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*Second Annual Report, 2006-07 (July to June)*

*Project: 14-002*

***“Environmental educational programme promoting biodiversity conservation on Socotra, Yemen”***

# **Darwin Initiative**

## **Annual Report**

### **1. Darwin Project Information**

Project Ref. Number	14-002
Project Title	Environmental educational programme promoting biodiversity conservation on Socotra, Yemen
Country(ies)	Yemen
UK Contractor	Durham University (Geography)
Partner Organisation(s)	Socotra Conservation and Development Programme, Yemen, and the Soqotra Society for Heritage and History
Darwin Grant Value	£186,440
Start/End dates	July 2005 to June 2008
Reporting period (1 Apr 200x to 31 Mar 200y) and report number (1,2,3..)	Second annual report: July 2006 to June 2007
Project website	
Author(s), date	Roderic Dutton

### **2. Project Background**

- *The project is located on the Yemeni island of Soqotra (350km by sea from Makullah), the main island of the Soqotra archipelago, as special as the Galapagos in terms of endemic species, and unique also in that the population (c.45,000) has an indigenous language (in addition to Arabic) and culture. The flora and fauna have been under research since the 1880s, with large grants to enhance the research process during the past 20 years including a major GEF grant and a previous Darwin grant. The research has resulted in a growing number of scientific books and peer reviewed papers almost all in English and effectively inaccessible to the education system on the island.*
- *Most of the children are now at school. At the same time life-security and economic diversification have been enhanced for many reasons, including year-round flights to/from Aden and Sana'a, making the need for conservation less obvious. Education has many advantages but a disadvantage is that it takes children from their parents during the most active parts of the day, thus they are not imbibing parental 'innate' understanding of the need for and means to achieve conservation.*
- *The Government of Yemen is aware of the special nature of Soqotra and has created the Socotra Conservation and Development Programme (SCDP), now headed by the Minister of Water and Environment, who is also Director of SCDP, to guide and oversee research and sustainable development on Soqotra.*

### **3. Project Purpose and Outputs**

- *To ensure, through curricular education, that future generations of people on Socotra know about and are concerned for the sustainable management of their islands' unique flora and fauna heritage. Teachers, many from the mainland and other Arab countries, need*

appropriate training. The project will work with MoE to include a requirement within the curriculum for children to learn about and maintain respect for their unique natural heritage (including the many practical, medicinal and livelihood values of the plants and the traditional land and livestock management practices that have conserved the biodiversity) and play future roles with EPA to establish and manage the network of community-based protected areas and foster community support for biodiversity conservation. It will convert scientific knowledge into stimulating educational materials. Outputs: 1: Materials / approaches developed with EPA EE team, TTC and pr'y and sec'y teachers on Socotra; 2: Outreach strategies and courses developed, EPA staff and in-service teachers trained; 3: Teaching strategy and courses for TTC developed; 4: Agreements on EE between EPA (Socotra) and TTC and MoE achieved

- Operational plan changes:
  - By email discussion with Darwin, RSPB (Porter and Cooper) dropped out of the project. In Yemen it was also agreed that the work of the Yemen Society for the Protection of Wildlife (Omar Saghier) should be discontinued. Given that EPA EE on Soqotra had more relevant experience, we would ask them undertake the extra-curricular role of working with schools and school-based clubs.
  - By discussion with Darwin the printing anticipated for this year should be deferred until the final quarter-year of the project, April to June 2008
- Output changes
  - 1: Materials / approaches developed with EPA EE team, TTC and pr'y and sec'y teachers on Socotra. **Change:** Although EPA EE have been (and will continue to be) involved, quite a lot of their role in this has been (and will be) taken by the NGO, SSHH. All other groups, including the MoE on Soqotra and in Sana'a, are being actively involved.
  - 2: Outreach strategies and courses developed, EPA staff and in-service teachers trained. **Change:** Modifications to the operational plan allowed us to involve EPA EE more centrally, with extra-curricular activities including school clubs.
  - 3: Teaching strategy and courses for TTC developed. **Change:** For providing teachers for Soqotra, the roles of the TTC and of the College of Education remain unclear, though it seems that the College will be responsible for Arabic leaving the TTC responsible for other teaching disciplines.
  - 4: Agreements on EE between EPA (Socotra) and TTC and MoE achieved. **Change:** We achieved an agreement with EPA, but this has not been possible with TTC / College of Education because their respective roles are still not finalised.

#### 4. 4. Progress

- The first year (2005-6) went mostly according to plan: agreements were reached on educational topics and materials by November; materials were drafted, translated and approved by mid March (and the RSPB 'build-a-bird' kits made); the strategy and courses for field testing were implemented by training in March including the role of the NGO SSHH; an outreach strategy was also agreed associated with three schools and the ETA EE Awareness team; important and effective discussions were undertaken between all parties in formal workshops and informal meetings including initial mid-level discussions with curriculum officials in MoE; appropriate MoUs were agreed with all parties. The materials were tested in pilot schools from March to the end of the academic year. Work on the learning-by-growing concept was successfully initiated. However, A change, agreed with Darwin, was to replace EPA EE with the NGO SSHH for much of the role originally agreed for logistic support, and educational monitoring and evaluation. The responsible body for training teachers for Soqotra had been the Teacher Training College, part of the Hadhramaut University, but this was changed by Yemen to become the College of Education on Soqotra itself. However, the status of the College was still in flux making it difficult to know how to work with it.

- o Below, taken verbatim from the project document, are the annual activity milestones from year two and the associated key milestones. Note the associated **Comments**.

#### Annual activity milestones; year two

Yr 2: More materials and approaches developed. **Comment**: Approaches (curricular materials; extra-curricular awareness training; learning-by-growing) were refined and improved in discussions between all parties. Also, the educational materials were altered and added to taking into consideration all the comments and suggestions made.

Yr 1-2: Selected EPA staff trained in developing materials with teachers. Outreach strategy outside of curriculum developed. **Comment**: The EPA EE team came back into the reckoning (which had seemed unlikely at the end of year 1; see first-year report). The team, led by Ahmed Jumma, took an active part in the Jan 2007 training workshop and, working with Andy Griggs from the UK, agreed on a pilot programme in 12 schools and the local nursery to make up to 36 separate awareness and training visits to the schools, or by taking groups of children to selected locations away from the schools.

Yr 2: Accredited training in UK for 1 EPA staff or one MoE staff member achieved. **Comment**: With Darwin approval this was altered to 6 people to undertake a week of training in Jordan in year three of the project.

Yr 2-3: Working with EPA staff and teachers, the new course developed and being delivered. **Comment**: The new course has not been delivered in year 2006-7 (see below).

Yr 2: In-service teachers trained. **Comment**: Yes, in the 'familiarisation' workshop in January.

Yr 2: Courses approved and TTC staff trained. **Comment**: As previously stated the College of Education on Soqatra had replaced the TTC in Makullah for this role, but its own role is still under discussion with the Ministry of Higher Education in Sana'a. Although (see above) the courses were not approved, staff at the College of Education were involved in the January workshop, themselves helping to conduct the familiarisation/awareness raising activities.

4: Yr 1-3: On-going meetings/discussions/emails, faxes with MoE, EPA, SCDP and other bodies in Sana'a resulting in EE being integrated into the curriculum, as initiated in Socotra. **Comment**: Discussions have been held with SCDP, EPA EE, MoE (on Soqatra and in Sana'a), College of Education (Soqatra), and the NGO (SSHH),. In particular discussions were held in July (during a visit to Soqatra/Sana'a which also monitored progress in year one), December, January/February and April (see below).

