



**drynet**

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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

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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](http://www.dry-net.org) developing into a public platform for organisations active in dryland man-

agement. 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 national 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, which >>

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>> 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](http://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, how-

ever, 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 make 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 agroecosystems, water quality and biodiversity, etc.

**By Drynet partner: Silke Brehm of LPP, Germany**

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### 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](http://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](http://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](http://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 under-ground 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, >>

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>> they would transfer the sprouting branches of vine in 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.

**By Drynet Partner: CENESTA, Iran**

For more details on the articles published you can check our website [www.dry-net.org](http://www.dry-net.org) or contact us at [drynet@bothends.org](mailto: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.*



**COLLECTED  
REGIONAL NEWS**  
News from all over  
the world collected  
from Drynet's  
Regional Newsletters



*Iskander Mirkhashimov, CAREC project manager of the "Development of integrated management plan for the Ili-Balkhash basin"*

## News from Central Asia:

### **ENVIRONMENTAL SITUATION IN BALKHASH REGION: CHALLENGES AND SOLUTIONS**

The Balkhash lake and the surrounding area is part of the Ili-Balkhash basin territories (IBB). IBB covers more than 400 thousand km<sup>2</sup> and is the biggest lake ecosystem of Kazakhstan. One fifth of the Kazak population, i.e. 3,3 million people live here. The biggest water reservoir of the IBB is the Balkhash lake, it is the 16th biggest fresh water reservoir in the world. About 80% of the Balkhash inflow is received from the Ili river, the rest from the Karatal, Aksu, Lepsy, Ayaguz rivers and number of smaller rivers. Inefficient use of natural resources by humans caused a number of environmental problems in the area, i.e. degradation of ecosystems and augmentation of desertification processes. Furthermore environmental experts argue that at the moment it is not profitable to produce vegetables and plant gardens. The loss of pasture ranges and hayfields make livestock breeding more expensive and fish farming does not exist anymore as an industry. Many villages lack irriga-

tion and drinking water, and there is a lot of migration from southern parts of the IBB to the piedmont area. Sanitary conditions of small towns in the region do not fulfil the requirements of Sanitary and Epidemiologic Standards and the population's health indicators are decreasing.

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

Public hearing on environmental problems is one of the effective interaction methods of the community with state bodies, NGOs and the business sector. It allows for the implementation of a participatory approach of the community towards making decisions on the protection of the nature as well as to making sure the community receives environmental information "first hand". Thus, an important part of the public hearing was the presentation to the public of the project named "Development of Integrated Management Plan for the Ili-Balkhash Basin". A collection of opinions and proposals on the plan was organized during the breaks. Mr. Iskander Mirkhashimov, manager

of the Regional Environmental Centre for Central Asia (CAREC), presented the project - of which the European Commission and the Ministry of Environmental Protection are partners. The project's goal is the creation of an ecosystem management model for the Ili-Balkhash basin in order to protect ecosystems, support integrated water management and the efficient use of natural resources.

The project foresees an evaluation of conditions of the IBB ecosystems and the effects on them from the economic sectors and the community.

The ecosystem management in the IBB, whose model is being developed within the frameworks of the project, might possibly become a way of preventing an imminent environmental crisis.

***By Drynet partner: CAREC, Kazakhstan. "Environment and Community" scientific and popular environmental magazine #11(16)2007 - Kazakhstan, Almaty***



## COLLECTED REGIONAL NEWS

### News from Turkey:

#### **SUMMARY OF CASE STUDY "INTEGRATED SUSTAINABLE BASIN MANAGEMENT PLAN OF THRACE"**

Thrace is in the Marmara region of Turkey, it covers the area from Black Sea in the east to the river Vardar in the west and from the river Danube in the north to the Aegean Sea in the south. It has mountains to the north and south and large plains in between them. With the exception of the mountainous Bulgarian section, Thrace is a mainly agricultural region, producing tobacco, corn, rice, wheat, silk, cotton, olive oil, and fruit.

