

**DM 2005 Project Implementation
PROGRESS REPORT**

[21/06/2007]

I. Background Information

DM Project Number and Title	4700 – Eco-coffins
Report Author’s Name (if different from Team Leader)	Mr Bheki Dlamini, Programme Manager and Dr Guy Preston, Team Co-Leader.
Total Award	US\$ 150,000
Amount Disbursed to Date	US\$ 127,500 (85% of the Total Award)

II. Progress Against Milestones

- i) List the milestone objectives in the first column as expressed in the Project Agreement. The second column should indicate the current status of each milestone objective. In the third column, please provide quantitative data and qualitative information describing the status of the project against that particular milestone.

Milestone 3 Objectives: Project Implementation (Copy from the Agreement)	Status (Completed/ In Progress)	Descriptive Information on the Status
<u>Project Management</u>		
<input type="checkbox"/> Project Manager appointed	Completed	Mr Bheki Dlamini was appointed on 1 December 2006.
<input type="checkbox"/> Project Business Plan finalized	Completed	Version 11 remains the current Business Plan.
<input type="checkbox"/> Monitoring & Evaluation framework for all aspects of the project developed	Completed	A detailed monitoring and evaluation framework is in place, assessing all aspects of the work.
<input type="checkbox"/> Performance Indicators for all aspects of project monitored, and strategy reviewed	Completed	While “completed” for the World Bank requirements, this monitoring and review is obviously an on-going function. The performance indicators for the production of the Eco-coffins have been met, and exceeded, in all aspects. The distribution of the Eco-coffins is still developing, with lessons being learned that have meant that the strategy has had to be modified (eg, cash-flow challenges for the Distributing Agents, storage space, the constituencies of the Distribution Agencies not always aligning with the planned transportation programme). It is clear that the marketing side of the programme will be a continuous adjustment to meet the needs. That said, it remains clear that the programme will not be able to meet the future demand for its products at current production levels, and a significant increase in production is likely.
<input type="checkbox"/> Reporting framework that meets the needs of all stakeholders finalized	Completed	This has been done, and the reports are being used.
<input type="checkbox"/> Reports submitted to Steering Committee and World Bank, as required	Completed	The reports have been submitted to the Steering Committee and World Bank on monthly and quarterly basis, respectively, which meet the needs of the

<p>Partnership</p> <p><input type="checkbox"/> Memorandums of Agreement drafted between local Faith-based groups and any other partner organizations deemed necessary</p>	<p>Completed</p>	<p>stakeholders.</p> <p>Agreements have been reached for distributing the Eco-coffins by the KZN Christian Council, the eThekweni House of Traditional Leaders, and the KZN chapter of the South African Non-Government Organization Coalition, thus far. The intention is to pilot the approaches, and broaden the scope when appropriate to do so. It has been decided that the manufacturing of the Eco-coffins (into which most of the World Bank and Government money has gone) will be run as a non-profit organization (most likely a Section 21 Company), and the Constitution for this is being drafted. The Distributing Agents are separate non-profit organizations, and have contractual agreements for the distribution of Eco-coffins under the stipulated conditions (price, target audience, etc).</p>
<p><input type="checkbox"/> Two Focus Group discussions held, to test acceptability of the project with communities near the pilot site</p>	<p>Completed</p>	<p>These were held through the KwaZulu-Natal Christian Council, and indicated a full acceptance for the concept being pursued and the quality of the Eco-coffins, and an appreciation of the price range being suggested. The manner in which they were to be distributed was a matter of concern. However, broader research is being done on the acceptability of the Eco-coffin concept – including aspects such as the holding of elaborate feasts, and functional considerations regarding the storage of the body prior to the use of the Eco-coffin.</p>
<p><input type="checkbox"/> Other potential stakeholders identified</p>	<p>Completed</p>	<p>Completed in terms of the World Bank requirements, but also, out of necessity, an on-going process. For example, the Eco-coffins are not being distributed by all of the targeted faith-based organizations at present. We have engaged six out of 11 Traditional Houses of Traditional Leaders, as well as Non-Government Organizations, the Department of Social Welfare and Population Development in the Province, the national Department of Correctional Services, and we are currently engaging the Health Department in the KwaZulu-Natal Province.</p>
<p><input type="checkbox"/> Quarterly Steering Committee meetings held</p>	<p>Completed</p>	<p>Meetings have been held on a “needs basis”, rather than every quarter. Stakeholders are spread across the country, and the costs are a significant factor. (For the ARC, based in the UK, a teleconference link is used.) A management sub-committee of the Steering Committee meets on a monthly basis.</p>
<p>Clearing</p> <p><input type="checkbox"/> Inventory of available biomass compiled</p>	<p>Completed</p>	<p>Completed in terms of the World Bank requirements, but an on-going function for the programme, due to the opportunistic nature of much of the harvesting.</p>
<p><input type="checkbox"/> Areas with pine identified and incorporated into Annual Plan of</p>	<p>Completed</p>	<p>As far as it is possible to do this, it has been done. Again, this is an on-going process, due to the special</p>

