



Information System of Research, Studies and Consulting for Agriculture in Lithuania

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Preface

Information in our days is very important for management of farms and agricultural enterprises as far as enterprises of agricultural processing industry. A lot of information is necessary for federal state institutions and local authorities for development of policy of agricultural sector and rural areas and its control. Knowledge about processes, taking place in sector of agriculture, and its effectiveness a very important for professors and students in Universities and Colleges for illustration of teaching process and research.

At present in Lithuania the main institutions, which are collecting the data from producers of agricultural production, are:

1. Statistical Department of Lithuania.
2. Ministry of Agriculture.
3. Lithuanian Advisory Service Centre.
4. Lithuanian Agricultural Chamber.

As far as state budget possibilities to provide subsidies per unit of agriculture production are limited, there are no legal acts, which request to provide statistical and administrative data, producers of agricultural production are not interested in providing of right information for these institutions.

The object of research is request for information of producers of agricultural and fisheries production and food products as far as possibilities of sharing collected data in on-line regime.

The purposes of research are:

- To describe main users of ISRSC and request for information of them;
- To create the structure of data bases (DB) of ISRSC;
- To define main sources of information, necessary for end-users, and describe possibilities to use them;
- To provide principle scheme of functioning of ISRSC and technology of information processing.
- To describe the directions of improvement of ISRSC.

In process of research are used these methods: the analysis and synthesis of scientific papers, analysis and comparison of results of data, provided in questioners and on interview, statistical and comparative analysis, generalisation of experience.



1 The main reasons of creation of ISRSC

The lack in information about real situation in sector of agriculture and market of agricultural production has negative influence not only for farmers, agricultural and agricultural processing enterprises, but and for quality of agricultural and rural development policy and its investigation. To increase interest of agricultural producers to provide necessary information, especially confidential data, to help them in short time and way get information for farm's management, increasing effectiveness of producing of production and its quality, to concentrate information, necessary for research and teaching of students in Universities and Colleges and for consulting of farmers and specialists of agricultural enterprises in Centres of Lithuanian Agricultural Advisory Service, it was made decision to start creation of IS of Research, Studies and Consulting for agriculture.

ISRSC is very important and for Lithuanian Agricultural University and scientific research institutes. Information, collected in databases of this system will help researchers, post-graduate and other students to find out necessary information about publications, results of research projects and programs and other kinds of scientific activities. It will help to increase quality of study and teaching process, made good possibilities to obtain necessary experience in usage of modern information technologies for search of information, inclusion of students in process of improvement of this system.

On the other hand it will help in presenting of results of research not only for end-users in Lithuania, but and in other countries. This fact can had positive influence for international collaboration with similar institutions in other countries.

2 The main users of ISRSC and their request for information

The main users of ISRSC are:

1. Specialists of agricultural, fisheries and processing enterprises.
2. Consultants of agricultural advisory service and other institutions.
3. Specialists of agricultural chamber and other institutions.
4. Researches and students in universities and scientific research institutes.
5. Teachers and students of agricultural colleges and agricultural schools.
6. Institutions, responsible for agriculture and fisheries state regulation.
7. FAO (Library of Ministry of Agriculture).

Using questioners and interviews (directly and non directly), it was made investigation of request for information these main groups of end-users of ISRSC:

1. Researchers and professors of universities, scientific research institutes, colleges and teachers of agricultural schools.
2. Students of universities and other agricultural schools.
3. Governing staff and consultants of Lithuanian Advisory Service Centre and Lithuanian Chamber of Agriculture.
4. Farmers and other specialists of agricultural enterprises and food processing enterprises.

5. Specialists of state institutions and local authorities, responsible for administration of sector of agriculture.

Reaching to satisfy requests for information of mentioned above end-users, it was made investigation in sources of necessary information. Institutions which can provide information for ISRSC

1. Higher schools and scientific research institutes.
2. Agricultural colleges and schools.
3. Institution, responsible for administration of IS of IACS.
4. Institution, responsible for administration of agricultural market IS.
5. Institution, responsible for administration of FADN IS.
6. Lithuanian Agricultural Advisory Service Centre.
7. Institution, responsible for administration state registers.
8. Institutions, which are presenting legal and business information.
9. EU institutions, sharing legal and other kinds of information.
10. FAO (Library of Ministry of Agriculture).

3 DB structure of ISRSC

As a result of analysis of requests for information of end-users, it was made decision about design of structure of databases. At first stage of development of ISRSC it was created 6 databases (subsystems).

In database of subsystem Institutions of research, studies and consulting in agriculture can be provided these data:

1. Full and short title of institution.
2. The number of main subdivisions.
3. Governing body (name, surname and title of position of four persons).
4. Data for contacts (post, e-mail and www addresses, telephone and fax numbers).
5. Short description of directions of scientific research (till 250 symbols).
6. Short description of directions of consultancy activities (till 250 symbols).
7. Directions of studies or titles of specialities.

There is possibility using the some structure of database to present separately information about each subdivision of institution.

Additionally each institution, in case of personal interest, has a possibility to present:

1. The number of employs.
2. The number of scientific researchers.
3. Number of professors.
4. Number of associated professors.
5. Number of publications, prepared by specialists of institution.

Universities, colleges and agricultural schools have the possibility to present study and teaching programs. In this database can be provided:

1. Title of study or teaching program.
2. State code of program.
3. International code of program.
4. The title of qualification, which can be obtained.
5. Period of study or teaching.
6. Annotation of study program.
7. Short description of qualification (till 250 symbols).

