



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: 30th April

IWT Challenge Fund Project Information

Project Reference	IWT-03
Project Title	Breaking the chain: combating the illegal trade in Ploughshare tortoises
Country/ies	Madagascar; Indonesia, Malaysia
Contract Holder Institution	Durrell Wildlife Conservation Trust
Partner institutions	Madagascar National Parks, TRAFFIC International, Alliance Voahary Gasy, Madagasikara Voakajy, Turtle Conservancy, UK Border Force, Wildlife Conservation Society, Government of Madagascar.
IWT Grant Value	£215,932
Start/end dates of project	April 2014 – Mar 2017
Reporting period (e.g. April 2015-Mar 2016) and number (e.g. Annual Report 1,2,3)	April 2014 – Mar 2015
Project leader name	<i>Andrew Terry</i>
Project website	
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1. Project Rationale

The ploughshare tortoise (*Astrochelys yniphora*) is Critically Endangered, with fewer than 500 remaining in the wild and restricted to a single site in Baly Bay National Park (BBNP). Poaching for the illegal pet trade has become the leading threat to the species, with its rarity and large golden shell making it highly desirable for reptile enthusiasts. Local villagers take animals from the wild, passing them onto smugglers who then smuggle them to Southeast Asia where they are either sold in markets or passed onto recipients in Asia, Europe or USA.

The main problems this project addresses are the challenges in providing effective community-led anti-poacher patrols; low capacity levels within National Park staff, police, local judiciary and Customs officials to track, arrest and prosecute those involved; knowledge gaps concerning the extent of poaching within local communities; attitudes in local communities towards poaching and knowledge of the whole trade chain from poaching in Madagascar to collectors and traders in Southeast Asia. Without concerted effort to stop this trade, the world's most threatened tortoise will likely go functionally extinct in the wild in the next 10 years; existing only in captive breeding facilities.

Our field surveys have shown that over the past five years, the tortoise population has dropped by a third, and the main cause is poaching. Since 2007 and 2008 we have witnessed, as elsewhere in the world, a massive increase in poaching pressure. This also coincided with the downfall of the Madagascar government in 2009, which led to a contested regime lacking international recognition. Bilateral aid was cut and weak internal legitimacy led to increased corruption levels and unemployment. Weak governance, and the resulting reduction in tax revenues and aid, has not helped efforts to prevent illegal exploitation of the country's unique natural resources – including the ploughshare. As poaching levels have risen, so too has the value of tortoises traded. In 2009, an animal would sell locally for US\$2. Today, villagers are offered between US\$20–40 by traffickers. The value depends on the size and age of the animal, and increases rapidly along the trade chain: ploughshare tortoises have been advertised for sale on the international black market for as much as US\$50,000.

In partnership with Madagascar National Parks (MNP) and the Baly Bay communities, the project supports community-led anti-poaching patrols which reinforce the park staff's own operations, and also support national policy for community involvement in conservation. Rangers are selected from local villages where village elders help Durrell and MNP to choose suitable candidates, which both strengthens community support for the patrols, and gives the rangers a degree of respect from their villages.

To help manage and improve the effectiveness of these patrols (Output 1), in Year 1, project partner WCS focused on providing training in the use of the SMART (Spatial Monitoring And Reporting Tool) software system, which helps the management and use of patrolling data to guide teams in the field. We aim to expand the use of SMART, both to help manage patrolling data and to provide an important feedback and communication to the patrols themselves.

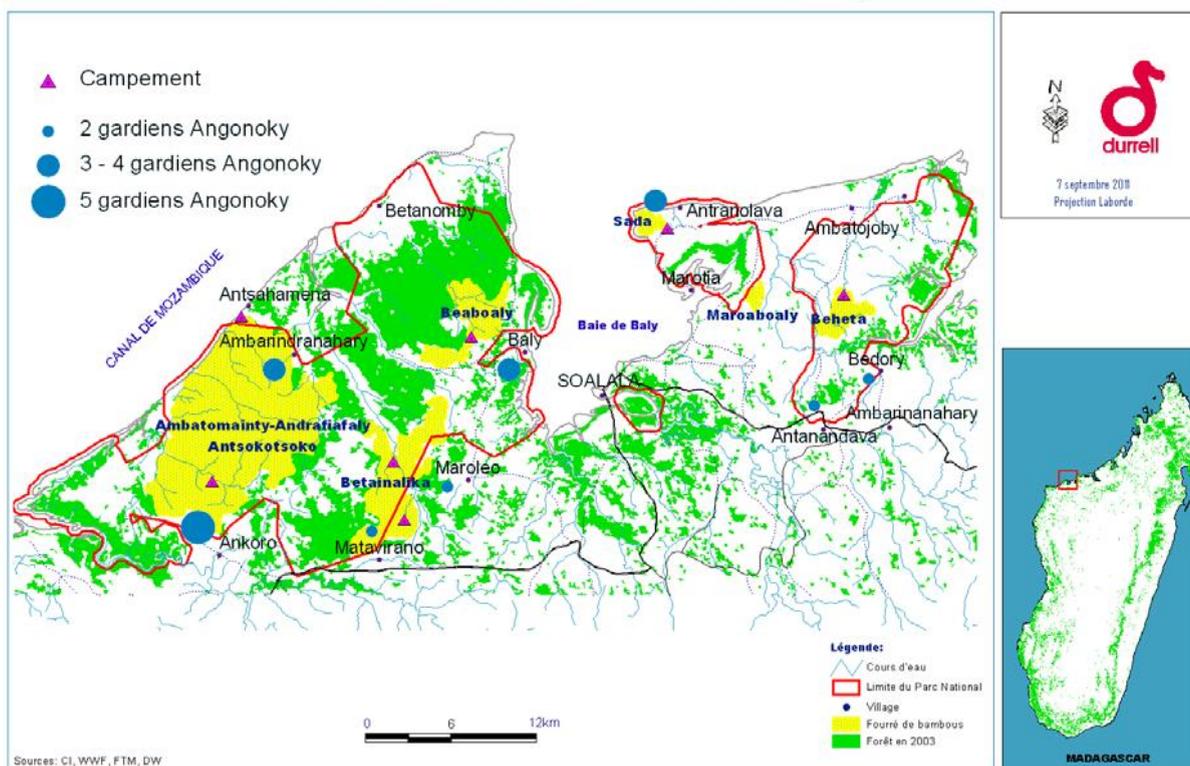
Once poachers are caught project partner AVG is leading a process of training and capacity development with law enforcement and the judiciary to try to ensure that due process is followed, that they understand the importance and impacts of poaching and to minimise corruption (Output 4). Apart from the most recent three or four cases, all poachers taken in front of tribunal had been released or given insignificant sanctions.

Workshops with police, prosecutors and magistrates at local and regional levels have been carried out so that they all understand the needs of the others in terms of successfully investigating, prosecuting and sentencing a case. The need for an improved judicial response was recognised by the Minister of Environment at a recent (March 2015) round-table discussion hosted by Chatham House and facilitated by Durrell.

Alongside efforts to improve protection and law enforcement, the project aims to better understand the scale and extent of poaching within the local communities (Output 2). Project partner MAVOA is leading a community-based research project, which uses a logbook approach and specialised approach to collecting sensitive information (involvement in poaching) to collect data on community involvement in poaching.

