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BELARUS' SIXTH NATIONAL CLIMATE CHANGE COMMUNICATION READY IN FEBRUARY 2015

Belarus' sixth national communication on climate change will be presented to the secretariat of the United Nations Framework Convention on Climate Change (UN FCCC) in February 2015, BelTA learned from Ivan Narkevich, coordinator for international projects of the unitary enterprise Belarusian Research Center Ecology, during the opening of the international seminar on the sixth national communication on the implementation of the UN Framework Convention on Climate Change in view of regional problems of sustainable development of the Republic of Belarus.

"The first variant of the sixth national communication on climate change is ready. We are now polishing it. The final variant will be presented to the UN FCCC secretariat in February 2015," noted Ivan Narkevich.

According to the specialist, the international seminar, which is scheduled to take place in Minsk on 5-6 November, will help Belarusian researchers to determine the weak points in the first variant of the national communication. "The seminar has gathered specialists from Russia, Poland, Kazakhstan, and Austria. With their help we will be able to analyze our draft and improve it," stressed Ivan Narkevich.

The national communication on the implementation of the UN Framework Convention on Climate Change is one of the most important commitments for

the countries that sign the Convention. "The communication is meant to demonstrate how greenhouse gases are released, whether the volume of release is reduced, what research is carried out in this field in the country," noted Ivan Narkevich. Parties to the Convention are supposed to present national communications on climate change every 3-4 years.

Belarus acceded to the United Nations Framework Convention on Climate Change in 2000 and to the Kyoto Protocol in 2005. Belarus honors its commitments as part of the Kyoto Protocol. In particular, Belarus has reduced greenhouse gas emissions by one third since 1990 while the real GDP has grown by two times in the period.

The international seminar held to discuss the sixth national communication on the implementation of the UN Framework Convention on Climate Change in view of regional problems of sustainable development of the Republic of Belarus has gathered about 100 researchers and representatives of the production sector. The seminar is supposed to allow its participants to share experience of preparing national communications and to develop recommendations to improve them. Participants of the seminar will also discuss achievements and problems with regard to climate change at the national and international level.



BELTA,
5.11.2014

BELARUSIAN SCIENCE CAN OFFER A LOT TO THE EUROPEAN UNION AND THE WORLD

Belarusian science can offer a lot to the European Union and the world on the whole, BelTA learned from President of the Polish Academy of Sciences Michal Kleiber during his visit to the National Academy of Sciences of Belarus.

"Today I visited several institutes of the National Academy of Sciences of Belarus. I was glad to see the state of Belarusian science. Belarus can offer a lot both to the European Union and the world on the whole as far as the development of the scientific sphere is concerned," said Michal Kleiber.

As promising avenues of cooperation Michal Kleiber mentioned biology, physics, humanitarian and social sciences. "The development of humanitarian sciences plays an important role for the development of science on the whole because we need to know our cultural legacy, our history," stressed the President of the Polish Academy of Sciences.

According to Vladimir Gusakov, Chairman of the Presidium of the National Academy of Sciences of

Belarus, cooperation avenues have not been determined yet. "We have invited our colleague to Belarus in order to make up our minds about the prospects. Today we are going to make a list of projects regarding future cooperation. The Polish side will do the same. Then we will bring them together, analyze, and compile a common document — an agreement on cooperation. I think the document will be signed soon," added the official.

Belarusian and Polish scientists are busy implementing 93 joint projects, including 20 projects on agrarian and biological sciences, 14 on humanitarian sciences, 22 on physics and math, one on medical and pharmaceutical sciences, 24 on technical ones, 12 on chemical sciences and geoscience. As many as 38 travel grants have been allocated for the sake of taking part in events held in Poland.

President of the Polish Academy of Sciences Michal Kleiber was in Minsk on 21 November for the sake of holding negotiations on expanding Belarusian-Polish scientific and technical cooperation. The Polish scientist visited the Bioorganic Chemistry Institute, the state enterprise Academpharm, the Microbiology Institute, the B.I. Stepanov Institute of Physics, and the History Institute of the National Academy of Sciences of Belarus.

