

Darwin Initiative Annual Report

Project No. 14-043



Mpingo Conservation Project –

Community Forestry in Kilwa, Tanzania

Annual Report No.1: 01 May 2005 – 31 March 2006

1. Darwin Project Information

Project Ref. Number	14-043
Project Title	<i>Mpingo Conservation Project – Community Forestry in Kilwa, Tanzania</i>
Country(ies)	<i>Tanzania</i>
UK Contractor	<i>Fauna & Flora International</i>
Partner Organisation(s)	<i>Mpingo Conservation Project</i>
Darwin Grant Value	£ 144,268
Start/End dates	<i>May 2005 – March 2008</i>
Reporting period	Report No.1: 01 May 2005 – 31 March 2006
Project website	www.mpingoconservation.org
Author(s), date	Steve Ball (MCP) & Lizzie Wilder (FFI), 28/04/06

2. Project Background

Mpingo is the Swahili name for *Dalbergia melanoxylon*, the East African Blackwood, which is one of the most valuable timbers in the world. It is exported to the West for use in the manufacture of musical instruments (primarily clarinets and oboes), and in Africa is the medium of choice for many wood-carvers. The tree's high profile coupled with its high market value make it an excellent flagship species, and could hold the key to conserving large areas of forest and woodland in southern Tanzania and at the same time bring economic development to rural communities.

The Mpingo Conservation Project (MCP) is based in Kilwa District, in southern Tanzania, which has recently been opened up to intensive logging as a result of recent infrastructure improvements. Uncontrolled logging is a major threat to the globally significant East African Coastal Forests biodiversity hotspot, large patches of which are to be found within the district. The MCP is working in close partnership with Kilwa District Council (KDC) to develop community ownership and management of local forests under a national programme known as Participatory Forest Management (PFM). Under PFM communities are entitled to retain the licence fees for logging within the forests they control so long as the harvesting is sustainable and carried out according to an agreed management plan. These potentially lucrative licence fees will provide a strong incentive for communities to conserve the forests and prevent illegal logging.

3. Project Purpose and Outputs

Aims

- To develop community forest management in southern Tanzania using *Dalbergia melanoxylon*, locally known as mpingo, as a flagship for sustainable management of high-value timber species.
- To conduct necessary applied research to facilitate management of mpingo and other tree species by communities on a sustainable basis.
- To raise awareness locally, nationally and internationally of the issues of mpingo and forest conservation in Tanzania.

Main Anticipated Outputs (from log frame)

- Community management of timber and forests in Kilwa District.
- National guidelines for community management of timber stocks.
- Evaluate potential for certification of community-managed mpingo.
- Progress towards ability to model impacts of different harvesting regimes.
- Engender cooperation up the supply chain.
- Increase awareness of mpingo conservation nationally and internationally.
- Improve capacity of district staff.

Outputs achieved thus far

Considerable progress has been made thus far on getting PFM operational in Kilwa District, with the first management plans ready to go before the district council for approval. This is behind schedule, due to bureaucratic delays in the national PFM programme and low management capacity within KDC. However, if improvements continue it should be possible to make up the lost time over the duration of the Darwin funding.

The stocks assessment has mostly been completed, see attached report, although it is hoped that alternative GIS data may improve the accuracy of the results. The baseline laid for the biological monitoring (timber growth rates and forest health), and work has now begun on a comprehensive socio-economic monitoring programme. The village educational programme has shown some impressive early results.

Except for the above noted delays to the PFM programme in Kilwa District, no major changes to the project plan have been made thus far. FFI's SoundWood Programme – which has international links to media, the musical instrument industry and potential donors – was put on hold indefinitely in 2005 due to lack of resources. Although this has limited MCP's international exposure, responsibility for MCP is now with FFI's Biodiversity and Human Needs Programme, who also provide support (see below).

4. Progress

The MCP began in 1995 as a series of student expeditions from the UK to Tanzania to study the ecology and exploitation of mpingo. It was transformed in 2004 when it won a \$75,000 Consolidation Award from the BP Conservation Programme which enabled it to establish a field office in Kilwa, move into practical conservation by working along side the PFM programme, and register as an NGO in Tanzania. That first year lay the groundwork for what followed; bedding the project down with its KDC partners, familiarising ourselves with the local communities, and conducting the field surveys for the stocks assessment.

