Department of Water Affairs and Forestry

Working for Water Programme: Development of

Secondary Industries

Options Analysis: Draft Report of

the Transaction Advisor



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List of Abbreviations

DWAF Department of Water Affairs and Forestry

II Industrial Initiatives

NGBE National Government Business Enterprise

SBI Secondary Business Initiatives

SI Secondary Industries

SIU Secondary Industries Unit

WfW Working for Water Programme

1 Executive Summary

1.1 Introduction

The Working for Water Programme (WfW) is an interdepartmental government initiative under the auspice of the Department of Water Affairs and Forestry (DWAF) that was started five years ago to control invasive alien plants in a sustainable manner.

More than R1 billion has been invested in the programme since its inception. WfW currently provides employment to approximately 20,000 people in more than 300 clearing projects throughout the country. In 1999/2000 the total programme expenditure was R222m.

A Secondary Industries (SI's) project has been initiated by WfW to develop additional benefits of extracting biomass. This project has three primary objectives:

- Minimising the net cost of clearing.
- Maximising economic impacts (jobs creation addressing the "poorest of the poor").
- Minimising biomass to optimise environmental impacts.

The Secondary Industries Unit (SIU) of WfW undertakes and supports efforts to manufacture products from the wood and plant material being cleared. Amongst the products currently manufactured are indoor and garden furnishings, charcoal and firewood. In the restoration of the natural ecosystem by clearing the alien vegetation and replacing it with indigenous species, there is further potential for eco-tourism ventures.

1.2 The Project

To assist WfW in developing SI's (and particularly to encourage the involvement of the private sector in this development), it has appointed a Transaction Advisor (consisting of KPMG, Stellenbosch University and Edward Nathan & Friedland) to develop a strategy and range of options for WfW to adopt in relation to the future development and expansion of SI's.

1.3 Site visits

As part of the research for the project, the Transaction Advisor visited and evaluated 16 existing projects and/or service providers associated with the WfW Programme. In the majority of projects there was an identified need in respect of particular functional areas. For example, 10 of the 16 projects required support in terms of the finance function and almost half of the projects needed assistance with legal skills, marketing, mentorship and technical skills. The results of the site visits were used to inform the remainder of the analysis.

The findings of the field trips also indicated that there were limited levels of personal development and growth within the projects. There is an immediate need to embark on an aggressive all round capacity building programme with regard to both technical and personal training. Such a programme will be central to the development of a successful exit plan for participants in large scale, Industrial Initiatives (II's) and Smaller Business Initiatives (SBI's) within Secondary Industries. Measurable outcomes should include a proper transfer of skills and a willingness amongst participants to assume responsibility for personal development and future growth.

1.4 Analysis of options

A shortlist of options (divided into 2 categories – Industrial Initiatives and Smaller Business Initiatives) was considered to assist the SIU in the pursuit of its objectives. As a general strategy, the concept of whole-tree utilisation is essential and a prerequisite to ensure maximum removal of the alien pant material and to ensure that maximum value in terms of economic, social and environmental benefits, is derived from each option. The following paragraphs summarise the results of this analysis:

1.4.1 Category I: Industrial Initiatives

Two products were identified as providing the potential for immediate financial benefits to the SIU, namely woodchips and charcoal. However, it has to be stressed again that whole tree utilisation has to be an integral part of the woodchips and charcoal implementation. This implies in practical terms that harvesting must include a log and other plant material sorting phase, that would enable the selection of additional saleable material such as saw and veneer logs, leaf material and bark.

- Woodchips. Market information indicates that there is an immediate demand for 100,000 tons of woodchips (equivalent to 1,667 ha) from Acacia species such as *Acacia cyclops* (Rooikrans), *A. saligna* (Port Jackson), *A. longifolia* (long-leave wattle) and *A. mearnsii* (Black wattle). The potential net income to WfW is R11.65m pa. Total job opportunities are expected to be 121. It is envisaged that this could be packaged in a Public Private Partnership (PPP) Concession Agreement whereby WfW derives benefit from the provision of raw materials (the Acacia wood) and is able to stipulate minimum provisions in respect of the inclusion of PDI's in the transaction.
- Charcoal. Market information indicates that there is also an immediate demand for 45,000 tons of charcoal from Acacia wood per annum. The potential net income to WfW (after taking the sales proceeds less all production and transport costs) is R16.2m pa. Total job opportunities are expected to be 163. It is again envisaged that the charcoal potential could be packaged in a Public Private Partnership (PPP) Concession Agreement whereby WfW derives benefit from the provision of raw materials (the Acacia) and is able to stipulate minimum provisions in respect of the inclusion of PDI's in the transaction.

For both woodchips and charcoal, there is a need for a small team to immediately continue negotiations with interested private companies on matters such as the project's initiation and short-term management as well as technical issues that have been raised and flagged as being in need of development work. This approach will ensure that the current interest from both woodchips and charcoal role-players is maintained. The SIU could consider funding from the current budget.

A third product, still very much in the development phase, was also identified as providing the potential for future benefits to the SIU as follows:

• Organic fertiliser. Although this project is only in it's initial stages there appears to be huge potential in the use of leaves and berries from the Syringa tree (Melia azedarach) to produce and export organic fertiliser. Unlike the wood-chips and charcoal projects, there is a need to embark on further development work regarding this project – which the SIU could consider from it's own budget. Our financial projections detailed below exclude the potential income from this product but include the cost of research.

1.4.2 **Category II: Smaller Business Initiatives**

Taking into account the results of the site-visits, a programme of assistance to SBI's needs to be established, including training and mentorship along with the provision, where appropriate, of a revolving credit facility to assist in raising capital. A clear exit strategy is envisaged for all projects to avoid the situation whereby projects become overly dependant on SIU support.

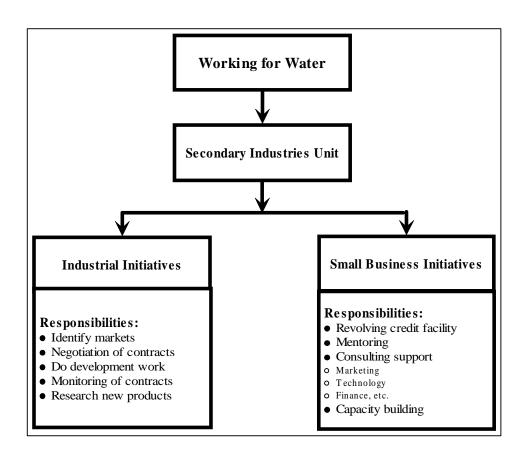
1.5 **Implementation Structure**

In order to secure the benefits identified in the Options Analysis it is clear that the future role of the SIU will need to change significantly. In terms of the Industrial Initiatives (II's) there is initially a need to implement and co-ordinate the proposed PPP transactions. This may involve the sub-contracting of certain key functions (such as wood science and technology) to appropriate specialists. In future, the role of the SIU will include the identification, negotiation and management of large scale Industrial Initiatives with a view to maximising the financial benefits to the SIU and securing appropriate PDI involvement.

For Smaller Business Initiatives a focussed approach is envisaged whereby the SIU (again through the use of sub-contractors) provides mentoring and support in several key areas such as financial, legal, wood science and technology, etc. A "revolving credit facility" - using funds derived from the Industrial Initiatives - is also envisaged to assist the smaller businesses in accessing capital. Hence the need to immediately launch the Industrial Initiative projects.

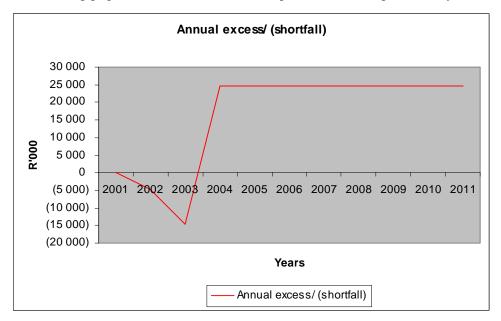
To assist in the delivery of the new SIU functions, a number of legal options were considered, including the establishment of a Section 21 Company, a National Government Business Entity, a Trading Entity and a private company. Following a detailed analysis of the options it is recommended that the SIU initially becomes a Trading Entity (defined under the Public Finance Management Act) but then converts to a National Government Business Enterprise (NGBE) when it reaches a point where it is substantially funded by sources other than the National Revenue Fund. The NGBE structure would provide the SIU with considerably more flexibility than the present situation and would allow the SIU to take maximum advantage of the financial benefits derived from the Industrial Initiatives.

The following diagram provides an illustration of how the SIU would operate in conceptual terms.



1.6 Financial implications

The following graph summarises the financial implications of the Options Analysis.



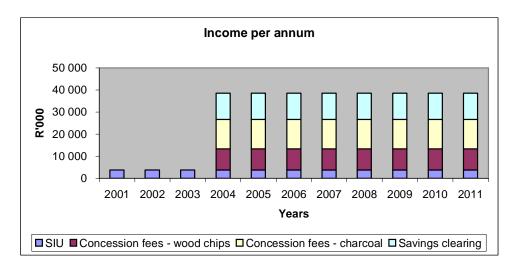
As can be seen from the above, following a two year investment period (including the establishment of a Revolving Credit Facility, setting-up and carrying out development work in respect of the two PPP initiatives, plus a research project into the feasibility of the Organic Fertiliser project) the SIU would be able to generate net income of approximately R25m per annum to support the objectives of the WfW Programme.

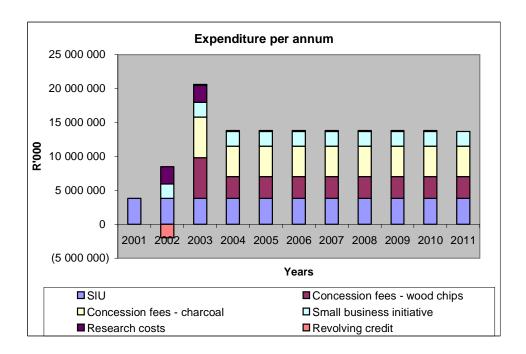
The net income is made up as follows:

Item	Rm
Industrial Initiative (Woodchips) See Note	11.65
Industrial Initiatives (Charcoal) See Note	16.20
Contract management costs	(0.8)
SIU Additional staff	(0.9)
SIU Consultancy support to SBIs	(1.26)
Revolving Credit Facility	(0.16)
Total net income	24.73

Note: The figures shown for the Industrial Initiatives relate to initial pilot studies in respect of specific areas. The potential for roll-out of these studies to other areas would significantly increase these figures.

The detailed assumptions used in the above calculations are given in Sections 6 and 7 and Appendix 5.





1.7 Action Plan and communications strategy

A detailed Action Plan and Communication Strategy for the implementation of the Options Analysis findings are included in the full report.

2 Introduction

2.1 Background to the Study

The Working for Water (WfW) Programme has identified the critical role that the private sector can play in the development of Secondary Industries (SI's) – which in turn is seen as critical to the achievement of its overall objectives. The establishment of private sector partnerships is viewed as an integral and important factor in the future success of SI ventures.

To assist the Programme in developing SI's (and particularly to encourage the involvement of the private sector in this development), it has appointed a Transaction Advisor (consisting of KPMG, Stellenbosch University and Edward Nathan & Friedland) to develop a strategy and range of options for Working for Water to adopt in relation to the future development and expansion of SI's. As part of the Terms of Reference, the Transaction Advisor is also required to develop a framework to assist the SI enterprises in accessing the market – which is critical to the sustainability of any venture.

2.2 Terms of Reference

The original Terms of Reference for the work of the Transaction Advisor (TA) are summarised below:

- Project visits. The TA will visit some of the existing projects. An assessment of the projects visited will be compiled incorporating the viability, marketability and production potential of the projects. The critical outcome of this analysis will be an assessment of the needs of the projects in relation to accessing the market and a strategy for the development of a framework to facilitate this access. This work will inform the options analysis.
- Identification and analysis of options. The TA will have a thorough and clear understanding of the market, which will inform the identification of options. The TA will assist in the development of an appropriate strategy for WfW to adopt in terms of the services and support it offers to SI initiatives. The TA is to identify a range of options from a 'do nothing" base scenario through licensing to corporatisation and sale of equity, or a combination of these. The TA is to evaluate the different alternatives in terms of the possible divisions within the SI sector, both in relation to the above options and in relation to the economic and productive potential of the sector.
- Development of a Communication Strategy. The TA will formulate proposals for a Communication Plan whereby all stakeholders are regularly informed of project progress.

3 The existing position

3.1 Introduction

The Working for Water Programme is an interdepartmental government initiative under the auspice of the Department of Water Affairs and Forestry (DWAF) that was started five years ago to control invasive alien plants in a sustainable manner. More than R1 billion has been invested in the programme since its inception. The Programme currently provides employment to approximately 20,000 people in more than 300 clearing projects throughout the country. The Programme seeks to optimise its investment by extracting and utilising biomass from clearing operations. By so doing both the environmental and sustainable economic benefits of the Programme can be further enhanced.

The Mission Statement of the Programme is:

"The Working for Water programme will substantially control invading alien species, to optimise the potential use of natural resources, through a process of economic empowerment and transformation. In doing this, the programme will leave a legacy of social equity and legislative, institutional and technical capacity."

A Secondary Industries (SI) project has been initiated by the Programme to develop additional benefits of extracting biomass. This project has two primary objectives: maximising the positive economic benefits of the programme; and optimising the use of cleared plan biomass after clearing. SI initiatives provide an ideal opportunity to encourage entrepreneurship amongst people from historically disadvantaged communities. The Programme is able to create a supportive and enabling environment through providing training and assisting with product design and market identification. In this manner, first-time entrepreneurs can develop and hone their newly acquired business skills. The development of small and micro enterprises is a critical factor in the process of economic empowerment in South Africa.

The Secondary Industries (SI) component of the Programme manufactures products from the wood and plant material being cleared, such as crafts and furniture, mulch, charcoal and smoke chips. In the restoration of the natural ecosystem, there is also potential for ecotourism ventures.

The SIU is currently involved with 7 "pilot projects" around the country:

- Bio-log in Prieska (Northern Cape). This is one of the most commercially successful ventures, which is producing predominantly for export. The products range from fuelwood, fence poles and mulch, to furniture.
- Ikhamanga Permaculture Project in Qolora (Eastern Cape). This project has a very holistic approach to Secondary Industries, involving the local community, building on

- The Fynbos Project (Western Cape) is comprised of a range of ventures predominantly in the Overberg region, in partnership with Cape Nature Conservation. The products include fencing and screens, furniture, home interior and décor crafts.
- The project in George (Western Cape) is in partnership with a local small business development project called South Cape Business Centre as the implementing agent. The products are primarily furniture related.
- Cape St Francis (Eastern Cape), in partnership with the St Francis Municipality. This is focusing on clearing land in order to plant indigenous reeds for harvesting for the local thatch industry. This project is still in its infancy.
- Makuleke in the Kruger National Park (Mpumalanga): is in the eco-tourism stream.
- Cradle of Humankind in Brits (NorthWest/Gauteng): Crafts, Furniture Training Board, marketing network trains PDI's in woodwork.
- Shell Partnership production of charcoal for sale in Shell retail outlets.

3.2 The existing financial situation

The table below sets out provisional financial statements for the Working for Water Programme:

	1April 1999 to 31 March 2000	1998/99	1997/98	1996/97	1995/96	Total
	R'000	R'000	R'000	R'000	R'000	R'000
Income	241 762	260 534	251 436	86 668	27 046	867 446
Poverty Relief	123 000	120 000	150 000	50 000	25 000	468 000
DWAF	93 900	115 000	90 000	7 000	-	305 900
Rand Water	12 500	10 000	11 059	4 291	-	37 850
Foreign funds	6 693	8 915	377	43	-	16 028
Other	5 669	6 619	-	25 334	2 046	39 668
Expenditure	222 913	248 891	245 291	80 005	26 773	823 873
Balance	18 849	11 643	6 145	6 663	273	43 573
% spent	92%	96%	98%	92%	99%	94%

Notes to the accounts:

- These figures do not reflect the major budget expenditures of partnership programmes, such as through the forestry industry and Cape Peninsula National Parks. The Ukuvuka Campaign will be reflected in next year's expenditure.
- 1999/2000 expenditure was hampered by the severe flooding in February/March.
- The Working for Water Programme proposes a 20-year clearing strategy at R600 million per year (this excludes the impact of new invasive alien plants). Working for Water currently needs to clear over 10 million hectares of invaded land.