BELTA,
21.11.2014



BELARUSIAN, RUSSIAN SCIENTISTS PARTAKE IN GENETICS CONFERENCE IN MINSK

Belarusian and Russian scientists discuss modeling of human behavior at the level of genes, Nikolai Kolchanov, Director of the Cytology and Genetics Institute of the Siberian Department of the Russian Academy of Sciences, said at the opening of the international scientific and research conference "Genome Transformation. The 5th Zhebrak Readings", BeTA has learned.

"Today we will discuss the prospects of cooperation in the study of the human genome with our Belarusian colleagues. Our institute conducts large-scale research in the modeling of the human behavior by analyzing people's genes," Nikolai Kolchanov noted.

According to the Russian scientist, there is a lot of genetic variants which can make people more benevolent or aggressive. "We are currently developing methods to study the human genome; soon we will be able to predict human behavior. The information that we will get after the analysis of the human genome can be

useful, for example, in vocational guidance. For instance, very energetic people can succeed in sport, serve in the army or in emergency bodies," Nikolai Kolchanov explained.

Workers of the institute conducted the first experiments on wild animals in 1950s. Russian scientist Belyayev studied the possibility to domesticate wild animals and came up with a conclusion that wild animals can become less aggressive in 5-7 generations. Later scientists started to study genes responsible for aggression. Since then such experiments have been conducted on about 200,000 animals. In due time scientists started to study the human genome.

The international scientific conference "Genome Transformation. The 5th Zhebrak Readings" takes place in Minsk on 11 November. Partaking in the event are about 100 scientists from Belarus and Russia. The forum has been held since 2008. It is focused on the most important issues of modern genetics.

BELTA, 11.11.2014



BELARUSIAN HUMAN LACTOFERRIN SUGGESTED FOR DIETARY SUPPLEMENTS

Scientists suggest using human lactoferrin extracted from goat milk for making dietary supplements, BeTA learned from Alexander Budevich, head of the lab for the reproduction and genetic engineering of farm livestock of the Animal Husbandry Research Center of the National Academy of Sciences of Belarus, on 19 November.

Alexander Budevich remarked that scientists from the Physiology Institute of the National Academy of Sciences of Belarus, the Genetics and Cytology Institute of the Academy, medical institutions are now involved in the research into the qualities of human lactoferrin extracted from goat milk. Many useful qualities of lactoferrin have been found. "It is necessary to determine the list of products, which can be manufactured using lactoferrin extracted from goat milk. It is a new organic substance, not a product of biochemical industry," he stressed.

Nikolai Popkov, Director General of the Animal Husbandry Research Center of the National Academy of Sciences of Belarus, said that new equipment had been bought to process goat milk. The equipment will be installed by 2015. "We have already raised transgenic animals. Now we

face a task as difficult. We have to make end products that could be used for medical and food purposes. We are working on it," noted Nikolai Popkov.

Nikolai Popkov stressed that a pilot production lab to make medications had been created in the Belarusian State University. It is too early to consider industrial processing for now. "We need to polish the technology first. We plan to build a large industrial enterprise but it will need time. I cannot say yet when it will happen," he added.

One liter of goat milk contains about 6g of human lactoferrin (10g in some cases). The lactoferrin extracted from transgenic goat milk is a unique product developed

by Belarusian and Russian scientists. The physical and chemical qualities of transgenic goat milk lactoferrin are identical to those of human breast milk. This protein

increases the resistance of human bodies to diseases. Apart from bactericidal qualities lactoferrin demonstrates anti-inflammatory, detoxing, antioxidative and antitumoral qualities.

"We have already raised transgenic animals. Now we

BELTA, 19.11.2014



AUROCHS READY FOR MOVEMENT

The sight of such animals almost causes the heart to stop beating: their majesty seems to hail from the time of mammoths and dinosaurs. Nobody knows when they first appeared on our planet, but Aristotle mentioned them in his works.