Operations for KZN Invasive Alien Species Programme		requirements of trees to be harvested. What has been impressive is that the full cost of clearing is covered in the cost of the Eco-coffins – a first for such value-added industries.
<input type="checkbox"/> Chainsaw clearing teams evaluated, and re-trained if necessary	Completed	This is working well. In some cases it is necessary to bring in outside capacity, owing to the need for insurance against damage (eg, when tree next to house or road). This capacity still needs to be built into the WfW/KZN IASP chainsaw teams.
<input type="checkbox"/> 10 ha of pine clear-felled every 4 months, according to WfW norms and standards	Completed	We have been clearing and felling more than 10 hectares of pine per every 4 months and the clearing process has been in accordance with norms and standards of WfW, including employment of women.
<u>Harvesting</u>		
<input type="checkbox"/> Sawmill supervisor appointed	Completed	Mr Jacky Zuma has been appointed as Bush Mill and Wet Mill Supervisor at the beginning of the year.
<input type="checkbox"/> 2 sawmill operators appointed and trained	Completed	This has been done.
<input type="checkbox"/> Mobile sawmill procured	Completed	Two mobile sawmills needed, and have been procured.
<input type="checkbox"/> Utilizable timber harvested, planked and dried	Completed	Operating efficiently. Options to use off-cuts for benches (for people queuing at pension payout points, clinics and the like) and school desks being pursued.
<input type="checkbox"/> Timber transported to point of production	Completed	Operating efficiently close to Cedara. Future distances a variable that may alter budgets marginally.
<input type="checkbox"/> Utilizable timber harvested, planked and dried	Completed	This aspect of the operations has been separated from the harvesting and production of “cants” of wood in the field, and is now run by the “Wet Mill” This has been done. A second kiln is being bought, as this has been identified as one of the bottlenecks in production.
<input type="checkbox"/> Timber transported to point of production	Completed	A small fork-lift truck has been bought, and significant effort made to streamline the production line.
<u>Production</u>		
<input type="checkbox"/> Production Site Selected	Completed	The KZN IASP has invested strongly in the production site at Cedara (a second warehouse is now available). All health and safety standards are met. One off-site assembly point is operational (the Bergville team, now operating out of Escourt), but more such assembly points across the Province make logistical sense.
<input type="checkbox"/> Production Supervisor Appointed	Completed	Mr Koos Goosen has been managing production since the inception of the programme. Excellent work.
<input type="checkbox"/> Wood processing equipment procured	Completed	All necessary equipment has been procured. A second bottleneck has been the lamination of the boards, and a second lamination wheel is being bought.
<input type="checkbox"/> Trainees selected and trained	Completed	There are currently 64 people working in the programme, in the different production teams. With

