Darwin Project Information

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UK Contract Holder Institution	GardenAfrica
UK Partner Institution(s)	Royal Botanic Gardens, Kew
Host country Partner Institution(s)	Umthathi Training Project, SANBI
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Project Leader Name	Georgina McAllister
Project website	www.africulture.co.za
Author(s), date	Georgina McAllister (GA), Philip Crous (UTP), Monique Simmonds (RBG Kew)

1. Project Background

The Project was initiated to address the loss of biodiversity within the Eastern Cape Province (Eastern Half of the Albany Centre of Floristic Endemism), focussing on conserving indigenous medicinal plant species. Many species are currently harvested illegally from the wild and are threatened by over-exploitation. Land use patterns have changed over the last decade in the Eastern Cape, with increasing areas devoted to game farming or private nature reserves stocking dangerous animals. This trend reduces access to many wild plant populations, increasing pressure on those populations which remain accessible. Indigenous medicinal plants are vital to traditional health care, with more than 80% of South Africans relying primarily on the informal sector for health provision. Innovative methods of supplying the market with medicinal plants are essential in conserving these species, and the traditional knowledge associated with them for future generations. Other species are also under threat due horticultural demand, or their value to the international market. By promoting alternative rural livelihoods based on the sustainable cultivation and utilisation of indigenous plant species, biodiversity conservation will be positively effected. A core assumption therein, hinges on the Project's successful facilitation of a shift from wild harvested to cultivated materials, and therefore forms part of planned outputs and related activities.

2. Project Partnerships

Umthathi Training Project (UTP)

Management

A key to the successful delivery and legacy of this project depends on the dedication and management of staff at UTP and the relationship among UTP and the UK collaborators, Garden Africa and Royal Botanic Gardens, Kew. Since the project started UTP has faced many staffing challenges and these have hindered progress. Prior to project inception, in 2005, UTP lost its founder & director who had conceptualised the AC project, and with whom GardenAfrica had developed its partnership. However, with key team members in place, GardenAfrica agreed to continue to work with UTP in the delivery of key project outputs with DI funding.

However, since 2005, UTP has struggled to fill key staff posts, both in relation to the Africulture Project, and more generally. This is not unusual in South Africa's present employment and skills environment, which continues to hinder NGOs and projects across the country. Many of the competent people who have received training in the voluntary sector are now being absorbed into the private and government sectors, leaving a dearth of skilled personnel at NGO level.

After the Founding Director left the post remained vacant (filled by Training Manager Clint Cockroft) until October 2006 when Sbusisu Msomi took the position. Unfortunately, after less than 18 months in post Mr Msomi announced that he was to be leaving the organisation at our mid-term review (March 2007). Alongside Mr Msomi's departure, the organisation also lost Susan Murray who was employed as Project Manager, (who has returned Rhodes to begin a psychology post-grad), Training Manager (Clint Cockroft, who has returned Rhodes to begin a psychology post-grad), training co-ordinator Veronica Moodley, and finance manager (Anne Taylor), who return to the private sector for financial reasons.

Without any consultation with the UK partners, the UTP Board decided not to replace the Africulture Project Manager (Sue Murray). They also made the unfortunate decision to request that the Africulture Centre Manager & plantsman Philip Crous, take the post of acting director until the post could be filled permanently. Under the circumstances, between October 2007 and March 2008, progress on the Africulture Project, which had, somewhat remarkably, remained on track until the mid-year review (October 2007), has now experienced some slippage. Furthermore, given the inevitable pressures implicit in taking on the role of acting director with few management staff to support him, combined with his not being able to fulfil his Africulture duties, Mr Crous has now announced that he is also leaving the organisation to take a job at Rhodes Parks & Gardens Dept. Given the expertise of Mr Crous, this leaves the Project in an extremely difficult position. However, during Mr Crous' tenure as acting director, GardenAfrica has worked closely with him to secure further grants, particularly from the local EC fund (Thina Sinako) for localised economic development, and another small grant from the Global Environmental Facility – both of which have been successful. Mr Crous' continued commitment to the Project is unprecedented, and his willingness to share his expertise with the incoming team is most welcome. He will be greatly missed as a central member of the team, but we wish him well for the future.

It now remains for GardenAfrica and Kew to work closely with UTP to rebuild the Africulture team in order to deliver progress against the agreed outputs. One such candidate who is ready to come on board as Project Manager is botanist Michelle Griffiths. Representatives from Kew and GardenAfrica had an opportunity to meet Ms Griffiths during the last end of year review, and were impressed by her knowledge and commitment.

Board

Under the advice of representatives from GardenAfrica and Kew, we are pleased to report that the UTP board of trustees has extended its own expertise in the field of traditional healthcare, plant conservation and training by inviting new members. These include Michelle Cocks (Rhodes – Dept of Anthropology, specialising in medicinal markets in the Eastern Cape), Phyllis Mnyamana (Secretary of the Makana THP Association), Sunitha Srinivas (Rhodes Faculty of Pharmacy), and Shireen Badat (whose background includes the Dept of Education - National Qualifications Authority, and is the wife of the Vice Chancellor of Rhodes University). Furthermore, the board's previous chairman has now resigned from the board. Kew and GardenAfrica are now hopeful that decisions can be taken to fill staffing gaps without further delay to ensure that the Project can get back on track.

Given that these events are extremely recent, at the point of writing no decision has been taken with regards to replacing the Director, although some good candidates have provisionally been identified. These include Dr Mandy Cadman (previously of SANBI), and Lawrence Sisitka (from the Community-based Natural Resource Management team at Rhodes). Key Project positions (Centre Manager & THP Liaison) are now also being advertised through the Indigenous Plant-Use Forum (IPUF) and SANBI networks.

The Africulture Steering Committee has recently drawn up a document to refine the Terms of Reference between itself and UTP, whereby it will be a formal body within UTPs own structure, as opposed to being a sub-group within its Projects & Programmes Committee. This will therefore enable faster and more efficient decision-making, by agreement of the UTP board, in recognition that the Africulture Project is a core pillar of UPT activities. This document is now under final review by the UTP board, 3 of whom sit on the current Steering Committee.

