



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

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Host country(ies)	Mali
Contract Holder Institution	Wilderness Foundation-UK
Partner Institution(s)	Direction des Eaux et Forêts, Ministry of the Environment International Conservation Fund of Canada, The WILD Foundation
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Project Leader Name	Dr Susan Canney
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Report Author(s) and date	Dr Susan Canney 31st July 2015

1 Project Rationale

Increasing human pressure throughout the migratory range of the 550 Mali elephants is heightening the potential for human-elephant conflict at the same time as degradation impoverishes livelihoods and reduces the resilience of the ecosystem to cope. And yet successful mitigation methods, such as land-use planning and the integration of elephant conservation into community natural resource management plans and development plans, are still possible if action is taken soon, particularly as poaching has been non-existent.

In their NBSAP, Mali has identified the Gourma as an area of great significance with regards to biodiversity. The elephants are singled out for particular attention as they are regarded of national and international importance for several reasons. They represent 12% of all West African elephants. This population is the most northerly population in existence, and is accorded a high priority in the regional elephant strategy of the World Conservation Union (IUCN), making an amazing circular migration of over 600 kilometres annually from Mali to Burkina Faso and back. The African elephant is listed in Appendix Two of the CMS and the subject of a MoU. This population is listed under Appendix I of CITES. Government resources are wholly inadequate to cover this vast area: a different approach is needed.

Scientific studies and community consultation indicated that the threats to the elephants were the same as the threats to the livelihoods of the local population and the resilience of the ecosystem to cope with environmental change, namely:

- Population pressure from the south, as people search for new land to farm. Meanwhile dispossessed herders try shifting agriculture that ultimately results in soil erosion and loss.
- Well intentioned development interventions that have exacerbated the problem e.g. the thoughtless provision of water-points encouraging settlement and a natural resource "free-for-all"; and financial incentives to develop market gardens around water holes attracting agriculturalists from elsewhere.
- Livestock pressure from the river towns where middle classes amass huge "prestige" herds that need to travel further and further afield to find pasture. These have greatly increased in number while national statistics show that local livestock ownership has declined for over 2 decades. At Lake Banzena they make up 96% of the cattle using the lake, which has become highly degraded, denuded, and the water quality is such that 54% of the local women suffer from water-borne disease and 37% have miscarried in the past 2 years.
- Urban commercial interests cutting trees and gathering non-timber forest products.
- The disinclination to respect the resource management systems of another ethnicity.

Underpinning all these is the anarchic use of natural resources by multiple interests, clans and ethnicities. The resultant "free-for-all" has led to resource degradation, habitat destruction, impoverished livelihoods, and an increase in human-elephant conflict. The livelihoods of 85% of the 233,000 inhabitants of the zone rely on natural resources (water, food, construction and fuel wood, land)

The strategy is to protect the elephant migration route by establishing consensus-based community land-use planning and natural resource management systems, effectively putting "the commons" under community management. These empower the local population to sustainably manage the natural resources on which their livelihoods depend, reverse ecosystem degradation, make provision for elephants, generate income, equitably share revenue, and contribute to many kinds of security. This strategy was developed at Lake Banzena in the "Elephant Partial Reserve", the last accessible water for elephants at the end of the dry season and the lynch-pin of the migration. The approach worked better than expected and this grant helps extend it throughout the elephant range.

The area covered by the project's work lies between the following co-ordinates: 3.3°W and 0.9°W;



and 14.6 °N and 16.9°N. The location of the elephant range in West Africa is shown in Figure 1a, and the communities with which the project works are shown in figure 1b (although not all are included as we still have to collect GPS co-ordinates for them). This shows that the project has extended its work to the communities in the north and west between the elephant range and the river, as many of the migratory herds using the elephant range come from these areas.

Figure 1 Map showing the elephant range (brown) in its West African context

The original intent had been to advance more slowly and surely but with the advent of lawlessness, conflict and insecurity, the project had to move quickly to engage communities across the elephant range. As a result the level of NRM varies and to keep a track of progress the project has created a database of groups of communities with which it has worked and measures to assess the level of NRM for each. There are difficulties in defining discrete communities but it can at least help to assess progress and is thought to include around 75-80% of those with whom we have engaged.

Communities report a reduction in incidences of conflict.

It is very difficult to measure the level of conflict as many reports are false as individuals sometimes report conflict to ask for compensation, and given the distances involved and the lack of forester presence, the project cannot visit every site. The project visits incidents that seem genuine but never gives compensation. Instead it holds a community meeting to discuss and understand why the problem arose, and how to avoid it. All community meetings include discussions about causes of conflict, how to avoid it and how to behave around elephants so as to avoid conflict. One measure is the number of deaths. In 2011 (the baseline) there were 5 deaths; in 2012 there were 2, which were in areas where the project had not yet worked, and there have been none since.

An intercommunal convention covering the whole of the elephant range enters law and protects elephant habitat.

The communes of Gossi, Ouinerdene and Inadiatafane had already been brought together under an umbrella convention. During the project the remaining communes were brought together and the conventions harmonised. The whole of the elephant migration route is therefore protected in principle, however the absence of government and several mayors has meant the inter-communal convention has not yet been signed by the authorities. There is an umbrella convention for the enforcement structures (brigades), giving them legal status. All subsequently created local enforcement structures are inscribed under this convention. All communes have begun the process of developing enforcement structures which mesh with local structures through individuals that are members of both. At the moment it is the local structures that are the most operational, but the texts and principles are there, ready to be dynamised (convention texts and project reports available).

Pastoralist communities are implementing sustainable NRM that includes habitat protection and restoration.

The original idea had been to extend the model developed at Lake Banzena incrementally over the elephant range, but with the arrival of the conflict the project engaged as many youth and communities as possible to protect the elephants and their natural resources. As a result the communities with which the project worked are at different stages in the process as shown in the map in appendix 2 and the database in appendix 3, where the pastoralist communities occupy the area north of the RN16 road. More details are provided in section 2.3.

A participatory plan for agro-pastoral and agricultural communities is developed, and used to raise money for implementation.

The socio-economic study was undertaken by a combination of project personnel and partners. The study and emergence of a plan was developed in a participatory way that actually triggered 13 communities to move along the process of natural resource management by producing maps of the resources in their "territories" which they used to define detailed RM rules. The plan was used to raise additional money for CBNRM in the south (funded by ICFC); creating brigades in the south (funded by Buffet-Agence Nationale des Parcs Nationaux), a transboundary co-ordination workshop (funded by the Convention on Migratory Species, report available <http://www.wild.org/blog/elephant-poaching-the-local-context/>); and the resultant community organisation greatly facilitated community-requested workshops on peace and reconciliation such as that at Boni, attended by around 1,500, as well as the ability of individuals to provide information on bandits and the handing over of arms (see <http://www.wild.org/blog/rocky-road-to-reconciliation/>). See attached study, maps and plan in appendix 4, plus more details in section 2.3.

Projects & programmes working in the area include the consideration of elephants in their programmes.

Other projects are always invited to community meetings, however for much of this grant period there have been no other projects working in the area. Other projects had their offices destroyed and burned by jihadists. Thanks to the presence of mind by our project staff, the office plaques were taken down and the contents removed, piecemeal, in carrier bags and stored in many houses around Douentza.

The level of CBNRM was not as profound as intended over the initial target area (60% of the pastoral range). Instead some level of CBNRM was achieved throughout 100% the project zone and beyond.

This is due to events that were entirely unforeseen by anyone, and required rapid adaptation to ensure maximal effectiveness of funds. The Tuareg rebellion reignited by the return of mercenaries from Libya in 2011, the coup, the withdrawal of government, the seizure of the elephant range by armed groups of rebels and jihadists in 2012, and subsequent lawlessness posed enormous danger for the elephants. The project managed to continue its work throughout the conflict by adapting its activities to meet the threat to the elephants by working with the local people to protect them. In addition to protecting the elephants these prevented the recruitment of young men by the jihadist groups (despite being paid only in food none of the 520 young recruits joined the jihadists who were paying \$30-\$50/day).

In the post-conflict situation the residual insecurity has continued to pose more threats and made it difficult to travel or use GPS units or cameras for fear of attracting theft/attack. This has meant that the project has had to plan activities according to the greatest need while taking account of the security situation in particular areas, rather than according to a plan, and the collection of monitoring data has therefore been patchy. This is caused by groups of young men who had joined the jihadists now find they have nowhere to go. They feel unable to return to their communities due to shame and/or fear of being handed over to the authorities. The social divisions and upheaval created by the conflict mean that the project has needed to include community reconciliation as an integral part of its resource management activities; while CBNRM has proved to be an excellent way to promote social cohesion and building community solidarity to stand against the factors promoting insecurity and poaching.

