

DESIRE Fact Sheet 6 for Desertification Day, 17 June 2011

Let's plant more trees in drylands -

DESIRE shows how forests help to avoid desertification

Thursday 17 June is Desertification Day, and each year the United Nations Convention to Combat Desertification (UNCCD) draws attention to one particular aspect of desertification, land degradation and drought. This year the UNCCD theme is: "Forests keep drylands working".

In this International Year of Forests, **DESIRE**, which is a €9 million European Union research project, is tackling the problems of land degradation, and matching mitigation measures to environmental problems such as soil erosion, saline soils, and depleted water supplies. As part of our work we remember how **trees help to conserve soil and prevent it being lost through erosion**. If soil is washed or blown away it is no longer available for growing crops, and new soils can take thousands of years to form again. In drylands, areas of soil left bare of vegetation are most at risk of erosion and gullyng. Although trees take up water and nutrients from the soil, decaying leaves and roots return organic matter back to the soil. The organic matter and the roots help bind the soil together and improve the soil's resilience to erosion. Organic matter also helps the soil to absorb and store the moisture needed for plant growth. In drylands, when the rain does come it is often as intense rainstorms. A tree canopy helps to intercept the potentially erosive force of the rain before it reaches the ground.



Destruction of the dryland forest environment by fire, as seen in Mação, Portugal, can be reduced by the removal of strips of vegetation to make fire breaks (© Diederik van der Laan 2009)

DESIRE researchers and local people have been working together to suggest and try out a wide range of approaches to avoid land degradation. Technologies being trialled include drip irrigation, contour ploughing, mulching and minimum tillage. **Any new technologies have to be practical and sustainable, and enhance the livelihoods of the local people**. All the details of the experiments and research results are presented in non-scientific language on the DESIRE on-line Harmonised Information System. In rural drylands it is important to convince people that there is a viable future for them managing the land,

otherwise they will move away to better prospects in towns and cities and the land may be left abandoned.

Land abandonment is a problem in drylands if scrub vegetation and trees grow unchecked and become a fire hazard. Fire can spread very rapidly through dry vegetation and pose a significant risk to human life. **In the Mação and Góis regions of Portugal DESIRE has been looking at ways of reducing the fire hazard in dryland forests. Measures such as removal of vegetation along parallel fire break strips, and prescribed burning to reduce the fire fuel load have been shown to be very successful.** These are featured in a DESIRE video available with subtitles in 10 languages. To mark Desertification Day 2011, the DESIRE video, already available to view on the DESIRE website, is also launched on YouTube.



The DESIRE video promotes better management of dryland forests

We conclude that well-managed forests are an excellent strategy for conserving soil and moisture in drylands. And forests can provide a sustainable source of employment and income for local people. Mr. Gnacadja , Executive Secretary of the UNCCD asks for active participation in planting more trees: “If each of us makes the commitment and ensures that just one tree is planted in a degraded part of the drylands and that the tree survives through the year, we could have well over two billion trees in the drylands by the end of the year. That is a tree for every inhabitant. ...let us go forth and forest the drylands to keep them working for present and future generations.”



For more information about DESIRE see:

DESIRE website <http://www.desire-project.eu/>

DESIRE Harmonised Information System <http://www.desire-his.eu/>

DESIRE video, available with subtitles in 10 languages http://www.desire-project.eu/index.php?option=com_content&task=view&id=124&Itemid=83

Link to the video on YouTube: <http://www.youtube.com/watch?v=K23D3wbUt3k>

Link to the video on vimeo.com: <http://www.vimeo.com/19738629>

Source of quote from the UNCCD

Mr Gnacadja, UNCCD website <http://www.unccd.int/publicinfo/june17/2011/menu.php>

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