Market information for farmers’ market managers, supporters and farmers in Armenia

Manual and Training Guide

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Background
The Food and Agriculture Organization (FAO) is implementing the project “Development of open air food retail markets in Armenia”, which should provide an alternative market outlet for small farmers and increase the involvement of direct contacts with customers through the establishment of farmers’ markets.

The establishment of a market information system (MIS) to ensure information flows among all relevant stakeholders is crucial for the successful functioning of farmers’ markets: Information also needs to reach farmers, market managers and staff, customers and the national and local authorities and supporters engaged in the functioning of the farmers’ markets.

The MIS will connect the operators and beneficiaries in an information network. The operators will be data collectors who will be present at the farmers’ markets, and data processors located at the Agriculture Support Centres in Marzes and at the Ministry of Agriculture. The Ministry of Agriculture (MoA) will be the focal point for all farmers’ market related issues including access to information. For this purpose the MoA will appoint a Market Information Coordinator (MIC). The MIC will be responsible for supervising the coordination activities among the various stakeholders and the functioning of the MIS.

How to use this manual
The purpose of this manual is to help participants to play their role in the farmers’ markets in Armenia and particularly to help farmers, market staff and managers, the staff at the Agricultural Support Centres and the staff of the Ministry of Agriculture of Armenia.

The first module “Market Information System” provides general information about the Market Information System and can be used by all stakeholders to familiarise themselves with the Farmers’ Market Information System and why it is important. In a globalized world, where economic liberalization and market oriented agricultural production rule, the circulation of information is a basic precondition for a farmer’s decisions and actions towards sustainable and profitable agricultural production. At the same time, the flow information is a basis for efficient agricultural strategy from the responsible state institutions.

The following models can be specific for particular groups, but as the FMI system is heavily dependent on the contribution and role of all stakeholders in the system, it is recommended that the cooperation of all participants in this information system be recognized. The tasks foreseen for different participants can be carried out only in full coordination and cooperation with each other.

The second module “ACS staff and MIS operators” describes how tasks are planned and performed by service provider staff (Agriculture Support Centres) and the Ministry of Agriculture. Bearing in mind that at this moment the functioning of the FMI system is heavily reliant on state support from the Ministry of Agriculture and ASC-s in Marzes, the delegation of tasks and coordination of the activities is essential. Their scope of engagement, however, will be further specified with the development of the appropriate information software which is aimed at
facilitating, speeding up and making operations more efficient (collection of information, processing and their dissemination) for all participants.

The third module “Farmers’ market staff” is dedicated to the involvement of the farmers’ market managers and market staff as key persons in the efficient functioning of farmers' markets and its information system. Their role in supporting the development of the interaction and communication between consumers and farmers can positively influence the institution of the farmers' market, where the customers learn about the products and about how farmers grow the foods they are purchasing. The mediation of the market's staff brings benefits to the farmers and to their customers, at the same time enabling them to be reliable partners of state institutions responsible for the development and growth of the agricultural sector.

The fourth module “Farmers and FMI system” aims to increase the farmer's awareness of the need for market information and of the farmers’ market information system. The farmers still have unordered access to market information and do not use the market information properly in the development of their agricultural businesses.

This module also provides valuable information about the purpose of farmers’ markets and how they function as an alternative market outlet for small farmers. Farmers must be aware of the mission of farmers’ markets, the benefits of participating in them, and they should also gain a feeling of ownership over market operations, either directly or through their representatives. Farmers’ markets without farmers without farmers running them would not be farmers' markets at all.

The fifth module “Distribution of Information for the farmers’ market” advises farmers that the establishment of the FMI system is not only tool for collecting the necessary information for making appropriate production decisions, but is also very efficient tool for promoting and marketing their agro-businesses. The development of an appropriate FMI system can contribute towards improving direct communication between farmers and consumers and to the possibility of transitioning to electronic sales in the future.

Various manuals and guides have been published focusing on the development of the market information system. In our opinion, the most important and valuable sources for all interested stakeholders are the FAO publications “Understanding and using MARKET INFORMATION” and “A guide to marketing costs and how to calculate them” written by Mr. Andrew W. Shepherd, which can be downloaded from the FAO site. Russian language versions are also available “Понимание и использование РЫНОЧНОЙ ИНФОРМАЦИИ” (ftp://ftp.fao.org/docrep/fao/011/x8826r/x8826r.pdf), and “Руководство по оценке РЕАЛИЗАЦИОННЫХ ЗАТРАТ и способам их расчёта” (http://www.fao.org/docrep/013/u8770r/u8770r00.pdf), which may be more useful for Armenian farmers.
Module
Market Information System

Purpose of the FMI system
The main purpose of the Farmers’ Market Information (FMI) system introduced through the FAO project in Armenia will be to provide reliable and timely information contributing to:

- Improving the operation of farmers’ markets;
- Satisfying customer needs;
- Efficient state support for running farmers’ markets;
- Increased benefits for farmers.

The essential activities of the FMI system are:

- Design of the system and protocols;
- Data collection;
- Data inputting;
- Data processing;
- Data storage;
- Dissemination of descriptive statistical analysis and reports on the running of farmers’ markets and their members;
- Updating;
- Maintenance of the system.

The beneficiaries will be different types of stakeholders in the supply chain of locally produced farm products, as well the wider auditorium and consumers.

For an efficient FMI system, a single data base must be developed, from which the operators will be able to extract the sets of data to be used for further:

- Dissemination of information;
- Reporting;
- Various analyses.
What type of Information? The data inputted into the system is proposed to contain the information:

1. For the farmers;
2. Their activities at the farm;
3. Their activities at the farmers’ markets.

Who will use the FMI system?
The system will be used by:

- Farmers;
- Farmer’s organizations and cooperatives;
- The market staff;
- The staff at the Ministry of Agriculture;
- The Marz Agriculture Support Centres staff.

All of these people will need to be trained on how to use the FMI system, and some of them will have to be trained on how to operate it.

Of course, not all them need to be engaged in operating it but their opinion on the design of the reports must be heard.

The external service provider will provide technical support for functioning and maintenance of the system. This will be accompanied with appropriate training for use of MIS by all beneficiaries and personnel engaged in the collection, inputting and processing.

In order that any misunderstandings be avoided, the introduction of an FMI system must be accompanied by an extension campaign to explain the meaning of the prices announced and accompanying data to farmers.

The campaign must be continuous and repeated on a regular basis.

The FMI system must become a part of wider marketing system in the future, which will contribute to the strong position of the farmers’ markets as an alternative to farmer’s outlets.

Market information
Today, farmers worldwide, including in Armenia, produce more and more for the market, where they are facing strong competition from domestic and imported products. In order for farmers to be successful, their products must meet the needs of their customers. Therefore, farmers need quality information to help them to make decisions about what, when and how to market their products.

What attributes should the information have?
Information can be useful for the farmers and beneficiaries of the MIS if it is:

1. Relevant;
2. Complete;
3. Accurate;
4. Current;
5. Economically focused.
1. **The information needs to be relevant to the target audiences.** Price information is most useful for helping farmers to achieve their market strategies for selling their agricultural products. If the information is not relevant it will not help solve the issues raised (market strategy, planning of production, etc.) at all.

2. **The information must be complete.** If the information is incomplete and only partial information is received, it may lead to inappropriate decisions. *What will happen if only information on the high price of strawberry is disseminated, and information about quantities required or sold at the market is left out?*

   **Note:**
   **What information is the farmer looking for? - Think about it in the design of FMIS**

3. **The information must be accurate.** If it is inaccurate, it could:
   
   - Raise many different problems;
   - Lead farmers selling their produce at the farmers’ market to lose a lot of money.

   *For example, if the prices are not clear regarding the quality and standards, farmers could get the wrong picture and assume that small and second class apples are in demand at good prices.*

4. **The information must be current,** particularly when the prices stated are for perishable crops. Even during one day, these prices can often fluctuate. Delivering the information on time is a challenge in this respect.

   The experience of publishing prices in monthly magazines is useful more for analysis. The monthly prices, in many cases are not an appropriate base for immediate action and as market prices are constantly changing, current information really is a must.

   **Note:**
   **Can price information from last market day be same for the next market event or today? – How does the farmer have to react to price changes?**

5. **The information used must be of use to farmers form an economic perspective.** Today farmers are operating based on making profits and if the information used is not useful from an economic perspective it could result in losses and in the worst case scenario, push them into quitting production. By providing of all relevant economic parameters, the information will have economic impacts.
Note:
For example, if the information does not cover marketing costs (packing, transport, administrative fees, various service fees etc.) farmers will be not in position to properly calculate and plan their market strategies.

The Market Information System is tool for all stakeholders involved in the agro-food chain

Farmers and their organizations, as well other stakeholders in the agro-food supply chain can be successful in their activities only if they co-operate based on full exchange of information relevant for carrying out the process of buying and selling agricultural products.

Only informed stakeholders can be equal partners and to cooperate with success towards efficient and sustainable agricultural production.

In order for the information to be circulated and shared the Market Information System has to be established. The Market Information System is an efficient tool in production and marketing activities for farmers, and is particularly useful for promoting specific quality products.

Today’s market information systems are characterized by:

• Being based on technical and institutional innovations;
• Computerized procedures and sophisticated equipment;
• Beneficiaries being familiar with the system functions and its use;
• Beneficiaries being instructed or trained, particularly if they are involved in operations;
• Appropriate information media to be used for accessing information, bearing in mind the specifics of beneficiaries and regions, particularly in more remote areas;
• Functioning of the MIS is time consuming tool;
• MIS is also cost-consuming tool, requiring proper financial planning.

Farmers, market managers and supporters of the farmers’ markets must be aware that though there are substantial costs related to establishing a fully computerized effective MIS, this system provides:

• Consistency;
• Completeness;
• Orderliness.

An efficient MIS would have many advantages, such as:

• Providing organized data collection for all farmers on which markets they sell their produce;
• Increasing the speed with which farmers can obtain sufficient information to make appropriate analysis and decisions;
• Enabling the storage of important data;
• Avoiding market risks and crises;
• Efficiently promoting and marketing farmers’ markets and individual farmers participating there.
Today, beneficiaries can use the MIS more easily due to the latest technological trends, but at the same time more sophisticated skills are required of the designers and operators who should make the transformation from paper-based systems towards an electronic system. Media and services such as the following are used in various combinations:

- **Strong storage capacity computers**;
- **Electronic readers**;
- **Tablets**;
- **Fast communication sources like internet network, mobile phones and text messages, radio and TV and cable networks**;
- **Appropriate software**.

The simple MIS has become more and more a part of an integrated and complex information system covering not only:

- **Prices**;
- **Commodities**;
- **Producers**.

but also information and data on:

- **Production technologies applied**;
- **Traceability of product flows**;
- **Customer services provided**;
- **Product management**;
- **Promotion**;
- **Pricing**;
- **Sales**;
- **Forecasts**;
- **Research**.

The MIS becomes part of a more complex integrated system. As the marketing information system brings benefits to the farmers, they:

- **Must be aware of the benefits of using this system**;
- **Must know how to use it**.

**Users of MIS**

The MIS will be used by various stakeholders, including:

- **Farmers**;
- **Traders**;
- **State institutions and policy planners**;
- **Statistical and research institutions**;
- **Wide public auditorium**;
- **Consumers**.
All stakeholders will use the MIS in relation to their specific area of interest. For farmers and traders, MIS will contribute towards easier market entrance through providing appropriate information on products, prices and other relevant information. Having relevant, up-to-date information will put farmers in a position to plan their future production.

