

Plan Vivo Carbon management and rural livelihoods



Project fact sheet | Scolel Té Plan Vivo Project

Project name	Scolel Té Plan Vivo Project.
	The project name means ±he tree that growsq
Project type	 Community-based sustainable land use project. Verifiable CO₂ sequestration / emission reduction benefits are generated as a result of a range of land use activities involving: Afforestation and reforestation Agroforestry Forest restoration Avoided deforestation
	In addition to carbon sequestration and reduction benefits, the project delivers a host of environmental and social co-benefits, including biodiversity maintenance and poverty reduction.
Project location	Central and northern Chiapas and northeast Oxaca, southern Mexico. The project area covers numerous ecological and cultural regions including Tojolobal and Tzotzil communities in the highland and Tzeltal and Lacandon communities in the lowland regions.
Project protocol/ standards	 Plan Vivo: www.planvivo.org The Plan Vivo System is a framework for community-based, sustainable land use projects in developing countries. It incorporates a set of project standards (Plan Vivo Standards), administrative processes and technical models. The project participants (producers) are small-scale farmers, forest dwellers and other land users with recognised land tenure or user rights. They participate in projects through community structures or groups such as cooperatives, organisations, and associations. The producers create sustainable land management plans (plan vivos) by combining existing land uses and agricultural activities with additional activities such as the creation, restoration and protection of indigenous forests and woodlands, as well as agroforestry initiatives. The projects are managed by in-country project coordinators - usually local or national NGOs or not-for-profit organisations - who work

	with local communities to apply the Plan Vivo Standards. Project coordinators recruit producers and coordinate training. They oversee project administration, technical aspects and monitoring. They negotiate purchase contracts with buyers of credits in the market and coordinate the corresponding sale agreements with producers and manage the disbursement of carbon payments. The Plan Vivo System and Standards are developed and overseen by an independent registered charity called the Plan Vivo
	Vivo Certificates following the project annual reviews. It approves third-party verifiers, registers resellers of Plan Vivo Certificates, and disseminates information and promotes Plan Vivo.
	Plan Vivo was originally formulated in 1996. it was the culmination of a research project initiated in 1994 with funding from the UK Department for International Development (DFID). The research led to the development of a pilot project in the Chiapas region of southern Mexico which became the <i>Scolel Té</i> Plan Vivo project. The project provided valuable insights into how to engage successfully with small-scale landowners and communities and test project principles and ideas in practice. It facilitated the development of rigorous and conservative carbon accounting methodologies, management regimes for different land use systems, technical monitoring systems, administrative systems and procedures, and a robust certification process.
	The Plan Vivo Standards apply to all the important aspects of project design and implementation . governance and management; community participation and planning; local capacity building; ownership of carbon benefits and livelihood security; additionality; avoidance of leakage; permanence; sustainable development co-benefits.
	The Plan Vivo Standards are available at:
	http://www.planvivo.org/content/fx.planvivo/resources/Plan%20Vivo%20System%20and%20Standards%20-%20Consultation2.pdf
Project registration status	Project validation and registration in 1996.
Project	Coordination:
description	The project is administered by the Fondo Bioclimático (a non-profit trust fund) and coordinated by AMBIO, a Mexican non-profit environmental co-operative.
	Background:
	The project was formally established in 1996 and has operated on an entirely commercial, self-sufficient basis since 2002. It is rooted in a 1994 research project funded by the UK Department for International Development (DFID). The research led to the development of a pilot project spearheaded by the Edinburgh Centre of Carbon Management (ECCM, now a Camco company) in partnership with El Colegio de la Frontera Sur (Ecosur), the University of Edinburgh and Ambio.
	Size:
	402,884 VERs sold (end 2008)
	A handful of farmers participated in the pilot phase; today the project involves more than 670 producers and close to 50 communities.

