



Submit by 21 January 2005 ref 14-050

DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 13 COMPETITION:STAGE 2

Please read the Guidance Notes before completing this form. Applications will be considered on the basis of information submitted on this form and you should give a full answer to each question. Please do not cross-refer to information in separate documents except where invited on this form. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Keep within word limits.

1. Name and address of organisation

Name: GardenAfrica	Address: 1a Gresley Road, Whitehall Park London, N19 3LA
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2. Project title (not exceeding 10 words)

Africulture Centre

3. Project dates, duration and total Darwin Initiative Grant requested

Proposed start date:	May 2005	Duration of project:	4 years		
Darwin funding requested	Total	2005/6	2006/7	2007/8	2008/9
	(£)300,000	(£)147,226	(£) 55,712	(£) 48,531	(£) 48,531

4. Define the purpose of the project in line with the logical framework

To promote sustainable management of botanical resources - for food, medicine, crafting and other economically beneficial activities - supporting traditional health care & livelihood development by fostering the technical skills of traditional healers, small-scale producers, suppliers and informal traders in the Eastern half of the Albany Centre of Floristic Endemism (Eastern Cape Province of South Africa) providing access and training in cultivatable alternatives, and through this, contributing to the conservation in this biodiversity hotspot.
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5. Principals in project. Please provide a one page CV for each of these named individuals

Details	Project Leader	Other UK personnel (working more than 50% of their time on	Main project partner or co-ordinator in host country
Surname	McAllister	Simmonds	Murray
Forename (s)	Georgina	Monique	Susan
Post held	Programmes Director	Head of Sustainable Uses of Plants Group	Manager
Institution	GardenAfrica Project (GAP)	Royal Botanic Gardens, Kew.	Umthathi Training Project
Department	Southern Africa Programme	Jodrell Laboratory	Projects Department Africulture Centre

6. Has your organisation received funding under the Darwin Initiative before? If so, give details

No

7. IF YOU ANSWERED NO TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)**Aims (50 words)**

- To promote agro-ecology as a means of addressing vulnerability – improving health & advancing livelihood opportunities.
- To develop community capacity to assess needs, target objectives, and identify appropriate and sustainable responses.
- To promote and support organisations upholding a belief in appropriate social plant use to address both social needs and environmental imperatives.

Activities (50 words)

- Cultivate community land for sustainable production of food and medicinal plants.
- Train local people to work with educators and health professionals to promote use of plants which support vulnerable & immune-compromised communities.
- Facilitate inter-generational exchange of knowledge on uses of plants to support intra and inter-community trade and co-operation.

Achievements (50 words)

Research & working partnerships via introduction of GardenAfrica in UK

Research of institutional & civil society frameworks to optimise development strategies – South Africa & Swaziland.

Network of field partnerships to develop cross-cutting approaches linking health, agriculture, environment & education.

Palliative health care programme - food & medicinal gardens at hospitals & clinics providing skills training for 26,000 people affected by HIV/AIDS.

Schools for Sustainable Science pilot – integrating educator training - included in national workshops to discuss the future of EE in SA. Expanding to 10,000 children.

Sustainable village project – combining education, health & resource training. KZN, SA.

8. Please list the overseas partners that will be involved in their project and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. What steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? Please provide written evidence of partnerships.**The Umthathi Training Project & the Medicinal Herb Association (MHA)**

Umthathi will put its 12 year experience in community development in Grahamstown to good use as the core contributor to the Africulture Centre. In so doing they have secured a 20 year lease on the 3 hectare site from the Local Government authorities, establishing strong links with Rhodes University to enhance long-term sustainability. Umthathi has already established contact with local traditional healers at its small community-based nursery in Grahamstown.

Umthathi will be responsible for day to day management of the project, identifying project trainers and stakeholders, and is in the process of undertaking an extensive rural outreach assessment towards the identification & establishment of producer networks & wider training. They have now developed local & national advocacy links with Biowatch and SANBI.

The core stakeholder group, discussed here as the *Medicinal Herb Association* (MHA), will be formalised via registration (the *actual* name will be chosen by the group), and will get underway once funding has been secured, allowing the Project to formally begin work. The MHA may incorporate a newly established *Medicinal Herb Forum* (inclusive of Government Departments of Water Affairs and Forestry and Economics, Environment and Tourism) formed within the Greater Target Area to continue the work of the SANPAD (see below). The MHA will also form partnerships with the national association of indigenous health practitioners and other related associations.

The MHA will be the major means of forging necessary communication channels between formal

and traditional health care in the area. Examples of this include disseminating information on species toxicology research to the traditional healers to improve safety of remedies and workshops will include training in new legislation and associated mechanisms relating to indigenous plants and formal health care. It is envisaged that the will MHA play a major advocacy role to ensure that the draft legislation on the protection of indigenous knowledge rights is properly compiled and promulgated.

With close support from Kew and its partners in South Africa, Umthathi & the MHA will assess the environmental and cultural viability of medicinals to be selected for cultivation. Criteria for selection also include *inter alia* economic viability for growers, conservation status of species, the degree of formally researched pharmacological data for each species and viability of cultivation under localised bio-physical conditions.

The MHA will be charged with providing lists of plants used in preparations, from which endangered wild varieties can be identified for planting on site. The MHA will also gather together their network of formal and informal traders/harvesters in order that they may be included in resource training beginning in the second year. With Umthathi, the MHA will form the nucleus of any benefit-sharing agreements with UK partners. Working to expand its network of traditional healers over the first year, Umthathi & the MHA will develop training methodologies to foster the knowledge base & technical skills of healers, informal traders and small-scale producers, including emerging farmers. By creating an enabling environment, the project will provide mechanisms for participant, and other associated groups to identify priorities & structure appropriate responses to urgently needed conservation management & community development.

The MHA will also provide information about locations of in situ populations of certain species, including non-medicinals, such as endangered cycads - cultivation of which will form a lesser part of the Project. Research into, and eventual processing of, creams & tonics at the Project site to mitigate the effects of opportunistic infections such as psoriasis, oral thrush and TB will be developed in conjunction with the MHA, and will eventually be disseminated by the traditional healers to their HIV/AIDS patients to supplement other treatments. These phyto-products will be analysed & validated in-house by Kew, having first acquired PIC, and having reached a mutual understanding in the form of an MOU. Kew will work with MHA to produce basic monographs to support development of quality locally produced products. The viability of these treatments fulfilling local legislative requirements for use in, and marketing to, formal health care, and the nature of profit sharing agreements will be evaluated during the course of the third and fourth years.

The following partners will be fully involved – whilst reporting directly to Umthathi :

EarthWorm Productions (EWP)

EWT began participatory design & planning to develop 8 cross-cutting pictorial booklets in Xhosa & English – covering: HIV/Health, Water (storage and re-use) & Sanitation, Soil, Plant Identification, Nutrition, Nursery Design, Recycling Technologies, and Informal (squatter) Settlement Design. 4 of the 8 booklets have now been prepared for the first print run of 1000 copies. With support from the Depts. of Agriculture & Education, both of which have been charged with provision of environmental education (EE) in the province, work has begun to consolidate various & disparate training materials. EWP will continue to monitor the use of these materials throughout the project cycle.