The project engaged communities over the widest area possible through addressing their greatest need and then returning to support the next steps or reinforce training to compensate for social dislocation. For example in many areas the project's initial work with a community has been through training in the construction of fire-breaks to conserve as much pasture as possible to reduce conflict between humans, livestock and elephants. It used these training sessions to demonstrate the impact of resource management and social cohesion; and included the need for elephant protection as a part of the training.

This has also been used as a tool to prevent an influx of herds to Lake Banzena. There was an extreme scarcity of pasture and water in 2013 and 2014 due to a coincidence of poor rains in 2013; and the broken dam/bridge at Gossi. This drained the Gossi corridor and its chain of lakes stretching almost 100km, meaning that pastoralists from the river that were used to using this area for pasture were no longer able to and sought pasture elsewhere. By building fire-breaks along the north of the elephant range, pasture was protected close to the river, reducing the need for these populations to seek pasture and water inside the elephant range (see map in appendix 5). As a result Lake Banzena did not dry. The project is now seeking support to repair the dam from USAID/AFRICOM.

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

Original impact: To ensure the historic migratory path of the Mali elephants is secure and unimpeded by human development, and that the elephants have stable access to the natural resources key to their survival – water and food – while avoiding human-elephant conflict.

Without the project the elephants would either be extirpated or well on the way to extirpation. Since the first poaching incident in 2012, the project was able to mobilise the community to protect the elephants through the conflict because of the trust established by the existing CBNRM activities. Post-conflict the community provided the information required for a successful anti-poaching mission in May 2014 and there were no more killings until December of that year. In 2015 there has been an enormous surge in poaching due to the aggressive targeting of the elephants by well-organized, international trafficking networks (3 times as many elephants killed as in the previous 3 years together), the project's anti-poaching section continues to build Mali's capacity to respond (from a baseline of zero) as rapidly as funds allow.

The CBNRM activities described elsewhere in detail protect the elephant migration route and its key habitats, thereby securing water and food, and resolving conflict.

Pastoral and agro-pastoral livelihoods have improved in several ways for those communities who are collectively managing their resources. The details are described later but they include a range of contributions, including increased income, increased access to resources (food, water, medicine, fuelwood, pasture), youth employment, community empowerment, social cohesion and environmental and social resilience. These result in an increase in options to cope with climatic variability through an increase in environmental condition; and promoting several types of security: economic (livestock and other foods, medicines and resources sold in the markets); food security by improving livelihoods; social cohesion through CBNRM; and health in the case of the population of Lake Banzena. These are in addition to increasing personal security by mounting an armed response to poaching and promoting community solidarity in the face of the ongoing insecurity to enable the transmission of key information to enforcement structures.

2.3 Outputs

The biggest problem was the conflict, coup, occupation by jihadist groups, total lawlessness, post-conflict insecurity and banditry which was a total surprise to everyone, and meant that the project was operating in perpetual uncertainty. Poaching appeared for the first time, and the government had no capacity at all to deal with it. Consequently the project had to adapt its activities to include elephant protection (covered by other grants). One of the huge negative impacts of the conflict was that it has opened up social divisions, militating against CBNRM which meant the project had to engage in community reconciliation. The success of these, and the rapidity with which we were able to act was wholly due to the strong foundation provided by the existing CBNRM activities. Without the conflict the project would have substantially exceeded its output targets.

The need to rapidly extend community CBNRM and elephant protection measures across the elephant range meant project activities tended to contribute to several outputs at once, and these are reported on together after the individual impacts.

Output 1 – A model is developed and implemented for the protection of the elephant range in pastoral areas that cover 60% of the elephant range.

- **The integration of the 3 adjacent Karwassa communities into the Banzena process**
- **Extension of model to remaining pastoral communities.**

CBNRM systems have been established to some degree over the whole of the pastoral zone, north of the road on figure 2, and the communities of the Karwassa zone are among the best performing..

The model was originally developed at Lake Banzena just before the beginning of the grant. A baseline socio-economic survey of the situation in the region surrounding Lake Banzena was begun in 2012 and completed in 2013. It charts the progress of the model over its first year of implementation (see appendix 6). Key findings were:

- In this year 9 tree cutters, 5 hunters and 13 vehicles had been apprehended by the brigades and handed over to the forester authorities. The brigades had also been raising awareness among the communities of how to combat bush-fire. It also shows that 83% of the local population thought that pasture had improved, 13% thought it had greatly

improved, and 4% thought it had slightly improved. 84% thought this was due to the firebreaks, 14% thought it was due to good rains and 4% attributed it to the brigade patrols. Bushfires had become rare as a result of the project's support to CBNRM (socio-economic report of 2013 in annexe)

- The survey was suspended due to the conflict but extended to the urban populations of Ber, Timbuktu and Douentza during a lull in 2013, and showed that 100% of the local population were aware of the existence of the local convention and its rules of resource use, whereas only 14% of the urban dwellers surveyed were aware.
- 95% of the local population were very satisfied with stakeholder interventions to protect elephants, 3% were quite satisfied and 2% were dissatisfied (3% didn't say). Of the urban dwellers interviewed 38% were dissatisfied (as these would curtail their activities), 29% were quite satisfied and 33% were very satisfied.

The number of cattle at Banzena was reduced from a local estimate of 22,000 in May 2010 to 700-1,500 in 2013 when, however sabotaged solar panels, a broken dam and poor rains in 2013 led to large numbers in 2014 & 2015. Despite this, due to strategic fire-break construction Banzena has not dried in either of these years, and the project is now working with partners to raise money for a well with manual pump in place of vulnerable solar panels.

Output 2 – A costed and phased participatory plan for the resolution of human-elephant conflict, whose implementation will serve as a model for the management of conflict in the agro-pastoral and agricultural communities found over 40% of the range.

The study and plan was undertaken by a project-DNEF team (see appendix 4). It confirmed that agro-pastoralism and agriculture were the main economic activities in the south of the range. Slash & burn, shifting agriculture was the main threat to elephants' migration route in this area, while the increase in number and size of human settlements can in large measure be attributed to the establishment of wells and water points in the area by development NGOs and projects, which attract additional settlers. The main conclusion was that unless something is done about the increasing human impact, current peaceful cohabitation between local people and the elephants in the south cannot continue beyond the next 20 years. The main conflicts were summarized as

Nature of conflicts	Seasonality & Frequency	Causes	Mitigation
Crop destruction	Early growing/ harvest time	Farmers grow crops on the elephant migration route, and elephants abandoning traditional routes to raid crops	No farming on the elephant migration route or clearance of elephant habitats
Granary destruction	Beginning of rainy season	There is less pasture available for elephants & trees are still leafless)	Do not leave granaries unattended in fields during the passage of elephants
Tree destruction (e.g. Baobab)	End of rainy season	Elephants like grazing on baobab trees.	Planting of baobab seedlings
Access to water		Elephants and humans using the same water-points	Careful behaviour when elephants are in the area

The study was interrupted by the conflict and hampered by the difficulty in travelling to some areas, but was subsequently completed when the security situation in the south improved. The process was participatory and resulted in 13 communities producing maps of their resources. This is more suitable in the south where populations are sedentary and proved to be an excellent way of bringing communities together and promoting reconciliation. The study gained a better understanding of the distribution and degree of conflict, something that is often difficult

to do because of false claims for hope of compensation. The plan has been used at all workshops and meetings in the south to create NRM systems.

Output 3 – The establishment of an intercommunal convention covering the whole elephant range Much work had already been happening at the local level and there was already a relatively high level of awareness, making individual communal level meetings unnecessary. 4 integration meetings were held during the grant period over 20 days and attended by 330 people to harmonise the rules across adjacent groups of communes. Regulations, penalties, means of enforcement were determined through integration with local community systems, with some individuals engaged at both levels to ensure continuity.

Output 4 – Sustainable NRM is supported by the establishment of community ecosystem protection initiatives such sylvo-pastoral or forest protection zones that increase resources

52% of the 54 groups of communities from whom we have collected data have protected pasture and 83% have protected forests, including the continuous forest stretching from Feto Gassel to Masi, stretching just over 100km in the south of the elephant range. Two areas have been selected and plans devised for enclosed pasture to experiment with the cultivation of hay for sale and the rearing of ostriches, however money has not yet been raised to pursue these initiatives. Due to the risk of robbery, most of these were not recorded by GPS. Satellite change studies are planned for the future to detect the impact of these initiatives on forests and area burned, and test community reports that trees are regrowing.

An additional 436km firebreaks were built in the last year. Communities report a decrease in hunting of near-threatened Dorcas gazelle and Denhams and Nubian bustards. 56% of the population around Banzena thought the increase in prices of bushmeat in adjacent towns was due to CBNRM and 36% to less availability in general (socio-economic study attached).