Project Partners / Collaborators

Due to the changes in UTP management, it has not yet been possible to ratify the Memorandum of Collaboration (MoC) between Kew, GA and UTP. This document was nearing agreement prior to last year's end of year review, and required only a couple of minor changes. We hope that, despite those changes, Kew will not have to go to the considerable expense of re-drawing this document, without which the transfer of genetic materials between SA and the UK will not be possible to complete the chemical fingerprinting (activity 3.5). However, we are aware that some changes might need to be made to the MoC to take into account the changes in CBD legislation in South Africa associated with Access and Benefit Sharing of genetic resources as of the 1st April 2008.

Royal Botanic Gardens, Kew

Now that the Traditional Health Practioners have agreed to release the names of the 40 plant species that they consider to be important for medicinal use to the communities, Kew has started to collate data on these species. This information will contribute to the production of monographs for each species. These monographs will contribute to the African Herbal Pharmacopoeia, and to the WHO list of medicinal plants. Of the 40 selected species, Kew has not identified any reports of drug-herb interactions.

Authentication of plant use – Once the appropriate authorities in South Africa have signed the MoC with Kew and phytosanitary certificates have been obtained from SANBI then small samples of the selected plants can be sent to Kew for authentication. Kew will then work with scientists in the School of Pharmacy and Chemistry departments of Rhodes University on developing methods that could be used to evaluate the quality of the plants been cultivated within the Africulture centre.

To support the monographs and authentication research Kew will ensure that specimens of all the selected species are vouchered and that the vouchered specimens are deposited in the National Selmar Schonaland Herbarium at Rhodes.

Database on traditional use. Kew has discussed with SANBI the influence of national and international directives on traditional medicine - which places restrictions on the commercial sale of medicinal plant-based medicines unless you ca show traditional use in-country for over 25 years. This project also aims to protect the IP associated with the traditional uses of plants. SANBI is working with other institutes to develop a database on traditional use. SANBI has made a request to Kew that information it has on the SA species is shared with the SANBI database. The main aim of the project will be to share information with the Project's growing THP network, however, having the data available on the national database will make it available to a wider group of people.

The South African National Biodiversity Institute (SANBI)

SANBI is the local implementer of the CBD. They have established a Bioregional Programmes Co-ordination Unit in the Eastern Cape, based in Port Elizabeth. The Bioregional Programmes Co-ordinator, Dr Mandy Cadman, whose role is to build horizontal linkages between N/GOs to enhance connectivity between the community development and environmental sectors. Dr Cadman is also responsible for co-ordinating the implementation phase of the Sub-tropical Thicket Ecosystem Plan (STEP); the **Fish River Biodiversity Initiative** is a key implementation intervention of the **STEP** programme. The Africulture Project is one of 8 community-based projects receiving support from this Initiative and is an integral component of STEP.

Since Dr Cadman announced her departure from SANBI last year, SANBI has struggled to recruit staff to its new Eastern Cape office in East London, with many, if not all posts lying empty. However, Dr Cadman continues working on a consultancy basis for SANBI, and remains steadfastly committed to the Project, believing that it can serve as a much needed model for similar projects in the province. Dr Cadman remains on the Project Steering Committee, and will be

contacted about taking on the role of UTP Director in the short-term. Dr Cadman's ongoing support will ensure that the Project continues to support the objectives of the Global Strategy for Plant Conservation (**GSPC**) with particular links to the National Biodiversity Strategy and Action Plan (**NBSAP**).

3. Project progress

3.1 Progress in carrying out project activities

1.1 Secure site and necessary authorisations for establishing a nursery and training facility

The 10 ha Africulture site was purchased in December 2005, but UTP only received the Title deed in December 2006. All compliance procedures for site development have been finalised; in May 2006, the Provincial office of DEAET granted UTP permission to develop the site as planned, as well as an exemption from the costly and time-consuming Environmental Impact Assessment (EIA). In July 2006, Local Government (Makana Municipality) approved the Consent Uses application under the primary zoning of Agriculture 1. Conditions were made by Department of Economic Affairs, Environment and Tourism (DEAET) with regard to the change in land use and EIA exemption; the most important being that an Environmental Management Plan (EMP) to be drawn up for the site and approved by DEAET prior to the physical development. These have now been obtained through the Coastal and Environmental Services (CES), allowing further development to progress.

This activity is therefore now 100% complete.

1.2 Identify target species through research & engagement with THPs for input into the selection of target species

The Project has continued to work with the Makana THP Association to identify species useful for the treatment of patients. Setting the criteria to select the plants has been a challenge – finding a balance between both healthcare and conservation needs. Identification also proved to be a lengthy process, with many local names for one nomenclature. Due to the thorough process of consultation, most, if not all, of the THPs consulted now understand that the use of wild harvested plants is not sustainable. This level of buy-in between the THPs and the Project remains unprecedented within projects of this kind in South Africa, with the Makana Association even willing to share information on wild populations so that 'tried and tested' plants, known to them as being effective, can be tested for equivalence to those being cultivated under the project.

The Project has a list of 31 indigenous species, with an emphasis being placed on telling a story about the key indigenous species that THPs use; upon those that the Project has existing in-house propagation and cultivation expertise; and that propagation material for each species is available. The current list of selected species is appended. It is expected that THPs taking part in the roll-out of the full cultivation training course (year 4) will add further species. 30% has therefore been allowed for additions which are specific to a wider training group & geographical area, before the Project will be in a position to document uses to input data on the GSPC, WHO and EU databases.

In consultation with THPs, the following species have been identified as being in demand, and are therefore under consideration for inclusion during year 4:

All Cycad species, Senecio elegans, Gunnera purpensa, Rhus incisa - var. effua, Gnidia capitata, Ledebouria revoluta, Schotia latifolia, Talinum caffrum and Sarcostemma viminale.

This activity is considered to be 70% complete.

1.3 Establish 1ha nursery site (to secure a sustainable supply of medicinal plants for training)

With plant production now based entirely at the dedicated 1 ha Africulture nursery site, and producing plants required for training, the nursery is fully operational.

