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News from Drynet

A global initiative giving future to drylands

Drynet is a project of 14 organisations from all over the world. They work together to combat land degradation

GLOBAL NEWS

CONTENT

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Drynet Update

Welcome to the second issue of "News from Drynet", a newsletter from the Drynet project on local concerns and views on drylands. This issue focuses on the upcoming 16th session of the UN Commission on Sustainable Development (CSD-16) as several dryland-related themes like land, drought and desertification will be under review. Drynet partners have identified CSD-16 as an important forum in which to jointly contribute our common knowledge and experience, like we did for the 8th Conference of Parties (COP8) of the United Nations Convention to Combat Desertification (UNCCD) in October 2007. We will also make ourselves heard in other international and national discussions!

A year has passed since Drynet was launched. The experience of setting up this project with 14 partners worldwide has taught us that consolidating a group of key working partners on the national level is not done in one day, and communication and information management is a crucial element. We are proud to see www.dry-net.org developing into a public platform for organisations active in dryland management. We invite you to visit the website and encourage you to read through the success stories and the national newsletters in a variety of languages!

Partners will continue national dialogues to include issues of civil society interest in nationalt policy agendas. Let's see if the outcomes trigger common messages…

By Drynet partner:
Marie José van der Werff ten Bosch of Both ENDS, the Netherlands

CSD 16

The 16th session of the UN Commission on Sustainable Development (CSD-16) will be held at New York, USA, between May 5-16 2008. The commission was established to make sustainable development a reality, and ensure that the lives of people living in poverty is improved and the continuing degradation of the global environment is reversed. The CSD is a high-level forum on sustainable development, >>>

GLOBAL NEWS

>>> which ensures the follow-up of Agenda 21, the Barbados Programme of Action (BPOA) and the Johannesburg Plan of Implementation (JPOI) at the national, regional and international levels. Agenda 21 recognizes that broad public participation in decision-making is fundamental for the achievement of sustainable development, and identifies specific roles and responsibilities for several major groups of civil society. The CSD concentrates on cross-cutting and emerging sustainable development issues. CSD16 will focus on desertification and drought along with the interrelated issues of Land, Agriculture, Rural development and Africa.

An outline of the Science and Technology Community's overview and the NGO community's report related to the themes of the CSD16 is provided in the article below.

Sustainable development challenges

For the CSD16 the International Council for Science (ICSU) submitted a discussion paper (www.icsu.org).

The ICSU emphasizes the achievements of the Green Revolution in the 1960s and 1970s like increased food and fibre production, in spite of its partial failure (e.g. salinization through irrigation). Need for further growth in agricultural production, however, is stressed. Other challenges for sustainable development are:

- **CLIMATIC CHANGE**

Climatic change will exacerbate the vulnerability of certain ecosystems and their users and mostly lessen food security. Better understanding is needed about effects on agroecosystems, adaptation and mitigation strategies.

- **INTERDISCIPLINARY APPROACH**

Small-scale farmers are difficult to reach with scientific advances and new technology. A broader inter- and transdisciplinary strategy in local and international research using participatory methodologies is supposed to overcome the gap. The role of traditional knowledge is recognised. Better extension services should help to disseminate knowledge.

- **BIOFUELS**

ICSU identifies significant potential for biofuels to increase energy security, reduction of GHG (greenhouse gases) and stimulation of rural development. Gains for GHG reduction, with less side effects on food production, are expected especially by the second generation biofuels (using wood and waste). In drylands the use of marginal lands seems very promising.

- **GENETIC MODIFICATION (GM)**

ICSU expects large gains by GM, however, their use has to be discussed on a case by case basis taking socio-economic and environmental effects into account.

- **DRYLANDS, DROUGHTS AND DESERTIFICATION**

The important role of adapted management such as mobile pastoralism in semi-arid/arid ecosystems is underlined.

Conclusions

The Scientific Community raises a number of issues in line with NGOs/CBOs like involvement of farmers/stakeholders, strengthening S/T capacity in developing regions, better extension services to (small-scale) farmers, promoting sustainable agriculture.

However, some diverging views are obvious:

- Increased food production does not automatically makes more food available to the poorest – the Green Revolution encloses too little.
- Without land ownership or secure owner rights, sustainable land management is out of reach.
- "Participation of local people and stakeholders" means to involve them in the development process from the very beginning.
- The Green Revolution can be considered in a far more ambiguous light due to dependencies on seed companies, far reaching environmental pollution, i.e. broad use of pesticides and fertilizers with negative effects on agroecosytems, water quality and biodiversity, etc.

