Fuel-efficient stoves for African women

The United Nations World Food Programme (WFP) has launched a pilot project to provide fuel-efficient stoves to women in Sudan and Uganda to reduce the risk of violence they run while gathering firewood and at the same time protect the environment. The guidance of the project was already produced in 2007. In December 2009, WFP launched the practical guidance, which means field implementation. The Safe Access to Firewood and Alternative Energy in Humanitarian Settings (SAFE) stoves initiative will be rolled out in 2010 to reach up to six million refugees, internally displaced people and returnees located in 36 nations.

Refugees and women living in drought conditions are forced to walk further and further into the bush to collect firewood. They chop down trees and uproot grasses, harming the fragile ecosystem. They venture out into unsafe areas and are left vulnerable to rape and other attacks. WFP researchers found that some women spend a full day's wages on firewood alone. Others sell off food rations to purchase fuel.

Photo: Iaif

Women are subject to many risks when cooking over an open fire; fuel-efficient stoves may be a solution.

WFP's SAFE project will scale up distribution of fuel-efficient and "improved mud" stoves to assist almost 100,000 women in North Darfur/ Sudan. These stoves consume less firewood and reduce the health risks associated with smoke. In Uganda, WFP will focus on refugees and pastoralists in the drought-hit Karamoja region. It will provide more than 35,000 households and 50 schools with fuel-efficient stoves, as well as helping women to find other sources of income.

Project partners include the Women's Refugee Commission, the United Nations High Commissioner for Refugees (UNHCR), the Food and Agriculture Organization (FAO) and the UN Environment Programme (UNEP). *(WFP/ib)*

Grasslands to fight climate change

Grasslands have vast untapped potential to mitigate climate change by absorbing and storing CO_2, according to a new report published in January 2010 by the Food and Agriculture Organization of the United Nations (FAO). Pastures and rangelands represent a carbon sink that could be greater than forests if properly managed. Covering some 30 percent of the earth's ice-free land surface and accounting for 70 percent of its agricultural land, the world's 3.4 billion hectare of grasslands can also play a major role in supporting the adaptation and reducing the vulnerability to climate change of over one billion people who depend on livestock for a living, according to the paper *Review of Evidence on Drylands Pastoral Systems and Climate Change*.

Land degradation

Grazing lands are estimated to store 30 percent of the world's soil carbon in addition to the substantial amount of above-ground carbon held in trees, bushes, shrubs and grasses. But they are particularly sensitive to land degradation, which affects some 70 percent of pastures as a result of overgrazing, salinisation, acidification and other processes. Pressure on the land is also increasing in order to meet the fast-growing demand for meat and dairy products. Improved management practices restoring organic matter to grassland soils, reducing erosion and decreasing losses from burning and overgrazing can therefore help sequester large amounts of carbon – up to 1 billion tonnes a year according to some estimates. But this would require a vigorous and coordinated global effort and appropriate funding.

A more immediately feasible target would be to place 5–10 percent of global grazing lands under carbon sequestration management by 2020, which could store 184 million tonnes

Photo: laif

Has the $C0_2$ absorption potential of grasslands been neglected in the climate debate?

of carbon a year. Socio-political and economic barriers need to be overcome, too. They include land tenure, common property and privatisation issues; competition from cropping; and lack of education and health services for mobile or nomadic pastoralists.

Drought defence

Increasing the amount of carbon sequestered in grasslands can help pastoralist populations adapt to climate change because the added carbon improves the soil's water retention capacity and thus its ability to withstand drought. Another consideration is safeguarding biodiversity. According to some estimates, the potential biodiversity of grasslands is only slightly less than that of forests. But there is also evidence that the number of animal and plant species and soil microorganisms resident in grazing lands is declining alarmingly through mismanagement, land-use change and, more recently, climate change.

The report suggests that measures promoting improved grasslands management should include payment for environmental services (PES) which include both financial rewards and non-financial incentives such as capacity building and knowledge sharing. Increased access to existing development and funding mechanisms such as the Global Environment Facility should be made possible for efforts that contribute to sustainable use of grasslands and restoring their carbon storage potential. Besides climate change mitigation, such efforts would also contribute to climate change adaptation and to improved livelihoods for pastoral and agropastoral peoples. *(FAO)*

More information:

www.fao.org

Sustainability Quick Check for Biofuels

If smaller producers from developing countries are to be enabled to sell biofuels on the world market and to be competitive in their operations, affordable tools for assessing the environmental impact of biofuels must be available. In December 2009 the Swiss State Secretary for Economic Affairs SECO and the research and services institution Empa unveiled just such a tool: the Sustainability Quick Check for Biofuels (SQCB).