The following table provides an analysis of the 1999/2000 expenditure (and other measures) by Province.

	Total	Other	North West Province	Gauteng	Free State	Northern Cape	Western Cape
Total jobs	20 999	78	382	382	493	1 095	2 874
Initial treatment (ha)	112 333	13 743	2 180	10 268	1 274	4 674	28 709
Follow-up (ha)	121 310	3 560	1 247	1 526	422	898	41 496
Expenditure R'000 (99/00)	222 913	15 272	9 251	3 459	11 978	9 439	67 982
% of total exp.	100%	7%	4%	2%	5%	4%	30%
Cost per ha (R)	950	880	270	290	706	169	970

	Total	Northern Province	Mpumalanga	KwaZulu Natal	Eastern Cape	Sa National Parks
Total jobs	20 999	747	1 815	8 764	3 189	1 180
Initial treatment (ha)	112 333	2 402	21 650	12 268	10 537	4 628
Follow-up (ha)	121 310	1 021	18 614	29 438	9 548	13 540
Expenditure R'000 (99/00)	222 913	14 663	16 779	24 838	27 852	21 400
% of total exp.	100%	7%	8%	11%	12%	10%
Cost per ha	950	428	420	600	139	118

Notes to the accounts:

- The cost per ha will vary depending on a number of factors such as the species and the density.
- 92% of 1999/2000 budget of R241 million was spent.
- 20 999 people were employed during the financial year. Of these 58% are women, 23% youth and 1% disabled.
- 95% of the budget was spent on labour-intensive clearing. Of this, 80% was task-based (i.e. payment only for work completed). There are 884 emerging contractors (145 of these are collectives and 85% are run by individual entrepreneurs).
- A total of 134 718 training days were provided.
- The teams cleared 238 823 hectares (112 333 ha initial clearing, 121 310 ha follow-up and 51 081 ha were rehabilitated).

The current budget for the SIU (2001-2002) is approximately R 3,0 M. (1.2% of the total WfW budget).

3.3 Existing institutional arrangements

3.3.1 Relationship with WfW and current operations

The current status and relationship of the SI Unit is not well defined within the Working for Water Programme. The WfW strategy document (dated April 2001) does not clearly list Secondary Industries as a focus area, although it is mentioned in relation to certain other aspects of the broader Programme. This, in addition to the lack of a clear strategy has consistently undermined the capacity of the Unit to function effectively.

When new staff were appointed to the Unit at the end of 2000, one of their first tasks was to draw up an Action Plan which would inform the development of a new strategy for the Programme. (It should be noted that, due to the appointment of a Transaction Advisor, the implementation of the Action Plan was suspended in anticipation of the findings and recommendations of this report).

The Action Plan listed specific objectives, activities and outputs with deadlines for the period 2001-2002 as outlined below:

Objective	Date	Output	Person responsible
Develop SI Strategy	March 2002	Document	Sarah Polonsky/Sam Falatsa
Develop SI set-up process	Dec 2001	Document	Sarah Polonsky/Sam Falatsa
Develop monitoring framework	March 2002	Report/Policy	Sam Falatsa
Communication system	Nov 2001	Document	Sarah Polonsky
Research alternatives	Mar 2002	Documents	Christo Marais

Discussions with staff members of the Secondary Industries Unit have highlighted several areas of particular concern including the need to:

- develop an operational plan, also drawing up clearly defined job descriptions for each of the current staff members (roles and responsibilities);
- formalize a workable reporting structure;
- draw up a realistic budget;
- clarify the status of the Unit within the broader Working for Water programme; and
- provide the Unit with the legal standing and authority to operate effectively.

3.3.2 Staffing

The Secondary Industries Programme was initially run largely on an *ad hoc* basis by one staff member located in the national office, while regional initiatives were generally driven by WfW regional programme leaders. As the prime responsibility of the regional programme leaders was the implementation of the clearing programme and there was no staff member dedicated to Secondary Industries development to assist the process, this was clearly not a satisfactory arrangement.

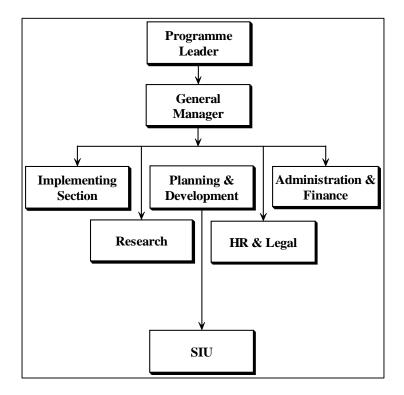
As an increasing number of projects began to be explored across the country, it was recognized that it would be necessary to establish a specific Unit tasked to develop appropriate policy and manage the programme. In October 2000, two staff members were appointed, one in a full-time position, the other working half-days.

The current staff profile of the Secondary Industries Unit (SIU) may be summarized as follows:

- *Dr Christo Marais* (presently 30% of his time; has spent more than 3 years on SI's in WfW programme).
- Sarah Polonsky (half days; appointed end 2000).
- Sam Falatsa (full time; appointed end 2000).

The total staffing complement of the SIU is 1.925 whole person equivalents (wte's). In addition there is a small element of support staff.

The following diagram illustrates how the SIU works within the existing WfW Programme.



Site visits

4.1 Introduction

4

One of the tasks stipulated in the Transaction Advisor contract was that project evaluation teams should visit projects of the Secondary Industries (SI) that are currently associated with the Working for Water Programme as well as projects with no relationship with WfW at all.

The purpose of the visits was to:

- Familiarise those involved with the types, size, impact, scope, extent and performance of current Secondary Industries' projects. Specific factors affecting performance that were considered:
 - Raw materials (availability, quality, quantity, etc.)
 - Processes (efficiency, technological level, etc.)
 - Equipment (machines, tools, support and measuring instrumentation, etc.)
 - Business aspects (essential management functions, access and control of finance, marketing, etc.)
 - Products (range, quality control, quality assurance, etc.).
- Obtain the required background and information on the complexities and issues of the links within the WfW-program, state departments, private sector, etc.
- Assess the real needs and project potential in order to make recommendations.

The information gained from the visits should only be regarded as presenting *snap-shots* of current situations; i.e. at the time of the visits, some projects were in a start-up phase whilst others were in various operational stages. Some of the projects had been operational for a considerable time. As the project visits were relatively short, no in-depth analyses were possible.

The general guideline followed with these visits was to qualitatively and/or quantitatively evaluate all project activities in terms of the following three main criteria:

- **economic** covering all financial aspects of the project;
- social maximum job creation for unemployed individuals from historically disadvantaged (HDI's) in the local communities; and
- **environmental** maximum impact on alien removal whist employing eco-friendly production processes.

A full list of the projects and service providers visited is attached at Appendix 1.

4.2 Methodology: data acquisitioning

4.2.1 Score Card

A score card was developed and compiled to accommodate the use of the following main performance criteria: environmental, social and economic aspects.

The environmental criteria mainly determined whether or not the project contributed to the WfW programme objectives i.e. alien invasive plant removal. The social criteria measured the skills and social development aspects of the people involved. The economic criteria consisted of an assessment of the product as well as sales & marketing, management ability, financial profile of the organisation and the technical viability of the operation.

Within each section there were varying numbers of attributes. The score card allowed three *scores* i.e. the letters F, U, & N that represents Favourable, Unfavourable or No opinion yet, for every attribute within every section.

The score for the attributes within each section, was expressed as a percentage to normalise the varying numbers of attributes.

4.2.2 Ranking option

Ranking is an accepted guide to provide assistance with the evaluation of projects. No numerical weighting factor was assigned to any of the eight performance criteria evaluated, as it was decided that each section should contribute equally and independently to the subjective evaluations. Different weightings are possible should it be required in future. The eight performance criteria evaluated were:

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Headings	Performance criteria
Economic	Product assessment
	2. Sales and marketing
	3. Management
	4. Financial profile
	5. Technical viability
Social	6. Skills assessment
	7. Social assessment
Environmental	8. WfW contribution

A project "score" was calculated by obtaining the sum of all the favourable values and subtracting the sum of all the unfavourable values. The highest possible score in this case would comprise of +800, whilst the worst possible score comprises of -800; the sum of the unfavourable values. The "no opinion" scores should not affect the scores of either.

Thus, after evaluating the various projects, one has a ranking of the projects with scores ranging from -800 to +800. This scoring and ranking is intended to aid the decision-maker, not to make the decisions; therefore, it would be unwise to set arbitrary limits for acceptance or rejection.

The scorecard was completed after each visit. Evaluation team members had to reach consensus on all the scores given.

4.3 **Findings**

At Appendix 2, the above-mentioned methods of classification were utilised to summarise the results obtained by using the score card.

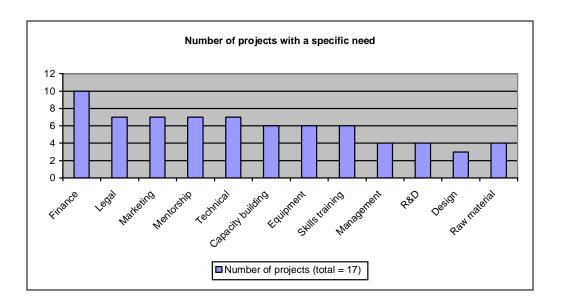
Different types of performance criteria, with slightly different emphasis and approach than those used for the score card, were selected for appraisal in the contract's Terms of Reference. Therefore, Appendix 3 provides a further analysis in relation to the three criteria; viability, marketability and product potential for each SI project.

The table below provides a summary, based on the scorecards, of Project Needs.

Active projects with WfW relationships	Needs
Northern Province, Nelspruit: Kruger National Park	Finance, Technical, Marketing, Training.
Northern Province, Tzaneen: Invader Crafts	Management, Finance, Technical, Equipment, Training, Mentorship.
Western Cape, Berea: Genadendal Natural Products	Finance, Technical, Marketing, Legal.
Western Cape, Bot River: Riverside Crafts	Management, Finance, Legal.
Western Cape, George: Droom Boom	Raw material, Management, Technical, R&D, Equipment, Marketing, Training, Legal.
Western Cape, Grabouw: Ceronio Industries	Raw material, Finance, Equipment, Training, Mentorship, Legal.
Western Cape, Riviersonderend: Natural Décor Creations/Wood Packer	Finance, Technical, R&D, Equipment, Mentorship, Legal.
Non-active Projects with WfW relationships	
Eastern Cape, Qolora: Ikhamanga Permaculture Project	Finance, Technical, R&D, Marketing, Training, Mentorship.
Mpumalanga, Nelspruit: Educational Toys	Finance, Marketing, Mentorship.
Northwest/Gauteng, Brits: Cradle of Humankind (Roman)	
Western Cape, Genadendal: African Forest Industries	Finance, Marketing, Mentorship, Legal.
Successful Projects on exit route	
Northern Cape, Prieska, Bio-Log	Social.
Unsuccessful Projects on exit route	
No projects in this category as yet	
Potential projects	
Western Cape, Kommetjie & Gansbaai: Papermaking	Raw material, Management, Technical, R&D,

Active projects with WfW relationships	Needs
Project	Equipment, Training.
Western Cape, Somerset West: Somerset Timbers	Marketing.
Service providers with active WfW relationships	
Western Cape, George: South Cape Business Centre	Finance, Equipment, Mentorship, Legal.
Northern Province, Western Cape: Shell Christo Vorster	Material supply
Service providers with non-active WfW relationships	
Northwest/Gauteng, Brits: Furniture Training	

The following chart provides an analysis of project needs, by type.



4.4 Recommendations

The following recommendations relate to the projects visited (Small Business Initiatives) only. Recommendations related to the Industrial Initiatives are in Chapter 6.

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- Divide the projects visited into two groups, i.e. the "top five" and "the rest".
- As a matter of urgency, establish immediately a team of specialists that can: (i) address the required needs and improve the skills of the "top five" projects,. Make these projects really successful and ensure they can be used as examples to others, and (ii) start an assistance/capacity building scheme, for a predetermined period and with clearly, defined milestones, for the projects that were classified as "the rest".
- Institute a policy that all future financial and other assistance offered to projects and service providers, requires as a pre-requisite, a strategic, a marketing and a business plan. Contract-in and use a team of specialists to assist the leaders of these projects with the assembly of the required plans.
- Verify the status of the projects. Differentiate clearly between active projects with WfW relationships, non-active Projects with WfW relationships, successful Projects on exit route, unsuccessful Projects on exit route, potential projects, service providers with active WfW relationships and service providers with non-active WfW relationships.
- Ensure that the needs of both the "top five" as well as the needs of "the rest", are addressed at all correct levels.
- Ensure that the required critical mass of all disciplines, especially Wood Science is present in the teams of specialists.
- Acknowledge the role of the SIU as mainly that of a managing, co-ordination function and facilitating, and outsourcing specialist functions.
- Ensure that financial support be channelled to those projects with good success prospects.

5 Option analysis – Methodology

5.1 Introduction

Within the following Sections we have examined a number of Options available to assist in the development of the SI sector. Each option has been analysed in a 3-dimensional way, as follows:

- Product analysis. Products have been categorised into Industrial Initiatives (IIs) and Small Business Initiatives (SBIs). Existing products have been researched and estimates have been made of the potential for developing the SI sector through maximising the potential of these products. Where appropriate, new products have been identified and the future potential examined.
- Organisational analysis. Alternative organisational and commercial structures have been considered for securing maximum benefit to the SI sector from the development of products. For example, in the case of Industrial Initiatives, proposals have been made for a number of PPP structures whereas in the case of SBIs we have considered a number of proposals for the SIU to assist in a "hands-on" way, including a revolving credit facility to assist existing and new businesses.
- Institutional arrangement for SIU. The final part of the options analysis (Section 9) considers the most effective legal form of the SIU in order to assist in the delivery of our recommendations in respect of the above two points.

5.2 Project investment criteria (from Terms of Reference)

In line with the Terms of Reference for this report, each option has been analysed in terms of the following criteria:

- advantages and disadvantages the key advantages and disadvantages of each option are listed and analysed;
- empowerment of Historically Disadvantaged Individuals or communities each option is considered in relation to it's impact in both qualitative and quantitative terms;
- environmental implications including the impact on clearing along with other environmental considerations (such as the negative environmental implications of smallscale charcoal production facilities;
- legal and/or regulatory prerequisites the legal and regulatory implications, including requirements for new legislation in some circumstances and the associated timetable implications;

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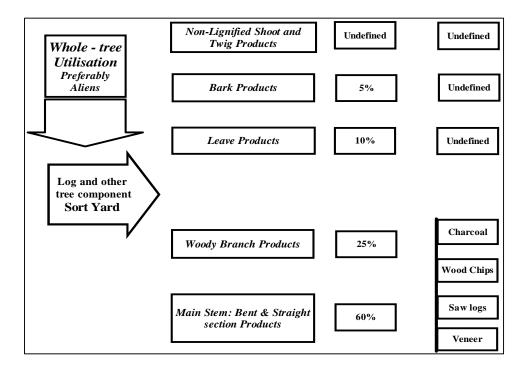
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- risk profiles the impact of each option in relation to the risk profile of the WfW Programme;
- financial implications the impact of each option in relation to the financial position of the WfW Programme. Additional financial benefits to the Programme are expected to further opportunities for the Programme to meet it's wider objectives;
- impact on project timescales considers the timescales associated with the achievement of benefits from each option;
- potential trademark/patent royalties this is closely linked to the financial implications and considers specific opportunities in relation to the Wood-works trademark;
- the ability to replicate and, if necessary adapt the options to accommodate variations in circumstance where a specific opportunity has been identified it is important to assess it's ability to replicate either geographically or otherwise; and
- identify the extent of the PPP initiative where a PPP structure is envisaged the structure of the transaction is considered to maximise the potential benefits to WfW.

6 Analysis of options – Industrial Initiatives

6.1 Introduction

The environmental goal of implementing a Secondary Industries Programme is to reduce biomass to levels comparable with biomass levels under natural conditions. In order to do so the concept of Whole-tree Utilisation is essential, see below.



The *removal* of alien invading plants particularly from the Western Cape, South-Western Cape, North Western and Mpumalanga Provinces has for many reasons become essential. In doing so: biological diversity is conserved; water secured from catchments and ground water sources enhanced; ecosystem functioning improved; the impacts of fires and floods reduced; the productive potential of land restored and sustainable use of natural resources promoted.

