

Darwin Initiative Final Report

To be completed with reference to the Reporting Guidance Notes for Project Leaders (<http://darwin.defra.gov.uk/resources/>) it is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Darwin project information

Project Reference	19-001
Project Title	Conservation of the newly-discovered Burmese (Myanmar) snub-nosed monkey
Host Country	Myanmar
UK contract holder institution	Fauna & Flora International (FFI)
Partner institutions	Biodiversity and Nature Conservation Association (BANCA) Oxford Brookes University Primate Conservation MSc programme
Darwin Grant Value	£289,458 GBP
Start/end dates of project	1 April 2012 to 31 March 2015
Reporting period	1 April 2012 – 31 March 2015, Final Report
Project Leader name	Dr Stephen Browne, Director of Operations, Asia-Pacific Programme, FFI
Project website	None
Report authors and date	Christian Matauschek (FFI), Mark E Grindley (FFI), Ngwe Lwin (FFI) Saw Soe Aung (BANCA) and Stephen Browne (FFI). Completed 30 June 2015

1 Project Rationale

A joint survey team lead by FFI discovered a new species of snub-nosed monkey in northern Myanmar in 2010. Its distribution range was believed to be less than 400 km², with an estimated population of 260-330 individuals. The species was initially assessed to face severe threats that would warrant the IUCN status of 'Critically Endangered'. The discovery was published in the American Journal of Primatology in which it was named the Myanmar snub-nosed monkey *Rhinopithecus strykeri* (Geissmann *et al.*, 2010).

The colobine monkey's range is located in Northeast Myanmar, restricted to the high altitude zone of a mountain range between the N'mai River and the Chinese border. This mountain range supports diverse forests with an altitudinal range of 300 to 5000 m, forming the watershed for the Irrawaddy basin and supporting one of the highest levels of biodiversity in the Eastern Himalayas. This part of the Northern Forest Corridor is the only area where the Yunnan and the Eastern Himalayan Endemic Bird Areas overlap, and has been highlighted as a gap in Myanmar's protected area network. It is thus considered a conservation priority in the National Biodiversity Action Plan (MoECAF 2011).

The knowledge of the monkey was limited. There was limited in-country capacity to gather and analyse scientific information for the development of a species conservation strategy, and until the project started we could only infer ecological requirements from its closest relative, the Yunnan snub-nosed monkey *Rhinopithecus bieti*.

Threats to the monkey appeared to be hunting for local consumption and trade, and forest degradation caused primarily by logging conducted by contractors from China. Root causes appeared to be poverty amongst rural communities, poor border controls and a lack of management authority due to on-going political and occasional armed conflict in this remote area, itself driven by demand for resources

including timber, jade, gold and other minerals. These issues are all facilitated by improved access caused by the development of Chinese-funded hydro-electric schemes and logging roads.

The project aims are to address gaps in knowledge through intensive surveys into habitat, behaviour and distribution of Myanmar snub-nosed monkey that will provide an overview of the conservation status of the species and inform the creation of a species-focused protected area. This was intended as a capacity building exercise involving a mixture of local and national civil society, state government and the national protected area authority, the Nature and Wildlife Conservation Division of the Ministry of Environmental Conservation and Forestry. This approach will build a local conservation constituency for the snub-nosed monkey and its bio-diverse habitat, involving indigenous communities and township authorities, raising awareness for biodiversity conservation, endangered species and environmental services, and using the monkey as a flagship species. Ultimately, protected area designation will reduce illegal Chinese logging and also contribute to reducing emissions from forest degradation, while a strengthened constituency will support the park and allow co-management that takes account of the needs of local communities as well as biodiversity. The project will also seek strengthened national and international protection of the species, e.g., by designating it CITES Appendix 1, and by engaging with Chinese authorities on heightened border controls.

2 Project Achievements

2.1 Outcome

The project purpose is the conservation of the Myanmar snub-nosed monkey and its bio-diverse habitat. The project faced a lot of difficulties, but has nonetheless been achieved against all progress level indicators. Main achievements towards the project purpose were:

- Clearly improved knowledge about the Myanmar snub-nosed monkey and its habitat
- Agreements of all stake holders for establishment of Imawbum National Park
- Clearly improved conservation of the snub-nosed monkey with a non-hunting zone established in a participatory process with local communities
- Local communities enabled to benefit from a small grant programme for alternative livelihoods

A contribution has been made to the conservation of the species through expanded knowledge on the distribution of the species. The process of defining and gazetting a protected area for the species is well underway, involving both the Ministry of Environmental Conservation and Forestry (MoECaF) and local stakeholders, including Kachin State-level parliamentarians and local villages. In addition, awareness has been increased at the site-level through consultations and dissemination to over 600 residents of all 54 villages, which would have had a clear effect at reducing hunting pressure on the monkeys. All of the newly established community conservation groups agreed on the creation of a non-hunting core zone and already in 2014 no hunting of snub-nosed monkey was recorded in the region.

However, the need to recognise traditional resource rights is now part of the discourse on protection of the Myanmar snub-nosed monkey and its habitat, and local communities have been clearly identified and engaged as key stakeholders. Benefits from a small grant programme for alternative livelihoods can be expected in the coming years.

A Kachin State workshop on protection of the species in early 2013 being jointly hosted by MoECAAF and FFI, with support from the Kachin State Chief Minister, among others. While there has been no immediate armed conflict at the project site, access has been hampered. We remain cautiously optimistic that full field access will be again possible, but as this cannot be guaranteed we have a contingency plan to focus some activities more on trans-border collaboration and field conservation activities on the Chinese side of the border in terms of wildlife trade assessment and trans-boundary conservation and law enforcement.

2.2 Impact: achievement of positive impact on biodiversity and poverty alleviation

The intensive survey activities showed that the Myanmar snub-nosed monkey lives in a very diverse and species-rich habitat. The establishment of a protected area as National Park will protect this habitat and other species with importance to conservation, such as red panda, takin, tufted deer, Gongshan muntjac, Asian golden cat, Asian black bear, Assamese macaque and Shortridge leaf monkey.

There is no possibility of sustainable hunting of the species, so our target under this final goal component is a total reduction in hunting with guns and traps, and removal of existing traps in the target area. We could reasonably expect a reduction in the threat from logging and land grabbing as a result of projected

area designation or potentially from the political dialogue that is part of the notification, consultation and gazettment process.

The proposed Imawbum National Park is one of the poorest parts of the country, with a largely cashless economy and poor access to government goods, services and markets. The project has engaged in activities that have a poverty alleviation component primarily under Output 3, with the goal of increasing support for conservation of the species (as defined through signed agreements) and reducing incentives for hunting. As noted above, grants were provided for raising goats and mython (the domesticated form of the gaur, a wild bovid), and walnut and cardamom plantation, both of which are high-value cash crops which can be easily transported from remote areas.

The potential number of beneficiaries now extends to over 50% of the population around the proposed park. Thus while direct impacts on poverty were not expected during the project, we do expect to see reduced hunting. Already in 2014 no snub-nosed monkey were killed in the area. This will be monitored in the future through community patrols, as soon as the security problem allows frequent patrolling. Due to the fact that these interventions are already proved in the project area, we are also fairly confident that poverty impacts will be felt within a realistic time-frame of three to five years for mython and cardamom, and seven years onwards for walnut.