The wild populations of ploughshare tortoises exist only within Baly Bay National Park, the only National Park in Madagascar established to protect a single species. The park was created in 1998 at the request of the local communities, through an engagement project led by Durrell to manage and protect the natural resources of Baly Bay. The park is large in size (57142ha) and in an isolated area of Madagascar with access mostly by boat, making it costly and difficult to patrol.

Parc National de Baie de Baly



2. Project Partnerships

This project represents a large partnership spanning a number of countries, which carries benefits from a diversity of expertise but also risks from the challenges of maintaining communication and engagement. However each of the partners brings a specific focus and interest that overlaps with the needs of the ploughshare tortoise and its role as a flagship for efforts to reduce illegal wildlife trade in Madagascar. Not all these partners have worked together before the project and so part of the process has been to enable communication between partners.

From the start of the project we have organised six-monthly partners meetings. Each partners meeting is used to communicate current progress within the project, whether it is research in the field, judicial training in regional courts, captive breeding or reports of illegal trade from SE Asia. This allows us to refine project activities based on current developments, for example at the last meeting in February, WCS requested that MaVoa see if it were possible to provide estimates of their findings within the community-based research on the extent of ploughshare poaching within communities as a way of adaptively adjusting management responses.

With TRAFFIC SE Asia, there is regular communication and information regarding illegal trade is shared regularly. TRAFFIC in Southeast Asia compiles and analyses the data, and produces intelligence reports which are delivered in a timely and confidential manner to relevant enforcement agencies.

Partnerships between TRAFFIC and enforcement agencies in countries implicated in Ploughshare Tortoise trade, including Indonesia, Malaysia, Singapore and Thailand, is increasingly effective with information being passed to the authorities being accepted and acted upon.

Working with institutions that are not formal partners of the project has also remained an important component of the work and has provided challenges. An important institution has been the Civil Aviation Authority (CAA), which manages the airports and did not view illegal wildlife trade as a major issue and therefore showed low engagement in the process. Through the project we have engaged the Ministry of Transport closely in the organisation of workshops and roundtable discussions to improve controls at the national airport in particular. The

outcome was that senior officials are now engaging in the process and also attended the training provided by UK Border Force.

One of the challenges often encountered in illegal wildlife trade situations is that there are many law enforcement agencies involved in different components of the process, and they do not fully aware of what each other is responsible for or doing. This situation has improved within increased engagement from CAA, gendarmes, police and Customs in the round table meetings. Also the training provided by UK Border Force started with a session on having each agency identify its role.

In a separate process, project partners have also engaged in a project led by the University of Michigan to use participatory risk mapping to help identify hotspots of illegal activity in terms of natural resource use. This is a commonly used technique within security services for issues such as crowd control or public security, and is now being applied to wildlife crime issues. The result is that a project is being led by partner Alliance Voahary Gasy (AVG) to carry out risk mapping for Baly Bay.

Thanks to AVG reputation Malagasy media always give much importance to any news/info related to natural resources smuggling such as rosewood or tortoises. Therefore, press conferences organized by AVG and DWCT at each main activity of the project were always much attended and well reported in different regional and national media.

3. Project Progress

3.1 Progress in carrying out project activities

Output 0: General project management activities

The aims for this period were to recruit a programme coordinator and ensure the effective management and reporting of the project.

An international call for applications was launched at the start of the project. Although over 30 applications were received it was felt that none of the candidates possessed the required level of expertise within a number of technical issues relating to illegal natural resource use, management and conservation that was required. It was also very important for the candidates to have experience with conservation and communities in Madagascar. As a result Hasina Randriamanampisoa was recruited from within Durrell to lead coordination of the programme. Hasina has extensive experience working within Malagasy natural resource management policy with a focus on illegal or unsustainable practices in Baly Bay and around Lake Alaotra. He has extensive experience working with the ploughshare tortoise and understands the problems and challenges well. His communication and language skills are high and he therefore made a very good choice to lead the project forward.

The launch meeting between partners was held on 24th June in Antananarivo. The partners shared information on existing activities and the situation in the field. There are some new activities that will be associated with the project and allow it to have a greater impact.

The second partners' meeting was held in Antananarivo on 28th October to review progress at the start of the project and plan the second semester's activities. Based on the main output of this meeting, the Half Year report was produced on time.

The third partners' meeting was again held in Antananarivo on 20th February to share new information and review progress of second semester's activities.

The last partners' meeting of project year 1 was held in Antananarivo on 13th March, 2015 to review progress but also to discuss immediate and near future activities and issues. Partners also agreed on a deadline to send year 1 final reports.

Output 1: Improve the coverage and efficiency of community-park ranger patrols in Baly Bay National Park (BBNP)

In the first period, the aim was to implement a new patrol monitoring system called SMART, which is part of a global movement to enhance anti-poaching efforts. WCS is leading on the delivery of SMART and training in Madagascar. The first training session was held with 21 staff from Madagascar National Parks (MNP), Ministry of Environment and Durrell, as well as 23 village patrol members. A separated report on the training by WCS is included in the present annual report to IWT (see Annex 4). Baly Bay now has to highest number of trained SMART users in of any of Madagascar's protected areas.

Madagascar National Parks now use SMART in all their sites and all these have their own data model ready for use. As far as Baly Bay is concerned the problem still lies on entering patrol data into SMART since only the Park Director and a member of DWCT staff are able to do this, and both of them are mostly engaged with other duties.

The project has so far enlisted 165 community rangers, drawn from 11 of the 28 main villages surrounding the bay. Together, they patrol one third of the ploughshare habitat, and spend 1,400 hours per month on duty. The community patrols generated 2,888 daily reports to the park authorities in 2014.

Data from tortoise counts in 2015 are still being analyzed. What can already be said is that observation efforts had been increased this year but encounters seemed to have decreased (Angelo Ramy, DWCT, Pers. Com).

Output 2: Identify the role of local community members in poaching

The aim for this period was to start the community-based research and data collection. To achieve this, Madagasikara Voakajy (MAVOA), who lead this Output, visited 16 villages, held 6 village meetings and left 8 smuggling logbooks (ways for community members to anonymously log any knowledge or sightings of illegal activities) in key villages. By the end of project year 1, MaVoa collected those 8 logbooks once to check what had been recorded in them during a two months period. So far, the data they have collected using the Randomized Response Technique are less than the 30% minimum required to be analysable, so further data collection is planned.

Nevertheless, investigations led by MaVoa showed that poachers are found in quite all areas of the district of Soalala, and smugglers follow at least two identified routes to get the tortoises out of the habitat area. Identified barriers to stopping ploughshare smuggling include difficult access to the tortoise habitat during rainy season which reduces the frequency of visits by the community guards while poachers are choosing this time to increase their visits; community guards feel no support from local and regional authorities as there is not fast enough follow up to their reports; communities are not keen to testify in court because of social issues and also because they fear to lose their time and money travelling several times from their village to Mahajanga (the main regional town) and back and nobody will reimburse their expenses. A separate report from MAVOA, in French, is included in Annex 4.

Output 3: Understand the trade chain between Madagascar and SE Asia and foster greater international collaboration

TRAFFIC SE Asia is still carrying out the recruitment process of a highly-qualified consultant with herpetological experience as our investigator based in Indonesia. They have established an office in Madagascar, and communication between the Programme Officer based there and the partners has become regular.

