

Global Water Partnership in Central Asia and Caucasus

NEWSLETTER #1

**WATER, CLIMATE AND DEVELOPMENT PROGRAMME
FOR CENTRAL ASIA AND CAUCASUS**

**Global Water Partnership of
Central Asia and Caucasus**

(GWP CACENA) is one of 13 regional partnerships in the Global Water Partnership Organization (GWPO).

GWPO was established in 1996 under the auspices of the United Nations in accordance with the decision of the Global Summit 1992 to promote integrated water resources management (IWRM). GWP CACENA was established in 2002 in Almaty and comprises national water partnerships of all eight countries of Central Asia and Caucasus.

More information: www.gwp.org

DETAILS

In this issue, we talk about the demonstration projects to be implemented through national water partnerships of Armenia and Kazakhstan: "Creating a decentralized system of domestic wastewater treatment in the Parakar village of Armavir District" and "Improving the efficiency of water use in the Kyzylorda Province of Kazakhstan"

In the next issues read about the details of other projects.

See pages 5 and 6

EDITOR'S FOREWORD

Our newsletter is published under support of GWPO within the Water, Climate and Development Programme for Central Asia and Caucasus (WACDEP CACENA). The Programme will be implemented in all 8 countries of CACENA Region as part of the annual GWP CACENA activities. WACDEP

CACENA can be divided into three areas:

- Contribution to capacity building in the Central Asian countries to climate change adaptation using GWP knowledge;
- Implementation of demonstration projects on the fields to demonstrate the results to decision-makers at various levels of the hierarchy. These projects using IWRM principles in practice will help the process of adaptation to climate change;
- Wide dissemination of outcomes of the demonstration projects and of knowledge on IWRM practices in all countries of CACENA region.

Also this newsletter is provided within the last achievements and will be published twice a year.

As the editor, I care about the readability and popularity of the newsletter, first of all, for a wider audience: whether information is easy to understand or not; are the topics attractive; whether fingers reach out for the keyboard to respond to any article? It is impossible to evaluate the effectiveness of information if no comments are received!

You can write to my email address

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or send sms to my mobile phone

+998 91 384 8756. And finally, if you prefer a good old

classic style, you may contact me by the post address:

Yusup Kamalov

Nukus, Karakalpakstan, Uzbekistan, 230100,

41 Prospect Berdakh.



GWP CACENA family is replenished!
The Mongolian Country Water Partnership joined GWP CACENA! At the GWP CACENA Regional Council meeting held on November 7th, 2013, in Moscow, Professor Basandorj, Head of Mongolian Country Water Partnership, told about the water resources of Mongolia, the problems, and the current situation in Mongolian economy. Mongolia's joining to GWP is a result of the visit of the Mongolian President to the GWP headquarters in Stockholm.

WATER IN THE 21ST CENTURY: ON THE CULTURE OF RELATIONSHIPS FOR WATER SECURITY

Sokolov V.I.

Regional Coordinator of the Global Water Partnership in Central Asia and Caucasus

In recent years, the topic of "water conflicts" and even "water wars" is very popular in mass media. It is alleged that the water becomes a "political weapon", the subject of inter-ethnic, inter-sectoral discord. At the same time, in order to attract public attention to water issues, the terms and expressions are often used that are difficult to interpret as wise. Water has no ethnic, religious or any other affiliation. Water belongs to the nature, and therefore to all who live on Earth surrounded by this nature. Due to water there is life on Earth, to save this life, mankind immediately has to change their attitude toward nature and to water - its main component. Behavior change requires at least two things: intellectual understanding of the current problems and absolutely new culture of relationships around water.

Today, for each inhabitant of the planet there is 750 m³ per year of freshwater available for use. By 2050, this figure is reduced to an average of 450 m³ per person per year, and more than 80% of the world will cross the line of water deficit on the UN classification. Water crisis associated with the shortage of fresh water is a "revenge" of Earth to Mankind for its irrational behavior. Changing climate, changing the direction and amount of moisture transfer, the Earth is trying to protect itself from the efforts of people to create a more favorable environment for life.