2.3 Outputs

In the project proposal we identified three outputs.

Output 1: Improved knowledge of snub-nosed monkey abundance, distribution and ecological needs across its range.

This output comprised eight activities aimed at improving the capacity of local partner the Biodiversity and Nature Conservation Association (BANCA) to conduct and publish scientific research on snub-nosed monkey abundance, distribution and ecological needs.

Although we have not had full access to the project site as planned, we have nonetheless been able to conduct three research expeditions to the site during the first project year. These expeditions have focused on identifying the southern extent of the range of the Myanmar snub-nosed monkey, conducting village interviews, awareness raising and setting camera traps. The results are documented in technical reports, which are available on request. We have also conducted successful primate surveys on the Yunnan site of the population range and discovered additional Myanmar snub-nosed monkey groups in collaboration with Dali University. Although the security situation improved significantly and the government army and the KIA were returning to the negotiation table, we developed a contingency plan to shift conservation activities to the Chinese side of this trans-border range.

We were able to conduct several camera trap surveys in each of the project years. The camera traps were set in five locations during the reporting period to confirm interview reports of an extension of the known eastern extent of the Myanmar snub-nosed monkey group in "Range 3" (see supplemental information for map). The most significant result was a confirmation of the species in the new area, with a group of about 80 individuals observed and filmed by our local Village Facilitator during camera trap collection in 2013. This was the first footage ever made of this species in the wild. Combined with the interview and camera trap results, there is now strong evidence for a new sub-population in this area, tentatively named "Range 4". This population appears to be contiguous with the population originally discovered on the China side of the border in October 2011.

Unfortunately the collaboration for research and wildlife trade monitoring with Oxford Brookes University had to be postponed due to the ongoing insecurity in the project area resulting in travel restrictions for foreigners during the whole project period. Thus, any kind of habituation of wild monkey groups was not possible. Nevertheless, we could provide some first insights in distribution, movements and ecology of the species, which provides a basis for further conservation planning.

Analyses of camera trap data and interviews showed the altitudinal distribution of the snub-nosed monkey is from 1,880 to 3,187 m asl, with most of the records originating from between 2,400-2,800 m asl. From the interview data it is clear that at least some groups display altitudinal movements in relations to the seasons, moving down to lower elevations in winter, thus bringing them closer to the areas inhabited by humans, and returning to higher elevations when the weather improves and snow-cover disappears.

Results of each survey are available in internal trip reports and a revised status report for the Myanmar snub-nosed monkey, which was finished in July 2015.

In-service capacity building for local counterparts has been ongoing since the start of the project, through a mixture of formal training and intensive on-the job training in terms of participation in field research

design and implementation. The success of this approach was indicated by the recording in late September 2013 of the first video footage of a group of Myanmar snub-nosed monkeys in the wild, made by an unsupported local Village Facilitator while he was retrieving camera traps in the new "Range 4". We provided qualitative indication of improvement against this indicator. All field work has to date been conducted by a team of BANCA members and local counterparts. These individuals are now the world's experts on the species and able to plan, conduct and report surveys without support.

Two trainings were conducted on primate survey methods and non-invasive sample collection, with both theoretical and practical modules. These were delivered from 25 to 31 May 2013 in Mount Popa (Mandalay Region) and from 1 to 10 June at Tanintharyi Nature Reserve (Tanintharyi Region), since access to the project areas was not permitted at the time of the trainings. Thirteen participants from BANCA and the Forest Department joined each, with BANCA participants funded under this project. An additional 22 Forest Department staff joined the theoretical component in Tanintharyi Nature Reserve. The trainings were provided by the German Primate Centre, DPZ. In all, 29 genetic samples were collected from ten species of mammal, seven of them primates. Training reports have been produced for submission to the Forest Department.

Staff from the project attended the International Primatological Society conference (with around 900 delegates) in Hanoi in August 2014 and gave a presentation on the work funded by this project to share the first insights in the Myanmar snub-nosed monkey's distribution and ecology with the scientific community.

Camera traps were set in new locations in February and March 2014 to help confirm the feedback from interview reports and were collected in August. A summary of the results is available in the internal camera trapping report. Most significantly, this survey was able to confirm the presence of the species in the part of Range 2 (see Annex, Fig 1). One individual snub-nosed monkey was recorded, this constitutes only the third record of the species in Myanmar and in itself gives further insights into the species behaviour, showing how unlike others in the snub-nosed monkey group, this species travels on the ground.

We comprised the available information on the species into a revised conservation status report for the Myanmar snub-nosed monkey, which will be published in 2015.

Output 2: Snub-nosed monkey conservation strategy designed and implemented

This output comprises eight activities aimed at formalising conservation and protection action for the Myanmar snub-nosed monkey, including designation of new protected area and development and implementation of multi-stakeholder collaboration for the species as defined within an Action Plan or similar strategy. We were able to deliver against all indicators for this output.

A significant step towards a permanent conservation of the Myanmar snub-nosed monkey is the establishment of the Imawbum National Park. A lot of survey work has been done to deliver the technical and biological justification for the National Park. We conducted various surveys including flora, invertebrates, fish, amphibians, reptiles, birds and mammals. 48 mammal and 178 bird species were recorded. Moreover the camera traps revealed important information on other species occurring in the project area, including red panda, takin, tufted deer, Gongshan muntjac, Asian golden cat, Asian black bear, Assamese macaque and Shortridge leaf monkey. Survey results are available in various internal reports and in a comprehensive Biodiversity Report on the Imawbum area which is presented in July 2015.

- Launch of surveys for the creation of the Imawbum National Park, with representatives from government, civil society and the international conservation community
- Expanded conservation constituency, with awareness raising in 25 villages in the proposed national park buffer zone leading to the establishment of 23 conservation groups, all of which signed conservation stewardship agreements and received small grants for livelihood activities (co-funded by other donors).
- Multi-stakeholder workshop agreed on the goals, procedure for and potential location of a protected area to cover the range of the Myanmar snub-nosed monkey, called the Mount Imawbum National Park.
- Agreement from all stakeholders for the Imawbum National Park and beginning of the designation process for the Park.

Since the discovery of the Myanmar snub-nosed monkey in China, we put emphasis on trans-border conservation collaboration, especially since the ICIMOD meeting in Yangon, where we presented the proposed National Park, both China and Myanmar selected the mountain range between the Irrawaddy

(N'Mai Hka) River and the Salween River as a trans-border conservation priority site in the eastern Himalayas. The government of Myanmar selected the proposed Imawbum National Park as a priority site for trans-border conservation.

As a follow up to a stakeholder consultation in February of Year 2, the project held a meeting with the Forest Department of the Ministry of Environmental Conservation and Forestry on the preliminary survey for the establishment of the park. Consequently a letter was issued to Kachin State and Saw Law Township forest offices to conduct a field assessment of land use and ownership in preparation for protected area notification. An Activity Plan for the trip was subsequently drafted, for a three-month survey to include a mixed team of scientists, forestry staff and local government representatives. The project gained an expanded legal mandate for field season research, as the security situation allows.