As described above, implementation in Kilwa District of the national PFM programme, alongside which the MCP works very closely, has been afflicted with a variety of delays. Many of the outputs listed in the log frame are also outputs of the PFM programme, and it would be inappropriate for the MCP to "go it alone". However some new members of staff at KDC have alleviated these problems to a considerable extent such that we can be reasonably confident that future development of PFM in the district will proceed more rapidly and smoothly. To reinforce this, the Kilwa District Forestry Office and the MCP collaborated on a workshop for newly elected district councillors and other key decision makers in the district to better explain both the PFM programme and the MCP's role.

In Kikole village (in Target Area 1), a management plan has been written and byelaws passed at the village and ward level. The management plan and byelaws now simply await approval at the full district council before they can become operational. Progress in Ruhatwe (the other village in TA1) has been held up for over a year by long-running boundary dispute with Migeregere (one of the TA2 villages). Conflict resolution has been slow and painful, but the MCP has been instrumental in mediating a rapprochement; Ruhatwe's original Village Forest Area (VFA) will now be

jointly managed by the two villages. Additionally the MCP will assist both villages to identify a suitable patch of forest and developing a management plan for a new VFA within their respective village areas, but away from the disputed zone.

Kisangi Kimbarambara (the other village in TA2) epitomises the other major hurdle to implementation of PFM in Kilwa District – the lack of defined village boundaries – which is widespread amongst villages in the district. Rectifying this requires the involvement of the District Land Office, who have many competing demands, and are not always very enthusiastic about this kind of work. Budget wrangles and other concerns held up progress until October 2005. However the new forester at KDC has also been able to assuage these difficulties; Kisangi's borders were mapped and boundary definition work is now underway at Migeregere and other villages. As well as village borders, the boundaries of each village forest area must also be mapped by KDC staff. Once this has happened, as is now the case at Kisangi, work in earnest can commence on assessing the forest and devising an appropriate management plan.

While progress on land issues was held up, KDC and the MCP pushed forward with other aspects of the PFM programme; problem identification PRA and election of Village Natural Resource Committees (VNRCs) was facilitated both in TA2 villages, and others on the district PFM expansion plan.

The field work for the rapid stocks assessment was mostly conducted between September and November 2004. However some supplementary calibration tests were carried out in the period covered by the Darwin funding, and most of the analysis performed. The assessment relies on rapid transects with tree sizes of select timber trees being estimated only where they appeared within 10m either side of the transect side. The analysis therefore had to calibrate for systematic estimation error, and then relate observed vegetation on transects to available data on land cover in the district. The quality and relevance of this land cover data is critical to the results obtained, and further work is required to refine the results. Nonetheless the methods employed were found to be highly effective for estimating timber stocks in the relatively open woodland that is typical of much of Kilwa District. The rapid transects were found to be at least 5 times more efficient than a comparable survey based on traditional sample plots. The study has also provided the first comprehensive assessment of timber stocks across the entire district. See the attached report for more details.

Our biological monitoring programme has two principle purposes. Firstly to track growth rates of mpingo and *Pterocarpus* so that the impact of different harvesting regimes can be modelled. Secondly to track basal area (as an indicator of overall forest health) in and outside VFAs to monitor effectiveness of community management of the forest. As such the monitoring programme has been fully integrated into the PFM development cycle, and, except for control plots in government reserves, monitoring plots can only be established as and when villages assess their forest resources as one of the stages in PFM development. However a good baseline has already been laid with 21 plots set out so far, and more will be added over the next two years. In order to make the results comprehensible to villagers a strong visual element has been build in using controlled digital photos taken at each monitoring plot.

Illegal logging is a major concern in southern Tanzania, and has made front page headlines. Building awareness in rural communities of their rights under the new Forest Act, and the potential worth to them of their forest resources under PFM has therefore become a high priority for the project. A village educational programme has been put together with 3 handouts so far:

- A short summary leaflet on the value of mpingo under PFM
- An introductory booklet on forest conservation
- A short booklet setting out the various stages in developing PFM in a village

Additionally, together with the Wildlife Conservation Society of Tanzania (WCST), we produced a colourful wall calendar on the theme of forest conservation and management. This is been widely distributed to villages in the district, and given to decision-makers nationally.