In database of subsystem Specialists of agriculture can be provided data about specialists, who are doing research, preparing methodological, technical and technological publications, take part in teaching process in universities, colleges and agricultural schools, providing consultations for producers of agricultural production. About each specialist in this database can be provided:

1. Name and surname.
2. Title of institution (or 2 institutions), where he works.
3. Title of subdivision, where he works.
4. Position.
5. Title of scientific degree or qualification.
6. Ratio of scientific interests (till 150 symbols).
7. Titles of study modules (till 150 symbols).
8. Directions of consultancy activity (till 150 symbols).

In database of subsystem Programs, projects and other kinds of scientific research activities are presented data about programs, projects and other kinds of scientific research activities, which are finished, in stage of investigation or preparation. In this database have to be presented:

1. Title of program, project and other kind of scientific research activity.
2. Status of activity (scientific research program, project or other).
3. Level of realization (stage of planning, preparation, investigation, implementation or usage).
4. Dates of beginning and finishing.
5. Scientific area and direction (according to classification).
6. Titles of involved institutions.
7. Leader of project or program (name, surname and position).
8. Participants of project or program (names, surnames and positions of 10 persons).
9. Institutions, involved in financing of project or program).
10. Main publications, where are presented results of program or project.
11. Abstract of results of project or program (till 250 symbols).
12. Address of WWW page with full text of report.

In database of subsystem Scientific, methodical and technological publications in area of agriculture can be presented data about these publications and places of storage in case of short number of copies. There is possibility to put:

1. Name and surname of author.
2. Title.
3. Date of issuing.
4. Title of publisher and place of issuing.
5. Scientific area and direction (according to classification).
6. Key words, representing publication.
7. Type of publication (monograph, manual, article or other).
8. Institutions, storing this publication (can be till 2 titles).
9. Institutions, sharing publication (can be till 2 titles).
10. WWW address, where is full text of publication).
11. Language.
12. Title of periodical publication in case of presentation of article.
13. Number of periodical publication in case of presentation of article.
14. Abstract (till 250 symbols).
15. Remark about stage of preparation (issued or not).

In database of subsystem Open information systems are provided data about these systems and open databases, where is concentrated important for agriculture information, and conditions of its usage. In database can be presented:

1. Full and short title of IS or DB.
2. Data, when data collection was started.
3. Institution, which is responsible for IS or DB administration.
4. Language (languages), used for information presentation in IS or DB.
5. Key words, representing data, collected in IS or DB.
6. Abstract of purpose of IS or DB (till 250 symbols).
7. Short presentation of conditions of usage collected information (till 250 symbols).
8. WWW address of IS or DB.

In database of subsystem Authorities and other agricultural institutions can be presented its addressees and areas of responsibility. There can be stored:

1. Full and short title of institution.
2. Number of main subdivisions.
3. Governing body (name, surname and title of position of four persons).
4. Data for contacts (post, e-mail and www addresses, telephone and fax numbers).
5. Short description of directions of main activities (till 250 symbols).
6. Short description of directions of consultancy activities (till 250 symbols).

There is possibility using the some structure of database to present separately information about each subdivision of institution.

4 Technology of information processing

All the data should be entered from remote workstations, installed in the academic, research or other institutions and using ordinary INTERNET brouser. But there is the possibility to transfer data using all other possible means (E-mail, disks and other) to central ISRSC operators. This decision was made because some institutions have too weak connection to the central DB or are using incompatible software or codepages.

In each academic, research, consulting and other institution should be the person, responsible for correct information transmission to the central database in time. Information for different subsystems of ISRSC should be supplied and entered into database from different institutions.

1. Data about institutions of research, studies and consulting in agriculture, its addressees and areas of responsibility should be managed by central ISRSC operators using information transferred from these institutions.
2. Data about study programs of Agricultural colleges and secondary schools should be managed by central ISRSC operators using information transferred from Agricultural colleges and secondary schools.
3. Data about specialists of agriculture - consultants, researchers and lectures of universities, colleges and other agricultural schools should be managed by central ISRSC operators using information transferred from all institutions participating in the project.
4. Data about research programmes, projects and other activities or events should be managed by central ISRSC operators using information transferred from all institutions participating in the project.
5. Database of publications should be managed by central ISRSC operators using information transferred from all institutions participating in the project. Main role in creation of this database should play the National library of agriculture.
6. Data about open information systems, which provide data for agriculture and conditions of usage of them should be managed by central ISRSC operators using information collected from all possible sources.
7. Database of authorities and other institutions in sector of agricultural, its addressees and areas of responsibility should be managed by central ISRSC operators using information, transferred from these institutions.

5 Conclusions

On the base of research made during preparation of project of ISRSC it s possible to do some conclusions:

1. Using questioners and interviews (directly and non directly), it was made investigation of request for information these main groups of end-users of ISRSC. On the base of results of analysis of requests for information, it was made list of main groups of end-users of ISRSC information. After checking possibilities to satisfy these requests, it was created structure of ISRSC databases.

2. As far as 40 percent of end-users of IS AGROSCIENCE where from foreign countries, it is very important some data of this system to present not only in Lithuanian, but and in English language.
3. As far as consultations for producers of agriculture production can be provided not only by consultants of Lithuanian Advisory Service Centre, in list of consultants have be included researchers, professors of universities and colleges and teachers of agricultural schools.
4. Reaching lower costs of information collection it is necessary to use special templates, which have to be fulfilled by responsible persons in institutions, which provide data for ISRSC, and send to Central DB using internet.
5. For databases management it is more convenient to use programs of WWW server using CGI scenarios.
6. To prepare information for presentation in English language, it is necessary to use Multilingual Agricultural thesaurus AGROVOC.

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