Output 5 – Elephant protection activities conducted through:

- **Extension of vigilance cells across the elephant range.**
- **Deployment of a second anti-poaching ranger post**

100% of the elephant range is covered by vigilance cells working with brigades (the 13% of groups of communities without brigades are outside the elephant range), an increase of 25% since the last report. There are over 600 brigade members, although they have not all yet been formally registered and so exact figures are elusive. All the young men in these communities who did not join the armed groups are either brigade members or associated with them as part of vigilance cells. The slight reduction in security over the last period of the grant has meant that no anti-poaching ranger posts are yet functional although 10 new posts were constructed in 2014 (with Buffet-ANPN funding) and 50 newly recruited foresters are currently being trained to man them (with ECF funding).

Output 6 – Kick-starting and catalysing a process to extend the reconciliation process to the local level; ensure aid agencies are aware of the implications for their activities; and ensure that reconstruction activities are conducted with awareness of their social and environmental impact

62 participants attended this high-profile national workshop called *Reconciliation and post-conflict reconstruction in the Gourma region of Mali: towards a process to identify & implement the measures required for societal and environmental resilience*. They included high ranking officials from 11 Ministries, ex-Prime Ministers, retired generals, representatives of local government, NGOs and local communities over three days. The chief conclusions were that:

- Reconciliation within and between communities is a pre-requisite for aid and reconstruction activities,

- All efforts should aim for the reconstruction of communities as they were pre-conflict
- Local communities must be involved in the design of post-conflict aid and reconstruction to ensure that these activities are correctly targeted and achieve the desired results.

The output was a report with detailed, phased action-plan. It is covered in detail in the last annual report.

The report and plan was officially launched at a half-day meeting/press-conference in July 2014 that attracted 18 national and local media, and was reported on prime-time television and radio in the 8 major languages spoken in Mali, and was front-page news in all the national newspapers, reaching a very wide audience very quickly. The support of the Darwin Initiative was prominent. In the following three days, 125 calls were received from all walks of life, congratulating the project on the importance of the initiative and calling for its implementation in full at local level. The project includes the importance of reconciliation in all its activities and its activities promote reconciliation through supporting the community cohesion required for successful CBNRM.

Three local workshops were organised in the second half of 2014 at the request communities in the elephant range, each attracting many hundreds of people and enabling many people to voluntarily giving up fire arms, disclose arms caches and information on bandits, one instance of which led to the prevention of an attack on Douentza. The result was that the security situation improved in the south and central parts of the elephant range, markets re-opened and people travelled more freely, however this deteriorated again in 2015 partly due to the dilution of military presence in being deployed to deal with attacks elsewhere in Mali, many of which were trying to disrupt the imminent signing of the Peace Accord.

Factors of relevance for all outputs

A database has been compiled to record the level of progress of CBNRM achieved by groups of communities across the elephant range with whom the project has worked. Although this is only indicative due to the difficulty of defining a community, it can be used to assess the efficacy of different approaches. The database is a work in progress but of the 54 groups of communities so far entered (representing about 75-80% of the total and not including those in Burkina Faso) that have engaged in NRM activities facilitated by the project, 61% have management committees, 87% have brigades, 52% have designated reserve pasture, 83% have protected forests and 41% have local conventions of some sort (see appendices 2 and 3). The chart below shows the percentage of communities at each stage in the convention process, the level of social cohesion and the level of NRM.

Level (low to high)	% of communities			
	1	2	3	4
Stage in convention process (1-3)	70%	15%	15%	
Social cohesion (1-4)	33%	11%	2%	54%
Level of NRM (1-3)	33%	13%	54%	

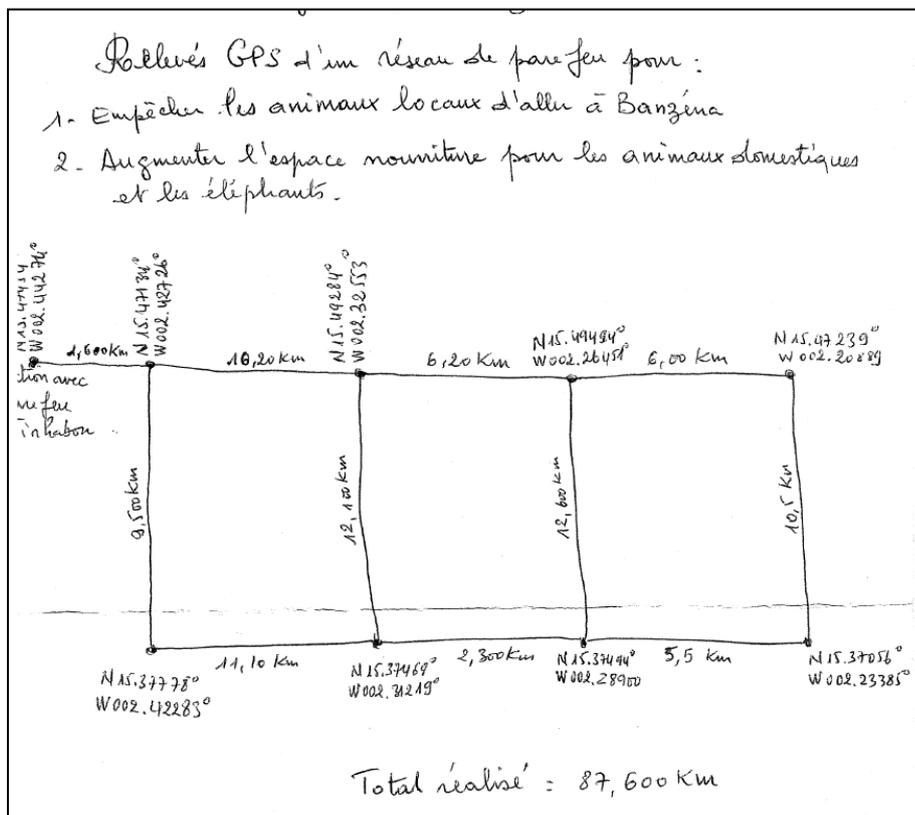
Due to the absence of government few have finalised and signed local conventions, however the field manager has produced a manual describing the process of creating local conventions in detail.

Over the grant period 1,784 people attended community meetings over 21.2 weeks to establish local NRM systems throughout the elephant range. 1,327 people have been trained in aspects of resource management over 12.3 weeks. Effectiveness is best evaluated by the results of resource management

The following documents some of the evidence for the benefits of establishing community resource management systems.

An impact survey of 10 communities showed that those who had designated areas of reserve pasture, protected them with fire-breaks, and protected forests from abusive cutting, noticed a substantial increase in the quality of their livestock, as reflected in the price in the local markets.

The increase in prices obtained were, on average, 55% for goats, 36% for sheep and 40% for cattle. For the population at Banzena, for example, this represents an average of an additional £134/person. [This is only an indicative sum as higher value camels and donkeys were not surveyed, and it does not include other benefits.] The price increase is because the animals do not have to travel so far for forage and there is much more available, particularly at the harshest time of the year, the end of the dry season. Other benefits that were also mentioned were the increase in milk produced, and therefore an improvement in food security for the family, as well as an increase in young animals conceived and born.



One group of communities, Kazey-Kazey, has been charging livestock for access to the pasture in its reserve pasture area. They have received an average of £320/year for the past three years. On top of this they gained £530 from the sale of hay during the last months of the dry season. As they say “we benefit twice: we have more pasture for ourselves and we raise money from others” (see adjacent figure 3 for their firebreak plans). The relocated Banzena communities had also introduced charges but fleeing jihadists

and bandits have broken/stolen the solar panels from 2 of the three boreholes three times, meaning that half of the clans returned to Banzena (the project is liaising with USAID/AFRICOM to sink one or two sabotage-proof well(s) with manual pump as a replacement water source(s) in the relocation area).

Firebreaks also protect forest resources, and at least one community is carefully protecting and adding to a stand of *Acacia seyal* for the harvest of gum Arabic from which it receives £3.50/kg. Half of this goes to the women, a quarter to the brigades, and a quarter to the management committee.

