

# Ex Post-Evaluation Brief VIETNAM: Forest Programmes ("FP") II + III

	Sector	31220 Forest development		
Ha Noi Laos Da Nang CAMBODIA Ho Chi Minh	Projects	FP II: 1996 65 134 (Inv.)/ 1996 70 225 (accompanying measures) FP III-1: 1998 66 781 (Inv.)/ 1999 70 013 (macc.meas.) FP III-2: 2001 65 241 (Inv.)		
	Programme execut- ing agency	Ministry of Agriculture + Rural Development (MARD)		
	Year of sample/ex post evaluation report: 2013/2013			
		Appraisal	Ex post-evaluation	
		(planned)	(actual)	
	Investment costs (total) in EUR mil- lion	FP II: 8.28 FP III-1: 5.57 FP III-2: 3.07	FP II: 8.07 FP III-1: 5.36 FP III-2: 2.77	
	Own contribution in EUR million	FP II: 1.33 FP III-1: 1.07 FP III-2: 0.51	FP II: 1.12 FP III-1: 0.91 FP III-2: 0.32	
	Funding, of which budget funds (BMZ) in EUR million	FP II: 7.67/ 7.67* FP III-1: 5.11/ 5.11* FP III-2: 2.56/ 2.56	FP II: 7.67/7.67* FP III-1: 5.03/5.03* FP III-2: 2.45/2.45	

\* including accompanying measures

**Short description:** <u>Reforestation of state-owned lands</u> with tree species that have been handed over to <u>small-scale family farmers</u> for cultivation with <u>long-term land use titles</u>. Performance-related subsidies were paid out to the participants in the start-up phase by way of periodic pay-outs from savings accounts set up especially for this purpose ("savings account model"). The reforestation area comprises roughly 22,150 ha (56 communes) in three provinces of central Vietnam (Forestry Programme II) and around 26,450 ha (50 communes) in three provinces of north-eastern Vietnam (Forestry Programme III). The scheduled implementation period of FP II (1997-2001) was exceeded by 80 months due to the Vietnamese partners' requesting intensive follow-up care; FP III was extended accordingly by two years (1999-2006 originally planned overall). The residual funds were transferred to subsequent FC projects in the forestry sector.

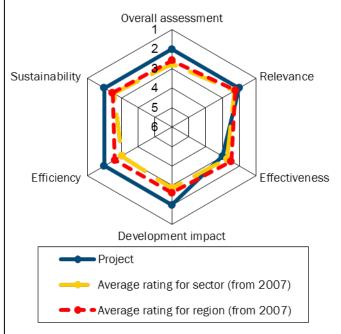
**Objectives:** Programme goal – sustainable management of forest areas in the provinces Ha Tinh, Quang Binh + Quang Tri (FP II) as well as Bac Giang, Quang Ninh and Lang Son (FP III); contribution mainly to erosion protection of endangered areas (primary impact) and to improving rural incomes (new). **Target group:** Small-scale family farmers in the aforementioned areas (FP II: 14,586 households; FP III: 17,162).

## Overall rating (all projects): 2

The programmes have contributed to increasing the forest cover with innovative approaches for Vietnam (participatory land use planning; long-term rights of use allocated to rural households; savings account model).

**Points to note:** Resource utilisation has only just begun, yet the projects have contributed to promoting forestry as land use, despite patchy support by the forestry service. It was possible to rrespond swiftly to the growing demand for wood products (also from China). Much of the success is due to tying reforestation to long-term land use rights as well as to the transparent handling of subsidies; from the start, those had been individually deposited into savings accounts for periodic pay-outs – under agreed conditions. At the same time, loss and/or degradation of the remaining <u>natural forest cover</u> areas continues, which is alarming from an environmental perspective.





