

*Planned activities for WP4 “Integration into management strategies and agricultural policy “*

**ARI&SHI**

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- Identify and recommend dissemination strategies of adaptation measures to decision-makers
- Demonstrate dissemination strategies of adaptation measures at the national level

# International Conferences, Symposia and Workshops

- 1. Presentation by N. Lemeshko on ESF Entre-Sciences Conference (France, November 2008) “New Methodologies and Interdisciplinary Approaches in Global Change Research”  
(<http://www.entre-sciences.msh-paris.fr/>, the video recording of the conference will be online soon ).
- 2. Poster on Symposium “Climate Extremes during Recent Millennia and their Impact on Mediterranean Societies” (National and Kapodistrian University of Athens Academy of Athens Athens, Greece 13-16 September 2008).
- 3. Presentation by M. Nikolaev “Vulnerability of crops to insect pests and diseases with climate change in Russia” on the ISAB CMEP Workshop at University in Novi Sad, Serbia, 8-10 May 2008.

# Conferences in Russia

“Actual trends in water use in the southern Russia”, held in Saint-Petersburg 5th December 2008

Discussion about adaptation strategies by changing land-use, socio-economic conditions, and changes in water demand in dry regions, crop selection and implementation of adaptation into management strategies was carried out.

# Presentations

- 1. Voronez Reg.

Agrarian Academy –seminar “Potential adaptation measures for the selected regional agroecosystems”

meeting was planed to November, 15 2008 – moved to this year

- 2. Volga region. - Nizniy Novgorod

Contacts and discussions with key people of local administration and with administration of the Upper-Volga Department of ROSHYDROMET of Russia and discussed situation with water use, reservoirs as a priority water resource for Upper-Volga region with progress of climate change.

- June 2008

- April 2009 - Demonstrate dissemination strategies of adaptation measures at the national level

- 3. Kuban – Krasnodar ?

Experts from Institute of Water use and Irrigation – optimisation of irrigation system

# Agricultural Exhibitions of Russia

participation in exhibitions are most productive

- ***“Agricultural Russia – 2008”, (in Saint-Petersburg),  
5th Interregional Specialized Exhibition “Harvest  
– 2008”***
- ***8th Specialized Exhibition “ProdExpo***
- ***4th International Congress “Grain and Bread of  
Russia – 2008” in Saint-Petersburg.***
- ***2nd International Forum “Land and Crop – 2008”  
21.05.2008-23.05.2008 in Saint-Petersburg***

***These exhibitions allow us to make a contact with  
individual farmers, potential applicants, to identify  
the best ways of dissemination and demonstration  
strategies ( relate to WP4)***

# questionnaires

Have been disseminated about 275 Flyers of ADAGIO project and Questionnaires for Russian farmers.

For assessment a role of supplementary factors (economy, demography, lack of professionals, fertilizers, pesticides, machinery; anthropogenic impact to environment and so on) in current problems of farming on the background of climatically induced agricultural risks in the North-Western and Southern parts of the European Russia

two new questionnaires for applicants have been developed and adopted till September to Non-Chernozem and Chernozem zones.

They were disseminated via **Agricultural Exhibitions of Russia**

Questionnaires are available on the electronic site

<http://www.project-adagio.ucoz.ru>,

# Адаптация сельского хозяйства к изменениям климата

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 ПТ 6 13 20 27  
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Май  
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Сентябрь  
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Ноябрь  
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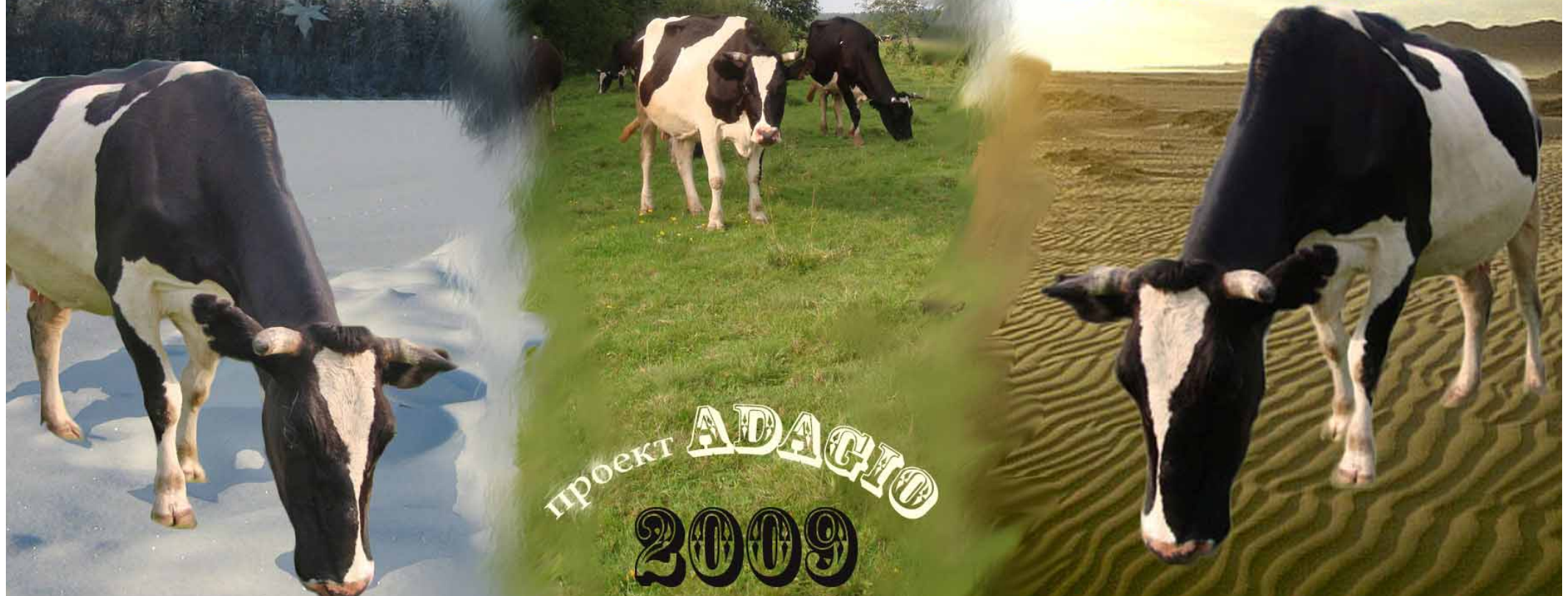
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Июль  
 ПН 6 13 20 27  
 ВТ 7 14 21 28  
 СР 1 8 15 22 29  
 ЧТ 2 9 16 23 30  
 ПТ 3 10 17 24 31  
 СБ 4 11 18 25  
 ВС 5 12 19 26