Initial results have been very good, and some villages have as a result turned away loggers not prepared to pay more for the privilege of felling in village lands. The education programme has therefore been expanded to additional villages in a bid to combat illegal logging and facilitate the introduction of PFM to new villages. However the programme also needs to be deepened over the coming year as understanding is low except amongst (male) members of the VNRCs.

MCP staff have approached loggers and carvers about the project, and talked to one sawmill. Unfortunately the sawmill viewed the project as a threat, and it seems consumer pressure (from the UK or elsewhere) will be necessary to persuade them to cooperate with the project. The MCP and WWF Tanzania Programme Office (WWF TPO) plan to approach other sawmills in the coming year. However we have established a more cooperative relationship with *Uwambali*, the local loggers union, who seemed more receptive to a message which included concern about the sustainability of their own jobs.

The MCP and WWF TPO have also worked together with carvers, and we jointly organised a study tour for carvers and carving vendors to see the WWF-sponsored Good Woods project in Kenya, which has certified carvings made from farm-grown trees.

Work plan for 2006-7

Date	Milestone
May 06	TA2: Participatory Forest Resource Assessment (PFRA) at Kisangi. Framework document on certification. Village education pack refined. First stories collected under Integrated Village Monitoring System. Funding proposal for KiFaCE (CBO) submitted to CEPF Community Grants Programme. Seminars on managing IT resources for KDC officers.
Jun 06	TA1: Kikole core VFA management plan approved, implementation begun. TA1: PFRA of extended VFA at Kikole. TA2: Management plan & byelaws for Kisangi VFA. TA3: Village boundaries of Liwiti and Nainokwe mapped. Educational leaflet on managing a VFA produced.
Jul 06	TA1 & 2: Boundaries agreed and mapped for Ruhatwe & Migeregere. TA4: Follow-up education work in Mitole and Ngea PFRA in HiMaTi CBO Community Forest Area (CFA) at Njianne. Local bi-lingual para-taxonomy collection of high-value timber species.
Aug 06	TA1: Repeat PFRA of Migeregere / Ruhatwe Joint VFA. TA2: Kisangi management plan approved, implementation begun. TA3: Boundaries of Liwiti and Nainokwe VFAs mapped. Sawmill attitudes towards certification surveyed.
Sep 06	TA1: Revised management plan & byelaws for Migeregere / Ruhatwe Joint VFA. TA1: Management plan & byelaws for extended VFA at Kikole. TA1: Boundaries of new Ruhatwe VFA mapped. TA2: Boundaries of new Migeregere VFA mapped. Paper on stocks assessment submitted to <i>Forest Ecology & Management</i> journal.
Oct 06	TA1: PFRA of new Ruhatwe VFA. TA4: Village boundaries of Mitole and Ngea mapped. Management plan & byelaws for HiMaTi CBO CFA at Njianne. Poster added to education pack.
Nov 06	TA2: PFRA of new Migeregere VFA (<i>depending on weather</i>). Planting begins at Uwambali CBO tree nursery. Village profiles of all villages in TA1 and TA2 completed.
Dec 06	TA1: Management plan approved for Joint VFA, implementation begun. TA1: Management plan approved for extended Kikole VFA, implementation begun. TA1: Management plan & byelaws for new Ruhatwe VFA. Report describing and analysing mpingo supply chain.

Date	Milestone
Jan 07	TA2: Management plan & byelaws for new Migeregere VFA (<i>dependent on completed PFRA</i>). Interactive schools projects initiated. Participatory planning workshop for 2007-8 financial year.
Feb 07	Simplified Swahili guide to conducting a PFRA. VNRC Capacity Assessments in TA1 and TA2 villages.
Mar 07	TA1: Management plan for new Ruhatwe VFA approved, implementation begun. TA2: Management plan for new Migeregere VFA approved, implementation begun. Management plan for HiMaTi CBO CFA at Njianne approved, implementation begun. Database of tree vernacular names produced.