A GIS-based land classification was conducted for the proposed protected area pro-bono by Berlin-based Remote Sensing Solutions, a GIS consultant. Remote sensing data was 'trained' (ie, ground-truthed) using data collected during project surveys. The final classification and map production was conducted as a capacity building exercise for the Project Manager. The result is a landcover map that was used as the basis for field verification and boundary definition. The training was co-funded by the European Union under a separate FFI project.

A preliminary survey for the gazettelement of Imawbum National Park was undertaken by the Forest Department and FFI/BANCA team in February and March 2013. This involved village interviews and a site inspection – the first undertaken by the legal protected area management authority in over twenty years due to the area being under the control of an ethnic 'ceasefire' group since the early 1990s. The Forest Department produced an internal report. As with all field surveys, the designated team leader from FFI submitted an Activity Report.

FFI and the Forest Department staff continued with the biological field surveys in February and March 2014.

In late September, project staff visited the Imawbum area to assess road conditions and to inform the village leaders about the forthcoming consultations in October or November.

As part of the National Park nomination process consultation meeting with local communities were conducted in January 2015 with FFI, the state Forest Department and the Nature and Wildlife Conservation Division from Myitkyina to hold discussions on the national park boundary. This field survey was conducted for 25 days (from 6 Jan 2015 to 30 Jan 2015) in collaboration with the Forest Department in adjoining villages of proposed Imawbum National Park located in Chipwi and Tsawlaw Townships. During the field surveys, stakeholders consultation meetings were held in each study village in order to get the perceptions and comments of local communities regarding the establishment of Imawbum National Park. During the consultation meetings, environmental conservation talks were conducted to increase the awareness for conservation needs and the proposed park. Moreover, participatory land-use mapping exercises were conducted in order to record the current land use maps of the villages and resulted in revised boundaries for the proposed park. All these activities took place in all 25 village tracts around the proposed national park (12 in Chipwi Township, 13 in Tsawlaw Township). A total of 823 representatives, representing about 52.8% of total households, attended the meetings. All village tracts agreed to the establishment of Imawbum National Park outside the village use zones. About 603.4 sq.mile (386,225 acres) could be identified for establishing Imawbum National Park, as a result of the participatory village mapping in each village group during the stakeholders meetings.

Additionally, biodiversity survey went forward in early 2015, resulting in botanical, herpetological, and entomological reports. A fish assessment was conducted in March 2015 and a fish identification guide for the region was prepared.

The Myanmar snub-nosed monkey is now listed as Critically Endangered on the basis of criteria A4cd - an estimated and projected population reduction of more than 80% over the three generation period (18 years), based on (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat and/or (d) actual or potential levels of exploitation. With all other species of the genus *Rhinopithecus* it is also listed on CITES Appendix I. We provided conservation and management recommendations to the Myanmar government, which will include the species in the new version of the Myanmar Biodiversity Strategy and Action Plan.

Output 3: Community-based constituency for snub-nosed monkey conservation programme developed

This output comprised 11 activities aimed at raising awareness and motivation, and providing the material and technical support, for local communities to undertake protection activities aimed at the

target species. In total people of all 54 villages in the area received awareness activities. Monkey hunting was ceased and an agreement of all villages for a non-hunting core zone could be achieved.

Activities under this output have been the most delayed in the first year as staff have not been able to supervise community conservation groups, patrols or small grants due to security risks. It was therefore decided to postpone these activities until year 2. At this time, a peace process was underway, and we were carefully monitoring the security situation. The constraints imposed by the ongoing security problems slowed down the preparations of the National Park proposal. However, in most cases we have found ways around the constraints, e.g., by conducting training in other areas not subject to the same travel permit restrictions for foreigners. Nevertheless, output indicators remained relevant and largely measurable. These are described in detail in Annex 1.

In collaboration with the Kachin Forest Department, the project made posters and verbal presentations on the conservation of the Myanmar snub-nosed monkey at an open day held on the International Environment Day on 5 June 2013. The event was held in Waimaw Township, in the lowland area that lies on the main route from the state capital, Myitkyina, to the project site. Approximately 120 people from local communities and organisations attended.

The project finalised an information leaflet and posters on the biodiversity values of Imawbum National Park, particularly the Myanmar snub-nosed monkey. These were printed in December 2013 and have been distributed as necessary ever since, including to national level stakeholders, and the media, plus during awareness activities in the project area and at other key locations during field research.

Small grants were provided to local communities following a well-tested process. These are intended to incentivise conservation agreements signed with local communities, and if possible to focus on livelihood development activities that also reduce threats, in this case hunting pressure. The process starts with awareness raising and livelihood opportunities assessments, conducted in villages in the proposed national park buffer zone in January 2014. Village conservation groups were then formed, and conservation stewardship agreements signed before grant proposals submitted. Until the end of the project, agreements have been signed with 23 community conservation groups from 13 village tracts (45 villages) and 33 small grants were provided to 13 village tracts in this reporting period (Table 2). Projects that received funding this round included mythun raising, walnut and cardamom plantation, and construction of a structure to be used as a pre-school. All these activities were led by the local conservation awareness officer, with some technical support provided by external consultants.

Together with Kachin State Forest Department, the project organized an open day as part of the Biological Diversity Day on 22 May 2014. The event was held in Waimaw Township in the lowland area that lies on the main route from the state capital, Myitkyina, to the project site. Approximately 126 people from local communities and organizations attended. At the event, the project used posters and presentations to raise awareness on the biodiversity value and threats of the Imawbum area and Myanmar snub-nosed monkey conservation.

Working together with the Pidaung Wildlife Sanctuary, the project organized an awareness event at a village located near the project site. This village is now home to most of the villagers originally from the project site. Posters and presentations called attention to the biodiversity value and threats of Imawbum area and Myanmar Snub-nosed monkey.

From late September to early October, project staff visited the villages to which we provided grants in early 2014 to monitor activities. The small grant programme could be completed in this period with a total of 33 small grants provided to 23 village conservation groups.

Dissemination has been undertaken in several ways:

- Awareness raising of the conservation status of the snub-nosed monkey and its needs, plus of the interventions of the project partners, to villages in the north, east and west of the site. This took place during village interview and focus group discussions and during a Christmas awareness campaign in 2012. In all we estimate over 600 people benefitted from the campaigns.
- Sharing of data and experiences from previous and current work on the species and in the project area through the Kachin State level workshop on the conservation needs of the Myanmar snub-nosed monkey targeted at local stakeholders, particularly state parliamentarians and local representatives.
- Presentation of the Myanmar snub-nosed monkey, the data and experiences as well as the activities for its conservation to the scientific community was done at the congress of the International Primatological Society in Vietnam in 2014.
- Communication of project findings to the Ministry of Environmental Conservation and Forestry during regular progress report meetings. MoECAFF support will be essential to the long term

protection of the species, and our efforts to encourage their engagement lead to them co-hosting the state level workshop on the species and establishment of a new park for its protection.