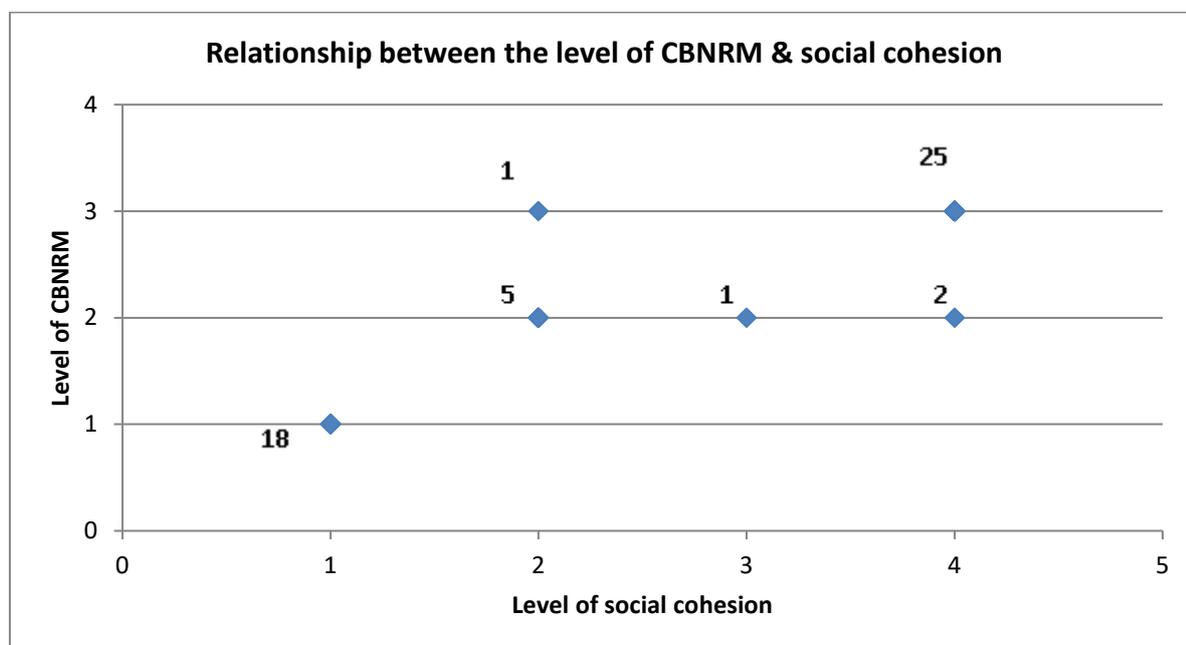
In addition to protecting pasture, project CBNRM communities are closely protecting their forest resources and preventing their clearance for several reasons. They have noticed the prices of wood in the urban markets, witnessed the increasing off-take by outsiders and realised they will lose trees if they don't protect them. They value forests for game and wildlife; fire-wood (and construction wood in the south); wild foods and medicinal plants (e.g. fruits, roots and leaves of many species such as tamarind, Baobab, *Commiphora* and *Acacia* spp., incense *Commiphora africana* and gum arabic *Acacia seyal*); protecting the water holes at their centre from siltation and evaporation; and as forage for fattening animals. They also associate forests with rain and wildlife: for them it is the same thing.

To give an idea of the income from these resources, the socio-economic study in the south surveyed 12 villages in the commune of Haire and 7 in Hombori. Here they found that during the period between harvest and the end of the dry season (approximately November – May) when people were not cultivating their fields, individuals received the following income in 2013.

Commune	No. of villages	Occupation	NTFPs (tamarind, Baobab, Commiphora africana, herbal medicines, leaves for food & animal forage)	Fishing	Forestry products	Other small trade (tea, sugar etc.)	Others (crafts, tailoring, metalwork)
Haire	12	Agro-pastoral					
Hombori	7	Agricultural					

In the Banzena since CBNRM began: charcoal has increased in price by 150% in the markets of Timbuktu and Ber (127% if adjusted for national average inflation) while local people use dead wood. The price of bushmeat in the urban markets (mainly the near threatened Dorcas Gazelle, Nubian and Denham's bustards) had tripled (182% national inflation-adjusted). 56% thought this was due to the CBNRM controls at Banzena and 36% because there was less charcoal on the market in general. Both socio-economic studies showed that it was more economic to collect wild foods (done by women) than fell wood for sale. Elephants are recognised as a great help in the collection of wild foods and fruits by knocking them down from high branches. These are then collected by the women. Sheep and goats feed around the feet of feeding elephants to benefit from the leaves and branches knocked down from inaccessible parts of the trees.

Over the duration of this grant, the project has noticed a very strong relationship between quality of natural resource management and the level of social cohesion between the diverse ethnicities and clans of the elephant range, as indicated by the graph below (the numbers refer to the number of groups of communities in each combination of values). Generally low values coincided with inter-clan rivalry, and high values with high levels of social cohesion. In fact 18 of the 25 communities performing highly in CBNRM had not committed the rules of their local convention to paper because the rules were widely agreed and respected. Often the creation of a participatory map had been all that was required for these communities. More widely, the process of agreeing the sketch map proved one of the most successful ways of promoting community cohesion.



In the village of Yoro, associated pastoralist groups pay £3,500/year for water access rights. They also receive £4,700/year from selling fish. Social cohesion is very strong and they don't pay their brigades because they are deemed to benefit from the village income.

More anecdotally, communities containing local accomplices of poachers tended to be those with less social cohesion and a lower level of CBNRM.

The project will use the quantitative benefit data to encourage and reinforce CBNRM activities in less advanced communities.

Existing assumptions still hold. The project continues to enjoy strong support from all levels of government, and the interest and commitment of communities to continue in resource protection at local and communal level in the post-conflict situation. In particular the young men are proud to have an occupation that has status, and many show a great interest in the elephants. The Field Manager reports enthusiasm for these activities among the local community in being empowered to make a difference (although communities vary as described previously). Numbers attending the workshops and meetings are impressive, as are the achievements of the brigades and vigilance networks in protecting the elephants, finding poachers and ivory; the amount of pasture, and numbers of lakes and forests protected under local resource management agreements; and the fact that most of the elephant range is protected at commune level.

3 Project Partnerships

Co-operation and collaboration are the essence of the Mali Elephant Project's (MEP) approach, as community-based natural resource management (CBNRM) is not possible without this. The project always involves all local organizations in its meetings – traditional community leaders, elected leaders, government technical services from all relevant departments (forestry, agriculture, herding communities, planning), government administration, NGOs, and other projects and programmes.

In its activities the MEP has built bridges between the top levels of government and grass-roots subsistence farmers. The partnership with the Malian Ministry of the Environment and Sanitation and its Direction National des Eaux et Forêts (DNEF) is excellent and fruitful, and continues to strengthen. It also involves other Ministries in its activities, as for example in bringing 11 Ministries and local representatives together for the Reconciliation workshop, and is currently working with the Ministries of the Environment and Defence in dealing with post-conflict residual insecurity in the elephant range. These partnerships are demand-driven because the Malian government needs help to secure the future of the elephants in the Gourma (of the area larger than Switzerland) promote community reconciliation and cohesion, and alleviate poverty for local communities.

From its very beginning the MEP enjoys a strong partnership with the US Embassy in Bamako. Since 2002 the project has received financial and in-kind support, including a borehole, vehicles and tents; and secured funding through US Fish and Wildlife Service.

Since 2007 the project has enjoyed excellent relations with the successive Ministers of the Environment, briefing them personally. It has also identified key allies within the DNEF and supported them through helping them in their work, including them in project activities (while working to keep less helpful elements at arm's length), and enabling them to share in the project's success, particularly in the eyes of the Ministers and Secretary Generals. Over the years these have risen to key positions of power and now provide a supportive environment that makes it easier to constrain unhelpful elements. They have sent high-ranking representatives to attend key local workshops, thus sending a message to the local communities that their initiatives are regarded of great importance by the government, and will continue to be supported. This has been of particular importance in the post-conflict situation to reassure the local communities that all agreements and conventions made with all parties will continue to stand despite the insecurity.

In 2013 the Direction Nationale des Eaux et Forêts (DNEF) replicated our approach in other protected areas in Mali, by creating local community "Brigades de Surveillance" in the Faya reserve, the Biosphere Reserve of the Boucle de Baoule and Nianfolia, modelled on those of the Gourma. The DNEF has also been inspired by the community model to work towards the creation of a separate agency charged with the management of the country's protected areas.

Over the past year the project has developed a strong relationship with the new Parliamentary group on Wildlife and the Environment who exist to make sure that Mali has the correct legislation in place and that it is applied. The project hosted a briefing workshop on the elephants, and this group has been working to raise their profile within Parliament, and has

asked several key questions of the Prime Minister during a full sitting (see <http://www.wild.org/blog/mali-elephants-again-under-siege/>).

The project has developed important relationships with several divisions of MINUSMA, the UN peace-keeping force in Mali (All Source Information Fusion Unit, Environment & Culture Unit, Joint Mission Analysis Center, UN Police, Security Sector Reform), who are helping with patrols, additional training for the 50 new foresters, and the pursuit of traffickers.

4 Contribution to Darwin Initiative Programme Outputs

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

The project addresses the three main objectives of the CBD by conserving biodiversity (community-forester patrols and habitat protection initiatives); sustainable use (community based NRM, and habitat regeneration for fuel, pasture, and NTFPs); and equitable benefit-sharing (transparent consensus-based community structures).

It contributes to the CBD programme of work on agricultural biodiversity through using an ecosystem approach to balance the needs of humans and elephants, and integrate biodiversity conservation into the day-to-day lives of local people, specifically by identifying adaptive management techniques, building capacity, and integrating concerns over the wise management of the biodiversity and natural resources of the Gourma into livestock, agriculture, development and planning sectors.