#### Key milestones; year one

Materials produced and delivered to Socotra before start of academic year. **Comment**: The first materials were delivered in year 2005-6. But no new or revised materials were delivered ahead of academic year 2006-7(see below).

Selected teachers trained. **Comment**: Yes, what was called a 'familiarisation workshop' was held in Jan 2007 attended by 50 teachers and others.

EPA staff trained in promotion of materials to teachers. **Comment**: Yes, in January 2007.

TTC staff trained. **Comment**: College of Education staff were trained and themselves then acted as trainers in the January 2007 workshop.

Main materials refined in the light of experience and changes agreed. **Comment** The educational materials were altered and added to taking into consideration all the comments and suggestions made following trialing in year one

Training of additional teachers in use of materials by EPA EE staff. **Comment**: Yes, EPA EE staff participated in the January 2007 awareness raising / training workshop for 50 teachers and others.

Meetings with MoE re curricular connections and relevance. **Comment**: Yes (see below).

Learning by growing working with pilot schools. **Comment**: A major training session in January and February 2007 was followed by a second in April/May and then some follow up in July 2007 (see below).

#### Progress in year 2

Early July meetings on Soqatra and in Hadiboh: At meetings on Soqatra 3<sup>rd</sup> to 7<sup>th</sup> July and in Sana'a from then until 12<sup>th</sup> July we were able to talk at length with 20-25 people, gaining excellent feedback from the early experiences of using the educational materials and discussing this with senior MoE personnel and the Yemeni project leaders including my direct counterpart, AbdulRahman al-Eryani, who is now also Minister of Water and Environment. These meetings also set the work plan for year two of the project, with the following main elements and timings:

- *Curricular education: we would expand our first year trial from 3 to 12 schools (50 teachers, and staff from Soqatra's College of Education and local education officials) with a training week in January 2007 followed by the in-school trialing of revised materials during the rest of the academic year to May 2007. This to be undertaken, mainly, with assistance from SSHH and the local Department of Education but also with the involvement of teacher trainers from the Ministry of Education in Sana'a and/or Makullah.*
  - *Extra-curricular awareness raising: This would provide some activity and focus for the 'environmental clubs' that had been established in the three original pilot schools, Hadiboh, Qalansiyah and Nugid, and involve other schools also – possibly establishing environment clubs in some of them. This would be undertaken mainly by the EPA EE (Awareness and training team) on Soqatra following training in January 2007. It would also be the most appropriate way to use the build-a-bird kits made by RSPB in the previous year.*
  - *Learning-by-growing: This would expand the work of year one by linking the excellent plant nursery near Hadiboh with one or more schools so that some children would gain first-hand experience of growing plants and using them as a learning tool. This work would be led by the UK NGO 'Aridlands and Community Development' acting in coordination with the Royal Botanic Garden Edinburgh which is also supporting the nursery.*
- *The main difficulty (or perhaps simply the main evolutionary change) came because the understandings that we had reached in July 2006 with MoE curriculum staff, about changes to the education materials and the action plan for the second year, were not formally accepted by MoE; our conclusions had not been taken through the bureaucratic process. In December we had a formal meeting with many of the curriculum staff in MoA, Sana'a, chaired by the Vice Minister. He stated several times and very strongly that he greatly appreciated all that we are doing and that he gives environmental education a very high priority given all the local and international environmental problems that we are facing. The Vice Minister spoke of the work as being a pilot for incorporating environmental education more widely into schools in Yemen (ie not just on Soqatra). The Head of Curriculum was also at the meeting and he shared the Vice Minister's enthusiasm. However, the Vice Minister also said that we cannot even test the education materials in the schools until they have been approved right through the formal MoE procedures for curriculum development. Therefore we could not further test them in Soqatra during the current academic year but that we should all work together to have everything ready for the start of year 2007-08. Furthermore, we could not go ahead with our planned training session on Soqatra in January though he was happy for the session to go ahead under the heading 'familiarisation' workshop. He even said that he would ask up to 10 of his curriculum staff to participate in the familiarisation workshop.*
  - *At other meetings in December, held in the SCDP offices: MoE curriculum staff suggested minor changes to the materials; the NGO SSHH listed the 12 schools to participate in the January workshop and the names of 50 teachers who had been selected from those schools (selected by SSHH working closely with the Department of Education on Soqatra) and the 2 Directors of Education on Makullah and 4 inspector/observers from Makullah and 4 teacher evaluators from Soqatra and 4 SSHH staff and 2 of the EPA EE team and the Head of the College of Education and 4 MoE teacher trainers, plus people from the UK. The same set of meetings defined the role of SSHH as: liaison with all parties on Soqatra (SCDP, the 2 Education Directors, the Education Inspectors and the Learning by Growing unit and the Environmental Clubs and EPA EE). And SSHH will assist with training and 'familiarisation'. We also agreed that there would be two types of evaluation: the standard*

MoE questionnaire focusing on teacher competence and a questionnaire that we would develop focusing on the materials and their impacts and how they fit into the curriculum. Much of this had to be re-thought in the light of the Vice Minister's decision.

- In February (following the 'familiarisation' workshop on Soqatra) there were two more important meetings with MoE:
  - Meeting with the Minister of Education (with Roderic Dutton and Essam al-Sulaihi). The Minister agreed that we could illustrate lessons in the curriculum with examples from biodiversity and the environment. This gave encouragement for us to continue work to define the exact slots within the curriculum for our materials so that the academic messages are not changed but newly illustrated. The Minister then arranged for a big meeting the following day with all the key curricular staff, chaired by the Deputy Minister for Curriculum and Supervision.
  - Meeting with the Deputy Minister for Curriculum and Supervision, Jamil al-Khalidi, and staff. The importance attached to this meeting by MoE must be judged by the fact that it was set up by the Minister and, in addition to DMCS, were the DG of Curriculum, the Chief of the Research Centre and curricula specialists from English, Maths, Child Development, Social Science, Biology and Science. We had some very good wide ranging discussion in which everyone participated, but the meeting was essentially a bureaucratic overture: there was an apology that the team set up in December to – formally – study our material had reported too late to allow MoE arrange for 10 of its curricular staff to participate in our January 'familiarisation' workshop on Soqatra; DMCS proposed to set up a joint group between MoE and the Ministry of Water and Environment (MoWE) and the Darwin project and he named the 4 people who would represent MoE; DMCS also said that they would write minutes of the meeting and send them to MoWE so that it would name its group members; they would also propose a plan of action that would allow the materials to be tested in selected schools during academic year 2007-8.
- The Minister of Water and Environment chose not to nominate people to the joint group proposed by MoE in part fearing that this mechanism was too cumbersome but mainly because his staff were not educationalists and so, he felt, could not contribute to the discussions (even though those of his MoWE staff in SCDP know far more about Soqatra than anyone else in Yemen, and include the environmental awareness team).
- At the start of April 2007 Roderic Dutton and Sue Christie visited Sana'a, according to an understanding reached with MoE that this would be a good time for us all to meet together to check progress and give responses to any queries that each side might have. Unfortunately, MoE felt that there was very little use they could make of our visit. They were preparing a proposal, or joint action plan, in spite of the joint group not having been formed, but nothing further could be agreed until their proposal had been finalised and approved.
- On 15<sup>th</sup> May 2007 Mrs Yasmin Mohammed Abd al-Wasa (member of the joint group) told SCDP that the Minister of Education had just approved their proposal for working with Darwin. The proposal reached SCDP, in Arabic, a bit later and was translated by SCDP and sent to Roderic Dutton on May 21<sup>st</sup> (Annex 1). Essentially it was a very good draft proposal including a timeframe of activities that would take us to our goal of training teachers ahead of the 2007-8 academic year and then widely testing the materials during the year. Roderic was away when the proposal reached Durham and then needed to discuss the proposal in the UK. Essam and MoE were thanked by email on 26<sup>th</sup> May and then the following questions, based on the proposal, were put to MoE via Essam on 28<sup>th</sup> May, and again on 31<sup>st</sup> May in the shortened form (at Essam's request) given below:
  - Are we just talking about schools on Soqatra [not elsewhere in Yemen which had been a possibility given our discussions in February about using the materials for the whole of Yemen];
  - Will the work be with the same 12 schools and the same 50 teachers identified by SSHH;
  - Who in Sana'a will act as the main link and co-ordinator;