- The first video footage of Myanmar snub-nosed monkey, taken by a FFI Village Facilitator was distributed in media throughout the world and created a big awareness not only for the species but also for the proposed Imawbum National Park. We launched various press releases in local and also international media. The South China Morning Post featured the proposed Imawbum National Park and its unique wildlife and landscape in a big article and addressed the problems caused by the illegal wildlife trade. The project was broadcasted in Japanese TV in 2013. News and articles on the project were also regularly distributed using FFI's website, newsletters and magazine.
- Awareness materials: Conservation of Myanmar snub-nosed monkey three different leaflets in local Lisu, Burmese and English languages (in total 3000); 300 Myanmar snub-nosed monkey T-shirts produced in January and distributed in the project site in Feb and March 2014.

3 Project Partnerships

Our **main host country NGO partner** is the Myanmar Biodiversity and Nature Conservation Association (BANCA). Since the start of the project the organisation has moved out of the office space we originally shared and has also undergone two leadership changes. However, all of the collaborating national scientists are BANCA members, and in late 2013 we signed a new Memorandum of Understanding with BANCA to continue collaboration on joint activities in Kachin State. BANCA has been represented in all national discussions on the protection of the species and due to a strong bird conservation focus remains particularly committed to the protection of the site, which they originally surveyed with BirdLife International between 2005 and 2007, following which they made the first scientifically-based proposal for a protected area at the site. This is an ambition they remain committed to, and we were pleased to be able to facilitate the participation of Myanmar ornithologists and primatologists in the project.

Our **main UK partner** is Oxford Brookes University Primate Conservation MSc programme, which designed the conservation science capacity building component of this project. Due to ongoing security problems the government has made it clear that permits cannot be issued to foreigners until a peace settlement has been reached with the Kachin Independence Army (KIA), which didn't happen until the end of Year 3 and inhibited field work with UK scientists.

Our **main host country government partner** is the Forest Department of the Ministry of Environmental Conservation and Forestry, which has the legal mandate for species protection and protected area establishment and management. We have had a Memorandum of Understanding with the FD since 2012 and have a specific implementation agreement on this project. The FD has lead on the process for park designation, and requested FFI to participate in a joint survey for boundary delineation. With FFI support, FD has also added the Myanmar snub-nosed monkey to the list of nationally protected species and has expressed strong interest in cooperating with Chinese authorities on this trans-boundary species.

All partners consider the involvement at the site as a long-term commitment. Our continued engagement will help ensure the outcomes are sustained beyond the end of the project.

4 Contribution to Darwin Initiative Programme Outputs

4.1 Project support to the Conventions (CBD, CMS and/or CITES)

FFI's main partner in Myanmar is the Forest Department of the Ministry of Environmental Conservation and Forestry, which is the CBD focal point for Myanmar. The FD recently adopted the Aichi target and is currently in the process of incorporating them into a revised National Biodiversity Strategy and Action Plan, although at this point the original NBSAP (MoECAF 2011) is the main articulation of national ambitions and targets for biodiversity.

The Myanmar snub-nosed monkey was not described at the time of preparation of the current NBSAP. However, all Critically Endangered mammals are considered highest priority in that document, as are Key Biodiversity Areas that are known to support CR species. The Northern Forest Complex is considered a "priority site for conservation investment" (MoECAF 2013), and Imawbum Mountain would presumably have been named in that landscape had its existence been known at the time of the NBSAP preparation. This project made a substantive contribution to national CBD obligations for species and sites as defined in the NBSAP. A revised NBSAP is currently in preparation and will feature the Myanmar snub-nosed monkey as a Critically Endangered species and the species was listed in the 5th

National Report to the United Nations on Biological Diversity in March 2014 (MoECAAF 2014). With all other species of the genus *Rhinopithecus* it is also listed on CITES Appendix I.

4.2 Project support to poverty alleviation

The Proposed Inmawbum National Park is one of the poorest parts of the country, with a largely cashless economy and poor access to government goods or services, or markets. The project has engaged in activities that have a poverty alleviation component primarily under Output 3, with the goal of increasing support for conservation of the species (as defined through signed agreements) and reducing incentives for hunting. As noted above, grants were provided for raising goats and mython (the domesticated form of the gaur, a wild bovid), and walnut and cardamom plantation, both of which are high-value cash crops which can be easily transported from remote areas.

The potential number of beneficiaries now extends to over 50% of the population around the proposed park. Thus while direct impacts on poverty were not expected during the project, we do expect to see reduced hunting. Due to the fact that these interventions are already proved in the project area, we are also fairly confident that poverty impacts will be felt within a realistic time-frame of three to five years for mython and cardamom, and seven years onwards for walnut.

4.2.1 Programme indicators

- **Did the project lead to greater representation of local poor in management structures of biodiversity?**

Local communities have been clearly identified and engaged as key stakeholders and the need to recognise traditional resource rights is part of the discourse on protection of the Myanmar snub-nosed monkey and its habitat. Over 600 people participated in the participatory workshops on the establishment of the National Park and attended the various awareness events.

- **Were any management plans for biodiversity developed?**
- **Were these formally accepted?**
- **Were they participatory in nature or were they 'top-down'? How well represented are the local poor and women, in any proposed management structures?**

All activities of the project were designed in a participatory process including all local communities in the buffer zone of the proposed conservation area. In the workshops and consultation meetings, men and women were addressed and participating. All actions taken are well documented in the internal trip and activity reports.

- **Were there any positive gains in HH income as a result of this project?**
Benefits from a small grant programme for alternative livelihoods can be expected in the coming years. Poverty impacts will be felt within a realistic time-frame of three to five years for mython and cardamom, and seven years onwards for walnut.
- **How many HH saw an increase in their HH income?**
460 households are organized in the 23 conservation groups which received the 33 small grants for alternative livelihoods.
- **How much did their HH income increase (e.g. x% above baseline, x% above national average)? How was this measured?**

4.3 Transfer of knowledge

Did the project result in any formal qualifications?

The project didn't result in formal qualifications in terms of university degrees or PhD degrees. The transfer of knowledge was more designed as a long-term on-the-job training of local partner's staff combined with some specific trainings on wildlife and protected area management and scientific sampling methods.

- How many people achieved formal qualifications?**
- Were they from developing countries or developed countries?**
- What gender were they?**

4.4 Capacity building

- i. **Did any staff from developing country partners see an increase in their status nationally, regionally or internationally? For example, have they been invited to participate in any national expert committees, expert panels, have they had a promotion at work?**

Three of the original field team members became senior positions in the FFI Myanmar Programme.

1. One team member promoted as a project manager of the FFI Myanmar Programme (North), which also includes the snub-nosed monkey project.
2. One member became a senior biologist for the FFI Myanmar Programme.
3. One member became a field project coordinator.

- ii. **What gender were they?**

Male

4.5 Sustainability and Legacy

There is increasing interest to protect the species both at the site and at the state level. State level interest was documented in the Kachin State-level stakeholder workshop.

