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### **Interview with Nina Tellegen** of DOEN Foundation

Nina Tellegen has been the director of DOEN Foundation for three years. One of the programs funded by DOEN is the Programme on Sustainable Soy and Palm oil (PSSP). The PSSP and its predecessor, the Pure Oil Programme (Zuivere Olie Programma – ZOP), have been jointly developed and managed by Aidenvironment since 2003.

How does the DOEN Foundation operate?

The DOEN Foundation was established in 1991 by the **Dutch Postcode Lottery to** support small initiatives. It now receives funds from three Dutch charity lotteries - Postcode Lottery, Sponsor Bingo Lottery and BankGiro Lottery - and funds projects related to three themes: Climate Change, New **Economy and Open Society** based on Solidarity. DOEN focuses on the pioneers of sustainable, cultural and social innovation. The PSSP is part of the New Economy theme, which is about social enterprises, sustainability innovations and the changes in the economic structure needed to create a more sustainable economy.

### Why did DOEN start to work in the oil palm and soy sector?

In 2003, the social and environmental impacts of soy and palm oil production

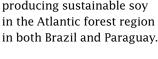
attracted increasing attention across the world. The two sectors appeared to be important contributors to the deforestation of tropical forests in South America and South East Asia. As Dutch imports made a significant contribution to these impacts, DOEN launched the Pure Oil Programme to show that sustainable production is possible.

### What is the role of DOEN (and PSSP) within the broad stakeholder community active in the soy and palm oil sectors?

DOEN can take more risks than many other donors. As such, DOEN has been involved in the launch of a variety of innovative and 'key' initiatives in both sectors. For example, DOEN has supported the Roundtable for Sustainable Palm Oil (RSPO) and Round Table for Responsible Soy (RTRS) by helping to

empower small-scale producers and local communities affected by large-scale agriculture. Over the years, DOEN has increasingly worked with pioneer companies and small-scale producers. In 2009, after an external evaluation, it was decided that PSSP would focus primarily on sustainable entrepreneurship in relation to small-scale producers. For example,

> we now support farmers producing sustainable soy in the Atlantic forest region



### Why did DOEN decide to outsource the management of PSSP to Aidenvironment?

The role of DOEN is to identify, support, connect and inspire. DOEN Foundation is a fund, not an implementing or development organization. Aidenvironment has a broad network and presence in the field and good knowledge of the local context. It is well equipped to develop and manage PSSP and provide technical assistance to partner organizations whenever needed.

### What will be the future role of DOEN in the soy and palm oil sector?

Many organizations are now involved in the soy and palm oil sector and the available funding for PSSP ends in 2011. We will then

evaluate the results and determine the direction of any new activities. Our role in the soy and palm oil sector may then come to an end if other organizations have taken it over. As part of our New Economy theme, DOEN will continue to support small-scale farmers in sustainable agriculture, but this will not necessarily focus on particular commodities. In the coming years, we will pro-actively search for pioneers, for example in cradle-to-cradle concepts, inclusive business models, and organic and fair trade production.



Desirée Immerzeel and Jan Willem Molenaar. For more information on PSSP, please contact Desirée Immerzeel, immerzeel@aidenvironment.org, or Manon Klein, manon@doen.nl. You can also visit: www.doen.nl/pssp.

# Resource-Efficient Rice Production in Thailand

### **Setting the Scene**

Rice is an indispensable ingredient in almost every daily meal for half of the world population at this moment. In Asia the production of rice to meet this need has significantly increased the pressures on land, labor, water and other natural resources. Population growth therefore requires sustainable intensification of rice production to meet the growing demand, reduce the pressures on natural resources, lower greenhouse gas emissions and build resilience to climate change (drought, flooding, heat and salinity). Irrigated rice is inefficient in its use of resources, especially nutrients, the application of pesticides and water. WWF has labeled it as one of the three 'thirstiest crops', next to cotton and sugar cane.

#### **The Good News**

Irrigated rice fields are a provider of ecosystem services, such as flood management. Rice fields make up 15% of the world's wetlands and contribute to biodiversity.

Moreover, there are plenty of novel options for producing rice more efficiently. New irrigation techniques can save 30% of irrigation water, while at the same time reducing methane emissions. Site specific nutrient management can prevent up to 50% of nitrogen losses, while still raising yields by 10% to 20%. Biological control can significantly increase resilience against pests. The question is why these techniques are not being adopted on a large scale.

