SCOLEL TÉ:



CARBON MANAGEMENT AND RURAL LIVELIHOODS











BACKGROUND

Since evolving, mankind has exploited forests for fibre, food and fuel. Today, we realise that forests contain a large proportion of the earth's biological diversity and are important components of the global carbon and hydrological cycles.

Currently, the deforestation of about 17 million hectares per year causes annual emissions to the atmosphere of 1.8 billion tonnes of carbon as carbon dioxide. This is 25% of the total carbon dioxide emissions due to man.

However, when forests are restored or conserved they can act as sinks of carbon dioxide. Thus, fossil fuel users who contribute to the preservation or establishment of forests can reduce their net greenhouse gas emissions.

SCOLEL TÉ OBJECTIVES

.....to sequester carbon in forest and agricultural systems which contribute to sustainable livelihoods for rural communities in Mexico.

The aim is to ensure that carbon is reliably sequestered for the long term in systems that are economically viable, and socially and environmentally responsible. The project includes procedures for internal monitoring and external verification. The management systems are designed to be applicable in similar regions of Mexico and other developing countries.



The project is situated in Chiapas, southern Mexico, and works in a number of ecological and cultural regions including Tojolobal and Tzotzil communities in the highlands and Tzeltal and Lacandón communities in lowland regions. The title of the project, *Scolel Té* means 'the tree that grows'' in Tzeltal and Tojolobal and was chosen by farmers participating in the project.

HOW DOES IT WORK?

Companies, individuals or institutions wishing to offset greenhouse gas emissions can purchase voluntary emission reductions (VERs) via the project trust fund, the Fondo BioClimatico.

The project uses the *Plan Vivo* management system to register and monitor carbon sequestration activities implemented by farmers. Local promoters help farmers to draw up their own "work







plans", known as Planes Vivos ~ for forestry or agroforestry systems that reflect their own needs, priorities and capabilities.

These are assessed for technical feasibility, social and environmental impact and carbon sequestration potential. Viable plans are registered with the Trust Fund and an agreement for the supply of carbon services via the Fund is signed.

The Trust Fund then provides farmers with financial and technical assistance to implement farm or community-scale forestry and agroforestry developments, on the basis of the carbon that will be sequestered.



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HOW MUCH CARBON CAN BE SEQUESTERED?

These diagrams illustrate how much carbon may be sequestered by some of the forestry systems used in the Scolel Té project:

- The establishment of tree plantations on areas previously used as pasture, may increase carbon stored in vegetation by about 120tC/ha;*
- by growing timber and fruit trees interspersed with annual crops such as corn or perennial crops such as coffee, around 70tC/ha can be sequestered;
- where closed forests are threatened, protection can prevent emissions of up to 300 tC/ha; and where forests are degraded, careful management and restoration can increase carbon storage by around 120tC/ha.

WHO IS INVOLVED?

Project management

The project is managed by AMBIO, a Mexican environmental co-operative, with support and training from The Edinburgh Centre for Carbon Management.

Local organisations

Forestry activities are planned and undertaken by groups and communities of small farmers affiliated to local organizations such as AMEXTRA and the Unión de Crédito Pajal.

Regulatory approval

The project is part of Mexico's official Programme of Joint Implementation to Reduce Climate Change and is also registered with the US Initiative for Joint Implementation.

Research and development

Various organisations have been involved in the development of the project and associated research including El Colegio de la Frontera Sur El Colegio de la Fronter Sur, (ECOSUR), the University of Edinburgh and the Mexican Government's National Institute of Ecology (INE).

Financial support

The project is supported by the FIA Foundation for the automobile and society. UK DFID's Forestry Research Programme, and the Mexican Instituto National

de Ecologia have also funded associated research into carbon management and rural livelihoods.





* tC/ha = tonnes of carbon per hectare



The average cost of long-term carbon sequestration within the project is currently estimated at \$13 US per tonne of carbon (\$3.55 /tCO2) and basic Voluntary Emission Reductions (VERs) are currently available at this price. These credits are issued in advance of actual carbon uptake and prices of emission reduction credits will vary according to the timeframe over which the purchaser wishes the carbon to be sequestered.

The cost of VERs from Scolel Té includes the cost of providing technical support, compliance and social impact monitoring and administration as well as the financial package to farmers to cover the cost of planting and maintenance of forest and agro-forest systems.

Purchasers

The project has supplied credits to offset greenhouse gas emissions from the Formula 1 championships from 1997 and the World Rally championships since 2001. Future Forests, one of the leading climate mitigation companies, have also purchased credits on behalf of several organisations including the World Economic Forum, D'leteren-Audi and Pink Floyd. The World Bank is one of the project's latest clients.

Development

From 1996 to 2001 the project has operated at a "pilot" level, installing and testing procedures for planning forestry activities, quantifying impacts and tracking credits. While further improvements to the models used to estimate carbon uptake, and the systems for external verification are still required, the project has essentially entered a commercial mode, as of 2002.

ASSOCIATED RESEARCH AND INITIATIVES

Scolel Té was the test bed for the **Plan Vivo** system that is now being used to develop a number of other community based carbon sequestration initiatives. These include projects in India, Mozambique and Uganda. More information can be found at <u>www.planvivo.org</u>

Further information about the project and several downloadable publications can be obtained from www.eccm.uk.com/scolelte

More information about cars and climate change can be found at www.fiafoundation.com

Contact

For enquiries about the availability of credits from Scolel Té or for further information about the Plan Vivo system, contact Gus Hellier at ECCM.

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