In many regions of the world with increased water scarcity today there is no consensus among all stakeholders. This is due to the fact that the efficiency of water management is "cooked" at the fire of ambitions of decision makers defending sometimes conflicting interests of political elites or corporate interests of economic sectors and financial elites. As famous Lebanese philosopher and economist Nassim Taleb noted: "Never before so many people that play safely, in other words, those who are not in danger, they control the society to such an extent as today. The world has never been so rich and never had been weakened so much by debt and life on other people's money. The richer we get, the harder we live within our means." In attention of society to the water problems is not so much due to the recession caused by the world economic crisis, but more because of the decline of the education system in most developing countries, and the degradation of culture and morality in general

Flame of certain ambitions also come over Central Asia. In particular, the key water problems of the Aral Sea basin are still cooked on this fire. However, there is a hope that not all the water evaporates until the brew reaches preparedness and acquires the form of ready meals that are attractive to all stakeholders. Moreover, it is water due to its unique properties is to help extinguish the flame of ambition and discord in our region.

Political and financial elite, despite the existing ambitions in economics and politics, should radically change their attitude to the water issues. A new culture of relationships and behavior towards water may contribute to this change. As a first step in this direction humanity should review and redefine key concepts and categories related to water, on the basis of which it will be possible to build a new line of conduct to prevent water crisis.

New conceptual thinking; what terms and categories are required to make the dialogue on water effective?

The term "conflict" as applied to water has a strong negative understanding in Central Asia. It is associated with the image of violence and is considered as a last resort solution. The expression "disputes over water resources" more accurately describes the perception of domestic and regional issues in the water sector; thus it is proposed to use the term "dispute" when considering the differences in the water sector. Decision-makers must be aware that the water today is not a "political weapon" but "subject to diplomacy." In regards to water there should not be "enemies" but only dialogue among "opponents" to find a consensus. In a dialogue on water - no to recriminations; the parties should have the ability to listen to the opponents and take their arguments.

History and progress are pushed forward by people who can look into the future.

Human capital is a major factor in the formation and development of innovative economy. At a low level and quality of



Sokolov V.I.
Photo Bjorn Guterstam

human capital the investments in any area of the economy do not allow returns. In this context, particularly the water industry needs a strong human capital. The modern world accumulates technical knowledge but the future at that paradoxically becomes less predictable. Nature itself is changing at every step, and every moment modifies its own strategy. Therefore, the water problem is to be solved not just smart but more importantly - wisely. In order to make the world safer from greed, and even benefit from the greed and other potentially dangerous human vices, reasonable and practical actions are required. Wisdom in decision-making is infinitely more important than knowledge.

Water can and should be saved and many experts suggest to solve this by introducing economic incentives for water saving, the use of innovative technologies or other rational ways. However, all these measures without the

intensification of the human factor towards wisdom will be ineffective. A restructuring of public consciousness with respect to water is required through eliminating the gap between "my" and "our" or "state": through the introduction in the minds of people, especially the younger generation such concepts as "water - the greatest blessing and, at the same time, great value that bestowed upon us", "Mankind like water, is a part of nature, so it cannot be the master nor above Nature or water."

I appeal to the vision of the world by Nassim Taleb mentioned above. According to his vision - a world consists of three objects: "Fragile", "Unbreakable" and "Antifragile." Fragile is everything that does not like variability, chance, uncertainty, confusion, errors and stressors. Fragile wants peace, almost everything that exists on Earth, including water and people belong to this category; we are fragile. Unbreakable object simply does not care; it is flexible or elastic and resists shake, and remains the same. However, the absolute invulnerability is unattainable in the modern world. The most attractive category - "antifragile" - it is what develops under conditions of disorder and passing through the tests becomes better than before.

Getting into the heart of the Nassim Taleb's philosophy, I wonder whether it is possible to make the water "antifragile." Perhaps it is, if we create a mechanism by which the water management system will be continually updated, benefiting from unpredictable events, shocks, stressors and variability and not only suffering from them. Fiction? The answer to this question, I find from the same Taleb: "Absence of "own skins at stake" makes society fragile and generates crises. Main ethical rule of modernity: "Do not possess antifragile by fragility of others." From this wisdom message:

- The system in which DO NOT to put own skin at stake is fragile;
- The system in which put own skin at stake is unbreakable;
- The system in which put own SOUL at stake is antifragile.

Public consciousness can be changed in the right direction only on the basis of focused, comprehensive and persistent training of people. It should be done on the basis of accumulated knowledge on water, experience in the use of water by our ancestors and contemporaries, not forgetting about past failures and mistakes of past generations in relation to water and nature in general, considering possible future crisis events.

Culture implies adherence to generally accepted legal canons.

If humanity is reasonable and wise its behavior around water should be based on open for understanding and universally recognized legal norms such as, already widely adopted Traffic Rules.