#### **In Thailand**

Thailand is the world's largest rice exporter. As part of a strategy to remain competitive in the global rice trade, reverse declining yields, adapt to climate change and tackle water shortages, it will have to adopt sustainable techniques for intensifying rice production and making more efficient use of resources. But Thailand is not the only country that faces these challenges and the policies being developed by its government could be an example to the region. Their success will depend on



Farmer working a rice sample plot of the Ministry of Agriculture, Bangkok

involving multiple actors along the value chain, who should also be concerned about the availability of rice in the world market and the related issue of sustainable production. Most of the market for rice is in South–South trade, with thin margins and little consumer interest in paying a premium for sustainable rice. The challenge is to identify points of leverage to change production systems.

In a consortium with the Thai Rice Department, International Rice Research Institute (IRRI), International Institute for Environment and Development (IIED), and Aidenvironment, the United Nations Environmental Program (UNEP) is targeting resource efficiency in rice production in Thailand's irrigated central plain. The consortium is promoting a value chain approach, actively seeking the involvement of international stakeholders such as traders, input and finance providers, the rice processing industry and the retail trade.

### **The Challenge Ahead**

After an exploratory mission and a first expert meeting in early 2010, several studies have been carried out to gain greater understanding of resource ineffi-

ciency, gain insights into the ecosystem services that can be provided by rice production, and identify points of leverage to drive the uptake of sustainable production techniques. A roadmap was drafted during a recent stakeholder meeting, with the active participation of the international trade and the input industry. The next step is to get the relevant stakeholders to join forces and take a big leap forward in resource efficient rice production. The expectation is that their involvement will enable the draft roadmap to be developed into a fully fledged pilot phase, including a series of site-specific pilot projects, to make the business case for resource-efficient production. At the same time, current policies will be assessed and additional policy measures and market-based mechanisms developed to foster largescale uptake and replication of the pilot projects. If successful, this project can be scaled up to a national level and serve as a model for other rice producing countries that face similar challenges.

> For more information, please contact Joost van Montfort, vanmontfort@aidenvironment.org.

## Forests in the Fight Against Climate Change

### The REDD+ concept

In recent years interest has grown in the potential of well managed and intact forests to help mitigate the effects of climate change. An important mechanism is the uptake of  $\mathrm{CO_2}$  by trees and the storage of this carbon dioxide in the form of biomass. But if forests are subject to uncontrolled logging and poor management in general, they can also become a source of  $\mathrm{CO_2}$  emissions. This is the case when trees are removed in large numbers, die or are burnt.

Since the 2007 United Nations Climate Change Conference in Bali, Indonesia, a funding mechanism has been in development to compensate countries for reducing emissions caused by deforestation and forest degradation: the REDD concept (Reducing Emissions from Deforestation and Degradation). In the meantime this has been taken further as REDD+, in which the 'plus' refers to the inclusion of forest conservation, the sustainable management of forests and the enhancement of forest carbon stocks.

The funding mechanism is still in development and therefore still contains many ambiguities. What is clear is that countries that want to be eligible for REDD+ must be able to demonstrate that they are improving their forest management practices in such a way that their forests will store more carbon. The additional carbon storage is converted into 'carbon credits', which form the basis for the payments. Countries will therefore have to adapt their forest management practices and monitor the biomass content of their forests in order to demonstrate that the policy measures they are taking under REDD+ are effective.

### **Calculating carbon stock in Suriname**

Aidenvironment has the expertise in house to help countries calculate their carbon stock and set up efficient monitoring systems that meet all the requirements of the UN Intergovernmental Panel on Climate Change (IPCC).

At the moment Aidenvironment is working in Suriname, which is one of the HFLD countries (High Forest cover, Low Deforestation).

About 90% of the country is forested and it has an annual deforestation rate of less than 0.07%. Although this is favorable from a climate perspective, it makes it difficult for Suriname to demonstrate that it will be able to earn additional carbon credits. It is hoped, therefore, that a separate arrangement will be made for HFLD countries under REDD+. For the moment Suriname is going for the 'plus' in REDD+.

Whatever arrangements may be made, the Suriname government wants to make a start with determining the size of the carbon stock in its forests to improve its position in climate negotiations. It also wants to monitor the effects of its national forest policy. Aidenvironment is currently working with the Suriname government and other local organizations to strengthen the technical capacity in the country. This is being done primarily by training the people who will be carrying out the monitoring work. They are being trained in how to set up a network of permanent and temporary plots for measuring carbon pools (above-ground biomass, below-ground biomass, dead wood, litter and soil). They are also receiving training in laboratory procedures for processing samples and in good practices for managing data. After a period of data collection an initial calculation will be made of the carbon stock.

A similar project was started and completed last year in Guyana by a consultant now working for Aidenvironment. Guyana is now beginning to scale up the monitoring system and is being very successful in attracting external finance (for example, the bilateral treaty with the government of Norway).