This activity is now 100% complete.

1.4 Supply cultivated stock for training

With collection permits now in place, 1200 seedlings comprising **22 of the 31 selected medicinal species** have been successfully cultivated and supplied to participants as part of the pilot cultivation coursework. This are:

Alepidea amatymbica, Aparagus africanus, Boophane disticha, Bulbine latifolia, Capparis tomentosa, Clivia miniata, Curtisia dentate, Eucomis autumnalis, Gasteria bicolor, Haemanthus albiflos, Haworthia attenuate, Melianthus comosus, Mentha longifolia, Olea europea subsp. Africana, Pelargonium reniforme, Rapanea melanophloeos, Rhoisissus digitata, Rhoisissus tridentate, Silene undulata, Stangeria eriopus, Sutherlandia frutescens, Tulbaghia violacea

Non-Target medicinal species cultivated: Acacia karoo, Bowiae volubilis, Agapanthus praecox, Aartemesia affra, Bulbine frutescens, Talinum caffrum, Polygala myrtifolia, Becium burcheltianum, Schotia afra, Trichilia dregeana, leonotis leonorus, Buddleya saligna, Alloe ferox

A total of 1000 seedlings comprising 30 target species are needed to fully supply the cultivation training up to year 4; with 1760 seedlings comprising 16 selected target species successfully propagated out of a total of 2510 seedlings grown overall during the period under review

This activity is therefore considered to be 60% complete.

1.5 Develop appropriate technologies for cultivation and propagation of target species

The Project has identified species on the list that can be readily propagated, and has so far encountered no problems.

As per the above list (1.4), 22 of the 31 **target medicinal species** successfully cultivated. Kew has carried out a check on accepted scientific bionomial names used for all the species within the Project.

9 of the remaining target medicinal species are proving difficult to source on the open market. Time restrictions of key staff have prevented wild sourcing. These include: *Behnia retriculata, Cissampelos capensis, Dioscorea sylvatica, Hypoxis hemerocallidea, Pellaea calomelanos, Pentanisia prunelloides, Pittosporum viridiflorum, Rubia petiolaris, Rumex lanceolatus*

This activity is considered to be 55% completed

2.1 Develop Cultivation Training Course with input from THPs and other key experts

The Cultivation pilot course has been developed on the basis of applicable NQF unit standards through AgriSeta, the Education and Training Authority in the Agriculture Sector. After facilitation of each phase of pilot training (phases 1-4) a further assessment has gauged the extent to which the unit level and structure are appropriate for the Africulture Cultivation course, and course work revised accordingly. This has progressed steadily, although some slippage has been experienced as a result of holidays - when participants return to familial homes – affecting all of December and part of January, during which time Phase 4 had been scheduled for delivery. Phase 4 delivery has now been rescheduled for April 14–17, after which point the existing phase 4 materials can be assessed and revised.

The review team identified the need to focus attention on the development of pictorial materials with additional pamphlets to take home, which are not available as prompts at present. These include key plants around which 'stories' are being developed, appropriate techniques for cultivation (soil & water management), common health conditions, key plants to mitigate common conditions, alongside seed saving, propagation and cultivation techniques for each. A specialist in this field will be brought on board once the EU/Thina Sinako funding is in place.

The length of the coursework is currently under discussion, with due consideration given to the needs of participants to see results to encourage cultivation of important species relevant to their work, and for conservation of these.

Given the participatory nature of the pilot training, and its impact on the final course material, this activity is considered 90% complete.

Phase 1-3 have been assessed and can be found in the accompanying material, along with phase 4 outline

2.2 Develop Micro-nursery Course with input from THPs and other experts

During the 4th year (model pilot year 2008/9), the participants from the previous year's cultivation training will be selected for intensive micro-nursery training. The small indigenous plant nurseries established through this training will eventually take over the supply of indigenous seedlings to the rest of the growers from the area to ensure sustainability and independence from the Project. The content of this course is more complicated and the skills required more difficult to learn than those of the cultivation course. For this reason only participants who have demonstrated a skill and interest in more complex indigenous plants cultivation systems during the previous year will be selected to participate in this course. The Project will assist each micro-nursery participant to obtain a collector's permit, which will allow them to legally and sustainably collect the propagation material they need from the wild and will provide most of the basic equipment to get the micro-nurseries started. It will also allow the relevant Government departments an easier means of controlling illegal wild harvesting.

Some of this coursework will include information from the cultivation course, and is therefore considered 7% complete. The development of this course has been delayed due to staff shortages, and is not due to be piloted until mid 2008.

Once EU/Thina Sinako funding is in place it will be possible to allocate a staff member to the development and piloting of this course, with the first group playing host to the course on their own site.

2.3 Develop Agri-business Course by amending & consolidating existing course material with input from key experts

Over the coming year, the Project will make regular visits to the growers and THPs for ongoing mentoring and support. Entrepreneurial Skills training that is specific to small-scale agro-producers will be offered to assist both the growers and the micro-nursery owner/growers to enhance their income generation skills based on the growing and selling of their plants. This course will be open to the participants of both the above courses and, pending available space, to other agro-producers in that community.

Until the end of her allotted time with the Project (August 07), Dutch Africulture Volunteer Marieke Kijne had been conducting a review of similar initiatives taking place within the Eastern Cape that can contribute to training. Kew will also be providing simple examples of how plants can be used to make products such as anti-bacterial soaps. It will also assist develop quality control procedures that can be disseminated during training. Such activities could enable the development of Africulture branded products to be sold.

Training materials have now been assessed to align with the Project training model. This is therefore considered 20% complete. The development of the course structure, outline and resource materials were not due to finalised until May 2008, with pilot training conducted between August and November 2008. This activity will continue under EU/Thina Sinako funding during the coming financial year.

2.4 Conduct pilot Cultivation Course

Dedicated Africulture training facilitator, Ludwe Fani has now facilitated 3 of the 4 phased pilot training course to 5 groups of THPs (x 3 associations). The final phase (4) was to be delivered from December, but has experienced some slippage (for reasons already outlined in 2.1). This final phase contains the bulk of the coursework on sustainable harvesting of wild plants/material.

