



## ***Darwin Initiative Annual Report***

Important note:

To be completed with reference to the Reporting Guidance Notes for Project Leaders – it is expected that this report will be about 10 pages in length, excluding annexes  
Submission deadline 30 April 2009

### **Darwin Project Information**

Project Ref Number	17-010
Project Title	Chameleon trade and conservation in Madagascar
Country(ies)	Madagascar
UK Contract Holder Institution	DICE, University of Kent
Host country Partner Institution(s)	Madagasikara Voakajy
Other Partner Institution(s)	
Darwin Grant Value	£229,225
Start/End dates of Project	1 May 2009 to 31 April 2012
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1 May 2009 to 31 March 2010 and annual report number (1)
Project Leader Name	Richard Griffiths
Project website	<a href="http://www.madagasikara-voakajy.org/en/about_us">http://www.madagasikara-voakajy.org/en/about_us</a>
Author(s) and main contributors, date	Richard Jenkins, Christian Randrianantoandro, Richard Griffiths

### **1. Project Background**

The island of Madagascar is home to over 70 species of endemic chameleons. These unique lizards, loved by the island's tourists but disliked by many of its residents, occur in all habitats and from sea-level to over 2,000 m altitude. Chameleons in Madagascar however are subject to a wide array of threats, including habitat loss, illegal collection and climate change. The conservation status of Malagasy chameleons is not available on the IUCN Red List and the most threatened species have therefore yet to be determined. Chameleons once featured prominently in international exports from Madagascar but since 1994 CITES has only permitted 2,000 individuals of four common species to be traded. This project aims to improve the delivery of scientific information from Madagascar to the CITES Secretariat and to conduct an IUCN conservation assessment for each species. Focal species, that are either important for trade or are highly threatened, will be the subject of research and conservation efforts.

### **2. Project Partnerships**

The main partnership is between DICE and a Malagasy association called Madagasikara Voakajy (MV). A part-time DICE employee (Richard Jenkins) was seconded to MV and thus facilitated close and frequent discussions about project progress. The key individuals from MV were Christian Randrianantoandro (chameleons) and Mhy Andriamampionona (Finance and Administration). Richard Jenkins and the MV chameleon team met weekly in the MV office, when possible, to

discuss progress and emerging issues. Other discussions occurred when necessary between individuals which was at least daily when the teams were not in the field. The UK-based PI received regular emails from the project team in Madagascar. Three UK-based personnel, two full-time DICE employees (Richard Griffiths and Alison Rosser) and an ecological consultant and part-time DICE employee (Lee Brady) visited Madagascar during the first year of the project. These visits consisted of field trips in support of student projects, discussions with partners and presentations at the University of Antananarivo and a CITES workshop.

The project team worked closely with partners in Madagascar, notably the government, the Department of Animal Biology (University of Antananarivo) and Conservation International. These relationships were based on regular face-to-face meetings and in organized seminars. Our main contact at the Department of Animal Biology was initially Dr Daniel Rakotondravony but later became Dr Hanta Razafindriabe when the latter became the new head of department. The project's involvement with the Department of Animal Biology was two-fold, firstly regarding CITES because of its role as the Scientific Authority for Animals and secondly in the student training programme. At Conservation International, our main contacts are Dr James MacKinnon and Harison Randrianasolo. Regular meetings were held between Richard Jenkins and Dr James MacKinnon to discuss project progress whilst Harison Randrianasolo was involved in the technical aspects and participated in all of the CITES meetings.

The main collaboration with the government was through the Department for the Valorization of Natural Resources (Ministry of Environment and Forests), which is also the CITES Management Authority in Madagascar. Our main contact in this department was Sahondra Rabesihanaka who is the CITES focal point. She was particularly helpful in getting the project the early momentum from which many of the achievements evolved. Project staff are in regular contact with Sahondra Rabesihanaka, usually by telephone or when we visit her office. We have also kept Lydie Raharimaniraka, the director of the CITES Management Authority informed, and she was occasionally able to attend meetings.

IUCN was our international partner and communications were managed through email and Skype. This collaboration concerned issues about the Red Listing of Malagasy chameleons and other communications with the Species Survival Commission. We maintained regular contact with Neil Cox, Mike Hoffmann and Craig Hilton-Taylor.

### **3. Project progress**

#### **3.1 Progress in carrying out project activities**

Activities for Output 1

IUCN Red List to contain assessment of all Malagasy chameleon species.

The activities related to this output have been completed in line with the original proposal with only a minor deviation from the work plan. Some delays were experienced because the Malagasy partner, MV, was invited by the IUCN to prepare species accounts for an additional 275 reptile species. MV received additional funding to support this work but it nevertheless increased the workload during the first year of the project. The 74 chameleon species accounts were the first to be completed but there was a delay in uploading these to IUCN's online species Red List management website. This is expected to be completed in April 2010. The original project application was supported by the IUCN but they always favoured assessing all Malagasy reptiles together and not just the chameleons as we proposed. This looks like providing added

value however, with clear benefits to project legacy, Darwin Initiative profile and reptile conservation expected. With the close involvement of the IUCN in the planned workshop to evaluate the draft species accounts, the project's original work plan has been shifted slightly to accommodate the availability of IUCN staff. This has had only a minor impact on the project though, and the workshop is now scheduled to take place in Antananarivo the 4<sup>th</sup>, rather than the 3<sup>rd</sup>, quarter of the second year of the project.