A well-structured and well-managed research, development and management project can immediately utilise available expertise as well as research and development (R&D) facilities, to solve current and short-term problems and to identify any further research needs. Note that non-standard, non-plantation and non-commercial forestry concepts are required. An initial investment has to be made to ensure proper implementation. However, the raw material is free and available and estimated to be worth R95 per ton standing, in the Western Cape.

Three industrial projects considered are the utilisation of the stems and heavy branches for the production of wood chips & charcoal, and the utilisation of leaves and berries for the production of organic fertiliser. Independently and in combination, these three projects comply with the WfW specific aims i.e. to remove the maximum amount of biomass with large projects, whilst creating the maximum number of jobs.

6.2 **Option 1 – Woodchips**

6.2.1 **Description of the option**

Woodchips that comply with international standards as well as specifications of the pulp and paper industry can be produced from local alien, invasive species. Three approaches are available to manage the production of woodchips: (i) chip the woody components close to the point of harvesting, (ii) rail the harvested logs to a large South African harbour where it will be chipped and exported or (iii) a combination of the above two options.

Currently Acacia wood chips are internationally being used as a source of fibres for papermaking. Species utilised are: Acacia aulacocarpa, A. auriculaeformis, A. auriculiformis, A. cincinnata, A. crassicarpa, A. dealbata, A. mangium, A. mellifera, A. nilotica, A. senegal and A. seval.

Invading alien plant biomass removal through the production of woodchips would save clearing costs to DWAF / WfW and turn waste material into an income-generating product. Both the straight and bent wood stems as well as heavy branches of alien, invasive, Acacia species, are suitable raw materials. Log dimensions are well specified and described. The best prices are obtained for logs and wood chips, when species are not mixed, but kept separately.

The products delivered are either woodchips or solid wood stems from the alien, invasive, Acacia species such as Acacia cyclops (Rooikrans), A. saligna (Port Jackson), A. longifolia (long-leave wattle) and A. mearnsii (Black wattle). A premium of about 30% is currently being paid for wood chips from the above-mentioned Acacia species, relative to Eucalyptus species' wood chips, when sold on international markets (Personal communication: Günter Gerischer, Stellenbosch, March 2001).

Currently South Africa exports more than two million tonnes of Eucalyptus and Acacia mearsii wood chips annually. An initial market analysis has indicated that it is possible to participate in this export venture, at very favourable financial returns. Supplying logs for the production of wood chip versus producing the wood chips and selling this product will lead to lower income to local communities.

Debarking Acacia cyclops (Rooikrans) and A. saligna (Port Jackson) and A. longifolia (longleaf wattle) on the coastal plains has been raised as a problem. As no R&D was part of this contract, no proven debarking methodologies are available at this stage, however it is not seen as an insurmountable problem at all.

6.2.2 Project objectives

The objectives of this project include:

- Maximise the environmental, social and economic benefits through the generation of the maximum income from the sale of products derived from the eradication of invading alien plants.
- Minimise the cost of clearing for WfW, whilst creating the maximum number of jobs.

6.2.3 Financial analysis

Initial indications are that with a production rate of a 100,000 tons of *Acacia* wood chips per annum, delivered at central points near available railway sidings, an income of R160/ton is possible. At this early stage a liniar relationship is assumed between tonnage delivered and direct profit generated, e.g. 100000 tons = R9.5 million, 200000 tons = R19 million, etc. Note that current estimations assumed that an average woody material yield of 60 tons per hectare is possible with the alien *Acacias* (personal communication: dr Christo Marais, WfW, Cape Town). The financial assumptions related to this option are listed below.

Item	Assumption	Rm
Gross sales value	100,000 tons @ R290/ton	29.0
Direct costs (fell, debark, sorting, log preparation, transport(25km), rail, etc)	100,000 tons @ R195/ton	(19.5)
Direct profit	R95 per ton (wood)	9.5
Indirect costs	100,000 tons @ R28.5/ton	(2.85)
Net income to WfW		6.65
Clearing cost savings	100,000 tons @ R50/ton	5.0
Total benefit to WfW		11.65

It is estimated that the cost of contract monitoring (which will reduce the above savings) will amount to R0.4m per annum.

First round calculations further indicate that the number of jobs required for the 100 000 t/a wood production is 121 (based on 1,667 hectares to be cleared at a rate of 13.8 hectares per person).

Note: The above figures relate to the single identified pilot project. If the project can be repeated throughout the Country then the benefit would to WfW would also potentially increase.

6.2.4 Analysis of the option

Criteria	Commentary
Advantages	Removal of the woody component (bent & straight stems and heavy branches) is 85% of the total biomass.
	Turn waste into a "saleable" product.
	An environmentally-friendly process.
Disadvantages	
Empowerment of Historically Disadvantaged Individuals or communities	Contract terms will allow for significant PDE and PDI involvement.
	Scope for SBIs: local processing (felling, debarking), handling and transportation.
Environmental implications	Positive removal of alien biomass.
Legal and/or regulatory prerequisites	See 6.2.3
Risk profiles	Depends totally on initial funding for essential R&D and project management.
	Constant supply of volumes of acceptable quality has to be guaranteed.
Impact on project timescales	Start immediately with the essential R&D, project management and legal components
Potential trademark/patent royalties	Not applicable

Criteria	Commentary
1 .	Excellent provided initial funding is made available to solve problems during initial stages.
Identify the extent of the PPP initiative	See 6.2.3

6.2.5 Structuring the transaction

In order for SIU to derive benefit from the opportunities related to large-scale woodchips production it is essential that it structures a transaction such that it receives maximum value from its' contribution - essentially the provision of the wood itself.

There are two principal mechanisms for ensuring that this happens:

- The SIU would negotiate a contract with the customer to provide an uninterrupted supply of wood chips to defined quality specifications. At the same time, it would negotiate a "back to back" PPP supply contract with a prime contractor in the Western Cape (or any other area for future transactions). The advantage of this mechanism is that the SIU is fully in control of the process involved in both sides of the transaction and as such may be able to extract maximum financial benefit in terms of the margin between the sales contract (price) and the supply contract (cost). The main disadvantage of this mechanism is that the SIU is exposed to market risk i.e. it may be exposed in some circumstances if it is unable to fulfil it's commitments under the sales contract.
- The SIU would negotiate a Concession Agreement with the supplier, which effectively would give the supplier the right to use the alien trees in a specific area for a given purpose in this case for the supply of wood chips. In exchange for this right the SIU would receive a fee. The advantage of this mechanism is that the SIU is exposed to market risk and the disadvantage is that it may receive less fee than the back to back contract mechanism. As always, there would be a trade-off between risk and reward.

Under either structure the key features of the transaction would be as follows:

- The SIU would receive a fee or payment in respect of cleared trees as opposed to the present situation whereby it is paying for trees to be cleared.
- Additional employment opportunities would be generated as the transaction is adding value to the cleared trees rather than leaving them "in-situ" with all the associated environmental hazards.
- The contract terms will allow for significant PDE and PDI involvement.
- The role of the SIU is significantly affected it needs to become focussed on researching sales opportunities and then monitoring the supply contract.

■ All investment requirements (such as major equipment) would be financed by the private sector.

6.2.6 Imlementation Issues

The following steps are required as part of the implementation process:

- Establish a comprehensive inventory. Determine the available utilisable biomass on areas under the WfW jurisdiction, by species and size classes.
- Harvesting these alien plants will demand some innovative solutions, since agricultural and forestry machines are not designed for material of such form.
- Determine how effective current harvesting, debarking and local wood chipping is, and to what degree both materials and processes conform to specifications.
- Develop a logistics plan. Determine the locations of useable railway sidings. Match these facilities with available biomass distributions as obtained from the inventory.
- Confirm with local wood and fibre evaluations, the quality and usefulness of the local alien species as a raw material source for wood chips and paper production. This information is essential for all technical marketing efforts.
- Develop additional marketing channels.
- Confirm effective debarking of all species to be utilised.
- Determine the suitability of wood quality for chipping and the effectiveness of available mobile chipping facilities utilising local alien, invasive, *Acacia* species.
- Determine the fibre and paper quality produced of local alien, invasive, *Acacia* species. (Personal communication: Colin Baker [*Head of Papermaking*, Pira International, Surrey, England], an international fibre source, pulp and paper expert August 2001).
- Develop an extensive logistics plan. Establish cost and practical implications of the proposed logistical chain.

6.3 Option 2 – Charcoal

6.3.1 Description of the option

Various grades of charcoal with diverse requirements and applications i.e. charcoal lumps (20-80 mm), restaurant charcoal (40-160 mm) and charcoal for smelters, can be produced

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from alien, invasive species. Currently South African companies are exporting large amounts of charcoal. Invading alien plant biomass removal through the production of charcoal would reduce and save clearing costs to DWAF/WfW and turn waste material into an income-generating product.

Both the straight and bent wood stems as well as heavy branches of alien, invasive, *Acacia* species felled and delivered on a roadside are suitable for Charcoal production. Various grades and dimensions of Charcoal are required with species kept separately. The products delivered are either charcoal or solid wood stems from the alien, invasive, *Acacia* species such as *Acacia cyclops* (Rooikrans), *A. saligna* (Port Jackson), *A. longifolia* (long-leave) and *A. mearnsii* (Black wattle).

Currently South Africa exports a considerable tonnage of charcoal annually. An initial market analysis has indicated that it is possible to participation in this export venture, at very favourable financial returns.

6.3.2 Project objectives

The objectives of this project include:

- Maximise the environmental, social and economic benefits through the generation of the maximum income from the sale of products derived from invading alien plants.
- Minimise cost of clearing for WfW, whilst creating the maximum number of jobs.

6.3.3 Financial analysis

Initial indications are that at a production rate of 45 000 tons of charcoal from *Acacia* wood per annum, delivered at central points near available sidings, could yield R1,000/ton depending on quality. Typical yields of various production methods are: Simple kilns, costing R5 000 to R20 000 (environmentally unacceptable) with a 6:1 (6 parts of wood for 1 part of charcoal) recovery rate or Retort kilns, costing from R100,000 to R250,000 (environmentally more acceptable) with a 3:1 recovery rate.

The projections below are based on Retort kilns.

Item	Assumption	Rm
Gross sales value	45,000 tons @ R1,000	45.0
Direct costs (rail, debark etc)	45,000 tons @ R700	(31.5)
Direct profit	R300 per ton (charcoal)	13.5
Indirect costs	45,000 tons @ R90	(4.0)
Net income to WfW		9.5
Clearing cost savings	135,000 tons (wood) @ R50	6.75
Total benefit to WfW		16.25

It is estimated that the cost of contract monitoring (which will reduce the above savings) will amount to R0.4m per annum.

First round calculations further indicate that the number of jobs required for the 135,000 t/a wood clearance is 163 (based on 2,250 hectares to be cleared at a rate of 13.8 hectares per person).

Note: The above figures relate to the single identified pilot project. If the project can be repeated throughout the Country then the benefit would to WfW would also potentially increase.

6.3.4 Analysis of the option

Criteria	Commentary
Advantages	Removal of the woody component (bent & straight stems and heavy branches) is 85% of the total biomass.
	Turn waste into a saleable product.
Disadvantages	Not an environmentally-friendly process.
Empowerment of Historically Disadvantaged	Contract terms will allow for significant

Criteria	Commentary
Individuals or communities	PDE and PDI involvement.
	Scope for SBIs: local processing (felling, debarking), handling and transportation.
Environmental implications	Not an environmentally-friendly process. However, the retort system has been accepted by Department of Environmental Affairs and only systems with such status and track-record will be used. it is a way of alien biomass removal.
Legal and/or regulatory prerequisites	See 6.3.3 below.
Risk profiles	Depends totally on initial funding for essential R&D and project management.
	Constant supply of volumes of acceptable quality has to guaranteed.
Impact on project timescales	Start immediately with the essential R&D, project management and legal components.
Potential trademark/patent royalties	Not applicable.
The ability to replicate and, if necessary adapt the options to accommodate variations in circumstance	Excellent provided initial funding is made available to solve problems during initial stages.
Identify the extent of the PPP initiative	See 6.3.3 below

6.3.5 Structuring the transaction

Similar to above -6.2.5

Implementation issues 6.3.6

Similar to above -6.2.6

6.4 Option 3 – Organic Fertilizer

6.4.1 Description of the option

The Syringa tree (*Melia azedarach*) is invading some 3 million hectares of land in the North Western and Mpumalanga provinces at present. The catchment area of the region is negatively influenced and agricultural land limited. The removal of these trees is regarded as important as they spread at an alarming rate.

A Romanian entrepreneur, who has settled in South Africa has researched the use of the leaves and berries of the Syringa tree in conjunction with kelp from the Atlantic ocean and fish extracts and modifying them biochemically into a liquid or powder organic fertiliser which will place South Africa in a situation to either grow and export organic vegetables and fruit or export the fertiliser on its own. The international trade, especially the E.U. trade is growing at a rate far in excess of the norm (internationally to R8 billion in less than 10 years).

The range of jobs ranges from a low training level, collecting leaves, berries and kelp (rural), to semi-skilled, drying and milling (semi-rural), to highly skilled factory level operating specialised factory equipment.

Both the leaves (including non-lignified shoots and twigs) and berries, harvested when ripe, of the Syringa tree must be harvested. The leaves are milled at the roadside after drying and this plus the berries transported to a central point. Here the leaves are milled into a powder and further transported with the berries to the factory. Kelp (wet) and bone meal can be railed from the West Coast. Availability is not a problem. The raw materials are converted by an undisclosed process by mainly extracting the growth hormones and other growth extracts to yield a saleable product.

6.4.2 Project objectives

The objectives of this project include:

- Maximise the environmental, social and economic benefits through the generation of the maximum income from the sale of products derived from invading alien plants.
- Minimise cost of clearing for WfW, whilst creating the maximum number of jobs.

6.4.3 Financial analysis (initial)

Within a period of four years the production of organic fertiliser could reach R200 million or 8,000 tones per annum. The co-operation however, between the various parties, WfW, Mefin, IBNT, Bucharest and the University of Stellenbosch is a pre-requisite. Between

10,000 - 50,000 jobs per annum could be created and the gross income to the SIU could be R100 million p.a.

Considerable development work is still required before any firm estimates can be provided – for this reason all income associated from this product has been excluded from our financial projections. Development costs of R2.52 have been assumed in the financial model.

6.4.4 Analysis of the option

Criteria	Commentary
Advantages	Removal of leaves and berries of Syringa trees.
	Large resource of Kelp available.
	Create eco-friendly product which has high market demand.
Disadvantages	Development risks.
Empowerment of Historically Disadvantaged Individuals or communities	Contract terms will allow for large number of PDE and PDI involvement.
Environmental implications	Very positive removal of alien biomass.
Legal and/or regulatory prerequisites	Ownership of biomass.
Risk profiles	Depends totally on initial funding for R&D and project management (whether contracted out or in-house.
Impact on project timescales	Start immediately on R&D, project management and legal aspects.
Potential trademark/patent royalties	Obtain funds from biomass sales and keep know-how in SA.
The ability to replicate and, if necessary adapt the options to accommodate variations in circumstance	Not applicable.

Identify the extent of the PPP initiative	Not yet fully understood but could be structured similarly to the charcoal transaction.

6.4.5 Structuring the transaction

As above.

6.4.6 Implementation issues

The following steps are required as part of the implementation process:

- Confirm research results with analyses and with developmental field trials. Establish time and motion studies for harvesting process.
- Establish siding and logistics for major raw materials and establish a factory.
- Confirm technical process on at least pilot plant scale.
- Establish market feasibility for both requirement and price.
- Establish market size.
- Logistics for raw materials and final product must be established.

7 Analysis of options – Smaller Business Initiatives (SBI's)

7.1 Introduction

The Working for Water programme initiated a series of Secondary Industry projects from 1998-1999 onward. Established on a 'pilot project' basis, most of the early initiatives were situated in the Overberg region (Fynbos programme), although in the intervening period, further projects have been started elsewhere in the country.

The pilot projects were structured to operate as the smallest possible viable production unit. This approach was based on a commitment to minimizing start-up costs and ensuring that operational overheads were kept as low as possible (e.g. the producers either worked from home or from premises provided by WfW).