The MIS can provide the following positive benefits for:

- **Farmers.** If farmers have up-to-date market information they will be in stronger positions in negotiation processes with traders. Having the right information helps not only in the distribution and sale of products, but also in the process of decision making and production planning. Benefits for farmers include:
  - Planning production *more in line with market demand*;
  - Scheduling their harvests *at the most profitable times*;
  - Deciding which markets they should send their produce to;
  - Negotiating on *more equal footings* with traders.

- **Traders.** Traders can bring more efficient decisions for the place of procurement and way of storing. Benefits for traders include:
  - Profitably *moving produce* from a surplus to a deficit market;
  - Making decisions about the viability of carrying out storage, where technically possible.

- **Supporters** can be divided into Service providers and Policymakers.

1. **Service providers.**

Better information should lead to higher profitability for farmers, but it is very complex process. For most small farmers, information services will have to be supplemented by extension service providers which are able to help them disseminate data and interpret price data.

A proper extension service understands:

- Identification of varieties *selling on the market*;
- Finding out what prices the customers are paying;
- The terms and conditions for purchase.

Most of the extension agencies are involved in:

- Providing *marketing services*;
- Keeping records of prices reported;
- Providing advice on markets and the seasonal fluctuations;
- In the short term, helping farmers understand MIS broadcasts.
2. Policymakers.

Market information is particularly important in those countries undergoing structural adjustments and where state-sponsored market information systems are going to be taken over by the private sector. Government support needs to be provided for a competitive market to function. Even in those countries where the private sector has always played a major role in the agricultural market, it is recognized that there is a need for official state assistance in areas such as:

- Legislation;
- Infrastructure provision;
- Extension services;
- Market information services.

If they have accurate market information, agricultural planners and researchers can address developmental challenges and food security problems more easily.

With the support of the MIS, the governments can make some steps towards:

- Improving the fairness of market price formation by ensuring timely and accurate information about actual market conditions;
- Providing timely and accurate information to all interested parties;
- Ensuring information is available to all stakeholders;
- Making market information a public good, particularly where there are numerous small farmers who are unable to pay for information;

The implementation of a market system can provide two types of arbitrage for the beneficiaries:

1. “Spatial arbitrage”, which takes place on different markets where the farmers and traders take advantage of price differences until these differences decrease to the level of transaction costs.
2. “Temporal arbitrage”, which is the storage of products in order to take advantage of expected higher prices later in the season.

Farmers with reliable up-to-date information and the ability to interpret it can decide:

- To which market they should send their produce to maximize returns, or;
- Indeed, whether to send their produce to market at all.
Market price information
The key issue within the market information is the market price. Why is market price information so important?

Market Price information is needed:
- To calculate budgets and projected profits: Accurate price assessments can help farmers make decisions about growing particular crops or making certain products. Overall, having market price information makes it easier to make farm business plans.
- Evaluation of the commodity and market options. This can help farmers decide which product to market and how and can suggest various marketing options, such as:
  - Farm gate;
  - Road stalls;
  - Farmers’ markets;
  - Collection points;
  - Wholesale market;
  - Retail green markets;
  - Grocery shops and retailers;
  - Direct marketing (restaurants, hotels, hospitals, public institutions, state organizations, etc.);
  - Contract farming etc.

   It should help farmers to make decisions about when to sell and how to be involved in post harvest handling and processing, etc.
- Seasonal and Historical trends. Farmers must be aware of current prices, and collect information about the expected prices when the crop is ready for sale.

Why is it necessary to be familiar with seasonal and historical trends?
Prices can vary markedly throughout a year. If the decision is to market in an “off season” or seasonal shortage period then the exact timing of the market opportunity needs to be determined.

Therefore, the price data over several years on a weekly or monthly basis will show any seasonal variations. It helps:
- To identify if any trend in the market exists;
- To use the data collected as basis to research why this trend is occurring;
- For an appropriate market strategy to be implemented.

1. The market price information must be complete, which can be achieved more easily if it is collected from various markets.

   As prices may be different on various markets; having the maximum amount of data possible will allow comparisons to be made more easily.

   In any case, various sales options, different reasons of operating and conditions must be identified. Different prices will be obtained depending on which market option is used.
Price differences can occur for a number of reasons so additional information has to be collected and understood; this could include:

- **Information about sellers/competitors**: who they are, what they offer in terms of quantity, quality, packaging and timing;
- **Information about the buyers**: who they are, what their needs are in terms of quantity, quality, consistency of supply, packaging and timing;
- **Information about particular markets**: location, access, market capacity and product flow, as well as any other factors that could affect the market volume and prices.
- **Information about product differentiation**: for example, different varieties, brands, special packages and promotions.

2. The market price information must also be combined with other relevant information, in order to properly determine the market strategy; this information includes:

- **Varieties**: what varieties can bring best the price for farmers?
- **Timing**: with particular focus when the buyer wants to buy certain products
- What kind of **post-harvest handling** is required by the markets? Grading for size, colour or weight, trimming, washing, removing husks, etc.
- **Packaging**: how do the buyers want the goods to be packed? What costs are they ready to pay?
- **Transport**, how will the produce be transported to market and what arrangements have to be made? What are the costs?
Module for ASC staff and MIS operators

Market Information System composition
All beneficiaries of the market information system must be aware that MIS is not absolutely comprehensive. However, it will provide accurate, detailed and up-to-date information services. MIS will be a useful tool for farmers, traders, consumers and decision makers.

According the FAO definition, a market information service includes the following elements:

- **A service, usually operated by the public sector, although it may also include private services for which beneficiaries are required to pay a service fee;**
- **Involves the collection of information on prices on a regular basis and, in some cases, quantities of widely traded agricultural products;**
- **From markets: rural assembly markets and wholesale and retail markets, as appropriate;**
- **Dissemination of this information on a regular basis;**
- **Various media used for dissemination to farmers, traders, government officials, policymakers and others, including consumers.**

The market information system (MIS) is comprised by set of procedures and methods the purpose of which is:

- **To collect information;**
- **To input and generate data;**
- **To analyse data;**
- **To disseminate information.**

In designing a market information service, the prime considerations should be:

- **Sustainability;**
- **Commercial utility.**
The design of efficient MIS implies:

- Detailed research into the needs of the users involved in the system;
- Tailoring the service to meet the resources available;
- Funding being planned on a long-term basis.

**Collection of data**

The basic pillar of an efficient Market Information Services is that it is built on quality information. An efficient market system must a database with relevant elements such as:

- Pricing;
- Products;
- Producers, and
- Customers.

The information must include a time aspect and show both past and present data. Therefore, it is crucial that adequate attention is given to these services.

For the FMI system, the following data must be available:

- A complete listing of the farmers participating at the farmers’ market;
- A complete listing of all data about the produces;
- A complete listing of competitive substitutes;
- A listing of customers.

**Listing of the farmers participating at the farmers’ market**

The proper management of farmers’ markets means that the organization must have an overview of its members or participants. With the help of the database of farmers, appropriate actions can be planned regarding participation, offered products, quantities, contacts, promotion of the farmers and the regions where they work.

**Listing of produce**

The FMI system must be filled with data about the products of the farmers/members. A full overview must be available on the type of crops, varieties, area planted (i.e. the quantities expected to be grown), location, timing, etc. In this way, it is easier for the ACS staff and the market managers to plan market events and the range of products to be offered. If some products are missing from the market, they can communicate this farmers and to initiate their participation. At the same time, if some products are absent from particular farmers’ markets, they can easy reallocate the farmers.

**A listing of customers**

As well as the data mentioned above, a list of customers is very valuable information. Most well developed farmers’ markets in the US and UK have customer databases, which make communication with consumers much easier. This is logical issue as in this case the ownership of the process of selling and marketing activities stays with the farmers, which differs to when farmers come to the regular retail market.
Modern farmers’ markets in the US and UK are working on issues surrounding the collection of data on customers, which can be used for:

- Communicating with consumers;
- Sending promotional information about the farmers’ markets;
- Promoting available produce;
- Promoting the farmers/participants and their farms;
- Informing about various contents of additional events organized at the farmers’ markets.

Type of data for collection

The data can be:

- Quantitative;
- Qualitative/descriptive.

The qualitative data provides clarification and justification of the quantities and prices achieved, which helps to get an overview and make decisions. Integrating the qualitative data into the system that is developed is a major challenge, as is which format to use to report the qualitative data to farmers and other beneficiaries of the market information system.

Unfortunately, there is always a danger that:

- Too much information may be entered in the system;
- Summaries may be unclear or incomplete;
- Farmers may find themselves lost in a sea of information;
- Farmers may not properly understand the reports.

Collection points

The data to be imported into the FMI system has been collected at various locations and at different times depending of the nature of the data. Some of the data will be collected:

- At the point of applying and data processing;
- At market events at the farmers’ markets.

Data for the FAO project in Armenia will be collected at two points:

1. Marz Agriculture Support Centres, where collection points will be established for the farmers willing to participate in the farmers’ markets. At this place the following data has to be collected:
2. **At the farmers’ markets**, the staff of the market will collect data on the quantities brought and sold, as well on the prices of products collected. In the future it is expected that more data will be obtained in accordance with developed needs.

The market staff will have to check the data from the certificate and to verify compliance based on the report produced by MARZ ASC-s. They will have also obligation to collect data about:

- **Quantity of products brought at the farmers’ market**;
- **Quantity of products sold according the declared statements by the farmers**;
- **Prices for the products collected during the market event following frequency rules**.

Data collection will be easier if previously appropriate operating forms are designed. These will facilitate the input process and proceeding basis going forward. Filtering of information is key so that database users and market staff are not overloaded or presented with irrelevant information.

![Diagram of data collection](image-url)

**Figure 1 – Proposal for collection data at the farmers’ markets in Armenia**

<table>
<thead>
<tr>
<th>Farmers’ Market #1</th>
<th>Crop</th>
<th>Report for 24 August 2012</th>
<th>Tomatoes</th>
<th>Pepper</th>
<th>Cabbage</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>Farmers</td>
<td>Marz</td>
<td><em>Applied</em> Qty kg</td>
<td><em>Sold</em> Qty kg</td>
<td><em>Price</em> AMD</td>
</tr>
<tr>
<td>1</td>
<td>Ara Petrosyan</td>
<td>Kotayk</td>
<td>200</td>
<td>50</td>
<td>300</td>
</tr>
<tr>
<td>2</td>
<td>Tigran Armenian</td>
<td>Ararat</td>
<td>350</td>
<td>48</td>
<td>350</td>
</tr>
<tr>
<td>3</td>
<td>Robert Tigrosyan</td>
<td>Tavush</td>
<td>50</td>
<td>30</td>
<td>220</td>
</tr>
</tbody>
</table>
Role of ASCs data collectors

At the beginning of the market season ASCs will invite farmers who are interested in participating in farmers’ markets to apply with the approximate quantities and qualities of produce they intend to market during the season. Every farmer will be assigned a unique vendor number which will be used in all future transactions.

Marz Agriculture Support Centres – where collection points for the farmers willing to participate at the farmers’ markets will be established – will collect data on:

- Farmers’ identities;
- Location of farms;
- Farmers’ contacts;
- Type of products;
- Quantities of products;
- When the produce is expected to be ready for market;
- Participation at particular market dates;
- Participation at particular markets.

The trained staff at the Agriculture Support Centres will fill in the forms with the data and transfer them to the data processing unit at the Ministry of Agriculture in Yerevan. During the farmer application process, it is recommendable that inputting forms should also be used as certificates to show market staff that the farmers are certified to participate. These forms should also be used for inputting the data on prices obtained and quantities sold by the farmers at the end of the market day.