As mentioned earlier, REDD+ is still under development. The future shape of the mechanism will hopefully become clear after the upcoming United Nations Climate Change Conference in Cancun, Mexico (November 29 – December 10, 2010).

For more information, please contact Marijke van Kuijk, vankuijk@aidenvironment.org.



Painting on sea wall in Georgetown, Guyana

### **Innovative Partnerships**

# Interview with Pascalle Grotenhuis and Anno Galema of the Dutch Department for International Cooperation on the Millennium Agreements



During the second quarter of 2010 Aidenvironment conducted a mid-term review of the Millennium Agreements (MAs) in which the Dutch Department for International Cooperation (DGIS) is participating. In 2009 Aidenvironment also reviewed the forerunner to the MAs, the Schokland Fund.

The Millennium Agreements (formerly Schokland Agreements) were established in 2007 in Schokland by Bert Koenders, the then Minister for Development Cooperation. The Millennium Agreements (MAs) are agreements between organizations and the private sector, in the form of Public Private Partnerships (PPPs), to jointly contribute to the Millennium Development Goals (MDGs). Internationally, the Netherlands has been a frontrunner, with 75 PPPs (54 of which are MAs) in the areas of health, agriculture and water. At the MDG Summit in New York, the Netherlands devoted considerable attention to the importance of strengthening cooperation with the private sector, and, together with other

like-minded donors such as the UK, issued a statement that stressed the importance of PPPs in achieving the MDGs. The Dutch companies Unilever, DSM, Heineken, and TNT were also represented in New York. DSM and Heineken have won prizes for their inclusive business models at the World Business and Development Awards.

# Has the cooperation between various parties delivered what was expected?

Looking at the portfolio of 54 agreements we see a broad diversity in the 200 participating partners, mainly from the private sector and civil society. There are innovative MAs in the areas of financing mechanisms, ICT application and value chain approaches that have the potential for spin-off and leverage.

### What can you say about the role of DGIS, and the embassies, in the MAs?

Although DGIS fulfills different roles in the PPPs, the dominant role is that of financier. Some MAs are managed from a distance, while in others DGIS is a proactive partner. In general, DGIS aspires to a role that is broader than that of the financier, as this can provide opportunities for greater synergy: MAs can reinforce each other and learn from each other, and can be linked to relevant initiatives at an international level. Likewise, we can embed the MAs more effectively in developing countries through our embassies.

# What do the results of the mid-term review by Aidenvironment mean for future policy?

Many MAs are in the first stage of implementation, so it is too early to draw firm conclusions. But the review confirms that PPPs are successful new forms of development cooperation. Pooling and strengthening each other's knowledge and power can enhance the effectiveness of development cooperation.

MAs with an adequate analytic basis

that are demand-oriented and based on a sound business case appear be more successful. Even so, the review points out the diversity of agreements, not only in terms of sectors or themes, but also of strategy, innovation and progress. These differences should be addressed in the portfolio management of the MAs. Furthermore, it can be expected that future policies will have a more thematic focus, with more emphasis on initiatives that truly make a difference in developing countries and with a greater role for the private sector.

# What are your views on the new Dutch government and the consequences for the Millennium Agreements?

The coalition agreement gives clear opportunities for expanding the role of the private sector in development cooperation. Development of the private sector will be one of the key issues, together with its contribution to achieving the Millennium Development Goals. The importance of investing in the private sector and in economic development are also strongly reflected in the report by the WRR (Netherlands Scientific Council for Government Policy) earlier this year. How this will actually work out is still under discussion with Ben Knapen, the State Secretary. Aidenvironment strongly believes that the private, public and civil sector can jointly contribute to solving development issues. We bring a lot of knowhow and experience to the table on how innovative partnerships can be successful.

> Frederik Claasen en Cathrien de Kruijff – de Liagre Böhl. For more information, please contact Frederik Claasen, claasen@aidenvironment.org.

## 3R - Water Recharge, Retention and Reuse:

### The Untapped Potential of 3R Solutions to Improve Water Quality and Quantity

Summary of a seminar at the Stockholm World Water Week, September 5–11, 2010

The 3R approach is about the integrated management and storage of groundwater, surface water and rainwater. The 3R Consortium, comprising the RAIN Foundation, BGR, SEARNET, Acacia Water, and Meta Meta, convened a four-hour seminar during the Stockholm World Water Week. The seminar was organized as a follow-up to the 2009 3R seminar, when the 3R approach was introduced. This time the objective was to demonstrate that 3R can be used effectively to resolve water quantity and quality problems through the presentation of best practices. The event was well received; more than 150 people attended and participated actively in the plenary discussions and roundtables.