The emphasis was on entrepreneurial development (SMME's) as opposed to straight job creation, with the WfW programme playing the role of business incubator. In order to build strategic partnerships around core areas of need such as training and marketing, considerable efforts were also made to link each SMME within the programme to private sector partners. This was viewed as a mechanism for fast-tracking the capacity building process, but unfortunately had only mixed success (see chapter 4).

A comprehensive feasibility study (including market research) was undertaken before the pilot projects were implemented and the initial short list of suitable products was based on its findings. These can be broadly categorized as follows:

- high volume/low value products (charcoal etc); and
- low volume/high value added products (interior and outdoor furniture, functional garden furnishings, décor accessories etc).

All value added ranges were designed and developed by a dedicated team of specialists and included simple, hand processed/low technology items such as hurdle fences or hand woven bark balls through to highly worked products requiring advanced levels of skill and fairly sophisticated tools and equipment.

7.1.1 Overview of current initiatives

7.1.1.1 Product types

Products of current SBI's may be broadly grouped as follows:

- Garden Furnishings (including trellises, fencing, rustic garden furniture).
- Interior Furnishings (including home accessories, bark balls, chairs and tables).

■ Small businesses making charcoal, firewood, wood chips.

7.1.1.2 Operational models

Operational models vary around the country, but may be summarized as follows:

- Private sector driven with fairly informal partnerships with emerging entrepreneurs around raw material supply and some value added processes (e.g. Ceronio Industries).
- Private sector driven with employed staff working on a 'piece' system (e.g. Wood Packer).
- Micro production units run by former members of the WfW clearing team (Genadendal Natural Products).
- Focussed production unit within a co-operative structure (e.g. Ikhamanga Permaculture Project furniture unit not operational as yet).

7.1.1.3 Challenges/weaknesses

The challenges faced by SBI's include access to finance, markets, technical processes (wood science), social development (personal growth skills), product development and design, business management, access to raw material supply (in some instances), lack of consistent strategy from WfW SIU (operations as well as support), no legal framework for operations (legal structure, contractual agreements with WfW etc).

7.1.1.4 Opportunities/strengths

Market driven products, some operating experience and understanding (including production processes), some business skills, existing client base and some market experience, (in most instances) high levels of commitment to their business initiative, a successful SBI programme will equip HDI's within the Secondary Industries programme with the opportunity to engage in the formal economy and empower them to contribute and compete as equals.

7.1.1.5 Some best practice examples of SBI's in the craft/handmade sectors include:

■ Clementina van der Walt

Well-known ceramicist who has built a flourishing studio workshop specializing in highly designed, colourful domestic ware while also practising as a serious art potter (one-off pieces only). She has an established client base both within South Africa and abroad and her turnover exceeds some R2 million a year.

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■ Kapula Candels

Started by micro-entrepreneur Ilse Appelgryn in 1994 Kapula Candles focuses on the production of hand-painted candles for the domestic and international market. Based in Bredasdorp in the Overberg region of the Western Cape, Kapula now employs some 195 people (mostly women) from the surrounding district and has two shops, one locally and the other in Germany. Their turnover exceeds R11 million per annum.

■ Carol Boyes Functional Art

Carol Boyes is internationally renowned for her highly designed functional and decorative pewter ware. Best known for her cutlery ranges, she now employs more than 120 people in her factory and has an annual turnover in excess of R8 million.

■ An African Christmas

Formally launched in 1999, the small business partners involved in the development of the African Christmas range spotted an opportunity to capitalize on the international market for Christmas decorations, worth some U.S. \$2 billion annually. Targeting a niche market for Christmas products with a uniquely African flavour, they now export their ranges internationally. Materials used include beads, wire and various fibres while production methods are usually labour intensive to maximize employment opportunities.

7.1.1.6 Market share

Preliminary research into the size of the potential market for ranges produced by SBI's within the Secondary Industries programme resulted in some promising findings as follows: although garden furnishings such as fencing (woven and other) and rustic outdoor furniture are viewed primarily as *niche market items*, the European and U.S. markets could each absorb in the region of 1 million fencing lengths and 2 million pieces of furniture annually. The Danish market alone would be in the region of 50 000 fencing lengths or 100 000 pieces of furniture. The emphasis is on knock-down furniture (some 70% of market) while principle retail outlets are garden centres and Home Depots. (Information courtesy of Laurits Moller Larsen, Danish partner of Woodpacker.)

Product value profile:

1 x debarked fence (1,8m high x 1,2m wide) wholesale price to European shops = R275 Estimated profit per container load = R37 000

Woodpacker aim to ship out some 24 containers during the course of 2002 and are interested in collaborating with or setting up other projects to increase this to meet market demand.

7.2 Financial analysis

The full financial aspects of this option are discussed in detail in Section 8. However, a summary of the financial aspects are also provided in the table below:

Item	Assumption	Rm
Secondary Industries Unit		
Additional staff	Total 6 additional staff plus	0.90
Consultancy support	Consultancy support	1.26
Revolving Credit facility	Initial facility of R2m –	0.16
	recovery rate of 60%	
Total cost		4.54

7.3 Analysis of the option

It should be noted that for the purposes of this exercise, no distinction has been made between the different SBI's on the basis of product type. It was the opinion of the team that challenges/opportunities profile of the SBI is broadly similar across all sub-sectors.

Criteria	Commentary
Advantages	Succesful SBI's can stimulate the economy at community level; present opportunities for modest, but sustainable income generation; positively empower HDI's through a process of self-improvement and skills development.
Disadvantages	Higher levels of investment by SIU in terms of training and mentorship; longer lead period before sustainability achieved; only small scale impact on the removal of biomass.
Empowerment of Historically Disadvantaged Individuals or communities	See above (advantages).
Environmental implications	Little or no negative impact (except through the use of portable charcoal kilns without any form of filter).
Legal and/or regulatory prerequisites	Agreement must be reached between WfW and the SBI regarding transactions around state-owned raw material; most suitable legal trading structure for SBI's must be determined (CC, JV, Co-operative etc.); the SIU will have to draw up contractual agreements with all SBI's.

Criteria	Commentary
Risk profiles	Higher levels of investment by SIU, however performance milestones must be built into the contract and adhered to.
Financial implications	Special budget must be allocated to SBI programme for support services agency as well as the revolving credit facility; income streams for SIU will probably be minimal (initially).
Impact on project timescales	Minimum 3 year commitment required from project start-up to exit point, although this may change depending on the nature of the SBI.
Potential trademark/patent royalties	Possible income stream from WfW brand if made widely available to both SBI's and private sector initiatives outside the programme (see Chapter 8); possible design patent royalty, but unlikely.
The ability to replicate and, if necessary, adapt the options to accommodate variations in circumstance	Good – SBI's are usually flexible and capable of multiplication e.g. Woodpacker's wishing to establish multiple sub-contractors based on their existing structure.
Identify the extent of the PPP initiative	Through the charcoal operations, quite good if linked to other PPP's proposed previously (see chapter 6); otherwise unlikely in the short to medium term.

7.4 Implementation issues

7.4.1 Medium-term

While detailed guidelines for future operations are listed in Chapter 8, certain key recommendations may be summarized as follows:

- The SIU should continue with the SBI programme, but radically re-evaluate and restructure it's role and implementation strategy (e.g. institutional arrangements, 3-5 year mentorship programme etc.).
- The SIU should insist on a professional approach, demanding a business-like attitude from all involved. Sustainability and successful business results must be the dominant criteria.

- Criteria for selection of new SBI's should be instituted whereby the majority are selected on the basis of an existing skills and capacity (thereby reducing start up investment in training, infrastructure and equipment). The SIU should recognize the different levels of commitment (financial and otherwise) required when investing in an existing business initiative to grow capacity and stimulate more jobs (*job creation*) as opposed to the creation of entrepreneurs (SMME development).
- Institute a policy that all financial and/or mentoring assistance to SBI's is subject to the submission of a business plan outlining strategic objectives, marketing plan, detailed budget etc.
- Organize SBI's into active/non-active projects and develop a strategy for intervention and support based on their ranking in the score card analysis.

7.4.2 Short-term emergency measures

Although the team has been mindful of the client's requirement to draw up an operational framework which may be implemented as quickly as possible, systems of government generally work fairly slowly and it may be at least six months before key changes are made. This delay will almost certainly impact very seriously on several of the existing SBI's, many of which are in difficulties as a result of poor communication and little - or inconsistent - support from the Working for Water SI programme!

It is therefore imperative that an emergency support programme be put together and implemented as quickly as possible. It is recommended that a small team of 'trouble shooters' be appointed to act as an interim support agency over a six month period while the necessary infrastructure is put in place for a permanent programme.

Models for the emergency team may consist of:

- Small co-ordinating unit (1 or 2 people) which designs and co-ordinates the emergency support programme, sub-contracting certain key functions to appropriate specialists.
- An integrated team is appointed (possibly 3-4 people) each responsible for a specific portfolio, sub-contracting certain functions if required.
- An emergency programme is drawn up and co-ordinated by the SIU (national office) who will sub-contract certain key functions to appropriate specialists. SBI's requiring short term intervention should submit a proposal motivating for assistance. Although it is recognized that not everyone will be able to draw up a formal business plan, there should be evidence in the proposal of a clear understanding of their needs and what interventions may be required to address them. SBI's should also have knowledge and understanding of their financial situation as well as plans for market/business expansion.

It will be necessary for the team to pay a series of visits to SBI's selected for support over the six month period. It is recommended that the team use each visit also as an opportunity to identify possible local service providers and support systems in each region.

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The emergency support programme will require special financing (from this year's budget), while it should be noted that some form of interim loan facility will have to be made available to assist SBI's where necessary. Any investment in interim support will be compromised unless the producer has the cash flow to implement recommended changes and improvements.

The SIU should draw up a terms of reference for the emergency support programme as well as motivate for the necessary budget.

7.5 Marketing recommendations

Appendix 5 provides a detailed analysis of the marketing recommendations.

8 Implementation Structure

8.1 Legal options for SIU

8.1.1 Introduction

There are a number of South African statutes dealing with or relevant to the control of invader plants, including the National Water Act, 1998, the National Environment Act, the Environment Conservation Act, the National Veld and Fire Act and the Conservation of Agricultural Resources Act, 1993 ("CARA"). In terms of CARA, the Minister of Agriculture may, by regulation, declare any plant to be a weed or an invader plant for the purposes of CARA. On 30 March 2001, regulations were promulgated declaring a number of plants to be weeds or invader plants, and specifying the obligations of "land users" (which includes not only landowners, but also tenants and other rights-holders) to control the spread of the prescribed weeds and invader plants on their property. Failure to comply with the control measures set out in CARA and the regulations, is an offence. CARA gives the "executive officer" designated by the Minister in order to carry out the provisions of CARA, wide powers to give directions to particular land users relating to control of invader plants, to enter upon land to render advice relating to control of invader plants, and in fact perform or cause to be performed (out of moneys appropriated by Parliament for this purpose) such activities as are deemed appropriate, on any land, to achieve the object of controlling invader plants. In terms of CARA, the costs of the performance of such activities or part thereof, are repayable by the owner of the land on or in respect of which the act was performed.

WfW has been set up as a Government inter-departmental initiative, led by the Departments of Water Affairs and Forestry, Environment Affairs and Tourism, and Agriculture. It is funded principally by the Government, but has been able to secure supplemental private sector funding too. Through WfW, the Government seeks to assist land users in meeting their obligations to control invader plants, by assisting with clearing. WfW has also taken some steps to get involved in the secondary industries sector, through its SIU.

Neither WfW, nor the SIU are legal entities, and they derive all their powers from the Government Departments, which delegate such powers to them. They cannot, independently of the Government, enter into contracts, incur expenses or earn income. While the objectives of WfW generally relate to the clearing and control of invader plants, in a manner that achieves certain social goals, it is foreseen that the development and maintenance of the SIU in an economically viable, sustainable manner may necessitate its ultimate separation from WfW, in order to pursue objectives (such as earning income) that do not fit neatly within the framework of WfW.

At Appendix 4 is a table setting out a number of possible legal structures for the SIU, comprising a summary of each of their main features, advantages and disadvantages. Detailed below are the Transaction Advisor's conclusions and recommendations concerning the possible legal structure of the SIU, which include a brief discussion of relevant ancillary issues, such as access to cleared raw materials for secondary industries, procurement by the SIU, and mechanisms for structuring the relationship between the SIU and WfW.

The discussion in this section is based on the assumption that WfW will, for the foreseeable future, remain within the Government, as part of the Department of Water Affairs and Forestry.

8.1.2 Recommended structure

8.1.2.1 Short-term recommendation

Assuming that the resources are available within WfW for the SIU to be structured as a distinct unit within the greater WfW structure, in other words with a number of persons dedicated on a full-time basis to the achievement of the objectives of the SIU (as developed), and assuming that WfW (and the Government Departments standing behind it) accept the notion that those objectives include the earning of income whether through IIs or SBIs or a combination of both categories of SI initiatives, it is our recommendation that the SIU seeks, as soon as is possible, to establish itself as a "trading entity" as defined in the Public Finance Management Act ("PFMA"). A trading entity, as set out in the table above, is not a separate legal entity, nor is it burdened by a complex organisational structure. It is a part of the Government Department that establishes it, thus benefiting from the advantages thereof, but is permitted to trade and for the income earned by it to be retained by the relevant Department. A "head of the trading entity" would have to be appointed, and the trading entity would have to comply with a number of prescribed reporting requirements, but those obligations are concomitant with the ability to trade and to earn income, which are obviously crucial to the success of the SIU in the long-term. Establishment of a trading entity with DWAF or any other Department must be done with the approval of the National Treasury.

The reason for our recommendation that, in the short term, the SIU seek to become a "trading entity", is that its status as such permits it to earn income, as mentioned above, but does not necessitate that the bulk of its funding be derived from external sources. At least at the initial stages, it is likely that the SIU will require Government funding in order to carry on the proposed activities in relation to SBIs, and in order for it to diligently monitor and enforce the PPP contracts proposed.

8.1.2.2 Long/medium term recommendation

In the longer term, and assuming that the SIU reaches a point where it is substantially funded by sources other than the National Revenue Fund (in other words, by its own trading income), it is our recommendation that the SIU seeks to be established as a "national government business enterprise" in terms of the PFMA. Establishment as an NGBE will mean that the SIU is a separate legal entity, which can enter into contracts, acquire rights and incur obligations and, subject to regulation by the PFMA and other relevant legislation, operate on business principles with the efficient decision-making processes that are necessary to participate or compete in relevant markets. Being an NGBE would entail a more complex organisational structure than either the SIU's current operations or those of a trading entity would require, as well as more onerous reporting obligations. If the NGBE

took the form of a company in terms of the Companies Act, 1973, it would have to comply with the provisions of that legislation too, and there would be costs associated therewith.

8.1.2.3 **Procurement**

As long as the SIU remains under the direct or indirect control of the Government, whether it is a trading entity, NGBE or other body, it is our view that it (if it has independent contracting powers) will have to comply with the procurement principles set out in the Constitution of the Republic of South Africa, 1996. The consequence of this is that when the SIU contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective.

8.1.2.4 Access to raw materials for SIs

Because CARA does not restrict the delegation of the powers of the Minister or the powers of an "executive officer" within the relevant Department, to persons within that Department, there is no legal obstacle to an independent SIU agreeing with the Minister or his or her delegated representative that the SIU will have certain rights over cleared raw materials, whether on State land with the authority of the State, or on private land by agreement with the landowner. Any objectives sought to be pursued in this regard, by the SIU, will obviously require the co-operation and support of the Government and, in its turn, WfW as the implementer of certain of the Minister's powers and duties concerning the control of invader plants. With regard to privately owned land, the SIU would – assuming that it becomes a separate legal entity with contracting powers - be free to enter into contracts with landowners regarding the use of cleared raw materials, though it would make sense to do so with the co-operation of WfW, if that is the entity involved in the initial felling/clearing activity.

8.1.2.5 Relationship with WfW

As long as the SIU remains within the structures of one or more Government Departments, whether within WfW "as is", or as a "trading entity" within a particular Department, its entire powers and duties will be determined by the relevant Department/s, by means of delegation of particular rights and obligations to the SIU, by those Departments. Thus its relationship with WfW will also be determined by the Government through delegation of powers and duties, and is likely to remain more or less the same as its current position, subject to changes brought about either by changes in the current structure of WfW, or by the allocation of additional resources specifically to the SIU in order to enable it to pursue its distinct objectives, whether in the form of additional personnel or funds.