Inappropriate implementation of urban development has caused degradation of the natural resources, especially land, in Thrace. The unplanned development also threatens the Ergene and Meriç Basins together with the two major water sources.

The other major drawback faced in conserving the prime lands of the area is the high prioritization granted to the needs of Istanbul - the giant metropolis - which most likely exhausts and will finally irreversibly degrade the natural resources of Thrace.

In this context, the recently accomplished Ergene Sub-Basin Environmental Management Plan (1/100.000), which is also the first approved document of its kind in Turkey, is in fact an 'Integrated Sustainable Basin Management Plan', developed for the optimization of the multipurpose uses and the ideal and

objective selection of the land regarded as a priority in environmental safety. However, the management of the territorial ecosystem in accordance with the 'Integrated Sustainable Basin Plans' based on the 1/25.000 or larger scale Detailed Soil Maps prepared at the level of soil series, is vital and inevitable in order to provide and maintain the proper use of our lands in conjunction with their natural properties.

*By Cemil Cangir and Duygu Boyraz /  
Soil Science Department of  
Agricultural Faculty, University of  
Namik Kemal, Turkey, for Drynet  
partner TEMA, Turkey.*

### News from India:

#### **DRYLAND DROMEDARIES OFFER MORE THAN JUST DRAFT POWER.**

CAMEL HUSBANDRY IS A GOOD STRATEGY FOR SUSTAINABLE USE OF DRYLANDS, BUT SADLY, IT IS NOT GETTING THE ATTENTION AND SUPPORT IT DESERVES.

Every child knows about the camel's phenomenal adaptations to the desert: the fact that they need minimal water, that they possess humps with fat deposits that takes them through lean periods, and that they are impervious to heat. However, what is less well known is that camels survive and efficiently utilise the desert ecosystem to generate a range of products that meet modern (and traditional) consumer needs and can generate income for desert people in an ecologically sustainable way.

#### **Camels effectively utilise desert vegetation**

In India's Thar Desert, camels convert the native drought-resistant trees and shrubs and many other plants into energy and food. Camels are much more efficient than cows in converting vegetation into milk, requiring only 1.9 kg of dry matter to produce one litre of milk, while cows need 9.1 kg. Their long necks help in utilization of upper storey vegetation. In addition, their grazing exerts minimal pressure on the vegetation or even stimulates plant growth. Herds disperse over large areas and never eat up plants completely, but take only one or two bites before wandering to the next one. Camels can also make use of plants with a high salt content that typically sprout when soils become salinized in the wake of irrigation projects. According to the Food and Agriculture Organisation of the United Nations (FAO), the potential global market for camel milk alone may be worth \$10 billion ([http://www.fao.org/world/Regional/rne/News/news377\\_en.htm](http://www.fao.org/world/Regional/rne/News/news377_en.htm)). There is a huge grey market for camel milk in the countries in the Horn of Africa, due to cultural preference for it among Somali groups. Containing ingredients that act as immune-system booster, it has been used traditionally in the treatment of tuberculosis in India and Central Asian countries. It also contains an insulin-like substance that is not broken down in the stomach and immediately lowers the blood sugar level. Various research studies including some from India have proved the utility of camel milk in the treatment of patients with diabetes.

## COLLECTED REGIONAL NEWS

Would you like to read the complete versions of these articles, please check the regional newsletters of CAREC, TEMA, LPPS and EMG on our website: [www.dry-net.org](http://www.dry-net.org)

### **Camel draft power as a source of green energy**

Interestingly, in rapidly modernizing India, the demand for camels as work animals has risen in the last couple of years: in some agricultural areas because of the rise in fuel prices, people can no longer afford to run tractors and switch back to camels. This trend not only reduces carbon dioxide emissions, but has also hiked camel prices. Since 2005, the value of male camels has doubled or trebled, while those of female camels are now up 900%!