The additional confidential information gained in Madagascar is combined with intelligence gathered from markets in Asia and used in database to better understand and map trade routes and key members of the illegal trade. Consistent with much organized criminality the 'kingpin' is often the most difficult to target; typically these individuals keep themselves fairly clean and do not necessarily get involved in day-to-day operations. In an attempt to disrupt this criminality, further efforts have been made to identify the key individuals creating the greatest harm.

During the year under review, four intelligence reports were provided to enforcement agencies (with two reports being shared with more than one agency), in Bangladesh, Hong Kong, China and Malaysia (Output 3, Indicator 1). Also ongoing bi-monthly reports on trade data are being

produced (Indicator 2, and an overall trade chain report is being planned, with the report outline prepared, with Introduction, Legislation Review and Methodology sections drafted (Indicator 3)

In November 2014, TRAFFIC's Regional Director for Southeast Asia, Dr Chris R. Shepherd, attended the Montier en Der Wildlife Film Festival where a presentation on Ploughshare Tortoises was given, highlighting key issues, needs and priorities. The need to combat the illegal Ploughshare Tortoise Trade was also presented in 2014 at the Clinton Global Initiative in New York, to the Dutch Lottery in the Netherlands and to WWF staff in 2015 in the Netherlands and in Singapore.

Ploughshare Tortoise trade has also been highlighted as a major high-end organised criminal enterprise to the ASEAN Wildlife Enforcement Network (ASEAN-WEN) and the US Embassies of Malaysia and Thailand in April 2015 at the ASEAN Regional Forum on Workshop on Combating Wildlife Trafficking, hosted by the Government of Malaysia and the Embassies of the USA to Malaysia and Thailand, in Sabah, Malaysia.

Output 4: Improve law enforcement both regionally and nationally to break the trade chain.

The main purpose for this period was to start working with regional judiciary representatives and to begin the training with Customs agents at the major ports of exit.

The process of developing the training for Customs agents has been more complicated than anticipated. This was due to the launch of the new government in Madagascar and then the replacement of the then head of the Civil Aviation Authority in Madagascar. We nearly had to postpone this training due to the change in authorities. However, Durrell and AVG mediated a meeting with the Ministry of Transport, and a workshop with all the different airport management bodies (Gendarmes, Police, Customs, ADEMA, Civil Aviation Authority, and Ministry of Environment) was eventually organized in October 2014, and a second one in March 2015 to review progress according to the action plan agreed during the first meeting. Just before the second meeting, these airport management bodies also attended a full day CITES training provided by UK Border Force and MEEF.

The training from UK Border Force and MEEF Agents took place in March 2015 and 12 Malagasy Customs officers benefited from it during two full days (Indicator 2, Output 4). Originally, 30 of them from different places in Madagascar were planned to attend the training but travel and accommodation costs forced us to focus on people from Customs main offices around Antananarivo – including the airport, which is the main exit point of smuggled animals.

Following a similar training held in Antananarivo in April 2014, Alliance Voahary Gasy (AVG) in collaboration with MEEF, Scientific Authorities, and other partners organized a two-day workshop training for some more than 50 national and regional judiciary representatives in Mahajanga in October 2014 (Indicator 1). Apart from sharing information on CITES and flagship species, the workshop gave the opportunity to discuss about Malagasy natural resources being smuggled out of the country, the causes and possible solutions. A deputy public prosecutor from the tribunal of Mahajanga was present at the workshop and showed much interest to the subject.

AVG has also started a process of risk mapping associated with the management of the National Park and smuggling, around Baly Bay. This is a consultative process that was carried out with community members and is being conducted with researchers from the University of Michigan. This represents an extension to the work originally proposed for this project, and will provide much useful information concerning the routes and means of smuggling from the field to export. To illustrate this, the mapping work done in October already showed new smuggling routes very different from what has always been known because these are located far inland to the south of the tortoise habitats. Following the crime prevention table which often ends risk mapping sessions, the agents, rangers and communities who participated in them also gave very interesting suggestions on how to stop the poaching such as asking anyone pretending to look for his cattle inside the core zones to wear a fluorescent jacket so that it is easy for rangers to spot him in the forest, or working with Fishery department to give an identification number to every single pirogue in the zone as well as put fluorescent strips along them so that they can be spotted at night.

Discussions with the authorities over having a district Dina (local law) were held in June, during celebrations for World Environment Day. A draft proposal had been lost when the Court office in Mahajanga burnt down but this was replaced by a new copy which still awaits approval by the tribunal according to follow-up done by MNP and Durrell. The importance of the Dina was again stressed at the workshop held in Soalala during the Angonoka Festival in December 2014.

3.2 Progress towards project Outputs

Output 1	Coverage and efficiency of community-park ranger patrols in the BBNP is improved through implementation of SMART system.
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This Output has got off to a strong start, with SMART training and implementation at the Park (Indicator 3: 37 people participating in monitoring have been trained on SMART, 22 village rangers, 12 park rangers, 1 local representative of MEEF, and 2 Durrell staff members). However patrols are not yet using the system for data entry and management. The next stage is to provide methods and training for data entry and to improve coverage of patrolling within the park. This is being provided in 2015/16 through this and an associated project. However, patrolling efforts by village rangers in core zones have been doubled since January 2015 (indicator 1). The decision was taken after the big persistent fire at the release site of Beaboaly in December 2014.

Output 2	The role of local community members in poaching and the incentives and barriers to poaching are identified and understood for at least 6 of the communities most closely identified with the problem.
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Progress has been definitely made towards this output. Thanks to the 8 logbooks instead of 6 established but monitored only once (indicator 1) and the 6 surveys conducted in 6 villages (indicator 2), some incentives which make communities indulge in poaching are now identified. The village interviews identified a number of new routes that poachers were using and also factors that enabled or promoted poaching. This includes the lack of coverage in the park of rangers and guards especially in the wet season, when poachers are increasing their activity; the limited area being patrolled; the perceived lack of support from local and regional authorities and the lack of compensation for extensive travel required for people willing to testify against poachers (see Annex 4 for more details).

Output 3	The trade chain of illegal activity for ploughshare tortoises from Madagascar to Southeast Asia is understood and documented leading to greater national and international cooperation to tackle key individuals and areas within the smuggling process.
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Numerous exchanges of intelligence between TRAFFIC SEA and Durrell occurred throughout the year to warn about suspicious passengers or freight, and/or share news of confiscated animals. In total, TRAFFIC SEA has sent intelligence 4 times to Durrell and the latter has sent in return 9 times (Indicator 1). On the other hand, Durrell has given information to airport authorities 3 times with the last time ending with the arrest of a Chinese couple which had already tried to bribe their guide at the Durrell breeding centre of Ampijoroa to steal juvenile ploughshares for them.

During the year under review, four intelligence reports were provided by TRAFFIC to enforcement agencies (with two reports being shared with more than one agency), in Bangladesh, Hong Kong, China and Malaysia (indicator 1).

Indicator 2: ongoing.

Indicator 3: Report outline prepared, with Introduction, Legislation Review and Methodology sections drafted. Contributors for various sections have been planned.

Output 4	Improved enforcement of laws along the trade chain through filling key skills gaps and raising awareness of poaching issue within priority institutions and increased support of local Dina governing ploughshare poaching
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The Malagasy police and gendarme showed good will to take part in any activity related to natural resources management and protection. Twenty-five agents from each body participated in a training organized by AVG and a few other partners (indicator 1) during which two real cases of Ploughshare tortoise smuggling were discussed vehemently and at greater length.