- *At what stage will they do the printing [ the proposal seemed to indicate an inappropriate timing for this]*
- *How do we agree about costs? Can we start work before finalising the costs in order to save time? I am sure we will make an agreement about the budget but we need to start the work now*
- *Where do we do the training [Sana'a or Soqatra]*
- *SCDP were very busy, they told me, but they would try and get answers from MoE. Having spoken with Yasmin, Essam replied to the questions on 12<sup>th</sup> June:*
  - *Schools on Soqatra, not elsewhere in Yemen;*
  - *We can 'negotiate' with MoE about the working in the 12 schools;*
  - *Essam said: need more discussion within SCDP about the link / coordinator;*
  - *MoE will do the printing [in time] but Darwin will pay for the printing;*
  - *Essam said: budget and costs need to be estimated after agreeing all the activities;*
  - *Training location is negotiable, but Essam said that Soqatra will be cheaper.*
- *This would have been the perfect time for Roderic to make a visit to Sana'a to finalise all points. However, he had only just emerged from a week of severe illness in hospital and was starting a several-week period of convalescence, making a visit in June or July impossible.*
- *Thus, although MoE is clearly committed to working with us, a series of 'normal' bureaucratic delays, and health delays, have made it impossible to prepare the materials for the start of academic year 2007-8.*
- *Back to the 'familiarisation' workshop and other activities on Soqatra in January to early February 2007. As stated in the visit report, the visit had several interlinked aims: Build on the meeting with the Vice Minister of Education in December 2006; undertake a workshop on Soqatra with 50 teachers from 12 schools, with the participation of 10 curriculum specialists from Sana'a; establish as clearly as possible in all minds the links between curricular education, additional extra-curricular activities and 'learning-by-growing'; link up with the team from RBGE and Adeeb Abdullah's nursery; take the outputs back to meetings in Sana'a (see above); start preparation for the next visit, to deal with curricular education, by Roderic Dutton and Sue Christie in the spring (see above).*
- *For reasons given above the 10 MoE Sana'a staff to join the workshop were not nominated in time to find seats on the plane to Soqatra, but they were all nominated (Roderic has the names), showing that the intention and interest were there,*
- *In pre-workshop meetings on Soqatra we spoke with Adeeb, with SSHH, with SCDP/EPA and others, giving shape to the workshop and arranging for our awareness specialist, Andy Griggs, to work closely with EPA EE, through Ahmed Jumma, the Head of Environmental Awareness and Education.*
- *We also spent time at the College of Education where we met the new Director, Dr Thabet, who is Yemeni (his predecessor was from Sudan), from Makullah, and was very welcoming. Through him we met other staff (Khaled Adadh Mukhashin, Omar Mohammed and Sa'ad A'aamar). We briefed them fully about the work and the overall Darwin project. They agreed to study our materials and to help run the 'familiarisation' workshop, along with Salim Daheq and Ahmed Jumma from SCDP/EPA and Fahd Salim Kafyn of SSHH and Roderic Dutton and Andy Griggs from the UK, as well as Tony Milroy (learning-by-growing) also from the UK. We then ran a three-day workshop with the 50 teachers identified by Fahd and with education officials and College staff. For much of the workshop the teachers were divided into groups according to discipline – Arabic, Science, Social Science and Mathematics.*
  - *Day one: Plenary session (background, introductions and explanations and distribution of the education materials by discipline) emphasising the concept of 'familiarisation' and the links between curricular (classroom) work, extra-curricular awareness raising and learning-by-growing practical work. Then the four groups by discipline were led by Fahd (Arabic), Ahmed Jumma (social science), Sa'ad (science) and Omar (maths).*

Successive sessions took the teachers through each of the three levels of lessons (years 4 to 6).

- *Day two: The four leaders performed remarkably well, selecting students to act as teachers through each discipline and age group. The role-play teachers used the materials properly and fully, with one or two exceptions, and the 'students' took notes and asked questions. The final session was for feedback. Again this was taken seriously, with everyone talking freely and confidently. One of the sessions used the build-a-bird kits, but some teachers had difficulty in constructing these 5-piece jigsaw puzzles; more training will be required.*
- *Day three: First a plenary session led by Tony Milroy and Abeer explaining all about learning-by-growing and taking questions; Abeer brought potted plants along and passed them round. Then we practised the concept of bringing in local people with traditional knowledge (a farmer, a fisherman and a livestock owner) to talk about and discuss their lives; this inspired lively question and answer sessions. Then they all played the migrating bird game; many die therefore we must protect the rest. Finally, all the teachers visited Abeer's nursery. Abeer proved to be an excellent teacher. Seeing lots of potted plants was a unique experience for most teachers. Many took a plant away for their homes or schools.*
- *Andy Griggs, working with Ahmed Jumma and his team, devised a programme of school awareness visits, including taking groups of children into the countryside or to visit certain sites, including the nursery. Based on this Ahmed Jumma devised a programme of activities for the remainder of the academic year.*
- *The College of Education is still in flux. It still only teaches one of the subject areas in which we are interested, Arabic. In Makallah, now, students can take a full degree course followed by a one-year education diploma at its College of Education. The University is divided into a College of Science and a College of Arts. We will need to rethink training people in Makallah.*
- *The UK NGO, Aridlands and Community Development, prepared and led learning-by-growing workshops for teachers held at the College of Education and at the excellent plant nursery, managed by Abeer Abdullah and family; the team evaluated, repaired and tested the learning-by-growing tree-growing kit and solar irrigation system at Abeer's nursery; there was good collaboration with staff from the Royal Botanic Garden Edinburgh (RBGE) in order to coordinate its support for the nursery with the learning-by-growing programme; the team worked with teachers and children in two pilot schools – Umm al-Khara near the nursery and the school at Nugid in the south of the island.*
- *A second Aridlands visit in April/May involved Abeer and family at the nursery to review progress in pilot schools, including Nugid and at the nursery and progress with the provision of trees and shrubs to schools and housegardens. Careful records have been kept by Umfatma Abeer's wife) indicating over 6 cycles of approximately 450 plants per cycle had been germinated and grown-on for one month in the 'Learning by Growing', solar-powered, ebb and flow auto-irrigation nursery, before being planted out in plastic bags and then grown-on for two months before distribution to over 2,000 local beneficiaries. Solutions to water supply and plant protection at Nugid were found as were, at both schools, problems to be faced when the schools closed in the summer. However, in July it was seen that goats had penetrated the fence at Nugid and attacked some of the recentlyplanted endemics and fruit and vegetable seedlings. Discussions were held with the Minister of Water and Environment and the British Ambassador.*
- *Exit strategy: We have the same conclusion as at the end of year one, that potentially SSHH has a big role to play. If in the coming year if they continue to fulfil our hopes for them and to make a name for themselves with MoE they will be a strong voice for post-project continuity. The Darwin project will do all it can to help them in this regard. MoE is clearly key to the exit strategy.*
- *Our options for the year ahead are, of course, in large measure defined by the progress (and areas of lack of progress) this year. The significant lack of progress is that we cannot have the curricular materials (and approvals for them by MoE) ready for the start of the*

coming academic year. There are still factors to be taken into consideration, but the basic options for the year could be as follows:

1. Darwin closes the project, fearing that further expenditure will not lead us to achieve the main goal of working in partnership with MoE to incorporate biodiversity and environment messages into the curriculum on Soqatra, with interest being shown by MoE in doing something similar in other parts of the country.
  2. The project team close the project for much the same set of reasons.
  3. We limit our ambitions to working for extra-curricular awareness raising, in partnership with the EPA EE team on Soqatra, and to learning-by-growing.
  4. Darwin permits the project to retain its full aim by relaxing (or specifically modifying) the timeframe so that we can in practice adapt our approach to fit the speed at which MoE can realistically operate.
- We would prefer option 4 but appreciate that before Darwin could consider adopting this option it would need some forms of reassurance that good progress could be made. Reassurance could perhaps be provided by a combination of the following:
    - Letters of support from MoE and/or MoWE and/or the British Council in Sana'a.
    - A revised timetable of activities which is clearly supported by all concerned.
  - In practice it might be possible, through phone and email contact, to obtain letters of support.
  - A revised timetable (and associated budget modifications) agreed by all parties will require a visit by Roderic Dutton to Yemen. For health and other commitment reasons, and the fact that we are now approaching mid summer to be followed, from mid September to mid October, by Ramadhan and the Ramadhan Eid, a Yemen visit could not usefully be undertaken until late autumn.
  - A modification of the timeframe does not imply an increase in budget.
  - We believe that MoE is sincere in wanting to continue working with us. The problem is bureaucratic (and illness) delay rather than lack of interest or commitment by MoE.
  - Below is the action plan for year two (the year just completed). In spite of the problems we currently face (those outlined above) much of this plan was achieved, see below;
    - Revise the draft lessons this summer in the light of all the comments that have been made, particularly those made at the training workshops in late March and at the evaluation visit in July. This will involve changing the Arabic text and some drawings as well as adding to and revising format and lesson content. Add sections on 'additional activities' to each lesson and make clearer the exact links to specific curricular areas. Revise supplementary materials, balancing cost, practicalities and quality to achieve the optimal result. Add a small number of lessons to the total, largely from splitting existing lessons. **ACHIEVED**
    - Have some of the revised lessons ready (especially those that need little change) for the start of the academic year, by October; **ACHIEVED**
    - Have the remainder of the lessons ready before the end of the first school term (first of two) so that they can be studied by all parties before the mid-year break (in Jan); these parties to include a range of specialists in MoE. **ACHIEVED**
    - Meanwhile, SCDP, SSHH and MoE (on Soqatra) to identify the next project enlargement, from the current three schools to 1-12 (max 15) schools in the coming academic year. These organisations will also name the individual teachers and their subject disciplines and give an indication of the number of children per class. **ACHIEVED**
    - Meanwhile, also, for SCDP to secure sufficient approval, at this stage, from MoE to give teachers confidence to use the revised and new lessons instead of the original curricular lessons. **NOT PERMITTED BY MoE**

- *In the mid-year break: a set of training courses (held on Soqotra) for the teachers at the 10-12 (max 15) schools identified (see above) – training to involve not only SSHH but also MoE trainers from either Sana’a or Makullah; meetings with MoE specialists and others (including UK team members) to check the materials and review progress and look ahead; meetings with MoE decision-makers (Deputy Minister and Director-General level) to achieve a step along the path to full approval of the work. THE TRAINING COURSE HAD TO BE CALLED ‘FAMILIARISATION’, OTHERWISE LARGELY ACHIEVED*
- *Also in the mid-year break: moving forward with the Teachers’ Training College on Soqotra (anticipating that by then they are clearer about their long-term remit) to involve them actively in the teacher training ideas so that future teachers can be trained before starting their work in the schools. THE COLLEGE ON SOQOTRA IS STILL IN A STATE OF FLUX, BUT WE HAVE INTERACTED WELL WITH CURRENT COLLEGE STAFF.*
- *Probably at the same mid-year time: ‘learning by growing’. This important aspect of the project is also very ‘innovative’ in the local context; trying to integrate classroom and applied learning. Biological sciences at the basic education level include plant growth. We want the children, in at least one pilot school (in Hadiboh), to ‘grow’ and thus to ‘see’ (and to measure etc) and thus to ‘learn’ about aspects of plant growth, especially taking the examples of some of Soqotra’s more ‘special’ plants (those 10 included in one of the grade 4 lessons, for example). We think that this approach may be especially helpful to some of those children who find more difficulty in ‘learning by studying’. This aspect of our project will also involve an excellent local plant nursery and also, we anticipate, inputs at HND agriculture level from the Royal Botanic Garden in Edinburgh. ACHIEVED*
- *Post-training use of the revised materials in the 10-12 (max 15) schools selected (see above). NOT PERMITTED BY MoE*
- *On-going monitoring and evaluation, led by SSHH, of the impact of this in the schools and the College and the local Directors of Education. IMPOSSIBLE AS USE OF MATERIALS WAS NOT PERMITTED*
- *End of year (end of year two) evaluation and discussion and looking ahead meetings on Soqotra and in Sana’a. IMPOSSIBLE AS USE OF MATERIALS WAS NOT PERMITTED*
- *End of year report, in July 2007.*

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

*Some general feedback/clarification was requested on the following points*

- *MoE involvement:*
  - *Query: Expressions of doubt about MoE giving a ‘final green light’. Response: This point is covered in great detail above. Our tentative conclusion is that MoE is interested and committed (see also Annex 1).*
  - *Query: What is your realistic assessment of the situation? Response: As above, but this report provides, we believe, sufficient evidence for others to draw conclusions also.*
  - *Query: Would more MoE involvement engender more ‘ownership’. Response: There has been a lot of MoE involvement this year, in Sana’a and on the ground in Soqotra. We believe, as above, that ‘ownership’ is there; that MoE is committed.*
  - *Query: the relationship between SSHH and MoE: Response: Fahd Salim Kafyn, the Secretary-General of SSHH is a teacher and education activist very well known to the education officials on Soqotra and becoming well known to the MoE in Sana’a through playing an active and very constructive role in our meetings there.*
- *Environmental Protection Agency Involvement*
  - *Query: Given the SSHH growing role what implications does this have for ‘ownership’ by EPA. Response: Fahd of SSHH knows and works closely with Salem Daheq and*

Ahmed Jumma; the former is the chief officer of EPA on Soqatra and the latter is the Head of the EPA EE team. In Yemen EPA is also Chaired by the Minister of Water and Environment (HE Abdul Rahman al- Eryani) who is the co-Director of the Darwin Project (and counterpart to Roderic Dutton the other co-Director).