During phase 3, It was found that THPs had been invited to take part in a course hosted by the Dept of Health on HIV/AIDS. Whilst this is excellent complement to the Africulture coursework valuable, it would have been helpful if the Project had been aware of this course, to ensure that it did not clash with its own course delivery. This was highlighted by the review team during the Steering Committee meeting, one of the members being from the DoH. It was agreed that timetables would be consolidated to ensure that this did not happened again. Although the Project would not aim to compete with these DoH courses in future, it was also noted that THPs chose to attend the DoH course over the AC course because refreshments were on offer at the former. It was agreed that an allowance for refreshments on AC courses must be supplied, due to course being labour intensive. The lessons learned here have been extremely valuable to the team.

However, the Makana THP Association, the first to take part in pilot training, has now secured a piece of land at Settlers Day Hospital for the creation of a medicinal garden to compliment clinical activities. They are now waiting for written confirmation from the Provincial DoH, which will then enable the release of available funding from the provincial authorities in Bisho to establish the garden and nursery, with necessary inputs. This illustrates excellent progress, with the first group trained now motivated to put its' skills into practice.

With this course ongoing, at the time of writing this pilot is 75% complete

2.5 Ongoing monitoring and evaluation of training programmes to inform updated training materials

This activity is ongoing with the materials development consultants and Umthathi's Education Officer who observed and supported the initial training. Phase 1 - 3 of the Cultivation Course materials have been assessed and revised by local consultants, Project People. A clear acceptance of cultivated alternatives is being demonstrated by all THPs involved, who are increasingly aware the impact of present wild harvesting practices, heralding a shift in cultural belief systems. Groups of THPs from further a field have now applied for course, illustrating a good level of success in acceptance of the approach.

Pls comment on 25% complete, on the basis of ongoing course development from feedback. Phase 4 is due to be closely monitored in order to assess both materials and facilitation.

3.1 Research key issues needing advocacy interventions with input from THPs and other experts

Workshops with THPs continued to be facilitated by Sunitha Srinivas until she left on sabbatical in August 2007 – and has but is being replaced by Kenyan PhD student & senior lecturer (Catherine Karekezi). Dutch volunteer, Marieke Kijne has worked closely with Sunitha, until her departure in August, but has gathered and collated excellent files on the workshops and resulting data, to be handed over to her successor. With funding soon to be available for a full time THP Liaison position, we hope that a suitable candidate can be found without further delay.

These workshops have continued to build confidence in the Project, and have highlighted a number of critical issues.

Whereas many associations that the Project has had contact with (via the Bisho conference in 2006) remain unwilling to accept the inclusion in workshops of those THPs who are not registered, the first pilot group (Makana THP Association) is actively encouraging those who are not members already, to sign up with them in order to share and align practices.

Furthermore, this association has gone considerably further in agreeing that harvesters should also be a part of their association – thereby broadening their mandate. This is a direct result of the advocacy workshops, during which the THPs have become increasingly concerned about the negative impact that harvesters have on wild plant populations. In due course, the Project can expect these THPs to be advocating Project training to their harvester networks.

Whilst Sunitha continues her work with THPs, the lack of Project Manager has stalled the wider process of connecting the project and its findings with external bodies and institutions. This will be rectified when Michelle Griffiths joins the project under EU/Thina Sinako funding.

This activity is therefore considered 70% complete

3.2 Engage in advocacy issues including the Traditional Health Practioners Act, legal harvesting on private land, and indigenous knowledge protection

In a further Project initiative, a questionnaire was developed to gather information on the 10 foremost common ailments, and plants used to mitigate these. This is appended here, and will assist to develop list of plants under cultivation, and increase understanding and acceptance of usage. A sample questionnaire is appended here. The conditions listed by THPs during this exercise were: high blood pressure, cancer, internal bleeding, water retention, skin rashes, head ache, HIV/AIDS, diabetes, mental disorder, and diarrhea. An extensive list of plants used to treat these were also provided (in Xhosa) and are now being checked against binomial names at Kew.

African monographs – With the assistance of Kew, the Project is in the process of developing monographs which will contribute to the production of the African Herbal Pharmacopoeia. Monique Simmonds has had discussions with **Prof Kobus Eloff** (University of Pretoria) and Denzil Philips about how to develop the monographs as samples of the plants which will need to be exchanged with other institutes within South Africa to develop robust testing methods to support the monographs. Work has started on 30 species and it is planned to discuss further work on the species at the 4th World Conference on Medicinal Plants to be held in Cape Town, November 2008. The production of the monographs will facilitate use of the plants by the THP as changes in the legislation associated with the use of herbal medicines will recommend that approved THP only use herbs covered by the Pharmacopoeias.

Until such time as a dedicated Project Manager is on board, GardenAfrica has been in contact with Neil Crouch (SANBI) regarding the National Environmental Management: Biodiversity Act (NEMBA). The Act, which comes into effect on 1st April, contains a number of contradictions, not least relating to commercialisation and exemptions, which will have a significant impact on the trade of cultivated plants and related products. A meeting between DEAT and provincial regulatory bodies is to be convened on the 2nd April to discuss an implementation plan. We will remain in close contact with Neil, to establish the result of ongoing consultations, and how to disseminate this information to Project stakeholders once the dust has settled.

Other aspects of this activity have been integrated as part of cultivation coursework (legal harvesting and seed gathering) and will be further explored in the micro-nursery course (under development). NEMBA was also been introduced during THP workshops (see 3.3).

With the decision taken not to replace the Project Manager with immediate effect from March 2007, this activity has experience significant slippage. The Project team is acutely aware of the need to recapture lost ground in this regard, and is keen for Ms Griffiths to take position in order to fulfil these components.

This activity is still considered 20% complete

3.3 Generate and disseminate information around practice and safe use of medicinal plants

Now that the first species selection list has been compiled with THPs, Kew is collating data from the literature that shows that none of the selected plants have been reported to the WHO as being associated with interactions with the antiretrovirals presently being used in South Africa. Kew plans to discuss the data it has collated on the plants with Rhodes Pharmacy Department to establish whether they are aware of any adverse responses to the plants so that appropriate action can be taken in the use or preparation of the plants.