<input type="checkbox"/> Three prototype coffins produced – to test with the “market”	Completed	<p>the decision to introduce night shifts (making fullest use of the equipment), more jobs can be created, and the needs of more of the bereaved poor can be met.</p> <p>This has been done, initially through focus group meetings, currently through further research, and most importantly through actual distribution. There are now five types of Eco-coffins – the “Rope-handled”, “Gold-handled” (clear), Gold-handled (stained), “Casket” and “Infant Coffin”. All have found acceptance in the market. (The programme could easily supply to the funeral industry, having very high quality, solid wood coffins, marketed at a fraction of the cost being charged in the industry. However, this defeats what the programme is attempting to do.)</p>
<input type="checkbox"/> Production initiated in Bergville	Completed	<p>The Bergville crew is fully operational with the capacity to assemble 35 coffins per day.</p>
<input type="checkbox"/> Production initiated with the Dept of Correctional Services	In progress	<p>The DCS agreed to refurbish its workshop, and engage in-mates to manufacture coffins with wood harvested through the programme, for use by Govt Departments. They now have a fully functional workshop; have received wood from the programme, and are training selected in-mates. This will get greater focus, as it is lagging behind the rest of the work.</p>
<input type="checkbox"/> Production targets reached	Completed	<p>While this is not yet completed, the projection is that 1,456 Eco-coffins will have been produced by the end of June 2007 – marginally exceeding the target of 1,400 Eco-coffins. There have been significant delays in terms of procuring equipment, and recent disruptions with the Public Service strike over the past three weeks. But production levels are now at 55 per day, and will increase on a long-term basis when the full night-shifts (to take fullest advantage of the equipment, job opportunities and demand) are in place.</p>
<input type="checkbox"/> Production approaches optimized	Completed	<p>A very detailed production chain has been developed, with contract teams being paid against output for each major stage of the production cycle. This has had a very positive effect on both productivity and a sense of ownership by the members of the collective teams. There are four contract teams – Bush Mill, Wet Mill, Dry Mill and Assembly. The number of teams will increase as the programme introduces night-shifts. Currently two shifts are being run, but ultimately a three-shift day is planned. This is beyond the scope of what has been planned, but is the product of the work of Mr Michael Braack, Mr Goosen and Mr Dlamini.</p>
<p><u>Rehabilitation work</u></p> <input type="checkbox"/> 3 trainees selected and trained	Not done	<p>The initial concept of having large areas that are cleared has been replaced by a more opportunistic clearing of suitable large trees. The in-field rehabilitation has therefore not been a major focus for the project. The approach has shifted, rather, to planting trees in remembrance of loved-ones, and as a</p>

<input type="checkbox"/> Sites for rehabilitation and for memorial/celebration gardens identified	Completed	<p>contribution to “greening” and (very marginally) as part of a bigger focus on carbon sequestration. The programme has engaged with a local indigenous nursery, near the facilities at the Cedara Agricultural College, to propagate plants to be used for tree planting (including rehabilitation of cleared areas, where it is necessary to do so). The nursery complies with the requirements of broad-based black economic empowerment, and it makes sense to purchase the plants from the nursery, rather than to establish a nursery in competition</p> <p>The first memorial site was opened at Cedara on 8 September 2006, and was an opportunity for WfW staff to plant trees in memory of loved ones who had past away in recent months. The trees were planted in the area that was initially cleared to provide wood for the project.</p>
<input type="checkbox"/> Seed collection initiated-engaging WfW teams	Not done	<p>The change in the approach has meant that this aspect has not been relevant to the programme at present. This may be done at a later stage, if and when more rehabilitation work is necessary.</p>
<input type="checkbox"/> Selected plant species propagated	On-going	<p>Working through the partner BBBEE nursery.</p>
<p><u>Advocacy</u></p> <input type="checkbox"/> Project-specific advocacy framework implemented	On-going	<p>A framework for distribution has been developed with the Distributing Agencies. On-going research will refine the marketing approach. Following the framework outlined in the Business Plan, on-going engagement is taking place with key stakeholders and influential individuals. A formal launch will be held later in the year, if and when Archbishop Desmond Tutu (who has agreed to commit publicly to being buried in such a coffin, when his time comes) can fit this into his schedule. Several other high-profile South Africans have been approached to make a similar commitment, and most have done so. A sales brochure has been produced. Engagement with the funeral insurance industry has not yet begun, as the programme will work through the Government and South African Council of Churches in this regard. Meetings have been held with funeral industry members, burial society members, local authorities and other key groups identified in the Business Plan.</p>
<input type="checkbox"/> For every coffin produced and distributed, pastoral support aftercare to the bereaved provided	On-going	<p>This is built into the agreement with the Distribution Agents, and provided for in the “commission” of R80 for each coffin (R50 for Infant Coffin) sold. More needs to be done here, though, for best practices.</p>

ii) If you did not achieve some of your stated milestone objectives, please explain the reasons.