○ SSHH

• Query: Give details of SSHH. Response: It is a Soqotri NGO, strongly encouraged by Roderic's counterpart, Abdul Rahman al-Eryani, who is also Minister of Water and Environment. It is three of four years old. Almost all of its members (about 45 in total) are teachers on Soqotra with an active interest conservation of all aspects of the island's heritage and culture. The officials are Ali Mohammed Abdullah Sa'abab (President), Fahd Salim Kafayn (Secretary-General), Ahmed Mohammed Thany (Treasurer), Salih Yisalam Faris (Culture) and Abdal-Nasr Sa'ad Ali (Public relations). Fahd stood for Council elections last year for the Islah (Reform) party, thereby showing his commitment. Attach is a contract document for his work last year and up to January this year.

▪ Query: the contract with SSHH. Response: See Annex 2

○ Educational Materials

▪ Query: Any scope for introducing other activities. Response: See (above) the work on learning-by-growing and the work in year two of the EPA EE team and the 'familiarisation' workshop on January 2007.

▪ Query: Will the children understand terms such as overfishing etc. Response: the materials actually used were, of course, in Arabic.

○ Education Handbook

▪ Query: what is the progress. Response: There is a misunderstanding here due to wording used in the original proposal; 'handbook' was intended to mean the combined student and teacher materials. However, we might usefully be able to produce a cut-down version of the chapter "Introduction" of the volume 'Ethnoflora of the Soqotra archipelago' Anthony Miller and Miranda Morris, 2004, RBGE: Edinburgh, pp759, two members of the team.

▪ Query: Will we gather info on traditional management/conservation methods; it needs documenting. Response: This has been published as the "Ethnoflora of the Soqotra archipelago", mentioned above.

○ Reporting

▪ Query: more detailed reporting would be useful. Response: We have reports of each intervention made. I can send them all if you wish. We don't think that sending them will materially affect outcomes or anything else of value to the project.

○ Monitoring

▪ Query: Any ideas for monitoring current levels of knowledge. Response: Not in the project document; change is influenced by far too many factors to make this exercise worthwhile within the duration of the project.

○ Teacher Training

▪ Query: Can the setback with TTC be overcome. Will the College of Education evolve to be able to play a useful role? Response: About the College, see above. About TTC, supposing the project continues (see above for discussion of the issues) then, as stated above, we will need to work with the TTC in Makullah.

## 6. Partnerships

○ A key partner, perhaps the key partner, is MoE. We have spent a lot of time this past year in discussion with them at all levels including the Minister. We believe they are committed (but see above for details of the issues and the present situation). We also believe that if we can successfully work with them to include messages about biodiversity and conservation

*into the curriculum for use on Soqotra we will have recorded a very significant achievement. There is also the possibility, expressed by senior MoE staff at previous meetings, of including messages about Soqotra into the whole national curriculum because, as the MoE staff were saying, Soqotra is a unique world treasure and needs to be better known throughout Yemen.*

- *Our relationship with SCDP has changed as a result of Roderic's counterpart, Abdul Rahman al-Eryani, being made Minister of Water and Environment in February last year, and having the post confirmed in September this year. In some ways this has strengthened our position, for two reasons: first, the Minister retains responsibility for Soqotra and its environmental interests; second, the Minister can talk directly with the Minister of Education. However, the Minister now has far less time to devote to Soqotran affairs, though his replacement is a very effective administrator.*
- *This year we have been working more closely with the EPA Environmental Awareness team on Soqotra than seemed likely a year ago. Through them we have been able to work in an extra-curricular manner with our pilot schools including those which have established environmental clubs.*
- *For the third leg of our work, learning-by-growing, there has been an effective partnership between the UK NGO Aridlands and Sustainable Communities Trust, the Royal Botanic Garden Edinburgh and the excellent nursery run by Adeeb Abdullah and encouraged by SCDP.*
- *The NGO SSHH was very effective in helping in centrally important ways with the 'familiarisation' workshops and meetings in January and February. However, because MoE has said that the materials could not be further tested in the schools until they were fully agreed and approved, they have not had a role since then.*

## **7. Impact and Sustainability**

- *For information about the ways in which we are increasing project profile within the country see above; with particular reference to all groups on Soqotra, to MoE, to the international basic education donor group, and to the British Council.*
- *For information about exit strategy see above with special reference to the Soqotran NGO, Soqotra Society for Heritage and History (SSHH), and also with special reference to the links we continue to build with MoE at all levels.*

## **8. Post-Project Follow up Activities (max 300 words)**

*This section should be completed ONLY if your project is nearing completion (penultimate or final year) and you wish to be considered to be invited to apply for Post Project Funding. Each year, a small number of Darwin projects will be invited to apply for funding. Selection of these projects will be based on promising project work, reviews to date, and your suggestions within this section. Further information on this scheme introduced in 2003 is available from the Darwin website.*

- *From project progress so far, what follow-up activities would help to embed or consolidate the results of your project, and why would you consider these as suitable for Darwin Post Project Funding?*
  - *Not applicable: In the discussion above we are suggesting that because of delays this year the timetable for the project should be extended.*
- *What evidence is there of strong commitment and capacity by host country partners to enable them to play a major role in follow-up activities?*
  - *Not applicable: In the discussion above we are saying that although MoE has worked at a bureaucratic speed this year, it is committed. We need to further test this commitment. If it is truly there, there is an excellent chance of MoE playing a major and effective long-term role in follow-up activities (supported by MoWE).*

## 9. Outputs, Outcomes and Dissemination

- See section 3. Last year we said: “The ‘explanation’ for the shift of role played from EPA EE to the NGO SSHH is that the former does not have the time and the latter is more appropriate given that its members are teachers with active interests in Soqotran natural and cultural heritage.” However, see above, this year we have found a way to bring EPA EE back into playing a more significant role. Concerning teacher training we are still unclear of the longer-term roles of the College of Education on Soqotra and the Teacher Training College in Makullah.
- The project focus in Yemen is on the island of Soqotra and, on the mainland, with our partners in Sana’a (SCDP) and MoE. The information in various sections above about workshops and meetings and training sessions is relevant to this dissemination question. It will be mainly in the third year of the project that post-project dissemination activities will be actively under discussion, and this will principally be with MoE. If MoE likes what they are then seeing on Soqotra they may wish to adopt the principles (using local materials) to basic education in other parts of the country. It has already been recognised, by a curriculum specialist in MoE, that by that stage local specialists need to be engaged in preparing suitable materials.

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

Code No.	Quantity	Description
14A	5	<p>(a) half day workshop: with senior MoE staff, July 2006, to inform MoE of our work in the previous year and to take ideas from them;</p> <p>(b) 3-day ‘familiarisation’ workshop: for familiarising 50 teachers, the 2 Directors of Education on Soqotra, College of Education staff etc, with the revised education materials, January 2007;</p> <p>(c) Meetings, 1-day workshops etc with many senior MoE staff in Sana’a; December, February and April 2007.</p> <p>(d) Learning-by-growing sessions with 2 schools and many children to increase awareness</p> <p>(e) Awareness raising sessions in 12 schools by EPA EE.</p>
14b	1	(a) Meetings, Sana’a, July 2006, with the Coordinator of the donor group on basic education in Yemen, and with USAID on our work within the context of basic education in Yemen
15B/15D	2	Article in the joint newsletter, Tayf, produced by the Friends of Soqotra and the Socotra Conservation Fund. Distribution 350 in Yemen and 150+250 in the UK/Europe/USA; and a presentation at the FoS AGM in September 2006.