## **EVALUATION SUMMARY**

#### Overall rating: 2

#### **Relevance**

The main problems identified for both programmes during appraisal were insufficient vegetation cover and low water storage capacity of soils in the programme sites; the result is largescale erosion in slope locations as well as flooding, silted irrigation canals and loss of agricultural revenue downstream. This assessment also holds true in retrospect, as does the programme approach derived from it, which is and has been consistent with the ambitious national reforestation goals supported by various donors (including ADB, EU and the World Bank): In concrete terms, intensifying environmental problems were to be countered by enhanced reforestation using various (increasingly diversified) tree species; this novel form of land use was also open up new sources of income. Participatory land use planning prior to actual reforestation activities, combined with the award of long-term land-use rights ("red books") and initial subsidies through individual savings accounts have been key elements; they served as an important incentive for the targeted small-scale farmers whose ownership has been significantly advanced . The underlying target system is sufficiently coherent and comprehensible, but fails to further address the issue of programme-induced income effects on the *impact* level; otherwise, performance is only measured in terms of forest cover. The strong demand - above all for fast-growing timber - that has set in since approximately 2007 from neighbouring China, could not be anticipated at the start: on the one hand, this trend is leading to an increased rate of reforestation - even without external support. In the vast majority, the tree species used are the exotic Acacia mangium and auriculiformis, especially on better soils at lower altitudes; this is due to their short rotation periods (5-8 years), so that longer-term approaches to forest cultivation are only of limited interest to farmers at suitable sites. From today's perspective, maintaining the still remaining near-natural forest resources deserves greater importance and attention. The constraint of insufficient overall forest cover, identified at appraisal has now largely been eliminated; the concept of aiming at quick initial reforestation results with fast-growing (and in some cases exotic) tree species made sense at its time.

The option of fruit tree cultivation was discussed in the course of the 2009 ex post evaluation of FP I; ultimately, that approach was not pursued further, and it has proven largely redundant, given that it can essentially constitute an option only at favourable sites with enough deep, water-preserving soils on the one hand, and requires much greater care and cultivation methods on the other hand: in light of a substantial price decline in the last few years, some farmers have given and continue to give up orchards planted previously and instead have also begun reforesting on their own initiative.

#### Sub-Rating: 2

## **Effectiveness**

With a <u>reforestation area</u> of around 22,150 ha (FP II) and 26,400 ha (FP III), the target size pdefined at appraisal was exceeded by around 7% and 25%, respectively. The indicator for the survival rate of currently at least 90% of the total reforested areas was achieved or exceeded (nine years after the end of the last reforestation). The installation of reforestation areas on farmers' own initiatives seen since roughly 2007 (above all *Acacia mangium,* in part also pine trees) is worth noting.Plantation <u>care and cultivation</u> at the time of the evaluation (nine to 14 years after reforestation and arrangement) shows a mixed picture. It has to be noted that timber extraction in programme areas is to subject to approval by the community or district administration, with technical follow-up and control by the forest administration:

- A large proportion of the <u>pine tree stands</u> (some 55% of the areas in FP II and 65% in FP III) has not yet been thinned, as this is economically unattractive for farmers due to lack of possible selling opportunities. For pure pine stands, this increases both the risk of infestation from pests (above all pine tree lappet moths) and the risk of forest fires although this has, until now, only occurred to a limited extent. As pines reach maturity after 30-40 years at the earliest, the majority of farmers prefer the shorter-term potential of extracting pine resin for the production of paints and varnish (after roughly twelve to 15 years); possible in future trade-offs in terms of reduced timber quality are accepted according to reports.
- The exotic, rapidly growing acacia species are grown at a share of around 40% (FP II) and nearly 20% (FP III); they are enjoying strong demand mainly on the part of Chinese consumers. Growing acacias is economically very attractive at suitable locations (with rotation periods of five to seven years). Approximately 1,000 ha in the area of FP II were certified by the *Forest Stewardship Council* (FSC) with the support of the WWF in 2009. Starting in 2014, the annual certification fees will no longer be financed externally, but instead will have to come from the organisation's own income or other sources. In the meantime, Acacia trees are being planted independently as well wherever possible. In doing so, some residual natural forest areas (although not on programme areas) are also being converted into acacia stands. The conversion of acacia trees into rubber plantations was observed sporadically in the area of FP II (Quang Tri province), but its extent could not be quantified.