In the event that the SIU becomes sustainable substantially through income earned by it from its SI activities, and is established as an NGBE, it will be necessary to negotiate with the Department/s within which WfW is located at that time, an agreement as to the relationship between the SIU and WfW. Without such an agreement, it would not, in our view, make sense to separate the SIU from WfW. The need of the SIU for access to raw materials, and for a co-operative relationship with the implementer of the Government's and other land users' clearing obligations, as well as the efficiencies achieved by close co-operation between WfW and the SIU, make such an agreement a necessity.

8.2 Implications for Social Development and Empowerment

8.2.1 Introduction

When the national Department of Water Affairs and Forestry (DWAF) established the Working for Water programme in 1995, it's core objectives included the clearing of alien vegetation and the alleviation of poverty through job creation.

The Secondary Industries (SI) Programme was initiated with a view to providing Working for Water with a vehicle to generate income for the clearing programme, create further jobs and add value to the lives of unemployed people within the historically disadvantaged community.

Whether directly impacting employment opportunities within an existing enterprise (job creation) or encouraging the development of SMME's (entrepreneurial activity), the Secondary Industries Programme could stimulate economic and social development in a community. However to do so on a sustainable basis, it is necessary to approach the process holistically, investing as heavily in the building of personal skills as in technical or administrative.¹

8.2.2 Methodology

To assess the impact of social development and empowerment in current projects, a series of field trips were undertaken and a situational analysis conducted as per the following:

- a review of human resource development programmes applicable to Secondary Industries (if any);
- levels of capacity building (technical and holistic life skills training);
- real income generation levels;

.

¹ By 'personal skills' we are referring to confidence and assertiveness training as well as the ability to exercise choices, make decisions and assume responsibility. These are of central importance in ensuring productivity and enabling programme participants to contribute and compete effectively.

- an evaluation of morale and motivational levels amongst producer groups;
- ownership of the programme (sense of ownership).

8.2.3 Findings

The findings of the field trips indicated that there is a general shortage of appropriate skills (i.e. technical, managerial), and, with one or two exceptions, limited levels of personal development and growth.

There is an immediate need to embark on an aggressive all round capacity building programme with regard to both technical and personal training. Such a programme will be central to the development of a successful exit plan for participants in large scale (Industrial Initiatives) and smaller initiatives (Small Business Initiatives) within Secondary Industries.

Measurable outcomes should include a proper transfer of skills and a willingness amongst participants to assume responsibility for personal development and future growth.

8.2.4 Recommendations

In order to address the social development needs identified, we recommend the following actions:

- an annual needs assessment for each project (to inform the training programme);
- a bi-annual social audit for each project (to determine the impact of the investment on the training programme);
- identification of appropriate service providers;
- identification of funding (both donor funding and internally generated funds) to support the social development programme; and
- the Secondary Industries Social Development Programme build a working relationship with the existing Social Development Unit of Working for Water.

(targeted intervention in areas of needs specific to Secondary Industries)

We strongly recommend a creative approach to all technical and other training modules i.e. methodologies must be tailored to meet the specific profile of the target group. An evaluation of best practice indicates that a generic approach negatively impacts the effectiveness of training.

Following our analysis we have identified a number of areas of social development training requirements, as follows:

- leadership and assertiveness;
- project management;
- reporting and accountability;
- conflict management;
- labour relations:
- co-operative approaches to production and resource mobilization e.g. finance, raw materials (not including co-operative ownership of a project);
- awareness programmes (such as HIV/Aids); and
- the management of cultural diversity.

8.3 The future role of the Secondary Industries Unit (SIU)

8.3.1 Introduction

As indicated in the findings of the site visits report, the WfW Secondary Industries Unit (SIU) must invest in strategies for the support of their small business development programme if it is to succeed. Although it is not envisaged that the Unit will itself play a direct 'hands-on' role in delivering that support, it will nevertheless be pivotal to the development – and successful implementation of – policy, as well as monitoring levels of service provision to Small Business Initiatives (SBI's) operating under the aegis of WfW.

Wherever possible, it is suggested that existing structures within the WfW programme be utilized in the support and development of the Secondary Industries programme. It should be recognized, however, that many officials in the structure, while enthusiastic about the programme, are already overstretched in terms of their capacity to assist; while others are unconvinced as to its merits and may require considerable motivation.

Accepting these realities and understanding the special nature and level of operation of many of the existing and possible future SBIs within the programme, it is recommended that the capacity of the SIU be developed in order to run the programme effectively. Key areas in which the Unit requires immediate extra support include: regional co-ordination (for on-the-ground implementation), SBI support service provision and the development of broad operational guidelines.

Detailed recommendations for structural arrangements and responsibilities in relation to these are covered later in this Section while some recommended operational guidelines (SBI's only) are listed in the paragraphs below.

8.3.1.1 Identification of the SBI opportunity

It is recognized that the process by which the SI Unit will identify and implement new projects will be, in part, a dynamic one. Typically it may result as a consequence of either of the following scenarios:

- The SIU identifies a completely new product opportunity (i.e. not implemented as yet elsewhere in the programme).
- Individuals or groups approach the SIU with a product concept (including members of the private sector).

8.3.1.2 The SBI implementation process

The SIU will employ a number of different mechanisms for the implementation of new projects as well as the extension of existing ones. A phased approach to implementation is recommended with a selection process which is flexible and adaptable to circumstances and needs. Criteria should be set and a system of scoring (possibly) developed to assist the process.

Phase One (start up)

Scenario 1: New products identified by SIU

- Call for proposals (with clearly articulated terms of reference: what is required and the role of the SIU i.e. what support can be expected? etc.). The following process is suggested:
 - internal circulation of opportunity to existing programme participants
 - public call for proposals (subject to lack of appropriate response from current SBI's)
- Evaluation of proposals according to specific criteria (including required investment from SBI programme)
- Negotiation and signing of contract agreement
- Start (mentorship programme begins immediately)

Scenario 2: New products identified by private sector*

- (Possible annual call for proposals)
- Assess product concept according to set criteria (marketability, cost of production, required levels of investment by SIU etc.)
- Assess company profile (equity and other aspects of social commitment; financial liquidity and business experience)

- Negotiation and signing of contract agreement
- Start (mentorship programme begins immediately)
- * It may be worth considering an annual national awards scheme under the Working for Water brand. Categories could include innovation and design, production excellence, export potential, job creation possibilities, environmental impact and more.

Phase Two (intermediate – beginning of exit plan)

- Further development of existing projects
- Assess current status of the project (financial, marketing, human resource capacity etc.)
- Link to appropriate resources independent of the SI programme
- Foster opportunities for co-operation and support between SBI's (marketing, raw material supply etc.)
- Mentorship programme continues

Phase Three (exit) *

In terms of the contractual agreement, the support relationship terminates, but the project retains the option to utilize the Working for Water brand. This agreement is formalized contractually and is subject to review.

* It should be noted that the exit plan applies both to successful and unsuccessful SBI's: if an initiative has not achieved key milestones with the timeframe set by the SIU, the SIU must retain the option to terminate the agreement.

8.3.1.3 Timeframes for implementation (new SBI's)

It is recognized that not all projects will require similar levels of support from the SIU and the contractual agreements should reflect this. However, it is recommended that, with new SBI's there be a standard commitment to an initial three year (maximum) contractual agreement, subject to regular evaluation with measurable outcomes linked to specific milestones.

Phase One 6 to 12 months

Phase Two 1-3 years (depending on product type and scale of operation)

Phase Three Exit when applicable (in line with contractual agreement)

8.3.1.4 Accreditation for branding purposes

Commission flowing from the awarding of accreditation to business initiatives (large and small) wishing to use the Wood Works brand may become an income generating opportunity for the SIU. Three levels of entry are proposed:

■ Projects with <u>existing</u> relationships with the SIU programme

Automatically qualify for the use of the brand; contractual agreement, renewable subject to evaluation process

■ New projects (SIU and private sector)

Provisional access to brand; contractual agreement; renewable subject to evaluation process

Existing businesses <u>outside</u> SI programme which wish to register with SIU in order to
use the Woodworks brand

Process of application; criteria for selection; a contract for a set period of time (say, 3 years); renewal subject to review (evaluation) process

8.3.2 The role of the SIU regarding SBI's involved in Industrial Initiative contracts

8.3.2.1 Monitoring

The SIU should monitor to ensure that the terms of the contractual agreement between the implementing corporate and the SIU are honoured.

8.3.2.2 Training and capacity building

In the absence of a specific programme for capacity building and small business support within the contract, the SIU should link the SBI's to the existing small business support and social development programme. (Note this increased workload may have budgetary implications for the support services agency; alternatively, the private sector partner in the PPP may choose to hire the agency to perform this function on their behalf).

8.4 Strategies for SBI programme success

8.4.1 Training and Mentoring

In order to ensure SBI's achieve sustainability within the contractually agreed timeframe, it is recommended that the SIU establish a comprehensive mentorship programme. Programme components would be specific and limited to the following areas: business

management skills (especially costing and bookkeeping), product development and design, technical skills (wood treatments etc.), social development and marketing assistance.

Although it may be possible to establish some of the necessary support functions within the SIU, it is recommended that this function be largely outsourced to a private sector company/consortium with the necessary expertise to supply such a service. A number of alternatives may be considered as to how this 'agency' could operate, for example:

- a single unit may be appointed which is tasked to service all SBI's nationally
- a central co-ordinating unit is appointed, but instructed to as far as possible source the necessary support at regional or local level
- independent support units are established in each region

It is recommended that the co-ordinating function of the support services agency be as lean and efficient as possible (2/3 people) with specialists sub-contracted to provide a variety of services on a project by project basis e.g. dedicated teams can be created to meet the needs of specific projects.

The services of the agency must be boosted at local level by appropriate partnerships.

It will operate under contract to the SIU and its performance will be subject to regular evaluation and review.

Although SBI's within the SI programme will probably not be in a position to pay for mentorship initially, a sliding scale of payment for (or repayment of) services should be instituted at 18 - 24 months from start of operation (middle of phase two).

8.4.2 Access to finance

It is recommended that a "revolving credit facility" be established to assist SBI's with regard to start-up and cash flow finance. The facility should not be administered by the SIU itself, but by either the support services agency or one of the major banks with a strong small business support programme. It still has to be determined whether or not the agency will (a) use the money to underwrite a bank loan or (b) loan it directly to an SBI in return, say, for an equity share in the business.

Approval of applications for financial assistance will be subject to submission of a proper business plan (rather than a proposal) and issued at the discretion of the agency. The loan will be structured according to the initiative's needs and capacity e.g. in some instances a step-up system could be employed whilst in others a lump sum will be required.

It is recommended that except for particular instances, financial assistance will be issued in the form of a loan. An exception to this may be if a donor gives money to the SIU to be used specifically as seed funding.

Repayment schedules can likewise be negotiated on a case by case basis and entrenched in the contract. It is recommended that repayment be deferred for an initial period (12-18 months) and possibly linked to a sliding scale as the business grows.

The mentorship support agency must ensure that simple, clearly understood information regarding access to and management of finance is available to all SBI's at all times. The agency must also be able to refer SBI's to - and assist them with applying for - various government small business incentive schemes.

It is suggested that a revolving fund be set up with the sum of R2 million.

Possible supplementary income streams might include donor funding for specific projects driven by the SIU; profit from the Industrial Initiatives (once established); commission on use of the Working for Water brand (once established) and other complementary government programmes.

8.4.3 Legal requirements

These are covered in more detail earlier in this Section, but would range from the contractual agreements between the SIU and SBI's and the identification of the most appropriate legal structure for the SBI's e.g. Closed corporation, Pty Ltd., Co-operative, Joint Venture etc.

8.4.4 Raw material supply

An uninterrupted supply of appropriate raw material is central to the success of all SBI's within the programme, irrespective of sub-sector or product type. However, as has been demonstrated (see chapter 4) access to the raw material supply can be fraught with difficulty. There appear to be two alternative models for ensuring access and these include: the SBI controlling the process i.e. cutting, harvesting, processing (e.g. Woodpacker) or the SBI subcontracting the harvesting of the material to a contractor within the WfW clearing programme (e.g. Ceronio Industries)

Of the two, the first is the preferred option, but it is recognized that there are implications around access, transport, the necessary equipment, treatment of the cut area with herbicides etc.

It should be noted that the harvesting of raw materials offers further opportunities for SBI development if transport and basic processing of the materials is considered. Contractors who are graduates of the clearing programme may be interested in collaborating with other (multiple) SBI's in this regard.

It is recommended that the SIU negotiate a mutually acceptable standard agreement with WfW regarding access to and payment for the wood used by SBI's.

8.4.5 Auditing of SBI programme

Annual audits of the SBI programme must be conducted and should include the following:

- financial performance of programme
- financial performance of SBI's (including defaults on loans/loss of money)
- real job creation (in terms of person working days per SBI)
- social impact (biennial?)
- monitoring of people's perceptions (within the SBI's/outside the programme)

8.5 Future organizational structure of the Secondary Industries Unit (SIU)

As has been noted previously (see Chapters 3 and 4), both the existing Secondary Industries pilot projects and the recently created Secondary Industries Unit have, from the start, held equivocal positions within the broader Working for Water programme. The negative impact of this has hampered – and in some instances paralysed – the operations of both.

If the programme is to continue, certain fundamental changes should be implemented to ensure that:

- the SI Unit is clearly mandated to implement the SI programme
- the status of the Unit (legal and operational) and the SBI's (organizational and operational) is formalized within Working for Water
- the SI Unit is equipped with the necessary tools (staff and financial resources) to be effective

8.5.1 Structure of the Secondary Industries Unit (national office)

The staff complement of the SI Unit (national office) should be increased to four people: $3 \times 10^{12} =$

- Research and development (new projects II's)
- Research and development (new projects SBI's)
- Operations (including data collection)
- Communications and market development

It is recommended that the large and small business programmes be separated and a dedicated staff member be appointed to drive the industrial initiatives. This individual will, however, be required to collaborate closely with the rest of the unit especially regarding operations (as they affect the SBI's) and communications.

8.5.2 Responsibilities of the SIU (national office)

8.5.2.1 *General*

- policy development
- fundraising
- development of structures for inter-departmental collaboration
- liaison between SIU and WfW programme

8.5.2.2 Research and Development (II's and SBI's)

- research and development of new business opportunities
- overseeing contractual agreements and other legal requirements

8.5.2.3 Operations and data collection

- assessment of needs (business support and social development programme)
- development of strategies for programme support (including mentoring)
- identification of support service providers

8.5.2.4 Communications and market development

- development and implementation of a communication strategy
- planning and implementation of annual auditing process

8.5.3 Structure of the SIU (regional operations)

The national office of the SI Unit should be supported at regional level initially by three * co-ordinators, each responsible for a specific geographical area as follows:

Northern - Northern Province, Mpumalanga, Kwazulu-Natal

Central - Gauteng, North West Province and Free State

Southern - Northern Cape, Western Cape and Eastern Cape

To reduce costs and optimise opportunities for collaboration, each co-ordinator will operate out of the WfW regional offices. Their responsibilities will include:

■ liaising between the SIU (national) and the various business initiatives (large and small)

^{*} This figure may increase as the programme grows

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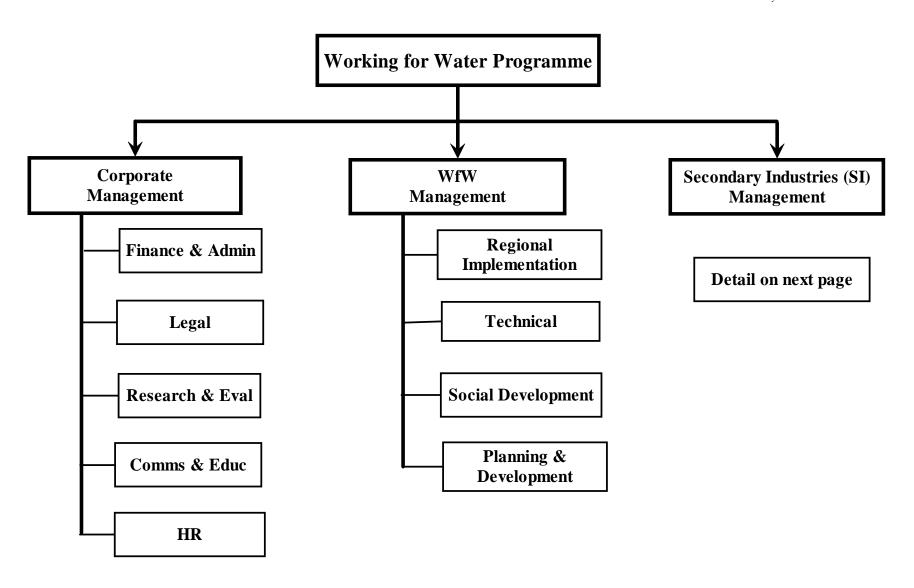
- implementing policy
- optimising synergies between production units
- building communication and support networks and
- ensuring that contractual agreements are honoured (particularly with regard to the large industrial initiatives).