This information will be disseminated through registered medicinal body early in year 4, and will contribute to the development of best practice information pamphlets with a view to being disseminated by THP participants to community members who self-medicate.

Collaboration was set up between the Project, Dr. Sunitha C. Srinivas (Associate Professor, Faculty of Pharmacy, Rhodes University), and the Makana Committee of Traditional Health Practitioners Association, to discuss HIV/AIDS, Anti-retrovirals (ARVs) and traditional medicines (TMs). The aim of this collaboration was to initiate discussion and also to provide THPs with information on these subjects from the biomedical perspective. It was encouraging that the request to acquire information about the interaction between traditional medicines and ARVs came from the THPs themselves.

Over a period of 4 months (May - August 2007) a total of seven workshops were held. The workshops were divided into three sections: one focussed on HIV/AIDS, the second on ARVs and the last one on the interaction between simultaneous use of traditional medicines and ARVs. An average of 25 members of the Makana THP Association attended the workshops. The main method used was group discussion. In each section, questions were posed to determine the participants' views and knowledge on the subject and to stimulate group discussions. After the group discussions, answers to the questions were given from the biomedical perspective and additional questions from the participants themselves were responded to.

The last part of the workshop was the most theoretical part and concentrated on the following: Traditional Medicine (TM) and their global use; criticism of TM; South African government initiatives to promote TM; manufacturing, regulation and research of allopathic medicines; and possible interaction between African herbal medicines and ARVs. The THPs had little knowledge of all of the above-mentioned issues: even though they were aware of the fact that there is a lot of criticism of TM, they didn't know exactly why. Also they could not clearly see the difference between traditional medicines; and allopathic medicines; they didn't know what the South African government has done to promote traditional medicines; and they didn't know anything about the manufacturing, regulation and research of allopathic medicines. The

focus during these workshop sessions was therefore on providing information and explaining the broader context of the interaction between TM and ARVs. Attention was paid to the use of traditional medicine globally, and the existence and role of the WHO in this regard. Criticism of traditional medicine was explained by contrasting the western and the African point of view on medicines and their safe use. Attention was paid to the way medicines are tested in the western world, explaining the controlled, double blind, peer-reviewed method of testing. Also the amount of time and money involved to bring a new medicine to the market was stressed. Attention was paid on the three areas of criticism of TM: safety, efficacy and quality. Several initiatives that have taken place in South Africa to improve and promote TM were mentioned: the NDP (National Drug Policy); the THP Act of the Department of Health; The NEMBA (National Environmental Management Biodiversity Act); and the Indigenous Knowledge Systems Bill of the Department of Science and Technology; and the establishment of the National Centre for African TM. Finally it was stressed that from the little research that has been done on the interaction between ARVs and TM, it would be best not to combine herbal medicines and ARVs before research has proved the safety of this for the patient.

The THPs knowledge on HIV/AIDS has been extended as well as their understanding of the causes of the disease. They also gained knowledge about biomedicine; the way conventional medicines work, the development of drug resistance and their interaction with other substances like traditional medicines. The main goal of the workshop, to raise awareness amongst THPs on the possible danger of simultaneous use of TM and ARVs, has been achieved. At the end of the workshop the THPs who participated in the programme all acknowledged their responsibility as healthcare providers for their patients in this matter. Because of the success of the collaboration and on request of the THPs, the Project is now looking at the possibility of extending the collaboration into other areas of interest. The THPs stressed a particular interest in chronic and commonly occurring health conditions in the Eastern Cape, e.g. hypertension, asthma and diabetes.

This activity is considered to be 50% complete

3. 4 Information sharing and awareness raising associated with the sustainable use of biodiversity

Phyllis Mnyamana is proving to be an excellent asset to the Project, and one of the more vocal members of its committee. Concerned about perceptions of THPs in South Africa, she is keen to advocate the positive role of THPs in promoting health and conserving biodiversity. Phyllis has therefore put herself forward to present a feature on 'The Calling' - a Xhosa radio programme (broadcast from East London) with national reach, in which she can discuss issues around safe-use & cultivation of medicinal plants in the present climate. Facilitator, Ludwe Fane will also join her in talking about sustainable cultivation of plants, to promote home cultivation amongst the many listeners who self-medicate (and would otherwise purchase wild harvested plants from traders). We would hope that this could become a regular feature, which would prove to be an excellent outcome of the project.

One article within South Africa has been co-authored by Sunitha Srinivas, Marieka Kijne and Phylis Mnyamana, and is due to be published in the Essential Drugs Monitor (WHO).

The March Africulture newsletter has been published – circ: 2,622 (via UTP, IPUF & SANBI networks). The Project has also been featured in GA's March 08 e-newsletter (circ: 3000), and in the GFU for Underutilized Species. Two local SA articles have been published in Grocotts Mail in Grahamstown. Rhodos (official Rhodes newsletter) in March includes and article on the Project to promote it's 'adopt a plant' campaign (*Howorthia attenuate* cultivation project) for Rhodes students.

Monique Simmonds has features the Umthathi Africulture Project in 46 talks given during the year at conferences and meetings to illustrate the importance of medicinal plants in supporting health programmes but also the need to conserve not only plants for their sustainable use but the indigenous knowledge associated with the traditional uses of these plants. The project has been presented to five of the UK Education Examining Boards as an example of the importance of conservation and health in a biodiversity hot spot. The project was also presented by Monique Simmonds at a Gatsby Workshop for outstanding Plant Science students to illustrate the type of work that graduates with botanical expertise can contribute to, and to the Gates Foundation as an example of the importance of medicinal plants in the treatment of HIV related ailments. Attendance at these talks = 8,085

With a total of 22 items spanning press, broadcast & publication, and a further 71 presentations in which project information has been discussed & disseminate – we consider that this activity is already 100% complete, but will naturally continue to strive towards the publication in academic journals of project findings.

