Prospects of Development of Organic Production in the North-West Region of Russia

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Scientific Seminar On Organic Food 2014,
Mikkeli, Finland

Production of organic food is in beginning of the way in Russian Federation

- The term "organic" agriculture appeared in Russia in 2008 with the inclusion of Chapter 6, "Sanitary requirements for organic products" in of SanPiN 2.3.2.1078-01 "Hygienic requirements for safety and nutritional value of food."
- This year, the Ministry of Agriculture plans to submit to the State Duma the bill "On the production of organic food" which has passed a broad public discussion.

- The State North - West Research Institute of Agricultural Engineering and Electrification (new name: Research Institute of Agri-Engineering and Environmental Problems of Agriculture) has started to deal with issues of scientific support for organic production in recent times.

CROSS BORDER COOPERATION PROGRAMME
partly financed by the European Union

ENPI WITHIN EUROPEAN NEIGHBOURHOOD AND PARTNERSHIP INSTRUMENT (ENPI)

LUGABALT

South-East Finland - Russia ENPI CBC 2007 - 2013
International Project SE - 717

"CLEAN RIVERS - TO HEALTHY BALTIC SEA" (LUGABALT)

2012 - 2014

PROJECT PARTNERS

LP - Administration of Luga Municipality

P1 - North-West Research Institute of Agricultural Engineering and Electrification (SZNIIMESH) of the Russian Academy of Agricultural Sciences

P2 - Saint Petersburg State Agrarian University (SPSAU)

P3 - Regional Public Organisation "Association for Assistance of Field Research and Development of Rural Territories" (AAFRDRT)

P4 - MTT Agrifood Research Finland

P5 - Mikkeli University of Applied Sciences

P6 - Cattle farm "Partizan"

P7 - Committee on Agro-Industrial and Fishery Complex of Leningrad Region

LugaBalt is a biennial project of the Program of Frontier Partnership (ENPI), directed on development of Russian-Finnish cooperation on protection of the Baltic Sea from land-based pollution.

- **Under support and active involvement of local population and municipal authorities:**
- - to create conditions for the decrease of N and P compounds leakage from the rural territories into the Luga River, which runs into the Baltic Sea
- - To encourage the Russian-Finnish cooperation on national, public and personal level in the sphere of effective protection of common water sources, environment and biodiversity

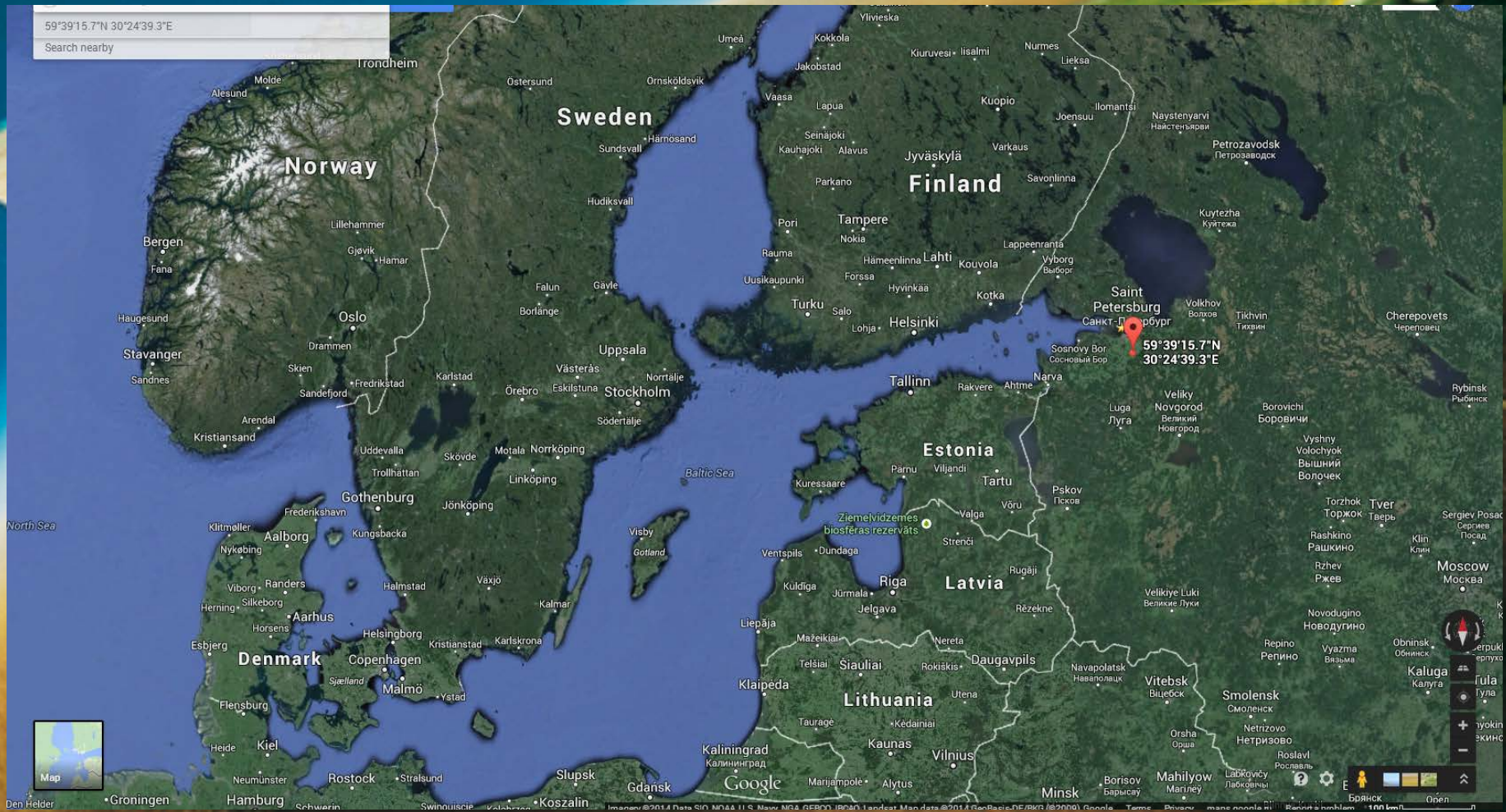
One of the project activities is to promote development of organic agriculture