- **Table 2: Publications** Nothing formally published, though a set of draft lessons revised

## 10. Project Expenditure

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

- 
- 
- *Highlight any recently agreed changes to the budget and explain any variation in expenditure where this is +/- 10% of the budget.*

## 11. Monitoring, Evaluation and Lessons

- *Because the Vice Minister said we could not further test the materials in the school until everything had been approved through the MoE curriculum committee, we have not been able to monitor or evaluate the revised lessons and their impacts.*
- *We have been able to strengthen, in Sana'a and on Soqatra, awareness of the importance of the links between the three strands of our work: curricular education; extra-curricular school 'club' approaches and the practical learning-by-growing.*
- *We continue to achieve wide interest in our work on Soqatra and with key groups in Sana'a.*
- *Of critical importance will be to carry MoE with us to the extent that it fully approves of the project aims when it sees them happening in practice. Ultimate approval will be as and when MoE prints the materials as parts of the curriculum to be used formally on Soqatra long term. In a tangible sense (see above) we have not made progress on this; no final agreements have been made. However, we believe that MoE is committed long-term, up to and including the Minister of Education, even though bureaucracy has delayed progress.*
- *Lessons learned. As we wrote last year: "In a project that has a central human focus (rather than a scientific focus) field work inevitably, and rightly, has to be responsive to all local suggestions for project modification, as we all learn from experience. A human focus project, such as ours, has to be a 'process' project to a much greater extent than, for example, a scientific collecting project. Thus our year one aims (choice of schools and grades and disciplines and particular lessons) were strongly based on the outcomes of the Sep and Nov workshops in Sana'a and Soqatra."*

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

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

In this section you have the chance to let us know about outstanding achievements of your project over the year that you consider worth highlighting to ECTF and the Darwin Secretariat. This could relate to achievements already mentioned in this report, on which you would like to expand further, or achievements that were in addition to the ones planned and deserve particular attention e.g. in terms of best practice. The idea is to use this section for various promotion and dissemination purposes, including e.g. publication in the Defra Annual Report, Darwin promotion material, or on the Darwin website. As we will not be able to ask projects on an individual basis for their consent to publish the content of this section, please note the above agreement clause.

- *If we attain an outstanding achievement during the project life time it will be when MoE formally publishes our materials within its curriculum for Soqotra. This will set an example for other parts of Yemen and for other parts of the region.*

### **13. REQUEST TO DARWIN**

- *I PRESUME THAT WE ARE NOT THE ONLY EDUCATIONAL PROJECT THAT DARWIN HAS FUNDED. I WOULD GREATLY APPRECIATE BEING PUT IN TOUCH WITH THE LEADERS OF ALL OTHER DARWIN PROJECTS, PAST AND PRESENT, THAT HAVE SOME DEGREE OF SIMILARITY WITH OUR OWN.*

## **Annex 1**

***Document subject: The joint venture program between MOE & MOWE & Darwin initiatives for conserving and saving Socotra which is about " Making awareness materials for saving and conserving Socotra island"***

*[Translated from Arabic to English by Essam al-Sulaiyhi in the SCDP office in Sana'a, and emailed to Roderic Dutton on 21<sup>st</sup> May 2007]*

### ***Introduction:***

*In the introduction they are talking about orientation of our country to conserve and protect the environment. From here both ministries MOE & MOWE with cooperation of SCDP are aiming to spread the environmental awareness among the students in Socotra Island, thus the agreement has been obtained between the MOE & MOWE to select the rule of every side.*

### ***The main aim of the project:***

- *To give the students the chance recognizes the biodiversity of Socotra.*
- *To give the chance to the students to earn knowledge, positive orientation and skills towards the environment through the enforcement of the related activities which is included in the teacher guide in different subjects.*

### ***The project duration:***

*Starting from ..... ending at ( **No dates given** )*

### ***The aimed Subjects:***

- *Science*
- *Arabic Language*
- *Geography / Social Sciences*
- *Mathematics*

## *Tasks & Activities*

<i>No</i>	<i>Tasks</i>	<i>Activities</i>	<i>Carried out by</i>	<i>The Responsible Authority for carrying it out</i>	<i>Funded By</i>	<i>Timing</i>
1-	<i>- Preparing the joint venture program and applying it.</i>	<i>- making a joint team from both ministries to prepare the plane accompanied with needed time to run the program  -Authorizing the program from both minister's water and education.</i>	<i>-Joint venture team from both ministries</i>	<i>-MOE &amp; MOWE</i>		
2-	<i>Document preparation</i>	<i>-Surveying all the aimed students books (Since Math-Arabic language-geographic) from class 4-6.  - Studying and reevaluating the materials which were prepared by the experts from Darwin.  -Making a workshop to make the reference document which includes the main aims, contents and the strategy of education &amp; evaluation.</i>	<i>- Specialized team from the curriculum and research Dept.</i>	<i>MOE</i>		<i>May &amp; June</i>
3-	<i>Printing progress</i>	<i>Printing</i>	<i>Curriculum Dept.</i>			
4-	<i>Approving the Document.</i>	<i>- presenting the reference environmental document to the high supreme committee for curriculum to approve it.</i>	<i>High supreme committee for curriculum</i>	<i>MOE</i>		<i>June</i>

5-	<i>Preparing the instruction guide for each subject( Arabic language- math- since) for the classes from 4-6</i>	<i>-commissioning a team consist of specialized and researchers.-Making a workshop for making the instruction guide from the aimed classes. - Preparing the related activities &amp; the educational instruments.</i>	<i>-Specialized people from the curriculum dept + researchers from researching center.</i>	<i>MOE+MOWE</i>		<i>June +July</i>
6-	<i>-Technical design</i>	<i>-Making the technical edit and design to the guides &amp; educational instruments.</i>	<i>Specialized people from Curriculum Dept &amp; Darwin initiatives</i>	<i>Curriculum Dept. + MOWE</i>		<i>July</i>
7-	<i>Approving the Guides.</i>	<i>-presenting the guides to the high supreme committee for curriculum to approve it.</i>	<i>High supreme committee for curriculum</i>	<i>MOE</i>		<i>August</i>
8-	<i>- The training</i>	<i>-Making a workshop to train the teachers to be able to use the guides and to run the related activities.</i>	<i>Curriculum Dept + Darwin experts</i>	<i>MOE+MOWE</i>		<i>August</i>
9-	<i>field testing</i>	<i>- Selecting the schools for testing the materials. - providing the educational instruments &amp; needed materials for running it.</i>	<i>Curriculum Dept + Darwin experts</i>	<i>MOE+MOWE</i>		<i>September</i>

*Partners duties :*

*1- Ministry of water and environment, SCDP and Darwin initiatives are the main supporter for the financially and technically, they are charged with following :*

*-Providing the needed financial support to run the program according to what was mentioned in the task and activities.*

*- The participation in the teachers guides preparation for the classes from (4-6) for the selected subjects.*

*-The participation in the teacher training to let them be able to use the guides and running the activities.*

*-covering the cost of coordination, supervision and technical committees.*

*-covering the cost of the workshops and the field visit.*

*-providing the publication, the needed materials and educational instruments that the work require.*

*2- Ministry of education in coordination with partners:*

*- Preparing & approving the working program.*

*- Preparing and approving the reference document.*

*- Preparing and approving the instruction guides.*

*- Supervising the program tests.*

*- Attending the related program activities (Program running – teacher training ECT)*