It also contributes to the CBD programme of work on dry and sub-humid lands, through halting and reversing the degradation of pasture, water sources and forests through sustained over-use. Although the wetlands and forests make up a tiny proportion of the elephant range, they are crucial for the elephants and its biodiversity, and water-source management and forest protection from clearance and over-exploitation are key foci for action.

With the advent of elephant poaching, the project has mobilized the population to protect the elephants throughout the conflict and is working with the government to develop this, thus addressing the CITES Appendix I listing. The project has good relations with the communities and administration of the protected area on the Burkina side of the border, where the elephants spend some of the wet season. Project work addresses the remaining two priorities of the appendix to the CMS MoU on West African Elephants: to at least maintain numbers (community protection, engagement and outreach to resolve human-elephant conflict); and to improve elephant habitats (habitat protection and regeneration).

The Gourma is mentioned in Mali's National Biodiversity Strategy as one of the four natural regions of highest biodiversity value in Mali. The elephants are an important population in their own right but also function as an umbrella species. The project's habitat protection activities favour the Gourma's biodiversity rich habitats that are key for ecosystem services and resilience. These are supported by the community-ranger patrols enforcing sustainable resource-use practices, and controlling the illegal exploitation of game species (including the near-threatened Dorcas gazelle and Denham's and Nubian bustards).

By establishing community resource management systems across the elephant range, the project aims to create the structures required to enable the eventual reintroduction of species that have been lost.

The project works closely with the DNEF, and has inspired the directorate to use its approaches elsewhere in Mal, as described in section 3.

4.2 Project support to poverty alleviation

The project is working with some of the poorest people in the world. There are in the order of 165,650 living in the areas touched by the project (2009 census), and at least 85% rely on subsistence livelihoods. The project is alleviating poverty by empowering local communities to improve the quality and quantity of the resources in water, pasture and forest, on which their livelihoods depend, while at the same time making them more resilient to environmental and social disturbances. By bringing the communities together, common systems of resource

management are devised, that protect habitat and regulate resource extraction, as well as generate income. By preventing overexploitation, habitat destruction and controlling fire, these systems mean that there are many more resources available for the local population, and habitats that yield useful products such as game, wild foods and medicines, in addition to pasture, water and browse; as well as deliver a wide range of other benefits such as reduced human-elephant conflict and improved social cohesion and resilience (as described in section 2.3).

These systems are based on traditional structures but are adapted to current needs and circumstances. Most importantly they empower the local population, providing a means for them to take control and better their livelihoods as well as improving their environment and society. It has even prevented the establishment of a Chinese quarry at Kerwal in the heart of key elephant habitat, and the community map of resources and local regulations was taken to Prime Minister by the National Director of Eaux et Forêts as proof that such a development must be stopped.

As well as improving food security (described in section 2.3), the project's CBNRM activity is also improving energy security for the populations in the south of the elephant range. There is plenty of dead wood for the needs of the north but this is not the case in the south, and preventing the abuse of forest resources ensures a steady supply of wood for these populations.

When established, the situation at Banzena will reduce the incidence of water-borne disease that currently afflicts of 50% of the women and children.

Most importantly, the resource protection, bush surveillance and elephant protection activities provide employment for the young men, providing an alternative to joining the armed groups. Even though the project only offers "frais d'encouragement", these men have great pride in an occupation that benefits and accords status within the community, rather than the risks and social alienation associated with joining the armed groups. All across the Sahel land is degraded; the young men have no employment and they risk radicalisation. This approach provides a model that could be adapted to local conditions and replicated elsewhere providing benefits in terms of security, poverty alleviation and conservation.

The elephants are also important culturally. An attitude survey of 350 people randomly selected from all over the elephant range showed that 78% thought it would be a bad thing if elephants disappeared from the Gourma (4% didn't know). 43% stated biodiversity and ecosystem services as their first reason¹; 18% said they were lucky²; 12% cited their value as heritage³ and 4% cited their curiosity/rarity value⁴. However these values were closely interlinked and in many cases were aspects of a greater value, A sense of identity from feeling deeply embedded within the wider environment.

Providing armed support to community anti-poaching initiatives will help increase the security of the general area. Experience suggests that a show of government presence reduces attacks. It also gives heart to the local people, reinforcing solidarity and the enabling them to give information anonymously when foresters perform inquiries and visit all households.

¹ They view elephants as an indicator of a "healthy" ecosystem and they know that all livelihoods depend on this. They also know from direct experience that elephants are important as seed dispersers and in forest regeneration. Dung is valued to help conjunctivitis, a widespread problem in these environments

² Every species has a right to exist & contributes something unique to the ecosystem that is unique to it, a notion encapsulated in the word *baraka* or blessing. Each species has its own baraka, and if a species is lost, the ecosystem is irretrievably diminished, and poorer in its ability to sustain life

³ "If the elephants disappear, our area will no longer be special".

⁴ People spoke of awe in witnessing elephants' social interactions and expression of a range of emotions, their joy when groups reunite, their apparent care for each other and particularly for their young. They have reported seeing elephants covering their dead with soil and branches and standing vigil for several days. They tell of elephants constructing a causeway of wood and branches to help rescue another elephant stuck in mud.

When security returns to the area the project will help the local communities in activities associated with elephant-based tourism, as the area is on a popular tourism route and adjacent to attractions such as the Dogon escarpment, the inner delta, Timbuktu and Mopti.

4.2.1 Programme indicators

The aim of the project is to empower the local poor to create effective structures to manage biodiversity that work in synergy with, and are backed up by, those of the Malian government and are fully supported in Malian law. These structures will form part of the national elephant management plan (including strict protection of Lake Banzena), and local resource management plans include the protection of local habitats, wildlife and game species from uncontrolled exploitation by outsiders. At Banzena in 2012, for example, no local market existed for bushmeat since the CBNRM rules were passed. The approach was participatory, as without this they will not last. All local stakeholders are involved but the local poor are by far the most numerous and the key actors. Varying numbers of women are involved. They frequently attend meetings to show their support and encourage the men, while the “wise women” always participate in ceremonies of signature. The positive gains in household income as a result of this project are described in section 2.3. Given the large area of intervention compared to the modest resources of the project the numbers of households who saw this increase is not known for sure, but the 54 groups of communities protecting pasture (52%) and forests (83%) are likely to have experienced the gain described. As explained earlier, the biggest impediment to achieving this gain is a lack of social cohesion.

4.3 Transfer of knowledge

The project did not result in any formal qualifications but has made great efforts to share and transfer knowledge to the Malian implementing agencies through working closely with them, implicating them in the project, and using their expertise whenever possible, emphasizing the role that each needs to play and their responsibilities.

Knowledge is transferred locally as the results of any study or survey are always shared with the population to enable their discussion and input. Communities are trained to increase their capacity for CBNRM.

The project tries to transfer knowledge to both targeted audiences (as with specific reports and plans like the Reconciliation and Reconstruction report/plan); as well as a wider, more general audience through writing blogs, a newsletter, articles, reports, and giving talks nationally and internationally. It has not written as many journal papers as planned due to the disruption and rapid expansion of activities to cope with the large forces threatening the elephants and people of the Gourma

4.4 Capacity building

The project is helping Mali create an Elephant Management Plan, as well as develop a model for Protected Area management that has sparked proposals for the creation of a new governmental protected areas agency. It has also worked with the government to put in place solutions to the crisis situation at Lake Banzena and to put in place a capacity to deal with elephant poaching, starting from a baseline of zero, as described elsewhere. These initiatives are all supported by an enabling environment created by the project through engaging a range of partners such as the US Embassy, and MINUSMA.

Local expertise is used wherever possible and developed, as for example through training social surveyors, using foresters and brigade members to teach other communities about the technical aspects of fire-break construction, for example. At the beginning of the grant, a scheme was being developed for the community to recruit foresters from among the highly-performing brigade members. The conflict prevented this from being developed further, however it is still a goal for the future.

4.5 Sustainability and Legacy

This project has an extremely high profile within the Ministry of the Environment, being regarded as a model for the rest of Mali. The Project Leader and Field Manager enjoy ready

access to the top levels of the Direction of Eaux et Forêts, and to the Minister and Secretary General of the Ministry of the Environment as described in section 3. The DNEF are much more confident in their ability to take decisions to support elephant conservation, something that was noticeably absent in 2008, the first time that Banzena dried.

The ultimate aim is that these systems become an automatic part of local practice. They need to be supported in this until the systems become familiar and a habitual part of their day-to-day activities, and can be seen to bring tangible benefits. This may take several years and we envisage the Mali Elephant Project continuing until 2020 at least, with the whole of the elephant range being managed by integrated community-forester natural resource management systems, supported by an elephant range management plan, ready for the re-introduction of species that have been lost. The project will continue supporting communities in their efforts until they become autonomous.