- 1. Seminars with farmers and local consumers;
- 2. Education of consultants in organic agriculture;
- 3. Study visits to Finland;
- 4. Edition of the education materials.

The Agreement on Cooperation was signed between the Institute and the Finnish Organic Research Institute on the 23rd of March, 2014

- The institute has started to develop new Experimental Field

The Experimental Field has the area of about 800 hectares.It is located near the town of Pavlovsk, Saint-Petersburg, (59°39'15.7"N 30°24'39.3"E).



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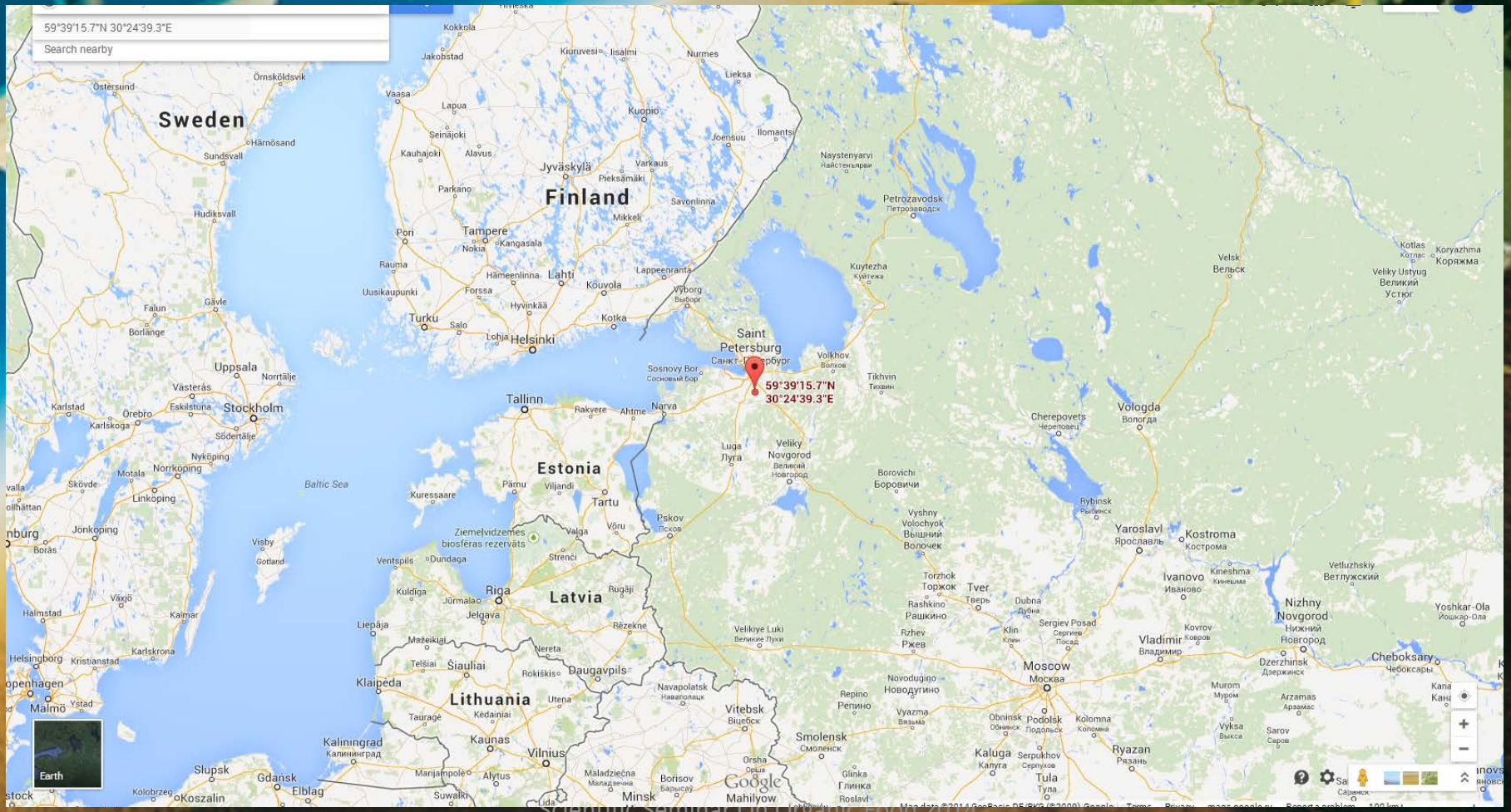