The application process at the ACSs should follow these rules:

1. ASCs collect individual farmers’ applications for participation in the market on a certain day;
2. Those farmers who still do not have their vendor numbers will be assigned one;
3. The acceptance of the application and approval to participate in the market is based on requirements for quantities and assortment of products defined by the market management;
4. Individual farmers will be given a certificate to participate only with the products accepted;
5. Approvals and certificates are given on a first come first served basis;
6. Any other products will not be permitted to the market.

In order for the system to function properly, a number of important questions need to be answered:

1. How much information will be entered in the database?

This is important as if there is too much information, the system will be overloaded and the efficient management process will be disabled. At the same time, a valuable storage space in the information system will be lost. Therefore, from time to time, the information available in the information system will need to be reviewed and any information that is not being used will have to be removed.
As mentioned above, for the FMI system, essential data on the participants, their contacts, production, participation at the farmers’ markets, planned quantities, the expected size of the farmers’ markets and their mission must be entered.

Though it seems an easy job, the staff at the ASC must fully complete the forms in order for appropriate results to be produced.

2. What information will be collected and entered into the database?

During the design of the MIS, the scope of information required with the farmers and managers who will use the system must be carefully addressed beforehand.

What kind of data is available for collection and useful for the beneficiaries has to be properly defined. The methodology of collection and distribution also has to be defined. The following data is recommended to be put in the FMI system:

1. Name of the farmers;
2. Marz and living places of the farmers;
3. Addresses of the farmers;
4. Phone contacts;
5. Email contacts (if any);
6. Data about their crops and produce planned to be grown;
7. Quantities planned to be produced;
8. Application for participation in the particular market with information about:
   - Date of participation;
   - Type of products to bring to the market;
   - Market where the farmer will participate;

**Figure 2. List of farmers and their contacts**

<table>
<thead>
<tr>
<th>Marz</th>
<th>Village</th>
<th>Farmer</th>
<th>Registration number</th>
<th>Address</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ararat</td>
<td>Ararat (village)</td>
<td>Tigran Armenian</td>
<td>001</td>
<td>Yerevan, 5</td>
<td>0918349695</td>
<td><a href="mailto:armenian@yahoo.com">armenian@yahoo.com</a></td>
</tr>
<tr>
<td>Ararat</td>
<td>Dashtakor</td>
<td>Armen Sargsyan</td>
<td>003</td>
<td>Nizami 4</td>
<td>0918333986</td>
<td><a href="mailto:sarberi@hotmail.com">sarberi@hotmail.com</a></td>
</tr>
<tr>
<td>Gegharkunik</td>
<td>Goravan</td>
<td>Ana Yerevaniyan</td>
<td>004</td>
<td>v. Goravan bb</td>
<td>0238986327</td>
<td><a href="mailto:ay@t-mobile.am">ay@t-mobile.am</a></td>
</tr>
<tr>
<td>Kojayk</td>
<td>Achara</td>
<td>Ara Petrosyan</td>
<td>002</td>
<td>Tavush 34</td>
<td>0105210302</td>
<td>No email</td>
</tr>
<tr>
<td>Tavush</td>
<td>Yegheghavan</td>
<td>Robert Tigroryan</td>
<td>005</td>
<td>Svoboda 56</td>
<td>0918346666</td>
<td><a href="mailto:tigroryan@net.am">tigroryan@net.am</a></td>
</tr>
</tbody>
</table>

**Figure 3. Report on planned production**

<table>
<thead>
<tr>
<th>Planned Production</th>
<th>Crop in kg</th>
<th>Farmers</th>
<th>Aubergine</th>
<th>Cabbage</th>
<th>Carrots</th>
<th>Grape</th>
<th>Leek</th>
<th>Onion</th>
<th>Pears</th>
<th>Pepper</th>
<th>Plums</th>
<th>Potatoes</th>
<th>Tomatoes</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ana Yerevaniyan</td>
<td></td>
<td>2000</td>
<td>3000</td>
<td>6000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4000</td>
<td>40000</td>
<td>46000</td>
</tr>
<tr>
<td>Ara Petrolyan</td>
<td></td>
<td>4000</td>
<td>4500</td>
<td>30000</td>
<td>6000</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>11009</td>
<td>44500</td>
<td></td>
</tr>
<tr>
<td>Armen Sargsyan</td>
<td></td>
<td>10000</td>
<td></td>
<td>2000</td>
<td>6000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7000</td>
<td>25000</td>
<td></td>
</tr>
<tr>
<td>Robert Tigroryan</td>
<td>80000</td>
<td></td>
<td></td>
<td>2000</td>
<td>3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>85000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>82000</td>
<td>7000</td>
<td>10500</td>
<td>12000</td>
<td>30000</td>
<td>8000</td>
<td>2000</td>
<td>3000</td>
<td>6000</td>
<td>4000</td>
<td></td>
<td>47000</td>
<td>211500</td>
<td></td>
</tr>
</tbody>
</table>

Farmer data will be collected on a daily basis, as will farmers’ applications to participate in particular market days/events. This data will include the variety and quantities planned to be
brought at the market. The data will be based on the information provided by the farmers in the application process at the premises of ASCs.

Periodical checks and reviews of the system design will have to be carried out and sometimes modifications may be required in order for the system to provide farmers satisfaction regarding quality their needs.

3. How will data be collected and entered into the database?

Here, a few issues must be precisely defined:

a. Who will collect the information?

Ideally, it should be people who are solely responsible for market information and have no other job and who have an interest in ensuring the success of the service.

However, bearing in mind the limited scope of the data and the fact that farmers’ markets will only take place at weekends, in the case of open air markets in Armenia, the data will be collected by the staff of Marz ASCs during the application process, and later the market staff will supplement the data at the market event.

In order for quality information to be collected, data collectors must:

- Be trained after the establishment of computerized MIS;
- Follow determined methodology regarding the steps and procedures;
- Be familiar with what kind of data is required for collection;
- Be familiar what factors are related to the collection.

Unfortunately, bearing in mind that at this stage there will be no relevant data for standards and packing, such data will be collected in a future after the adoption of standards for various products.

In the case of the farmers’ markets, the data collectors will not be able to travel often and collect data from various locations, as they will be collected at the ASCs and at the farmers’ markets. However, for collection of data and farm controls, the ASC/market staff should carry out farm inspections. Therefore, the resources and means of transport to the farms of the participating farmers need to be properly planned.

Establishing a proper human resource policy is a challenge, bearing in mind the negative practices at some markets like:

- Lack of motivation among data collectors;
- Unattractive salaries resulting in poor collection results;
- Mechanical price reporting, and
• reporters paying little attention to the accuracy of their work;

b. What are the sources of data information?

**Internal Sources:** Most of the data will be from internal sources, received from the farmers regarding:

- The planned production;
- The planned quantities to be delivered at the farmers’ markets;
- Providing data on the quantities sold.

The activities will be carried out:

- In full cooperation with the ASCs and farmers’ market staff;
- With the creation and use of appropriate forms facilitating the collection process and ensuring accuracy;
- Ensuring that the collection process does not interfere with farmers’ regular production and selling activities.

The sources can be external but internal data from farmers is also important (hopefully, farmers keep accurate books). Farmers’ accounts can easily provide information on:

- Products;
- Varieties;
- Quantities produced
- Quantities sold;
- Selling prices.

Additionally, if required to be recorded in the FMI system, the farmers can also provide data on:

- Grading costs;
- Packing costs
- Transport costs;
- Administrative and other related costs.

**External Sources:** From the external sources, reports can be provided on:

- Competition (size, location, origin, etc.);
- Products (type, varieties, packaging, grading, etc.);
- Prices;
- Customers' wants and needs.

This process consists of collecting everyday information about market conditions, so that farmers can properly prepare themselves for entering the market. Marketing intelligence is gained through gathering information from various sources like:

- Neighbours;
- Other farmers;
- Suppliers;
- Distributors;
- Transporters;
- Service providers;
- Customers.

Additionally, intelligence information can be bought from outside suppliers who set up data gathering systems and sell the information to all market players.

If such reports are planned, the information needs to be included in the MIS in electronic forms. Bearing in mind that price collection activities already exist, the reports done by the Republican Agriculture Support Centre (published in Agrolratu and at their web site) and AMIS from the Farmers Associations of Armenia can be complementary sources for prices and quantities, for which links have to be provided on the website of the project.

**Market research:** Farmers and their organizations – as well the people in charge for the MIS, can make their own market researches – in many cases combine:

- Their own internal data, and
- The available one from the gathered market intelligence.

**Data inputting and processing**

1. **Who will enter the data in the system?**

As the FMI system will use two types of data collectors; namely, ASCs and market-staff engaged for entering the data in the MIS, they must:

- Be familiar with the established FMI system;
- Work in close cooperation and coordination.

This coordination will be facilitated through development of appropriate design of electronic forms, which will be completed by data operators.

The time of data input is very important, particularly as for some products the information must be entered in proper time. This could be an important challenge, as data is collected at different farmers’ markets and it is expected to be forwarded through the server in the Ministry of Agriculture to the beneficiaries through various media (email, radio, info points, ASC points, web sites etc).
One way of making data processing easier is to:

- Use the same form when farmers register at ASCs centres;
- Use the same format as a certificate with only empty fields for quantities sold (and/or brought at the market);
- Use electronic forms, which should be distributed to the farmers’ market staff before the market event;
- Use the same form by the market staff at the market event;
- Deliver the same form by the market staff to the processing unit.

In this way, the market staff will have data and forms ready on the activities foreseen at the market events to be completed.

The data inputting requires sophisticated equipment and skilled personnel and the equipment and software installed have to be maintained. Therefore, these expenses have to be properly planned for and appropriate funds have to be provided to cover the costs. This has to be taken into account with the relevant departments in the Ministry of Agriculture.

**Data analysis**

The main purpose of the FMI system is to provide speedy and useful information to farmers, traders and consumers. As discussed above, most valid resources will be

- Participating farmers;
- ASCs staff;
- Market staff;
- System operators.

The role of the system operators at the Ministry of Agriculture is also crucial, as they will synthesize and analyse the data. They will also produce quality reports and deliver them to farmers and others beneficiaries. The farmers will decide whether to participate in certain markets according the reports produced by the Ministry staff.

The effectiveness of MIS is proved if it provides farmers with a competitive advantage on entering a particular market. The use of computers to process market information is replacing manual processing and the use of pocket calculators. User-friendly software and large databases help farmers in their decisions for participation at particular farmers’ market. But the use of computers can be less than perfect, for example:

- The operators of the MIS in the farmers’ market project in Armenia must bear in mind that **significant funds are required for creating appropriate software, but also for its maintenance** which requires a specialist to run it.
- The operators in the Ministerial department must be aware that the MIS could become obsessed with processing and analysing data. This is often a reflection of the lack of a commercial orientation among officials, particularly those from formerly centrally planned economies, who see data primarily in terms of its use for planning and control purposes.
Therefore, the operators and analysts must explore the collected data and to turn it into meaningful information for decision making and managing farm activities by the farmers and farmers’ market managers.

The farmers will use the prepared reports and analysis, for example, to gain information about the quantity and type of products purchased at farmers’ markets and their prices. Unfortunately, as farmers’ markets in Armenia are in their infancy, no data will be available on price discounts, transport and other related service expenses, which can be done separately later, at the developed website.

**Dissemination information and reports**

The MIS has multiple uses according the needs of the farmers and managers.