#### Activities for Output 2

All chameleon species assessed for their potential as a harvested resource

The activities for this output centred on assessing the preference of exporters and conducting field studies on focal species. Initially, the results of Output 1 and the exporter preference study were to provide the foundation for the field studies. The review that the project team conducted for the CITES Scientific Authority for Animals in Madagascar provided us with the information needed. The exporter preference study was initiated by MV during the first year but was not completed. During discussions with the DICE delegation who visited Madagascar in January 2010 it was decided that the activities should continue until July 2010 so that MV staff could benefit from additional DICE personnel visiting this year. MV is now in the process of securing meetings with each of the registered exporters in Antananarivo for a survey which will begin in May 2010. We made four visits to exporters' premises to determine the species composition of chameleons present.

The project conducted field studies in four different locations:

##### Ankaratra Massif

This high elevation site (2,600 m) is a priority site for conservation but is not a protected area. The project team made two 3-week long field studies, in October 2009 and January 2010, where personnel from MV, DICE and Malagasy students conducted research on two chameleon species *Furcifer campani* and *Calumma hilleniusi*. The former is a species of considerable interest to the trade and the latter is of conservation concern. These field studies were financially supported by Conservation International. Field studies at this location will continue until the end of 2010.

##### Tsitongambarika

This area of low and mid elevation humid forest is currently being developed as a new protected area. The project team made a one month-long field study in November-December 2009 and collected data on 4 species of chameleons, *Calumma brevicorne*, *Calumma nasutum*, *Furcifer verrucosus* and *Brookesia nasus*. The former is a species of considerable interest to the trade and might be subject to export in the near future. These field studies were financially supported by the British Embassy to Madagascar. MV has secured new funding from FFI-Rio Tinto to conduct reptile work in this area, which although is focussed more on geckoes and than chameleons, will involve surveys of locally endemic *Calumma* species.

##### Bongolava

This area of low elevation deciduous dry forest is currently being developed as a new protected area by Conservation International. The project team made a one month-long field study in March 2010 and collected data on 4 species of chameleons, *Furcifer angeli*, *Furcifer oustaleti*, *Furcifer lateralis* and *Brookesia stumpffi*. The former is a species of conservation concern. These field studies were financially supported by Conservation International.

## Belalanda-Sakabera

These two villages are the only known localities for *Furcifer belalandaensis* and we conducted field studies in November-December 2009 and March 2010 at these sites. Other species of conservation interest that occurred at the study site were *Furcifer antimena* and *Furcifer labordi*. We received additional support from the Mohammed Bin Zayed Fund and the British Herpetological Society for this work. The sites where this species occurs is found within a provisional protected area that is being managed by WWF. The project is now working with WWF to coordinate chameleon conservation activities in these two sites.

We also combined all of the available information on *Furcifer* and *Calumma* species for Activity 2.4. The CITES Standing Committee wrote a letter on 6<sup>th</sup> August 2009 to the Management Authority in Madagascar to convey the results of their commissioned study (AC24 Doc. 7.2) and CITES Animal Committee recommendations (E-AC24-Sum-Rec-Final and SC58 Doc. 21.3 Rev. 1) which categorised Malagasy *Furcifer* and *Calumma* chameleons into either not suitable for trade (C1 or C2) or provisionally suitable (C3 and C4). The letter stated that three conditions were required for trade in C3 and C4 species to be in accordance with Article IV. The Standing Committee also encouraged Madagascar to provide additional information on the species listed as C1 and C2 before the 25<sup>th</sup> meeting of the Animals Committee in 2011. A meeting was held in the Department of Animal Biology, University of Antananarivo on the 5<sup>th</sup> October 2009, and attended by representatives of the Madagascar Management and Scientific Authorities and other experts on Malagasy herpetofauna, to discuss the Animals Committee letter of 6<sup>th</sup> August 2009. MV and DICE were invited to review each of the species in accordance with the request from CITES. The MV-DICE report was circulated in January 2010 and a meeting held on 1<sup>st</sup> February 2010 during which the Scientific Authority reviewed each species and allocated it to one of the four C-categories. Species that were put into the C4 category are the most suitable for trade and will be subject to a non-detriment finding evaluation in the second year of the project. The Scientific Authority formally submitted this information to the Management Authority but it had not yet been communicated to the CITES Secretariat (Sahondra Rabesihanaka pers. comm. to Richard Jenkins on 20.4.10).

## Activities for Output 4

Enhanced host country capacity to conserve and sustainably manage endemic chameleon species

We recruited five Malagasy students early on in the project to give them the maximum time available to complete their research theses. Three of the students are from the University of Antananarivo and two from the University of Toliara, in the south of the island.

Before embarking on their research projects the students attended two training events. The first was held in September 2009 at the *Institute Geographique et Hydrographique National de Madagascar* and all five students completed a five day GIS training course. The second was a five day training course organised by MV at the Angavokely Forestry Station. In addition to the five students, five staff from the regional Ministry of Environment and Forest team participated in the event. The training course consisted of classroom teaching (CITES, chameleons, Darwin Initiative, photography, DISTANCE analysis, measuring and handling chameleons) and field exercises (chameleon surveying and photography). In addition to DICE and MV personnel, the head of the CITES Scientific Authority for Animals in Madagascar gave a lecture on the role of the Scientific Authority and his colleague, from the Scientific Authority, lectured on quota setting for reptiles in Madagascar. The CITES focal-point for the Management Authority

in Madagascar also attended and gave a presentation. The trainees were therefore given a strong grounding in CITES as well as chameleon biology and survey techniques.