5 Lessons learned

Given the size of the area, the modest resources, and limits placed by the security situation, the project's management structure functions well. The Malian team is very competent and there is great synergy in the complementary yet overlapping skills between the Director, a natural scientist/conservationist/policy analyst by training, and the Field Manager, a development sociologist, both of many years experience. The project has had to evolve systems and expertise to deal with the conflict situation, and has had to take on tasks that it would not have planned in advance (combating jihadists, lawlessness and armed groups), with budgets that were extremely modest to deal with the task at hand. The staff have worked extremely hard to cope with the additional tasks required by the anti-poaching and reconciliation activities, and as a result some activities have not been pursued with the precision and depth that was originally planned. Because the project has been in existence for several years, and its design had been based on several years study of the elephant migration, the local socio-economic situation, and a period of stakeholder consultation to develop a shared vision, the underlying issues were well understood. This enabled the cost effective adaptation of project activities to cope with the huge forces impacting the elephant range, and demonstrate that NRM is fundamental to human well-being and many types of security.

5.1 Monitoring and evaluation

Two additional outputs were added to the log-frame to cope with the post-conflict situation: anti-poaching and reconciliation. Although the jihadists were no longer in control of the area, there was remnant insecurity and banditry which posed a great threat to the elephants. Communities were also suffering from social disruption and the exacerbation of social tensions and wounds.

There are many fascinating studies that could be done and it has been frustrating not to be able to gather more specific data for reasons explained previously. As reported previously the project has tried getting the brigades to keep a log of when they patrol and where, but while they retain the information extremely well, recording it is entirely alien. The project is actively seeking additional funds to recruit an additional member of the team responsible for ensuring the collection of these data and the maintenance of databases.

The Field Manager and project field team have continually monitored the activity of the community management systems, assessing the degree to which meetings, workshops and training has led to community action, what further project input is required and where, however this information was not initially captured in a systematic or quantitative form. To remedy this a database has been compiled over the last year (as described previously) to enable the assessment of progress and the impacts of different actions. The project has also tried to gather more quantitative indicator data to be able to measure progress that have been included in the log frame and previous sections.

Unfortunately the Project Leader has not been able to visit the project area throughout the past year due to the insecurity, but speaks almost daily with the Field Manager.

5.2 Actions taken in response to annual report reviews

We have responded to all issue raised during the reviews of annual reports and discussed the reviews in depth with our partners and collaborators.

Outstanding issues include the collection of monitoring data and recording the activities of patrols, as mentioned in 5.1. For the next phase, the project is compiling a data collection strategy and hoping to raise funds for include a data and information manager whose sole job is to ensure data, photos, videos and other evidence are collected and stored systematically, as the only way to ensure regular and systematic coverage for agents dispersed over this vast area. The GPS enabled radio handsets of the soon to be activated radio-communications system could be a helpful element.

6 Darwin identity

The project posts the Darwin Initiative logo on the website, publications, presentations and workshops. Because it is part of a larger programme, the project gives additional publicity and credit for the contribution of the Darwin Initiative for particular activities funded by the Initiative. The Darwin identity has been exposed in Mali through the support to high profile initiatives such as the national reconciliation workshop which aired on prime time television, radio and was front-page news in all newspapers. There was no awareness of the Darwin Initiative in Mali among our partners before the project, but now there was interest in what was regarded as a new and novel source of funding from Britain. It has also received significant profile in the United States and Canada through The WILD Foundation and International Conservation Fund of Canada.

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)			0	
Consultancy costs			0	
Overhead Costs			0	
Travel and subsistence			0	
Operating Costs			+6.5	£1,060 from unspent contingency fund from "others" used for workshops
Capital items (see below)			0	
Others (see below)			-63.9	£1,060 unspent contingency fund used for workshops under "operating costs"
TOTAL				

Staff employed (Name and position)	Cost (£)
Susan Canney (Project Leader)	
Idrissa Ganame (Office Administrator)	
Ibrahim Maiga (Book-keeper)	
TOTAL	

Capital items – description	Capital items – cost (£)
Lap-top and printer	
Lap-top	
TOTAL	

7.2 Additional funds or in-kind contributions secured

Due to the conflict and sudden appearance of elephant poaching, the project had to extend its activities and raise funds for anti-poaching activities

Source of funding for project lifetime	Total (£)
International Conservation Fund of Canada	
USFWS	
Woodtiger	
Mali Government	
Buffet-ANPN for anti-poaching	
Convention on Migratory Species	
Others (Tusk, The Abraham Trust, Disney, IEF, St Louis Zoo, Friedman-French) for anti-poaching	
TOTAL	

Source of funding for additional work after project lifetime	Total (£)
UK-IWT (anti-poaching)	
International Conservation fund of Canada	
Elephant Crisis Fund (anti-poaching)	
The salaries, uniforms and equipment of 50 foresters by the Malian government	
TOTAL	

7.3 Value for Money

The project is excellent value for money given that it is working over an enormous area (the size of Switzerland) dealing with huge geo-political forces, with a modest budget for these tasks. It was the only organisation that continued to work in the area throughout the conflict, proving the resilience of its approach. It delivered multiple impacts throughout this area: protecting elephants, reversing natural resource degradation and loss of biodiversity; improving livelihoods; improving social relations; providing an occupation for the youth, preventing radicalisation and therefore contributing to many types of security. Without the project, the elephant population would either have been extirpated or well on the way to being so. All these things are possible because of an integrated multi-sectoral, socio-ecological approach that is adapted to the local context, which means that several goals can be achieved at once.