Note the above timetable is optimistic as regards progress of PFM with KDC, and represents the best likely scenario. Accounting procedures are due to change in July, and that could introduce some new delays. Fieldwork from November onwards is dependent on the severity of the short rains.

5. Actions taken in response to previous reviews (if applicable)

N/A

6. Partnerships

After some minor teething problems, collaboration between FFI and the MCP has been good. When FFI's SoundWood Programme was deactivated, responsibility for the MCP within FFI moved to the Biodiversity and Human Needs Programme where it is a good fit. FFI funnelled an additional £10,000 (to be spread over 2 years) from DGIS to the MCP to cover the costs of a second car.

The MCP's close collaboration with the national PFM programme is also enormously advantageous; helping it make links with other projects and also pushing the project's innovations out to a wider audience. The MCP has collaborative arrangements with a number of local NGOs. It produced a promotional calendar jointly with the Wildlife Conservation Society of Tanzania (WCST), it is helping the Tanzania Forest Conservation Group (TFCG) administer the Community Forest Conservation Network (Mjumita) in south-eastern Tanzania, and is working with WWF Tanzania Programme Office (WWF TPO) to develop certification of mpingo extracted from community managed forests. It is also a member of the Tanzania Natural Resources Forum (TNRFF) which shares best practice and provides an umbrella for advocacy on issues of mutual concern.

7. Impact and Sustainability

The impact of the project within Tanzania is growing all the time, partly as a result of the above listed local partnerships, advocacy and awareness-raising programmes, and partly due to various press coverage that the project has received in the last year. The project has featured in various newspaper articles and radio reports, and also provided articles for some various national conservation publications.

Separating out the effects of the above on biodiversity conservation in Tanzania from efforts by other NGOs and projects is next to impossible. However the impact of the village educational programme has been unmistakable with communities turning away loggers unless they agree to pay a higher price for timber (none has agreed yet). Communities are also starting to show greater enthusiasm for our work, although this is difficult for us to monitor objectively.

The close collaboration between the project and national and local government provides a strong fall-back position should funding for the project dry up. However the MCP deliberately does not have an exit strategy, as past experience shows that projects handed over to local government control do not fare well, gradually withering

away. Instead the MCP's long term aim is to be funded by a cut from sales of certified timber from operational areas, in return for low-level coordination work once the initial ramp-up has completed in 10-15 year's time.

8. Outputs, Outcomes and Dissemination

The following planned milestones & outputs were achieved in this financial year:

- Commence PFM & MCP programmes in TA2 villages
- Establish monitoring plots in TA1 villages (*Kikole only*)
- Education pack produced and trialed
- Complete final field surveys for stocks assessment
- Promotional wall calendar produced and distributed
- 13 Tanzanian KDC staff trained in monitoring techniques (*4 were planned*)
- 13 Tanzanian KDC staff trained in PFM methods (*6 were planned, though only one day of formal training was provided*)
- Press release announcing Darwin grant
- Write up in an FFI publication – *Short article in the FFI quarterly newsletter 'FFI Update', disseminated to all FFI members.*

The following additional milestones & outputs were achieved in this financial year:

- A 2 day workshop for newly elected district councillors and other decision makers to explain the PFM programme and the work of the MCP.
- Assisted KDC with introductory work to expand the PFM programme in 5 other villages.
- A study tour for carvers and carving vendors to see certification in action at the Good Woods Project in Kenya, organised jointly with WWF TPO, and a subsequent 1 day workshop to discuss findings and map out a way forward.
- Assisted KiFaCE (a local CBO) to join the national *Mjumita* network.
- Established cooperative relationship with *Uwambali*, the local loggers union.
- Launched UK awareness raising campaign with anniversary dinner, followed up by interview on BBC Radio 3.