Water Law should not be non-regulatory as it is today, but be compulsory behavior conduct of every person. Such key principles of international water law as the principle of reasonable and equitable use of water , the obligation not to cause significant harm, notification principles, consultation and negotiation, information sharing and the peaceful resolution of disputes over water, etc. should become a generally accepted practice.

Is it enough for homo sapiens to create for him reasonable legal and moral frameworks? As the whole history of civilization demonstrates – it is not. Legal and moral frameworks in the form of laws and agreements are only half a step towards justice around the water. Besides, people have to be taught or forced to keep once given word - enforcement mechanisms and regulations are required.

If humanity creates "Regulations on Water", they should contain a clear "own skin" mechanism in relation to water. Main thing – the humanity must open its soul to water!

In place of conclusion



As famous scientist Ernest Ulrich von Vaytshimmer noted: "The Globe is not enough to satisfy all dreams of constantly growing population on wealth and delicious life. People and the Earth will be saved by not so much saving technologies as sustainable consumption and new labor management." I would add - and a new culture of relationships with an open soul. If we'll be able to open the souls and to overcome ambitions and to climb above the clouds of mistrust because it is always sunny behind the clouds, we will find ourselves in a favorable atmosphere of bright co-existence.

Let us strive for this - people live peacefully in a climate of "social optimism"!

DETAILS OF THE WATER, CLIMATE AND DEVELOPMENT PROGRAMME FOR CENTRAL ASIA AND CAUCASUS

National and regional institutions responsible for implementing the Programme:

Armenia: Company JINJ; responsible person – Mr. Edward Mesropyan.

Azerbaijan: SAF SU, the Centre of Ecological-Melioration Monitoring. Responsible person – Mr. Ayub Mammadov.

Georgia: GWP-Georgia, Tbilisi. Responsible person – Mr. George Dzamukashvili.

Kazakhstan: Public Foundation "Kazakhstan Water Partnership". Responsible person - Professor Nariman Kipshakbaev.

Kyrgyzstan: Kyrgyzstan Water Partnership. Responsible person – Ms. Kasiet Musabaeva.

Tajikistan: Tajikistan Water Partnership (OS "VPT"), Dushanbe. Responsible person - Professor Yarash Pulatov.

Turkmenistan: Ecological Society "Yananch-Vepa", Ashgabat. Responsible person – Ms. Guljamal Nurmukhammedova.

Uzbekistan: Scientific and Information Center of ICWC, Tashkent. Responsible person – Mr. S h u k h r a t Mukhamedjanov.

Program Manager – Mr. Abdybay D j a i l o o b a e v , Kyrgyzstan, on the right photo.

Program duration - 21 months, from 1 July 2013 to 31 March 2015.



DEMONSTRATION PROJECT

Establishment of a decentralized system of domestic wastewater treatment in the village Parakar of Armavir District of Armenia.

Project goal: to restore degraded agricultural lands and ensure sustainable use of water and land resources, as well as the food security of the population, restoring the sanitary wastewater transport system and treating it in lagoon type facilities.

The first phase of the project was carried out in 2010 - 2012 under a Small Grant Program of the Global Environment Fund, during which the following facilities were built in Parakar Village: almost 900m long wastewater collector, building mechanical structures of the plant, screen, wastewater pump station, air blowing node and air supply and distribution system, as well as facilities for biological treatment - biological lagoon with artificial aeration and sedimentation lagoon with natural aeration.

In the second phase of the project it is planned to build the pond system, where the secondary treatment of wastewater will be implemented and develop the fisheries there. Also, it is planned to build a sludge bed for sludge treatment and its further use as an organic fertilizer. The lagoon system is divided into 8 sections along its length, alternating sections with water hyacinths and without them. The purpose of this alternation is to provide a natural aeration of wastewater, as the sections with hyacinth plants on the surface of the water prevents air penetration into the layers of water and the aeration process. Treatment not only reduces the BOD₅ to 30-35mg/l but wastewater disinfection occurs due to bacterial processes occurring in hyacinth systems. The Coli index is reduced by almost 4 times.



Pond for aeration of wastewater.

This pilot project will provide an opportunity to show the effectiveness of higher aquatic plants in the secondary treatment of wastewater.

During the second phase of the project it is planned to build a sludge treatment bed; the sludge can further be used by villagers as a cheap and high quality fertilizer for production of green product.