Europe's largest mammal has received human protection to ensure that it avoids extinction. In fact, the number of aurochs worldwide has grown from 50 (in the early-20th century) to 4,500. Over a thousand 'bison bonasus' reside in Belarus alone and neighbouring Poland boasts a greater population.

However, further steps are needed, since aurochs often fall ill; the limited genetic pool leads to poor immunity, since all Belarusian aurochs are descended from the same dozen 'forefathers'. Among the most common problems are cataracts, hearing loss and urogenital diseases, which cause infertility. Around 55-130 animals die annually.

With this in mind, we must either 'cull' the population, leaving only the healthiest animals,

or continue increasing livestock breeding programmes. Without reasonable intervention, the species could disappear, so ecologists insist on serious stock selection: as envisaged by the 2015-2019 plan of action on auroch preservation and rational use.

The Deputy Minister for Natural Resources and Environmental Protection, Igor Kachanovsky, is convinced that the threat of European auroch extinction is no longer acute. He wishes to see efforts focused on

preserving existing dissociated populations across Russia, Belarus, Poland and some other states. With this in mind, the territory of these animals' habitat is being extended, and a joint Belarusian-Russian CIS programme has been prepared: the 'Road Map for Aurochs'.

The General Director of the Scientific-Practical Centre on Bio-Resources (of the National Academy of Sciences), Prof. Mikhail Nikiforov, has helped create the programme. He stresses that Belarus and Russia share a mutual

interest regarding aurochs, explaining, "Russia possesses vast natural territories, suitable for more independent, wild, large populations (needing less human care). The programme should be realised in five years' time."



Some are concerned that, if we restore this endangered breed, a new, stronger species may appear, against the 'natural balance' of nature, but Mr. Nikiforov is convinced that our responsibility to help this breed began long enough ago that its disappearance would create a 'gap' in nature. He also believes that restoring the population on a global scale is possible. In the USA, a million such bison have been cultivated, from an original 45 aurochs. Some herds are even bred for hunting. Our task is to restore aurochs to sustainability as a biological species.

BELTA, 13.11.2014

WAY OF LIFE OF PEOPLE IN BELOVEZHSKAYA PUSHCHA

Single-house museum opens in Grodno Region's Belovezhskaya Pushcha.

The house-museum is located in the village of Rudnya in the Svisloch District, designed to show visitors how people once lived in the Belovezhskaya Pushcha. The museum boasts over 250 artefacts from everyday life: icons, early-20th century paintings, documents, and money from several periods of history, as well as tools, utensils, items of clothing and toys. Many were donated by local residents.

The owner and manager of the museum, Mikhail Guskov, tells us, "We've restored our authentic Russian stove, used for heating, cooking, for drying mushrooms and berries, for illumination and as a place to gather and rest. The museum also has a spinning wheel, a kerosene oil lamp, and various handmade items: doormats, coverlets and embroidered linens."

Among the most valuable exhibits is a collection of reproduction Anton Kaminsky engravings;

the well-known pre-revolutionary author and illustrator depicted nature and the way of life in the Belovezhskaya Pushcha. He also rendered portraits of well-known people who visited Rudnya: among them pictures of Russian and French army generals (who led their troops through Rudnya in the autumn of 1812). The museum also stores local history materials collected by regional librarians, and reference books.

Experts from Belarus and Poland helped set up the museum, whose board of guardians comprises historians, curators, teachers and entrepreneurs from Belarus, Poland and Russia. Vari-



ous exhibitions are planned, inviting local artists: at present, Anatoly Polozkov's wooden sculptures of animals are on show.

Mr. Guskov emphasises that the museum has a very important role to play in preserving the historical and cultural heritage of those who have lived in the Belovezhskaya Pushcha. "We hope that it will become a tourist attraction for people from Belarus and abroad, as well as being used to educate youngsters and encourage understanding of local culture," he adds. The museum even has its own pages on social networks, to promote its activities.