3.5 Chemical fingerprinting

As already discussed under Section 1 (Project Collaborators), due to the present state of SANBI, it has been difficult to arrange for the transfer of genetic materials between South Africa and the UK. Once the MoU has been signed between Umthathi, Kew and GA, it will be possible for Kew to organise this from the UK end. We expect this to progress early in the coming financial year. Work has started at Kew on samples of plants in the Kew collections. However, these data will need to be compared with chemistry of the plants being cultivated for use in the Project.

This activity is therefore 25% complete

4.1 Measure the implementation of cultivation practices by trainees

This component has not yet taken place, with the development of monitoring mechanisms ongoing. While it is therefore too early to comment on progress, we expect to feed in progress of the first group, once they have taken tenure of their plot at Settlers Day Hospital. As with all the activities contributing to this output, this is not due for implementation until year 4.

This activity can be considered 15% complete.

4.2 Measure uptake and use of cultivated materials by THPs

Uptake will be measured through monitoring the behaviour of THPs trained by the Project. This will also be ongoing. This will be built into workshops with THPs from the 1st introductory year, when base-line information on wild harvested species will be collected. As training progresses, it will be possible to monitor behavioural shifts to use of cultivated alternatives. This is due to take place in 2008/9. The development of monitoring mechanisms underway and relationship with THPs established.

This activity is therefore considered 15% completed

4.3 Survey to what extent cultivated materials have replaced wild harvested materials by trained THPs

Having established a firm relationship with those THPs involved in the project, it is hope that they will be willing to share information on the scale of wild materials they are still using. It is not expected that THPs will make a 100% shift to use cultivated plants as there are many cultural reasons why they use wild harvested material. This will assist in making an assessment of what may lie behind a failure to shift from *some* wild to cultivated species.

Just as with 4.1, and 4.2 – this activity is considered 15% completed, with the development of monitoring mechanisms underway and relationship with THPs established

3.2 Progress towards Project Outputs

1) Production of indigenous plants to secure a sustainable supply for training for growers and supply of stock to micro-nurseries

The Project has progressed well and, until the mid-year point, was on track to deliver against this output. The only activity contributing to this output that has lagged behind, has been the wild sourcing of 9 of the 31 other target species now under successful cultivation, due to time staff-related constraints.

The Project will continue to grow the site in accordance with available funding, which will allow greater capacity for the cultivated of target species – the list of which we intend to increase by a further 30% once the full training is underway.

Against indicators, the PIT is on target to achieve this output by the end of the DI project term. This output is therefore considered to be largely on track, being 77% complete.

2) Beneficiaries trained in indigenous plant cultivation pilot. Micro-nursery and agri-entrepreneurship courses developed.

With many of the activities relating to this output relating to year 4, it is too soon to comment on the success of achieving this output. However, with the pilot linked to the ongoing courses now underway and training materials being revised and peer reviewed, good progress is being made, despite some slippage with the final phase of the Gen Cultivation Course. Activities 2.2 & 2.3 have also experience some delays due to funding constraints but we expect that these will soon be back on track in the coming year – with EU funding for the continuation of the development of these 2 courses with local consultants (Project People) who are tasked with the development of related coursework.

Please note that the overall training figure sated within the standard output measures, refers to the integration of phase 1 of the general cultivation course (consisting of biocultural diversity and games, such as the web of life) into UTPs existing schools programme across the wider target area. This will take place, once the pilot is complete, in year 4.

The Project is making progress against these output indicators, with strong feedback from course participants to date, illustrating an increase in participant interest for future courses. Bound course material for the Gen Cultivation phases is being forwarded directly to ECTF.

Against indicators this output is nearly 43% complete.

3) Advocating sustainable traditional uses and appropriate recognition of plant based rights and practices

Despite the lack of a Project Manager over the past year to link the project with other initiatives and institutions, this output is showing progress in relation to advocacy with THPs. Recognising that the needs of THPs will inevitably change as new legislation comes into being, advocacy issues (including THP concerns) have been primarily identified in consultation with THP associations – with a significant amount of background research undertaken in the midst of an extremely fluid policy environment, which continues unresolved at the national level. The Project has received a significant amount of media attention, and has only now begun to publish its findings – with monographs due to go online in via the dedicated Project website, as well as via Kew's extension network. No activity has been possible with regard to the transfer of genetic materials from South Africa and the UK, affecting chemical fingerprinting (3.5). As already mentioned in section 3, Kew will motivate for this transfer from the UK, so that this activity can get underway in the early part of the coming year.

Against indicators, this output is 53% complete.

4) Information on changes in behaviour and plant use patterns arising from cultivation, training and advocacy activities

Being the most important output in measuring the Projects success, it really is too early to make an assessment of achievements towards this output – but against indicators this is 15% complete. However, as already indicated, THPs now engaged in training have illustrated a clear understanding of the negative impact of present practices on biodiversity, and the resulting impact this will have on their work. All are committed to broadening access to project courses, in seeking to replace wild harvested with cultivated species, and those who are presently not part of a formal association are, for the first time, to be invited by those THP Associations that the Project has developed a relationship. With the first group due to commence activities at their own site, it will be possible to measure implementation of practices, and to what extent they are able to replace wild harvested materials with those that they have cultivated for use. Furthermore, the 1st roll-out training will be offered (in year 4) to a THP group in Peddie which, unlike Grahamstown, has a large medicinal market. The Project will then be able to gauge to what extend cultivated replaces wild harvested materials, and traders willingness to trade these alternatives. Africulture branding will be an important part of this 'selling' process, and will need to be stepped up in the coming year.