- Capacity for conservation in the BANCA project team and the Forest Department staff is increasing primarily as a function of the additional field experience and mentoring experienced over the past years. The main indicator of this is that the survey and trip reports were the first English-language outputs from two of the staff, and show a good standard of data collection, storage and analysis.
- Formal protected area designation is supported by all stakeholders and planned by the government to be executed as soon as the security situation in Kachin State has improved. This will provide long-term legal protection for the snub-nosed monkey and we expect Chinese logging to be phased out immediately with protected area designation.
- We see our involvement at the site as a long-term commitment. Our continued engagement will help ensure the outcomes are sustained beyond the end of the project.

Both national and state-level authorities have taken a strong interest in the Myanmar snub-nosed monkey and the proposed national park. This is evidenced by Forest Department launching the gazettment process with little prompting in 2012, following the first national workshop on the conservation status and needs of the species, and the enthusiasm of the state authorities for moving ahead.

By the end of the project the national park designation is well advanced, the local conservation constituency still is well motivated to protect the species, and that national scientific capacity is increasing to meet the needs of the species' protection. It is now clear that park designation is not a technical issue but a political one, and involves state and non-state armed groups. Even following designation the site will need additional support to establish the necessary infrastructure and processes for management.

For these reasons, FFI Myanmar has taken a long-term view of its engagement for Myanmar snub-nosed monkey, with five-year objectives that include:

- Leveraging increased support from China to help address threats from the demand side
- Ongoing livelihood development to reduce incentives for hunting and to strengthen local ownership of this conservation landscape
- Support for ranger training and equipment, sub-station construction, patrol data management and other protected area management activities
- Increased civil society monitoring of illegal logging

All equipment provided by FFI will stay in Myanmar and jointly used by FFI and BANCA to continue the conservation efforts for the Myanmar snub-nosed monkey. A written agreement on that was made in 2012 and is available on request.

5 Lessons learned

The project was well-planned and the choice of project personnel including FFI staff and local partner BANCA staff was excellent. We could achieve most of our outcome despite several obstacles, not least because of the dedication and motivation of our local staff.

Since peace negotiation have re-assumed there have been no major changes to project design and progress was generally following the original plan, though much slower than envisaged.

The main difficulties have been discussed elsewhere. Continuance of insecurity and armed conflict along main access routes to the site and to a degree elsewhere in Kachin State, all threaten to impact the project. It is impossible to predict how the peace process will proceed, but we were seeking to reach agreement with the government to allow the project team to continue to operate as long as there were no armed conflicts. During year 3 armed conflicts have ceased and peace negotiations are on-going. The tediousness of such a process has to be considered in future project planning.

Both, government and non-state army checkpoints on the main access routes, including from both Myanmar and China, have sporadically stopped access even for Burmese nationals, making access at times difficult for project staff. The situation made it impossible for central government to grant travel permits to foreign nationals, which effectively stopped the main thrust of the research collaboration with Oxford Brookes and also forced us to postpone a wildlife trade survey by Chinese colleagues inside Myanmar. However, field work and conservation activities by our Burmese staff could be fully implemented.

The security situation has improved significantly and both the government army and the KIA have ceased armed conflicts, while returning to the negotiation table. We are optimistic for project implementation in the future, but a possible contingency plan should be developed to shift conservation activities to the Chinese side of this trans-border range, especially since the Yunnan part is neither protected.

Output level assumptions are all related to government and local support, and we felt that this support has been exceptional. Where the assumptions failed was at the level of political stability and the ongoing conflicts in the area fuelled by resource extraction revenues. However, those assumptions were based on the experience of over twenty years of a successful ceasefire between the local armed group and the Myanmar army, which at the time of project preparation did not seem unrealistic.

5.1 Monitoring and evaluation

Project monitoring comprises three procedures:

- Regular reporting on results of field trips provided verbally by field staff, and through trip reports and technical reports
- Six-monthly project progress review by all relevant staff, and completion of annual financial and technical reports, final report
- Regular financial reporting through accounts from activity budgets

5.2 Actions taken in response to annual report reviews

The review of the first year report was favourable and acknowledged the political and security constraints faced by the project, and our plans to address them.

6 Darwin identity

Darwin Initiative funding is acknowledged on all project communications outputs, publications and internal reports (eg, those submitted to local or national government). In most cases the logo is used as part of the project identify, along with that of FFI, BANCA and the Ministry of Environmental Conservation and Forestry, plus other collaborators as necessary. The project is geographically distinct from other FFI projects and is focused on one only species and one main outcome (creation of a national park to control logging and hunting), so the project has a strong identity and is likely to be well known in the project site and Kachin state more generally, particularly among state Forest Department and state parliamentarians. Anecdotal evidence suggests that there is good awareness generally about the species, the discovery of which was widely reported in 2010 (ie, prior to the current Darwin support), but knowledge of threats and the specific project interventions is unlikely to be well known nationally outside of specialist interest groups such as the conservation community and perhaps the Kachin diaspora.

7 Finance and administration

7.1 Project expenditure

Project spend (indicative) since last annual report	2014/15 Grant (£)	2014/15 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			108%	
Consultancy costs			69%	Due to the limited survey time, consultancy cost can be charged at only 69%.
Overhead Costs			47%	Since the project used other funding sources for the office rent, charge only at 64%.
Travel and subsistence			80%	Due to the limited survey time as a result of unsecurity, project can spend only 80%.
Operating Costs			64%	Due to unsecurity condition in the project, we could not implement community patrolling/ monitoring according to the proposal. Therefore we could spend only 64%.
Capital items (see below)			130%	Since we had to buy more field equipment for the field survey than in the project proposal, we overspent 1393.36.
Others (see below)			99%	
TOTAL				

Staff employed (Name and position)	Cost (£)
BANCA Chairman	
Frank Momberg (Project Team Leader)	
Dr Stephen Browne (A/P Oversight)	
Dr Vincent Nijman (Oxford Brookes))	
Ngwe Lwin (Forest Conservation Coordinator)	
Saw Soe Aung (Field Coordinator)	
Aung Ko Lin (Jr. Biologist)	
Mg Kyaut (Conservation Biologist)	
Alumi (Wildlife Trade Monitor)	
L.Zawng Lum (Awareness Officer)	
Dai Haung (Livelihood Advisor)	
Mira (Livelihood Advisor)	
Zaw Win (Small Grants Officer)	
Phoe Zaw (Driver)	
Mg Soe Thiha (Driver)	
Khaung Haung (Village Facilitator)	
TOTAL	

Capital items – description	Capital items – cost (£)
Camera-2no-IMB survey	
Transcend 500GB Hardisk(IDG of	
Aluminium press-flora survey	
Generator-flora survey	
Dry bag(6)-flora survey	
Field bag(2)-flora survey	
Field equipment-Flora survey	
Sleeping bag(10)-Imawbum trip	
Car-Hilux double cab-TNY	
Projector screen	
Material for SGM IMB trip	
Battery	
ITB Hard Drive for MKN office	
CEER AK-360 Sound Box	
Tent & Headlight	
Binoculars, field guides for M	
GPS Map 62S (1Nos)	
TOTAL	

Other items – description	Other items – cost (£)
Consumables (office)	
Internet/ phone	
Field research/ patrol station	
Community development grants	
Awareness events/ materials/reports	
TOTAL	

7.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
Staff costs	
Overhead Costs	
Travel and subsistence	
Operating Costs	
Capital items (see section 7)	
Others (see section 8)	
TOTAL	

Source of funding for additional work after project lifetime	Total (£)
Staff costs	
Overhead Costs	
Travel and subsistence	
Operating Costs	
Capital items (see section 7)	
Others (see section 8)	
TOTAL	

7.3 Value for Money

For the successful implementation of our project activities we chose all items and equipment very carefully to secure the best value for money. Therefore we could access our many years of experience with such projects in remote areas and the demands on material and quality. For instance, to conduct the camera trap surveys we chose a medium-class camera trap with which we have had good experience in previous projects. There are more expensive ones on the market, but we knew that this one delivers good results and will persist several years under harsh conditions.