The established processing unit in the Ministry of Agriculture will be able to process all data received and to produce various type of reports in accordance with the needs of:

- Farmers;
- The market management teams;
- The Ministry of Agriculture;
- The wider auditorium;
- Consumers.

In order for the system to be really efficient, more data on farmer’s activities and the functioning of the farmers’ markets must be collected and processed. This will enable various quality reports and information to be provided to the users of system and to farmers, designers and supporters of agriculture policies, as well to the customers.

Prepared reports will help the farmers and farm managers at the farmer’s associations:

- To provide information about products required and sold;
- To provide information about selling prices;
- To provide information about the efficiency of the farmers’ market as an alternative market channel;
- To define the marketing strategies, particularly their market approach related to farmers’ markets;
- To properly plan and carry out the advertising and promotional campaigns;

The reports can be widely distributed to the wider auditorium, which helps promote the farmers’ markets and their role.

Reports may be produced on a regular basis, can be defined by the users of the system, and also be published at the established website. The established FMI system will produce the following reports:

1. **Report for the farmer participants, their location, contacts, type of production and quantities.**
2. **Report for daily prices and quantities sold at particular markets.**
3. Report for farmer’s participation at particular markets during whole period.
4. Report for the quantities sold at particular markets on particular days and in total.
5. Report for the farmer’s selling according crop at the particular market and day.
6. Report for selling (quantities) of particular crops for both markets chronically and in total.
7. Report on lowest, highest and average prices on particular markets and days.

Dissemination system of the report for daily prices and quantities sold
The processing of the collected data from the farmers’ market staff and delivery of the same to the server and its transformation as a daily report is one of the main results of the established FMI system. After receiving the data, the reports will automatically be disseminated; i.e. forwarded to the beneficiaries through:

- **Emails to the recipients’ email addresses** stored in the database at the server;
- **Text messages** to the farmers in the FMI system;
- **Emails to radio and TV stations**;
- **Announcements** at the channel space rented at the cable TV providers;
- **Notices/boards** at the established info-centres and farmer’s organizations and/or cooperatives;
- **Notices** at the developed on a web-based promotional platform.

A selection of the form of information disseminated and the media must be carried out bearing in mind:

- **The relevant beneficiary’s acceptability, and**
- **The nature of the information.**

As well as choosing which medium to use, it is very important that attention be paid to the way in which the data is presented.

For example, on radio, simply reading a list will be boring and the audience may switch off. Therefore, radio broadcasts could concentrate on the most important crops on which prices have changed significantly.
After completing of all relevant data by the data collectors and market staff, the forms will be processed by the application and through the main server disseminated to the beneficiaries of the system, as well to various media contracted for further dissemination of the information. The report will be also uploaded as a simple web-page report on the web page of the farmers’ markets.

The daily dissemination of price information is of substantial importance. In many circumstances, daily information would appear to be a precondition for a commercially relevant MIS. However, the daily dissemination is dependant from the produce:

- **For horticultural produces**, daily information is highly relevant and outdated information is of little use.

- **Cereals**, on the other hand, are generally far less perishable and thus prices change more slowly. In these circumstances, a weekly service would appear adequate.

**Bearing in mind the character of farmers’ markets as weekend markets, price information will be not disseminated on a daily basis.** However, farmers must be aware of daily prices – particularly for perishable crops – at other markets in order to have better understanding and to better plan for marketing their products.
Farmers are often confused about the prices they hear on the radio or read in the newspapers. It is very important the disseminated data:

- Is clear;
- Is understandable by the beneficiaries, particularly the small farmers;
- Is repeated on a regular basis.

Studies conducted by FAO show that some MIS were generally found to be well appreciated by the target audiences, while others were either rarely listened to or not understood.

**Dissemination system for the reports**

<table>
<thead>
<tr>
<th>Date</th>
<th>July</th>
<th>Quantity sold in kg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crop</strong></td>
<td><strong>Market</strong></td>
<td><strong>07-Jul</strong></td>
</tr>
<tr>
<td>Pepper</td>
<td>FMTR1</td>
<td>95</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>FMTR1</td>
<td>155</td>
</tr>
<tr>
<td>Cabbage</td>
<td>FMTR1</td>
<td>240</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>July</th>
<th>Quantity sold in kg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crop</strong></td>
<td><strong>Market</strong></td>
<td><strong>07-Jul</strong></td>
</tr>
<tr>
<td>Pepper</td>
<td>FMTR2</td>
<td>50</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>FMTR2</td>
<td>100</td>
</tr>
<tr>
<td>Cabbage</td>
<td>FMTR2</td>
<td>200</td>
</tr>
</tbody>
</table>

**To whom will the reports be sent?**

- The farmers.

The reports on sales at the markets and prices obtained will help farmers:

- In planning their production;
- In selecting market channels;
- In preparing appropriate promotion campaigns.
All these activities are close linked with planning activities for providing funds for selling their products.

- **The market managers.**
  
The market managers need appropriate information to help them:
  - Plan the operations of the farmers’ markets;
  - Allocate the staff;
  - Plan promotion activities with the wide mediums and customers;
  - Plan the quantity and range of the offer.

If there is not enough of a specific product or the range of products is limited, they can make efforts in coordination with the ASC-s staff to attract more farmers who can provide additional crops for better diversification and more attractive offers at farmers’ markets. This means they will be able to prepare their forecasts based on the information collected about the market size and the farmer’s share of that market.

- **The customers.** The customers will be informed of:
  - Products available at the farmers’ markets;
  - The origin of the products;
  - Current prices;
  - Information about the participants;
  - Events organized within the market.

- **The state planners and responsible institutions.**
  - Useful data base for various analysis;
  - Planning of the agriculture policies.

![Figure 7. Report on farmer’s participation](image)

![Figure 8. Report on farmer’s participation with particular products](image)

From the report regarding participation, an overview of the interest of the farmers for participation, as well their frequency at the market events can also be prepared.
**Dissemination media**

Market information services can be disseminated in a number of ways; namely:

1. **National and local newspapers**;
2. **Radio**;
3. **TV**;
4. **Text message**;
5. **Bulletins, mostly weekly market bulletins**;
6. **Price boards**;
7. **Internet portals and email**;
8. **Notes/announcement at common info points**;
9. **Cable providers channel page**.

1. **National and local newspapers**. Characteristics:
   - Will farmers actually purchase the newspaper;
   - Advantage of having a hard copy of the information;
   - Possibility of referring to the information from time to time (archiving);
   - A significant time lag between submission and printing;
   - More suitable for the publication of analytical reports on price trends or market situations.

2. **Radio**. Characteristics:
   - Very popular means of information dissemination;
   - Relatively cheap media;
   - Listeners do not have to invest much in some kind of radio receiver;
   - Radios are portable and can work in areas which do not have electricity;
   - Radio broadcasts are generally well suited to the dissemination of current market reports;
   - The reports can reach farmer very quickly.

3. **TV**. Characteristics:
   - Not as cheap media as radio;
   - Advantage as TV messages include pictures as well as sound;
   - Greater level of involvement than with radio or newspapers;
   - Used for disseminating market reports, as well for analysis of market trends;
   - More expensive, MIS have problems in paying for such broadcasts.
4. **Text message.** Characteristics:

- Increased communication among people using mobile phones;
- Covers almost every part of the world, even remote areas;
- Portable;
- Increased number of text messages being sent, recently combined with pictures;
- Reluctance to pay for texts;
- Farmers sometimes cannot afford to send text messages;
- Difficulties of having text messages that cover multiple products at particular markets.

5. **Bulletins, mostly weekly market bulletins.** Characteristics:

- More suitable for the publication of analytical reports on price trends or market
- Proper preparation and design required;
- Printing costs a significant part of the calculation;
- Distributed by post, but recently also in electronic formats;
- Most of them distributed free of charge, and some for a fee;
- Reluctance of farmers to pay subscription fees;
- Limited quantities circulated;

6. **Price boards.** Characteristics:

- Developed at the markets and the social places;
- Relatively cheap media;
- Maintaining price boards is a challenge;
- Updating prices on time is a challenge;
- The design must be appropriate in order for the price boards to provide complete information.

7. **Internet portals and email delivery.** Characteristics:

- Most sophisticated level of communication;
- Information can be provided on a world wide basis;
- Requires that farmers have computers and a knowledge of how to use them.
- Requires internet access: landline, cable providers, mobile networks;
- Farmers have to pay to use communication services;
- Wide access to whole auditorium through internet cafes or rural communication centers, even in the most remote areas;
- Local media (news, radio and TV) use the internet to obtain information for broadcasts;
- Requires a high level of responsibility from operators engaged in updating web-pages;
• Maintaining websites and uploading the information on a daily basis so that the information remains current is a challenge;
• Planning of funds required;

8. **Common info points.** Characteristics:

- Located at common places for socialization of the rural habitants;
- Easy to establish communication and exchange of news and experience;
- Various media can be used, such as banners, posters and TV stations.

9. **Cable Channels.** Characteristics:

- Useful in rural areas whose TV and internet services come through Cable providers;
- Rented space/channel enables the farmers to monitor and become aware of the prices at particular markets;
- Required special agreement between the cable provider and the MIS holder;
- Fees are included in the monthly fee for TV services used.
Module for market managers and market staff

Farmers' market managers are key persons

Experience has confirmed that for farmers’ markets and the information system to function efficiently the role of farmers’ market managers is key. Their role in supporting the development of the interaction and communication between consumers and farmers can be a positive influence on how customers learn about products and about how the foods they buy are grown.

Therefore, appropriate planning of the recruitment of the farmers’ market managers and market staff must be carried out and proper delegation of tasks regarding their involvement in the functioning of FMI system must be carried out. In the planning of their involvement in the FMI system, the following questions must be answered:

- Who will work at the markets?
- How involved will market staff be in the FMI system?
- What kind of preparation/training do they need in order to properly fulfil their communication and market information tasks?
- What funds will be available for running FMI systems?
- What is the situation for involvement of the market volunteers?

Besides other responsibilities and tasks, market managers and staff should possess certain skills to successfully run the MIS. The duties and responsibilities of collectors and disseminators of information and data will vary based on the market’s size, structure, and programs. This means that besides management, organization and administration of the market, the market staff will be engaged in:

- Communication with farmers;
- Assisting farmers and customers in becoming familiar with the market rules;
- Collecting data about quantities brought and sold and prices offered and obtained;
• Inputting the data for quantities and prices in their tablets;
• Sending this data to the server and data processing unit;
• Carrying out promotion and advertising activities;
• Providing assistance to customers regarding information about:
  ➢ farmers;
  ➢ products;
  ➢ regions of origin;
  ➢ additional services provided;
  ➢ special events organized;
• Collecting all consumer inquiries and complaints.

The role of the Market manager will include supervising the market staff collecting data and the transfer of data collected to the operational centre for data processing at the Ministry of Agriculture.

As the managers have an organizational function, the data collected and analysed will help them work with farmers and encourage them to produce an adequate quantity and a broad variety of products each to be offered at particular market day. The market manager provides information like which products are in high demand and/or in low supply.