In spite of the fact that new people had been appointed to be in charge of training in the Customs department, the two-day training led by UK Border Force took place to the satisfaction of the 12 Customs officers who participated in it (indicator 2). At the end of the training, the Director General and the Head of training expressed their hopes to see the next training session to happen as soon as possible.

Before several tortoise smuggling cases discovered in South-East Asia which have been proved without any doubt to have departed from the airport of Antananarivo, AVG and Durrell together with all concerned ministries decided to tackle the problem and organized a series of workshops to raise awareness among the different bodies working at the airport and to find with them the flaws and the solutions to the problem (indicator 3). Up to now, the results of the two meetings include the identification of the responsibilities of each institution to avoid overlapping conflicts, the integration of flora and fauna species in the control targets, and the stimulation of a committee which will coordinate communication and cooperation between everybody working at the airport. A direct and concrete result of all this is the arrest of a Chinese couple in March 2015 after Durrell had given intelligence related to tortoise smuggling to the airport police.

Although social marketing activities could not be done as expected since the planned partner was no longer available, 250 t-shirts with various messages in favour of Ploughshare protection, forgetting about smuggling, taking pride in having the Ploughshare etc. have been produced to be distributed on site (indicator 4). This will take the awareness raising campaign to the next level. The impact of the t-shirts will be monitored through surveys during year 2 and 3.

3.3 Progress towards the project Outcome

<p>Outcome: Poaching no longer seriously threatens the ploughshare tortoise as communities and MNP more effectively guard and monitor this species alongside improved law enforcement and cooperation along the trade chain.</p>
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We are at an early stage in the project. Year 1 focussed on setting systems up whether it was increased monitoring effort within Baly Bay National Park, judicial training, community research or international collaboration. Our outcome indicators aim to show measureable change by Year 3 and major reductions in pressured by Year 5 (post-project).

One challenge that we have not adequately prepared for within the project is the impact of rapid staff turnover in law enforcement agencies. This requires that there be regular and ongoing training provided to ensure both that the core messages are embedded into the institutions and that all members of staff receive the training at least once. We will need to assess how to increase our training efforts. This will be a challenge with the cooperation with UK Border Force given the costs involved, although this was very well received within Madagascar and also with the Border Force trainers.

Political stability remains a concern, since project start the new President has already replaced his prime-minister and several members of the government (including the Minister of Environment) without being able to restore the Administration’s authority or at least some trust

in the government (cf. newspapers of ...). The new Minister of Environment has declared his intention to focus on natural resource crime and establish a court for this issue. Although we remain cautious as previous such commitments have rarely been followed up with action.

3.4 Monitoring of assumptions

We monitor the project assumptions closely:

Assumption 1: political stability remains – despite the rapid changes and lack of consistency, there is no sign at present that any significant reduction in stability can be expected.

Assumption 2: the safety of field staff and communities – again no reduction is expected. At present there are no national major interests in the region, although with the threat of the iron mine development we monitor this especially (see Assumption 4).

Assumption 3: MNP adopts the use of SMART. Another positive point for the project is that MNP decided to drop MIST and use only SMART throughout its National Park network in February this year, which was a condition of one of their donors (KFW).

Assumption 4: the development of the mining project has been very quiet since project launch, with no information being readily available. A co-funded project is focusing on this particular topic.

Assumption 5: Engagement with local law enforcement is stable and increasing. Fifteen interventions from the police were carried out following information of intrusion in the Park from rangers, and separately on two occasions, they helped our team to find two different people, arrest them and take them to the tribunal in Mahajanga. One of the arrested people stayed in prison and the other was released afterwards. On the judicial side, the deputy public prosecutor in Mahajanga is actively engaging with the project partners to provide guidance.

Assumption 6: Since the beginning of the project nothing has influenced local communities' engagement towards the goals of the National Park but this year, MNP plan to start discussions with them on the delimitation of areas they will manage themselves around the Park. The communities have been waiting for this to happen for so long that it will surely change their attitude positively if this is carried out in an appropriate manner.

Assumption 7: There are currently no signs that the regional authorities would not validate the Dina. At this point, the Dina needs to be returned to Soalala, Baly Bay, because the copy that was given to the tribunal had not been approved by the Chief of Soalala District beforehand, but the process is in motion.

4. Impact: achievement of positive impact on illegal wildlife trade and poverty alleviation

The project's overall impact statement was to see the illegal trade in Malagasy chelonians halted through improved monitoring and the implementation of appropriate law enforcement at all levels throughout the trade chain both in Madagascar and internationally.

This intentionally brought in much larger but less lucrative trade in Radiated tortoises. This project represents the development of over 20 years of dedicated conservation efforts for Malagasy tortoises and so has not started from a position of now activity. However by working with MNP to establish an effective programme of community guardians, we hope to provide a model that is supported by data and is readily replicated with radiated tortoises.

Nationally, Durrell is part of the national tortoise committee which is led by the Director General of Forest Department and which sets up all necessary strategies and implementation procedures for the conservation of the Malagasy endemic tortoise species. Project partner, AVG, has a high profile at a national level within political and media circles for their work on raising concern about the state of Madagascar's natural resources and they have been able to use the ploughshare tortoise as a flagship species, in a similar way to Rosewood, as a symbol of Madagascar's richness being stolen away because of the lack of law enforcement.

Internationally the project is raising the profile of the ploughshare tortoise as a flagship for the many little recognized species that are being trafficked to extinction.

In terms of poverty alleviation, rural development projects running alongside the IWT project have focused on food security, primary education, health and sanitation in Baly Bay (funding provided by Jersey Overseas Aid Commission and Guernsey Overseas Aid Commission).

5. Project support to the IWT Challenge Fund Objectives

The project supports the IWT Challenge Fund Objectives in the following ways:

- 1) Developing sustainable livelihoods for communities affected by illegal wildlife trade;

Durrell has closely linked community wellbeing objectives with conservation outcomes for the tortoise. The National Park is being monitored by community guards (supported by this project) who are from the villages surrounding the Park and benefitting from associated rural development activities supporting their immediate needs (JOAC and GOAC projects identified above). We are also supporting work to establish a community forum to address the potential threats associated with the development of the iron ore mine, which will have major implications for community livelihoods in the future and also working with the National Park on a project to review zonation in and around the Park, which affects how communities can use the land around the Park, with the aim of improving their access and ensuring a more equitable use of the land.

- 2) Strengthening law enforcement and the role of the criminal justice system;

Many of the project activities are focussed on enhancing law enforcement by improving knowledge and collaboration among enforcement agencies and increasing transparency. Within SE Asia, TRAFFIC is using the information generated within the project primarily to support law enforcement work in a more meaningful way. As part of this project they are now developing the intelligence we receive so that it is able to inform law enforcement at a higher level providing actionable intelligence that is used. Already information sharing with law enforcement agencies within this project has led to the arrest of smugglers trying to take radiated tortoises out of the country.

- 3) Reducing demand for the products of the illegal wildlife trade

Demand reduction is a key element in the overall battle against illegal wildlife trade. This project focusses primarily on Madagascar and halting the removal of animals from the country. Reducing demand remains a major issue that is currently being discussed within the International Angonoka Working Group. Evidence and projects results are being communicated to international efforts to support demand reduction overall, but this is outside the of the current project at the present time.