### **Policies and technical help required for camel breeders**

From these tidbits of information, it is evident that the camel can be considered as a potent means to utilise dryland vegetation and reduce carbon emissions. The potential of this animal will not unfold automatically: camel breeders - who often belong to the most marginal groups - need supportive policy frameworks and technical help. They need to feel that access to their traditional grazing lands is secure, and that these will not be used for biofuel

cultivation. They also desperately need training and technical inputs to be able to market their products. If a mechanism could be found for the camel breeders of the world to exchange their experiences, to learn from each other and to have access to targeted research inputs, this would go a long way to creating rural incomes in some of the poorest parts of the world and prevent people from having to migrate to the cities.

**By Drynet Partner: LPPS, India**



*Raika herders and their camels*



*Camel milk*



*A camel milk supplier*

Photos courtesy: Ilse Koehler-Rollefson

## COLLECTED REGIONAL NEWS

### News from South Africa:

#### **THE COMMISSION ON SUSTAINABLE DEVELOPMENT: WHAT DOES IT PROMISE FOR CIVIL SOCIETY?**

The 16th session of the UN Commission on Sustainable Development (5-16 May 2008) will focus on issues relating to agriculture, rural development, land, drought, desertification, and Africa. With CSD-16 just around the corner, Karen Goldberg spoke to Bryan Ashe, Coordinator of the South African Water Caucus and a CSD veteran to find out about current civil society sentiment towards the process and recent levels of civil society involvement.

#### **What is the current level of civil society involvement in the CSD process?**

Over the last few years, civil society involvement in the process has not been strong, and seems to be getting less every year. During the latest Country Review process only 2 NGOs, one parastatal and the main agricultural union represented civil society at the first meeting hosted by DEAT. Even fewer attended the second meeting.

#### **Why is the level of engagement so poor?**

Many people do not see any real benefit for getting involved in the CSD process. Consequently there isn't a strong enough grouping to generate clear civil society positions on the various themes and cross-cutting issues on this year's agenda. Our experience is that

CSO positions are not taken seriously by our government counterparts. In the latest review process, I was advocating for water rights (Free Basic Water) and water services delivery. At the time there was acknowledgement from officials of the challenges in these areas. However, in the final review report, such issues had been "sanitized" from the report: government does not seem to want to highlight any problem areas in the country. At an international level consensus is not generally reached on key issues and thus no progress is made. Also, when you raise your issues there, they are again sidelined. Some people representing CSOs who have accompanied the official South African delegation to the meetings felt they were not there as independent agents, were obliged to sign confidentiality agreements and felt that they had been gagged to some degree. The other main reason for poor engagement is one of resources. As 2008 is a review year, the government delegation was not considering taking CSOs to CSD-16, and thus no government funding has been made available. For most CSOs, attending international meetings is not a funding priority. If no external funding is available, these organisations will not be able to attend.

#### **Bearing in mind what you have said, do you think it is still worthwhile for CSOs to engage in the CSD process?**

Yes, I do still think it's worthwhile participating. Firstly, it's very useful to understand how the international sustainable development mechanisms work and how the various players (including the South African government) engage in the process. These meetings are also fantastic networking opportunities to connect with likeminded people and organisations throughout the world.

And finally, there is always a chance that your voice will be heard and that some changes are made at an international level because of your participation.

#### **What advice do you have for organisations or individuals interested in getting involved?**

CSO members can attend the CSD as an NGO representative, as an "indigenous person", or as a farmer. You must register to attend by either being a member of an accredited organisation or ensure that you are registered through an ECOSOC accredited organisation. As next year (CSD-17) is a policy year and it would be useful to go to CSD-17. DEAT will have funding for CSO attendance in New York. If you are planning to attend, make sure that your flights and accommodation have in fact been paid for, and be very specific about the conditions under which you go as part of the official delegation. Make clear that you will be attending the meeting as CSO representative and not the government.

In terms of actual involvement with the process, I would suggest that it is very important to engage with the discussion document that comes out of CSD 16 and the SA process in the lead-up to CSD17. It would also be important to develop a consistent position, and to link with international organisations working on the same theme.

**By Drynet partner: Karen Goldberg, EMG, South Africa**