Август  
 ПН 3 10 17 24 31  
 ВТ 4 11 18 25  
 СР 5 12 19 26  
 ЧТ 6 13 20 27  
 ПТ 7 14 21 28  
 СБ 1 8 15 22 29  
 ВС 2 9 16 23 30

Октябрь  
 ПН 5 12 19 26  
 ВТ 6 13 20 27  
 СР 7 14 21 28  
 ЧТ 1 8 15 22 29  
 ПТ 2 9 16 23 30  
 СБ 3 10 17 24 31  
 ВС 4 11 18 25

Декабрь  
 ПН 7 14 21 28  
 ВТ 1 8 15 22 29  
 СР 2 9 16 23 30  
 ЧТ 3 10 17 24 31  
 ПТ 4 11 18 25  
 СБ 5 12 19 26  
 ВС 6 13 20 27



проект **ADAGIO**  
**2009**

# In the frame of these exhibitions we participated in the Meetings and Round Tables:

- Selections, cultivating and processing of maize, rice and sorghum
- Grain crop production: the role of fertilizers, plants protection means
- *Grain crop production: the role of climatic and weather factors*
- Assortment and quality of bread in different regions of RF

# Brochure

## “ ADAPTATION OF AGRICULTURE IN Russia UNDER CLIMATE CHANGE

- The content of brochure has been discussed with experts from ARI
- Preliminary content in Russian. It will be about 20 pages.
- Проект содержания Брошюры
- «Адаптация с/х к к современным изменениям климата»
- 1. Глобальное потепление и его проявления на территории России.
- -Изменения термического режима в последние 20 лет.
- -средняя годовая, месячная температура воздуха
- -максимальная, минимальная температура воздуха-
- самый теплый
- -самых холодный месяц
- -продолжительность теплого и вегетационного периода
- -первый, последний заморозки
- Изменения режима увлажнения
- - осадки, сток
- -водные ресурсы, водопотребление, нормы орошения, ...
- Почвы- температура, влажность,
- Ресурсы тепла и влаги –агроклиматические ресурсы и их изменения.
- 2. Динамика урожайности (пространственно-временная)
- - Изменчивость урожайности и сборов культур
- 3. Уязвимость агроэкосистем к современным изменения климата.
- -(почвы:эрозия, плодородие, экстрим.
- Экологические Факторы: , риски, деградация
- -Экстр. Метеоявления: возвр. Заморозки, град, туманы...волны холод/тепло
- -Климатические: Засухи, ураганы и т.д.....
- -Эколого-климатические:
- Болезни
- Вредители
- Сорняки
- 4. Принципы адаптации
- 4.1. Основные принципы адаптации с/х производства к изменениям климата
- 4.2. Агроэкологическая адаптивность и устойчивость культур, сортов и ценозов.
- 4.3. Эколого-географический принцип зональности
- 4.4. Принципы районирования культурных растительных ценозов
- 4.5. Выбор сценария -----????????? Наиболее реалистичного, физически обоснованного???????
- Инерционность выбираемого сценария---Чего сценарий?????
- -Трансформация макро и мезоклимата
- -Трансформация микроклимата агроэкологических фаций
- 4.6. Управление факторами продуктивности
- - проектирование севооборотов
- - Химизация земледелия в условиях прогнозируемой изменчивости климата (для выбранного сценария)?????????????
- - конструирование агроценозов
- -эффективность использования прогнозируемого изменения почвенно-растительного потенциала агроэкосистем
- 4.7. Экологическое равновесие



According to brochure content – it's main topics- be invited the key lecturers to seminar which will arrange by ARI in april.

Will be invited – 6-7 scientists in the fields of

- climate change
- water supply, effective use of water in agriculture
- environmental risks
- ecological and economical aspects (still important in post-soviet society)
- adaptation strategies in farm practices
- recommendations on the priority adaptation measures aimed at preventing (reducing) losses from negative and increasing benefits from positive climate change impacts.

**These four main modes of activity  
become a base for final report**

It will be disseminate via administration of  
Farmer Union of Leningrad region  
And asking the reader to send us their  
opinion (data, observations...)

- Flyers:
- For selected region:  
for few agroecosystems   
adaptation options
- For selected agroecosystem for one  
region   
adaptation options

Uskov I.B. The global warming is coming: what should the farmer do? “Agrarny Ekspert” (“Agrarian Expert”), no2, 2008, p.6-9

Agricultural sustainability and possible risks in a changing climate .Ed.:A.L.Ivanov & I.B. Uskov. Moscow, 2009, RAAS issue, 106 p.

- Recommendations for decision making in erosion-preventive practice. Ed.: I.Uskov RAAS issue, 2009, 151 p.