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>Outcome:</p> <p>Communities manage human-elephant coexistence and elephants become an integral part of natural resource management (NRM) and support local livelihoods in the Gourma through the generation of long-term capacity at all levels of decision-making.</p>	<p>Communities report a reduction in incidences of conflict.</p> <p>An intercommunal convention covering the whole of the elephant range enters law and protects elephant habitat.</p> <p>Pastoralist communities are implementing sustainable NRM that includes habitat protection and restoration.</p> <p>A participatory plan for agro-pastoral and agricultural communities is developed, and used to raise money for implementation.</p> <p>Projects & programmes working in the area include the consideration of elephants in their programmes.</p>	<p>Project reports on community consultation, workshops, and functioning of community systems; results of socio-economic and conflict surveys; the plan for agro-pastoral and agricultural communities; and habitat protection activities and monitoring.</p> <p>The legal texts of local and intercommunal conventions, designations of sylvo-pastoral reserves (Decret de classement and Cahier de charge), and the documents constituting resource management structures are formally signed and endorsed (Constitution d'Association).</p>	<p>Post-conflict community division can be sufficiently overcome</p> <p>Continued strong support from national, regional and local government, and limited turn-over of personnel.</p> <p>Sustained interest and participation of the local communities.</p> <p>Good collaboration with the newly constituted committee managing the extension of the World Bank's PCVBG-E.</p> <p>Funding is available for the duration of the project.</p>
<p>Outputs:</p> <p>1. A model is developed and implemented for the protection of the elephant range in pastoral areas that cover 60% of the elephant range.</p> <ul style="list-style-type: none"> • The integration of the 3 adjacent Karwassa communities into the Banzena process. • Extension of model to remaining pastoral communities. 	<p>1a. Community structures established and active.</p> <p>1b. Training courses delivered, effectiveness evaluated (see 16,19&20).</p> <p>1c. Reduction in incidences of harmful and illegal activities in project areas.</p> <p>1d. Reduction in humans & cattle at Banzena.</p> <p>1e. An increase in forest cover, healthy ecosystem indicator species, and game</p>	<p>1a. Signed conventions and other legal texts. Project reports on meetings & workshops.</p> <p>1b. Surveys to assess understanding and take-up to form the basis of future training.</p> <p>1c. Surveys to assess understanding of wider community.</p> <p>1d. Transect data from Banzena (already established).</p>	<p>Some of the remaining pastoral communities have expressed interest, but not all communities have yet been approached.</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	species at Banzena (longer term). 1f. Wider community aware and supportive of rules of resource use and acting accordingly. 1g. Income for the community from charging outsiders for resource use.	1e. Management committee records.	
2. A costed and phased participatory plan for the resolution of human-elephant conflict, whose implementation will serve as a model for the management of conflict in the agro-pastoral and agricultural communities found over 40% of the range.	A team of four to undertake: 2a. Socio-economic survey plus consultation of all communities using a combination of community meetings and household visits. 2b. A mapped assessment of conflict. 2c. Production of plan on the basis of findings. 2d. Final community workshop to share the plan.	2a. Report of findings plus a detailed and costed plan of action, that will serve as the basis for future fund-raising. 2b. Report of the final workshop.	That inter-ethnicity rivalry does not obstruct the process.
3. The establishment of an intercommunal convention covering the whole elephant range.	3a. 10 meetings (one per commune, followed by 3 of integration) to identify the elephant route and associated. 3b. Regulations, penalties, means of enforcement & integration with community systems of outputs 1 - 3.	3a. Project reports of the engagement process documenting the meetings involved. 3b. 2 signed intercommunal conventions, plus 1 covering the whole of the range.	That the enthusiasm for subsequent inter-communal conventions will be as keen as for the existing one.
4. Sustainable NRM (output 1) is supported by the establishment of community ecosystem protection initiatives such sylvo-pastoral or forest protection zones that increase resources.	4a. At least 5 areas of habitat are protected for regeneration. 4b. An additional 3 fire-breaks are built & maintained each year. 4c. Reduction in percentage of area burned. 4d. An increase in forest cover, healthy ecosystem indicator species, & game species (longer term).	4a. Boundaries are mapped using GPS 4b. Project visits & reports using data from. 4c. Completed patrol forms, and simple transect data. 4d. Periodic photographs taken from fixed positions.	That there are individuals willing to take responsibility for these within the community. That government foresters are able to undertake the monitoring involved.
5. Elephant protection activities conducted through: <ul style="list-style-type: none"> • Extension of vigilance cells across 	5a. Area of the elephant range covered by vigilance cells.	5a. Information gathered by vigilance cells. 5b. Activities undertaken by vigilance	That money can be raised for these.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>the elephant range.</p> <ul style="list-style-type: none"> Deployment of a second anti-poaching ranger post. 	<p>5b. Number of vigilance cell hubs.</p> <p>5c. Operation of a second ranger post.</p>	<p>cells.</p> <p>5c. Action resulting from operations of vigilance cells.</p>	
<p>6. Kick-starting and catalysing a process to extend the reconciliation process to the local level; ensure aid agencies are aware of the implications for their activities; and ensure that reconstruction activities are conducted with awareness of their social and environmental impact.</p>	<p>Attendees and outputs of two workshops:</p> <p>6a. 3-days for the Malian government at national-local.</p> <p>6b. 1 day resultant report presented to Mali's financial and technical partners.</p>	<p>6a. Measures of engagement during the workshops (workshop reports).</p> <p>6b. Reconciliation process taken to local level and involving local communities.</p> <p>6c. Mali's financial and technical partners including these considerations in their activities.</p>	<p>This is an ambitious activity, but even raising awareness of the issues is a positive outcome. Receptivity of Mali's financial and technical partners.</p>
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>1.1 Community meetings to integrate Karwassa communities into the wider Banzena initiative for community NRM</p> <p>1.2 Training of the wider Banzena community management committees in resource management administration and record-keeping</p> <p>1.3 Training of the Karwassa patrols in duties and monitoring</p> <p>1.4 Operation of community-government patrols</p> <p>1.5 Demonstration visits to other projects e.g. the PADESO project in Sokolo where community NRM systems have been used to mediate agriculturalist-pastoralist conflict</p> <p>1.6 Training of the community management committees and patrols established in remaining pastoral areas</p> <p>1.7 Radio broadcasts to inform wider communities of the new resource management systems</p> <p>1.8 Evaluation of functioning of community resource management systems with high-ranking members of the DNEF</p> <p>1.9 International meeting to share findings and define conditions for which the models developed are appropriate</p> <p>1.10 Final report & conference proceedings written, academic papers submitted</p> <p>2.1 Socio-economic study of the communities in the key conflict areas of the south and production of a participatory plan of action</p> <p>2.2 Community workshop to share plan</p> <p>3.1 Meetings held in each commune to identify the elephant migration route, key elephant areas, rules of resource use in these areas, plus the enforcement mechanisms</p> <p>3.2 Signature of overall convention covering the whole elephant range</p> <p>3.3 Inclusion of government technical services and administration in the convention process in order to finalise the legal texts</p> <p>4.1 Establishment of at least 5 habitat regeneration initiatives</p> <p>4.2 Construction of 3 firebreaks each year to protect community sylvo-pastoral reserves; and maintenance of existing fire-breaks</p> <p>4.3 Evaluation of ecosystem restoration initiatives</p> <p>5.1 Extension of vigilance cells across the elephant range</p> <p>5.2 Deployment of a second anti-poaching ranger post</p>			

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>6.1 A three day workshop for the Malian government at all levels ranging from Ministers to local councils to chart a way forward regarding community reconciliation, aid and reconstruction at the community level in the Gourma</p> <p>6.2 Half or one day meeting to present the results to Mali's financial and technical partners</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 in the last Financial Year 2014-2015	Actions required/planned for next period
<p>Goal/Impact:</p> <p>To ensure the historic migratory path of the Mali elephants is secure and unimpeded by human development, and that the elephants have stable access to the natural resources key to their survival – water and food – while avoiding human-elephant conflict.</p>		<p>Elephants prevented from extirpation despite no government capacity to stand against aggressive targeting by international trafficking networks over a remote area of 32,000km².</p> <p>Whole elephant migration route and key habitats protected in principle by an inter-communal convention and local conventions defining CBNRM implementation systems at varying stages of development across the elephant range. These resolve human-elephant conflict, improve livelihoods and several types of security and resilience. The details are listed under outputs below.</p> <p>For communities implementing CBNRM: improved pasture, forest regeneration, prevention of illegal hunting, protection of biodiversity and associated benefits as reported by communities (details below and text)</p> <p>See 4-minute video of brigade interviews as a summary of impact</p>	<p>Do not fill not applicable</p>
<p>Purpose/Outcome</p> <p>Communities manage human-elephant coexistence and elephants become an integral part of natural resource management (NRM) and support local livelihoods in the Gourma through the generation of long-term capacity at all levels of decision-making.</p>	<p>Communities report a reduction in incidences of conflict.</p> <p>An intercommunal convention covering the whole of the elephant range enters law and protects elephant habitat.</p> <p>Pastoralist communities are implementing sustainable NRM that includes habitat protection and restoration.</p>	<p>The number of deaths has remained at zero (the baseline was 5 and there were 2 in the first year of the project but none since). There are less reports of conflict but level of conflict is difficult to measure quantitatively due to false claims.</p> <p>A framework convention has been establishing the rights of communities to manage the resources of the Gourma has been established and signed; and</p>	<p>Do not fill not applicable</p>

	<p>A participatory plan for agro-pastoral and agricultural communities is developed, and used to raise money for implementation.</p>	<p>an intercommunal convention harmonised across the elephant range, although not yet signed as not all authorities have returned.</p> <p>All pastoral communities have been engaged but some are more active than others (see map of level of NRM, appendix 2), which is strongly correlated with the level of social cohesion (see graph in text and database in appendix 3). The most degraded areas have the lowest levels of cohesion.</p> <p>The participatory plan for agro-pastoral communities was finalised, and in the process 13 communities produced maps to determine their resource management systems. It has been used to raise money and engage other communities across the agro-pastoral south (see maps showing evolution of community engagement in appendix 1 and maps in appendix 4)</p>	
<p>Output 1. A model is developed and implemented for the protection of the elephant range in pastoral areas that cover 60% of the elephant range.</p> <ul style="list-style-type: none"> The integration of the 3 adjacent Karwassa communities into the Banzena process. Extension of model to remaining pastoral communities. 	<p>1a. Community structures established and active.</p> <p>1b. Training courses delivered, effectiveness evaluated (see 16,19&20).</p> <p>1c. Reduction in incidences of harmful and illegal activities in project areas.</p> <p>1d. Reduction in humans & cattle at Banzena.</p> <p>1e. An increase in forest cover, healthy ecosystem indicator species, and game species at Banzena (longer term).</p> <p>1f. Wider community aware and supportive of rules of resource use and acting accordingly.</p> <p>1g. Income for the community from charging outsiders for resource use.</p>	<p>NB Because of the need to rapidly extend community CBNRM and elephant protection measures across the elephant range, many project activities tended to contribute to several outputs at once, as for example 1a, 1b, and 4a-d are results applicable to several outputs.</p> <p>1a. Over the past year 305 people attended community meetings over 2 weeks to establish local NRM systems throughout the elephant range. A database has been compiled to assess the level of progress of CBNRM across the elephant range however this is only indicative due to the difficulty of defining a community. Of the 54 groups of communities so far entered in the database (representing about 75% of the total and not including those in Burkina Faso) that have engaged in NRM activities facilitated by the project, 61% have management committees, 87% have brigades, 52% have designated reserve pasture, 83% have protected forests and 41% have local conventions of some sort (see appendices 2 and 3), however many communities with high social cohesion have used the creation of community maps as their basis of NRM rather than a convention which they don't feel they need and have achieved high levels of NRM .</p>	

	% of communities			
Level (low to high)	1	2	3	4
Stage in convention process (1-3)	70%	15%	15%	
Social cohesion (1-4)	33%	11%	2%	54%
Level of NRM (1-3)	33%	13%	54%	

A manual has been produced describing the process of creating local conventions.