After the training courses, the students conducted their research projects which consisted of the following:

Christinah Harisoa Jeannie Radafiarimanana  
University of Antananarivo  
Diplôme d'Etude Approfondies  
Ecologie et préférence en habitat de *Calumma hilleniusi* Brygoo, Blanc & Domergue (1973) dans le massif de l'Ankaratra

Mihanta Fiandrianana Raholdina Andriafananona  
University of Antananarivo  
Diplôme d'Etude Approfondies  
Ecologie et préférence en habitat de *Furcifer campani* Grandidier (1872) dans le massif de l'Ankaratra

Patricia Soloniaina Mamory  
University of Antananarivo  
Diplôme d'Etude Approfondies  
Ecologie et préférence en habitat de *Furcifer angeli* Brygoo & Domergue (1968) dans le corridor forestier de Bongolava

Ravo Benjamin Benjanahary  
University of Toliara  
Diplôme d'Etude Approfondies  
Ecologie et préférence en habitat de *Brookesia nasus* Boulenger (1887) dans la forêt de Tsitongambarika, sud-est de Madagascar

Philibertin Honoré Djadagna Ahy Nirindrainiarivony  
University of Toliara  
Diplôme d'Etude Approfondies  
Ecologie et préférence en habitat des caméléons du genre *Furcifer* Fitzinger (1834) dans Sakabera et Belalanda sud-ouest de Madagascar

Each student has a supervisor in their university department and additional supervision is provided by MV and DICE.

### **3.2 Progress towards Project Outputs**

#### Output 1

IUCN Red List to contain assessment of all Malagasy chameleon species

The project is on course to fulfill this output before the end of the project. Certain aspects of this output, such as IUCN facilitation, are beyond the control of the project team but all signs are positive and if the expert workshop proceeds as planned in January 2011 the final output should be available before the end of 2011. All of the four overseas experts contacted have confirmed their availability for the January 2011 workshop and an announcement will be made closer to the date in Madagascar to invite local specialists.

Evidence for this output can be seen in the report to the Scientific Authority for animals that used the brief species accounts and maps (ref: DICE\_1).

#### Output 2

All chameleon species assessed for their potential as a harvested resource

We are on course to deliver this output and although there was a slight delay in the small research project on exporter preference, significant achievement was made in assisting the CITES Scientific Authority for Animals to identify which chameleons are candidates to be exported. The field studies are collecting important information on the biology of some C3 species, such as *Furcifer campani*, and will be used to eventually develop sustainable harvests for these species. Additional fieldwork is also more likely to focus on C3 species because they are potentially threatened but may also be exported in the future.

Evidence for this output is as follows (1) report to Scientific Authority for animals that used the brief species accounts and maps (ref: DICE\_1), PowerPoint presentation to Scientific Authority (ref: DICE\_2), (3) meeting record from 1.2.2010 (ref: DICE\_3), (4) letter from Scientific Authority to Management Authority (ref: DICE\_49), (5) preliminary report from field missions submitted to partners and the Malagasy government (ref: DICE\_36-39), (6) Scientific Authority meeting record from 1.2.2010 (ref: DICE\_4)

#### Output 3

Assessment of current, and development of future, *in situ* conservation initiatives for chameleons

All of these activities remain scheduled for the second year of the project. The basic data have been compiled in the first year as part of the Red Listing process.

#### Output 4

Enhanced host country capacity to conserve and sustainably manage endemic chameleon species

Significant progress is being made on all aspects of this output. MV staff have a higher profile because of the DI project and were invited to give oral presentations in two meetings, one about Ankaratra organised by Conservation International and one about climate change in southern Madagascar organised by WWF. Working closely with IUCN and CITES has also been a new experience for MV staff and is helping to build a strong technical capacity in the organisation. The project has worked closely with the CITES authorities in Madagascar, with DICE and MV staff attending each CITES meeting. Chameleons in Madagascar are, coincidentally, subject to scrutiny by CITES at the moment and the presence of the project has enabled strong and effective collaboration between stakeholders. The Malagasy students who are involved in the project are progressing well with their research and have received additional training in GIS and CITES related issues.

A major activity towards this goal was a 2-day workshop funded by the Darwin Initiative in Antananarivo on CITES non-detriment findings. It was attended by most of the members of the Scientific Authority for Animals, plus two representatives from the Ministry of Environment and Forests department responsible for CITES, as well as expert Malagasy herpetologists and three of the five student trainees. The main outputs included an annual CITES timetable for Madagascar and a template for making non-detriment findings.

Evidence for this output is as follows (1) five student GIS certificates (ref: DICE\_5-9), (2) 15 certificates awarded after training (ref: DICE\_10-21, 27), (3) letter of appreciation from the director of the Analamanga Region for the Ministry of Environment and Forest (ref: DICE\_22), (4) photo of the CITES focal point for the Malagasy government giving her presentation in the meeting (ref: DICE\_23), (5) photo of a professor from the Scientific Authority for Animals giving a presentation on reptile quota setting (ref: DICE\_24), and (6) group photo of the training event, with representatives of the British Embassy (ref: DICE\_25), (7) official record of the non-detriment meeting (ref: DICE\_26), (8) signed list of participants for the non-detriment meeting (ref: DICE\_28-30), (9) title slide from the workshop (ref: DICE\_47), (10) Malagasy student research proposals (ref: DICE\_31-35), (11) Photo of Dr Alison Rosser at the workshop DICE\_46

#### Output 5

Assessment of the illegal trade in chameleons between Madagascar and South-East Asia

The project sub-contracted TRAFFIC Malaysia to conduct the survey and received the report in March 2010. DICE, MV and TRAFFIC and now working together to produce a presentation that can be delivered to the relevant authorities in Madagascar.