6. Impact on species in focus

Our evaluation is that poaching is having a major and potentially increasing impact on the ploughshare tortoise. The systems being putting place in year 1 are there to combat this pressure. Therefore although there is currently no measurable impact on the species due to Year 1 project activities, we expect this to change over Years 2 and 3.

With efforts in SE Asia, the project is supporting the identification and monitoring of known traders and the collection, analysis and communication of this data is helping law enforcement agencies directly.

7. Project support to poverty alleviation

The villages surrounding Baly Bay are the communities affected by the project and illegal wildlife trade. Overall efforts to save the ploughshare tortoise have strong and direct poverty alleviation targets supporting communities to improve food security, access to clean water, improved sanitation, income generation training, and community governance support. Separately a community forum will be created to ensure community rights are respected in the development of the iron ore mine.

However for this project the impacts are indirect as there is no subsistence value to ploughshare poaching. The surveys in Output 3 to ascertain incentives and barriers to poaching will also look for the measures relating to income generated by poaching in relation to household income. So far, only one person gave the amount of money he got from poaching ploughshares (MaVoa, Pers. Com.) and we must wait for more data to draw any kind of conclusion.

The community guards provide a model for improving wellbeing through the project. They are paid for the time they lose from patrolling, which could be spent fishing or farming. There is circumstantial evidence that village patrol members seem to be doing better than other people in their villages. They apparently save the money the project pays to them for the patrols and use it to start a new income generating activity such as chicken breeding or grow more crops or even buy and sell more fish and shrimps. We are currently reviewing options for an incentivisation scheme that would aim to improve performance and survey effort in the field, but it would also provide increased income to the monitoring teams based on performance.

8. Consideration of Gender equity issues

The project as it is has no direct impact on gender equality. However, when Durrell holds a community meeting in villages women are always solicited to attend the meeting. By experience, we know that once they are present women never miss an opportunity to raise their voice whenever they feel they have to.

9. Monitoring and evaluation

Project progress monitoring is carried out several ways. The project leader and Durrell's Head of Field Programmes communicates regularly with the project coordinator on the ground, Hasina Randriamanampisoa and Durrell's Madagascar Programme Director on overall progress and issues with the project. The main forum for monitoring progress is the partners meetings, which are held on a quarterly basis and have provided an effective forum for discussing activities, barriers and opportunities. In the meetings the outputs and corresponding indicators are discussed one by one according to what has been done and what is left to be done. Usually, issues that arise during project implementation are discussed in detail at the beginning of the meeting, and more general topics which may have longer term impacts are dealt with at the end. Minutes are produced and circulated to all project partners. The project coordinators have also started a Dropbox online file storage to give access to all relevant documents to all partners.

The collection of field data is led by the field managers, where it is tortoise survey data, socio-economic and wellbeing information or data collected through the community research. We are at the start of using SMART, but this too will enable collection of detailed monitoring data that will help evaluate the effort and impact from the community patrols much more effectively than before.

10. Lessons learnt

From the project start we faced challenges with recruitment of people with sufficient qualifications and experience. This was not due to a lack of applicants, but due to the specific nature of the skills required in both cases. TRAFFIC is still completing its recruitment and Durrell its most experienced staff member to coordinate the project. There is no alternative

approach to be adopted, because a transparent and open recruitment process was followed, except to allow a significant period of time to enable recruitment.

Equally we faced early challenges in Baly Bay National Park with the adoption of SMART, over the previous software option MIST, and then the capacity to enter the data resulting from the patrols. This is being addressed at the moment but this lack of capacity has hindered the integration of SMART. Baly Bay National Park is under-staffed and we overlooked this critical role. A major focus for next year will be improving the data collection and entry methods both to increase the effectiveness of using SMART and to provide feedback to guards to better incentivise them.

For MAVOA, this project is the first time they have worked in Baly Bay and they have had to learn the different customs and cultural values relevant there. This process of learning has limited the effectiveness of the first season of RRT research. For example part of the approach asks people to log the different species they use using images, but some of the species are locally taboo and therefore not touched. However the interviews provided important intelligence on routes used by poachers and also barriers to community engagement in anti-poaching efforts. One major barrier is that there is a risk to testifying against a fellow community member, and there is no reward or even compensation for the several journeys they may have to courts in Mahajanga (a day's travel), where the case may be thrown out. It is not surprising that they do not want to engage and this provides an area where the project can trial a scheme to enhance engagement.

A very positive component of the project has been communication and cooperation between partners and the institutions that were the focus of the project. Although changes in civil service staff (the Heads of Customs and of the Civil Aviation Authority changed in a matter of months) and with changes in government, there have been delays and difficulties, in general communication with government agencies has been positive. The Ministry of Transport importantly instructed the CAA to work with the project to identify solutions to improved control at the airport for example. Equally there has been good engagement from the Secretary General, the Director of Cabinet and the Director General in the various stages of the collaboration. Much of this is predicated on AVG's strong reputation as a civil society organisation and they are extremely important to continuing project engagement with the government and judiciary.

Customs training was extremely well received in Madagascar and now the Malagasy Customs has expressed their interest to the British Ambassador that they would like to establish an MoU with UK Border Force to provide regular training. This is currently being followed up.

Project implementation has highlighted the importance of engaging communities in socio-economic activities associated with the Park. Although we were constrained in implementing these options while the park zonation was still uncertain, as we promote the completion of this work we will also identify opportunities to engage community members financially in the management of the Park, for example in creating firebreaks or reforesting areas. These activities will be integrated into future rural development projects.

All data, information and ideas in this annual report will be shared with the project partners at the first meeting starting the second year of the project.

11. Actions taken in response to previous reviews (if applicable)

12. Other comments on progress not covered elsewhere

13. Sustainability and legacy

The project is part of a long-standing restoration project that will continue after project completion. The project has enabled the development of the anti-poaching components of this restoration effort that is supplemented with field research, rural development, international and national captive breeding, and policy support.

The project has so far enabled the development of new information concerning poaching in the field, greater capacity within communities for patrolling, customs agents and judiciary. Further work will embed and reinforce this capacity. The partnership has also enabled the arrest of smugglers trying to take Radiated tortoises out of Madagascar and actionable intelligence passed to authorities in Madagascar and SE Asia. We are in the first year of implementation and we have got the different streams of work off to a strong start. We will continue as proposed, with project results being further supported by associated and co-funded activities.

14. IWF Challenge Fund Identity

All press releases related to the project activities and sent to the media and/or distributed at each press conference made it clear that the UK Government was the funder of the project.

Hasina Randriamanampisoa, the project coordinator in Madagascar, also publicised it when he attended the symposium “Beyond enforcement: communities, governance, incentives and sustainable use in combating wildlife crime” in Johannesburg in February 2015. The ploughshare smuggling was taken as a case study in the IWT background book.

Durrell facilitated the a round table discussion at Chatham House, for which a representative from the Foreign and Commonwealth Office was present, with the new Minister of Environment, initially to discuss the rosewood smuggling issue, but there were a number of similarities with ploughshare issues discussed.

The project was also the focus of a fundraising event in London in September 2014 where Durrell presented it to 160 Durrell members and raised £ 7,000 to support technology that will assist efforts to reduce poaching in the park.

We have applied for new funding to support the expansion of the community rangers. If we get the CEPF fund, it will also help us to establish a community forum to look at the regional development based on natural resources with a special mention for the mining project in the area.