BELTA,
11.11.2014

BELARUSIAN FARMERS INTERESTED IN JAPANESE EXPERIENCE OF CREATING AGRICULTURAL CROPS

Belarusian farmers are interested in the experience of Japanese scientists in creating new varieties of agricultural crops. Contacts in this sphere were established as the Belarusian delegation took part in the agricultural technologies expo Agro Innovation Japan 2014 in Tokyo, BelTA learned from Yuri Pchelko, Deputy Director General for Foreign Economic Activities of the Vitebsk branch of the Belarusian Chamber of Commerce and Industry.

The Vitebsk branch of the Belarusian Chamber of Commerce and Industry scheduled the business visit to Japan for 10-16 November for the sake of attending the major international expo that featured seeds and agricultural products, equipment, information systems and software, fertilizers and agricultural chemistry, environmentally friendly technologies. Representatives of Belarusian farming enterprises were interested in buying vegetable seeds since Japan boasts cutting-edge experience in this field. The Belarusian farmers were also interested in the experience of using organic fertilizers, state-of-the-art products in agribusiness automation, and in the market of preowned construction and agricultural machines.

The Belarusian farmers established contacts with Japanese companies during the expo as well as via the representative of the Belarusian Chamber of Commerce and Industry in Japan and via the Embassy of Belarus in



Japan where a separate meeting took place. "The embassy and our representative will continue helping build up ties between the businesses of the two countries, including in agriculture where contacts are few and far between," explained Yuri Pchelko. Belarus and Japan have established tighter cooperation with regard to culture, children recreation, the provision of medical equipment and radiation safety instruments to Belarusian institutions. Apart from that, a delegation of business circles of Minsk and the oblast visited Tokyo early this year. During the visit the possibility of supplying woodworking industry products, agricultural products, and agricultural chemistry products to Japan was discussed.

The Deputy Director General for Foreign Economic Activities of the Vitebsk branch of the Belarusian Chamber of Commerce and Industry added that the Chamber is meant to get businesses meet each other and facilitate the dialogue. After that companies prefer working without mediators. This year the Vitebsk branch has arranged over 60 events to advance foreign economic ties.

BELTA,
17.11.2014

BELARUS TO UPGRADE RURAL DISPOSAL WORKS USING INTERNATIONAL GRANT

The reconstruction of rural disposal works will be conducted in Bereza District, Brest Oblast, using an international grant, BelTA learned from Director General of Bereza Housing and Public Utilities Company Sergei Makarevich.

The environmental investment project is part of the framework program "Strengthening Local

Environmental Planning and Environmental Civil Society in Belarus and Moldova" developed by the Regional Environmental Center (REC) for Central and Eastern Europe and financed by the Swedish International Development Cooperation Agency (Sida). The upgrade of sewage facilities in the



village of Mormozhevo will include the replacement of two-level retention basins with hydraulic cyclones that will need less filtration beds. €50,000 will be granted to implement the project.

The design and estimate documents have already been prepared, Sergei Makarevich informed. At present an application for financing the works is being drafted. All the works are to be

completed by 1 May 2015. "This is the first time we cooperate with the Regional Environmental Center. If everything goes as planned, we will keep cooperating, hopefully. After all, the international technical aid program is to be expanded at the next stage, with the neighboring districts invited to participate. The interest in the project has already been shown by our counterparts from Pruzhany District, Kobrin District and Ivanovo District," Sergei Makarevich said.

Apart from that, during the implementation of the international environmental program in Bereza District, a local environmental improvement plan has been developed. The action plan was needed to apply for funds to finance the pilot project. The work on the document took a year and involved specialists and representatives of the general public and was led by the coordination council and a working group approved by the district executive committee. In fact, the action plan represents a vision of the future of the local community. The plan was compiled in line with the REC methods and categorizes environmental issues depending on their relevance and importance. Bereza District identified our major target areas: waste

water from domestic sewage, the quality of drinking water, municipal waste dumps, the quality of local roads and pavements, and the lack of parking facilities.

"This document is so relevant because its developers have collected and processed a significant amount of important information. Besides, it is meant for a long-term perspective. This plan can be used as a basis to select and address individual issues, including with the help of international grants. That was the major goal of the REC: to show and to teach how it can be done. The action plan is a possibility to take part in other projects in furtherance of the earlier ones.