We are generally satisfied with the achievement of milestone objectives. Where milestones have not been met, such as with respect to the rehabilitation work, this is because of a change in focus. What is clear is that the programme is sustainable. The Eco-coffins are being sold at R300 for the Rope-handle Eco-coffin, R420 for the clear Gold-handle Eco-coffin, R440 for the dark-stained Gold-handle Eco-coffin, R1,990 for the Eco-

coffin Casket, and R100 for the Infant Eco-coffin. Within these prices are commissions to the Distributing Agents (R80 for the first four types, and R50 for the Infant Eco-coffins), Value-added tax, all clearing and production costs, transportation costs to centres across KZN, and replacement costs for all equipment. This makes the programme essentially sustainable, with the caveat of cash-flow considerations. The KZN IASP will continue to support the programme, focusing on the value-adding industry side of the work (the production of the coffins from invasive alien wood), and it will be necessary to ensure that the faith-based organizations, Traditional Leaders, NGOs and other partners – including Government at the different tiers – get these to those in need. This aspect has always been recognized as the most difficult component of the work, and so it is proving to be. However, it is also clear that if the service to those in need is well performed, the interest in this avenue for funeral support will be massive, and probably well beyond the current capacity to deliver. That does make the possibility of additional production units viable, especially when one adds in the potential for overseas sales with the assistance of the Alliance for Religions and Conservation. Furthermore, the parent Working for Water programme is intending to set up additional production units in all other provinces in South Africa.

It has to be said that while the production of Eco-coffins will make the target for the end of June, a significantly higher number had been expected to be produced.

- The initial problem was around procurement, including petty cash items that could nevertheless halt production. Ezemvelo KZN Wildlife, through Mr Brad Poole, stepped in to assist in this regard, and this is now functioning well. Government bureaucracy is always a challenge.
- A second problem related to productivity, where the setting up of production teams (an idea first put forward by Mr Tony Poulter and Mr Michael Braack) appears to be paying handsome dividends.
- A third problem has been the Public Service strike over the past three weeks, where the workers have been intimidated and production stopped on most days. However, three weeks is a very short period within the broader timeframe of the programme. It just came at a most inconvenient time, when all of the other factors mentioned above had been sorted out.
- What has to be mentioned here is the death of Mr Tony Poulter, the Director: Implementation for the KZN IASP, who was overall operational manager for the programme. His drive, warmth, empathy, leadership, practical outlook and outcomes focus were critical to the successes that this programme has enjoyed, and his loss cannot be over-estimated.

iii) Has your project's overall accomplishments to date exceeded the original plan?

Yes

If Yes, describe your achievements:

The scale of what is being produced, the very high quality of the Eco-coffins being made, and the ability to keep the prices so low whilst incorporating all business costs is in excess of what was planned. It is clear that the programme has, partially through trial and error, found a formula that has long-term sustainability, and such important benefits for the bereaved, especially among the poor. The potential for export, as mentioned above, is enticing, but the view of the Steering Committee has been to consolidate the successes in KZN, especially with respect to getting demand to outstrip supply, as a first priority. The fact that this is the first time in twelve years in which the Working for Water programme has been operating, that a value-added industry has succeeded in covering the full clearing costs (rather than just contributing to the clearing costs, and creating additional jobs, as is the norm) is also very important to WfW and KZN IASP. The ability to add additional benefits on the marginal costs of the work, such as the benches and desks mentioned above, is a further additional accomplishment.

III. Overall Project Progress

i) What have been the main challenges of your project to date? What, if any, adjustments have you made to your original business plan in order to overcome the challenges and meet your objectives?