Salaries for field assistants, project staff and professional consultancy services have been calculated carefully and meet average local and international standards.

Vehicles and ways of travel have been chosen to be most effective in terms of time, security and efficiency. In order spend the project fund effectively, the field survey team mostly used rental motor cycles for travelling to the project area and in the project area rather than using rental 4x4 cars. We normally used the rental car when big survey teams went to the project area while we used the motor cycles for the filed survey. By travelling motor cycles, the team could travel fast and could reach the area where the 4x4 car could not.

Annex 1 Project's logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your Stage 2 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the Stage 2 logframe.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal:</p> <p>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:</p> <p>Conservation of the Himalayan Ecosystems in Northern Forest Corridor of Myanmar</p>	<ul style="list-style-type: none"> Protected area gazettement of the Imawbum Mountain Range to fill the protected area gap in the Northern Forest Corridor 	<p>Gazettement decree by the Ministry of Forestry, Kachin state government/ parliament decision</p>	
<p>Purpose</p> <p>Conservation of the Myanmar snub-nosed monkey and its habitat</p>	<ul style="list-style-type: none"> Increased knowledge of the distribution, ecology and behaviour of the Myanmar snub-nosed monkey Increased awareness Reduced hunting of snub-nosed monkeys Local multi-stakeholder conservation constituency established 	<ul style="list-style-type: none"> Scientific reports, peer-reviewed articles published in journals Awareness, knowledge and attitude surveys Biodiversity monitoring & patrol reports Community-based conservation agreement 	<p>Political stability in the snub-nosed monkey range</p> <p>(Risks are low as this <i>Special Region 1</i> in Kachin state has a stable peace/ autonomy agreements and joint the recent election. Permits have been granted without problems to foreigners visiting this area)</p>
<p>Outputs</p> <p>1. Improved Knowledge of Myanmar snub-nosed monkey population numbers/ distribution and ecological needs across its range</p>	<p>Scientific information is available:</p> <ul style="list-style-type: none"> Species Distribution Ecological knowledge (seasonal migration, feeding ecology, behaviour) Threats/ wildlife trade Increased capacity of Myanmar biologists in primate conservation biology 	<ul style="list-style-type: none"> Research & survey reports Publications in peer reviewed journals Threat/ wildlife trade assessment report 	<p>Support by local authorities for field surveys</p> <p>(The government has consistently issued permits for foreigners conducting field surveys for the past 3 years)</p>

<p>2. Conservation strategy for key populations</p>	<ul style="list-style-type: none"> • Species Action Plan • Biodiversity Report/ Justification for Imawbum National Park gazettelement • Recommendation for National Park gazettelement and management • Recommendations for N'Mai Hka watershed management plan • IUCN RED listing of the Snub-nosed Monkey as critically endangered species • CITES listing of the Snub-nosed Monkey/ Recommendations for Myanmar China border enforcement 	<ul style="list-style-type: none"> • Conservation strategy report • Biodiversity report • Protected area proposal submitted to relevant government agencies • IUCN RED listing • CITES listing (appendix I) 	<p>Government and local stakeholder support for protected area gazettelement</p>
<p>3. Community-based constituency for Snub-nosed monkey conservation programme</p>	<ul style="list-style-type: none"> • Increased awareness of local communities for Snub-nosed monkey conservation • Reduced hunting of Snub-nosed Monkeys • Alternative livelihood interventions provide incentives for conservation 	<ul style="list-style-type: none"> • Pre-post knowledge, awareness, and attitude surveys, participant evaluation during conservation awareness events • Pre-post threat assessment report • Patrol/ monitoring reports • Conservation stewardship agreements 	<p>Local stakeholder support for snub-nosed monkey conservation</p>

Annex 2 Report of progress and achievements against final project logframe for the life of the project

Note: For projects that commenced after 2012 the terminology used for the logframe was changed to reflect DFID's terminology.

Project summary	Measurable Indicators	Progress and Achievements April 2013 - March 2015	Actions required/planned for upcoming project period
<p>Goal: <i>Effective contribution in support of the implementation of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMC), as well as related targets set by countries rich in biodiversity but constrained in resources.</i></p> <p>Sub-Goal: <i>Conservation of the Himalayan Ecosystems in Northern Forest Corridor of Myanmar</i></p>		<ul style="list-style-type: none"> • Declaration of proposed Imawbum National Park well on the way with support from all stakeholders on local and governmental level • Reduced hunting pressure through awareness campaigns and alternative livelihood incentives • Formation of village conservation groups and conservation stewardship agreements with local villages 	
<p>Purpose: <i>Conservation of the Myanmar snub-nosed monkey and its bio-diverse habitat</i></p>	<p>Increased knowledge of the distribution, ecology and behaviour of the Myanmar snub-nosed monkey</p> <p>Increased awareness</p> <p>Reduced hunting of snub-nosed monkeys</p> <p>Local multi-stakeholder conservation constituency established</p>	<ul style="list-style-type: none"> • Expansion of species' range to the east and increased knowledge on the overall biodiversity of the project site through intensive field surveys • Awareness activities in all 54 villages surrounding the project site, and associated Knowledge, Behaviour and Awareness baseline assessments expanded • Agreements of all stake holders for establishment of Imawbum National Park • 23 village conservation groups established 	

		<ul style="list-style-type: none"> • Hunting of monkeys clearly reduced. All village conservation groups agreed on a hunting-free core zone • Kachin forest minister and assorted parliamentarians, plus the competent ministry, backing the park • Final reporting on the technical and biological justification for the park • Support for government submission of National Park proposal, management objectives etc • Further national coverage of the species and the proposed park in national and international media 	
Output 1: Improved knowledge of Myanmar snub-nosed monkey abundance, distribution and ecological needs across its range	<p>Scientific information is available:</p> <p>Species distribution;</p> <p>Ecological knowledge (seasonal migration, feeding ecology, behaviour);</p> <p>Threats/wildlife trade</p> <p>Increased capacity of Myanmar biologists in primate conservation biology</p>	<p>The project has confirmed an extension to the northeast of the formerly known range, and camera traps have confirmed the species' presence in a further new area to the south. One team member made the first video recording of the species. We have now prepared improved survey methodologies, and plan to conduct habitat modelling using newly-acquired remote sensing data, to be tested with the current distribution data. This helped to identify locations for future surveys and inform boundary negotiations and habitat protection/restoration planning.</p> <p>We provided qualitative indication of improvement against this indicator. However, all field work has to date been conducted by a team of BANCA members and local counterparts. These individuals are now the world's experts on the species.</p>	
1.1 Capacity/ trainings need assessment for primatological/ biodiversity assessments		All needs assessments have been conducted by the country team. Originally to be led by Oxford Brooks, but due to insecurity in the project site and travel restrictions	
1.2 Training in primatological, biodiversity research, threats assessment methods		Several trainings have been delivered using current capacity, and in cooperation with external agencies and individuals. Collaboration with Oxford	