Figure 7. Report on forecast and applied quantities

<table>
<thead>
<tr>
<th>Crops/Products</th>
<th>Units</th>
<th>Planned quantity for selling</th>
<th>Applied quantities by farmers at ASCs</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aubergine</td>
<td>kg</td>
<td>700</td>
<td>800</td>
<td>-100</td>
</tr>
<tr>
<td>Cabbage</td>
<td>kg</td>
<td>1500</td>
<td>1100</td>
<td>400</td>
</tr>
<tr>
<td>Carrots</td>
<td>kg</td>
<td>700</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>Grape</td>
<td>kg</td>
<td>700</td>
<td>900</td>
<td>-200</td>
</tr>
<tr>
<td>Leek</td>
<td>pss</td>
<td>500</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Onion</td>
<td>kg</td>
<td>1500</td>
<td>1200</td>
<td>300</td>
</tr>
<tr>
<td>Pears</td>
<td>kg</td>
<td>500</td>
<td>1200</td>
<td>-300</td>
</tr>
<tr>
<td>Pepper</td>
<td>kg</td>
<td>700</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>Plums</td>
<td>kg</td>
<td>500</td>
<td>150</td>
<td>350</td>
</tr>
<tr>
<td>Potatoes</td>
<td>kg</td>
<td>3000</td>
<td>4000</td>
<td>-1000</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>kg</td>
<td>800</td>
<td>1000</td>
<td>-200</td>
</tr>
</tbody>
</table>

The market manager will be deeply involved in:
- planning of the information flow;
- supervision of FMI system functioning;
- distribution of the information;
- activities of public relations;
- promotion and advertising;

Therefore, the market manager must possess:
• excellent communications skills;
• ability to effective communicate with a wide range of audiences;
• marketing skills;
• problem-solving skills;

The market manager will be leading force for functioning of efficient information system bringing benefits to all beneficiaries.

The activities carried out by the market staff for the information flow are:
• Continuous;
• Complex;
• Time consuming;
Carried out in compliance with their other administrative tasks;  
Linked with the available funds requiring appropriate fundraising strategy;  
The responsibility by the staff engaged.

Challenges for market staff
In many situations the market managers and staff will be targeted, in various conflict situations by the farmers or the consumers, with statements like:

- The information provided is wrong;  
- Market staff are responsible for low prices;  
- The market staff do not promote the market so customers are not visiting;  
- The market staff do not listen the farmer’s ideas on how the market should be promoted.

Therefore, the market staff must:

- Listen to all ideas and information;  
- Record them;  
- Assess the value of each suggestion;  
- Proceed following the adopted market rules in a combination with their knowledge.

With development of the FMI system, the actual mission of farmers’ market managers and staff to continuously develop, expand and improve farmers’ markets will be facilitated.

It must be clear that market information system should not concentrate only on:

- Collection, and  
- Dissemination of the information only for the products and prices;

Actually, the FMI system has to become part of a marketing system. The dissemination of market information must be compliant and be part of wider information system with full overview and easier decision making, providing information like:

- Location;  
- Security;  
- Accessibility;  
- Expenses;  
- Capacity;  
- Participants;  
- Complementary services;  
- Contents;  
- Promotion and advertising;  
- Other useful and relevant data.

Collecting data at the farmers’ markets

At the farmers’ markets, the staff of the market will collect data on the quantities brought and sold, as well on the prices of products collected. Later on more data is expected to be obtained in accordance with developed needs.

The market staff will be obliged to check the data from the Certificate and to verify the compliance from the report produced by MARZ. They will have also to collect data about:
• Quantity of products brought at the farmers’ market;
• Quantity of products sold according the declared statements by the farmers;
• Prices for the products collected during the market event following frequency rules.

The collection of data will be easier if previously appropriate operating forms are designed. These will facilitate the inputting process and be a basis for proceeding. The proper design and filtering of the information collection is the key in order for collectors and market staff to not be overloaded with information or presented with irrelevant information.

The following operations will be carried out at farmers’ markets:

1. **Market staff equipped with tablets will receive forms with data for the participating farmers on any given day.** The application data is the collected from Marz ASC-s and transferred through the main server in the MA.

2. **Market staff will collect data about the quantities brought at the market event** (the quantities can be different than that declared at the time of application, which is usually done by Monday evening);

3. **Market staff will collect data about prices**;

4. **At the end of the market event, market staff will input the data about the quantities sold, provided by the farmers.**

5. **The completed form with previous mentioned data is sent to the server by the market staff.**

Using same document as in the application phase will facilitate the process.

---

**Figure 8 – Proposal for collection data at the farmers’ markets in Armenia**

<table>
<thead>
<tr>
<th>Farmers’ Market #1</th>
<th>Crop</th>
<th>Report for 24 August 2012</th>
<th>Tomatoes</th>
<th>Pepper</th>
<th>Cabbage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Applied Qty kg</strong></td>
<td><strong>Sold Qty kg</strong></td>
<td><strong>Applied Qty kg</strong></td>
</tr>
<tr>
<td>#</td>
<td>Farmers</td>
<td>Marz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ara Petrosyan</td>
<td>Kotayk</td>
<td>200</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Tigran</td>
<td>Armenian</td>
<td>350</td>
<td>48</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Robert</td>
<td>Tavush</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**

The proper and careful filtering of the information collection is key in order for farmers to be not overloaded with information or presented with irrelevant information.
The market staff must:
- Be familiar with MIS software;
- Know what kind of operations are required from them;
- Be able to read the data inputted by the ASC staff;
- Establish full and efficient cooperation with other participants;
- Be trained after the establishment of computerized FMI system;
- Be involved in updating of the FMI system.

For the farmers’ markets the essential data must be entered; for example:
- The participants;
- Their participation at particular farmers’ markets;
- Quantities brought;
- Quantities sold;
- Prices obtained.

Bearing in mind the size of the farmers’ markets, this may not be an easy job. Farmers’ market staff must fully and accurately complete the forms in order for appropriate results to be produced.

Data on the quantities sold and prices obtained will be collected on daily basis (every market day). It is important that farmers participate by providing accurate notes on the quantities sold and what the real challenge could be.

**Figure 4 – Market report on daily prices at particular farmers’ market**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Measurement</th>
<th>Sold Qty kg</th>
<th>Average Price</th>
<th>Highest Price</th>
<th>Lowest Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pepper</td>
<td>kg</td>
<td>325.00</td>
<td>315.00</td>
<td>300.00</td>
<td>250.00</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>kg</td>
<td>150.00</td>
<td>341.67</td>
<td>400.00</td>
<td>250.00</td>
</tr>
<tr>
<td>Cabbage</td>
<td>kg</td>
<td>200.00</td>
<td>110.00</td>
<td>150.00</td>
<td>80.00</td>
</tr>
</tbody>
</table>

Market staff should collect and record the prices for selected products twice per day:
- At 10-11:00 in the morning, and
- Two hours before closure of the market day.

Samples will be collected from at least 5 - 7 different farmers selling the same product, twice a day per product.

The sampling depends on:
- The products available;
- Seasonality,
- Price fluctuations per particular product during the market day.

At the end of each round of data collection, reports with minimum, maximum and average prices will be generated.
Sources of market information

The market staff will collect information from:

1. Farmers/Traders;
2. Price boards in markets.

1. Farmers/Traders
   - Often have up-to-date information, but
   - Very often the prices are not shown at the market stall, particularly at the markets in transition countries like in Armenia.
   - Farmers do not always want to declare the right price to data collectors.
   - They may not have an accurate idea of the prices they received.
   - The offered price can be also only ideal price, but not that which is really obtained when bargaining.
   - They may exaggerate prices they received because they want to present themselves as good negotiators with traders or as producers of top-quality produce for which the best prices are paid.

2. Price boards in markets.
   This information can be very useful not only for the price collectors, but as well for the visitors (customers, other farmers or their relatives). However, bearing in mind that the farmers and traders are not very fond of announcing their prices at the markets in Armenia, this method is a challenge which should be settled by ensuring that all participants strictly follow the market rules.

Challenges surrounding price collection

The data collectors at the farmers’ markets could be faced with following challenges:

1. Product selection;
2. Frequency;
3. Bargaining;
4. Price fluctuations;
5. Frustration at being questioned.

1. Product selection. Characteristics:
   - Not possible to collect market information for all products which are offered at the markets;
   - Collecting prices is a time consuming activity, particularly when it has to be done twice daily;
   - Overlong lists of products must be avoided;
   - The product report must be concise and friendly;
   - Appropriate selection of most relevant and important products must be defined;

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• Relevance depends on the most popular products;
• The selection should be done in cooperation with stakeholders;
• Seasonality is additional criteria to be respected in the reporting;

2. Frequency
The frequency will depend on the type and quantity of produce offered. There are various options for which the market staff and farmers have to decide on together, but collecting prices two or three times a day is realistic. The frequency collection:

• Must provide accurate data;
• Must not interfere the regular activities of the farmers;
• Must not interfere with other tasks of the market staff.

I. Option 1: twice a day, at 11:00 in the morning and two hours before the market closes.

Usual practice is that the first collection is done when the market opens and the second one when it closes.

• Prices collected at the start of the working day are more a reflection of the prices that farmers want to achieve rather that which will be accepted by shoppers. It is expected that later collection will reflect more realistic prices.

• Collecting prices at the end of the day tends not to provide accurate numbers as at this time farmers are trying to get rid of their remaining produce. Therefore, two hours before the market closes is proposed as the second price collection point.

II. Option 2: Frequency of price collection is taking three times, when the market opens, at noon and when the market closes. Actually, even here the desired frequency of price collection may vary by products, depending on how frequently the prices to be collected change, especially if perishable products are considered.

Required if:
• Prices may vary more frequently;
• Peak-up hours need to be identified;
• Required collection at defined intervals throughout the day;
• Typical for the perishable products;
• Bigger frequency should be justified;
• What works best for the farmers;

Depending how the frequency is defined, appropriate fields in the collection forms for filling and software applications to be planned.
3. **Bargain**

The market staff (price collectors) need to collect realistic prices about the offered products at the market. However, in many farmers’ markets, including in Armenia, prices are bargained. It is important the right method of price collection is defined. Sometimes, price collectors use the first price given by the trader and not the bargain price. Bargaining also means that traders cannot recall exactly how much they sold certain quantities for.

4. **Price fluctuations**

Price fluctuations during the day are common and at assembly markets prices can fluctuate hourly, particularly for the perishable crops. This could be because both due to supply changes and traders’ need to sell produce before it becomes un-saleable.

5. **Frustration at being questioned**

Some farmers are not willing to cooperate and provide correct data about the prices achieved, volume of production, and quantities sold at the market.

**Volunteers**

In many farmers’ markets the engagement of volunteers has been critical to the success of even well-staffed market organizations. Their recruitment also requires proper attention and they could significantly contribute to satisfying the customer's needs and diversifying the farmers’ market offers. Beside their engagement in various types of services, they can assist the market staff in:

- Communicating with farmers and collecting their permissions for participation;
- Collecting data on the participating farmers, quantities brought and sold at the market;
- Recording the prices achieved at the market event;
- Helping the market staff transfer the data collected to the data processing centre;
- Helping the market manager with promotion and advertising.

In any case, for the volunteer has to:

- Have identified tasks;
- Have a job description and responsibilities;
- Have a defined engagement time;
- Have certain skills.

Volunteers must feel appreciated for all their hard work and have to be respected. As unpaid staff they should:

- Be invited to share ideas for improving market operations;
- Share in the celebrations of market success;
- Receive some gifts for working at the market.
**Inputting data**

The time at which data is input is very important, particularly as for some products the information must be entered at the proper time. Data inputting is more related to every day market events, but is also very important for weekly farmers’ markets. This could be challenging as data is collected at different farmers’ markets and should then be forwarded to the beneficiaries via the Ministry of Agriculture’s servers through various media, like email, radio, info points, ASC points and websites. They should receive the information before they apply at the ASC centres (at present, by Monday afternoon).

If farmers have up-to-date information about products, quantities and prices, it will be easier for them to decide whether to participate in the farmers’ market for the weekend or to find some other distribution channel.