Specialists in nursery design, EWP have also contributed to the design & planning phase of the nursery, and will provide training & assistance to key members of the nursery staff throughout.

The Centre for Applied Social Research and Action (CASRA) Rhodes University

CASRA is an institute attached to the Psychology Department at Rhodes University, which aims to build bridges between the academic community and other organizations (such as business, NGO's and government departments), through the provision of appropriate and useful research, namely Action Research. Action Research may also be understood as a process; a continuing series of events and actions taking place in a cycle in which research is followed by change activities. Gary Steele is one of the founding members, lecturing in the Psychology Department at Rhodes – with a specialisation in Survey Research, Behavioural Statistics, and Community Intervention. Once funding has been secured and stakeholder relationships crystallised, CASRA (with Gary Steele as

co-ordinator) will be assisting Umthathi in researching and designing the stakeholder information sharing and training workshops that form a major part of the first year of the Project, and will likely input on Umthathi's internal impact evaluation indicators for the Africulture Centre Project.

Governance Mechanisms

To ensure the benefits of the project will continue despite any staff changes within Africulture Centre - a *Senior Management Team*, under the direction of Umthathi's Projects Manager and Africulture Centre Co-ordinator, Susan Murray, will manage the Project. This team will also provide a Centre Manager (CM) and a Financial Administrator (FA) to support the team in all aspects of AC administration and co-ordination. The CM will facilitate and respond to the priorities of the *Senior Management Team*, which will be collectively responsible for drawing down funds, monitoring expenditure and contracting technical assistance.

A *Project Steering Committee* comprising GardenAfrica, the Umthathi Projects Manager, and Umthathi botany and biodiversity specialist consultant and Umthathi Training Manager and chaired by the Member of the Executive Council or his/her representative, will convene monthly during the first year of the project. The frequency of such meetings will be reviewed thereafter. Working partnerships based in the UK and South Africa presents obvious challenges – which may be readily overcome, the group having given consideration to virtual communication, if physical meetings are not possible.

An *Advisory Board*, comprising key provincial and national stakeholders, representatives from local universities, other provinces, other sectors, Umthathi, CASRA, EWT, SANBI & GardenAfrica will meet every six months. The Advisory Board will provide advice and mediation to assist with implementation and receive monitoring and evaluation reports. One of the Advisory Board's meetings will coincide with receipt of the annual evaluation reports.

Individuals and field resource bases may also be used for a range of other activities including operational research, monitoring and evaluation. The full strategy will be established during the first six month mobilisation phase, once the CM has been appointed.

9. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities? Please include details of any contact with the government not already provided.

Project partners have a clear policy of establishing links with local & national institutions & organisations, and have ensured cross-sector support for the development of this project – to enhance the projects sustainability, & contribute to policy developments with long-term benefits. These links have been established to enhance the project in two ways: inter-sectoral *training* to ensure sound legacy; and *trade* links for economic sustainability.

Below listed are a number of organisations which have been consulted, and with whom we are developing important partnerships to take the Project forward. All organisations listed have agreed to formal inclusion in the Africulture Centre Project - when they will be fully credited as partners. These are:

South African National Biodiversity Institute (SANBI) (and STEP project) As the co-ordinator of SANBI's Eastern Cape Bioregional Programmes Co-ordination Unit, Mandy Cadman is the local implementer of the CBD. She is also responsible for co-ordinating the implementation phase of the Sub-tropical Thicket Ecosystem Plan (STEP). The Africulture Centre has been in the SANBI database since 2004. After discussions, she has committed to extending SANBI's support to the Project and the Africulture Centre is to be a formal STEP implementation project.

Rhodes University (RU) Municipal Botanical Gardens Development

Rhodes University has sourced significant funding to develop Grahamstown's Botanical Gardens. A concept document is in progress to establish a partnership between the Africulture Centre and the Botanical Gardens development, relating to an indigenous medicinal plants themed area of the Gardens to be jointly developed.

Wildlife and Environment Society of South Africa (WESSA)

As an integral part of the Makana District IDP (Integrated Development Plan), and GardenAfrica's EE *Living Classrooms* programme (with WESSA) across the Eastern Cape, the Project will see 5 municipal & provincial departments introduced to CBD principals, & training to link institutional sectors: Health, Education, Water Affairs & Forestry, Agriculture and Environment – which is designed by Laura Conde (Eastern Cape regional co-ordinator of WESSA). WESSA will most likely be conducting training with heads of these local government departments, district co-ordinators, and school subject advisers at the Centre, as instrumental to this planned WESSA / GardenAfrica initiative. With WESSA already working intensively with Umthathi to develop this programme, their involvement in the Africulture Centre Project is likely.

Environmental Impact Assessment Agencies (EIAA's) – project partners have established contact with EIAA's brought in to assess sites earmarked for clearance – either for industry, housing or tourism. Working with these local EIAA's in accordance with national guidelines on EIA best practice, the project will identify & remove plants, which would otherwise be discarded, for research, processing, planting and/or sale at the Centre.

Traditional Healers - Establishing trust is key to attaining the project objectives, as well as assessing stakeholder requirements. Contact with stakeholders has been purposefully limited, as once formally and sensitively introduced, concrete evidence of progress will have to be demonstrated for these stakeholders to place credence in the Project. Planting of the site must also be undertaken with cultural sensitivity, which requires close attention during planning & implementation. Aside from their direct involvement as project stakeholders, healers will conduct an annual purification ceremony at the site to ensure continued acceptance of cultivated medicinals.

Indigenous Plant Use Forum (IPUF) – This is a national South African body of experts and interested parties working on or with indigenous plant species. The Project was presented through a poster and discussion at their annual conference in 2004 and received substantial positive feedback with many experts agreeing that cultivation of medicinals is the most viable means of conserving these species. Ben-Erik van Wyk (eminent South African Botanist and author from RAU) is the Chairperson of the Forum. IPUF is to hold its 2005 conference in Grahamstown.

▪ **Institutional**

Building horizontal linkages between government & CSOs is been crucial in emphasising the need for skills transfer to enhance the connectivity between community development and the environment. Consultation with locally based CSOs, NGOs, and government institutions has therefore played an important role in identifying priorities and structuring a response.

Makana Municipality – Partners have consulted with the municipality throughout the design phase of the project, both to secure the long-term tenure of, & support for, the site and to ensure that the municipality makes full use of this resource in the future.

Department of Water Affairs and Forestry (DWAF) and Department of Economics, Environment and Tourism (DEEAT) Representatives of these GOs have been made aware of the intended nature and start up date of the Project and will be further involved during the course of the first year.

Dept of Health (DoH) - There has been a degree of resistance from traditional healers to the efforts of the DoH in modifying traditional healing practices, whereby they take into account more recent challenges posed by HIV/AIDS. The formalisation of the *Medicinal Herb Association* will provide a forum for dialogue as a basis for creating an environment of mutual support between *formal* and *informal* health care practitioners. Kew has experience in working at the interface between traditional users and health authorities

The National Environmental Education Programme (NEEP) (govt. agency est. 1997) Project partners are working through NEEP to ensure that the Centre contributes to the national programme of EE now under development.