The primary purpose of the Experimental Field project

- is to provide the material basis for development and evaluation of technologies for field crop cultivation taking into account both plant productivity and environmental impact.

The Experimental Field project includes four main packages:

- methodology,
- information,
- instruments and monitoring
- and planning.

Agroecological research methodology is based on integrity and multidisciplinarity

- Two groups of crops are studied in the Experimental Field project:
- (A) field crops: cereals, potato, vegetables, and grasses;
- (B) fruit and small-fruit crops

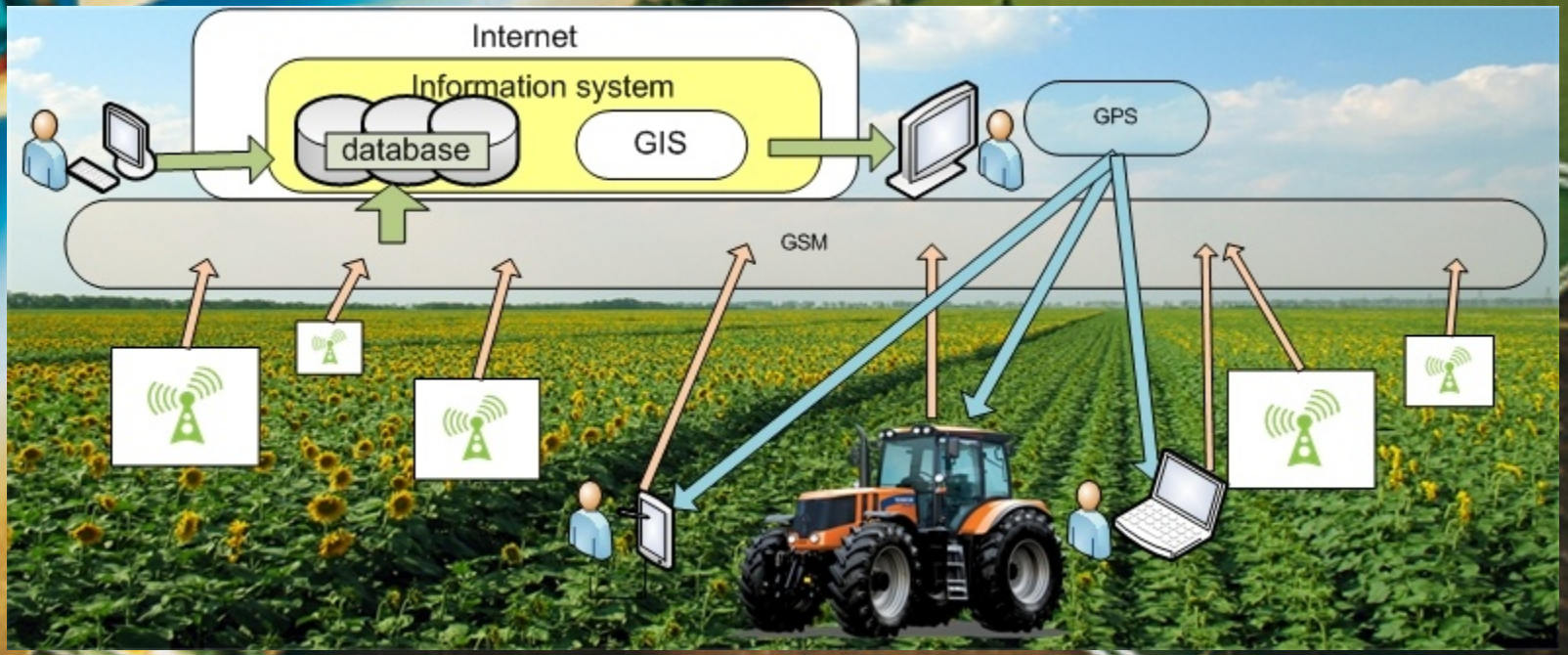
Basic Areas of the Experimental Station

No	Basic Areas	Brief Description
1	Berries – B	A nursery of fruit and small-fruit crops and field experiments related to intensive cultivation methods of these crops
2	Organic Experiments – OE	Different field experiments related to organic cultivation methods
3	Environment Impact Assessment - EA	The area equipped for assessment of environmental impact of cultivation technologies/methods
4	Demonstration Field – DF	Demonstration plots with different crop varieties/cultivation methods
5	Cultivation Methods Elaboration - CE	The area for field experiments, where new methods will be tested and adjusted for local conditions
6	Experimental Organic Farm – OF	Experimental Organic Farm with required facilities will be established for studies and education. The farm will have animals and will produce vegetables for sale and cereals/grasses for animal feeding.
7	New Houses – NH	New types of environmentally friendly and energy efficient rural houses will be constructed and opened for demonstration.
8	Dendrology Area – DA	Area, where the widespread and rare wild plants of the North-West Region of the Russian Federation will be collected and cultivated in conditions close to natural.

Information package

- provides for strategic and day-to-day IT-based management of operations in the Experimental Field project, as well as accumulation of all experimental data in the common Data Base.
- It is based on the Information managing system with the Database of experimental information.

The Information Managing System for Scientific Research on the Experimental Station



This year two activities were started