The following planned milestones & outputs were missed in this financial year:

- Participatory Forest Resource Assessments (PFRAs) completed in TA2 – *PFRA is a step in the PFM programme which experienced significant delays.*
- Establish monitoring plots in TA1 villages – *did not happen in Ruhatwe due to ongoing boundary conflict with Migeregere.*
- Monitoring plots established in TA2 – *this has been integrated with PFRA which has been held up by the general delays afflicting the PFM programme.*
- Management plans produced by TA2 villages – *ditto*
- Importers in UK identified and approached with a view to taking small consignments of sustainably harvested timber – *this was delayed due to lack of capacity after the deactivation of FFI's SoundWood Programme. There are plans to proceed in Q1 2006-7.*
- DFO receives planning training course – *the DFO decided against due to pressure of other commitments, assistance developing budget plan provided instead.*
- At least 6 Tanzanian KDC staff trained in PFM methods – *forestry staff now have sufficient technical training and general delays in PFM programme slowed on-the-job field training of new staff in KDC e.g. Community Development Officers.*

- At least 6 Tanzanian KDC staff will improve their IT skills – *some on the job training has been provided, but local secretarial staff prefer to attend formal training courses in Dar which provide certificates of completion, and for which they get generous per diems to attend. However this training often of dubious utility, e.g. in software packages that are never used.*
- At least one paper submitted for publication on district-wide stocks assessment – *complexities obtaining and analysing suitable GIS data held this back, but first full draft report now produced. Paper planned for Forest Ecology & Management.*

The project's primary audience is local communities who are involved in the PFM programme, and on which the village education programme has focussed. Awareness has been raised nationally through the promotional calendar which benefited from WCST's distribution network, and at least 4 articles and 3 radio reports about the project have appeared in national media in the last year. For conservation professionals the project has also provided articles for various national conservation publications. Details of the stocks assessment will shortly be presented to the TNRF.

Table 1. Project Outputs (According to Standard Output Measures)

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
	Tanzanian KDC staff trained in monitoring techniques	13 staff x 3 days				
6A	Tanzanian KDC staff trained in PFM methods	13 staff x 1 day				
6B	Tanzanian KDC staff with improved IT skills	6 staff 2 weeks total				
7	Materials to raise conservation awareness in local communities	1 leaflet 2 booklets Taken to 10 villages				
	British Project Coordinator	45 weeks				
8	British Research Officer	45 weeks				
	Visit from FFI Programme Officer (Biodiversity and Human Needs)	2 weeks				
9	Management plan for Kikole VFA	1 plan				
	Village meetings organised	>30				
14A	Workshop on PFM and MCP to new councillors	1				
	Workshop on certification for carvers	1				
14B	Workshops attended and presented	3				
15A	National press release in Tanzania	1				
15C	Write-up in FFI quarterly update	1				
19A	Report on Tanzania national radio station	3				
19B	Report on UK national radio station	1				
22	Permanent monitoring plots established	21 plots				
	Remaining funds from BPCP	£10,500				
23	PFM programme funding	~£20,000				
	DGIS money for 2 nd car	£5,000				

Table 2: Publications

Type	Detail (title, author, year)	Publishers	Available from	Cost £
Report *	Ball SMJ & Gregory A-M (2006) Rapid Stocks Assessment of Mpingo & Other Timber Species for Kilwa District	MCP	www.mpingoconservation.org	free
Report	MCP (2006) Principal report to the BP Conservation Programme on disbursement of the 2004 Consolidation Award made to the Mpingo Conservation Project	MCP	www.mpingoconservation.org	free

* Attached to this report.

9. Project Expenditure

Table 3: Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

•
•

10. Monitoring, Evaluation and Lessons

The best indicators of success of the project will be the total area of forest under sustainable community management and the total amount communities receive for licensing exploitation of forest resources under their management. This will be complemented by results from the biological monitoring programme which should show the impact of community management on forest health.

However these results are all some years away in the meantime the project needs to track progress along the stages of PFM, awareness levels, and more qualitative socio-economic measures. To this end the MCP is developing an Integrated Village Monitoring System incorporating all of the above along with Most Significant Change indicators. Collection of baseline socio-economic data has already commenced using informal questionnaires.

11. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum)

■ I agree for ECTF and the Darwin Secretariat to publish the content of this section

Illegal logging is a major problem in southern Tanzania and has made front-page headlines, but some rural communities are turning away would-be loggers. Hitherto communities had little reason to care one way or the other, but under a new programme of Participatory Forest Management communities can realise substantial sums in licence fees for felling timber if the logging is done by the book, and the

forest managed sustainably. The Mpingo Conservation Project is raising awareness amongst rural villagers of their rights under Tanzania's new Forest Act, and helping them to develop the management plans under which they can receive lucrative licence fees.

Managing forests sustainably requires you to know how large your stock base is to start with. To this end the Mpingo Conservation Project recently completed a stocks assessment of the whole of Kilwa District, some 13,000km². Project staff used rapid transects to count commercial timber species, and by relating the stratified results to available land cover data were able to estimate stocks over the entire district with a minimum of field time. Their methods were over 5 times more efficient than a comparable survey which relied on traditional sample plots. The Project is now adapting these techniques so they can be used by villagers to assess their local forests, develop sound management plans for their resources, and monitor the impact of community management.

The first full draft of the Stocks Assessment is available with this report.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2005/2006

Project summary	Measurable Indicators	Progress and Achievements April 2005-Mar 2006	Actions required/planned for next period
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • The conservation of biological diversity, • The sustainable use of its components, and • The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 			
<p>Purpose Improved protection for the forests of southern Tanzania by communities engaging in sustainable timber harvesting.</p>	<p>Community managed forests operating well. Useful guidelines and research results published.</p>	<p>Groundwork laid for establishment of community forests in 4 villages. 1st full draft of timber stocks assessment published.</p>	<p>Rapid transects efficient way of surveying timber stocks, but good GIS data crucial.</p>
<p>Outputs Community management of timber and forests in Kilwa District.</p>	<p>At least 6 villages in Kilwa District managing forests incorporating MCP ideas and principles.</p>	<p>Kikole VFA management plan awaiting approval. Brokered rapprochement between Ruhatwe and Migeregere over boundary dispute. PFM initiated in Kisangi.</p>	
<p>National guidelines developed for community management of timber stocks. Potential evaluated for certification of community-managed mpingo.</p>	<p>Guidelines produced and reviewed by end Yr3. Evaluation report produced by end Yr3.</p>	<p>Work in progress on template management plan. <i>Also see below under supply chain.</i></p>	<p>Framework document on certifying mpingo to be adopted.</p>
<p>Progress towards ability to model impacts of different harvesting regimes.</p>	<p>Stocks inventory published by end Yr1. Monitoring plots established and monitoring commenced.</p>	<p>1st full draft of timber stocks assessment published. Methodology devised and 21 monitoring plots established thus far.</p>	<p>Source alternative GIS data and analyse stocks by land cover in more detail. Add more plots as each village completes its PFRA. Implement socio-economic monitoring programme.</p>
<p>Cooperative consumer supply chain</p>	<p>Small network of supportive loggers, sawmills, carvers & importers.</p>	<p>Established cooperative relationship with <i>Uwambali</i>, the local loggers union. Made initial approach to 1 sawmill. Study tour for carvers arranged to Good Woods project (certification).</p>	<p>Approach other sawmills and UK distributors about certified mpingo.</p>

Project summary	Measurable Indicators	Progress and Achievements April 2005-Mar 2006	Actions required/planned for next period
Increased awareness of mpingo conservation nationally and internationally.	Education pack Promotional calendar MCP Web-site SoundWood literature.	1 leaflet and 2 booklets produced. Wall calendar produced and distributed. TZ: 1 press release, 3 radio report, 4 newspaper articles, 3 local journal articles. UK: 1 radio report. 7 new pages added, others updated. 2 completed reports posted. SoundWood Programme put on hold. MCP launched own UK awareness campaign.	Leaflet on managing a VFA. Educational posters. <i>What's your forest worth?</i> schools project. More press coverage. Further new pages and updates. More promotional events if funds can be found.
Improved capacity of district staff	Number of staff able to lead survey efforts. Number of staff able to use email, Word & Excel.	Training conducted on PFRA and monitoring. Informal on-the-job assistance given.	Real life practice required before KDC staff able to lead survey efforts. Develop IT support for KDC staff into a more formal programme, and track progress.