	Some producers are sizeable community producer groups. In total about 2,400 Mayan and Mestizo families are linked into the project.
	The estimated annual carbon generation capacity of the project is 100,000 tonnes CO ₂ , although there is scale/ supply elasticity in response to market demand.
	Further background information on the project, including relevant project and published documents, is available at: http://www.planvivo.org/fx.planvivo/scheme/mexicodocuments.aspx
Additionality	Additionality requirements are stringent. It must be demonstrated that the project could not happen were it not for the availability of carbon finance. Specifically this means demonstrating, as a minimum, that:
	1. A project does not owe its existence to legislative decrees or to commercial land use initiatives likely to have been economically viable in their own right without payments for ecosystem services; and
	2. In the absence of project development funding and carbon finance, financial, social, cultural, technical of traditional barriers would prevent the project from happening.
Leakage	Leakage risk must be addressed in the methodology (technical specification - see below) for each land use system. This requires an assessment of potential sources of leakage, and identification of preventative or mitigation measures.
	Project activities are designed in a pragmatic way so the resource needs of communities can be met within the boundaries of a project. Carbon revenues must complement, not undermine income from timber, fruit, crops and livestock on producer plots. This is an important consideration in the approval of individual <i>plan vivos</i> .
	For afforestation and reforestation, producers must have sufficient land for both agriculture and tree planting to prevent agricultural activity being displaced and potentially causing people to start clearing forests elsewhere. For avoided deforestation, management plans must ensure there is provision for sustainable timber production or alternative livelihoods to meet demand so that harvesting activity does not simply shift to forest areas outside the project.
Permanance	A balanced combination of land use systems and activities across producer plots and within a project area results in improved sustainability and permanence. Specific measures to promote permanence include:
	 A careful initial assessment of the long-term viability of projects taking into account the organisational capacity of the project coordinator and in-country partners
	 Participatory planning and management Staged recruitment of communities into projects, based on a getting to know youqprocess
	Secure land tenure or user rights Jand management plans based on legal peeds and capabilities
	 Clear, long-term carbon sale agreements with producers and the staging of payments based on agreed performance milestones Risk buffers of unsold carbon to cover unforeseen losses
	The long-term economic sustainability of the project is reinforced by revenues from high value native timber and agroforestry activities, which complement carbon finance and improve and diversify income from agriculture and other economic activities.

Ownership of carbon benefits	Carbon benefits are owned by individual producers or community producer groups who have enrolled with projects by submitting and having their <i>plan vivos</i> (management plans) approved, and entering into sale agreements with the project coordinator. It is possible to trace carbon benefits back to individual <i>plan vivos</i> . Producers are accountable for their performance under their management plans and only receive payments when targets are met.
Carbon quantification	Carbon quantification is based on conservative estimates of the expected average increase in carbon stocks in above and below- ground woody biomass over 100 years (IPPC Good Practice Guidelines).
	The carbon benefits of each eligible land use system are calculated using a project technical specification. A technical specification is a methodology for a land use system (see below). It specifies the carbon potential based on a simple carbon accounting model and the associated management regime. Biomass (carbon) accumulation depends on the productivity of the species/area and the management regime. It is therefore necessary to define the nature of land use systems and practices that will be used.
	The expected carbon accumulation is derived from published growth-and-yield models or an annual increment model developed by taking measurements of local trees of known age. The planting densities and thinning/harvesting regimes are also identified, where relevant, and the degradation of carbon in wood products is factored in. The relevant data are entered into the carbon accounting model to calculate carbon storage on a per hectare basis.
	Baselines are developed by analysing and extrapolating historical emissions trends. Data on degradation and deforestation may be obtained from published research, remote sensing and ground surveys. One method that has been used to extrapolate future trends from past deforestation data for an avoided deforestation technical specification applies the ACEU rule (Tipper, R. and Grace, J., 1998). This makes assumptions about the likely loss of forest carbon stocks in the absence of intervention based on the following factors: accessibility (proximity to roads and human settlement), cultivable and extractable value (extractable timber value, suitability of forest areas for agriculture), and unprotected (extent of regulation and influence).
Project methodologies (technical specifications)	Technical specifications are developed by project technicians with the involvement of local institutions and support from external consultants. The actions required to develop them include baseline studies; biomass surveys; carbon modelling; training workshops and producer meetings; biodiversity and socioeconomic impact assessments; and analyses of additionality, leakage, permanence. Requirements for (the development of) management regimes and risk management measures must be explained, and monitoring targets for reporting and verifying carbon benefits must be specified.
	The assumptions and calculations used in each project technical specification are independently reviewed by approved experts who confirm that the methodology for the land use system is robust and compatible with Plan Vivo Standards.
	Technical specifications are open to scrutiny and peer review. They also undergo periodic revision and enhancement as implementation experience develops.
	The following technical specifications have been developed for the project:
	 Sub-tropical improved fallow - AFM-ST01-01:
	Management of secondary pine/ oak (<i>Pinus oocarpa</i> and <i>Quercus spp</i>) vegetation for the production of timber, fuelwood and other products through enrichment planting and liberation thinning.