The South African Qualifications Authority (SAQA) Umthathi has been accredited as a training organisation in accordance with new education legislation in South Africa. Project courses will comply with these regulations and trainers be subject to a process of accreditation, which will result in the Centre courses having nationally recognized status.

Local Environmental Action Plan (LEAP) - The contract for the Municipal urban greening programme has recently been assigned to the Millennium Tree Planting Project. Umthathi has had contact with this group and will develop an agreement with them to supply the Millennium Tree Planting Project with indigenous plants.

Dept of Transport – is to erect street signs, ensuring that the Centre benefits from the recent gardening boom, where local landscapers are hard pressed to locate indigenous stock - demand for which has overtaken alien exotics. Local marketing will encourage more affluent Grahamstown residents to venture into the township, buying directly from source.

▪ Academic Co-operation

Future partners will include departments and institutes from various local universities including Rhodes University, the University of Port Elizabeth, the Rand Afrikaans University, the University of Pietermaritzburg, the University of Natal, Fort Hare University (Prof Mike Magwa and his students are already researching the pharmacology of indigenous medicinals in the area), the University of the Free State and Border Technikon. All of these are already involved in relevant research or projects and will provide students for independently funded postgraduate research on the work of the Africulture Centre. Discussions with the Rhodes University Environmental Science Department on postgraduate research and the Environmental Education Unit (EEU) on research and materials development (and the potential for long term inclusion of medicinal plant cultivation in the EEU and Umthathi School's Gardens Programmes) have now been held. The Project has been discussed with a representative from the Institute of Social and Economic Research. Formal involvements have been postponed with these partners pending the Project's inception.

PROJECT DETAILS

10. Is this a new initiative or a development of existing work (funded through any source?) Are you aware of any other individuals/organisations carrying out similar work, or of any completed or existing Darwin Initiative projects relevant to your work? If so, please give details explaining similarities and differences and showing how results of your work will be additional to any similar work and what attempts have/will be made to co-operate with and learn lessons from such work for mutual benefits.

The Africulture Centre is an entirely new initiative in the Greater Target Area, in that it frames a tangible and practical commitment to the participatory conservation of medicinal plants in the Eastern Cape. However, much of the horticultural training expertise central to the project will be derived from our partner's food nursery and sound community development record in Grahamstown & its environs. Umthathi will expand its existing programme of horticultural training, nutrition, home health care, and business skills training, dovetailed these courses in to the Africulture training, and development of the centre.

South Africa Netherlands Research Programme on Alternatives in Development (SANPAD)

Through funding from this Programme, the Institute of Social and Economic Research (ISER) has conducted and concluded research into the domestication and cultivation of indigenous medicinal plants by informal suppliers in two sites within the Africulture Centre's Greater Target Area. Jamie Pote, currently completing his MSc in Botany on this research, has been contracted to assist Umthathi in the development and implementation of the Project in order to utilise and build on the research work already accomplished by SANPAD. Concrete links with the ISER and SANPAD itself will be made, once funding for the Project is secured, to assure co-ordination with, and formal access to, their research results.

Silverglen Nursery Durban - Kwa-Zulu Natal is now a major cultivator and training nursery focussed on indigenous medicinal plants in that Province. Dr Geoff Nicholls is a highly respected South African botanist who founded Silverglen and has committed to sharing expertise and experience with the Project. A trip to Silverglen is planned soon after funding is obtained, with a

view to accessing & building on the experience in indigenous plant cultivation, propagation and training therein that is extant at Silverglen. Although the actual species will probably differ considerably due to massive climatic and vegetation differences between the two areas, much of the knowledge will be transferable. Umthathi's nurseryman at their small existing township nursery, (to be amalgamated into the Centre) graduated from a course at Silverglen. Africulture Centre course trainers will attend courses at Silverglen as part of their training and orientation.

11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes (see Annex C for list and worked example) and rank the relevance of the project to these by indicating percentages. Is any liaison proposed with the CBD national focal point in the host country? Further information about the CBD can be found on the Darwin website or CBD website.

This interdisciplinary collaboration will support South Africa's implementation of many different CBD articles, themes and cross-cutting issues. The relevant primary South African legislation is the Biodiversity Act, passed into law in May 2004, through which the old National Botanical Institute has been reconstituted to become SANBI, and is the vehicle for local implementation of the CBD.

The project addresses targets across the Global Strategy for Plant Conservation and also fits into the framework of the 2010 Biodiversity Target, addressing in particular the sustainable use focal area, goals 4, 8, 9 and 10 and attendant sub-targets.

The project as a whole focuses on:

- Sustainable use (20% - theme, article 10, GSPC-3,12);
- Traditional knowledge (17.5% - theme, article 8j, GSPC-13);
- Research and training (20% - art 12, GSPC-3,15,16);
- Transfer of technological expertise and information (15% - articles 16, 17);
- Ex situ conservation (10% - art 9, GSPC-3,8);
- Public awareness (5% - article 13, GSPC-14);
- In situ conservation (7.5% - art 8).

The project will be conducted with due regard to the importance at all stages of obtaining prior informed consent, working under mutually agreed terms, and sharing fairly and equitably any benefits arising from use of genetic resources and associated traditional knowledge (5 % - Article 15, 8j). The project involves the integration of biodiversity concerns across different sectoral programmes, through practical cooperation with local and national government institutions (5% - Article 6).

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

CITES is also of relevance for the Project, as channels for commercially traded will be researched as a market for growers, in line with our ethical criteria of fair trade, compliance with legislation, proper biodiversity considerations and protection of indigenous knowledge rights.

12. How does the work meet a clearly identifiable biodiversity need or priority defined by the host country? Please indicate how this work will fit in with National Biodiversity Strategies or Environmental Action Plans, if applicable.

SANBI has identified the Albany Centre of Floristic Endemism as being in need of urgent conservation and biodiversity management, and the Greater Target Area of the Project falls within this area.

The Project complies with Chapters 3 and 4 of the National Environmental Management: Biodiversity Act of May 2004. It will be a formal element of the Eastern Cape Bioregional Management (Chapter 3, part 1 and part 2). The Project will be working in a co-ordinated manner to protect the Sub-tropical Thicket Biome, in accordance with part 1 of Chapter 4, the protection of threatened or protected species (as per *Government Gazette* lists and Red Data Species Lists) in accordance with part 2 of Chapter 4 and in compliance with section 57(1) as regards domestic trade in the species and international trade in accordance with part 3 of Chapter 4.

As mentioned in Que. 9, the Project also forms part of the Local Environmental Action Plan (LEAP) of Makana Municipality, within which, the Centre will be based.

13. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country.

Future commercial product development as a result of the project will provide direct benefits for both Umthathi and the MHA, to be reinvested to expand conservation management and to further develop the localised industry in cultivated alternatives. This strategy, together with training and extending infrastructure to reach outlying producer networks, will provide a viable income for many in Grahamstown & Makana District, as well as then 16 neighbouring districts within the Greater Target Area. The Project will also serve to formalise and optimise the market conditions for a sustainable trade in medicinals.