Expected results

The community has its own decentralized domestic wastewater treatment system and the technical and human capacity needed for operation of the plant ;

by treating the sludge the village has cheap and high-quality organic fertilizer (about 15t/year) that can be used to fertilize the land and gets a green product;

community has a stable additional water (11.5 l/s) suitable for irrigation, which is not dependent on weather conditions and climate change impacts,

contamination of irrigation water by sewage is prevented and agricultural land degradation of Parakar Village is excluded;

favorable conditions for the integrated water resources management in the community are created (wastewater management and recycling);

Conditions for irrigation of additional 10 ha of land are created, which in turn provides additional income for residents (1,500-2,000 dollars profit per year on average for each family).

Another component of the project - public awareness and participation. Meetings, seminars and round tables will be organized in the village for the population; newsletters will be distributed. Information about the project will be disseminated through the media, web pages and social networks, and a promotional film about the project will be made.

The project also provides for the organization of a national workshop to identify the legal, institutional and financial conditions that promote and prevent the introduction of alternative technologies for treatment of municipal wastewater in Armenia, as well as to develop ways to create an enabling environment for their implementation. To take into account international experience in this industry, it is planned to invite international experts.

DEMONSTRATION PROJECT IMPROVING WATER USE EFFICIENCY IN THE KYZYLORDA PROVINCE OF KAZAKHSTAN

The demonstration project will be implemented at the field station of the Rice Research Institute of Syrdarya District of Kyzylorda Province of Kazakhstan on the area of 20 hectares and the field of Limited Liability Partnership "Shagan Jer" - Shagan Village, Syrdarya District of Kyzylorda Province - 18 hectares. Rice Research Institute and Provincial administration are willing to bear the additional costs of implementing the project.



Professor N. Kipshakbaev

Given the current situation in the economy, the recommendations on the organization and implementation of farming activities will be developed with the advanced rice irrigation technologies and improvement of soils.

To show the way to achieve a good harvest and profits the following methods will be used: efficient technological irrigation scheme taking into account the characteristics of the selected field;

use of irrigation water in accordance with the crop requirements, taking into account the state of soil reclamation;

application of recommended rates of mineral and organic fertilizers according to the schedule;

effective use of disease control measures and pesticides;

Implementation of all farming activities according to the schedule.

As a result of the application of advanced technologies it is expected to obtain the following benefits:

- Farmer selected as a pilot and carried out the demo work under the supervision of field trainers uses the irrigation water within the recommended norms and receives significantly higher yields than the average in the fields of neighbors.
- Water consumption on the demonstration fields is decreased by 20-30%.

GWP CACENA NEWS

GWP CACENA Chairman rotation

The GWP CACENA chairman election was held during the GWP CACENA Regional Council meeting held in Tbilisi on December 23, 2013. Mr. Kamalov Yu.S., who according to the rules has served as a chairman for 3 years, was substituted by Mrs. Nino Chkhobadze (Georgia). Mrs. Chkhobadze was elected for the next 3 years by majority of votes. Congratulations and wishes of fruitful work!



Nino Chkhobadze

Kamalov Yu.

DO NOT MISS OUT!

International courses on climate protection

For young climate experts from developing countries interested in implementing the project in Germany and in the development of long-term cooperation. Apply if you are involved in issues related to the scientific, engineering, legal, economic or social aspects of climate change before March 15, 2014. Courses start on March 1, 2015; duration - 1 year.

[Http://www.humboldt-foundation.de/web/icf.html?utm_source=ccw-newsletter-nov&utm_medium=email&utm_content=en&utm_campaign=ccw-newsletter](http://www.humboldt-foundation.de/web/icf.html?utm_source=ccw-newsletter-nov&utm_medium=email&utm_content=en&utm_campaign=ccw-newsletter)

30 scholarships for GWP partners

As capacity-building support to its Partner organizations, GWP, together with the University of Dundee, will offer scholarships for 30 participants to undertake a module in International Water Law, in Dundee 9-20 June 2014.

The module is aimed at persons who wish to acquire specialist knowledge of international water law, especially as it relates to transboundary water challenges in the GWP regions. The module will be highly appropriate for those with a law degree and environmental science background who want to specialize in transboundary water. The primary target is mid- to high-level practitioners and professionals from governments, NGOs, international organizations, academia, and the private sector.

Applicants must be recommended by a GWP Partner organization to receive a scholarship. Participants are required to be proficient in English, either as native speakers, or to an IELTS score of 6.5. A university degree is required in Hydrology, Environmental Science, Law, Agriculture, or a related field.