By Drynet partner:
Silke Brehm of LPP, Germany

GLOBAL NEWS

International Agenda 2008

16-20 June 2008 – Modena Bio 2008: 16th IFOAM Organic World Congress, Modena, Italy "Cultivate the future" congress will focus on Regional Values and Indigenous Knowledge, Innovation and Cooperation between different parties.
www.ifoam.org/events/ifoam_conferences/owc/Organic_World_Congress.html

25-28 June 2008 – Groundwater and climate in Africa. An International Conference, Kampala, Uganda The conference seeks to improve current understanding of the impact of climate and development on groundwater resources in Africa, bringing together water and climate scientists, donors and consortia to share knowledge and expertise.
www.gwclim.org

20-29 October 2008 – CRIC 7 and CST 9, Istanbul, Turkey. The 7th session of the Committee for the Review of the Implementation of the Convention (to Combat Desertification) (CRIC) will convene in conjunction with the 9th session of the Committee on Science and Technology (CST).
www.unccd.int

Drought, a sustainable development topic

Drought occurs when a region receives consistently much lower precipitation than average. Although droughts can persist for several years, even a short, intense drought can cause significant damage and harm to the ecosystem and local economy, particularly in pastoral areas.

Drought, combined with low economic development, is a common scenario in drylands. It is a major cause of food insecurity but the political climate, national and regional agricultural and rural development policies and practices, the state of watershed management, as well as health and nutrition issues etc., influence whether drought triggers a crisis.

In developing countries a large percentage of dryland populations depend directly on the often-degraded natural resource base and typically lack alternatives and/or have limited social safety nets to ensure food security.

Strategies to reduce impacts of drought include Drought monitoring and information, Sustainable Land use Management, Conservation agriculture, and Rainwater harvesting.

The Drynet approach: highlighting sustainable, innovative and indigenous technologies in dryland communities.

By Drynet partner:
Tanveer Arif of SCOPE, Pakistan

Coping with drought

A SUCCESS STORY ON THE CENTURIES-OLD INDIGENOUS TECHNOLOGY THAT ENABLES LOCAL COMMUNITIES IN SOUTHERN IRAN TO COPE WITH DROUGHT

Situated in the south of Iran, the province of Bushire has an arid and hot climate in which the temperature can reach over 50 degrees. The local communities have developed ingenious ways of coping with the conditions. A unique example of this is the underground gardens of Iran, where traditional agricultural know-how is combined with clever water harvesting techniques to produce stunning quantities of grapes.

A stone wall about 50 metres in diameter encloses every field. The ground outside is fashioned with features that capture and lead the very rare flash floods to an underground cistern half filled with topsoil. Rich harvests of tree crops are achieved in this manner.

In the case of grape vines, underground cultivation chambers about two to three metres across are dug to six metres in depth until they reach a "greasy" soil which is called "shol" in the local language. Expert well diggers who use simple digging bars are employed for constructing the underground chambers. As soon as they reach the shol, they fill the chamber half way with top soil. In January, at the beginning of winter, farmers would select suitable branches of vine, and plant them in good soil to sprout. In March, they would transfer the sprouting branches of vine in >>>

GLOBAL NEWS

By Drynet Partner: CENESTA, Iran

>>> the underground gardens. In the dry months of the first summer, they may irrigate the young vines five or six times. In the following years, the vines need no more irrigation.

Vine branches creeping out of the underground chambers, are led atop a stone stand about a metre high called "khan", which is filled with local stones. The workers pass under the branches to harvest the bunches of grapes.

Challenges: constructions due to urban expansion have been ruining a great part of the land and the underground gardens.

Strategies: Collaboration between CENESTA experts and the government has resulted in a recent decision to declare the remaining underground gardens "cultural heritage". This will ensure the conservation of this unique technology for combating desertification.

Stakeholders: rural people and farmers.

Success: great local agro-biological diversity; sustainable livelihood, food security and organic agriculture can be maintained by this technology.

Sustainability: grapes and other cash fruit trees planted in these underground gardens provide income for the household. If maintained, the vines will pull through as water and humidity are assured all year round.

For more details on the articles published you can check our website www.dry-net.org or contact us at drynet@bothends.org.

A view of an underground grape garden in Iran showing the roots of the vines. The branches of the vines are led atop a stone stand about a metre high called a "khan" which is filled with local stones. Workers pass under the branches while harvesting the grapes.

REGIONAL NEWS

Dear friends!

We are pleased to welcome you all to read the second edition of "Drynet" bulletin and thrilled to share with you the "hot" news!

Team of national experts started activity on the project in Central Asian countries. Now you can share your news, message or history of success as well to learn more about the project by contacting "Drynet" experts:

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At the moment we are preparing for conduction of cycle of seminars in CA countries devoted to issues of development of tools assisting to further increase of participation of civil society in process of activity on UN Convention on Combat Desertification (UN CCD). We are forwards to receiving your ideas and proposals on further cooperation!