Methods promoted at the Centre will seek to advance opportunities for beneficiaries & stakeholders by maximising production. As one such example - beekeeping is not only important for pollination, in South Africa there is a shortfall of 80,000 tons of honey, both for domestic & industrial use – with the market value of 1 jar at just under £3. The cost of building a simple hive is £10 – each producing 3 harvests per year, with a possible 30 jars per harvest. These techniques have produced great successes when applied to projects undertaken by ourselves & our partners across South Africa, which will be consolidated in the design of the Africulture Centre. To promote this integrative approach as a basic framework, the project will feature a market area to generate complimentary economic activities – with the sale of cuttings, seed & trees to local gardeners, co-operatives and other NGO/CBOs, promoting a cost effective and accessible approach to improving both biodiversity & household food security/sovereignty. It is intended that a tangible demonstration of the economic & health benefits will have a multiplying effect.

The Project will identify emerging farmers in the area who have obtained agricultural land as a result of successful land claims, and who are in desperate need of training in viable commercial farming enterprises. It is envisaged that smaller-scale growers will be assisted in co-ordinating their commercial marketing with these larger scale producers in the long term.

The Project will also prioritise those species which are endemic, or near-endemic, or which grow in the wild in the Greater Target Area as one of the criteria for species selection for cultivation. This will be done so as not to jeopardise the livelihoods of growers in other Provinces specializing in indigenous species that are near-endemic to their areas.

The Centre will also supply Umthathi with stock for its growing programme of school & home gardens, contributing to an increase in its project outreach. Furthermore, as previously mentioned in Que. 9, trees cultivated at the nursery will contribute to the city's greening initiative over the next 5 years. Other future activities held at the Centre may include:

- The hosting of seed fairs where producers can exhibit their best seed varieties and share information & seed.
- Nursery wo/men exchange visits - with some participants coming from neighbouring provinces, & other SSA countries.
- Field days where associated groups/co-operatives will be awarded the highest honour for cultivation methods, and where visitors will have an opportunity to tour the site and learn of techniques employed by each group.

14. What will be the impact of the work, and how will this be achieved? Please include details of how the results of the project will be disseminated and put into effect to achieve this impact.

The work is planned to impact on meeting many local needs at once by building on indigenous knowledge and facilitating stakeholder access to the necessary resources. The local needs referred to are health care, integrity of culture and tradition, access to food, self-sufficiency, developing sustainable livelihoods, biodiversity conservation, urban greening, skills development and individual, community and institutional capacity building. The approach follows an *ecosystem approach*, as opposed to a *mechanistic approach*.

Local Economic Development

The nursery and training site on the outskirts of the Grahamstown township will impact on the local community by becoming an economic hub in this semi-formal settlement, through attracting nursery customers who will also serve as a market for traditional crafters. An area for sale of such products by local micro-entrepreneurs has been planned in the layout of the site.

Sustainable Livelihood Development

Through phased training at the Centre and then at the agro-producers cultivation sites in the field, informal suppliers of indigenous medicinals will be able to develop a more reliable livelihood from cultivating plants for sale to the indigenous health and commercial markets (as opposed to harvesting unsustainably from the ever dwindling wild populations).

The new biodiversity legislation in South Africa and increasing international awareness of the CBD is already curtailing the international commercial demand for unsustainably harvested plant materials. Viable channels to ethical commercial markets will be researched and linkages provided to micro agro-producers and emerging farmers to further improve their livelihoods through cultivation. One such potential organisation, *Fever Tree African Plant Trading*, has also offered *in kind* enterprise training of emerging medium-scale farmers in commercial medicinal plant cultivation, and is being evaluated by Umthathi.

Health

The impact of the Project's dissemination of formal research on medicinal plants to traditional healers, and the production of non-traditional remedies using these plants is expected to have a substantial impact on improving the quality of traditional health care provision in the area. Pending further research, a possible extension of the Project is selling basic Centre remedies to the Provincial Department of Health for dissemination to AIDS patients at Government clinics, and training of Clinic personnel in the beneficial uses of traditional remedies (and recognition of symptoms of toxicity from incorrect dosage or preparation). A beneficial impact on AIDS patients through traditional healers is expected via this improved link between formal & informal health care.

Biodiversity Conservation

Botanists and stakeholders agree that domestication of indigenous medicinal plants is key to conserving these species in the wild, preserving viable wild genetic stock and preserving traditional health care. However, few practical programmes exist in South Africa to this end. As such, this Project will have a significant impact on actual and future biodiversity conservation in the area, as well as potentially serving as a model for other similar programmes through co-ordinated work with national biodiversity programmes such as SANBI.

Potential postgraduate research includes tracking what plants are bought, and how much is spent by traditional healers (directly and indirectly through traders) on plants grown, by the established home herb gardens in the communities where Centre training has been done. This will be an indicator of both socio-cultural acceptance of cultivated medicinals, as well as an indicator of the impact the project has on conserving the plants in the wild.

Through monitoring the Red Data Lists of endangered and threatened endemic and near-endemic species over time, we will also be able to determine to some extent if our work is having an impact on the conservation status of certain plants in the Greater Target Area.

Education of stakeholders re legislation and indigenous knowledge rights

The impact of protecting and preserving indigenous knowledge and the rights of traditional health care practitioners through our advocacy work and stakeholder workshops will be difficult to measure quantitatively within the comparatively short duration of the Project, but it is nonetheless a longer term objective of the Centre.

Publication and dissemination of postgraduate research on the Project & Umthathi

Umthathi has a policy of sharing information and experience with organisations and projects who comply with their ethical criteria. Knowledge gained from the Centre development and implementation will be passed on to other similar projects in other areas (through SANBI amongst other mechanisms), and thus will have positive spill-over impact beyond the scope of the Project

itself. Through attendance of, and participation through, conference papers and discussion panels of the Indigenous Plant Use Forum, knowledge of the Project (as well as expert input and feedback to the Project partners) will be disseminated to IPUF members.

15. How will the work leave a lasting legacy in the host country or region?

South Africa, and indeed the Eastern Cape (EC) features considerably higher on the vulnerability index than any other province - with 1 in 3 people now thought to be HIV positive in Grahamstown, and 80% of the black population relying solely on traditional medicines. Of EC healers interviewed, 54% stated a patient increase in the last 5 years as a result of HIV/AIDS; 81% expected a further upsurge in the next 5 years. With stretched allopathic health services and over 70% unemployment in the target district, indigenous plants will continue to form an important part of primary health care, but only if raw materials can be delivered in sustainable quantities.

With the hidden economy in medicinals estimated at between R500 million to R2 billion p/a, there are over 200,000 practising healers in the country. The market is largely informal and pricing, particularly on the micro level, does not adequately reflect the demand for, and scarcity of, traded varieties. With many livelihoods dependant on these natural resources, there is a need to formalise and optimise the market conditions for sustainable trade in medicinals. Harvested by informal traders with few incentives for conservation management, 93% of the species studied in the EC are currently being harvested unsustainably, with 34 species under immediate threat. Thus the likelihood that ill people will be given nothing, poor substitutes or adulterants. An accessible guide to the species will assist ensure more people can check the quality of medicinals being traded and used.

The 3 hectare Africulture Centre is to be established in Grahamstown as a base for data collection, biodiversity monitoring, conservation management training and research, cultivation & processing of medicinal plants and indigenous foods – the latter often more nutritious with greater health benefits than species bred for western markets. Food sovereignty is now considered a vital consideration for communities in South, Africa, especially so for those affected & infected by HIV/AIDS.