3.3 Standard Output Measures

	DESCRIPTION	YEAR 1	YEAR 2	YEAR 3	TOTAL
	Training Outputs				
1A	Estimated 2 South Africans - via other funding	0	0	1	1
1B	Estimate 2 South Africans - via other funding	0	0	0	0
2	Estimate 2 South Africans - via other funding	0	0	0	0
6A	Estimate total of 1365 South Africans Trained	0	0	67	67
	Cultivation Training Course: est 60 in yr 3 / est. 60 in yr 4.	0	27	41	61
	Weeks actual contact training with each group (weeks 1&4 at Centre and weeks 2,3&5 on site)	0	5	6	11
	<u>36 weeks non-contact training activities by</u> participants	0	0	8	8
	3 days (per group) interim field support during the non-contact training phase	0	0	12	12
	Kew training of 6 in authentication techniques – on site 4 ($\underline{\text{yr } 3}$)	0	0	0	0
	Training of all nursery staff and Umthathi Projects Manager in details of CBD and Biodiversity Act by SANBI and DEAET (15) <u>yr 3</u>	0	0	0	0
	In-house ongoing supplementary training of nursery manager, course facilitators and nursery workers	0	4	2	6
	Silverglen courses in indigenous medicinal plant propagation y3 These are no longer offered	0	0	0	0
	Training of course facilitators and Project field volunteer in basic bio-diversity monitoring of select species <u>v3</u>	0	0	0	0
	14 stakeholder workshops, involving 15 stakeholders per workshop	30	27	8	65
7	3 x training manuals for facilitators	0	0	1	1
	3 x course material for participants	0	0	1	1
	3 x support workshop content lay-out for facilitators	0	0	1	1

	Research Outputs				
8	8 weeks p/a	5	4	6	15
9	Dependent on species selection. Estimate input to <u>30 target species</u> management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country – y3	0	0	0	0
10	2 individual field guides/manuals to be produced to assist work related to species identification, classification and recording	0	0	0	0
11A	Kew authentication methods – 15 (yrs 3/4).	0	0	0	0
11B	Estimate 4 papers published in peer reviewed journals – SA. At least 3 – UK	0	1	1 submitted EDM- WHO	2
	Estimate 11 papers to be submitted to peer reviewed journals / At least 5 - UK	0	2	0 - (planned for yr 4)	2

	Dissemination Outputs				
14A	4 x conferences/seminars/ workshops to be organised to present/disseminate findings	0	0	0	0
14B	8 x conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	6	29	48	83
15A	3 x of national press releases in SA	0	0	0	0
15B	10 x local press releases in SA	0	2	4	6
15C	4 x national press releases in UK	1	1	0	2
15D	4x local press releases in UK	0	2	0	2
16A	4 x electronic newsletters to be produced (annually)	1	3	2	6
16B	Est circulation = 500 through IPUF/SANBI	0	1500	2622	4122
16C	Est circulation of newsletter in the UK 5- 7,000	0	2,962	3,569	6,531
	Est 2 SA dissemination networks to be est	0	1	1	2
17A	Est. 10 SA dissemination networks to be enhanced/ extended	0	2	1	3
17B	Est 5 dissemination networks to be enhanced – UK/ <u>Int</u>	0	1	0	0
18A	Est 3 SA national TV programmes/features (2 news items, one video documentary in year 4)	0	1	0	1

18B	Est 3 national TV programmes/features (2 news items, one video documentary in UK	0	4	0	4
18C	Est 5 x local TV programmes/features in SA	0	0	0	0
18D	Est 2 x local TV programmes/features in UK	0	0	0	0
19A	Est. 2 national radio interviews/features SA, potentially much more if this medium is used to disseminate project outcomes	0	0	1 planned yr 4	0
19B	4 national radio interviews/features p/a in UK		0	0	0
19C	Est 8 local radio interviews/features in SA	0	0	0	0
19D	4 local radio interviews/features in UK	0	0	1	1

	Physical infrastructure				
20	Physical assets to be handed over to host = £ (funds for building to be sourced separately)	0		0	
21	<u>1 productive nursery producing indigenous</u> target species for training	0	1	0	1
	1 permanent educational / training / research facility / organisations to be established and continued after Darwin funding has ceased	0	0	under dev with EU yr 4 funding	0
22	Estimate <u>80</u> permanent field plots to be established during the project, and continued after Darwin funding has ceased (<u>yr 3/4)</u>	0	0	6	6

Financial Inputs				
Remaining funds secured				

Table 2: Publications

Type *	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	
Journal	Collaborating with Traditional Health Practitioners in Grahamstown: promoting comprehensive care for HIV/AIDS Sunitha C. Srinivas, Marieke Kijne, Phyllis Mnyamana	Essential Drugs Monitor WH, Geneva	Difficulty confirming publication date & other details	

3.4 Progress towards the project purpose and outcomes

Despite capacity issues at local level, and as already discussed in sections 3.1 & 3.2, the Project has made sturdy progress in building relationships with both formally associated and other THPs groups. The process of consultation contributing to this has been a key area under constant evaluation. The primary assumption driving the Goal and Purpose of this Project has always been the acceptance, by THPs of cultivated materials (and inherently, for harvesters, to motivate a change to cultivation practices) and that the Project would be in a position to affect such an important behavioural shift so as to affect biodiversity in a significant way. Without endorsement by THPs it would not be possible to service the project purpose – to *support and enhance plant-based livelihoods that are underpinned by biodiversity within the Eastern Cape.* The growing interest around training has validated the more gradual approach adopted by the Project, and is the result of constant monitoring and revision. The Project has yet to roll its main course out across significant number of recipients in order to meet its purpose, which will take place in the coming year. To achieve this it will needs to put new staff in place to address both its advocacy and training commitments. Having achieved a strong endorsement from THPs it will now be important to shift the focus to harvesters, who are responsible for collecting large amount of wild harvested materials, so that they can be trained in cultivation and sustainable harvesting which will contribute towards building more sustainable plant-based livelihoods.

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

It is too early to measure progress towards biodiversity impact, due to the unit of measurement being the shifting behavioural practices from the use of wild harvested species to cultivated alternatives. This will primarily be measured in consultation with the Projects' stakeholders, and will include harvesters and others trained. Monitoring will be conducted by the following activities:

Measurement of the implementation of cultivation practices by trainees – this measurement is ongoing, based both at the gardens where training groups have received their on-site training. This process will also gather pace once Makana THPs have established their own communal garden to cultivate in larger numbers.

Measurement of uptake of use cultivated materials by THPs – Given that the THPs have not yet formally completed their pilot, it will take some time before commonly used species are ready for use.