The cultivation of <u>natural forests and indigenous deciduous trees</u>, which take at least 50 years to mature (sometimes considerably more) is limited thus far to the use of *non-timber forestry products* (NTFP) such as medicinal plants, fruits, mushrooms etc. On sites where indigenous tree species were planted together with acacias, only isolated remnant stands were found at most in the of FP II area – pure acacia stands are believed to have been replanted after the first acacia harvests. According to available information the felling of indigenous trees in natural forests is currently not permitted. Extension support by the forest administration, e.g. for plantation care, thinning measures or similar, are hardly evident - with the exception of individual pilot measures; one reason for this are unclear responsibilities within the forestry administration after expiration of the programme (i.e. of the Vietnamese's own contribution). Therefore, accompanying advisory support provided by the projects could not

deliver the results originally intended. In any case, that support contributed to the spreading of basic forestry skills to such an extent that the planting of economically interesting tree species (acacias, in part pine trees) has been pursued independently. Information systems, databases etc. developed under the programme have not been taken on thus far by the regular forest service; accordingly, valuable information (location data, etc.) is, at best, only partially used or available. The role of the *Village Forest Management Units* (VFMU) established under the programme is limited to the tasks of preventing and, if necessary, fighting forest fires.

The "savings account model" practised in the scope of the project called for annual payments to be made for an eight-year term for reforestation work as well as start-up subsidy. The responsible forest service was able to suspend payments in the case of improper care. This model is very well accepted by those involved due to its generally acknowledged transparency, and especially as a result of the clear separation of duties between technical control (forest administration) and administrative processing (VBARD). This has largely strengthened the target group's confidence in the programme approach, as has the fact that the allocated aid amount was deposited from the start - albeit under certain conditions - ad personam. From the perspective of both the project executing agency and the VBARD, the transaction costs call for a minimum volume per savings account - according to their estimate, a minimum area of 0.5 ha for reforestation. It appears that the model used thus far for natural forest management (compensated at lower rates) is rated as too unwieldy. Some of the proposed solutions were, in particular, the adjustment of state compensation standards, which barely cover costs any longer, and a reduction of execution terms from previously eight to four / five years. The loss in purchasing power temporarily amounted to over 20% annually in the last few years (with inflation rates having decreased meanwhile), meaning the deposits yielded a negative real interest at a nominal 6-10%.

## Sub-Rating: 3

## **Efficiency**

With regard to production efficiency, the unit reforestation costs of 280-390 EUR/ha are within the usual range or slightly below. The project was physically implemented within the scheduled timeframe, and cost savings allowed for additional reforestations. In retrospect, it is difficult to determine to what extent the chosen (rather high) planting densities of pine trees were really necessary to reach the intended environmental goals. Had they been lower, this would have, under certain circumstances, reduced plantation care efforts from the farmers' perspective on the one hand (see above for thinning problems among pine trees); on the other hand, the earnings potential for the resin extraction from pine trees might have also been reduced. From an environmental perspective, such a procedure would arguably have benefited the increased natural regeneration with indigenous types of trees and shrubs.

The allocation efficiency is likewise deemed adequate, as the reforestation areas contribute to the expected environmental effects and, in their majority, can be cultivated profitably, with planting *Acacia* plantations, in particular (see above) in some cases already substantially contributing to rural incomes.

## Sub-Rating: 2

## Impact

The degree of forest cover, initially defined as impact indicator exceeds original benchmarks; however, that indicator is hard to separate or differentiate from that of the *outcome* level. There are no performance data on the intended <u>environmental effects</u> expected, such as declining erosion and improved hydrological conditions, let alone a *baseline*. At any rate, interviews on site yielded enough qualitative indications of improved hydrology due to reforestation, even in the late dry season. Moreover, a reduced need for dry season irrigation in various sites and the arising possibility of an additional yield in some of the affected watersheds have been mentioned. The targeted environmental goals can be considered as achieved for the programme areas. Noteworthy income effects thus far only result from acacia stands or, in some cases, from the harvesting of pine resin. This is particularly evident for the preceding project phase ("FP I") and for some FP II areas of, but appears equally plausible for additional pine stands in the near future. According to available information, forested land increases the land value by eight-fold.

