Vietnam Agriculture Extension And Market Information System

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Abstract

Vietnam Agriculture Extension and Market Information System was established based on the research and application of information technology and communication in information collection, processing and dissemination to farmers, managers, researchers and target participants in rural areas, government agencies and science research institutions. An information system covering 100 specifically selected districts of 20 provinces was established and came in operation since 2006 under the coordination and technical supports of the Ministry of Agriculture and Rural Development (MARD) represented by the Statistics and Information Technology Centre. Its performance was highly appreciated by MARD as it helped provide information to farmers, managers, and scientific researchers in the context of the agricultural sector’s shifting to market mechanism where the producers took initiatives in both producing for markets and marketing their products.

Keywords: extension, market, information, information technology, information communication, information system, database, Internet, HTML, farmer.

Introduction:

Besides the activities directly related to production, MARD also actively participates in agricultural products production and marketing promotion. It provided assistance to producers, managers and researchers in form of collecting and disseminating valuable information through the rural development and agricultural information system. An example of this activity is the establishment of the website on Internet at http://www.agroviet.gov.vn/ for trade promotion. It was followed by the design and development of an extensional and market information system in 2002 in 7 provinces, including Lào Cai, Bác Giang, Nghệ An, Bình Định, Đắk Lắk, Vĩnh Long và Cần Thơ. In 2003, on improving the efficiency and overcoming some shortcomings of the seven-provinces information system, MARD developed vegetable specific information system in 9 provinces, which was then upgraded to 11 provinces.

In 2003, Viet Nam Government and Asian Development Bank (ADB) signed an agreement supporting the Agricultural Sector Development Programme (ASDP), in which a commitment was made to develop an extensional and market information system in 20 provinces and 100 district – a product on basis of inheriting and improving the outcome of MARD’s above-mentioned activities.

Within the framework of this report, we will mainly introduce the technical structure of MARD’s Agricultural extension and market information system in 20 provinces and 100 districts, focusing on the application techniques of information communication and technology in the system and some outcome of the system in 2 years of 2006 and 2007.
Content of Vietnam Agriculture Extension and Market Information System

1- Objectives
- To establish an agricultural extensional and market information system on the basis of information communication and technology application in response to the sectorial management, strategies and policies making demand and in support of agricultural production and trade promotion.
- To initially develop an integrated and comprehensive mechanism from the centre to local, ensuring the confidentiality, fairness, explicitness and sustainability of the extensional and market information system.

2. Structure
- To establish an integrated computer network connecting the centre with the local to serve the updating and management of market information. To provide information products in response to the market information demand of each target group (4 target groups: farmer, leadership; researcher; enterprise).
- A computer network connecting the centre (ICARD - MARD) with local (Departments of Agriculture and Rural Development (DARD) in 20 provinces) using new technology and internet with broadband (ADSL). Descriptions of the network are presented in Figure 1 and Figure 2.
- A software for updating, searching, correcting and making synthetic reports and tables from the information obtained from the local (districts, provinces) and the centre (Information Technology and Statistics Centre). The software also enables the automatic information exchange between the central and local database, which sustains the information exploitation and sharing demand of each provinces. Description of the information exchange using the software is presented in Figure 3.
- A software for monitoring and exploiting agricultural extension information (science and technology advances, new variety, breeds, addresses of providing seeds/breeds, fertilizer, pesticide suppliers, … at the centre and local) was made. The software developing technology ensures two ways, i.e. on internet to broadly serve the demand of the project’s localities as well as 64 provinces and cities nationwide; and on individual computers in form of CD-ROM to directly support the extension activities at different local levels (provinces, districts, communes).
- In order to effectively play the role of a focal point in the market information system, the Information Technology and Statistics Centre capacity in terms of information sources, facilities and staff will be strengthened to ensure the stable and effective performance of the system. The Centre will be financed to buy market information from domestic and international sources for analyzing and compiling.
- After being collected, processed and entered in the database will be compiled, analyzed and released in high value information products such as agricultural products market bulletins, television and radiobroadcast programs and in the information dissemination activities in community.