We provide the report abstract as evidence (DICE\_41).

### 3.3 Standard Measures

**Table 1 Project Standard Output Measures**

No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Number planned for this reporting period	Total planned from application
2	Diplôme d'Etude Approfondies	0	0	0	0	0	0	5
4A	GIS training	5	0	0	0	5	5	5
4B	GIS training	5	0	0	0	5	5	5
5	MV staff training	3	0	0	0	3	3	3
6A	Chameleon surveying	5	0	0	0	5	5	5
	Malagasy students	6	0	0	0	6	0	0
	Ministry staff	1	0	0	0	1	0	0
	MV staff	8	0	0	0	8	8	8
	CITES Non-detriment	4	0	0	0	4	4	4
	Scientific Authority	3	0	0	0	3	3	3
	Herpetologists	3	0	0	0	3	3	3
	Malagasy students	3	0	0	0	3	3	3
	MV staff	3	0	0	0	3	3	3
	NGO staff							
	Ministry staff							
8	Richard Jenkins	25	0	0	0	25	28	
	Richard Griffiths	2	0	0	0	2	2	
	Alison Rosser	1	0	0	0	1	1	
	Lee Brady	4	0	0	0	4	0	
11A	Papers published	2	0	0	0	2	2	4

No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Number planned for this reporting period	Total planned from application
14A	CITES non-detriment findings	1	0	0	0	1	1	2
14B	Stakeholder meetings in Madagascar	3	0	0	0	3	3	6
15C	DICE press release	1	0	0	0	1		
20	New landrover	£32k						
23	Conservation International MBZ fund BHS	£9k £3k £1k	0 0 0	0 0 0	0 0 0	£9k £3k £1k		

**Table 2 Publications**

Type (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £
Journal* (DICE_42)	Jenkins, R. K. B., J. Rabearivony, and H. Rakotomanana. 2009. Predation on chameleons in Madagascar: a review. African Journal of Herpetology <b>58</b> :131-136			
Journal* (DICE_43)	Randrianantoandro, J. C., B. Razafimahatratra, M. Soazandry, J. Ratsimbazafy, and R. K. B. Jenkins. 2010. Habitat use of chameleons in a deciduous forest in western Madagascar. Amphibia-Reptilia <b>31</b> :27-35	Brill	<a href="http://www.ingentaconnect.com/content/brill/amre/2010/0000031/00000001/art00004">http://www.ingentaconnect.com/content/brill/amre/2010/0000031/00000001/art00004</a>	\$35 + tax

### 3.4 Progress towards the project purpose and outcomes

The project is on target to deliver its main outcomes within three years. Because of developments within the first year, it is quite likely to exceed its targets for some outputs.



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

Major progress is being made. Changes in the state of biodiversity is frequently measured using the IUCN Red List and this project will therefore produce a valuable baseline for 74 chameleons and over 250 other reptile species. The inclusion of Malagasy chameleons on the Red List will lead to stakeholders and donors in Madagascar and elsewhere becoming more aware about the most threatened species. The first year of the project saw the creation of a Chameleon Specialist Group in the IUCN, chaired by a DICE member of staff (DICE\_40). This group will coordinate many aspects of chameleon conservation, including Red List and trade issues. Progress is also being made in increasing the number of chameleon species that can be exported from Madagascar, although significant hurdles remain for all but the most common species because collection permits are not issued at site level, making it very difficult to make non-detriment findings. Chameleons also featured prominently in the Madagascar report to CBD because of regular involvement in the process by project staff (DICE\_44).

### **4. Monitoring, evaluation and lessons**

The project launch was relatively low-profile because of the precarious political situation at the time. There were three occasions during the first year when project partners and stakeholders came together and were presented with the objectives and progress; in October 2009, December 2009 and February 2010. Individual project components are monitored by different entities, student's progress is followed closely by their academic supervisors, our contribution to CITES is monitored by the authorities and field studies by reports to donors.

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

Not applicable

### **6. Other comments on progress not covered elsewhere**

The project has been enhanced by the inclusion of additional reptile species in the Red List process and the creation of a Chameleon Specialist Group for the IUCN. The project has developed close working relationships with the CITES authorities in Madagascar but recognizes its advisory role and all final decisions are made and communicated by the Malagasy government and University of Antananarivo.

The project coped with some unavoidable changes to personnel during the first year. Dr Alison Rosser left DICE and moved to WCMC in Cambridge. However, we were very fortunate that her new employers permitted her to take leave in February so that she could run the non-detriment findings workshop. Secondly, Bertrand Razafimahatratra, left Madagasikara Voakajy in October 2009. This was initially supposed to be temporary absence to give him the opportunity to deal with pressing personal issues after the tragic death of his young wife in April 2009. We fully expected him to return to the project in January 2010 but he has so far been unable to do so. Lalaina Elisoa was recruited into the team to support the growing work-load from the IUCN Red List.