Survey to which extent cultivated material has replaced wild harvested material by trained THPs – a questionnaire has been developed for THPs to prompt discussion around this subject, and is part of the course wrap-up.

That THPs have not only agreed to recommend the course to their harvesters, but to incorporate them into their association is a good step towards achieving the project purpose, ensuring that impact of introducing cultivated alternatives, and creating a cultural shift in patterns of use, may be felt at market level.

4. Monitoring, evaluation and lessons

Project collaborations from SA and UK have met 3 times this year, to guide and support the more refined process by which to measure progress, as designed during last years MTR. At the 2nd visit, during the Project's mid year review (October 2007), the team was pleased to report to the DI that it was on track to deliver again all of its 2007/8 targets.

However, soon after this time, the affect of staff shortages began to have a serious impact on the Project, with the role of project manager, and acting director taken on by the Centre Manager. Furthermore, the status of the Project Steering Committee within the overall structure of our implementing partner UTP, has no doubt affected the import with which the decisions taken at that level have been given. At each of our reviews, a strong recommendation was made to UTPs board regarding key project staffing needs if the Project were to remain viable. A sense of urgency may not have been understood, given that these targets had been delivered without a Project Manager in place to drive and consolidate outputs towards the achievement of the project purpose to that point.

UK partners have undoubtedly been kept at arms length from the projects in the past, which is now widely understood to be one of the reasons that the project has not performed as it may have done. However, the past year has seen a far more inclusive approach, enabling a more frank and open dialogue about the needs of the project to provide a more responsive and flexible approach to delivery issues. But there is no doubt that this has cost the Project dearly, which we now hope to make up.

Previously, findings from the project M&E sessions were fed into the Project Steering Committee (SC), which then had an opportunity to discuss recommendations. However, it increasingly became clear that many of these recommendations were not being carried through to board level – and that in fact the board had quite different expectations of the project, and it's potential. As already mentioned in section 2 – the Steering Committee will now take a more central role within UTP governance structure. Three of the SC now sit on the UTP board, introducing more project-specific expertise to the centre. Despite the difficulties within UTP itself, belief in the Project remains strong. We expect that these internal matters can be resolved with a new board, and chairperson in place to drive the team.

5. Actions taken in response to previous reviews

Business/Development Plan – This document has provide a valuable asset to the project, and has been used as an effective fundraising tool. A recommendation has been put forward that this needs regular updating as funds are raised, and the capital development is readied for implementation in phases, so as not to distract from delivery of Darwin outputs.

Fundraising – GardenAfrica has worked closely with Mr Crous during his tenure as acting Director. Together we have made a successful application to the local EU fund for localised economic development (Thina Sinako) for R 4.4 million (). The agreement was signed in December 2007, and is now awaiting clarification on some issues before being made available. Mr Crous also acted on GA's recommendation to make an application to GEF for its small grants programme – and has since received US \$. Five further grants have been received during 2007/8 totalling \pounds – all rebuilding the confidence in, and of the team.

UTP has now made an approach to GEF to a medium sized grant, and an application in now in progress, and has submitted a number of additional applications to existing funders which are now being reviewed.

Communication between project partners has been more regular, for reasons already expressed.

Staffing Issues, which have been a regular feature and challenge throughout the project, are due to decision-making at UTP, as well as genuine capacity difficulties felt right across the sector in South Africa. UK partners have now recommended that the SC is now part of decision-making on short listing staff appointments. This is now taking place.

6. Other comments on progress not covered elsewhere

This has been adequately covered elsewhere in this document.

7. Sustainability

With funding now available, the PIT has little doubt that the planned sustainability model will enable greater planning towards expansion. This is however as ye a paper excersise, and requires a strong team, with excellent leadership within UPT to see this through. The PIT is aware of the need to provide continued support to enable UTP to continue to build a strong team to service this vision – which now lies at the heart of the organisations growth and expansion more than ever.

In the context of this report it is understood that the desired level of progress has not been achieved as may have been expected, many reasons for which have been outside of the Project team's control. With the level of Darwin expenditure, we would ordinarily have expected greater returns. However, the remaining team, including the UK partners, share a strong commitment to delivering a legacy. It is perhaps important to recognise that, against the Project's activity (Gannt) chart, this Project is still delivering, despite some major obstacles, yet with only minor slippage in relation to specific outputs.

Given that of the £ of Defra monies that have been invested in this project, and with only 1 year left to run, there is only £remaining for 2008/9. These monies are earmarked for UK support of the ongoing project, and constitute only 61% of the overall funds required. GardenAfrica and Kew take their commitment to Darwin and the Project very seriously, and are therefore proposing to provide even greater support to assist UTP to pull the project back on track, and develop a stronger team to move into the future, and to protect Darwin's good reputation. With some strong team members waiting in the wings to take up their positions (under EU funding), and with greater influence over staffing and governance issues, we are confident that this project can achieve its goal, and provide a legacy for biodiversity conservation training in the Eastern Cape.

8. Dissemination

Greater emphasis needs now to be placed on the dissemination of project outcomes. With monographs underway at Kew, these can be disseminated via a wide international network. The data in these monographs can also be used to produce leaflets for the trainers and THP.

The Project's website is an excellent tool, but also now needs to be expanded to include data and other research findings. A volunteer from Rhodes Media Dept is being sought for this purpose.

Despite initial reservations of the original team in-country, greater connection with various departments within Rhodes are now being developed

Item	Budget	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others –			
Kew validation			
Banking			
Contingency			
Salaries (specify)			
TOTAL			

9. Project Expenditure

Outstanding achievements of your project during the reporting period

This has been a challenging year, with the Africulture Project severely affected by skills and staffing shortages that have affected so many NGOs and like projects in South Africa. Despite this, the Project has remained largely on track to deliver against its commitments. The coming year (2008/9) will see the completion of the foundation phase of the Project, under the Darwin funding, and will hinge upon the ability of the team to identify key team members to take the Project forward. This will be greatly facilitated by the substantial grant recently approved by EU/Thina Sinako Local Economic Development fund, and GEF funding for 2008/9, for which UK partners and the involvement of the DI has provided important leverage. We are grateful for Darwin's continued support.