*- Supporting the program to facilitate running it at the selected schools.*

*This agreement is active from*

*This agreement it should be signed from the two ministers. [This means by the Minister of Education and the Minister of Water and Environment]*

***Notes towards a contract between the Darwin Project and the Socotra Society for Heritage and History (SSHH) for the implementation of the project “Environmental educational programme promoting biodiversity conservation on Socotra, Yemen”***

*With the support of Abdul-Kader of SCDP discussions were held on 20<sup>th</sup> November 2005 between Roderic Dutton and Sue Christie of the Darwin Project with the officers of SSHH about the terms under which SSHH might participate in the implementation of the Darwin Project.*

*The officers are:*

<i>Ali Mohammed Abdullah Sa’abab</i>	<i>President</i>
<i>Fahd Salim Kafayn</i>	<i>Secretary-General</i>
<i>Ahmed Mohammed Thany</i>	<i>Treasurer</i>
<i>Salih Yisalam Faris</i>	<i>Culture</i>
<i>Abdal-Nasr Sa’ad Ali</i>	<i>Public relations</i>

*The Darwin Project would like the SSHH to undertake the following tasks within a contract period that extends to the end of June 2006.*

- To liaise between all parties on Soqotra including SCDP, ESP EE, College of Education, the two Directors of Education (Hadiboh and Qalansiyah), the Hadiboh Council and participant schools.*
- To interact with the head teachers of participant schools so as to encourage their active interest and participation.*
- To reach agreement with the Department of Education on the inclusion of some Soqotri names (eg names of plants) and some suitable Soqotri expressions into the text, and then to provide and include those names and expressions.*
- To nominate 12-20 teachers to participate in the training sessions that will be held in March. All, or the great majority of the teachers should be members of SSHH and also teachers in the three schools that have been selected for testing the pilot lessons, which are the main schools in Hadibo, Qalansiyah and Nugid.*
- To arrange all support for specialist visits to the project whether from Sana’a or from the UK: accommodation, transport, transport of teachers, food, translation, assisting with training programmes and field visits. This to include the major training session to be held in March 2006.*
- To encourage the teachers to test the lessons in the weeks immediately following the training sessions.*
- To produce, by the end of June 2006, a report, in Arabic, on the feedback provided by the teachers (and some children) on the quality, value and impact of the pilot lessons.*

*If SSHH agrees to undertake the above tasks then they must now quote how much the work will cost, so that the Darwin Project can reach agreement with SSHH on the terms of this undertaking.*

*It is understood the SCDP will provide support to both parties to help secure the successful outcome of this work. The formal agreement will be made between the UK project director and the Manager of SCDP in Sana’a.*

*If all parties are satisfied with the outcome, there will be an opportunity of a second contract for the year July 2006 to June 2007, and hopefully a third contract for the period July 2007 to June 2008.*

*NOTE*

*Discussions led to an agreement between Roderic Dutton (Durham University) and the Manager of SCDP for the above work to be undertaken for a total of US\$8922.*

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

Project summary	Measurable Indicators	Progress and Achievements July 2005-June 2006	Actions required/planned for next period
<p><b>Goal:</b> 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"> <li>• The conservation of biological diversity,</li> <li>• The sustainable use of its components, and</li> <li>• The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</li> </ul>			
<p><b>Purpose</b> <i>To ensure, through curricular education, that future generations of people on Socotra know about and are concerned for the sustainable management of their islands' unique flora and fauna heritage. Teachers, many from the mainland and other Arab countries, need appropriate training. The project will work with MoE to include a requirement within the curriculum for children to learn about and maintain respect for their unique natural heritage (including the many practical, medicinal and livelihood values of the plants and the traditional land and livestock management practices that have conserved the biodiversity) and play future roles with EPA to establish and manage the network</i></p>	<p><u>During the project:</u> the training modules being used to train teachers and the teaching modules being used in the schools in Socotra.</p> <p><u>Post-project:</u> Growing numbers of school-leavers positively influenced by what they learned in school.</p>	<p><i>(report impacts and achievements resulting from the project against purpose indicators – if any)</i></p> <ul style="list-style-type: none"> <li>○ 12 lessons, including integral illustrations revised, used as the basis of January 2007 familiarisation.</li> <li>○ Substantial progress on learning-by-growing.</li> <li>○ Renewed active participation of EPA EE in extra-curricular education.</li> </ul>	<p><i>(report any lessons learned resulting from the project &amp; highlight key actions planning for next period)</i></p> <p><u>Lessons learned:</u></p> <ul style="list-style-type: none"> <li>○ We have been able to strengthen, in Sana'a and on Soqotra, awareness of the importance of the links between the three strands of our work: curricular education; extra-curricular school 'club' approaches and the practical learning-by-growing.</li> <li>○ We continue to achieve wide interest in our work on Soqotra and with key groups in Sana'a.</li> <li>○ Of critical importance will be to carry MoE with us to the extent that it fully approves of the project aims when it sees them happening in practice. Ultimate approval will be as and when MoE prints the materials as parts of the curriculum to be used formally on Soqotra long term. In a tangible sense (see above) we have not made progress on this; no final agreements have been made. However, we believe that MoE is committed long-</li> </ul>

<p><i>of community-based protected areas and foster community support for biodiversity conservation. It will convert scientific knowledge into stimulating educational materials.</i></p>			<p><i>term, up to and including the Minister of Education, even though bureaucracy has delayed progress.</i></p> <p><i><u>Draft work plan for the coming year:</u></i></p> <ul style="list-style-type: none"> <li>• <i>Our options for the year ahead are, of course, in large measure defined by the progress and lack of progress this year. In particular we cannot have the curricular materials (and approvals for them by MoE) ready for the start of the coming academic year. There are still factors to be taken into consideration, but the basic options could be as follows:</i> <ul style="list-style-type: none"> <li>• <i>Darwin closes the project, fearing that further expenditure will not lead us to achieve the main goal of working in partnership with MoE to incorporate biodiversity and environment messages into the curriculum on Soqotra, with interest being shown by MoE in doing something similar in other parts of the country.</i></li> <li>• <i>The project team close the project for much the same set of reasons.</i></li> <li>• <i>We limit our ambitions to working for extra-curricular awareness raising, in partnership with the EPA EE team on Soqotra, and to learning-by-growing.</i></li> <li>• <i>Darwin permits the project to retain its full aim by relaxing (or specifically modifying) the timeframe so that we can in practice adapt our approach to fit the speed at which MoE can in practice operate.</i> <ul style="list-style-type: none"> <li>○ <i>We would prefer option 4 but appreciate that before Darwin could consider adopting this option it would need some forms of reassurance that good progress could be made.</i></li> </ul> </li> </ul> </li> </ul>
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			<p><i>Reassurance could perhaps be provided by a combination of the following:</i></p> <ul style="list-style-type: none"> <li>▪ <i>Letters of support from MoE and/or MoWE and/or the British Council in Sana'a.</i></li> <li>▪ <i>A revised timetable of activities which is clearly supported by all concerned.</i></li> <li>○ <i>In practice it might be possible, through phone and email contact, to obtain letters of support.</i></li> <li>○ <i>A revised timetable (and associated budget modifications) agreed by all parties will require a visit by Roderic Dutton to Yemen. For health and other commitment reasons, and the fact that we are now approaching mid summer to be followed, from mid September to mid October, by Ramadhan and the Ramadhan Eid, a Yemen visit could not usefully be undertaken until late autumn.</i></li> <li>○ <i>A modification of the timeframe does not imply an increase in budget.</i></li> <li>○ <i>We believe that MoE is sincere in wanting to continue working with us. The problem is bureaucratic (and illness) delay rather than lack of interest or commitment by MoE.</i></li> <li>• <i>End of year report, in July 2008.</i></li> </ul>
<b>Outputs</b>			
<i>(insert original outputs – one per line)</i>	<i>(insert original output level indicators)</i>	<i>(report completed activities and outcomes that contribute toward outputs and indicators)</i>	<i>(report any lessons learned resulting from the project &amp; highlight key actions planning for next period)</i>