The SQCB is available free of charge on the Internet and is the world's first web tool for assessing the environmental impacts of biofuels along the entire production chain. At present the Quick Check is based on the criteria laid down in the Swiss Mineral Oil Tax Ordinance; other standards such as the sustainability criteria of the international Roundtable on Sustainable Biofuels are due to be incorporated soon.

Users of the test simply need to enter the most relevant and easily identified parameters of the biofuel production chain. The SQCB links the inputted values with background data, uses this information to calculate the greenhouse gas balance of the biofuel, and draws up the overall rating of the fuel's environmental impact. The results can then be compared with the specified sustainability criteria. The main aim of the SQCB is to enable small producers to enter the market, since strengthening local stakeholders is a key driver for empowering rural communities and increasing their autonomy.

Assessing the environmental impacts that arise from the cultivation, production and use of biofuels is a complex task which is likely to be beyond the means of small producers in developing countries. Certification schemes therefore involve the risk that these producers will be locked out and that international investors and large-scale plantation operators will dominate the market for sustainable biofuels. *(Empa/ib)*

More information:

www.sqcb.org

In brief

World Bank: Weather insurance for coffee farmers

The Jamaican Government and the World Bank signed an agreement to evaluate the feasibility of weather-risk management for coffee value-chain operators in the Blue Mountain region in January 2010. This pilot study is being financed by the World Bank, through a grant from the European Union's "All ACP Agricultural Commodities Programme." The project will include the following activities:

- Conducting weather-risk modeling and quantification.
- Assessing different insurance options based on the technical findings.
- Creating a weather insurance prototype product.
- Designing the scheme's administration and premium collection payouts. *(World Bank)*

FAO: Livestock disaster in Mongolia

Intense cold has killed 1.7 million head of livestock in Mongolia this winter, threatening the livelihoods of 21,000 herder families and putting them at risk of food insecurity, the Food and Agriculture Organization of the United Nations (FAO) reported in February 2010. If current conditions persist, the government estimates that losses could reach 3–4 million head of livestock by spring. FAO's Animal Production and Health Commission for Asia and the Pacific has provided 5,000 doses of medicinal food supplement for dairy cows, pregnant heifers and young bulls as immediate assistance. *(FAO)*

AGRA: Over 500 agro-dealers certified in Ghana

The Ministry of Food and Agriculture and the Environmental Protection Agency of Ghana – in collaboration with the Alliance for a Green Revolution in Africa (AGRA) and the International Centre for Soil Fertility and Agricultural Development (IFDC) – have officially certified 594 agro-dealers at Ejisu in the Ashanti region, reported AGRA in November 2009. The certification is part of the AGRA-funded Ghana Agro-Dealer Development (GADD) project. GAAD is a three-year initiative that will train approximately 2,200 agro-dealers and seed producers in business management skills to help them expand their business and provide farmers with knowledge and information that will increase their production. *(AGRA)*

China: Genetically modified rice

China is set to cultivate genetically modified rice for commercial sale from 2011, reported the *New Scientist* in January 2010. The two varieties Huahui 1 and Bt Shanyou 63 contain genes of the *Bacillus thuringiensis* bacterium, making them resistant to the rice stem borer. *(New Scientist/ib)*

Livelihoods programme for cocoa smallholders

In February this year, the World Cocoa Foundation announced the launch of the Cocoa Livelihoods Programme CLP in Côte d'Ivoire. Its activities will form part of a five-country programme benefitting 200,000 cocoa-cultivating households in Côte d'Ivoire, Ghana, Nigeria, Cameroon and Liberia. With funding from the Bill & Melinda Gates Foundation and 14 chocolate-making companies, the CLP will substantially improve the livelihoods of 75,000 cocoa farmers in Côte d'Ivoire by 2014. The programme is headed by the World Cocoa Foundation and will be implemented by Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Agribusiness Services International (ASI), the International Institute of Tropical Agriculture (IITA), Socodevi and TechnoServe. The German Federal Ministry for Economic Cooperation and Development (BMZ) is delivering additional support. *(GTZ)*

India: GM aubergine approval halted

Although the Indian approvals authority had rated a genetically modified aubergine variety – Bt Brinjal (Rural 21 reported in issue 5/2009, p. 42) – as presenting no concern, the variety's clearance for release has been halted. Further scientific studies are to be conducted. The country's environment minister based this decision on the heated public controversy over the Bt aubergine variety. *(ib)*

„Our Land ... Our Life ... Our Future"

Photo exhibition on rural poverty and land rights in South Africa

15 years after the official end of apartheid, the land reform promised by the South African government has still not come about. The purchase of farmland by foreign investors has added to the squeeze on farming communities: land is becoming ever scarcer and people are at risk of eviction. The touring photo exhibition "Our Land ... Our Life ... Our Future" aims to raise awareness of this situation. Three prize-winning South African photographers depict the life of rural communities and people's struggle for survival. The idea for the exhibition came from the South African Trust for Community Outreach and Education (TCOE).