Lastly, Durrell is organising for the BBC to film the project in May 2015.

15. Project Expenditure

Table 1 Project expenditure during the reporting period (April 2015-March 2016)

Project spend (indicative) since last annual report	2015/16 Grant (£)	2015/16 Total actual IWT Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				consultancy not conducted.
Overhead Costs				
Travel and subsistence				
Operating Costs				Fewer smaller meetings were held than initially planned. This was because of limited availability of Customs authorities and also because AVG secured a number of meeting costs through co-funding.
Capital items (see below)				
Others (see below)				
TOTAL	83,612	77,511		

16. 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 the IWT Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2014-2015

Project summary	Measurable Indicators	Progress and Achievements April 2014 - March 2015	Actions required/planned for next period
<p>Impact</p> <p>The illegal trade in Malagasy chelonians is halted through improved monitoring and the implementation of appropriate law enforcement at all levels throughout the trade chain both in Madagascar and internationally.</p>		<p>No impact yet</p>	
<p>Outcome</p> <p>Poaching no longer seriously threatens the ploughshare tortoise as communities and MNP more effectively guard and monitor this species alongside improved law enforcement and cooperation along the trade chain.</p>	<p>Indicator 1 : The wild ploughshare tortoise population is no longer seriously threatened by poaching as evidenced by a reduction in the population decline from 10% per annum currently to 5% per annum by Year 3.</p> <p>Indicator 2 : The level of poaching in BBNP is reduced as evidenced by the 40% reduction in the number of regional people involved in poaching by Year 3 compared to the baseline figures collected in Year 1 (current rough estimates indicate 60-70 people involved from local villages)</p> <p>Indicator 3 : There is improved law enforcement in relation to wildlife crime offenders in Madagascar as evidenced by the proportion of successful arrests and convictions relating to ploughshare trafficking offences increases from 10% currently to 25% by the end of Year 3</p> <p>Indicator 4 : The illegal trade chain in ploughshare tortoises is mapped leading to R20 St2 Form Defra – June 2013 20 improved cooperation between those countries and relevant authorities affected as evidenced by presenting at the CITES COP17 in South Africa</p>	<p>Still collecting data.</p> <p>Still collecting data.</p> <p>Improving law enforcement requires training and lobbying. These must be continuous and resumed each time new people come into key positions</p> <p>Risk mapping started in Baly Bay. Internet and other markets studied in Southeast Asia.</p>	

	<p>2016 and the organisation of a second Madagascar-Thailand bilateral meeting to discuss the illegal trade in Malagasy species and develop an MoU between the countries (the first meeting was held following CITES COP16 in Bangkok)</p>		
<p>Output 1. Coverage and efficiency of community-park ranger patrols in the BBNP is improved through implementation and uptake of SMART system.</p>	<p>Indicator 1 : 1,440 hours per month spent patrolling BBNP currently, will increase to 2,000 by end Year 1, 2,500 by end Year 2 and 3,000 hours per month by end of Year 3.</p> <p>Indicator 2 : 5280ha (33%) of ploughshare habitat in BBNP patrolled currently, will increase 7900ha (50%) by end Year 1, 11,060ha (70%) by end Year 2 and to 12,640ha (80%) by end of Year 3.</p> <p>Indicator 3 : 27 people participating in monitoring currently will be trained and participating in SMART by the end of Year 1, increasing to 34 people by the end of Year 2 and to 40 people trained and participating in SMART monitoring by end of Year 3. Indicator 4 : Local village patrols currently from 11 of 28 main villages in Baly Bay, will increase to 16 by end Year 1, 22 by end Year 2 and 28 of 28 villages by end of Year 3.</p> <p>Indicator 5 : 24 SMART patrol reports produced per Year during the course of the project.</p> <p>Indicator 6 : Quarterly SMART reports (4 per Year) to local law enforcement during the course of the project.</p>	<p>Patrolling efforts doubled in core zones.</p> <p>New funding are sought for to expand patrol rangers.</p> <p>37 people participating in monitoring have been trained on SMART, 22 village rangers, 12 park rangers, 1 local representative of MEEF, and 2 Durrell staff members.</p> <p>New funding are sought for to expand patrol rangers.</p> <p>No SMART patrol report yet because the two people who are able to do this are busy with other duties.</p>	

Activity 1.1. Obtain SMART and train core staff in its use		Done.
Activity 1.2. Train additional MNP staff and local community members in SMART		In total, 22 village rangers, 12 park rangers, 2 local representative of MEEF, and 7 Durrell staff members were trained.
Activity 1.3. Monthly monitoring of BBNP using combined community-ranger patrols carried out		Ongoing
Activity 1.4. SMART monitoring reports produced		No
Activity 1.5. SMART monitoring reports for local law enforcement agencies produced		No
Activity 1.6. Ploughshare tortoise population surveys conducted		Yes, at the beginning of the calendar year. Data still being analyzed.
Activity 1.7. Ploughshare tortoise population viability analysis (PVA) conducted		No
Output 2. The role of local community members in poaching and the incentives and barriers to poaching are identified and understood for at least 6 of the communities most closely identified with the problem.	<p>Indicator 1 : 6 logbooks established (1 per village) and monitored twice in Year 1, twice in Year 2 and twice in Year 3 to ascertain local involvement in poaching.</p> <p>Indicator 2 : 12 surveys conducted to ascertain incentives and barriers to poaching (1 per village in Year 1 and the same in Year 3).</p>	<p>8 logbooks established</p> <p>6 surveys conducted</p>
Activity 2.1. Hold Initial community meetings to explain project purpose and identify key informants (head of villages, elders, teachers, grocers) for interviews		Done in 6 villages
Activity 2.2 . Logbooks established in villages		Done
Activity 2.3. Logbook monitoring conducted		1 logbook monitored
Activity 2.4. Community interviews conducted		Done
Activity 2.5. Logbook and community interview reports produced		Done but not enough data for analysis
Output 3. The trade chain of illegal activity for ploughshare tortoises from Madagascar to Southeast Asia is understood and documented leading to greater national and international	Indicator 1 : At least 4 actionable intelligence reports are provided per year to enforcement authorities in Madagascar, Thailand, Indonesia and Malaysia.	TRAFFIC SEA has sent intelligence four times to Durrell and the latter has sent in return nine times. Durrell has given information to airport authorities three times. Four intelligence reports were provided by TRAFFIC to enforcement agencies (with two reports being shared with more than one agency), in Bangladesh, Hong Kong, China and Malaysia.