	http://www.planvivo.org/content/fx.planvivo/resources/subtropical_improved_fallow.pdf
•	Sub-tropical live fence - AFM-ST02 -01:
	Planting of pine and cipres (<i>Juniperus lusitanica</i>) on the perimeter of arable fields and pastures for the production of timber and other products without adversely affecting crop yields. Useful system where land is scarce as the trees do not have to replace crops.
	http://www.planvivo.org/content/fx.planvivo/resources/subtropical_live_fence.pdf
•	Sub-tropical forest restoration - AFM-ST03-01:
	Restoration of open pine/ oak forests degraded through harvesting, fire and grazing for enhancing stocks of commercial species through enrichment planting or fencing to prevent grazing and allowing natural regeneration.
	http://www.planvivo.org/content/fx.planvivo/resources/subtropical_forest_restoration.pdf
•	Tropical taungya system - AFM-ST04 -01:
	Establishment of <i>Cedrela odorata</i> and <i>Swietenia macrophylla</i> plantations initially with annual crops that make maintenance of saplings more economical and provide additional income during the early years before being outshaded. Suited to areas of higher rainfall and water supply.
	http://www.planvivo.org/content/fx.planvivo/resources/tropical_taungya_system.pdf
•	Tropical live fence - AFM-ST05 -01:
	Same as sub-tropical live fence except species is <i>Cedrela odorata</i> .
	http://www.planvivo.org/content/fx.planvivo/resources/tropical_live_fence.pdf
•	Tropical improved fallow - AFM-ST06-01:
	Same as sub-tropical improved fallow except species are pine and cipres.
	http://www.planvivo.org/content/fx.planvivo/resources/tropical_improved_fallow.pdf
•	Tropical coffee with timber trees - AFM-ST07-01:
	Enrichment planting of high value native timber trees (most commonly <i>Cedrela odorata</i>) into coffee plantations diversify coffee revenues with timber revenues and provide shade to improve coffee yields.
	http://www.planvivo.org/content/fx.planvivo/resources/tropical_coffee_timber.pdf
•	Forest management - AFM-ST08-01:
	Conservation of existing forest by establishing formal governance and protection measures, fire management and restoration of degraded areas. Carbon benefits calculated using predicted rate of carbon loss based on a regional baseline matrix with local data parameters.