Since its first showing in Cape Town the exhibition has visited a large number of venues in South Africa and Europe. In Germany it is available for loan to local groups, schools etc. from KASA – Kirchliche Arbeitsstelle Südliches Afrika.

More information: www.our-land.de; www.kasa.woek.de; www.tcoe.org.za

Climate change, agriculture and world hunger are closely interlinked

"Agriculture and Climate Change – New Concept Proposals from Policymakers and Industry" was the theme of the Global Forum for Food and Agriculture Berlin 2010 which took place from 14 to 16 January in Berlin/Germany as part of International Green Week. Three events formed the core of the forum: an agriculture ministers' panel discussion, an international business panel and a summit of around 50 agriculture ministers.

Farming is part of the solution

"We cannot safeguard world food supplies if we are unable to get a grip on climate change, and we will not be able to get a grip on climate change unless agriculture is allowed to play a central role." So said Alexander Müller, Deputy Director General of the Food and Agriculture Organization of the United Nations (FAO) at the start of the agriculture ministers' summit. He went on to point out that by 2050 the world's population will have grown by 3 billion to more than 9 billion. To feed so many people, it will be necessary to increase world food production by 70 percent. Müller maintains that it is the task of politicians to prepare agriculture to meet climate change, using new financing instruments and appropriate adjustment strategies that will enable production to be increased. Ajay Vashee, president of the International Federation of Agricultural Producers, spoke out in favour of investment in sustainable agriculture. To speed up climate protection, incentives must be created – for example through payments for ecosystem services.

China's Deputy Minister of Agriculture, Dun Niu, was of the view that the developed countries have an obligation to help the developing world adapt to climate change by providing technical and financial support. Nevertheless, each country should try to find appropriate solutions itself and should take steps to secure its own agricultural production. Dun Niu pointed out that in Africa this is not yet possible – this was why China was supporting agriculture there by setting up demonstration centres, seconding experts and supplying improved seed. Despite this, he said, it is not China's intention to buy farmland in Africa.

While Africa has not contributed to the problem in any way, it is prepared to contribute to the search for a solution; this was the view of Laurent Sédogo, Burkina Faso's Minister of Agriculture. The use of traditional production methods that help protect the soil could, he said, play a part in reducing greenhouse gas emissions. But there must be a transfer of modern technologies and skills if the continent is to succeed in adapting to climate change.

Climate policy is also a policy for peace

What form such adaptation measures should take was discussed by experts on the international business panel in a session entitled "Limited Resources and Climate Change – Managing a Turbulent Future".

Agriculture needs efficient and effective ways of managing resources and risks, explained Thomas Blunck, member of the board of the reinsurance company Munich Re. As an example he described the SystemAgro, a multi-peril insurance scheme that takes account of the special circumstances of every region and every farm and therefore covers the risks that farmers are actually exposed to. The insurance should be available to all farmers and should preferably be organised in the form of a public-private partnership under the central control of governments, said Blunck.

Shri S. Sivakumar, Chief Executive of the Agri Businesses Division of ITC Limited, India, described the online platform E-Choupal, which farmers can use to check market prices, order fertiliser and sell their products. A whole network of organisations has been involved in bringing this information together, said Sivakumar, and as a result millions of small farmers – including those in remote regions – now have access to comprehensive solutions.

Klaus Töpfer, who was for many years Executive Director of the United Nations Environment Programme (UNEP), criticised the Copenhagen climate summit in December 2009 as "a missed opportunity for a peace conference". The way in which we deal with such vital resources as water and soil is a matter of global security. Climate change and a growing world population mean that these resources are becoming in shorter supply, which could lead to conflicts about their distribution. Investments in the more efficient use of water, in water recycling and storage are just as necessary as efforts to maintain the fertility of the soil and the use of underground facilities for disposing of unwanted carbon. "A peaceful world will not be possible unless the currently undeveloped countries can undergo a process of development", was Töpfer's conviction.

Call for a global network to combat climate change

The final event was the Berlin Summit of Ministers of Agriculture 2010, at which some 50 agriculture ministers pledged their support for an international initiative to combat the effects of climate change. In the closing document they gave an undertaking to help to reduce greenhouse gas emissions and to adapt agriculture to the changing climate. Every country should analyse its own agricultural sector and subject all the various climate-relevant processes to close scrutiny. Moreover, a global network should be created, to which each country can contribute its knowledge and experience in combatting climate change. *(sri)*