The event was again facilitated by Professor Richard Carter. Three presentations showed large-scale implementation of 3R in different contexts, providing solutions to water scarcity in Namibia, polluted groundwater in Bangladesh, and hillside irrigation in Rwanda. After the presentations, the participants divided into four thematic roundtables to discuss ways to scale up 3R initiatives. The roundtables were facilitated by officials from WaterAid, WHO, Acacia Water and MINAGRI, Rwanda.

### The way forward

What is the way forward for the 3R initiative? Some important conclusions were formulated during the roundtables. For the coming years the focus should be on the development of integrated plans, backed by cost-benefit analyses and feasibility studies to demonstrate the potential of 3R and expand the evidence base. The 3R bottom-up approach remains important, with an emphasis on local governments and water user associations. For institution building, the 3R concept needs to be disseminated to a wide range of stakeholders. Capacities should be built at different levels, while ensuring that



Modified bench terraces and connected waterways, Rwanda

- ① Modified bench terraces at even heights, with upslopes graded towards the drainage canals to drain excess water.
- 2 Waterways are connected to valley dam reservoirs that retain rainwater for use in dry seasons.

different governmental sectors, research institutes and NGOs start to collaborate. Global peer learning could be the driver for upscaling and influencing policies. Projects need to be designed with particular consideration for enterprise development and Public Private Partnerships (PPP), while governments should be encouraged to take the lead in fundraising.

The conclusions on the technical aspects of 3R concerned water quality (health), including saline water. Water quality in relation to 3R needs to be addressed more systematically, using existing frameworks like the Water Safety Plan, and health impact assessments must become standard practice. Projects should be monitored in a systematic way to collect more data on water safety and health, which will require the involvement of health professionals in 3R projects. In coastal zones, 3R offers solutions for problems like over-abstraction and salt

water intrusion. To convince decisionmakers and financing institutes that 3R is the way forward, more pilot projects should be implemented in coastal zones to demonstrate the benefits.

#### **3R Water Secretariat**

In future the 3R initiative will be managed by the 3R Water Secretariat, set up recently to act as a central meeting point for organizations and for sharing knowledge about 3R solutions among the large network of enthusiasts. The secretariat consists of a front office (for matchmaking and project development) and a support office (for data and information management and support services, available to 3R members).

Saskia Nijhof, RAIN Foundation.
For more information on the RAIN Foundation,
please contact info@rainfoundation.com.
For more information on the 3R initiative,
visit the 3R website: www.bebuffered.com
or contact info@bebuffered.com.

# **Biodiversity Modeling as a Decision Support Tool**

Policy-makers are increasingly aware of the risks of uncontrolled biodiversity loss and need to be well informed about this process. They need information about current and expected trends in biodiversity change and insights into the main forces driving biodiversity loss, such as land-use change, so that they can identify the underlying processes causing such losses.

Biodiversity modeling can help answer policy questions related to biodiversity:

- What is changing? (indicators, ecosystem services, monitoring)
- · How is it changing? (trends, modeling)
- What can we do about it? (assessment of main drivers and underlying policies)
- What is the impact of policies? (scenarios and assessments of policy options)

The GLOBIO3 model, developed at the Netherlands Environmental Assessment Agency, can be used as a decision support tool to determine whether policies meet environmental objectives for biodiversity. The model has been developed to assess human-induced changes in terrestrial biodiversity and it can assess past, present and future biodiversity at different scales. The model uses a composite indicator that

describes the 'naturalness' of an area relative to its undisturbed situation. The indicator combines ecosystem extent (quantity) with ecosystem quality. It does not require field measurements, which are generally time consuming and costly, but can be calculated using existing information on driving forces. GLOBIO3 is built on simple cause-effect relations between pressures and biodiversity impacts. The combined impact of the following pressures can be calculated: land-use change, infrastructure development, fragmentation, climate change, and atmospheric nitrogen deposition.

The model can define the impact of each pressure for a specific administrative area, and thus assess whether policy targets will be met, for instance in protected areas. It can also determine which pressures (and underlying policies) contribute most to biodiversity loss. GLOBIO3 has been used successfully in several integrated assessments at various scales: global, regional, national and sub-national level 1. The GLOBIO-Aquatic model has been recently developed for the assessment of aquatic ecosystems. GLOBIO3 is software independent and can be customized if needed. Any GIS software can be used as long as it can handle raster maps.