## **7. Sustainability**

The project team have become recognised as the chameleon conservation specialists in Madagascar. Evidence for this comes from the invitation from the CITES authorities in Madagascar for assistance in reply to the CITES Secretariat on chameleon technical issues. Christian Randrianantoandro was also invited to make an oral presentation on reptiles at a major climate change workshop organized by WWF in Antananarivo.

The Darwin Initiative logo has been prominently displayed at all of the events that we have organised. For the host country partner this means a regular income from donors for its priority conservation work. This project should leave MV with an enhanced reputation and which might help obtaining funds in future. The reality though is there are other groups of animals in Madagascar, notably the leaf-tailed geckoes, day geckoes and poison frogs that would benefit from similar treatment to the chameleons, especially with regard to CITES Appendix IV. It is probably too early to consider this but the project team hopes that there will be a need to replicate this project for other taxa in the future.

## **8. Dissemination**

We have presented the objectives of the project to partners and other stakeholders on a number of occasions. In fact, each time we give an oral presentation we always provide a synopsis of the project. Tee shirts showing the project title and partner logos were given to participants in the Angavokely workshop (ref: Cham\_49). With Darwin Initiative funding we have enhanced the MV website and this will be available shortly. We were advised against high profile dissemination activities in the first year because of the political situation.

Events where the objectives of the project were disseminated:

30 September 2009

A meeting was held at the Madagasikara Voakajy office in which the objectives of the project were described to MV staff and representatives of the British Embassy and British Interests Section (DICE\_48). The new landrover was officially handed over to MV during this meeting.

Participants: Richard Jenkins (DICE), Christian Randrianantoandro (MV), Raphali Andriantsimanarilafy (MV), Julie Razafimanahaka (MV), Andriamampionona (MV), Nanie Nanie Ratsifindrahamana (WWF & President of MV), Katie Ransome (FCO), Heritsara Randrianarivony (British Interests Officer).

Presenters: Richard Jenkins (DICE), Christian Randrianantoandro (MV)

16 December 2009

Partner workshop in Antananarivo where the general project Darwin Initiative objectives and preliminary results were presented.

Participants: Richard Jenkins (BU), Julie Razafimanahaka (MV), Christian Randrianantoandro (MV), Daudet Andriafidison (MV), Radosoa Andrianaivoarivelo (MV), Roma Randrianelona (MV), Nanie Ratsifindrahamana (WWF), Dr Herilala Randriamahazo (WCS), Prof. Joelisoa Ratsirarson (ESSA-Forêts), Dr. Daniel Rakotondravony (Département de Biologie Animale, Université d'Antananarivo), Dr

Jonah Ratsimbazafy (Durrell Wildlife Conservation Trust), Michel Andrianasata (CI), Prof. Olga Ramilijaona, (Département de Biologie Animale, Université d'Antananarivo), Noromalala Raminosoa (Département de Biologie Animale, Université d'Antananarivo), Sahondra Rabesihanaka (Ministry of the Environment and Forests).

9-10 February

A Darwin Initiative workshop on non-detriment findings.

Presenters: Richard Jenkins (DICE), Alison Rosser (DICE), Christian Randrianantoandro (MV), Ny Rakotondrazafy (Department of Animal Biology), Germain Razafindrakoto (Department of Animal Biology)

Participants: Richard Jenkins (DICE), Alison Rosser (DICE), Christian Randrianantoandro (MV), Lalaina Elisoa (MV), Christinah Radafiarimanana (project student, Department of Animal Biology), Raphali Andriantsimanarilafy (MV), Roma Randrianavelona (MV), Mihanta Andriafananona (project student, Department of Animal Biology), Patricia Soloniaina Mamory (project student, Department of Animal Biology), Ny Rakotondrazafy (PhD student Department of Animal Biology), Germain Razafindrakoto (PhD student Department of Animal Biology), Sando Mahaviasy (PhD student Department of Animal Biology), Sahondra Rabesihanaka (CITES Management Authority), Hiarinirina Randrianizahana (for CBD FP), Aristide Andrianarisata (Scientific Authority), Jeanine Rasamy (Scientific Authority), Felix Rakotondraparany (Scientific Authority), Attale Ravoarimalala (Permanent Secretary, Scientific Authority), Hanta Razafindriabe (Head, Scientific Authority), Tiana Rahamaleo (WWF), Harison Randrianasolo (CI), Emiliene Razafimahatratra (Scientific Authority), Lydie Raharimaniraka (CITES Management Authority).

Other means through which we disseminated information about the project:

Information about the project was published in CI's regional newsletter (DICE\_45).

## 9. Project Expenditure

**Table 3 Project expenditure during the reporting period (Defra Financial Year 1 April 2009 to 31 March 2010)**

Item	Budget (please indicate which document you refer to if other than your project application or annual grant offer letter)	Expenditure	Variance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Operating costs: Conferences, seminars, etc			
Capital items/equipment (specify)			
Others (specify)			
Salaries Richard Jenkins Christian Randrianantoandro Lalaina Elisoa TRAFFIC			
TOTAL			

## 10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

I agree for LTS and the Darwin Secretariat to publish any content of this section.

## Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2009/10

Project summary	Measurable Indicators	Progress and Achievements April 2009 - March 2010	Actions required/planned for next period
<p><b>Goal:</b> <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>		<p><i>Main achievements included submitting 74 species accounts to the IUCN Red List, establishing a Chameleon Specialist Group for the IUCN and running a workshop on CITES non-detriment findings</i></p>	<p><i>(do not fill not applicable)</i></p>
<p>Purpose</p>	<p>All Malagasy chameleon species included on the IUCN Red List; threatened species identified as priority for conservation; key sites to avoid chameleon extinction identified; new initiatives for <i>in situ</i> conservation in place; species-based assessment of demand from overseas/exporters and potential impact of trade.</p>	<p>Progress has been made on all main outputs and the foundation is in place to deliver on the overall purpose</p>	<p>Review of draft Red List accounts Expert workshop Student theses submitted Non-detriment findings elaborated for five species Results from Thailand presented to Malagasy authorities</p>
<p>Output 1. IUCN Red List to contain assessment of all Malagasy chameleon species</p>	<p>1 Draft species accounts completed. 2 Draft species accounts peer-reviewed. 3 Final species accounts validated in workshop and submitted to IUCN 4 Updated IUCN Red List.</p>	<p>Progress to deliver this objective is on course. There has been a slight delay caused by factors beyond the control of the project but none have jeopardized the work.</p>	
<p>Activity 1.1 Email all stakeholders to announce the project</p>		<p>Completed in June 2009.</p>	

<p>Activity 1.2 Collation of all publicly available data on chameleons in Madagascar</p>	<p>Completed by December 2009 but is subject to regular updates as new information becomes available.</p>		
<p>Activity 1.3 Preparation of draft species accounts and maps for the IUCN Red List</p>	<p>Draft accounts and maps completed for each chameleon species. There was a slight delay in the launch of the off-line Species Information Service website and draft accounts will be uploaded in April 2010. IUCN will facilitate the next step (the review: Activity 1.4) and the expert workshops (Activity 1.5) is scheduled for January 2011, with an update online Red List expected in the second half of 2011 (Activity 1.6).</p>		
<p>Output 2. All chameleon species assessed for their potential as a harvested resource</p>	<table border="1"> <tr> <td data-bbox="589 563 1070 1002"> <ol style="list-style-type: none"> <li>1 Assessment of the demand for Malagasy chameleons.</li> <li>2 Identify the most desirable chameleon species for hobbyists.</li> <li>3 Field studies on the biology and habitat preference of key species.</li> <li>4 Identify chameleons that can be sustainably harvested.</li> <li>5 Proposals to resume trade in certain species.</li> </ol> </td> <td data-bbox="1070 563 2069 1002"> <p>We remain on course to deliver this output. We assisted the Scientific Authority for Animals to review which <i>Calumma</i> and <i>Furcifer</i> species are candidates for trade. We also developed a template for assessing detrimental findings for these species and this will be evaluated and tested in the next year of the project.</p> </td> </tr> </table>	<ol style="list-style-type: none"> <li>1 Assessment of the demand for Malagasy chameleons.</li> <li>2 Identify the most desirable chameleon species for hobbyists.</li> <li>3 Field studies on the biology and habitat preference of key species.</li> <li>4 Identify chameleons that can be sustainably harvested.</li> <li>5 Proposals to resume trade in certain species.</li> </ol>	<p>We remain on course to deliver this output. We assisted the Scientific Authority for Animals to review which <i>Calumma</i> and <i>Furcifer</i> species are candidates for trade. We also developed a template for assessing detrimental findings for these species and this will be evaluated and tested in the next year of the project.</p>
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<p>Activity 2.1. Establish contact with exporters, importers and breeders</p>	<p>Initial contact was made early during the project and occasional communication has been maintained thereafter</p>		
<p>Activity 2.2. Research project to investigate which chameleon species are in the most demand (if there were no CITES restriction)</p>	<p>The Malagasy partner started this element of the project but it is due to be completed by July 2010 with the assistance of a visiting student from DICE</p>		
<p>Activity 2.3 Field studies on species identified as CR, EN or DD (in 1.6 above) or species identified as desirable (2.2 above)</p>	<p>The project team has conducted field studies in four different areas, working on eight different chameleon species (2 trade priority and 3 conservation priority)</p>		