http://www.planvivo.org/content/fx.planvivo/resources/forest_management.pdf

Credit type	Plan Vivo Certificates.
	A Plan Vivo Certificate is a bundled ecosystem and social service credit representing the long-term sequestration or reduction of one tonne CO ₂ e plus a host of environmental and social co-benefits.
	Plan Vivo Certificates from Scolel Te are <i>ex-ante</i> VERs for carbon sequestration activities (afforestation and reforestation, agroforestry and forest restoration), meaning they are based on future expected carbon benefits rather than historic sequestration benefits or emission reductions. However there is potential to use partial or even comprehensive <i>ex-post</i> crediting based on historical emission reductions for avoided deforestation activity. This option is being considered as new technical specifications (methodologies) are developed for avoided deforestation. Plan Vivo projects have used <i>ex-ante</i> crediting for carbon sequestration activities for three principal reasons:
	 Communities in developing countries require capital to create or restore land use systems Until they reach a relatively mature stage of development, newly created or restored terrestrial ecosystems take up and release CO₂ at different stages of growth, so a long-term view of uptake is more meaningful than retrospective crediting Additionality . carbon finance is decisive in making carbon sequestration activities possible
	All carbon payments to producers are linked to a monitoring regime and are made on a staged basis provided agreed performance targets are met.
Crediting/ Certificate	Projects are eligible to sell Plan Vivo Certificates following full validation and project registration by the Plan Vivo Foundation. The process steps are as follows (described in the Plan Vivo Standards link above):
issuance	 Project Idea Note review and approval by the Foundation to ensure eligibility Project Design Document (PDD), technical specifications approval by Foundation. Project validation report by expert reviewer chosen by Foundation . involves field visit and assessment of project against Plan Vivo Standards
	 Project registration following review and approval of validation report and all (amended) project documentation. Project commences selling carbon by entering purchase contracts with market buyers and sales agreements with producers Project technicians monitor producersqland management activities based on indicators identified in relevant technical specifications Third-party verification, corrective actions and continuous improvement
	Plan Vivo Certificates are issued as part of an annual monitoring/ review/ improvement cycle. Projects submit an annual report and their Plan Vivo database to the independent Plan Vivo Foundation for review and approval. Approval may be qualified by the imposition of corrective actions if the Foundation is dissatisfied with any aspect of project performance in relation to the standards. The Foundation issues Certificates by cross-checking monitoring data against carbon sale agreements. Certificate issuance is recorded in the Plan Vivo registry.
	The latest publicly available annual report (2007) is available at:
	http://www.planvivo.org/content/fx.planvivo/resources/Scolel%20Te%20Annual%20Report%202007%20- %20English%20translation.pdf
Verification	SmartWood (independent certification arm of Rainforest Alliance) conducted a review of the projectos monitoring systems in 2005-2006 and a full verification in 2008 as part of a long-term plan, details of which can be found in the separately attached file entitled

	ScoleITe_Verification_Plan_2008. A summary of corrective actions and progress made against them is contained in the 2008 verification plan (referenced above) and 2007 project appual report (link above)
	A verification status review was undertaken by SGS with support from ECCM in 2002:
	http://www.planvivo.org/content/tx.planvivo/resources/PVSGS_verification_Report.pdf.
	An evaluation study commissioned by the UK Department for International Development in 2000 was carried out by DTZ Pieda Consulting:
	http://www.planvivo.org/content/fx.planvivo/resources/DTZ%20report.pdf
	The Plan Vivo Foundation requires projects to undergo third-party verification by a Plan Vivo approved verifier within 5 years of registration. It is recognised that new projects are unlikely to have the resources to undertake verification. Verification only becomes economically viable and sensible once project operations and processes are established and have been applied for long enough to make an evaluation exercise meaningful. Hence the need for a rigorous expert review and validation process prior to project approval.
	The Foundation can assist projects to select an approved verifier and agree terms of reference.
Environmental	In addition to greenhouse gas emission reductions, the project provides numerous environmental and social co-benefits.
and social co-	Environmental co-benefits:
benents	Conservation of threatened ecosystems and native species
	Strengthening of protected areas
	Biodiversity maintenance Watershed protection
	Soil stabilisation
	Regulation of regional micro-climates
	Specific biodiversity co-benefits:
	Restoration of degraded pine-oak forest in upland areas
	Protection and restoration of endangered Tropical Montane Cloud Forest
	 Expansion plan being developed for creation of buffer zone around El Ocote Biosphere Reserve - a biodiversity hotspot that is home to over 2,000 plant and 5,500 animal species
	Social co-benefits:
	 Increased resilience and ability to adapt to climate change Poverty alleviation and sustainable livelihoods through improved agricultural productivity, income from timber, fruits, nuts and non-timber forest products, payments for ecosystem services
	 Improved social capital through participatory planning, capacity-building, transfer of knowledge and skills, stronger community structures, reduced dependency on aid

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