The GLOBIO3 model is integrated with the CLUE land-use model for the assessment of future biodiversity loss caused by land-use changes. The integration of CLUE with GLOBIO3 allows the assessment of the impact of different scenarios or policy options on both land-use change and biodiversity. If the results are not in line with biodiversity policy targets, policies can be adapted using modeling exercises as part of an iterative optimization process.

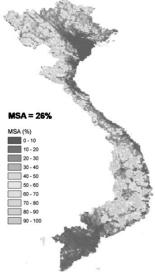
Decision makers can use the models to get the following information:

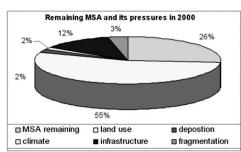
- The relative contribution of human drivers to biodiversity impacts
- Spatial distribution of past, current and future biodiversity
- Expected biodiversity trends under various future scenarios
- The likely impacts of various policy options

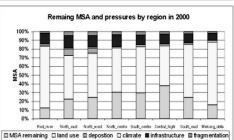
The Globio decision support tool can help policy-makers who want to incorporate biodiversity objectives into their policies but do not know how to do this.

> For more information, please contact Wilbert van Rooij, vanrooij@aidenvironment.org.



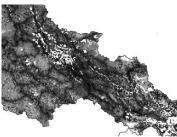




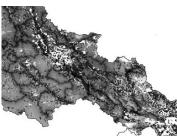


MSA-total map of Vietnam together with a pie chart showing the contribution of biodiversity loss per pressure and a histogram that shows this contribution per region.

### Business as usual option



Forest conservation option



MSA output for the year 2020 according to the business-as-usual and forest conservation policy option. Remaining biodiversity is 6% higher in the conservation option. Detail of the North West region in Vietnam near So'n La

### **EU Timber Regulation**

Illegal logging is one of the major threats to forests worldwide. Last October, the European Council formally adopted legislation prohibiting the sale of timber logged illegally under the rules of the country of origin and requiring companies to use a due diligence system. Covering the whole timber supply chain from logging sites to European consumers, the Timber Regulation aims to guarantee access to EU markets for legally-sourced products while halting deforestation in third countries. It is intended to work alongside the FLEGT licensing system via Voluntary Partnership Agreements between the EU and timber producing countries. The new legislation will come into force in 2012. This comes after almost twenty years of research, consultation and lobby activities, to which Aidenvironment has actively contributed.

For more information, please contact Marina d'Engelbronner, dengelbronner@aidenvironment.org.

Photo impression of the Waza Logone Floodplain



# HarvestPlus Launches Delivery of Biofortified Products

Aidenvironment recently facilitated multi-stakeholder workshops in Rwanda, Zambia and Nigeria to launch the delivery phase of HarvestPlus. During the last three years, HarvestPlus has done research on the biofortification of staple crops to fight hidden hunger. The year 2010 marks the beginning of the delivery of biofortified products and thousands of consumers need to be reached.

HarvestPlus recognizes that mainstreaming the consumption of highnutrient staple crops can only be achieved through a collaborative initiative with other stakeholders involved in seed distribution, extension services, trade, and nutrition. One of the outputs of the workshop is the creation of national networks of potential partner organizations. Another output is the outline of a tailor-made delivery program.

Hidden hunger is receiving increasing attention from national and international organizations. Several supplementation and fortification programs are being implemented, including sugar and rice fortification. Biofortification can create synergy with existing programs such as programs for the supplementation of Vitamin A through local health centers in Nigeria or of sugar and flour in Zambia.



### Oil exploration threatens Waza Logone floodplain in Cameroon

In spring 2010, IUCN's Ecology & Development magazine (issue number 80) published an article based on research by Aidenvironment on the status of the Waza Logone floodplain in Cameroon after 30 years of development efforts. Today, new developments in the oil industry pose a major threat to the rich biodiversity and livelihood opportunities of 200,000 people in this area. A few months ago a Chinese owned oil company was granted approval to start the exploration phase for oil extraction in the floodplain. Local NGOs and research institutes accuse this company of not properly conducting the necessary social and environmental impact analyses and fear important adverse impacts of the oil exploration They have started a joint process to inform the local population and Cameroonian public and have also begun a dialogue with the authorities and the company to ensure that all legal safeguards are respected and to inform them about the wider implications of such a venture on the future of the Waza Logone floodplain.



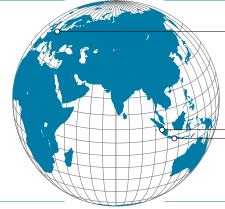
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To receive a copy, or if you have any comments or reactions, please send an e-mail to secr@aidenvironment.org, or call us on +31 20 5818250.
For more information about Aidenvironment:
www.aidenvironment.org



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