Training courses will be available to private individuals, CBOs & NGOs – this approach serves both to generate income to support the Centre, & its community development outreach. With many healer associations & NGOs recognising the importance of wider resource security training, there is growing demand for this approach. Given the lack of local expertise and facilities, the Africulture Centre aims to fill a gap in the delivery of reliable information for informal health care practitioners, and provide a forum for further discussion, research and certification of healers in the future, in accordance with normative ethics and codes of conduct.

The loss of this biological, and corresponding cultural diversity presents a severe threat to community health in South Africa & indeed across Southern Africa as a whole. Due to high mortality rates within indigenous communities due to HIV, the knowledge about the anti-HIV activity of plants is lost. This project aims to restore this balance. In establishing a valuable safety net, the centre could prove central to policy development, both as an example for creating a synergy between conservation & livelihood development, and impacting on the development of the nascent Indigenous Knowledge Bill - informed by those at the heart of the debate, who may previously have been excluded.

It is envisaged that the Africulture Centre, through self-generated income, become independent of all outside financial support within eight years, following the pattern of Silverglen Nursery. The Project will thus contribute substantially to the establishment of a permanent, fully functional Centre that will continue contributing to biodiversity conservation and sustainable agro-producer livelihood support in the region.

6. Please give details of a clear exit strategy and state what steps have been taken to identify and address potential problems in achieving impact and legacy.

In designing an integrated development strategy in the EC we identified local specialists from otherwise disparate fields, such as training methodologies, nursery design, nutrition & food storage, small business development, HIV related health, ethno-botany & materials development. Wherever possible, project R&D has involved individuals & organisations from the EC in order to build local capacity, and to develop a network for local information & knowledge exchange. We were careful to assess the core capacities of these partners, spending time with each; facilitating workshops to enhance delivery skills where gaps are perceived. This was only undertaken where partners were willing to integrate systems & work co-operatively. A key factor has been that these organisations were *able* to extend provision in given areas. All partners involved had identified existing gaps, and are therefore excited at the prospect of working together. The long-term objective is to develop the capacity of LNGO's in a sustainable fashion, whereby a network is established comprising almost entirely of EC organisations – providing an inter-disciplinary approach to community development which will be sustained long after the direct involvement of UK partners.

Linkages to the AC are further strengthened by way of partnerships to national botanical institutions (such as SANBI) and health authorities that will then be able to use the sustainable harvesting and product validation methods developed during the study. As a result of this project the traditional healers should have access to good quality material from indigenous plants and the community an income from the plants. Because a diverse range of people in the communities will be involved in the Project it will not revolve around one or two key people, whose departure would compromise the long-term success of the project. The dissemination of information relating to the plants will occur in the early stages of the project and will demonstrate how conservation and sustainable uses of indigenous plants can directly support the health and economy of vulnerable communities.

17. How will the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?

The Darwin name & logo will appear on the signage over the entrance of the Centre, as well as on the nursery vehicle. The Darwin name and logo will also be used in the associated medicinals garden at the Grahamstown Botanical Gardens.

As Project partners are increasingly involved in policy reviews relating to the CBD & national chapters, so knowledge of Darwin's contribution to this project will increase.

Each organisation will include the Darwin name on all literature and/or websites pertaining to the initiative – as well as the likely inclusion of the an article on the Project in *Kew Magazine*. Current hits on the Kew site is nearly 9 million a year - pertaining to the initiative – as well as the likely inclusion of an article on the project in *Kew Scientist* which has a circulation of between 5-7,000).

Journalism students from Rhodes University will be working on a video documentary of the establishment and functioning of the Project. It is envisaged that this material be screened on national television by the end of the four year Project, on which the Darwin assistance will be emphasised. The Darwin name will also be acknowledged in press articles on the Project in local and national newspapers as well as a possible article in *Africa Geographic* and exposure through the Eastern Cape Radio Algoa, with whom Umthathi already has a working relationship.

All publication and presentations would acknowledge funding from Darwin.

18. Will the project include training and development? Please indicate who the trainees will be and criteria for selection and that the level and content of training will be. How many will be involved, and from which countries? How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length and dates (if known) of any training course. How will trainee outcomes be monitored after the end of the training?

The Africulture Centre training courses will commence during the second year of functioning (second half of 2006) once the nursery has been established. The courses will be as follows:

1) Business and Entrepreneurial Training for traders:

There is a need to educate the traders in the principles of demand and supply and the pricing mechanism associated with these. Since prices charged by informal suppliers for these herbs have largely remained locally static for years, the informal suppliers currently harvest more and more from the wild in order to maintain the same level of income. Umthathi's existing and established Business and Entrepreneurial Skills Course will therefore be a vital component of the training provided for traders. It is also important for traders to promote the use of cultivated plants in selling to *inyangas* (traditional healers) and *sangomas* (diviners).

2) Home Herb Gardens Training for suppliers:

A viable alternative to unsustainable harvesting will be established through a Home Herb Gardens Course on medicinal herb propagation and cultivation. Each participant in the Home Herbs course will propagate 20 – 30 seedlings of a couple of different species as part of the course. They will then be given 3 seedlings of each species to take away, while the rest are sold to the local communities from the Centre. This is labour saving for nursery staff, as well as accomplishing practical training requirements. The Project will also include a training segment on sustainable harvesting from the wild, as this cannot be expected to cease altogether, and so must be addressed as part of the intervention.

The first week of training will take place at the Centre. Participants will be grouped according to the area in which they live to enable the second part of the course which will be conducted in the field. The facilitator will visit the participants' home herb gardens during the next growing cycle to provide ongoing and advanced mentoring. This training structure provides for sustainability of the intervention, as ongoing support is vital to the growers continued success. Care will be taken to educate participants on the need, and methods, to avoid genetic pollution of wild populations by propagated, domesticated stock.

3) Permaculture for Income Training for small-scale agro-producers and other community members:

Agro-production training in the production of products based on plants (eg. baskets and mats from fibre plants and vetivier grass, jam and sauce making with emphasis on preserving vitamin content, beekeeping, herbal remedies, etc) and commercially viable threatened non-medicinal indigenous species (for example endemic cycads) will be conducted at the Centre. Graduates of Umthathi's existing Home Vegetable Gardens and the Centre's Home Herb Gardens courses will be encouraged to attend this value added course, to provide income generating skills.

The above training courses, as well as a higher end propagation of medicinal herbs and indigenous trees course, will also be available for a fee to any other interested parties or members of other organisations. The income from this training will be used as income generation to support the Centre. Once the Centre is properly established, and the courses marketed, high demand from areas other than the Eastern Cape for this training is expected.

Training to supplement Centre facilitation staff's pre-existing qualifications and experience will be done in-house by Umthathi and by sending the facilitators on Silverglen Courses.

4) CBD Training for Centre Trainers – SANBI / KEW

Training for key trainers will include a module on CBD policy and practical implementation, to raise participant awareness of the project's national and international political context, and build capacity to design and use appropriate CBD implementation tools. CBD training will be delivered by experts from SANBI, or the CBD Unit at Kew.

5) Quality Control & Authentication Training – Royal Botanical Gardens, Kew.