8.5.4 Further recommendations

It is understood that there are plans to implement a series of training courses for project managers in partnership with the Port Elizabeth Technikon through their Saasveld campus. To consist of a series of four week modules focusing on areas such as environmental management and social development, the courses will receive accreditation recognized by the National Qualifications Framework.

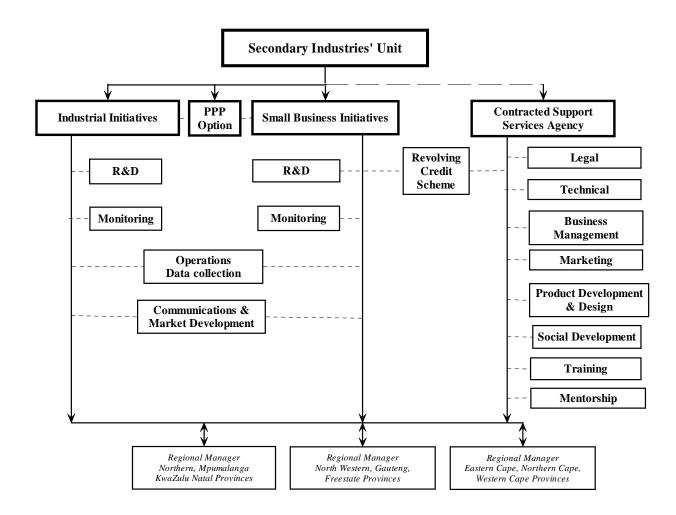
It is *strongly recommended* that a module on Small Business Management and how it relates to the WfW Secondary Industries programme be included in such a course. A better understanding of issues relating to small business will build the capacity of project managers and possibly ensure higher levels of on-the-ground support and co-operation. This can only be beneficial to the sustainable development of Secondary Industries within the broader Working for Water programme.

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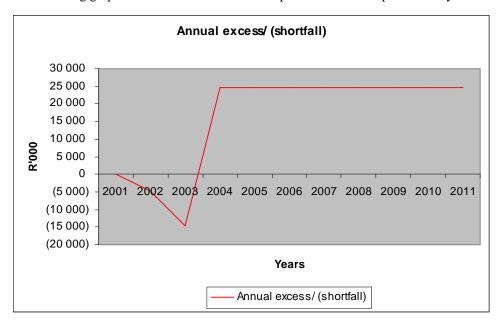
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8.6 Budget and Business Plan for the SIU

The following graph summarises the financial implications of the Options Analysis.



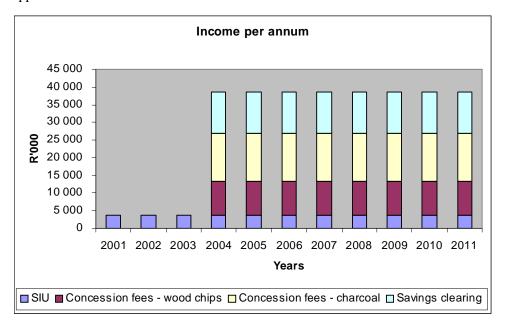
As can be seen from the above, following a two year investment period (including the establishment of a Revolving Credit Facility, setting-up and carrying out development work in respect of the two PPP initiatives, plus a research project into the feasibility of the Organic Fertiliser project) the SIU would be able to generate net income of approximately R25m per annum to support the objectives of the WfW Programme.

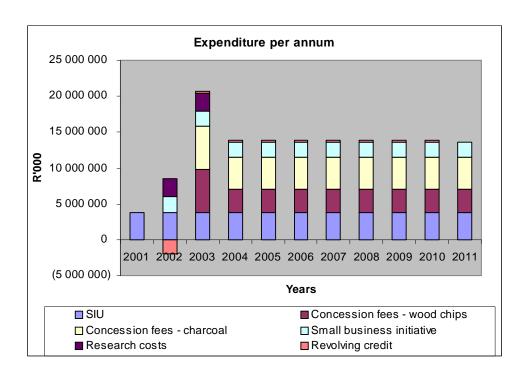
The net income is made up as follows:

Item	Rm
Industrial Initiative (Woodchips) See Note	11.65
Industrial Initiatives (Charcoal) See Note	16.20
Contract management costs	(0.8)
SIU Additional staff	(0.9)
SIU Consultancy support to SBIs	(1.26)
Revolving Credit Facility	(0.16)
Total net income	24.73

Note: The figures shown for the Industrial Initiatives relate to initial pilot studies in respect of specific areas. The potential for roll-out of these studies to other areas would significantly increase these figures.

The detailed assumptions used in the above calculations are given in Sections 6 and 7 and Appendix 6.





9 Action Plan

Within this document we have made a number of recommendations for action in respect of the future development of Secondary Industries. The purpose of this Section of the report is to combine these recommendations and associated actions into a detailed Action Plan, covering the next 18 months, which will allow for a full implementation

9.1 Timetable for action

The attached Action Plan (Appendix 7) provides the detailed Action Plan for the next 18 months – including the progression of two substantial PPP projects (Wood-chips and Charcoal) and a programme of actions to assist Smaller Business Initiatives.

The Action Plan is divided into 4 principal components:

- Project Management;
- Industrial Initiatives PPP projects;
- Small Business Initiatives:
- Re-structuring the SIU within the WfW

9.2 Communications Strategy

A Communication Strategy is attached at Appendix 8. The intention of this document is to initiate a systematic and comprehensive programme of interventions designed to build upon the communication that has already taken place with the various stakeholders.

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Appendix 1

Site Visits: Projects and Service Providers visited

Province and number of projects per Province	Town & Projects visited (not all active)
Active projects with WfW relationships	
Mpumalanga (1)	Nelspruit: Kruger National Park
Northern Province (1)	Tzaneen: Invader-Crafts
Western Cape (5)	Berea: Genadendal Natural Products
	Bot River: Riverside Crafts
	George: Droom Boom
	Grabouw: Ceronio Industries
	Riviersonderend: Natural Décor Creations/Wood Packer
Non-active Projects with WfW relationships	
Mpumalanga (1)	Nelspruit: Educational-Toys
Western Cape (1)	Genadendal: African Forest Industries
Northwest/Gauteng (1)	Brits: Cradle of Humankind (Roman)
Eastern Cape (1)	Qolora: Ikhamanga Permaculture Project
Successful Projects on exit route	
Northern Cape (1)	Prieska, Bio-Log
Unsuccessful Projects on exit route	No projects in this category as yet
Potential projects	
Western Cape (2)	Kommetjie & Gansbaai: Papermaking Project
	Somerset West: Somerset Timbers
Service providers with active WfW relationships	
Western Cape (2)	George: South Cape Business Centre
	Shell – Christo Vorster
Service providers with non-active WfW relationships	
Northwest/Gauteng (1)	Brits: Cradle of Humankind (FurnTrain

Sixteen projects and / or service providers of the WfW SIU, were visited. Table 1: Current projects and / or service providers are distributed in five provinces of South Africa.

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Appendix 2

Site Visits: Score card using the 8 performance criteria

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	Performance crite																								
	Economic															Soc	cial		Eı	ıvir	on	Project			
SI-sector/Producer	l .	Product Assess.			Sales & Market			Manage ment		Financial Profile			Technical Viability				Skil sses			sses			VfV ontr		Value
	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	
Active projects with WfW relationships																									
Western Cape, Riviersonderend: Natural Décor Creations / Wood Packer	82	6	12	100	0	0	67	25	8	38	50	13	73	18	9	100	0	0	63	38	0	100	0	0	485
Mpumalanga, Nelspruit: Kruger National Park	0	0	100	75	8	17	92	8	0	100	0	0	45	18	36	60	20	20	100	0	0	0	0	100	417
Northern Province, Tzaneen: Invader-Crafts	76	18	6	50	42	8	50	25	25	25	63	13	73	27	0	80	20	0	75	0	25	60	0	40	295
Western Cape, Grabouw: Ceronio Industries	59	35	6	100	0	0	42	50	8	38	63	0	55	18	27	80	20	0	50	25	25	60	0	40	272
Western Cape, Bot River: Riverside Crafts	53	47	0	25	58	17	50	42	8	13	38	50	45	27	27	20	20	60	75	13	13	60	0	40	97
Western Cape, George: Droom Boom	59	41	0	67	33	0	50	42	8	25	75	0	55	36	9	60	40	0	63	38	0	60	40	0	92
Western Cape, Berea: Genadendal Natural Products	53	41	6	33	67	0	17	25	58	0	50	50	45	27	27	40	40	20	50	0	50	0	0	100	-18
Non-active Projects with WfW relationships																									

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								P	er	fo	rm	aı	100	e c	rit										
	Economic															Social						Eı	ıvir	on	Project
SI-sector/Producer		Product Assess.			Sales & Marke			Manage ment		Financial Profile				chni abil			Skil sses			sses			VfV ontr		Value
	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	
Mpumalanga, Nelspruit: Educational-Toys	82	0	18	0	0	100	42	0	58	63	13	25	100	0	0	60	40	0	100	0	0	80	0	20	474
Western Cape, Genadendal: African Forest Industries	71	6	24	17	58	25	92	0	8	63	0	38	64	9	27	40	0	60	100	0	0	0	0	100	372
Northwest/Gauteng, Brits: Cradle of Humankind (Roman)	0	0	100	0	0	100	58	8	33	0	0	100	0	0	100	80	0	20	88	0	12	100	0	0	318
Eastern Cape, Qolora: Ikhamanga Permaculture Project	76	18	6	42	58	0	42	58	17	38	63	0	64	18	18	40	60	0	100	0	0	100	0	0	226
Successful Projects on exit route																									
Northern Cape, Prieska, Bio-Log	88	0	12	100	0	0	75	25	0	88	0	12	64	36	0	100	0	0	38	63	0	60	40	0	448
Unsuccessful Projects on exit route																									
No projects in this category as yet																									
Potential projects																									
Western Cape, Kommetjie & Gansbaai: Papermaking Project	59	29	12	50	33	17	50	17	33	25	63	13	55	27	18	60	40	0	75	25	0	0	0	100	139

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	Performance criteria																								
	Economic																Soc	cial		Environ			Project		
SI-sector/Producer	Product Assess.				Sales & Market		Manage ment		Financial Profile			Technical Viability				Skil sses			ocia sses			WfV onti		Value	
	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	F	U	N	
Western Cape, Somerset West: Somerset Timbers	94	0	6	58	0	42	83	0	17	88	0	12	82	0	18	80	0	20	38	38	25	60	0	40	545
Service providers with active WfW relationships																									
Western Cape, George: South Cape Business Centre	65	0	35	100	0	0	100	0	0	75	25	0	0	0	100	80	0	20	100	0	0	100	0	0	596
Western Cape: Shell – Christo Vorster																									
Service providers with non-active WfW relationships																									
Northwest/Gauteng, Brits: Furniture Training	94	0	6	75	8	17	92	0	8	100	0	0	36	36	27	100	0	0	100	0	0	60	20	20	592

The projects are grouped as per the description in 1.4.1.2. The score for the attributes, is expressed as a percentage in this table to normalise the varying numbers of attributes within each section. Table 2:

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Appendix 3

Site Visits: Score card using the performance criteria provided in the Terms of Reference

SI-sector/Producer	Viability (current profitability) Good, Average or Poor	Marketability (of the Product) Good, Average or Poor	Production Potential Good, Average or Poor
Active projects with WfW relationships			
Mpumalanga, Nelspruit: Kruger National Park (fire wood only)	Poor	Good	Poor
Northern Province, Tzaneen: Invader-Crafts	Average	Good	Good
Western Cape, Berea: Genadendal Natural Products	Poor	Good	Average
Western Cape, Bot River: Riverside Crafts	Poor	Good	Poor
Western Cape, George: Droom Boom	Average	Average	Average
Western Cape, Grabouw: Ceronio Industries	Average	Good	Poor
Western Cape, Riviersonderend: Natural Décor Creations/Wood Packer	Average	Good	Good
Non-active Projects with WfW relationships			
Eastern Cape, Qolora: Ikhamanga Permaculture Project	Average	Good	Average
Mpumalanga, Nelspruit: Educational-Toys	Average Average		Good
Northwest/Gauteng, Brits: Cradle of Humankind (Roman)	Poor Good		Average
Western Cape, Genadendal: African Forest Industries	Average Average		Good
Successful Projects on exit route			
Northern Cape, Prieska, Bio-Log	Good	Good	Good
Unsuccessful Projects on exit route			
No projects in this category as yet	No comment	No comment	No comment
Potential projects			

SI-sector/Producer	Viability (current profitability) Good, Average or Poor	Marketability (of the Product) Good, Average or Poor	Production Potential Good, Average or Poor	
Western Cape, Kommetjie & Gansbaai: Papermaking Project	Average	Good	Average	
Western Cape, Somerset West: Somerset Timbers	Good	Good	Good	
Service providers with active WfW relationships				
Western Cape, George: South Cape Business Centre	Average	Good	Average	
Western Cape: Shell – Christo Vorster	Poor	Good	Poor	
Service providers with non-active WfW relationships				
Northwest/Gauteng, Brits: Furniture Training	Good	Good	Good	

The projects are grouped as per the description in 1.4.1.2. The assessment of the projects in terms of viability, marketability and production potential is a specific requirement of the terms of reference. Table 3:

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Appendix 4

Analysis of legal options for the SIU

"AS IS"	
Main features	Advantages
SIU as a unit within WfW Programme, which is set up and funded as an inter-department initiative by DWAF, DEAT and NDA (Agriculture)	Tap into existing infrastructure
Not a separate legal entity (juristic person)	Have access to State resources
Budget determined by supervisory departments	WfW has an existing profile
Powers delegated by relevant department, including powers relating to clearing of invader pla	Support from other Government departments
(and, presumably, powers to deal with the cleared vegetation, either by virtue of it being on St land, or by agreement with private land user)	
	Fixed budget
Neither WfW nor the SIU has any independent powers or duties	No financing ability
	Cannot trade
	SIU poor status within programme
	Departmental red tape (authority)
	Currently appears unable to meet objectives
	No power to enter into contracts

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SECTION 21 COMPANY

	tures

Established in terms of the Companies Act, 1973

Separate legal entity (juristic person) which acquires own rights and liabilities

Board of directors in terms of the Companies Act, with fiduciary duties and duties of care and skill

Limited liability of shareholders

Reporting obligations in terms of the Companies Act

Shareholders do not normally participate directly in the management of the company

Has as its main object the promotion of a cultural or social activity or communal or group interests, and intends to apply its profits (if any) or other income in promoting that main object

Payment of any dividend to its members is prohibited

Would have to enter into an agreement with Government or private land users in order to have any status / control with regard to activities relating to invader plants, and in order to be able to deal with cleared vegetation

Advantages

Quick decision making

Access to external funds

Not restricted by Government procurement rules (if not under direct or indirect Government control)

Flexibility

Power to conclude contracts

Can borrow or lend money, issue guarantees or security (if not under Government control)

Disadvantages

Limitation on distribution of assets

Objective – non profit making company

Insecure funding

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PRIVATE COMPANY

Main features

Established in terms of the Companies Act, 1973

Separate legal entity (juristic person) which acquires own rights and liabilities

Board of directors in terms of the Companies Act, with fiduciary duties and duties of care and skill

Limited liability of shareholders

Reporting obligations in terms of the Companies Act

Shareholders do not normally participate directly in the management of the company

Would have to enter into an agreement with Government or private land users in order to have any status / control with regard to activities relating to invader plants, and in order to be able to deal with cleared vegetation

Advantages

Independent management and decision making

Can raise external finance, lend money and issue guarantees or security

Operates on business principles, for purposes of income-generation

Power to conclude contracts

Disadvantages

Financially unviable

Detached from DWAF

Expensive to establish

Lose control over raw materials unless it operates as an agent of Government (in terms of a PPP?)