For successful applicants, the GWP-University of Dundee International Water Law (IWL) Program covers full tuition for the module. Participants must secure their own funding for living expenses for the two week module (estimated at 650 GBP), plus travel to and from Dundee.

The application form is available at www.gwp.org/GWP-Dundee-2014

Applications will be accepted until February 15, 2014.

Participants who successfully complete the module assessments will receive a transcript from the University of Dundee which entitles the recipient to claim 20 SCQF (Scottish Credit and Qualifications Framework) credits, the equivalent of 10 ECTS (European Credit Transfer System) credits. A certificate of attendance ratified by both GWP and the University of Dundee will also be given.



Best wishes for the New 2014 from the Dr. Ursula Schaefer-Prus, GWP Chair

Season and Christmas Greetings from Ms. Judy Daniel - Chair of Regional Chairs, and GWP Caribbean Chair



GWP CACENA NEWS

The GWP CACENA Regional Council Members and the chairmen of the Country Water Partnerships are actively involved in various activities at the international and local levels. Thus, in 2013 they took part in the third session of the Meeting of the Parties to the Protocol on Water and Health to the UN Economic Commission of Europe (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes in Oslo; in the international High Level Forum on water cooperation in Dushanbe, Tajikistan; in the Conference of EECCA water-management organizations in Moscow; and in the international conference dedicated to the 20th anniversary of IFAS in Almaty, Kazakhstan and many other.





The problem of waste disposal is becoming sharper! Garbage vast area in the oceans are already visible from the space! Let's start a movement for the total prohibition of any pollution of natural water bodies! On the land we can cope with the garbage flows; it will be difficult a thousand times more in water.

Here are the sculptures can be made from empty plastic bottles!

GWP NEWS

On the 5th of December 2013 the first conference by phone of the chairmen of the regional partnership networks of the Global Water Partnership was held. The following issues were discussed:

1. Presentation of the GWP strategy at the International Water Day on March 21, 2014. What are the regional plans on presentation of the Strategy on March 21st?

2. Themes and areas to be discussed at the GWP Partner Conference in Trinidad. (For the first time the GWP partners' conference will be held outside Stockholm, in the Caribbean). Teleconference only lasted one hour and not everyone managed to speak. Despite the technical difficulties the teleconference was useful for working mood of the partners. It was decided to hold such teleconferences on a quarterly basis.

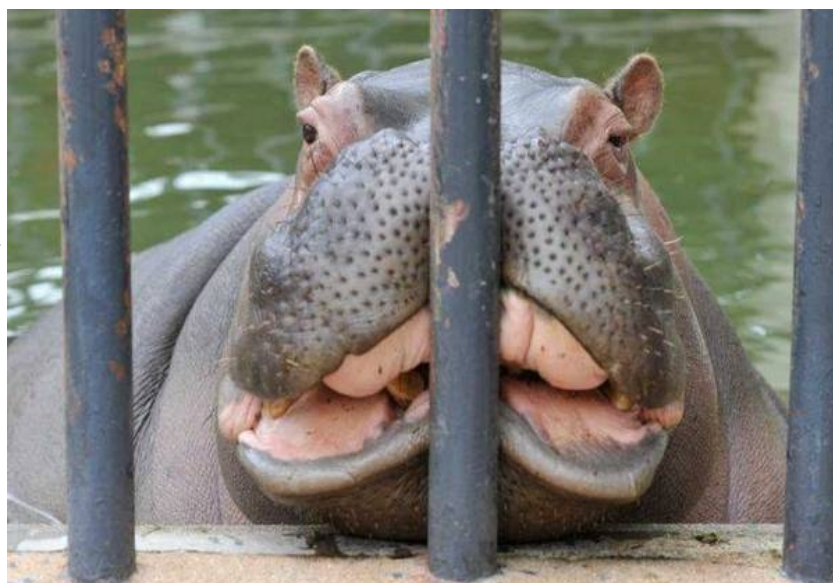
DO NOT MISS OUT!

Short courses on climate change management. Netherlands. Adaptation and mitigation as institutional change processes.

08-19 September 2014. Deadline for application for the tuition scholarship to the Netherlands Fellowship Program (NFP) is February 4, 2014 www.nuffic.nl/nfp

The number of scholarships is limited!
Deadline for training application is August 4, 2014
www.wageningenur.nl/cdi

Newsletter materials are provided by Khaydarova V., Sokolov V., Yessekin B.



I'm bored without you!