By Drynet partner:
Emil Gareyev, CAREC

Kazakhdarya. Karakalpakstan. Photo of Shulepina N.

Alternative to the sands

Project named "Achievement of ecosystem sustainability on degraded lands in Karakalpakstan and Kyzylkum desert" was introduced in Uzbekistan. It is an essential part of Central Asian Initiative on land use and designed for four years. Amount of investments would be equal to one and a half million US dollars.

Innovative solutions will be implemented in selected areas in Kyzyl Rovat (Bukhara oblast) and Kazakhdarya (Karakalpakstan) as Mrs. Irina Bekmirzayeva, project manager reported. It is planned to identify types of plants being able to provide with significant environmental and economical benefits in desert and semi-desert ecosystems. Other tasks include testing of sustainable methods of land resources management, fixation of shifting sands and recovery of degraded lands in partnership with local communities. Thereafter implementation of most successful approaches to provision with sustainability of ecosystems will be continued in other degraded areas.

About 85 percent of territory of Uzbekistan consists of desert and semi-desert lands. Starting from sixties of the last century deserted area is spreading due to drying Aral Sea. Therefore it is vital to stop spreading of deserts and to provide community with benefits on sustainable basis.

Subregional forum on partnership development of Central Asian countries on desertification control conducted in Tashkent in 2003 became an impulse for development of the project. This is when development of the "Central Asian Countries Initiative on sustainable land resources management (CACILM)" was started. It was conducted under auspices of the UN Convention on Desertification Control and Asian Development Bank. There was the National Framework Program prepared including project proposal on priority directions of efficient land resources management. Uzhydromet had coordinated that >>>

REGIONAL NEWS

>>> activity being the national body on fulfillment of obligations in the frames of Convention on Desertification Control. The State Committee of the Republic of Uzbekistan on Nature Protection, Forestry Department of the Ministry of Rural and Water Resources took part in the process as well. Application form for receiving of co-funding was submitted to the Regional Environmental Facility in 2007 and it was approved.

Medium-scale project "Achievement of sustainability of ecosystem on degraded lands in Karakalpakstan and Kyzylkum desert" is an essential part of the Central Asian countries Initiative on Sustainable Land Resources Management".

Key state agencies involved into orbit of the project are: Forestry Department of the Ministry of Rural and Water resources of Uzbekistan, the Academy of Science of Uzbekistan, "Botanika" scientific and production centre, Microbiology Institute, Institute of General and Non-organic Chemistry, Institute of bio-ecology of Karakalpak branch of the Academy of Science, Centre of Hydrometeorological Service of Uzbekistan (Uzhydromet).

GEF Implementing agency is the UN Development Programme in Uzbekistan (UNDP). National implementing agency of the project is the Ministry of Rural and Water resources. Office of the project is located at the building of the Forestry Department. Introduction seminar for the specialists will be conducted on May 22nd.

By Drynet Partner:
Natalia Shulepina of CAREC,
Uzbekistan

Iskanadar Mirkhashimov,
CAREC project manager "Plan of integrated management of Ili-Balkhash basin"

Environmental situation in Balkhash region: challenges and solutions

Balkhash lake and surrounding area is a part of Ili-Balkhash basin territories (IBB). IBB covers more than 400 thousand km^2 and is the biggest lake ecosystem of Kazakhstan. One fifth part of population of Kazakhstan, i.e. 3,3 million people live here. The biggest water reservoir of IBB is Balkhash lake and it is 16th biggest fresh water reservoir in the world. About 80% of Balkhash inflow is received from Ili river and the rest from Karatal, Aksu, Lepsy, Ayaguz rivers and number of small rivers.

Indeed, large amount of people living in the region need fair amount of natural resources which have been actively used during many years. However, the nature needs rest too. Inefficient use of natural resources by human caused a number of environmental problems, i.e. degradation of ecosystems of the region and excrescence of desertification processes, environmental experts say that at the present time it is not profitable to produce vegetables and plant gardens; loss of pasture ranges and hayfields make process of livestock breeding more expensive; fish farming does not exist anymore as an industry. Many villages lack on irrigation and drinking water, there is migration of population process takes place from southern parts of IBB to piedmont southern part. Sanitary conditions of small towns do not fulfill requirements of Sanitary and Epidemiologic Standards, population health indicators are decreasing.

REGIONAL NEWS

Experts say that environmental problems facing in the region could become a reason for social and environmental crisis just like the one which existed in Aral Sea region. If there is no urgent change for better then Aral catastrophe could be repeated again.