NATIONAL GOVERNMENT BUSINESS ENTERPRISE ("NGBE")

Main features

Regulated by the Public Finance Management Act, 1999 (PFMA)

Separate juristic person from WfW and Government

Defined as "an entity which-

- (a) is under the ownership control of the national executive;
- (b) has been assigned financial and operational authority to carry on a business activity;
- (c) as its principal business, provides goods or services in accordance with ordinary business principles; and
- (d) is financial fully or substantially from sources *other than-* (i) the National Revenue Fund; or (ii) by way of a tax, levy or other statutory money".

Money received by an NGBE, does not have to be paid into the National Revenue Fund

Must have an "accounting authority" which is accountable for purposes of the PFMA (usually a Board)

Members of accounting authority have prescribed fiduciary duties in terms of the PFMA

Members of accounting authority have prescribed general responsibilities in terms of the PFMA

Must submit an annual budget and an annual corporate plan (covering three years) to the relevant Department

Must submit prescribed information to the Treasury and the Auditor-General

Advantages

May allow external income to be retained by the programme

Well defined responsibilities of accounting authority and officers of the NGBE

Separate juristic person

Shorter decision making time

Have access to State resources

Power to conclude contracts

Disadvantages

Financed predominantly from external sources

Very limited borrowing powers

Cannot underwrite SMMEs

Restricted by Government procurement policies

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NATIONAL GOVERNMENT BUSINESS ENTERPRISE ("NGBE")

Must get approval from relevant Department, and notify Treasury, before embarking on major transactions (eg establishment in a company, participation in a trust, partnership or joint venture, acquisition or disposal of shareholding or asset)

Annual reporting requirements and financial statements in terms of the PFMA

Accounting authority may delegate powers to officials within the NGBE

Officials other than accounting authority have prescribed responsibilities in terms of the PFMA

Annual financial statements must be audited

May only borrow, issue a guarantee, indemnity or security, or enter into any other transaction that binds the NGBE or the Revenue Fund to future financial commitment if authorised by legislation other than the PFMA

Memorandum and articles of association (if set up as a company) could stipulate main purpose as acting on behalf of the Government to perform certain activities relating to alien vegetation

May have to conclude shareholder compact with Government

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TRADING ENTITY

Main features

Regulated by the Public Finance Management Act, 1999 (PFMA)

Defined as "an entity operating within the administration of a department for the provision or sale of goods or services, and established, in the case of a national department, with the approval of the National Treasury"

Money received by a national department operating a trading entity, does not have to be paid into the National Revenue Fund, as long as it is received in the ordinary course of operating the trading entity

Must have an "accounting officer", who is either the head of the department within which the trading entity sits, or someone else approved by the Treasury

Accounting officer has prescribed general responsibilities (section 38 of the PFMA), and prescribed reporting responsibilities (section 40 of the PFMA), including an annual report and financial statements

The accounting officer may delegate any of his or her powers to an official in the trading entity, or instruct an official to perform any of his or her duties

Officials in the trading entity have prescribed responsibilities (section 45 of the PFMA)

Trading entities allowed to open bank accounts may not borrow for bridging purposes and may not run overdrafts on their banking accounts unless approved by the relevant Department and Treasury (in terms of the Treasury Regulations)

Advantages

Income received by SIU retained by Department receiving money

Same as "as is" position

Disadvantages

SIU poor status within programme

Unable to meet objectives

Departmental red tape (authority)

Lack of flexibility (cheque signing)

Subject to Government procurement policies

TRADING ENTITY				
In determining charges for goods or services, the trading entity must aim to recover the full cost unless the Treasury approves otherwise				
Any surplus or deficit of funds must, at the end of the financial year, be declared to the Treasury				
Accounting officer may not enter into a public-private partnership (PPP) without the prior written approval of the Treasury (Treasury Regulations)				
To determine whether a proposed PPP agreement is in the best interests of an institution, the accounting officer must undertake a feasibility study (in accordance with the Treasury Regulations)				
Same entity as the Department within which the trading entity is situated, so the scope of its activities is determined by Government				

Appendix 5

Marketing recommendations

1 Introduction

National and international trends indicate that there is a growing market for wood or plantrelated products across a variety of sub-sectors. Products can be broadly categorised as follows:

- low value/high volume (charcoal, wood chips etc.); and
- high value/low volume (home décor and functional items such as furniture, woven baskets etc.) also known as "value-added" products.

A vigorous, effective market development plan for current and future product ranges will ensure:

- removal of alien plant biomass;
- the continued growth and sustainability of the Secondary Industries project;
- the creation of further job opportunities (a priority); and
- financial benefits to the Working for Water programme.

In it's role as Transaction Advisor, the Consortium was tasked to evaluate the current marketing strategy of SBI's within the Secondary Industries Programme. Once the preliminary data had been collected, some further market research would be undertaken to explore:

- correct pricing structures;
- alternative markets;
- marketing and promotional options (alternative means of accessing the market).

As in-depth market research was not required at this stage, the focus was on market identification, options for tracking relevant information and the development of recommendations for marketing and market development.

1.1.1 Methodology

In order to achieve these objectives, a series of on-site evaluations were conducted. Field trips to selected projects enabled the team to perform a situational analysis as per the following:

■ The product.

Assessing current product ranges according to: design and technical processes, quality control, production levels (volumes), costing, product presentation, availability of biomass.

■ The market

Reviewing the current customer base (was the producer targeting the correct markets?), together with existing partnerships/joint ventures (if any).

■ Internal marketing capacity of project

Evaluating the internal marketing capacity of project members in relation to established marketing and market development strategies; their understanding of market trends and customer requirements (including on-going product development); their ability to access relevant information as well as communication and negotiating skills.

Operational guidelines and policy framework

Were there any in place? And if so, what were they?

1.1.2 The findings of the site visits report

The site visits report indicates that there is no formal marketing strategy within the Secondary Industries Programme. Nor are there any plans in place to develop appropriate marketing skills.

While there may be some SBI's with the necessary capacity to undertake marketing, the majority do not appear to have reliable access to market information, have few resources to market their products effectively and are fully occupied in the production process, leaving little time for other activities. .

The power of the Working for Water logo and public profile, together with its commitment to poverty alleviation and innovative environmental management, was recognized by all as a invaluable marketing tool both within the South African market and internationally.

1.1.2.1 Evaluation of products

Although there are some initiatives experimenting with charcoal production and firewood, the majority of SBI's within the Secondary Industry programme manufactured products with a significant value added component: Garden furniture, different types of fencing and trellice work, as well as decorative and functional accessories for interiors, make up the current range.

There is a high level of design excellence across most products and ranges are clearly market driven, in line with national and international trends. (The team, however, questioned the capacity of certain of the SBI's to address product development and design needs on an ongoing basis, without external assistance.) The accuracy of costing methods was also a concern and identified as an area requiring urgent attention.

Technical processes were generally found to be in need of improvement and targeted interventions will be necessary in order to ensure quality control and cost-effective

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manufacturing methods. Problems identified ranged from the drying and treatment of the raw material, through to actual production processes. In many instances, the input required in terms of technical expertise and design may be fairly modest, regular mentorship resolving any further problems as they arise.

Several of the SBI's are further hampered by inadequate equipment and badly organized production workshops. Investment in appropriate technology is regarded as fundamental to the long term sustainability of all SBI's as it will reduce production costs, increase efficiency and enable quality control. Hand processes should not be used to no advantage, but rather to increase the uniqueness and value of the final product.

1.1.2.2 Evaluation of current markets

With the possible exception of Woodpackers and Ceronio Industries, which have export linkages in Europe and the United States, none of the SBI's has established regular outlets for their products. Most receive orders intermittently (mostly from private customers rather than retailers), while lack of resources and problems with production have limited their capacity to access the market with confidence, even when the opportunity arises. The building of a local and national - customer base for SBI's requires urgent attention, but is directly linked to resolving certain fundamental problems as identified previously.

There are also serious concerns with regard to distribution. Issues of isolation and access are particularly relevant to SBI's such as Invader Crafts, Genadendal Natural Products and (potentially) Ikhamanga Permaculture Project which have to transport their products considerable distances from production point to (even a local) customer base. They will require some form of distribution support network to serve as their interface with the market.

1.1.2.3 Marketing skills and capacity of producers

Although certain of the SBI's have the confidence and 'self-starter' approach required for successful marketing, the majority are either too busy producing or lack the necessary skills to compete successfully (Woodpacker and Ceronio Industries, once again, being the exceptions). Likewise, most SBI's have produced marketing materials in some form, but standards of lay-out/design and information vary considerably.

Many rural producers operate almost in isolation and do not have the financial resources either to travel to urban centres on a regular basis or acquaint themselves with market trends via the Internet or expensive décor/lifestyle magazines.

There is a need both for a training programme in marketing skills and a co-ordinated market development strategy if SBI's within the Secondary Industries programme are to achieve sustainability.

1.1.2.4 Impediments to success – a summary

Impediments to success in the marketing arena can be summarized as follows: lack of production capacity, limited financial resources, lack of marketing skills, poor marketing tools, difficulties with accurate costing ('wholesale' prices are not properly understood and frequently do not allow retailers sufficient mark up), issues of distance and isolation, transport and distribution and (possibly) a lack of capacity for on-going market driven product development and design.

1.1.3 Market profile

The market has been broken down into retail and wholesale opportunities together with a profile of what the 'typical' buyer may look like in terms of status, income and outlook. Details are summarized below as follows:

1.1.3.1 Retail/wholesale opportunities

- garden centres;
- lifestyle stores;
- DIY centres (fencing and other semi-industrial items);
- up-market florists (plant design studios);
- public gardens and official residences;
- game parks and lodges;
- broader hospitality industry.

1.1.3.2 The buying public *

- mid-thirties fifties (although certain décor/accessory items will also appeal to a younger age group both in terms of design and affordability);
- high achievers with expendable income;
- socially and environmentally aware;
- (young) optimists pursuing traditional family lifestyles.

1.1.4 Analysis of marketing options (domestic market only)

Data gathered during the site visits informed the options analysis which may be used as the basis for the development of an integrated marketing strategy. Clarification of the future roles of both Working for Water and the various SBI's in building and accessing markets

^{*} probably drawn from largely metropolitan centres

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was recognized as being of central importance in this process (*See 10.6*). Options short listed for serious consideration may be summarized as follows:

1.1.4.1 Wholesale

Strategies for approaching this option and would include: the appointment of a marketing agent (or agents); the appointment of a distributor; the development of a Working for Water warehouse; a franchise; participation in Trade Fairs.

A marketing agent (regional or national)

This option may be implemented in the following ways: (1) Identifying *a professional agent* with a proven track record, complementary product range and established client network in the right market and linking them to the established SBI's with capacity to deliver. Once the linkage is made, it will be the responsibility of the SBI to develop the relationship further and any negotiated contract will be between the SBI and the agent only. The identification of the agent could be the task of the support services agency (see Chapter 8) and the role of the SIU would be that of monitor only (if that).

It should be noted that most agents generate income through selling for a commission of between 15-25%. They will usually only take on products that they are sure will sell and be delivered on time and may be reluctant to take on untried products that are unconventional. This is probably not an option for 'testing the market' or capacity building SBI's still in need of extensive hand holding and support.

- (2) Appointing a WfW marketing agent* who will take the products of both established and developing SBI's to shops to get orders; who will feed comments from the market back to producers and who will liaise with the support services agency to ensure the SBI receives assistance when necessary. This agent would require a monthly retainer and also a commission on sales. Although most agents work on a commission basis only, this would not be appropriate in these circumstances (capacity building will also be done here if required)
- * There may be opportunities for collaboration in this regard with certain provincial government departments, for example, the Department of Economic Affairs, Agriculture and Tourism (W. Cape) or the Department of Cultural Services (W. Cape). Both have support programmes for SMME's in the craft sector and may be interested in a pilot exploring this option. Collaboration would compromise independence, however and may be tricky to implement.
- (3) A variation on the above, this time utilizing an SBI currently within the programme to market on behalf of the others. If this option is selected, a contractual agreement would have to be signed and a monthly retainer and commission on sales would still be necessary. A major advantage of this option would be an 'inside' knowledge of the programme and an understanding of the challenges facing producers. An SBI fulfilling this function could play

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a mentoring/training role, also. Possibilities for this position would include Woodpacker and Ceronio Industries both of whom have expressed an interest in marketing products for other members of the SI programme.

A distributor

Once there is an established demand for the WfW product range, it may be in the interests of the programme to identify and appoint a distributor with an existing network. Belief in and commitment to the objectives of the programme, coupled with a conviction that they can make money from the deal would provide powerful motivation for good performance by the distribution partner. The Pick 'n Pay and Checkers Hyperamas are well-known examples of large scale distributors, however it is recommended that this marketing option be piloted on a far more modest scale through a chain of garden centres, such as Stodels Nurseries or some similar organization. The popular profile and physical positioning of the chosen distributor are critical to success.

A Working for Water SI Warehouse

This option would entail setting up a warehouse in a nodal point such as Cape Town, Durban or Johannesburg from where all products manufactured in the SI programme could be marketed to trade buyers (local and overseas). If the proposed system of accreditation for use of the WfW brand is implemented, the warehouse could become a marketing point for all accredited items, also. It might be worthwhile structuring this as a marketing co-operative with all stakeholders (including the SIU) having equity in the venture.

A franchise

The marketing of Working for Water products through a series of retail outlets run by franchisees who have paid for the privilege of selling items produced under the programme brand. Although a popular marketing mechanism internationally, the option carries a high financial cost and risk to SIU and should not be the first considered or followed. Preliminary processes would require a project manager to evaluate, structure and set up the franchise shops with its support "head office". The financial and operating advantages to the franchise holder are excellent, but sustaining the infrastructure is costly.

Participation in Trade Fairs

Whether building a domestic or export market, participation in Trade Fairs forms a critical component of any successful market development strategy. Not only does a Fair enable producers to test their ranges in a rigorous market place, but it allows them to make contact with - and receive direct feedback from – buyers with regard to designs, product quality and price points. Exploring the Fair and evaluating what other manufacturers are doing, can also aid participants in identifying trends as to colour, texture and design, while the opportunity to negotiate with buyers, take orders and process them afterwards builds other essential skills. Aid to Artisans (U.S. craft marketing agency with international operations) considers

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participation in Trade Fairs so integral to the successful development of marketing skills that they organize a twice-yearly workshop around the New York Gift Fair (February and September) which is used as a practical vehicle for transferring expertise to participants from around the world.

1.1.4.2 Retail

Strategies for approaching this option would include:

WfW branded retail outlets

The SIU would negotiate to operate 'bijou' promotional showcases selling WfW branded products from the premises of selected stores over peak holiday periods. Functioning as 'shops within shops', everyday running of the outlets would be the responsibility of programme members collaborating in the initiative. Implementation of the project would be the responsibility of a dedicated co-ordinator (probably drawn from, or appointed by, the support services agency, possibly even a participating SBI) with the SIU playing a monitoring role only, once the negotiations have been completed.

SBI's participating in the scheme would be required to make a contribution towards rental and set up costs as a set payment on a weekly or monthly basis. It is recommended that there be an application process and selection made according to agreed criteria. Standards of excellence must be high and SBI's should earn the right to participate.

Potential outlets could include the Natural World Store (Kirstenbosch), visitors' centres at major destinations (such as Table Mountain, the Kruger National Park) as well as garden centres and DIY stores. Major retail chains, such as the Tourist shops (Tiger's Eye etc.), should also be approached. Initial start up costs could be high and it may be necessary to motivate for specific donor funding for such an initiative.

E-commerce (WEBSITE)

Although developing an on-line selling facility may form part of a medium to long term marketing strategy, it would be sensible to approach this option incrementally. Linking with the website of a major bank or other suitable partner and offering the WfW range as an 'exclusive' short term promotion may provide a low-cost alternative in the short-term. Issues around the processing of orders and distribution would have to be resolved to ensure a stream-lined delivery service.