ACS and market staff using the same form for inputting data will facilitate the process. The benefits of using same forms are:

- **Identical base for preparing and distributing reports;**
- **Better cooperation and coordination between both groups of staff, ASCs and the market;**
- **The application form will be the same as the certificate with only empty fields for quantities brought, sold, and the prices.**
- **The market staff will have ready data and forms to help them complete the activities foreseen at market events.**
Module for farmers

*Why do farmers need market information?*

Today, farmers produce more and more for the market, where they are facing strong competition from both domestic and imported products. In order for farmers to be successful, their products must:

- Meet the needs of the customers;
- Possess competitive advantages.

Therefore, farmers that are market oriented, have to make individual decisions about:

- What to market;
- When to market;
- How to market their products.

The environment that farmers are working in is characterised by:

- Reduction of marketing activities by national governments;
- No state companies prepared to buy a farmer’s entire production like in the past;
- Private companies having completely taken over trade with agricultural products.
Therefore, farmers need to:

- **Identify customers** or companies that will buy their crop;
- **Be sure that they are getting a fair price**;
- **Decide when to sell**; for example, is it best to sell immediately after the harvest or to store it and sell later at a more favorable price?

Farmers need to answer a variety of questions; such as:

- How can the risks, associated with marketing be reduced?
- Is it worth sending produce to market?
- Where to sell?
- At which stage of the marketing chain should they sell (e.g. collection market or retail market)?
- Are prices appropriate?
- How to negotiate with the traders?
- Is the quality of their products the same as other farmers?
- Should they store their products?

The need for market information is increasing in importance in terms of further strengthening the role of markets and the globalisation process.

Farmers and their organizations, as well other stakeholders in the agro-food supply chain, can be successful in their activities only:

- If they are fully informed;
- If they realize cooperation based on full exchange of information;
- If they cooperate on the basis on equal partnership.

**Note:**

*Only informed stakeholders can be equal partners and cooperate with success towards efficient and sustainable agri-business.*

**Information required**

Therefore, farmers need information in order to ensure effective and profitable marketing. As they have greater responsibility for marketing their agricultural products, they need to have information about markets and prices.

**What characteristics do small-scale farmers have?**

- They often rely more on word-of-mouth information;
- Their sources are often other farmers and traders;
- They usually collect information at local markets visited by household members or other acquaintances.
• With improved telecommunications, many farmers are trying to seek information:
  ➢ By telephone directly from the major markets, or
  ➢ By using the internet.

The types of information required can be grouped as:

1. *Group of information related to the buyers, questions such as*:
   - Who are the buyers?
   - Where are the buyers?
   - How can they be contacted?
   - What are their conditions of business?
   - Which varieties do they prefer?
   - What are the packaging and delivery requirements?

2. *Group of questions related to prices and goods, questions such as*:
   - What are the current prices?
   - What is the current supply of the products, the quantities available from the competition?
   - Are the prices offered by the buyers reasonable?
   - Information on price fluctuation in the longer-term (historical) over a number of years.

The really market-oriented farmers can consider supplying markets at times of the year when prices are high. To do this, the farmers need market information:

- When prices in the market are highest;
- Calculations on whether the higher prices will compensate them for the higher production costs involved;
- Market risks.

As the market is imperfect and farmers more rely on the market, they face greater risk of something going wrong. To minimize that risk, they need to have more relevant information in order to make proper decisions.

Although the information cannot be perfect, it must comply with the following requirements:

- Being of the right kind;
- Being sufficiently exhaustive in order to gain an overview of all influencing factors;
- Not being dispersed;
- Being up-to-date.
- Presented in proper form;
- Being accurate.
The market information cannot be perfect because:

- The prices change too rapidly;
- The costs of improving information have to be compensated for by additional benefits;
- Sometimes more precise information can be obtained but is too costly;
- There may be factors beyond the control of the stakeholders involved.

Therefore, farmers will always have to take decisions based on information that may be imperfect or incomplete.

If farmers receive prices lower than those obtained with market information they may, for example, conclude that they should:

- Seek out other traders in future;
- Negotiate more forcefully;
- Improve the quality of their produce;
- Improve the presentation of their produce;
- Improve their promotional activities;

Market information for prices can be also used by the farmers:

- As a starting point in negotiations with traders the following day. The availability of market information enables farmers to negotiate from a position of relative strength;
- To make decisions on how far to enter into the marketing chain. The further the farmers go, the higher the price they will normally get;

However, a high selling price does not automatically mean that farmers will maximize their income. This depends on the costs involved when farmers decide to sell closer to the final consumer. Profits may also be limited by:

- Additional expenses. It can be a lot more costly for a farmer to transport small quantities over a long distance than for a trader to transport large quantities over the same distance;
- Spending valuable time. At the same time, selling directly to consumers is time consuming. Sometimes sitting at a market getting high prices for their products is more worthwhile and sometimes it is more worthwhile to work on their farms;
- Price fluctuations and market risks. Information on price fluctuations will also give insights into the risks associated with producing different crops. Today, the question “when to produce” is in many cases limited to a fixed period, but the question “when to sell” becomes more important. The availability of information about seasonal prices under the liberalized market system pushes farmers not only have to seek market outlets, but also to store their produce for longer than in the past;
Marketing costs

When farmers sell their products at the farmers’ market, they must not only take into consideration how much it costs them to produce it but also the costs of getting the produce to market. Farmers must be aware that prices received at the market include additional costs which are not included at the farm gate price. Therefore, the farmers must know:

- All relevant costs up until sale to the consumer;
- How to properly calculate profits;
- How to decide what marketing channel to use.

These additional costs are usually known as marketing costs, and they can be many and varied. Generally, the more complex and lengthy the marketing chain is, the higher the marketing costs are. They are related to specific form of marketing activities and can include:

- **Cleaning and washing** (e.g. root crops)
- **Sorting** - removing damaged and immature products, as well as produce of different varieties.
- **Grading** based on size and color defects.
- **Packing**: For protection during transportation and handling of the products, but also for promotional purposes. Different types of packaging have different costs (cartons, wooden crates, pallets, glass, plastic containers, etc.) and influence of the share of the final market price.

Using poor packaging to save money can:
- Be counterproductive;
- Increase losses due to product damage;
- Make the product less attractive and reduce the price that buyers are prepared to pay for it.

- **Handling costs**. If there are multiple operations of handling, loading and unloading, then the farmer will have to pay proportionately more.

- **Transporting goods from the farm to the market**. Longer distances mean that farmers receive a lower share of the final market price. Calculating transport depends on the type of transport, the space occupied, and the weight of the products. It is particularly difficult to calculate the prices if mixed goods are transported together or if the farmer transports the goods using his or her own vehicles.

- **Storage**: This is an important cost for many products, although the main purpose of storage is to extend the availability of produce over a longer period than if it were sold immediately after harvest. Storage costs vary depending on the expense of building and operating the store and are also based on the capital used to purchase the produce which is stored.

- **Product losses** are common with agricultural produce marketing. For example, farm gate sales lead to fewer losses. Even if nothing is actually thrown away, products may lose weight in storage and transport. The calculation of losses in marketing costs can be quite difficult. Sometimes, if there are no quantity losses, there can still be quality losses, and this is reflected in the price at which produce is sold.
• **Commissions and fees.** Commissions and fees are often a part of marketing costs, including marketing fees, fees for parking of the transport, fees for leasing weighing scales and refrigerators, fees for phytosanitary checks etc.

*Uses of market information*

Farmers that have access to market information can make the following decisions:

- What to produce – product mix;
- When to produce – timing;
- How to produce – varieties, production technologies, post-harvest handling, transport and storage;
- How to sell;
- What marketing strategy to use;
- How profits may be improved (change market, different product, changed post-harvest handling and transport, changed marketing arrangements, etc.);
- How to minimize the identified risks;
- How to develop a Marketing Plan for the products;
- How to monitor performance, check prices received are reasonable or if better options exists;
- How to decide on how to increase profits.

*Sources of market information*

Farmers can use various sources of market information, including:

1. **Government-run market information services.**

   In many developing and transition countries, government-run market information services are the main source of market information for farmers, although they often provide inadequate information. Their main characteristics are:

   - They are independent and thus likely to be unbiased;
   - They offer information over several years;
   - They provide information that can be used to help farmers get better prices and plan for production, such as what to plant or when out-of-season production can be advantageous.

   *but*

   - They do not always reach smaller farmers;
   - The information may not be up-to-date;
   - The information may be made available too late to be of any use;
   - They may not be very accurate;
   - They provide little analysis.

2. **Traders**

   - Often have up-to-date information, *but*
   - They want to buy products as cheaply as possible
3. **Other farmers**
   - Can be an important source of information about local markets, but
   - May not have an accurate idea of the prices they received;
   - May exaggerate prices they received because they want to present themselves as good negotiators with traders or as producers of top-quality produce for which they receive top dollar.

4. **Price boards in markets.** This information is:
   - Used mainly by farmers that visit the markets;
   - Or have relatives of friends close to the market;
   - Little use to farmers who prefer to sell at the farm gate;
   - Of limited use at markets where farmers and traders are not fond of announcing their prices (similar experience at the markets in Armenia);

5. **Extension workers.** A proper extension service understands how to:
   - Identify varieties being sold at the market;
   - Find out what price products are going for;
   - Find out terms and conditions;
   - Keep records of reported prices;
   - Provide advice on markets;
   - Provide information on seasonal fluctuations;
   - Assist farmers in understanding market reports;
   - Prepare analyses and reports on the market;

6. **Non-Governmental Organizations (NGOs) and donor funded projects.** Characteristics:
   - Accurate and detailed data;
   - Regular updating and maintenance of the databases;
   - Weak side is that the information often only reaches a small proportion of farmers;
   - Mostly supporting and encouraging production, without paying too much attention to the market for the produce;
   - Limitations regarding sustainability after the end of the project (activities can be blocked);
   - Making beneficiaries dependent on donor aid;

7. **Agro-processors,** usually provide information about their buying prices:
   - On request (in person or by phone), and
   - Often place notice boards at their premises detailing such prices.
Farmers’ Markets – Alternative Market Outlet for Small Farmers

What is a farmers’ market?
Some people may think that setting up stalls and bringing farmers to sell their products makes a farmers’ market. However, this is only a small part of the institution of farmers’ markets. The farmers’ market system is made up of rich administration and operation activities providing:

- Valuable shopping experience to customers;
- Attractiveness to the general public;
- Worthwhile partnership to the community;
- Profitability to farmers;
- A sustainable alternative market outlet.

Therefore, farmers’ markets not only gather farmers to set up stalls and sell their local produce to urban residents, they do much more.

Established farmers’ markets are:

- An appropriate means of communication between farmers and consumers;
- An appropriate means of communication between farmers and the community;
- Able to communicate a full exchange of fruitful information;
- Able to communicate with the support of an established information system;
- Able to empower farmers to find better negotiation positions;
- Able to offer transparency and market convenient conditions.

When designing the market system, farmers must be aware of who is going to use the FIM system and what kind of information will bring benefits to all of them:

a. farmers should have a clear overview of the:
   - Varieties of produce offered and available to consumers;
   - Quantities of the products;
   - Retail level pricing;
   - Interest of the customers for products by type.

b. consumers should have a clear overview of the:
   - Varieties of produce offered by farmers;
   - Retail level pricing;
   - Freshness or nutritious locally grown food;
   - Origin of goods related to certain production areas;
   - Information about producers;
   - Method of production.

c. The local community should have information on:
   - The foods that are on offer on a local basis providing food security to the community;
   - Boosting the surrounding local businesses, generating jobs, increasing sales tax revenues, and helping the local economy to grow.
Farmer’s Markets and FMI system

Farmers are active participants in the established FMI system and by following the defined procedures are able to benefit from it. Farmers provide information which is appropriately processed. For farmers, it is very important to know what form their involvement will take, to know the procedures, and how to use the information provided.