Kew will train people selected by Umthathi in simple authentication techniques for the production of medicinals - between 5-25 species of plants/fungi. Kew's training usually last 2-3 weeks with follow up training at the proposed workshops, with additional sessions as optional. This will also provide the health authorities with standards to be used to support the long term development of quality control methods for the medicinals, and could provide templates for scientific use in SA. The quality of the products can be assessed by Kew and the health authorities in SA – testing between 500-1000 samples over the Project period to support the development of standards.

6) Reciprocal Training & Development – from SA to the UK

It has been suggested that, nearing the end of the 4 year Project cycle, Umthathi and key local partners be provided with an opportunity to share their experiences during a visit to the UK, hosted by Kew, in order that botanical institutions & NGOs in the UK can benefit from this experience. This would be facilitated by a separate grant at a later stage.

LOGICAL FRAMEWORK

19. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of benefits arising out of the utilisation of genetic resources 			
<p>PURPOSE Protection of biodiversity in the Eastern Cape, South Africa by establishing 3 hectare nursery to demonstrate sustainable resource management & foster the technical skills of traditional healers, small-scale agro producers, suppliers and informal traders, providing training in species monitoring, sustainable harvesting & access to cultivatable alternatives to reduce stress on wild plant species</p>	<ul style="list-style-type: none"> • Physical infrastructure of nursery, processing, demonstration & training areas – yr 1. • Collective decision-making forum - inclusive of interested actors, from harvesters to end-users – yr 1. • Participatory design (yr 1) & facilitation of 3 training courses – pilot yr 2, fully operational yr 3. • Operational biodiversity monitoring system established – yr 4 	<ul style="list-style-type: none"> • Reports from partners & service providers. • Feedback from stakeholders & beneficiaries participating in project design. • Documentation of meetings & reporting by stakeholders. • Field survey & reports by partner organisations 	<ul style="list-style-type: none"> • Building work completed within existing physical, time & financial constraints. • Partners, stakeholders & beneficiaries remain committed to the process. • Broad acceptance of cultivated medicinals. • Community ownership enhances project outcomes • Sensitive reintroduction of indigenous vegetables is successful.
<p>OUTPUTS Participatory design, planning & establishment of demonstration, training and production areas.</p>	Nursery planting - yr 1 Training established – yr 2 Production for sale – yr 3 Fully operational yr 4	Reporting by project partners	Municipal support for the initiative is sustained & advanced.
Biodiversity assessment & monitoring programme.	6 nursery/facilitation staff trained in biodiversity assessment & monitoring – yr 2. Baseline audit (Makana) yr 1. Outlying areas targeted & mapped yr2-4.	Assessments / progress reports by Kew	Successful recruitment of local staff.

Forum for traditional healers to exchange & update informal health care practices.	Formalised stakeholder group - Medicinal Herb Association (MHA) – yr 2	MHA registration docs	The MHA fosters & maintains an environment for information exchange
Home Herb Garden courses for <i>informal suppliers</i> .	Training in cultivable alternatives reduces strain on harvested medicinals.	Biodiversity monitoring by assessment team (Kew / local partners)	Sufficient numbers of informal traders/suppliers are prepared to take part in training
Business & Entrepreneurial Training courses for <i>in/semi-formal traders</i> .	Structure for monitoring sale of cultivated & harvested medicinals to traditional healers & overseas trade.	Monitoring & reporting by project partners	Project ownership by stakeholders enhances project sustainability
Permaculture for Income courses for <i>producers</i> .	Skills transfer to harvesters /traders. Monitoring/support over 2 seasons – yr 3&4	Work/training portfolios produced as integral to all course modules	Adequate investment by the community of agro-producers drives project.
Market area for cultivable medicinals, indigenous vegetables & processed goods.	Positive examples of sustainable productivity increase district wide agro-producer networks	Regular monitoring & feedback on product sales/consumption by partners.	Project drives local conservation focussed innovation & entrepreneurial ship.
Training support materials development	Production of print materials integrating cross-cutting issues	Pictorial booklets, leaflets & posters.	Materials produced & distributed according to demand & budget.
Inter/intra-sectoral dissemination of related material & data.	Building horizontal linkages between civil society orgs & gov.	Minutes of meetings between NGO, local & provincial govt tiers	NGOs CBOs & GOs remain committed to integrated development strategy .
Contribution to advocacy issues relating to the CBC & the protection of IK.	Contribution informs IK legislation under development	Discussion documents from local & national workshops.	Central govt sustains stated commitment to development of IK legislation.
<u>ACTIVITIES</u>			
Project Infrastructure	<u>Yr 1</u> : Nursery establishment – staff recruitment, fencing, irrigation systems, seed storage, shade areas & planting using agro-forestry principals; building indoor training & processing area; permit acquisition for growing protected species, gathering seed & medicinal collections; agreement with environmental impact assessment agencies for acquisition of stock through land clearance schemes; <u>Yr 2</u> : Establishment of market & trading area for crafter & agro-producer network; testing of plots & intermediate technologies employed on site; organic registration; sale of selected species; <u>Yrs 3-4</u> continued testing of varieties & techniques employed on site; continued sale of produce, seed, plants & trees for start-up initiatives & 5 year district urban greening programme .		
Medicinals development	<u>Yr 1</u> : Establishment of stakeholder group (MHA); formative workshop with MHA; desk top study; Identification of conservation priorities & approach; practical experimentation & research to determine cultivable medicinals; assessment of micro-biophysical conditions for replication (participatory & desk-top); assessment of prioritised species for cultivation; cultural acceptability assessment; assessment of species status & scope for inclusion in medicinal remedies; market research/consultations on medicinal preparations & remedies for opportunistic infections; market research & economic viability of tradable species. <u>Yr 2</u> : Registration of MHA; participatory development & consultation on medicinal remedies for processing; development & processing of medicinal remedies; experimentation with other threatened species & expansion of collections; <u>Yrs 3-4</u> Expansion of biodiversity monitoring & mapping through extended user & producer networks; expansion of market research for medicinal & other botanical products.		
Workshops	<u>Yr 1</u> : Introductory workshops with stakeholders & beneficiary network; development of training methodology & support materials; <u>Yr 2</u> : Pilot and participatory evaluation of training & materials (2x5 day – Home Herb Production training & 3x2day mentoring); 1x10 day – Permaculture for Income); assessment of & formative workshops with rural producer communities – 300 sq km from Grahamstown; <u>Yr 3</u> : Fully operational workshops at the AC & rural pilot – Permaculture for Income, Home Herb Production, & Business & Entrepreneurial Training Course – evaluations produced within 1 month of each; 3x2day mentoring/monitoring; Workshop development on integrated resource management, covering the CBD, Permaculture for Income course & HIV specific medicinals & nutrition		