On the one hand, the programme has promoted a better understanding of forestry as a landuse option on areas previously barely useable at best. This applies not only to the directly affected target group, but also to the overall region (see above - increasing reforestation on one's own initiative). On the other hand, it also improves awareness for environmental aspects such as erosion, soil protection and water availability.

The granting of long-term land use rights (*red book*) for reforestation purposes is an important effect that was not explicitly mentioned. Through the project, 32,700 small-scale farmers on 46,800 ha have obtained these rights, which may also serve as collateral for loans and can be sold freely. According to reports, the latter has not yet happened, or has only happened in emergency cases (severe diseases or similar). The concept of granting land use rights for reforestation areas is now common practice throughout the country. A total of around 10.6 million ha of reforestation areas have now been assigned via the *red book*, with some 3.5 million ha thereof to private land holders.

Better integration of the target group into the financial sector as a result of the "savings account model" has only kicked in to a limited extent, but was also not explicitly targeted pat appraisal. Information shows that farmers maintained banking relations by stepping up savings efforts or taking up loans in approximately 10-20% of cases.

## Sub-Rating: 2

## **Sustainability**

The continuity of forest areas is not considered to be in dispute per se, as can be seen from the condition of the "preceding areas" from FP I and also those of reforestation areas promoted otherwise (provided that they are planted properly). The largely absent care or thinning in the case of pine trees may lower timber quality, but has not negatively and visibly impacted the primary goal of "resin extraction" so far: potential losses in income in the longer term are apparently considered as the price of or trade-off for short-term profits - as seen from the mostly poorer farmers' viewpoint. Economic sustainability from the farmers' perspective thus appears ensured – particularly in the case of planting fast-growing acacias. In the latter use, however, the ecological sustainability seems doubtful - despite being deemed sufficiently assured in the other cases. It is plausible to assume that shorter rotation periods and clearfelling - albeit at a generally smaller-scale - at least dampen the protective effects on the water balance and soil erosion. However, this hypothesis has yet to be proven<sup>1</sup>.Natural forest areas and "enrichment plantings" with indigenous deciduous tree species are particularly valuable in ecological terms. Their direct economic benefits, however, have been unclear or limited up to now. It remains to be seen if, and to what extent, the use of non-timber products (medicinal plants, spices, etc.) and the positive effects on the soil and water balance provide sufficient incentives to maintain those stands in their form - especially at respective locations, where the economically more attractive cultivation of acacias represents an alternative use.

Currently it cannot be predicted to what extent the aforementioned certification of around 1,000 ha of acacia plantations can be held up after 2014, i.e. once support by the WWF expires (which took on the certification and inspection costs that have accrued thus far). Still, the farmer groups in question are considering the different options (e.g. loan financing), whereby certification is deemed economically beneficial in light of the roughly 50% higher purchase prices, even after deducting the corresponding additional expenses.

# Sub-Rating: 2

<sup>&</sup>lt;sup>1</sup> Methods of erosion were at least seen in any case for larger-scale clear-felling, which had been carried out on plantations laid on farmers' own initiative.

# Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being <u>relevance</u>, <u>effectiveness</u>, <u>efficiency</u> and <u>overarching developmental impact</u>. The ratings are also used to arrive at a <u>final assessment</u> of a project's overall developmental efficacy. The scale is as follows:

- 1 Very good result that clearly exceeds expectations
- 2 Good result, fully in line with expectations and without any significant shortcomings
- 3 Satisfactory result project falls short of expectations but the positive results dominate
- 4 Unsatisfactory result significantly below expectations, with negative results dominating despite discernible positive results
- 5 Clearly inadequate result despite some positive partial results, the negative results clearly dominate
- 6 The project has no impact or the situation has actually deteriorated

Ratings 1-3 denote a positive or successful assessment while ratings 4-6 denote a not positive or unsuccessful assessment

#### <u>Sustainability</u> is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy. Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The <u>overall rating</u> on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Ratings 1-3 of the overall rating denote a "successful" project while ratings 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (rating 3).