The FMI system has to enable the farmers and market staff to identify the farmers’ market product. Analysis of what is present at the market, products and quantities available, should allow identification of what is missing and what may be offered to the customers.

1. When submitting their applications for participation at the farmers’ market, every farmer will be provided with a unique vendor number which serves as identification and enables easier processing.
2. The farmers should provide the ASC with all relevant contact data and data about the products (crops, area, quantities, timing, farm location, etc.);
3. When applying with the ASC for participation in a particular market event, farmers declare the products and quantities they plan to sell. Those farmers who still do not have their vendor numbers will be assigned them at this phase. The information about products and quantities is provided by the farmers, as is the date of participation;
4. The approved products and quantities are based on the coordination developed among the ASC staff and market managers, in line with market rules. For every market event, the range of products and quantities are identified before the event.
5. Farmers have to report the products and quantities brought at the beginning of the market day.
6. At the end of the day, farmers report on quantities sold.
7. By the end of the day the data sets should be ready for transfer into the main database.
8. Farmers can also help with the reporting by interacting and providing feedback on the market, such as product needs, customer service needs, helpful suggestions, and useful criticism.

One of the options is active coordination with extension offices, such as the regional Agriculture Support Centres, which communicate with local farmers on a more frequent basis. It is expected that these extension centres, as well the farmer’s cooperatives and associations will have databases with the farmers in a specific region, who can then easily be contacted. Farmers’ markets do not only have to be promoted to customers, but also to other farmers, which could help farmers use the market as an alternative outlet. The contacted farmers must be provided with the most important information to help them decide whether or not to participate. Among other things, the useful information will inform farmers about location, working hours, seasonality, market customers, range of products, sales volumes, prices, market fees, farmers participating, market turnover, market promotion and of course the market rules.

As described above, the reports for the quantities sold and prices obtained will be distributed to the Market Information Centre using various media (emails, text messages, radio and TV, news and cable channels.) to all beneficiaries, including the farmers. It is very important this report
reaches farmer before they decide to participate at the weekend event and should be available in good time before applications have to be made.

<table>
<thead>
<tr>
<th>Crop</th>
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<tr>
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<td>325.00</td>
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</tr>
</tbody>
</table>

**Farmers’ Market – marketing opportunities**

Although Marketing takes many forms, for farmers’ markets it seems most adequate to define it as the ability to communicate the information about the farmers’ market, its farmers and their products to potential customers, with the goal of influencing them to shop at the market. The marketing process with farmers’ markets is dependent on the participation of both farmers and farmers’ market managers.

Farmers’ markets are a very convenient alternative outlet for the small farmers. At the farmers’ market:

- **Small farmers can organize themselves into groups;**
- **These groups can achieve economies of scale;**
- **Their products can become more competitive;**
- **Group members can achieve sustainable production.**

*Only when organized can they also protect and promote their local products. Promotion activities are easier in groups than individually.*

Bearing in mind the existing grouping activities under the projects carried out by Oxfam, ACDI Voca, Pragma, FAA, as well as the experience from another FAO projects in the Balkans, it is maybe more recommendable for farmers to organize themselves into small groups of 5-7 farmers. Bearing in mind the limited size of the farmers’ markets, the establishment of small groups seems to be more effective than establishing bigger groups. Small groups of farmers can more easily offer their products on small market stalls (for example, the Nizami collection centre at the Kasyan market is positive experience).
Group marketing at the farmers’ markets enables:

- Easier market access;
- The quantities offered to become concentrated and to represent serious offer;
- Richer and more complete assortment of products;
- Reduced marketing costs;
- The implementation of standardized procedures;
- Better handling costs;
- Tasks to be delegated among group members;
- Better coordination and more efficient promotion activities.

In this way, as the farmers’ markets have limited size, they are ideal market outlets for small groups of the farmers. They enable farmers to reduce their costs for market access and will point out the local and unique character and origin of the farmer’s products.

Advantages of group marketing are:

- Increased bargaining power;
- Improved economies of scale;
- Lower transaction costs;
- Better prices;
- Combined small surplus attractive;
- The smallest producer can sell at the same price at city marketing networks;
- Sharing risk;
- Encourages innovation;

At the same time group marketing has some disadvantages like:

- Possibility of over-centralization
- Loss of individual flexibility
- Levies and fees for the group
- Exploitation of weaker members
- Individuals forced to accept prices of the group

Some of the steps for group activities can be focused on:

- Improving the dissemination of information and capacity building regarding general market behaviour;
- Cooperation in preparation and distribution of promotion materials which will help for better establishment of long-term cooperation with the customers.
- Offering and probing the local products at particular events organized at the farmers’ markets;
- Distribution of printed and electronic promotion materials.
- Standardization of the products offered by the group;
If farmers are organized in groups, they can obtain valuable experience and knowledge about how farmers’ markets function through visits to markets in other countries.

Organizing farmers into group for marketing is more than a group of farmers just getting together to sell their products.

It requires some planning and organisation; including:

- Setting up membership criteria;
- Setting up member contributions;
- Services provided to the members;
- Management of the group;
- Financing of the group;

The following factors must be taken in consideration when planning group marketing:

**A. Criteria to become a member**

- Living in a certain village or region;
- Reliable and trustworthy farmer;
- No limitation to be equal member;
- Have minimum number of hectares of arable land;
- Must not be a member of another collective marketing scheme;
- Gender and Age can be also criteria;

**B. Member contribution**

- Annual fee
- Some minimum hours engaged in group activities;

**C. Services provided to the members**

- Marketing of products
- Value-adding activities
- Collective inputs buying

**D. How should the group be managed?**

- Elected management committee
- Appointed manager
- Voluntary management
- Certain financial structures should be used;
- Membership fees;
- Percentage of the profits at market prices;
- Percentage of the profits for lower input prices;

Again, it must be stressed that the grouping must come from the farmers, not from outside. Only if they are really aware of the benefits of group marketing and really want to work together will their cooperation be fruitful.
Module Distribution of Information for the farmers’ market

Module on distribution of information to farmers’ markets

Development of the market brand
Developing a market brand is a must for all farmers markets. The Market Brand should be:

- Strong;
- Recognizable;
- Consistent.

The brand represents and confirms the market organization’s identity. It helps consumers to recognize the market and encourages them to visit the market. The management team must create a brand image that sets up a positive image of the market and generates a response that will bring consumers to the farmers’ market.

The market brand consists of:

- A brand name; i.e. the market name;
- Logo;
- Tagline;
- Typography (the type size, font, and spacing);
- Colors;
- Attitude or voice.

Farmers and market managers have to use the market brand consistently, as its use creates a positive image for the market and maintains its integrity. With the help of a positive brand image, farmers and by the managers can achieve the following benefits:

- Increased revenue by drawing customers to the market;
- Decreased price sensitivity which enables maintenance of successful price structure;
- The creation of a loyal and stronger customer base;
- The creation of additional leverage over competitors;
- A boost in attendance at market special events based on brand credibility;
- Perceived professionalism;
- Attracting additional farmers to a market;
The development of the market brand is a creative activity and some basic rules must be respected:

- **The brand should be specific**;
- **The brand should be unique**. Ideally, if the market’s name is removed, people should recognize it just from the logo and tagline.
- **The brand must be consistent**, because it provides identity and personality. The identity should exhibit consistent and unambiguous. Therefore once created, the colours, fonts and tagline should not be changed.
- **The brand is created on long term**. Changing the market brand can cause confusion regarding market identity and may induce negative reactions leading to decreased sales.

**Preparing to disseminate the message of the farmers’ market**

After developing the market brand, the following actions should be carried out:

- **The market brand must be made visible to potential customers.** This will raise their perception of the farmers’ market;
- **The market brand also has to be made known to farmers so they feel a share of ownership**;
- **The market management team must create a marketing plan**;

Before the market information and visibility message is sent, a plan should be prepared based on:

- Demographic analysis;
- SWOT Analysis;
- Identified communication strategy.

The farmers and the market managers must understand the surrounding community and know the attributes of customers in order for the communicated information to hit the target recipients.

Bearing in mind the customers attributes, the marketing plan will target a good basic picture of the “who, what, where and when” as well as a communication strategy and media planning. The information about farmer’s markets must reach the potential customers with a meaningful message which will result in customers responding.

A Rapid Market Assessment is a very useful tool in this respect. This tool is usually periodically used at the operational markets throughout the market season. Through drawing into the DOT survey, it is very effective in learning who the market’s customers already are. This will help to target the marketing and thus reach more customers. It should also help to identify potential customer profiles that are missing.

The demographics of the community should help the farmers’ market managers in analysing:

- **What the preconditions of attracting potential consumers to the farmers’ market are**;
- **How appropriate messages should be developed**;
• How the segmented market’s targets should be determined.

However, it must be clear that demographic data can be limited as they give answers to “who, what, where and when”, but no to “why”. This can sometimes lead to stereotyping which can be wrong. Therefore, other data must be obtained in order for the disparate attitudes within a given target group to be identified.

Development of marketing messages

When the relevant data about customers and consumer groups is provided, as well data for understanding the relationship between the market, its consumers and community, the marketing message can begin to be shaped.

Firstly, a marketing objective must be developed, which should come from the weaknesses identified in the SWOT analysis. The task is to develop one message that will resonate with the target customer and meet the objective. It is important to focus on only one message.

Why? Because people are bombarded with advertising messages from every conceivable source, all day long. Keeping a consumer focused on only one message increases the chances of:

- The message being heard;
- The message being remembered;
- The message initiating an action by the customer.

Therefore, anything else should be a supporting message that backs up the primary message.

There are four key rules for developing a marketing message; it should be:

1. Focused on benefits;
2. Easy connected to by customers;
3. Concise;
4. Consistent with the market brand;

1. The message must focus on benefits. The customers want to know “what is in it for me?” That means benefits show that the farmers’ market relates to the customers, is able to make a connection and pull the customer in. It is very important that the message speaks the language of the customers and is personal; for example:

   a. Feature: The freshest produce is available at the local farmers’ market.
   b. Supporting benefit: Put customer’s and his family’s health first by giving them nutrition-rich fresh produce.

2. Customers can easily connect with the message. The consumers should not have to think hard to understand the message. If they are confused by the message then it was bad marketing.
3. **The message must be concise.** The message must be as direct as possible and not beat around the bush to get to the point.

4. **The message must be consistent with the market brand,** as it is loyal part of the brand.

**Communication strategies**

Once the message has been developed, a communication strategy should be developed to disseminate it to the consumers. A well disseminated message will raise their perception of the farmers’ market and will result with an increase in customer traffic. When developing a communication strategy, two issues have to be determined:

1. **Developing marketing materials and programs;**
2. **Deciding what media to communicate through;**

1. **Developing marketing materials and programs.** With developed marketing materials and programs, the farmers and market managers will raise the customer’s awareness and knowledge of the market and create opportunities to expose customers to the market brand. The materials have to be delivered directly to the potential customers. Such materials can be:
   - **Farmers’ market brochure** featuring the brand and keeping it front and centre for consumer recognition.
   - **The letterhead and business cards** are also part of the marketing materials. They should include the market brand, as well.
   - **Newsletter** is an important marketing material which is a powerful tool in retaining current customers, especially when the farmers’ market is going to be re-opened after a long winter break.