<p>Activity 2.4 Combine all data on conservation, biology and demand to propose a list of species and quota for sustainable harvest</p>	<p>The project team assisted the CITES Authorities in Madagascar to reply to CITES about a request regarding which chameleon species are candidates for sustainable trade. A list of 16 species was accepted by the Scientific Authority.</p>		
<p>Activity 2.5 Writing peer-reviewed articles</p>	<p>The project team published two chameleon papers (submitted pre-project) and one more is in press</p>		
<p>Activity 2.6 Writing reports for stakeholders and Darwin</p>	<p>Reports were provided to DEFRA, the Malagasy government, the CITES Scientific Authority and Conservation International</p>		
<p>Output 4. Enhanced host country capacity to conserve and sustainably manage endemic chameleon species.</p>	<table border="0"> <tr> <td data-bbox="591 564 1072 1118"> <ol style="list-style-type: none"> <li>1 Improved capacity of Madagasikara Voakajy to manage large, multi-stakeholder projects.</li> <li>2 Madagasikara Voakajy staff develop project and budget management skills; GIS.</li> <li>3 Malagasy students trained and graduated in chameleon conservation projects.</li> <li>4 Madagascar CITES Scientific Authority (Animals) facilitates and submits science-based recommendations to CITES Animals Committee</li> </ol> </td> <td data-bbox="1075 564 2069 1118"> <p>This Output is being delivered according to the original proposal. Malagasy research students are well advanced with their research projects and three of them aim to submit their thesis in 2010. We organised a 2-day training workshop for the CITES Scientific Authority for Animals and herpetologists and this produced a number of recommendations that need to be acted on in the second year of the project.</p> </td> </tr> </table>	<ol style="list-style-type: none"> <li>1 Improved capacity of Madagasikara Voakajy to manage large, multi-stakeholder projects.</li> <li>2 Madagasikara Voakajy staff develop project and budget management skills; GIS.</li> <li>3 Malagasy students trained and graduated in chameleon conservation projects.</li> <li>4 Madagascar CITES Scientific Authority (Animals) facilitates and submits science-based recommendations to CITES Animals Committee</li> </ol>	<p>This Output is being delivered according to the original proposal. Malagasy research students are well advanced with their research projects and three of them aim to submit their thesis in 2010. We organised a 2-day training workshop for the CITES Scientific Authority for Animals and herpetologists and this produced a number of recommendations that need to be acted on in the second year of the project.</p>
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<p>Activity 4.1 Student recruitment</p>	<p>There are currently five Malagasy masters-level students supported by the project</p>		
<p>Activity 4.2 Student field projects</p>	<p>All five students have conducted fieldwork for their research projects and three are now writing up. These students participated in a 5-day training course run by the project during which they received classroom lessons on chameleons and CITES and their first fieldwork experience.</p>		

<p>Activity 4.6 On the job training for Madagasikara Voakajy staff</p>	<p>Three Madagasikara Voakajy staff are engaged full-time on the project and received experience and training in a number of different disciplines, including IUCN Red Listing, CITES Appendix II non-detriment finding, climate change, oral presentations and organizing workshops</p>		
<p>Activity 4.7 External training</p>			
<p>Activity 4.8 Madagasikara Voakajy staff to obtain additional funding for species studies</p>	<p>Additional funding was raised from three donors to support chameleon conservation work</p>		
<p>Output 5. Assessment of the illegal trade in chameleons between Madagascar and South-East Asia</p>	<table border="1"> <tr> <td data-bbox="591 603 1072 823"> <p>1 Pet markets surveyed in Bangkok. 2 Web-based pet suppliers surveyed.</p> </td> <td data-bbox="1072 603 2072 823"> <p>This assessment was completed and report from TRAFFIC received before 31 March 2010. Illegal chameleon trade occurs mostly from private residences and over the internet, in contrast to the trade in Malagasy tortoises which is mainly from pet markets. We are seeking funding to repeat this survey in 2011.</p> </td> </tr> </table>	<p>1 Pet markets surveyed in Bangkok. 2 Web-based pet suppliers surveyed.</p>	<p>This assessment was completed and report from TRAFFIC received before 31 March 2010. Illegal chameleon trade occurs mostly from private residences and over the internet, in contrast to the trade in Malagasy tortoises which is mainly from pet markets. We are seeking funding to repeat this survey in 2011.</p>
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<p>Activity 5.1 Survey of live chameleon trade in south-east Asia, centred in Bangkok</p>	<p>Completed between December 2009 and February 2010. Next stage will see project team work with TRAFFIC to produce a report and PowerPoint for the Malagasy authorities (Activity 5.2), followed by publication.</p>		



## Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p>Sub-Goal: Improved conservation and sustainable management of endemic chameleons in Madagascar.</p>	<p>Projects to develop new protected areas, mines, roads and infrastructure and tourism use IUCN Red List to obtain chameleon conservation status. Protected areas with priority chameleons to be fully informed about species conservation needs and make staff and visitors more aware. Madagascar to propose new or revised levels of export for CITES Appendix II chameleon species.</p>	<p>Referrals to the threatened status of chameleon species in environmental impact studies, scientific publications, national databases, CITES species profiles.  Chameleon species listed site-based conservation priorities and subject to monitoring or field studies; new information provided to tourists about chameleons.  Documents submitted to CITES, CITES Animal Committee paperwork, export and collection permits.</p>	
<p>Purpose A framework for chameleon conservation that is based on the IUCN Red List and that incorporates sustainable use, including CITES approved live exports.</p>	<p>All Malagasy chameleon species included on the IUCN Red List; threatened species identified as priority for conservation; key sites to avoid chameleon extinction identified; new initiatives for <i>in situ</i> conservation in place; species-based assessment of</p>	<p>Updated website <a href="http://www.redlist.org">www.redlist.org</a>; additional funding acquired for conservation of priority species; updated <a href="http://www.zeroextinction.org">www.zeroextinction.org</a>; species action plans in protected areas, mines; report on demand for, and impact of,</p>	<p><b>Stakeholders have the resources to participate at the required level.</b>  CITES Authorities in Madagascar remain supportive.</p>