<p>1: Materials / approaches developed with EPA EE team, TTC and pr'y and sec'y teachers on Socotra.</p>	<p>1: Materials and handbook to inspire nature exploration and conservation, drafted, tested by teachers and in use.</p>	<ul style="list-style-type: none"> <li>○ Materials and approaches developed, but progress on final revision and approval by MoE delayed by bureaucracy</li> </ul>	<ul style="list-style-type: none"> <li>○ Lessons learned: In a project that has a central human focus (rather than a scientific focus) field work inevitably, and rightly, has to be responsive to all local suggestions for project modification, as we all learn from experience. A human focus project, such as ours, has to be a 'process' project to a much greater extent than, for example, a scientific collecting project. Thus our year one aims (choice of schools and grades and disciplines and particular lessons) were strongly based on the outcomes of the Sep and Nov workshops in Sana'a and Soqatra.</li> <li>○ See above for lessons learned</li> <li>○ See above for next period</li> </ul>
<p>2: Outreach strategies and courses developed, EPA staff and in-service teachers trained.</p>	<p>2: Strategies &amp; courses produced; 1 person with UK training; 220 teachers trained; 43 EPA staff trained.</p>	<ul style="list-style-type: none"> <li>○ The curricular element of the project is delayed by MoE bureaucracy.</li> <li>○ EPA EE has been centrally involved in extra-curricular awareness raising in the 12 pilot schools.</li> <li>○ Learning-by-growing has made good progress, linking the nursery, RBGE and two schools.</li> </ul>	<ul style="list-style-type: none"> <li>○ See above for lessons learned</li> <li>○ See above for next period</li> </ul>
<p>3: Teaching strategy and courses for TTC developed.</p>	<p>3: Course manual(s); First group of TTC students being trained.</p>	<ul style="list-style-type: none"> <li>○ The roles of the TTC and the College of Education are still unclear. But the</li> </ul>	<ul style="list-style-type: none"> <li>○ See above for lessons learned</li> <li>○ See above for next period</li> </ul>

		<i>College has been actively involved this year.</i>	
<i>4: Agreements on EE between EPA (Socotra) and TTC and MoE achieved.</i>	<i>4: Agreements and indications of their implementation.</i>	<ul style="list-style-type: none"> <li>○ <i>We believe that MoE is committed, though acting more slowly than we had hoped.</i></li> </ul>	<ul style="list-style-type: none"> <li>○ <i>See above for lessons learned</i></li> <li>○ <i>See above for next period</i></li> </ul>

*Note: Please do NOT expand rows to include activities since their completion and outcomes should be reported under the column on progress and achievements at output and purpose levels.*

## Appendix 1 – Logical framework

### 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.

<b>Project summary</b>	<b>Measurable Indicators</b>	<b>Means of verification</b>	<b>Important Assumptions</b>
<p><b>Goal:</b></p> <p><b>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</b></p> <ul style="list-style-type: none"> <li>• <b>the conservation of biological diversity,</b></li> <li>• <b>the sustainable use of its components, and</b></li> <li>• <b>the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</b></li> </ul>			
<p><b>Purpose</b></p> <p><i>To create, through curricular education, future generations of people on Socotra knowledgeable about and concerned for the sustainable management of their islands' unique natural heritage of flora and fauna</i></p>	<p><u>During the project:</u> the training modules being used to train teachers and the teaching modules being used in the schools in Socotra.</p> <p><u>Post-project:</u> Growing numbers of school-leavers positively influenced by what they learned in school.</p>	<p>School records</p> <p>Participatory evaluations with teachers and children.</p> <p>Periodic participatory evaluations, with adults taught using the teaching modules</p>	<p><i>The Ministry of Education supported by other central decision-making bodies (nb EPA) expands the project concepts and practices and reapplies them more widely in Yemen.</i></p>
<p><b>Outputs</b></p> <p>1: Materials / approaches developed with EPA EE team, TTC and pr'y and sec'y teachers on Socotra.</p> <p>2: Outreach strategies and courses developed, EPA staff and in-service teachers trained.</p> <p>3: Teaching strategy and courses for TTC developed.</p> <p>4: Agreements on EE between EPA (Socotra) and TTC and MoE achieved.</p>	<p>1: Materials and handbook to inspire nature exploration and conservation, drafted, tested by teachers and in use.</p> <p>2: Strategies &amp; courses produced; 1 person with UK training; 220 teachers trained; 43 EPA staff trained.</p> <p>3: Course manual(s); First group of TTC students being trained.</p> <p>4: Agreements and indications of their implementation.</p>	<p>1: Copies of the texts.</p> <p>2: Copies of the strategy and courses; copies of training manuals; UK certificate; EPA records.</p> <p>3: Copy of the manual(s); EPA and TTC records.</p> <p>4: Written agreements between EPA, TTC and MoE promoting EE on Socotra; EPA records</p>	<p><i>Additional teacher training and teaching materials are produced post-project.</i></p> <p><i>The Ministry of Education and EPA maintain and promote this conservation and environmental element of the curricula long-term in Socotra.</i></p>

<p><i>Activities</i></p> <ol style="list-style-type: none"> <li><i>1. Select data from experts and EPA team; devise and test educational materials/approaches with in-service teachers.</i></li> <li><i>2. Work with EPA to develop outreach strategies and courses and train EPA staff for in-service teacher training.</i></li> <li><i>3. With EPA/SCDP work with TTC to share skills and develop a teaching strategy and courses for TTC students.</i></li> <li><i>4. Discussions to reach long-term agreement between EPA/SCDP and MoE and TTC.</i></li> </ol>	<p><b>Activity Milestones (Summary of Project Implementation Timetable)</b></p> <p><u>1</u>: <i>Pre-project &amp; Yr 1: Agreements reached on educational topics and materials selected. Yr 1: Materials drafted, translated, approved. Yr 2: More materials and approaches developed. Yr 3: EPA EE team and teachers using the materials/activities mentored.</i></p> <p><u>2</u>: <i>Yr 1: Strategies and courses developed for field testing. Yr 1-2: Selected EPA staff trained in developing materials with teachers. Outreach strategy outside of curriculum developed. Yr 2: Accredited training in UK for 1 EPA or MoE staff member from Socotra achieved. Yr 2-3: Working with EPA staff and teachers, the new course developed and being delivered. Yr 2: 20 in-service teachers trained. Yr 3: All 220 in-service teachers trained. By yr 3: All 43 EPA Socotra staff trained and active.</i></p> <p><u>3</u>: <i>Yr 1: Teaching strategy and courses developed. Yr 2: Courses approved and TTC staff trained. Yr 3: 1<sup>st</sup> group of TTC students being trained.</i></p> <p><u>4</u>: <i>Yr 1-3: On-going meetings/discussions/emails, faxes with MoE, EPA, SCDP and other bodies in Sana'a resulting in EE being integrated into the curriculum, as initiated in Socotra.</i></p>
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