1. The field experiment oriented on organic production was established and is in progress. The impact of three kinds of organic fertilizers on potato productivity and soil nutrient status are studied in the experiment.
2. The performance of board terminals with the GIS devices, which have been installed on a forage unit and a vehicle, was studied in silage production from slightly dried grass.

One of the field experiment tasks is to evaluate the effectiveness of various types of organic fertilizers to supply crops by Nutrients.

- The software and methods for prediction of Nutrients availability from organic fertilizers are under preparation
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- CNs.w .= f (∑knm x CGn)E
- Nup = f CNs.w, P,E
- where:
- CNs.w - N concentration in soil water;
- knm - Coefficient of mineralization
- CG - Concentration of the Organic matter fraction
- - n - Number of Organic matter fraction
- Nup - Nitrogen uptake
- P - Plan actual need in N
- E - Condition of the Environment

Conclusions

1. The formation of scientific basis of organic production has started in North- West Region of Russian Federation
2. International projects have high value in transferring organic knowledge and experience;
3. The Program of the development of modern experimental field, focused on conducting the joint research in organic agriculture was prepared, and its implementation began.
4. Present-day agro-ecological studies have to take into consideration the actual environmental impact of technology.

- **Invitation to the Scientific event**

- The “Commission Internationale de l’Organisation Scientifique du Traval en Agriculture” (CIOSTA) was established in 1950 as a professional non-profit organization aimed at development of agriculture economics with a focus on agricultural production systems, processes automation and quality control, labour economics and ergonomics and safety.
- Once in two years CIOSTA organizes an international conference, with the first one being held in 1950 in Paris.

- XXXVI CIOSTA conference will be held on the 26-28 of May, 2015, in Saint Petersburg.

- One of the Conference topics is "**Organic production and consumption".**
- You are welcome!

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Thank you for your attention!