Today, an effective newsletter could be created in a simple electronic format emailed to the current customer database, which is just as powerful as a traditional newsletter but more cost-effective. Different information can be provided like:

- When new products are coming into season;
- Whenever new farmers have joined the farmers’ market;
- To announce an upcoming special event like the day of pomegranate.

The newsletter should be:

- Inviting;
- Informative;
- Short.
The average person will only spend two to three minutes reading an email. Any longer and the newsletter will likely remain unread.

- **Signs** like tables, banners, posters, or flyers. These are marketing tools in the communication strategy and must follow the marketing rules. They need to incorporate the brand: the market name, logo, tagline, typography, and attitude. As customers become used to seeing the brand, they will instantly recognize it and generate a perception and provoke a response - a trip to the farmers’ market.

- **Websites** are one of the most important marketing materials today. The consumers use the internet for news and information. The website may be first introduction to the market and must show the market brand. The web site should include four main pages:
  - Home page;
  - About the farmer’s market;
  - Who the farmers are, a list with all them including their photos, contact information, directions to their farms, and links to each farm’s website, if any;
  - Contact which include information about location of the market, including directions to the market, when the market is open, and season and contact information for further questions.

Websites are a powerful marketing tool and thus require maintenance. Neglecting the market website can damage the image of the market. Therefore, the web site:

- Must be kept up to date;
- Must be provided with each season’s new information like working hours, roster of farmers, special events listing;
- Must include any other time-sensitive information;

**Otherwise:**

- Browsers will stop visiting the web site;
- They will no longer see the market as a credible resource;
- They may no longer consider shopping at an out-dated venue.

**Note**

*Nothing generated from the market should be without the market brand which is the market’s identity.*
2. Deciding what media to communicate through

The market brand and message is communicated to consumers using the local media. Media, including paid advertising and editorial (non-paid coverage) are externally controlled communications.

- **Paid advertising.** Today, consumers are exposed to many different messages on a daily basis so the market message:
  
  - Needs to be powerful;
  - Needs to be repeated many times to be heard. According some analysis, the message will need to be seen or heard at least seven times before it even registers with the consumer and up to another seven times before it is acted upon.
  
  - Requires serious funds as the advertising process can be expensive in order to support a campaign that will guarantee frequency, recognizing and responding.

  **Key elements of the advertisement:**
  
  1. **What are the benefits in the advertisement for the customer?** Potential customers want to know what benefits they will gain by shopping in the farmers’ market. Otherwise it will be a waste of money and opportunity for the market.
  2. **Strong call to action.** The advertisement must deliver a strong call to action to potential consumers. “Feel good” advertisements have less chance of achieving the desired response (e.g. visit the market, buy local, visit the website, or whatever action you are looking for).
  3. **The market brand must be prominently featured in every advertisement** in order for the customers to recognize the brand and what the image, logo, and message refers to. In this way recognition for the market is built.

  Print advertisements can be in newspapers, magazines, local shoppers, or any other publication. The publication must match the target audience (who are they, what do they read, where and when, etc.).

- **Editorial advertising** can be a TV interview or news article. Characteristics:
  
  - More powerful than paid advertising;
  - The consumers find it more credible;
  - Requires relationship with reporters to be established;
  - The reporters must know and find the market manager to be reliable,
  - Positive precondition is the reporters to be familiar with the market and farmers.
The information is available when they need a story or report;
Their publishing deadlines must be met;

- **Press releases** are a tool for reaching media and building relationships. Characteristics:
  - Important to get stories that the readers/viewers will find interesting;
  - Delivered by mail, fax, or email;
  - The press release is followed up by a courteous phone call which has to be simple, short, and respectful.

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<th>When the press released is prepared, the market staff should think like the reporters and three key questions must be in mind:</th>
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| 1. **Is it news worthy?** For example:  
  a. There is a new product or farmer in the market.  
  b. There’s an upcoming event in the market.  
  c. An important official or group is visiting the market.  
  d. A weather event impacts local agriculture.  
  e. New services are available in the market. |
| 2. **Is it timely?** Press releases are immediate and should alert the media to what is happening now or be a call to action. |
| 3. **Is it relevant?** Does your press release relate to the readers/viewers? |

If the answer is yes to the above questions, then the information should be put into a one-page press release.

- **Social media** or networking started as a way for people to stay in touch with one another. Characteristics:
  - Powerful marketing tool;
  - Two-way communication between the farmers’ market and the contacts on the social media page.
  - No costs involved;
  - There is an investment of time to update the site pages.

- **Blogs** are online journals. Best scenario, the blog to be hosted on the farmers’ market website, so that the readers are also directed to other pages on the website. The blogs are written from a personal point of view. To be effective, they need to be updated with new entries on a regular basis to keep people returning.

- Twitter is a social network that started as a service to link family and friends. Its posts are limited to 140 characters. Quick updates on the market can be posted on the market page. Twitter “friends” will be able to follow the news of the market and respond through Twitter as well as by participating in the market.

- LinkedIn is a network for business-to-business contacts. It is primarily for professionals and is used as an exchange of information, exchange of services, and promotion of services. Promoting the market with its own page on LinkedIn may be effective in reaching business and professional people.

- Facebook is a social networking site for connecting friends. It does not have the character limitations of Twitter. Photos, videos, and lengthier posts can be added to Facebook. It can be an excellent showcase for the farmers’ market.
- **Television.** Powerful TV ads are:
  - Typically 30-second stories that sell the product and the brand;
  - Initiate emotions and force motivation with consumers;
  - Are prepared by professionals and require a properly planned marketing budget;

What TV network is to be used and at what time the advertisements will air has to be properly planning, bearing in mind the target demographic and the available budget.

- **Radio.**
  - More effective means during the summer;
  - Short message or a 60-second time frame to tell the market story and to sell the market brand.
  - Proper budget planning required in order for a professional-sounding advertisement to be ensured.
  - Planning regarding selection of radio station and timing (typically, the highest rates are during drive time and during national programming).

- **Billboards,** like iconic paintings on the walls of buildings and street panels or the electronic billboards flashing alternating messages to people on the streets below.
  - Sizes can vary but all sizes can be effective if used properly.
  - Billboards can be contracted for a certain period.
  - Rotation of the billboards from one location to another location can be practiced, in order for a new audience to be reached.

- **Direct Mail** through mailing a printed advertising leaflet to potential customers.
  - More expensive and requires larger budgets;
  - Requires a mailing list;
  - Costs for designing and printing the leaflet and envelopes;
  - Paying for postage;
  - Opinion that this media leads to low returns on investment.
Development of creative web-platform

Creation of a virtual database of farmers and products is a very valuable element of the MIS for farmers’ markets. The beneficiaries will be the farmers participating at the farmers’ markets, but also market staff, staff of the ASC and the Ministry of Agriculture, as well the wider auditorium and consumers. The users can be:

- Given access various databases
- Regular, who will benefit from having information about the markets and participants.

The main sections of the innovative web-platform are:

- Hosting of an online database of the farmers and their products;
- Exhibition of the local products and services. The web-platform can be used for marketing the farmers and promotion of local products and services.

The web-based platform is used as a tool for:

- Dissemination of information to farmers;
- Dissemination of information to a wider audience;
- Promotion of products that are specific and unique to a particular region;
- Virtual exhibition of farmers;
- Farmer’s products and services.

Promotion can be done:

- Through uploading of photos or short videos about the farmers and their products;
- By adding contacts to each farmer or group of farmers so interested visitors can get in touch directly;

The maintenance of the database and activities must be continuous activity. The web page must be updated regularly, as some information is particularly important in the process of planning the production and marketing activities.

Delays in transmitting, processing and disseminating price data can undermine the credibility of an FMI system. The users, farmers or consumers will gain no value from out-of-date market information. This will cause additional challenges related to the credibility of the Market Information System.

Communication with the Customers

In some cases, more developed systems allow:

- Entering purchase orders, thus providing secure sales;
- Reduction manipulation costs;

In the coming years considerable further developments of the MIS are expected, with use of more technical tools and computerized methods. In this sense communication will become part of the direct
selling of goods, particularly with auctions like in Holland, as well as more and more popular e-trade.

Significant increases in communication expenses could make it impossible for farmers’ markets to disseminate data without financial problems. Therefore, cost and benefit analyses of using various media must be carried out. Alternatively, information could be distributed using money from sponsors or other donors (advertising companies, institutions, banks and etc.). In many cases, future sustainability will depend very much on attracting and retaining such sponsorship.

There is no golden rule about how much is needed to cover marketing costs annually. In reality, most markets are concerned with covering their operating costs before they can create a marketing budget. However, the marketing budget must be adjusted as opportunities arise and additional funds are located. It is important to understand each type of marketing strategy, how to use each type effectively, and then measure results of how the marketing funds are being spent wisely.

**Evaluation**

In order for the established FMI system to be efficient and properly adjusted to the external environment, data must be continuously monitored. The operational FMI system should be periodically evaluated to ensure that:

- The objectives of the system are being met;
- The information services have achieved the desired impact on the beneficiaries.

Surveys of farmers and traders are by far the easiest way of carrying out evaluations of the service. The surveys should be designed to assess:

- The extent to which farmers and other beneficiaries are using the service;
- Constraints of using the information services;
- The extent to which farmers and other beneficiaries understand the reports on agricultural products, prices and other related data in various dissemination media;
- The impact on market behaviour, if any;
- Proposals for improving the service.

**Conclusions**

Development of an efficient, relevant and sustainable MIS is not easy task.

The FMI system must:

- Correspond to the technical and financial capacity of the farmer’s market;
- Be properly tailored in terms of the size and the scope of the services at the market;
- Lead towards sustainability.
- Take into account planning and obtaining funds from advertisements and sponsorship.
Many Market Information Services have been established by donors, and in most cases they ran into problems once the donors had left. Free computers, fax machines, cars and motorbikes can be very attractive, but problems come when the donors leave the projects. Housing an MIS is linked with the problem of generating sufficient funds to pay for its operation.

Despite the difficulties associated with sustainability after donor assistance has ended, there appears to be a strong need for technical and financial assistance on a short-term basis.

One of the problems is that farmers often do not appreciate the value of information. Therefore, in terms of permanent activities, the farmers must understand the implications of an MIS through a participatory approach and jointly identify in what form they would like to receive the information.

In the development of MIS, the question “Who would benefit?” must be answered. This is very dependent from the existing market outlets and practice with the farmers. For example, in the Netherlands almost all farmers are linked by computer to the auction system and thus have “real time” access to prices. Can we try to benefit together?
Market Information System – Further reading

Understanding and Using Market Information – Andrew Shepherd, FAO 2011
Improving information flows to the rural community – John Dixon, Horst Wattenbach and Clare Bishop-Sambrook, FAO Agricultural Management, Marketing and Finance Service Rome 2005
Agroecological market information systems in Africa: renewal and impact – Summary of the workshop held from 29th to 31st March 2010, Montpellier CIRAD – UMR MOISA

Farmers’ Market – Further reading

Understanding the Link Between Farmers’ Market Size and Management Organization – Garry Stephenson, Larry Lev and Linda Brewer, Oregon State University 2007
Enhancing Leadership and Organization for Farmers' Market Success - Jude Barry and Brian Henehan, Department of Applied Economics and Management Cornell University, Ithaca, New York
Farmers’ market Development Manual - State of Alabama, Farmers’ market Authority
Establishing and Operating a Community Farmers’ Market - Forrest Stegelin, University of Kentucky
How to Start a Farmers’ market – Velma Lakins, USDA
Iowa Farmer’s Market Development Manual – Patty Judge