		Brooks postponed due to insecurity in the project site.
1.3 Conduct biodiversity surveys/ primate distribution surveys and threat assessments		Field surveys conducted throughout the project site; Biodiversity assessments of fauna and flora completed. 2013 new groups of snub-nosed monkeys discovered in the northeast of the project site. Further surveys in 2014/15 completed the range assessment and improved the population estimates
1.4 Conduct camera trapping program to survey and monitor snub-nosed monkeys and other threatened mammals (e.g. bears)		Camera traps have been deployed in all project years across the proposed national park resulting in the confirmation of snub-nosed monkeys and other rare species like red panda.
1.5 Conduct primate research programs (semi-habituation & ecological research)		Not possible so far due to ongoing insecurity in the project site and current travel restrictions.
1.6 Assess threats to snub-nosed monkeys, their habitat and associated threatened species		Threats assessments included in two field surveys (see internal trip reports). Results have been being constantly reassessed based on new information and are presented in the revised species status report.
1.7 Prepare species conservation status review report		A reviewed species conservation status report was presented in June 2015.
1.8 Prepare regular research reports and publish findings in peer-reviewed journal articles		Various internal and public reports, a Biodiversity Report for Imawbum area and a revised status report for <i>R. strykeri</i> completed. 2 peer-reviewed articles published, 1 in preparation. Cooperation with Oxford Brookes had to be postponed due to travel restrictions
Output 2: Snub-nosed monkey conservation strategy	<p>Species Action Plan</p> <p>Biodiversity report/Justification for Imawbum National Park gazettelement</p> <p>Recommendation for National Park gazettelement and management</p> <p>Recommendation for N'Mai Hka watershed management plan</p> <p>IUCN Red Listing of the snub-nosed monkey as critically endangered species</p> <p>CITES listing of the snub-nosed monkey and recommendations for Myanmar-China border enforcement</p>	<p>The biodiversity justification for the proposed National Park is fully accepted by the government. With project support land use surveys have been conducted and proposed park boundaries have been redefined in a participatory process that do not create conflicts with local communities; survey results are available since beginning of 2015.</p> <p>Further species distribution data has been obtained that helped to ensure National Park boundaries encompass as much of the species habitat as possible. They will also potentially be used to test a habitat/distribution model.</p> <p>Public consultations for national park designation completed with all stakeholders</p> <p>Recommendation for N'Mai Hka watershed management plan were included in various awareness and consultation workshops</p> <p>The species is listed as Critically Endangered at IUCN Red List and in CITES Appendix 1</p> <p>Intensive on-the-job training in protected area gazettelement was provided during</p>

		joint surveys in the area of the proposed park to national Forest Department staff and BANCA members employed by the project.
2.1 Prepare biodiversity surveys report for protected area gazettelement		Completed in Burmese and English language
2.2 Train BANCA staff in protected area management design and planning		Conducted as field-based practical and intensive on-the-job training. BANCA staff and Forestry department staff were practically and theoretically involved in all field assessments and workshops
2.3 Prepare protected area gazettelement justification and protected area management recommendations, revise based on feedback from government/ stakeholders		Conducted prior to the protected area workshop in Kachin state in 2013. Final recommendations have been prepared in early 2015.
2.4 Facilitate multi-stakeholder species conservation action planning workshop		Protected area workshop joint hosted with the Ministry of Environmental Conservation and Forestry in Kachin state, 29 Jan 2013. State-level workshop on the newly-defined boundaries, co-sponsored by the project, conducted in March 2015.
2.5 Facilitate IUCN Red List/ CITES listing/ inclusion in the national protected species list		The Myanmar snub-nosed monkey was afforded Critically Endangered status under criteria A4cd Red List status in 2012. All <i>Rhinopithecus</i> species were listed in CITES Appendix I
2.6 Train BANCA staff in wildlife trade survey and investigation techniques		Not possible due to insecurity in the project site.
2.7 Conduct regular wildlife trade investigations/ submit reports to Customs/ CITES authorities in Myanmar and China		Not possible due to insecurity in the project site.
2.8 Design awareness programme/ materials and implement awareness campaign for dam/ road/ logging workers (see also activities 3.1-3.3)		Not possible due to lack of Chinese speaking staff caused by the poor security situation and strict travel restrictions, especially for foreigners.
Output 3: Community-based constituency for snub-nosed monkey conservation programme	<p>Increased awareness of local communities for snub-nosed monkey conservation</p> <p>Reduced hunting of snub-nosed monkeys</p> <p>Alternative livelihood interventions provide incentives for conservation</p>	<p>Despite the poor security and access situation affecting the site, we were able to make substantive progress on building a conservation constituency for the Myanmar Snub-nosed Monkey and the proposed Imawbum National Park.</p> <p>23 community conservation groups have been formed, new conservation commitments signed, and small grants for projects to improve livelihoods and reduce poverty in support of the commitments have been awarded.</p> <p>Awareness raising included in interview surveys in all villages north, east and south of the site being used to raise awareness of the species, its conservation status and needs, and the role of various stakeholders in its conservation.</p>
3.1 Conduct Conservation awareness baseline survey (Knowledge, attitude and behaviour) and repeat survey at the end of the project		Conducted in west of the site in Year 1. Conducted in the east during Year 2. Focus group discussion in 2014/15 demonstrated snub-nosed monkey hunting has been ceased and awareness campaigns have been largely successful

3.2 Design conservation awareness campaign and materials	Various materials and messages for village-based awareness prepared by the awareness officer.
3.3 Implement regular awareness programme in buffer zone villages	Village-based awareness activities conducted in 25 village tracts (including all 54 villages) during the project period.
3.4 Conduct special conservation awareness events during Christmas in collaboration with local church groups	Big initial Christmas campaign conducted in Tha Bang Ker village in December 2012.
3.5 Assess socio-economic conditions and livelihood opportunities in villages surrounding the Snub-nosed monkey range	Conducted in west of the site in 2011. Conducted in the east during Year 2. Agricultural assessment in 24 villages in March 2014
3.6 Establish and train village conservation support groups (responsible for village development planning, small grants management/ village conservation stewardship agreements)	23 village conservation groups (VCGs) established including people of 45 villages. Trainings provided to all groups
3.7 Facilitate village development planning and preparation of conservation stewardship agreement	Conducted in all 25 village tracts
3.8 Provide livelihood incentives through a small grants programme to local communities in return for conservation stewardship agreements	In total 33 small grants provided to local conservation groups.
3.9 Provide technical support for sustainable livelihood development (e.g. agro-forestry, paddy field development to replace shifting cultivation)	Technical report support was provided to all village conservation groups. Training focused on established activities and peer-to-peer support
3.10 Establish and train two community patrol groups	Project staff trained in “SMART” patrolling and a patrol protocol has been developed; start of patrols has been postponed due to insecurity in the project site
3.11 Facilitate monthly community patrols	Not possible so far due to insecurity in the project site