Challenges:	Adjustments:
<p>Getting the Department of Correctional Services to produce additional coffins.</p> <p>Secure commitment from faith-based organizations, Traditional Leaders and NGOs.</p> <p>Sort out institutional arrangements (especially with respect to being able to receive payment for the Eco-coffins that are sold).</p> <p>Understanding the market.</p>	<p>This will be fully rolled out in the coming months. The programme is dependent upon the goodwill of the DCS officials in this regard.</p> <p>This was always seen as the biggest challenge. Whilst it is easy to identify with what the programme is endeavoring to achieve, it is harder to make things work in practice. Formal commitments, and training, have proven necessary.</p> <p>This has been difficult, owing to changes in leadership in the parent Department of Agriculture and Environmental Affairs in KZN. Ezemvelo has provided a Suspense Account for receiving money for coffins sold, and a non-profit organization is being established to manage this side of affairs in the long-term. This will also help to address the procurement challenges mentioned above.</p> <p>These are early days in the Eco-coffins Programme, and there is still much to be learned about the market for our products. Our production projection for the year is as follows:</p> <ul style="list-style-type: none"> • Rope-handled 5,200 • Gold-handled (clear) 4,750 • Gold-handled (stained) 2,250 • Casket 1,000 • Infant Coffin 8,400 • Total 21,200 <p>However, we do not know whether this meets the needs of the market, and how we may need to adjust these figures. The first three are, however, easily inter-changeable, and we shall easily be able to sell the caskets. We do not know, however, whether the figure for the Infant Coffins will need to be adjusted. We have built in a contingency to cope with what we learn from marketing the Eco-coffins.</p>

ii) Have any of your objectives changed or have you added new objectives since you signed your Project Agreement? If Yes, explain the changes.

Yes

The down-scaling of the rehabilitation work is probably the main change in the objectives. The programme is understandably a lot more ambitious now that it has worked through the initial challenges. That is more a question of scale though, rather than a shift in fundamental objectives. Concerns had been raised about the sale of caskets, for they could perpetuate the concept of ornate and elaborate funerals. A compromise was reached, where a relatively small number of caskets would be produced, and they would be priced at a level that would enable an effective cross-subsidization (through absorption of specific costs) of the Rope-handle Eco-coffin and the Infant Eco-coffin. The work of Mr Michael Braack must be commended here.

IV. Ancillary Achievements

- i) Have you or has your organization received any awards/recognitions or media attention as a result of your DM-funded project during this period?

No

The programme has not attempted to gain additional awards. Once it is fully functional, with demand for Eco-coffins outstripping supply, and other production sites being set up, then we shall see if there will be any additional recognition. We strongly appreciate our debt to the World Bank Development Marketplace for where we are today, and will ensure that there is positive feedback to the Bank for its faith in what we are trying to achieve.

In terms of media, there have been reports on an *ad hoc* basis. With the launch of the programme, hopefully with Archbishop Tutu, and with senior representatives of the World Bank and the South African Government invited, we can expect significant coverage. We have been holding back for this launch. This is a programme that touches many of the “right buttons”, and is also newsworthy in dealing with what for many is an uncomfortable subject.

- ii) Has your organization made any new partnerships as a result of this project during this reporting period?

Yes

If Yes, specify type of the organization from the list below and describe nature of the partnership:

Department of Water Affairs and Forestry	Although a parent body to the programme, it was most encouraging to see the Working for Water programme endeavor to use unspent budget by its parent Department at the end of the last financial year, to set up new factories. Procurement could not be done in time, and this did not work, but it augurs well for the future.
--	--

- iii) Sustainability and scalability after completion of the DM fund are top of the DM Team’s priorities. Has your organization leveraged new funding or secured future funding during this reporting period?

Yes

If Yes, provide the following information.

Funding Sources: KZN Department of Agriculture and Environmental Affairs
Amounts Funded: US\$400,000 initial investment

The KwaZulu-Natal Invasive Alien Species Programme is committed to the rolling out of the programme, as mentioned above, having invested about US\$400,000 in the programme to date. The rolling out of the programme across the country through *Working for Water*, and the potential for exports with the help of ARC, have also been mentioned.

Annex I. Project Expenses for this Reporting Period

	Items	Sub-Totals (USD)
1	Personnel	\$ 25 225
2	Materials and Equipment	\$ 293 549
3	Training	\$ 21 558
4	Travel	\$ 26 449
5	Evaluation/Information Dissemination	\$ 4 135
6	General Administration/Overhead	\$ 6 354
7	Other	
	Total Expenses	\$ 377 270

Materials and Equipment:

- Hand tools
- Table saw
- Joiners
- Glue Applicators
- Blades
- Clamps
- Drill router bits
- Drying facilities
- Forklift
- Thicknesser

KZN DAEA has matched this funding in order to purchase all equipment.

Training

- Wood production
- Wood finishing
- Chainsaw operation