<p>Intra/inter sectoral linkages & dissemination</p>	<p>with provincial & national NGOs & CBOs – facilitated annually by <u>Yr 4</u>: Fully operational at AC & rural.</p> <p><u>Yr 1</u>: Introduction of project to Local Environmental Action Plan (LEAP) - underway; team building exercise with members of local govt. Integrated Development Plan (IDP); networking with NGOs & CBOs to assess levels of complementarity & training needs. <u>Yr 2</u>: project planning workshops to establish priorities & further develop methodologies for training & materials development with local & provincial gov depts; participatory assessment techniques; <u>Yr 3</u>: Formative session between informal (MHA) & formal health care practitioners; Protocol on co-operation between informal & formal health care practitioners; Skills development workshops with heads of local govt depts (water, environment, education, health & agriculture) district co-ordinators & schools subject advisers.</p>
<p>Advocacy</p>	<p><u>Yr 1</u>: Attendance of CBD related seminars/conferences; dissemination of information to provincial orgs; network with government departments, universities, technical colleges to co-ordinate research activities, approaches and ensure IK protections & conservation of cultural and natural heritage. <u>Yr 2</u>: Participatory establishment of advocacy criteria for IK issues with MHA; workshops to advise & support MHA insertion into provincial & national advocacy frameworks; Inputting on the Provincial State of the Environment report – re impact of indigenous medicinals on/by stakeholders. <u>Yr 3</u>: Protocol for development of legislation on protection of indigenous knowledge.</p>
<p>Monitoring & Evaluation</p>	<p><u>Yr 1-4</u>: Annual review by independent environmental project monitoring specialist - based on formative stakeholder sessions & partner monitoring assessments of project outputs to purpose - to maintain flexible & responsive approach to implementation & capacity development of local partners; Evaluation of pilot workshops and training materials; 3x2 day follow up support / workshop monitoring (over 2 growing seasons); Quality control testing of processed medicinals.</p>

20. Provide a project implementation timetable that shows the key milestones in project activities.

Project implementation timetable		
Date	Financial year	Key milestones
<p>Given that no R&D grant has been sought in relation to this project, we hope that Darwin will understand that it may be inappropriate to supply largely arbitrary dates, other than timeframes already provided above.</p> <p>Due to the sensitive nature & complexity of the Project, and additional concerns vis a vis the raising of stakeholder expectations, the finer project delivery details have yet to be fleshed out.</p> <p>An intensive planning phase is intended once funding is secured.</p> <p>Moreover, many of these activities ie. Advocacy, are ongoing, as will be the review process central to M&E.</p>	<p>Apr-Mar 2005/6</p>	<p>Project Infrastructure: Nursery establishment – staff recruitment, fencing, irrigation systems, seed storage, shade areas & planting using agro-forestry principals; building indoor training & processing area; permit acquisition for growing protected species, gathering seed & medicinal collections; agreement with environmental impact assessment agencies for acquisition of stock through land clearance schemes</p> <p>Medicinals development: Establishment of stakeholder group (MHA); formative workshop with MHA; desk top study; Identification of conservation priorities & approach; practical experimentation & research to determine cultivable medicinals; assessment of micro-biophysical conditions for replication (participatory & desk-top); assessment of prioritised species for cultivation; cultural acceptability assessment; assessment of species status & scope for inclusion in medicinal remedies; market research/consultations on medicinal preparations & remedies for opportunistic infections; market research & economic viability of tradable species.</p> <p>Workshops: Introductory workshops with stakeholders & beneficiary network; development of training methodology & support materials;</p> <p>Intra/inter sectoral linkages & dissemination: Introduction of project to Local Environmental Action Plan (LEAP) - underway; team building exercise with members of local govt. Integrated Development Plan (IDP); networking with NGOs & CBOs to assess levels of complementarity & training needs.</p> <p>Advocacy: Attendance of CBD related seminars/conferences; dissemination of information to provincial orgs; network with government departments, universities, technical colleges to co-ordinate research activities, approaches and ensure IK protections & conservation of cultural and natural heritage.</p> <p>M&E: Annual independent review by independent environmental project monitoring specialist - based on formative stakeholder sessions & partner monitoring assessments of project outputs to purpose - to maintain flexible & responsive approach to implementation & capacity development of local partners; Evaluation of pilot workshops and training materials;</p>

	<p>Apr-Mar 2006/7</p>	<p>Project Infrastructure: <u>Yr 2</u>: project planning workshops to establish priorities & further develop methodologies for training & materials development with local & provincial gov depts; participatory assessment techniques;</p> <p>Medicinals development: Registration of MHA; participatory development & consultation on medicinal remedies for processing; development & processing of medicinal remedies; experimentation with other threatened species & expansion of collections;</p> <p>Workshops: Pilot and participatory evaluation of training & materials (2x5 day – Home Herb Production training & 3x2day mentoring); 1x10 day – Permaculture for Income); assessment of & formative workshops with rural producer communities – 300 sq km from Grahamstown;</p> <p>Intra/inter sectoral linkages & dissemination: project planning workshops to establish priorities & further develop methodologies for training & materials development with local & provincial gov depts; participatory assessment techniques</p> <p>Advocacy: Participatory establishment of advocacy criteria for IK issues with MHA; workshops to advise & support MHA insertion into provincial & national advocacy frameworks; Inputting on the Provincial State of the Environment report – re impact of indigenous medicinals on/by stakeholders.</p> <p>M&E: Annual independent review; 3x2 day follow up support / workshop monitoring (over 2 growing seasons); Quality control testing of processed medicinals. Evaluation of pilot workshops & review of training materials;</p>
	<p>Apr-Mar 2007/8</p>	<p>Project Infrastructure: continued testing of varieties & techniques employed on site; continued sale of produce, seed, plants & trees for start-up initiatives & 5 year district urban greening programme .</p> <p>Medicinals development: Expansion of biodiversity monitoring & mapping through extended user & producer networks; expansion of market research for medicinal & other botanical products.</p> <p>Workshops: Fully operational workshops at the AC & rural pilot – Permaculture for Income, Home Herb Production, & Business & Entrepreneurial Training Course – evaluations produced within 1 month of each; 3x2day mentoring/monitoring; Workshop development on integrated resource management, covering the CBD, Permaculture for Income course & HIV specific medicinals & nutrition with provincial & national NGOs & CBOs – facilitated annually by <u>Yr 4</u></p> <p>Intra/inter sectoral linkages & dissemination: Formative session between informal (MHA) & formal health care practitioners; Protocol on co-operation between informal & formal health care practitioners; Skills development workshops with heads of local govt depts (water, environment, education, health & agriculture) district co-ordinators & schools subject advisers.</p> <p>Advocacy: Protocol for development of legislation on protection of indigenous knowledge.</p> <p>M&E: Annual review; Evaluation of workshops and training materials; Quality control testing of processed medicinals.</p>
	<p>Apr-Mar 2008/9</p>	<p>Project Infrastructure: continued revision & testing of varieties & techniques employed on site; continued sale of produce, seed, plants & trees for start-up initiatives & 5 year district urban greening programme .</p> <p>Medicinals development: Expansion of biodiversity monitoring & mapping through extended user & producer networks; expansion of market research for medicinal & other botanical products.</p> <p>Workshops: Fully operational at AC & rural.</p> <p>Intra/inter sectoral linkages & dissemination: Maintenance of output levels & links</p> <p>Advocacy:</p> <p>M&E: Annual review; Summative Evaluation; Quality control testing of processed medicinals.</p>