Annex 3 Standard Measures

Code	Description	Total	Nationality	Gender	Theme	Language	Comments
Training Measures							
1a	Number of people to submit PhD thesis						
1b	Number of PhD qualifications obtained						
2	Number of Masters qualifications obtained						
3	Number of other qualifications obtained	1	Myanmar	M	Remote sensing	English	Training
4a	Number of undergraduate students receiving training						
4b	Number of training weeks provided to undergraduate students						
4c	Number of postgraduate students receiving training (not 1-3 above)	48	Myanmar	M	Primate Field Survey Methods and Field Work	English and Myanmar	13 BANCA 35 FD staffs
4d	Number of training weeks for postgraduate students	2 weeks	Myanmar	M	Primate Field Survey Methods and Field Work	English and Myanmar	13 BANCA 35 FD staffs
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification(e.g., not categories 1-4 above)	6	Myanmar	Male	On the job training	Myanmar and English	4 BANCA members and 2 locals from

Code	Description	Total	Nationality	Gender	Theme	Language	Comments
							Sawlaw Township
6a	Number of people receiving other forms of short-term education/training (e.g., not categories 1-5 above)	5	Myanmar	Male and Female	Field survey training	Myanmar	5 locals from Sawlaw township
6b	Number of training weeks not leading to formal qualification	12	Myanmar	Male and Female	Field survey training	Myanmar	5 locals from Sawlaw township
7	Number of types of training materials produced for use by host country(s) (describe training materials)	4				Myanmar, English, lawwaw	1 Primate identification guide 1 Fish identification guide 1 Endangered mammal Identification guide 1 Wildlife law training guide

Research Measures		Total	Nationality	Gender	Theme	Language	Comments
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (ies)	1			Proposal for establishment of Imawbum	Myanmar	Developed the proposal together with local

					National Park		community and concerned government departments
10	Number of formal documents produced to assist work related to species identification, classification and recording.	2			IUCN Redlist and conservation status report of Myanmar snub-nosed monkey	English	
11a	Number of papers published or accepted for publication in peer reviewed journals	2					See publication list
11b	Number of papers published or accepted for publication elsewhere	5					See publication list
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country						
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country						
13a	Number of species reference collections established and handed over to host country(s)	8				English	See report list and handed over to Forest department and BANCA
13b	Number of species reference collections enhanced and handed over to host country(s)						

Dissemination Measures		Total	Nationality	Gender	Theme	Language	Comments
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	2				Myanmar	1. Stakeholder consultation Workshop in Myitkyina for establishment of Imawbum National Park 2. Stakeholder Workshop in Myitkyina to prepare the proposal of nomination of Imawbum national park
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	3	Myanmar	Male	<ol style="list-style-type: none"> 1. ICIMOD Workshop in Yangon 2. Biodiversity conservation of Myanmar, Indonesia 3. IPS conference in Hanoi 	English	

Physical Measures	Total	Comments
-------------------	-------	----------

20	Estimated value (£s) of physical assets handed over to host country(s)	9,811.65	Total value of capital items for 3 years
21	Number of permanent educational, training, research facilities or organisation established	1	One building in Wu Suk Village.
22	Number of permanent field plots established		

Financial Measures		Total	Nationality	Gender	Theme	Language	Comments
23	Value of additional resources raised from other sources (e.g., in addition to Darwin funding) for project work						

Annex 4 Aichi Targets

	Aichi Target	Tick if applicable to your project
1	People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	X
2	Biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	X
3	Incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	X
4	Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	
5	The rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	
6	All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.	
7	Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	X
8	Pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	
9	Invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent	

	their introduction and establishment.	
10	The multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	
11	At least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	
12	The extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	X
13	The genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	X
14	Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	X
15	Ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	
16	The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	
17	Each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	
18	The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in	X

	the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	
19	Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	X
20	The mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	X

Annex 5 Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Nationality of lead author	Nationality of institution of lead author	Gender of lead author	Publishers (name, city)	Available from (e.g. contact address, website)
IUCN Red List species entry	"Rhinopithecus strykeri", Geissmann, T., Momberg, F. & Whitten, T. 2012	Switzerland	Switzerland	M	IUCN, Gland	www.iucnredlist.org
Primate Conservation Program Report No. 21	"Results of biodiversity and camera trap surveys in Imawbum Proposed Protected Area, 2010-2012", Ngwe Lwin, Saw Soe Aung, 2012	Myanmar	Myanmar	M	FFI Myanmar, Yangon	FFI Myanmar
Internal report	Proceedings of the Workshop on the Establishment of the Imawbum Mountain Protected Area for Myanmar Snub-nosed Monkey (MYN)	Myanmar	Myanmar	M, F (various authors)	Ministry of Environmental Conservation and Forestry, Naypyidaw	FFI Myanmar
Primate Conservation Program Report No.	Proceedings of the Workshop on the	Myanmar	Myanmar	M,F (various	FFI Myanmar, Yangon	FFI Myanmar

22	Establishment of the Imawbum Mountain Protected Area for Myanmar Snub-nosed Monkey (EN)			authors)		
American Journal of Primatology, 74(10), 871.	Rhinopithecus strykeri found in China! Long, Y., Momberg, F., Ma, J., Wang, Y., Luo, Y., Li, H., Li, M. 2012	China	China	M	Wiley, USA	FFI Myanmar
BMC Evolutionary Biology 11(1): 77.	Nuclear versus mitochondrial DNA: evidence for hybridization in colobine monkeys. Roos, C., Zinner, D., Kubatko, L., Schwarz, C., Yang, M., Meyer, D., Nash, S., Xing, J., Batzer, M., Brameier, M., Leendertz, F., Ziegler, T., Perwitasari-Farajallah D., Nadler, T., Walter, L. and Osterholz, M. 2011.	Germany	Germany	M	BioMed Central, UK	FFI Myanmar
Internal report	Revised conservation status report for the Myanmar snub-nosed monkey (Rhinopithecus strykeri). Meyer D. 2015	Germany	Germany	M	FFI Myanmar, Yangon	FFI Myanmar

Annex 6 Darwin Contacts

Ref No	19-001
Project Title	Conservation of the newly-discovered Burmese (Myanmar) snub-nosed monkey
Project Leader Details	
Name	Dr Stephen Browne
Role within Darwin Project	Overall Project Oversight
Address	Fauna & Flora International Singapore
Phone	
Fax/Skype	
Email	
Partner 1	
Name	Prof. Vincent Nijman
Organisation	Oxford – Brookes University
Role within Darwin Project	
Address	
Fax/Skype	
Email	
Partner 2 etc.	
Name	Director
Organisation	Biodiversity and Nature Conservation Association (BANCA)
Role within Darwin Project	
Address	
Fax/Skype	
Email	