	demand from overseas/exporters and potential impact of trade.	wild collection; peer-reviewed publications and student theses.	
Outputs (add or delete rows as necessary) 1. IUCN Red List to contain assessment of all Malagasy chameleon species.	1. Draft species accounts completed. 2. Draft species accounts peer-reviewed. 3. Final species accounts validated in workshop and submitted to IUCN 4. Updated IUCN Red List.	Copies of draft accounts, reviewers' comments, workshop attendance, final database plus maps, Updated website <a href="http://www.redlist.org">www.redlist.org</a> .	<b>Participation by experts in reviews and workshop.</b>  IUCN endorse final species accounts.
2. All chameleon species assessed for their potential as a harvested resource	1. Assessment of the demand for Malagasy chameleons. 2. Identify the most desirable chameleon species for hobbyists. 3. Field studies on the biology and habitat preference of key species. 4. Identify chameleons that can be sustainably harvested. 5. Proposals to resume trade in certain species.	Copies of questionnaires; data and photographs collected in the field; student theses; peer-reviewed publications; non-detriment findings submitted to CITES.	<b>Cooperation of Malagasy exporters and international importers and breeders of chameleons.</b>
3. Assessment of current, and development of future, <i>in situ</i> conservation initiatives for chameleons.	1. Assess overall chameleon species distribution, existing protected areas and mines/exploration permit. 2. In protected sites with priority chameleons, raise awareness and develop chameleon-based initiatives. 3. Unprotected and threatened sites with priority species develop chameleon conservation plans with	GIS maps; guide training, poster creation, promotion of handicraft design and field studies in protected areas with priority chameleon species; mines to explicitly consider conservation of priority chameleons; feasibility study on captive breeding of Critically Endangered taxa; protected areas created or extended for priority chameleon species.	<b>Some Critically Endangered chameleon species are not found within the existing protected area system.</b>

	stakeholders.		
4. Enhanced host country capacity to conserve and sustainably manage endemic chameleon species.	<p>1. Improved capacity of Madagasikara Voakajy to manage large, multi-stakeholder projects.</p> <p>2. Madagasikara Voakajy staff develop project and budget management skills; GIS.</p> <p>3. Malagasy students trained and graduated in chameleon conservation projects.</p> <p>4. Madagascar CITES Scientific Authority (Animals) facilitates and submits science-based recommendations to CITES Animals Committee.</p>	<p>Effective communication between UK based and host country partners; sound management of expert herpetologists and their contribution to the project; additional funding raised by host country partners; training certificates; completed theses of Malagasy students; peer-reviewed publications on chameleon conservation and biology; documents submitted by Madagascar to CITES.</p>	<p>Key personnel in Madagasikara Voakajy remain in place.</p> <p>Students are available.</p> <p>Attendance of Madagascar CITES authorities in annual Convention of Parties meetings.</p>
5. Assessment of the illegal trade in chameleons between Madagascar and South-East Asia.	<p>1. Pet markets surveyed in Bangkok.</p> <p>2. Web-based pet suppliers surveyed.</p>	<p>Written report and photographs from TRAFFIC; dissemination to CITES Authorities in Madagascar.</p>	

**Activities** (details in work-plan)

- 1.1 Email all stakeholders to announce the project
- 1.2 Collation of all publicly available data on chameleons in Madagascar
- 1.3 Preparation of draft species accounts and maps for the IUCN Red List
- 1.4 Draft accounts and maps sent for review
- 1.5 Revised accounts prepared
- 1.6 Red List chameleon workshop
- 1.7 Submit final assessments to IUCN
- 1.8 Red List website updated
- 2.1 Establish contact with exporters, importers and breeders
- 2.2 Research project to investigate which chameleon species are in the most demand (if there were no CITES restriction)
- 2.3 Field studies on species identified as CR, EN or DD (in 1.6 above) or species identified as desirable (2.2 above)
- 2.4 Combine all data on conservation, biology and demand to propose a list of species and quota for sustainable harvest
- 2.5 Writing peer-reviewed articles
- 2.6 Writing reports for stakeholders and Darwin
- 3.1 Research project to look at spatial overlap of chameleons, protected areas and mines
- 3.2 Workshops in protected areas with priority species to determine existing levels of knowledge and to develop conservation plans
- 3.3 Creation of posters in protected areas with priority species
- 3.4 Training on chameleons given to tourist guides in protected areas with priority species
- 3.5 Workshops with stakeholders in any high priority site outside of protected areas to develop habitat conservation strategies
- 3.6 Research project on the feasibility of captive breeding
- 4.1 Student recruitment
- 4.2 Student field projects
- 4.3 Students to prepare theses
- 4.4 Students to defend theses and graduate
- 4.5 Development of training materials for Malagasy authorities
- 4.6 On-the-job training for Madagasikara Voakajy staff
- 4.7 External training courses
- 4.8 Fund raising
- 5.1 Survey of live chameleon trade in south-east Asia, centred in Bangkok
- 5.2 Report results to Malagasy authorities

Monitoring activities:

CITES committee outputs and annual quotas (pdfs) on [www.cites.org](http://www.cites.org)

Steering committee to track progress of major indicators

## **Annex 3 Onwards – supplementary material (optional but encouraged as evidence of project achievement)**

This may include outputs of the project, but need not necessarily include all project documentation. For example, the abstract of a conference would be adequate, as would be a summary of a thesis rather than the full document. If we feel that reviewing the full document would be useful, we will contact you again to ask for it to be submitted.

See separate documents and files.

### ***Checklist for submission***

	Check
<b>Is the report less than 5MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	
<b>Is your report more than 5MB?</b> If so, please advise <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> that the report will be send by post on CD, putting the project number in the Subject line.	/
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	/
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number.	
Have you involved your partners in preparation of the report and named the main contributors	/
Have you completed the Project Expenditure table fully?	/
Do not include claim forms or other communications with this report.	