21. Set out the project's measurable outputs using the separate list of output measures.

PROJECT OUTPUTS		
Year/Month	Standard output number (see standard output list)	Description (include numbers of people involved, publications produced, days/weeks etc.)
	<u>Training Outputs</u> 1A 1B 2 3	<ul style="list-style-type: none"> ▪ Estimated 2 South Africans - via other funding ▪ Estimate 2 South Africans - via other funding ▪ Estimate 2 South Africans - via other funding ▪ Estimate total of 1365 South Africans via SAQA accredited courses at AC. ▪ Home herb cultivation course: est 20 in yr 1 / est. 160 in yr 2 / est 200 in yr 3 / est. 220 in yr 4. ▪ 5 weeks actual contact training of which 2 weeks at Centre and 2 weeks 5 months later on site and a further week 5 months after that on site. ▪ 8 months non-contact training activities by participants ▪ 3 days interim field support during the non-contact training phase ▪ Permaculture for income course: / est 150 in yr 2 / est. 175 yr 3 / est 200 fourth year <p>3 weeks actual contact training of which 2 weeks at Centre and 1 week on site</p> <ul style="list-style-type: none"> ▪ Business & Entrepreneurial Skills for Traders: est. 60 in 2 yr / est. 80 yr 3 / est 100 in fourth year <p>3 weeks of actual contact training over 5 month period.</p>
	6A	<ul style="list-style-type: none"> ▪ Kew training of 6 in authentication techniques – on site 4 weeks. ▪ Training of all nursery staff and Umthathi Projects Manager in details of CBD and Biodiversity Act by SANBI and DEAET (15) ▪ In-house ongoing supplementary training of nursery manager, course facilitators and nursery workers during first 6 months of 2006 and Silverglen courses in indigenous medicinal plant propagation. ▪ Training of course facilitators and Project field volunteer in basic bio-diversity monitoring of select species (3) ▪ 4 major stakeholder workshops of over 3 days, involving estimated total of 600 South African stakeholders. * <p>One week per workshop, with three workshops in year 1 and one workshop in year 2.</p>
	7	<ul style="list-style-type: none"> ▪ 3 x training manuals for facilitators ▪ 3 x course material for participants ▪ 2 x training videos ▪ 10 x training and information posters for Centre

	<u>Research Outputs</u> 8 9 10 11A 11B	<ul style="list-style-type: none"> ▪ 8 weeks p/a ▪ Dependent on species selection process. Estimate input to 120 species management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country ▪ 1 x individual field guides/manuals to be produced to assist work related to species identification, classification and recording ▪ Kew authentication methods – 15. ▪ Estimate 4 papers published in peer reviewed journals – SA ▪ At least 3 - UK ▪ Estimate 8 papers to be submitted to peer reviewed journals ▪ At least 5 - UK
	<u>Dissemination Outputs</u> 14A 14B 15A 15B 15C 15D 16A 16B 16C 17A 17B 18A 18B 18C 18D 19A 19B 19C 19D	<ul style="list-style-type: none"> ▪ 4 x conferences/seminars/ workshops to be organised to present/disseminate findings (annual) ▪ 8 x conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated. ▪ 3 x of national press releases in SA ▪ 10 x local press releases in SA ▪ 4 x national press releases in UK ▪ 4x local press releases in UK ▪ 4 x electronic newsletters to be produced (annually) ▪ Est circulation = 500 through IPUF members and SANBI ▪ Est circulation of each newsletter in the UK ▪ 5-7,000 (+ potential in 9 million Kew web hits) ▪ Est 2 SA dissemination networks to be est . ▪ Est. 10 SA dissemination networks to be <i>enhanced/ extended</i> ▪ Est 5 dissemination networks to be enhanced - UK ▪ Est 3 SA national TV programmes/features (2 news items, one video documentary in year 4) ▪ Est 3 national TV programmes/features (2 news items, one video documentary p/a) in UK ▪ Est 5 x local TV programmes/features in SA ▪ Est 2 x local TV programmes/features in UK ▪ Est. 2 national radio interviews/features SA, potentially much more if this medium is used to disseminate project outcomes ▪ 4 national radio interviews/features p/a in UK ▪ Est 8 local radio interviews/features in SA ▪ 4 local radio interviews/features p/a in UK

	<u>Physical Outputs</u>	
	20	<ul style="list-style-type: none"> ▪ Physical assets to be handed over to host = £71,635 (funds for building to be sourced separately)
	21	<ul style="list-style-type: none"> ▪ 1 permanent educational/training/research facility / organisations to be established and continued after Darwin funding has ceased
	22	<ul style="list-style-type: none"> ▪ Estimate 650 permanent field plots to be established during the project, and continued after Darwin funding has ceased
	<u>Financial Outputs</u>	
	23	£190,000 <i>actual</i> funds to be secured

MONITORING AND EVALUATION

22. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.

A sound evaluative process is at the core of the project, and is listed as an activity in the logframe. Independent monitoring and evaluation will be led by an in-country specialist using a strong participatory framework which will be facilitated through a partners' workshop at project inception. This initial workshop will address the following tasks:

- Working with all project stakeholders and partners to establish a common consensus on values for monitoring and evaluation
- Establishing a team approach to monitoring and evaluation
- Ensuring that appropriate project data is collected in a manner which will allow the measurement of progress on an output to purpose basis;
- Agreeing norms and means for inclusive liaison between all project partners and implementers to agree any necessary changes and/or corrective actions that are highlighted as necessary through monitoring and review.

After the initial workshop, six monthly output to purpose reviews will be undertaken to assess progress in accordance with priorities identified in concert with project stakeholders. The review and evaluation teams will include project beneficiaries and will continue to identify critical issues and challenges in consultation with all project partners.

This close monitoring will include formative stakeholder consultations to maintain a flexible and responsive approach to implementation and the capacity development of local partners. In addition a summative evaluation will assess project outcomes, providing the necessary input to inform, and build on project activities and achievements. The detailed means for verifying outputs and activities are provided in the logframe. The critical outputs to achieve the project purpose can be classified under three categories. These are:

Infrastructure: including the establishment of the nursery encompassing production and demonstration areas; and a market area for cultivable medicinals, indigenous vegetables & processed goods.

Technical capacity: to service a biodiversity assessment & monitoring programme; to establish and service a formalised stakeholder group; to support inter/intra-sectoral dissemination of related material & data; and to contribute to advocacy issues relating to the CBC and the protection of indigenous knowledge.

Training capacity: to deliver: Home Herb Garden courses for informal suppliers; Business and Entrepreneurial Training courses for in/semi-formal traders; Permaculture for Income courses for producers; and training support materials development

Monitoring the achievement of individual outputs in all three of the above categories will be undertaken through the six monthly reviews and project partner reports.

The evaluation of effectiveness in supporting the overall project purpose will be built into all the activities for delivering against each of these components whether infrastructure, technical capacity or training capacity. For example all inputs such as workshops, training courses or use of the nursery and demonstration facilities will have an evaluative component built in to provide data to both inform the reviews as well as support the summative evaluation.

In addition, the establishment of the biodiversity assessment & monitoring programme and the formalised stakeholders groups is critical and will be fundamental for evaluating overall project success. This will provide the main means of assessing the achievement of project purpose and goal through changes in local practice influenced by demonstration, other technical support and the dissemination and advocacy work.