Mail order

While establishing a mail order capability may be a very effective marketing tool, it is also time consuming and costly. It may be of interest to approach an existing sales house (e.g. Heritage Collection) and negotiate a pilot project as a sub-section of an existing product category. Alternatively, it may be worthwhile approaching a national or international body

with complementary interests to Working for Water, such as the World Wildlife Fund (which has a modest Christmas catalogue), and negotiating a pilot through them. streamlined delivery service would be essential to this option, also.

Other direct marketing opportunities

Options would include participation in craft markets and visitors' programmes attached to special events e.g. National Arbour Day, National Water Week, Klein Karoo Nasionale Kunstefees, the Hermanus Whale Festival etc. Participating in a live demonstration programme, or manning a sales point, links producers directly to the market and provides multi-faceted opportunities for training and capacity building. Some of the advantages of direct marketing may be summarized as follows:

- Higher profitability to the producer (or the perception thereof);
- Locals and tourists alike prefer to buy from the producers themselves as this is a more colourful, less sterile experience and emphasises that the work is made by locals;
- In having a direct interface with the buying public, producers get immediate feed-back from the consumer and adjust their products accordingly;
- Producers are frequently unable to stop producing whilst they sell their products and need to be able to market in a make-whilst-selling situation.

1.1.4.3 High volume/low value products

The charcoal and wood chip products have well-established marketing and distribution channels and should be produced and priced to be competitive. Care should be exercised in selecting the strongest marketing and distribution opportunity for each.

1.1.5 **Recommendations - Guidelines for marketing success**

Small-scale producers need to market and sell co-operatively and to have access to market feedback to guide product development. Many crafters are either too busy producing to market or do not have the necessary skills. A joint marketing programme is needed to develop both the domestic and export markets.

The following section is not the outline for a marketing strategy, but rather a brief summary of essential marketing suggestions that may be used in the development of a strategy.

1.1.5.1 A phased (3 tier) approach

As the site visits report has indicated, SBI's within the programme are at different stages of development. It will be necessary, therefore, to use a phased approach to the development of markets and marketing skills.

In some instances, SBI's will need little in the way of training or building production capacity, but require assistance in growing their market through attending trade fairs, producing the right kind of marketing materials etc. SBI's with little knowledge of the market or serious infrastructure and production problems, however, will need a much more intensive input from support services agencies both to increase production capacity and to build personal marketing skills.

It is recommended that a marketing support programme (a marketing incubator) be designed around introductory, intermediary and graduate grades with SBI's operating at "graduate" level automatically moving on to an exit plan. (See Chapter 8 for further discussion of this approach.)

Cost implications for the programme will probably be high and it may be necessary to lobby for specific donor funding. International craft marketing agencies such as Aid to Artisans (U.S.), Tradecraft (U.K.) or Protrade (GTZ/Germany) may be potential partners, at least, in the development of export marketing skills, but usually demand matching funding.

The importance of the four 'P's' 1.1.5.2

In any marketing strategy, it is essential to ensure that the four 'p's' are covered. They consist of the following:

- *Product* Having the right product, driven by market demands and trends.
- Price Selling the product at the right price for the market, but still covering costs and making a profit.
- Packaging (presentation) Presenting the product in the strongest, most attractive way to capture the consumer's attention.
- Promotion Understanding the product's market niche and building its profile in the market place with the right marketing/advertising campaign.

Understanding the target market

Taking the trouble to analyse and understand the target market is an essential investment. Most producers operate with scarce resources initially and a proper knowledge and understanding of the market not only ensures that product ranges are designed in line with market trends but their promotion aimed at the correct market segment.

1.1.5.3 Domestic versus export markets - A two phased approach

In building a market, it is important to target the local (domestic market) first so that important lessons can be learnt regarding production, quality control, customer services and cash flow. Although the export market appears to offer dazzling returns, many producers have suffered bad experiences initially because they did not first address the following:

Market research – Many first-time exporters do not undertake adequate research and either try to enter the wrong market for their product or do so at the wrong price

Price – South African producers cannot compete with low production costs in the East and other parts of Africa

Quality control – South African crafters have much to learn about the importance of high, uniform quality standards

Production capacity – overseas buyers usually place high volume orders and most South African crafters do not have the capacity to fill the orders within a required timeframe, while in some instances producers have difficulty buying sufficient raw materials (for production). Failure to meet a delivery deadline usually leads to the cancellation of an order.

Administrative infrastructure – many crafters do not have the necessary infrastructure or experience to service international clients (are they customer driven? do they understand customer care?)

Product design – South African crafters need to adapt their products to follow international trends more closely (while maintaining an indigenous identity). They also need to expand their ranges through the development of new products on a regular basis, in line with common international practice

Cash flow – Many first-time exporters do not realize the long turn-around times involved in export: producers can wait 3-6 months for payment and this delay can bring a once-flourishing enterprise to its knees if proper planning has not been done.

1.1.5.4 Market penetration and development

Sufficient 'lead time' must be built into every marketing strategy for maximum effect to be achieved. Critical success factors include: timing, alignment with other campaigns (departmental/private sector/public relations) and co-operative marketing initiatives. There are a number of essential tools to assist the process, some of which are briefly described below:

Product presentation - The importance of branding

In an age where brand 'chic' and brand loyalty are immensely powerful consumer forces, the value of a strong brand cannot be over estimated. As has been noted previously the Working for Water name and logo (and all they represent) are already extremely valuable marketing tools, massive resources (financial, media, public relations) having been invested over the years in building their profile.

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It is the opinion of the consortium that unless there are powerful legal or procedural reasons as to why the existing WfW brand cannot be used for the marketing of SI products, no changes should be made in this regard. Should it be necessary to develop an independent brand, no drastic changes should be made until extensive market research has been conducted. The development of a brand is usually an expensive design and marketing exercise and would require a significant investment by the SIU over a number of years.

There are a number of international examples where merchandising or trading facilities developed as an extension of a parent organization's core business have retained the original logo of the parent structure. The merchandise and retail outlets of the National Trust in Britain (architectural and landscape conservation trust) are an excellent example of this: product ranges are immediately identifiable to most members of the public thanks to the familiarity of the National Trust brand.

Quality and excellence associated with branding must be sustained with continuous quality audits by SIU staff or appropriate appointed agency. This process can be expensive, but is critical to the building and maintenance of brand loyalty e.g. Woolworths products are generally associated with quality in the public conciousness while BMW is associated with "German precision engineering" etc.

Finally, branding should not create a generic brand only, de-emphasizing difference which in the handmade sector is a strength. The uniqueness of a producer, studio workshop, area, region and product must be nurtured and used as a marketing instrument in conjunction with the brand. *Wherever possible, uniqueness must be stressed.*

Product presentation - Packaging

While it may not be possible to package big items in the WfW SI range (e.g. furniture or fencing!), professional presentation of even the largest product would include an attractive label, or swing ticket. Integrated into the label design should be the programme logo as well as a brief description of the product: its origin, history, who made it etc. While an eyecatching label, telling a heart-warming story, will not sell a badly manufactured or unattractive item, it can be the deciding factor if a consumer is hesitating for some other reason, for example, price. To their detriment, producers frequently underestimate – or are not aware of - the value of packaging and presentation.

Projects for market development

Initiatives which would be used in a well-planned market development strategy would include:

- A programme of trade shows * (domestic and international);
- Promotional events (including National Water Week, Arbour Day etc.);
- Media campaigns and advertising;

• Opportunities for joint venture development (including Department of Trade & Industry, Fair Trade organizations etc.).

* As trade shows are expensive, the SIU should carry the cost of shows and co-ordinate the promotion of the SBI's products at these opportunities

Further practical tools

- Magazines/target publications for effective market outreach e.g. lifestyle magazines, inflight publications etc.
- Press (supply a continuous flow of new angles, stories and initiatives to invite positive discussions particularly on radio and press).
- Television coverage wherever possible.
- Direct marketing campaign (brochures).
- An interactive internet site.
- A visiting journalists' programme.
- Use of corporate merchandising (stickers, key rings, calendars, maps).
- Lobby for 'flagship' opportunities (festivals, events, destinations).

1.1.5.5 General recommendations

- Resolve production and administrative shortcomings before aggressively expanding market profile (is the SBI able to supply and process orders, if not it should be outsourced).
- Focus limited marketing resources on those markets most likely to yield a return.
- Establish partnerships between the public and private sectors to ensure the success of marketing actions and cost-effective use of limited resources.
- Create linkages and partnerships with entities and initiatives in other regions thereby increasing market impact (note possible linkages with tourism and a possible "WOOD ROUTE").
- Build on existing products while developing new ones.
- Cultivate products and product designs which are uniquely South African.
- Seek, identify and build on a competitive edge.

1.1.6 The role of WfW and the SIU

While it is recognized that the sustainable development of the Secondary Industries programme is integrally linked to the successful development of markets, the consortium recommends that the SIU outsources this function rather than becoming involved in performing it themselves. Playing the role of "arm's length" facilitator, the SIU can be extremely effective in creating an enabling environment for market development through the following means:

- providing assistance to SBI's in the development of appropriate marketing materials (either a group catalogue or individual brochures).
- developing and funding a programme of participation in appropriate marketing events e.g. craft markets, promotional showcases, trade fairs etc.
- making contact with and negotiating initial collaboration around various marketing options where official 'weight' would be helpful in the start up phases (see 10.3.1 and 10.3.2).
- negotiating with other government departments around special access to certain programmes and incentive schemes e.g. the DTI Export and Market Incentive Assistance scheme (EMIA).
- drawing up operational guidelines and a policy framework (e.g. adoption of fair trade principles).
- facilitating the development of a WfW Secondary Industries trade association etc.

Implementation of SIU policy and the day-to-day running of the market development strategy should be the responsibility of an outside agency, either the suggested support services agency (see Chapter 8) or some other suitable entity.

1.1.7 The Wood Works brand

The Working for Water programme has drawn up a Trading Framework to which businesses wishing to participate in the programme must adhere.

1.1.7.1 Review of current Trading Framework

While the team supports the principles and objectives informing the current Trading Framework which are in line with internationally accepted standards of Fair Trade practice (i.e. promotion of 'fair, social and environmentally sustainable development'), it is their view that the Trading Framework is unusable in its current form.

Over prescriptive and unrealistic, it is almost certainly impossible for any business entity to meet its requirements and maintain a sustainable enterprise.

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1.1.7.2 Recommendations

There are two potential options as follows:

- The Trading Framework should either be suspended in its entirety, subjected to a rigorous review process and extensive re-worked; or
- The Trading Framework is retained and used as a score card against which SBI's within the programme and those wishing to join the programme are tested. An acceptable minimum 'pass figure' will have to be established.

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Appendix 6 Detailed financial assumptions

	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011
Income	3 800 000	3 800 000	3 800 000	38 550 000	38 550 000	38 550 000	38 550 000	38 550 000	38 550 000	38 550 000	38 550 000
Working for water programme funding											
SIU	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000
Concession fees											
'Wood chips				9 500 000	9 500 000	9 500 000	9 500 000	9 500 000	9 500 000	9 500 000	9 500 000
'Charcoal				13 500 000	13 500 000	13 500 000	13 500 000	13 500 000	13 500 000	13 500 000	13 500 000
'Organic fertiliser											
Savings - clearing											
'Wood chips				5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000
'Charcoal				6 750 000	6 750 000	6 750 000	6 750 000	6 750 000	6 750 000	6 750 000	6 750 000
'Organic fertiliser											
Expenditure	3 800 000	8 480 000	18 480 000	13 820 000	13 820 000	13 820 000	13 820 000	13 820 000	13 820 000	13 820 000	13 820 000
Working for water programme											
SIU	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000	3 800 000
Additional costs											
Wood chips											
'Indirect running costs				2 850 000	2 850 000	2 850 000	2 850 000	2 850 000	2 850 000	2 850 000	2 850 000
'Contract management and monitoring											
Set up			6 000 000								
Annual running costs				400 000	400 000	400 000	400 000	400 000	400 000	400 000	400 000
Charcoal											
'Indirect running costs				4 050 000	4 050 000	4 050 000	4 050 000	4 050 000	4 050 000	4 050 000	4 050 000
'Contract management and monitoring											
Set up			6 000 000								
Annual running costs				400 000	400 000	400 000	400 000	400 000	400 000	400 000	400 000
Small business initiative											
'SIU staff		900 000	900 000	900 000	900 000	900 000	900 000	900 000	900 000	900 000	900 000
'Consultants		1 260 000	1 260 000	1 260 000	1 260 000	1 260 000	1 260 000	1 260 000	1 260 000	1 260 000	1 260 000
Development costs		2 520 000	2 520 000	300	300	300	500	000	000	500	300
Revolving credit facility			(2 000 000)	400 000	400 000	400 000	400 000	400 000	400 000	400 000	400 000
Repayment of credit facility			(/	(240 000)	(240 000)	(240 000)	(240 000)		(240 000)	(240 000)	(240 000)
1.1.7				(=)	(=)	(= : = = 00)	(= : = = = =)	(= .5 500)	(= : = 300)	(= : = = = =)	(= : = = = =)
Excess/ Shortfall	0	(4 680 000)	(14 680 000)	24 730 000	24 730 000	24 730 000	24 730 000	24 730 000	24 730 000	24 730 000	24 730 000

Income assumptions

Wood chips		
Direct cost		
Production (Acacia)	tons pa	100 000
Tons per ha clearing	tons	60
'Ha to be cleared		1 667
Standing value in WC	R/ton	95
Income		
Mill delivers price Richard Bay	R/ton	290
Expenditure		
Rail	R/ton	130
Short haul and loading (15km)	R/ton	25
Fell, debark and extraction	R/ton	40
Direct Profit	R/ton	95
Income per annum		9 500 000
Current cost of clearing		
SIU	per ha	3 000
Clearing cost per ton	R/ton	50
Saving (clearing cost incl. in production cost)	per annum	5 000 000
New jobs created		
1 person can clear xxx Ha		13.8 (Dependant on density)
Number of ha to be cleared		1 667
Additional jobs created		121

Charcoal		
Direct cost		
Production (Acacia)	tons pa	45 000 Charcoal
	tons pa	135 000 Wood
Recovery rate		3 (3 part wood for 1 part charcoal)
Tons per ha clearing 'Ha to be cleared	tons	60 Acacia 2 250
	D /4	= =
Standing value in WC	R/ton	95
Income		
Selling price	R/ton	1 000
Expenditure		
Rail	R/ton	700 (incl rail, clearing, finance)
Short haul and loading (15km)	R/ton	
Fell, debark and extraction	R/ton	
Direct Profit	R/ton	300
Income per annum		13 500 000
Current cost of clearing		
SIU	per ha	3 000
Clearing cost per ton	R/ton	50
Saving	per annum	6 750 000 (clearing cost incl in production cost)
New jobs created 1 person can clear ? Ha		13.8 (dependant on density)
Number of ha to be cleared		2 250
Additional jobs created		163

Organic fertiliser			
Market demand	tons	80 000	
Profit to WfW	R/ton	87.5	

Cost assumptions

Wood chips	
Other indirect costs	2 850 000
Gross income per ton	95
Number of tons	100 000
Operating cost as a % of gross income	30% 29

Charcoal	
Other indirect costs	4 050 000
Gross income per ton	300
Number of tons	45 000
Operating cost as a % of gross income	30% 90
Retort Kiln	250 000 (Recovery rate of
	3:1)

Contract management and monitoring		
Cost to set up contracts		6 000 000 once-off
Monitoring cost		
Number of people needed		2
Average salary	per person	200 000
		400 000 Annually

Small business initiative		
Number of people within SIU to cover core areas	4 (finance legal, technice etc.	,
Average salary per annum	skills) 150 000 600 000	
Co-ordinating team within SIU	2	
Average salary per annum	150 000 300 000	
Support from consultants		
Number of consultants required	4	
Number of hours per annum	1 800	
% of time required by SIU	70%	
	1 260	
Average charge per hour per consultant	250 1 260 000	

Development costs		
For first 2 years		
Number of people	4	
Number of hours per annum	1 800	
Average rate per hour	350	2 520 000

Revolving credit facility		
Initial funding		2 000 000
Repayment 'term of loan 'interest free loan	5 yrs	
Annual repayment Recovery rate	60%	400 000 240 000

Appendix 7

Action Plan

Appendix 8

Communication strategy