<p>cooperation to tackle key individuals and areas within the smuggling process.</p>	<p>Indicator 2 : Bi-monthly TRAFFIC reports (6 per year) produced detailing intelligence on the trade chain.</p> <p>Indicator 3 : Peer-report produced, published and distributed detailing the trade chain from Madagascar to Southeast Asia by the end of Year 3.</p>	<p>Ongoing</p> <p>Report outline prepared</p>
<p>Activity 3.1. Indonesia based TRAFFIC Investigative officer hired</p>		<p>Ongoing</p>
<p>Activity 3.2. Intelligence reports for law enforcement agencies on ploughshare trade chain produced in Madagascar, Thailand and Indonesia</p>		<p>Done</p>
<p>Activity 3.3. Internal TRAFFIC reports produced in Madagascar, Thailand and Indonesia</p>		<p>Done</p>
<p>Activity 3.4. Peer-report produced and distributed</p>		<p>No</p>
<p>Activity 3.5. Attend and present the project at CITES COP 17 in South Africa 2016</p>		
<p>Activity 3.6. Second bilateral meeting between Madagascar and Thailand to discuss illegal trade in Malagasy species is held</p>		
<p>Activity 3.7. MoU between Madagascar and Thailand on addressing the illegal trade in Malagasy species is drawn up and signed</p>		
<p>Output 4. Improved enforcement of laws along the trade chain through filling key skills gaps and raising awareness of poaching issue within priority institutions and increased support of local Dina governing ploughshare poaching.</p>	<p>Indicator 1 : 3 workshops conducted (1 per year) for Malagasy police, prosecutors and magistrates on the arresting, prosecuting and sentencing of wildlife crime offenders with sentencing guidelines for ploughshare trafficking offences agreed between magistrates and produced by end of Year 2.</p> <p>Indicator 2 : At least 40 Customs Officials receive best-practice training in CITES enforcement at Antananarivo and Mahajanga airports in Madagascar</p>	<p>1 workshop done for 25 policemen, 25 gendarmes, 3 MEEF agents, and 2 Customs officers</p> <p>12 Customs officers trained by UK Border Force</p>

	<p>and in Indonesia conducted through 2 workshops per Year in each country (12 workshops in total by end of Year 3).</p> <p>Indicator 3 : Knowledge of rules and laws and attitude towards responsibility for application of them is increased as demonstrated by instances of reporting and warning of law breakers increased by 15% by Year 2 and 30% by Year 3 compared to Year 1 as measured through KAP surveys.</p> <p>Indicator 4 : Social marketing campaign communication activities reach 300 people within the local communities by the end of Year 1, 600 by the end of Year 2 and 1000 by the end of Year 3.</p>	<p>2 workshops done to look for flaws and solutions about control at the airport; 1 CITES training by UK Border Force for the airport institutions</p> <p>250 tee-shirts produced with the project messages</p>
Activity 4.1. Local / regional judiciary workshops in Madagascar conducted		1 regional workshop conducted
Activity 4.2. Local / regional judiciary workshop reports produced		1 report produced
Activity 4.3. Procedures for investigating wildlife crime in Madagascar produced		No
Activity 4.4. Magistrates workshops for sentencing guidelines in Madagascar conducted		No
Activity 4.5. Magistrates workshop reports produced		No
Activity 4.6. Sentencing guidelines for wildlife crime offenders in Madagascar produced		No
Activity 4.7. Customs officials CITES trade enforcement workshops conducted in Madagascar		Yes
Activity 4.8. Customs officials CITES trade enforcement workshops conducted in Indonesia		No
Activity 4.9. Customs officials workshop reports produced		Ongoing

Activity 4.10. Guidelines for Customs officials in Madagascar and Indonesia produced	No
Activity 4.11. Stakeholder workshops and consultation to advocate for and support Dina (local law) legalisation	Ongoing
Activity 4.12. Social marketing research, campaign design and testing: focus groups	No
Activity 4.13. Targeted social marketing campaign	No
Activity 4.14. Knowledge, Attitude and Practice surveys conducted and analysed	Partly included in MaVoa study
Activity 4.15. Social marketing campaign evaluated, identifying best practice and final report produced	

Annex 2 Logframe

PROJECT MONITORING AND EVALUATION

MEASURING IMPACT

25. LOGICAL FRAMEWORK

Darwin projects will be required to report against their progress towards their expected outputs and outcomes if funded. This section sets out the expected outputs and outcomes of your project, how you expect to measure progress against these and how we can verify this. Further detail is provided in Annex C of the guidance notes which you are encouraged to refer to. The information provided here will be transposed into a logframe should your project be successful in gaining funding from the Darwin Initiative. The use of the logframe is sometimes described in terms of the Logical Framework Approach, which is about applying clear, logical thought when seeking to tackle the complex and ever-changing challenges of poverty and need. In other words, it is about sensible planning.

Impact

The Impact is not intended to be achieved solely by the project. This is a higher-level situation that the project will contribute towards achieving. All Darwin projects are expected to contribute to poverty alleviation and sustainable use of biodiversity and its products.

(Max 30 words)

The illegal trade in Malagasy chelonians is halted through improved monitoring and the implementation of appropriate law enforcement at all levels throughout the trade chain both in Madagascar and internationally.

Outcome

There can only be one Outcome for the project. The Outcome should identify what will change, and who will benefit. The Outcome should refer to how the project will contribute to reducing poverty and contribute to the sustainable use/conservation of biodiversity and its products. This should be a summary statement derived from the answer given to question 14.

(Max 30 words)

Poaching no longer seriously threatens the ploughshare tortoise as communities and MNP more effectively guard and monitor this species alongside improved law enforcement and cooperation along the trade chain.

Measuring outcomes - indicators

Provide detail of what you will measure to assess your progress towards achieving this outcome. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure the outcome – if you have more than 3 indicators please just insert a row(s).

Indicator 1	The wild ploughshare tortoise population is no longer seriously threatened by poaching as evidenced by a reduction in the population decline from 10% per annum currently to 5% per annum by Year 3 and down to 0% by Year 5
Indicator 2	The level of poaching in BBNP is reduced as evidenced by the 40% reduction in the number of regional people involved in poaching by Year 3 compared to the baseline figures collected in Year 1 (current rough estimates indicate 60-70 people involved from local villages)
Indicator 3	There is improved law enforcement in relation to wildlife crime offenders in Madagascar as evidenced by the proportion of successful arrests and convictions relating to ploughshare trafficking offences increases from 10% currently to 25% by the end of Year 3
Indicator 4	The illegal trade chain in ploughshare tortoises is mapped leading to

	improved cooperation between those countries and relevant authorities affected as evidenced by presenting at the CITES COP17 in South Africa 2016 and the organisation of a second Madagascar-Thailand bilateral meeting to discuss the illegal trade in Malagasy species and develop an MoU between the countries (the first meeting was held following CITES COP16 in Bangkok)
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Verifying outcomes

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	Ploughshare population surveys; PVA analysis results; Project reports
Indicator 2	Knowledge, Attitude and Practice (KAP) survey results and reports; social marketing reports; photographic reports; testimonials; media releases
Indicator 3	Training workshop reports; Procedures for Customs officials produced; Procedures for investigating wildlife crime produced; Guidelines for sentencing offenders produced; conviction figures and reports from local and regional judiciary
Indicator 4	CITES COP 17 presentation and report; Madagascar-Thailand bilateral MoU

Outcome risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the *outcome and impact* of the project. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	No significant reduction in current level of political stability
Assumption 2	Safety of field staff and local communities is maintained – no serious threats or incidents to staff and villagers
Assumption 3	MNP implement SMART throughout the National Park network
Assumption 4	Regional mining developments respect required national and international environmental legislation and social norms
Assumption 5	Engagement from local and regional law enforcement and judiciary to tackle this issue
Assumption 6	Engagement from local communities towards the goals of the National Park
Assumption 7	Regional authorities validate Dina, including rules relating to ploughshare poaching

Outputs

Outputs are the specific, direct deliverables of the project. These will provide the conditions necessary to achieve the Outcome. The logic of the chain from Output to Outcome therefore needs to be clear. If you have more than 3 outputs insert a row(s). It is advised to have less than 6 outputs since this level of detail can be provided at the activity level.