Public hearing on environmental problems is one of effective interaction methods of community with state bodies, NGOs and business sector which allows to implement participatory approach of community in making nature protective decisions as well as to receive environmental information "first hand". Everyone could influent on situation; in order to do so it is required to make own proposals which will be taken into consideration by authorized individuals during development or editing nature protection programs. Thus, an important pat of public hearings was the presentation to public of the project named "Development of integrated management plan of Ili-Balkhash basin"; collection and opinions and proposals on the plan was organized during the breaks.

Mr. Iskander Mirkhashimov, manager of the Regional Environmental Centre for Central Asia has presented the project named "Plan of integrated management of Ili-Balkhash basin" (partners of the project – European Commission and the Ministry of Environmental Protection), whose goal is the creation of ecosystem management model for Ili-Balkhash basin in order to protect ecosystems, integrated water management and efficient use of natural resources.

The project foresees evaluation of conditions of IBB ecosystems and level of effects on them from economy sectors and community; development of integrated management plan of the basin based on plans of the Government, plans of oblast development, industrial projects and programs, development of models and submission to the Government of document set for creation of IBB development management body; development of interstate agreement on management of water of transboundary rivers; development of technical tools for implementation of the Integrated Management Plan of IBB and etc.

Possibly, ecosystem management in IBB whose model is being developed withing the frameworks of the project will become a way of preventing of imminent environmental crisis.

"Environment and Community" scientific and popular environmental magazine #11(16) 2007 – Kazakhstan, Almaty

Development and testing of the strategy for sustainable pasture management at local level

CAMP Consulting – is a non-profit and non-governmental organization founded in 2004 promoting sustainable development of rural areas of Kazahstan. In cooperation with partner organizations working in Kyrgyzstan and Tajikistan, CAMP Consulting forms the CAMP Network.

GTZ/CCD project named "Development and testing of the strategy of sustainable pasture management on local level" is based on significant amount of experience of "CAMP Consulting" PF in a field mobilization of rural communities, setting up of community interaction mechanisms and cooperation for finding solutions for common problems on village level as well as for awareness increase on connection of social and economic wellbeing with environmental problems. The project is also a co-funding from GTZ/CCD into preparation phase of medium size project of Global Environmental Facility named "Sustainable Rangeland Management" designed for 2008-2013 and implementing by UNDP in Kazakhstan.

Goal of the project is to develop a strategy for pasture resources management with involvement of local community at local level.

The following tasks were stated for achievement of the targeted goal:

- Analysis of basic information for development of the Strategy of pasture management using participatory approach, capacity building of local community
- Development of approach for awareness building and mobilization of local community

Workshop in Matybulak village

REGIONAL NEWS

- Development of strategy on pasture management based participatory approach from local community
- Development of approach for implementation of participatory pasture management strategy at local level
- Identification of monitoring tools and evaluation of implementation of the strategy on pasture management with participation of local community
- Dissemination of best practices

Matybulak village of Zhambyl district of Almaty oblast was selected as a project implementation field. The village is located in semi-desert area and villagers are directly facing the problems of land degradation. Pastures of Matybulak village are suffering from severe degradation due to overgrazing of livestock in near pastures and non-reclamation of remote pastures. Soil surface is subject to wind erosion, productive quality is worsening, biodiversity and flora quality is decreasing. Natural and climate conditions of the region are contributing to that as well which is characterized as semi-desert area, i.e. small amount of annual precipitation, lack of water supply, deep location of subsoil water, fires and droughts. Pasture circulation system is absent in all types of households (peasant holding and farming, backyards) is absent.

The project is devoted for discontinuation of desertification process and improvement of pasture management through development and implementation of the local Plan of sustainable management of pasture resources using example of Matybulak village.

There was an assessment conducted within the project on social and economic, legislative and institutional issues, role of livestock breeding in provision of local community with employment as a source of income for living, its capacity and limits as well as analysis of demographic changes.

Participation of local community itself at all stages of implementation starting from planning and introduction to assessment of outcomes is an important factor of successful implementation of pasture management. Tools of local community interaction and researches on assessment and identification of stakeholders are the specially adapted modules L4S (Learning for Sustainability) for:

- Capacity analysis, problems, opportunities and obstacles in pasture management at village level
- Development of efficient approaches and technical solutions based on conducted analysis and deeper understanding
- Self-training of villagers on joint development of proposals on finding solutions for particular problem

The project is sustainable due to the fact that the strategy is being developed for the first time in Kazakhstan and it is different from all existing management approaches in the country functioning based on the "up to the bottom" principles as well as there is participation of the community itself is foreseen at all stages of implementation.

Mrs. Aigul Zhanserikova,
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Pastures of Matybulak village

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