Three types of bulletins, including:
+ Weekly bulletins of Market and Production at the centre and local,
+ Monthly special bulletin at the centre will be a highly valuable source of market information for most of the demanders in Viet Nam.
+ Monthly special bulletin for leadership with focus on hot issue of sector.
Besides, the market information dissemination activities and market information dissemination training and surveys will be made. The special feature of the system is the software for agricultural – forestry and fisheries price data collecting, entry, export and sending to the local (districts in which the final destination is the information collecting points at the communes) and centre (Information Technology and Statistics Centre). The software name is abbreviated PMARD. Structure of PMARD software as:

   The software contains 2 main parts,

   (i) the part for installation into individual computer in order to enter and send data, namely PMARD-WIN;

   (ii) the part for receiving, processing and displaying goods price on Internet through the website, namely PMARD-WEB.

   PMARD-WIN was developed using C++ language writing on Net Framework of Microsoft. The application software uses database Access to store information obtained. After the information is updated, there will be a module for exporting and sending it to the host computer at the centre through Internet using available ADSL connection. With PMARD-WIN, users can administer their own user accounts and make rules for each user. Besides, the users with Administrator power can create their own forms and print them to give to data collectors. This is a very useful tool for local as the market mechanism becomes more and more effective with the market oriented plant and farmed species structure changes.

   PMARD-WEB is actually an application developed on the platform of a Portal. The platform of this Portal is Net NUKE. The database used Microsoft SQL 2005 Advance server. At the central server have a software to receive information from 218 collecting point of agro-product prices, after checking the authentication, integrity of information, it will be convert in to database of SQL server. The PMARD-WEB is maintaining in Internet as address http://pmard.mard.gov.vn/ will be providing information for user. Access http://pmard.mard.gov.vn/ can exploit information with difference catteries and form as char, graph and data sheet or text to serve for suitable target.
Cập nhật những tin tức mới nhất về nông nghiệp và nông thôn.

Đánh giá các điểm chốt tín dụng hàng hóa nông thôn.

- Đà Nẵng: 2 đợt
- Bắc Giang: 8 đợt
- Bình Dương: 4 đợt
- Bắc Kạn: 2 đợt
- Bình Phước: 1 đợt
- Cà Mau: 1 đợt
- Cao Bằng: 0 đợt
- Đà Nẵng: 1 đợt
- Hậu Giang: 5 đợt
- Hiệp Phước: 1 đợt
- Hà Giang: 0 đợt
- Quảng Nam: 0 đợt

Truy cập hệ thống quản lý

TÌM HIỂM NĂNG NƯỚC CẢO NĂNG LỰC CNTT CHO CẦN ĐƯỢC ÁNH SÁNG

SOME ACHIEVEMENT OF SYSTEM IN 2007:

- Installation software in 20 provinces, 100 districts, and server system in ICARD.
- Organization training courses for more 700 people in system with IT, how to good manage the system. To train the skill to collecting, processing and producing the material information as bulletin, CD-ROM, TV.
- To diversify the way to disseminating information as use mobile phone, teletext... to improve efficiency of project.
- Up to march/2008, total 218/203 point of collecting information already updating information with average 1,1851 time/month (in chart of frequency of collecting and updating information)

**Conclusion**

The Agricultural extensional and market information system of Ministry of Agricultural and Rural Development are operating in 20 provinces and 100 districts. After one year operation, now already added 3 provinces into system by other project, so system scale now is 23 provinces and 106 district with nearly 300 point of collecting information. The output of system day by day more diversify and try to reach to farmer.

The web site for farmer will became convenience tool for user and special are farmer to access and exploiting, sharing information.

One think will be great successful of information system is the change the method, the behavior of offices involve in the system. Now they used to with exchange information by email, forum in the website...that never have before.

The Agricultural extensional and market information system of Ministry of Agricultural and Rural Development will be a good model of application IT in rural region. It’s positive affect to agriculture sector.
Figures

Figure 1: Model of 2-ways information system

Figure 2: Model of network in province and district
Figure 3: Model exchange information by software

Figure 4: Model disintegration