Output 1	Coverage and efficiency of community-park ranger patrols in the BBNP is improved through implementation and uptake of SMART system.
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Output 2	The role of local community members in poaching and the incentives and barriers to poaching are identified and understood for at least 6 of the communities most closely identified with the problem.
Output 3	The trade chain of illegal activity for ploughshare tortoises from Madagascar to Southeast Asia is understood and documented leading to greater national and international cooperation to tackle key individuals and areas within the smuggling process.
Output 4	Improved enforcement of laws along the trade chain through filling key skills gaps and raising awareness of poaching issue within priority institutions and increased support of local Dina governing ploughshare poaching.

Measuring outputs

Provide detail of what you will measure to assess your progress towards achieving these outputs. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure each output – if you have more than 3 indicators please just insert a row(s).

Output 1	
Indicator 1	1,440 hours per month spent patrolling BBNP currently, will increase to 2,000 by end Year 1, 2,500 by end Year 2 and 3,000 hours per month by end of Year 3.
Indicator 2	5280ha (33%) of ploughshare habitat in BBNP patrolled currently, will increase 7900ha (50%) by end Year 1, 11,060ha (70%) by end Year 2 and to 12,640ha (80%) by end of Year 3.
Indicator 3	27 people participating in monitoring currently will be trained and participating in SMART by the end of Year 1, increasing to 34 people by the end of Year 2 and to 40 people trained and participating in SMART monitoring by end of Year 3.
Indicator 4	Local village patrols currently from 11 of 28 main villages in Baly Bay, will increase to 16 by end Year 1, 22 by end Year 2 and 28 of 28 villages by end of Year 3.
Indicator 5	24 SMART patrol reports produced per Year during the course of the project.
Indicator 6	Quarterly SMART reports (4 per Year) to local law enforcement during the course of the project.

Output 2	
Indicator 1	6 logbooks established (1 per village) and monitored twice in Year 1, twice in Year 2 and twice in Year 3 to ascertain local involvement in poaching.
Indicator 2	12 surveys conducted to ascertain incentives and barriers to poaching (1 per village in Year 1 and the same in Year 3).

Output 3	
Indicator 1	At least 4 actionable intelligence reports are provided per year to enforcement authorities in Madagascar, Thailand, Indonesia and Malaysia.
Indicator 2	Bi-monthly TRAFFIC reports (6 per year) produced detailing intelligence on the trade chain.

Indicator 3	Peer-report produced, published and distributed detailing the trade chain from Madagascar to Southeast Asia by the end of Year 3.
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Output 4	
Indicator 1	3 workshops conducted (1 per year) for Malagasy police, prosecutors and magistrates on the arresting, prosecuting and sentencing of wildlife crime offenders with sentencing guidelines for ploughshare trafficking offences agreed between magistrates and produced by end of Year 2
Indicator 2	At least 40 Customs Officials receive best-practice training in CITES enforcement at Antananarivo and Mahajanga airports in Madagascar and in Indonesia conducted through 2 workshops per Year in each country (12 workshops in total by end of Year 3).
Indicator 3	Knowledge of rules and laws and attitude towards responsibility for application of them is increased as demonstrated by instances of reporting and warning of law breakers increased by 15% by Year 2 and 30% by Year 3 compared to Year 1 as measured through KAP surveys.
Indicator 4	Social marketing campaign communication activities reach 300 people within the local communities by the end of Year 1, 600 by the end of Year 2 and 1000 by the end of Year 3.

Verifying outputs

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Output 1	Training records; SMART reports; Project reports.
Output 2	Survey results and reports.
Output 3	Intelligence reports for authorities produced; Internal TRAFFIC reports; Trade chain report and peer-review paper produced.
Output 4	Training workshop reports; Procedures for investigating wildlife crime produced; Guidelines for sentencing offenders produced; conviction figures and reports; Procedures for Customs officials produced; Knowledge, Attitude and Practice (KAP) survey results and reports; social marketing reports; photographic reports; testimonials; media releases.

Output risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the achievement of your outputs. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	No significant reduction in current level of political stability
Assumption 2	Safety of field staff and local communities is maintained – no serious threats or incidents to staff or villagers
Assumption 3	MNP implement SMART throughout all the National Park network
Assumption 4	Regional mining developments respect required national and international environmental legislation and social norms
Assumption 5	Engagement from local and regional law enforcement and judiciary to tackle this issue

Assumption 6	Engagement from local communities towards the goals of the National Park
Assumption 7	Regional authorities validate Dina, including rules relating to ploughshare poaching

Activities

Define the tasks to be undertaken by the research team to produce the outputs. Activities should be designed in a way that their completion should be sufficient and indicators should not be necessary. Risks and assumptions should also be taken into account during project design.

Output 1	
Activity 1.1	Obtain SMART and train core staff in its use
Activity 1.2	Train additional MNP staff and local community members in SMART
Activity 1.3	Monthly monitoring of BBNP using combined community-ranger patrols carried out
Activity 1.4	SMART monitoring reports produced
Activity 1.5	SMART monitoring reports for local law enforcement agencies produced
Activity 1.6	Ploughshare tortoise population surveys conducted
Activity 1.7	Ploughshare tortoise population viability analysis (PVA) conducted

Output 2	
Activity 2.1	Hold Initial community meetings to explain project purpose and identify key informants (head of villages, elders, teachers, grocers) for interviews
Activity 2.2	Logbooks established in villages
Activity 2.3	Logbook monitoring conducted
Activity 2.4	Community interviews conducted
Activity 2.5	Logbook and community interview reports produced

Output 3	
Activity 3.1	Indonesia based TRAFFIC Investigative officer hired
Activity 3.2	Intelligence reports for law enforcement agencies on ploughshare trade chain produced in Madagascar, Thailand and Indonesia
Activity 3.3	Internal TRAFFIC reports produced in Madagascar, Thailand and Indonesia
Activity 3.4	Peer-report produced and distributed
Activity 3.5	Attend and present the project at CITES COP 17 in South Africa 2016
Activity 3.6	Second bilateral meeting between Madagascar and Thailand to discuss illegal trade in Malagasy species is held
Activity 3.7	MoU between Madagascar and Thailand on addressing the illegal trade in Malagasy species is drawn up and signed

Output 4	

Activity 4.1	Local / regional judiciary workshops in Madagascar conducted
Activity 4.2	Local / regional judiciary workshop reports produced
Activity 4.3	Procedures for investigating wildlife crime in Madagascar produced
Activity 4.4	Magistrates workshops for sentencing guidelines in Madagascar conducted
Activity 4.5	Magistrates workshop reports produced
Activity 4.6	Sentencing guidelines for wildlife crime offenders in Madagascar produced
Activity 4.7	Customs officials CITES trade enforcement workshops conducted in Madagascar
Activity 4.8	Customs officials CITES trade enforcement workshops conducted in Indonesia
Activity 4.9	Customs officials workshop reports produced
Activity 4.10	Guidelines for Customs officials in Madagascar and Indonesia produced
Activity 4.11	Stakeholder workshops and consultation to advocate for and support Dina (local law) legalisation
Activity 4.12	Social marketing research, campaign design and testing: focus groups
Activity 4.13	Targeted social marketing campaign
Activity 4.14	Knowledge, Attitude and Practice surveys conducted and analysed
Activity 4.15	Social marketing campaign evaluated, identifying best practice and final report produced