Taking part in the framework program "Strengthening Local Environmental Planning and Environmental Civil Society in Belarus and Moldova" are four districts of Moldova and 10 districts of Belarus. Besides Bereza District, the initiative covers Ivatsevichi District, Braslav District, Vileika District, Glubokoye District, Oshmyany District, Polotsk District, Pukhovichi District, Rogachev District and Chashniki District. The cooperation agreement with the Regional Environmental Center for Central and Eastern Europe was signed in Belgrade, Serbia, on 19-22 September 2013.

BELTA,
3.11.2014



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CHINA'S CITIC CONSTRUCTION INTERESTED IN NEMNOVSKAYA HPP PROJECT

The Chinese company CITIC Construction can become an investor for the Nemnovskaya hydroelectric power plant (HPP), BelTA learned from the Grodnoenergo company.

The Chinese delegation visited Grodno and held talks with Grodnoenergo about the possible involvement of CITIC Construction in the project to build the Nemnovskaya HPP. The parties discussed promising areas of cooperation; the company's officials told their Belarusian partners about a significant experience in building similar hydroelectric power plants in China, with five horizontal shaft units 4.167MW each, which toured the proposed site of the Nemnovskaya HPP be to generate up to 20MW. The project is estimated construction, and visited the Grodno hydroelectric at \$130 million.



Construction of the Nemnovskaya hydroelectric power plant is scheduled to begin in 2017. The project is included in the state program for development of the Belarusian energy system until 2016. The plant is expected to be built 20km away from Grodno near the Plebanskoye population center. According to preliminary estimates, the plant, with five horizontal shaft units 4.167MW each, will generate up to 20MW. The project is estimated

CITIC Construction is already implementing

BELTA,
3.11.2014

Minsk to host session of CIS commission for peaceful uses of atomic energy

On 12 November Minsk will host the official opening of the 15th session of the CIS commission for peaceful uses of atomic energy, BelTA learned from the press service of the Belarusian Energy Ministry.

"The conference will bring together over 40 participants to discuss about 15 issues, including the maintenance of nuclear and radiation safety, improvement of the legal framework and technical regulations, information exchange, personnel training, development of radiation medicine," the specialists explained.

On 13 November participants of the forum are expected to visit the Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Ukraine. Belarusian nuclear power plant in Ostrovets.

The CIS commission for peaceful uses of



atomic energy was established in January 1997 by the resolution of the CIS Council of the Heads of Government. It is an intergovernmental coordination and consultative body of the CIS. The commission coordinates efforts of the CIS member states to work out harmonized solutions regarding the multilateral cooperation in the development of the nuclear energy industry. The commission comprises representatives of eight countries, including Azerbaijan, Armenia,

BELTA,
12.11.2014

Lithuanian company intends to build waste recycling facility near Bobruisk



The Lithuanian company Oil Pack Invest Ltd intends to build a waste recycling facility with the combined production of electric and thermal energy near Bobruisk, BelTA learned from the economy committee of the Mogilev Oblast Executive Committee.

The pilot project with the total investment of \$195 million

has been prepared by Traku Delta company. Its analogues have been built and used in the Baltic states. The company CNIM, technology applied in such projects helps reduce pollution.

The proposed project uses the equipment by CNIM and other leaders that meet the EU stringent environmental requirements. In incineration the volume of waste is reduced by 80-90%. The remaining slag can be used as a raw material for manufacturing of paving and in road construction, for example.

The facility is to be fitted with a line to sort out solid waste and household waste: plastics, glass, paper, ferrous and non-ferrous metals, which can be further processed. The waste that remains after the sorting is to be combusted to generate heat and

electricity. A new-generation combined heat and power plant will be used for these purposes.

"This project will ensure energy stability and environmental safety in the city, which in the future will have a positive impact on the reduction of energy prices. It will also help reduce the amount of waste at landfills, which will have a positive impact on the environment," experts noted.

BELTA,
10.11.2014