The communities of the Karwassa are among the best performing. The model

has been introduced to all pastoral communities who apply it to varying degrees (see above)

1b. Over the last year 528 people have been trained in aspects of resource management over 5 weeks. Effectiveness is best evaluated by the results in 1a.

1c. The Banzena socio-economic survey records that in the year since CBNRM began in the Banzena area, 9 tree cutters, 5 hunters and 13 vehicles had been apprehended by the brigades and handed over to the forester authorities. The brigades had also been raising awareness among the communities of how to combat bush-fire. It also shows that 83% of the local population thought that pasture had improved, 13% thought it had greatly improved, and 4% thought it had slightly improved. 84% thought this was due to the firebreaks, 14% thought it was due to good rains and 4% attributed it to the brigade patrols

1d. The number of cattle at Banzena was reduced from a local estimate of 22,000 in May 2010 to 700-1,500 in 2013 when, however sabotaged solar panels, a broken dam and poor rains in 2013 led to large numbers in 2014 & 2015. Despite this, due to strategic fire-break construction Banzena has not dried in either of these years, and the project has developed a strategy to recoup the pre-conflict situation there.

1e. Communities say that trees are regrowing and game species are increasing in number (see video) ultimately to be tested with satellite change analyses.

1f. The results of the socio-economic survey in the greater Banzena area show that 100% of the local population were aware of the existence of the local convention and its rules of resource use, whereas only 14% of the urban dwellers surveyed were aware.

The results of the socio-economic survey in the greater Banzena area show that 92% of the local population were very satisfied with stakeholder interventions to protect elephants, 3% were quite satisfied and 2% were dissatisfied (3% didn't say). Of the urban dwellers interviewed 38% were dissatisfied, 29% were quite satisfied and 33% were very satisfied.

1g. The system at Banzena ceased to function with the sabotage of the boreholes but Kazey-Kazey has been receiving around £320/year to allow 800 cattle to graze in its reserve pasture, and gains £530/year from the sale of hay. At least one community protects and adds to stands of *Acacia seyal* - it sells the Gum Arabic for £3.50/kg.

Activity 1.1. Community meetings to integrate Karwassa communities into the wider Banzena initiative for community NRM	Completed - The communities of the Karwassa are among the best performing
Activity 1.2. Training of the wider Banzena community management committees in resource management administration and record-keeping	Completed twice: once at the beginning of the grant period and again as a reinforcement in 2014 when the boreholes were repaired and the community moved back to the relocation area.
Activity 1.3. Training of the Karwassa patrols in duties and monitoring	Completed - The communities of the Karwassa are among the best performing
Activity 1.4. Operation of community-government patrols	Completed where possible. This has been operating through the brigades providing information to foresters and the military, which has resulted in arrests (see lc.) and a successful anti-poaching operation in 2014. However much of the time the tiny forester presence has been absent.
Activity 1.5. Demonstration visits to other projects e.g. the PADESO project in Sokolo where community NRM systems have been used to mediate agriculturalist-pastoralist conflict	Not completed due to high numbers of attacks and hijackings in the Sokolo area, near the Mauritanian boundary.
Activity 1.6. Training of the community management committees and patrols established in remaining pastoral areas	Completed (project reports available and manual attached)
Activity 1.7. Radio broadcasts to inform wider communities of the new resource management systems	Completed until the destruction of the radio stations by jihadists. In the third year messages were broadcast on regional radio stations.
Activity 1.8. Evaluation of functioning of community resource management systems with high-ranking members of the DNEF	Completed (DNEF reports available)
Activity 1.9. International meeting to share findings and define conditions for which the models developed are appropriate	Completed by participation (speaking at) the international IUCN SuLi /TRAFFIC/IIED/CEED/Austrian government meeting "Beyond Enforcement" with these goals and speaking at a subsequent meeting at the European Parliament. (Presentation, paper and proceedings available)
Activity 1.10. Final report & conference proceedings written, academic papers submitted	The conference described in 1.9 was not organised by the project due to the conflict and knock on impacts, however the project's experience was disseminated at the conferences described above. (Presentation, paper and proceedings available)
Output 2 A costed and phased participatory plan for the resolution of human-elephant conflict, whose implementation will serve as a model for the management of conflict in the agro-pastoral and agricultural communities found over 40% of the range.	<p>A team of four to undertake:</p> <p>2a. Socio-economic survey plus consultation of all communities using a combination of community meetings and household visits.</p> <p>2b. A mapped assessment of conflict.</p> <p>2c. Production of plan on the basis of findings.</p> <p>2d. Final community workshop to share</p>
	<p>2a. This was undertaken by a project-DNEF team (see report attached). It was interrupted by the conflict and hampered by the difficulty in travelling to some areas, but the process was immensely valuable.</p> <p>2b. See map in annexe</p> <p>2c. See plan in the survey report</p> <p>2d. The plan has been used at all workshops and meetings in the south to create NRM systems. The process of the study triggered 13 well-integrated communities to move along the process of NRM by producing maps (see report) and using these rather than local conventions</p>

	the plan.	
Activity 2.1. Socio-economic study of the communities in the key conflict areas of the south and production of a participatory plan of action		Completed (Study and plan attached)
Activity 2.2. Community workshop to share plan		Completed (project reports available)
Output 3. The establishment of an intercommunal convention covering the whole elephant range.	3a. 10 meetings (one per commune, followed by 3 of integration) to identify the elephant route and associated regulations, penalties, means of enforcement & integration with community systems of outputs 1 - 3	3a. Because much work had already been happening at the local level and there was already a relatively high level of awareness, 1 integration meeting lasting 7 days and attended by 80 people took place over the past year to harmonise the rules across adjacent groups of communes. Regulations, penalties, means of enforcement were determined through integration with local community systems, with some individuals engaged at both levels to ensure continuity. Project reports and a draft convention text are available.
Activity 3.1. Meetings held in each commune to identify the elephant migration route, key elephant areas, rules of resource use in these areas, plus the enforcement mechanisms		Because much work had already been happening at the local level and there was already a relatively high level of awareness, meetings for groups of communes were held to achieve cross-commune harmonisation.
Activity 3.2. Signature of overall convention covering the whole elephant range		This has not yet happened as only some government has returned to the Gourma and several Mayors are absent.
Activity 3.3. Inclusion of government technical services and administration in the convention process in order to finalise the legal texts		This has not yet happened as only some of these have returned to the Gourma and several Mayors are absent.
Output 4. Sustainable NRM (output 1) is supported by the establishment of community ecosystem protection initiatives such sylvo-pastoral or forest protection zones that increase resources.	<p>4a. At least 5 areas of habitat are protected for regeneration.</p> <p>4b. An additional 3 fire-breaks are built & maintained each year.</p> <p>4c. Reduction in percentage of area burned.</p> <p>4d. An increase in forest cover, healthy ecosystem indicator species, & game species (longer term).</p>	<p>4a. 52% of the 54 groups of communities from whom we have collected data (comprising about 85% of the total) have protected pasture and 83% have protected forests, including the continuous forest stretching from Feto Gassel to Masi, stretching just over 100km in the south of the elephant range. Two areas have been selected and plans devised for enclosed pasture to experiment with the cultivation of hay for sale and possibly the rearing of ostriches, however money has not yet been raised to pursue these initiatives.</p> <p>4b-d. An additional 436km of fire-breaks were built by hand this year. For the most part these have not been recorded by GPS due to their dispersed nature and the security situation. Satellite change studies are planned for the future to detect the impact of these initiatives on forests and area burned.</p> <p>4d. Communities report a reduction in hunting of game, particularly the near-threatened Dorcas gazelle and Denhams and Nubian bustards. A possible measure is the increase in prices of bushmeat in adjacent towns. 56% of the population thought the price increase for charcoal was due to CBNRM and 36% to less availability in general. The project had initially intended to train brigades to collect data but instead focused resources on extending structures for elephant protection across the elephant range as soon as possible.</p>

Activity 4.1. Establishment of at least 5 habitat regeneration initiatives	Completed (project reports available)	
Activity 4.2. Construction of 3 firebreaks each year to protect community sylvo-pastoral reserves; and maintenance of existing fire-breaks	Completed (project reports available)	
Activity 4.3. Evaluation of ecosystem restoration initiatives	Completed (project reports available, database of community NRM attached, the socio-economic survey in the Banzena area).	
<p>Output 5. Elephant protection activities conducted through:</p> <ul style="list-style-type: none"> • Extension of vigilance cells across the elephant range. • Deployment of a second anti-poaching ranger post (<i>not covered by Darwin funding</i>) 	<p>5a. Area of the elephant range covered by vigilance cells.</p> <p>5b. Number of vigilance cell hubs.</p> <p>5c. Operation of a second ranger post.</p>	<p>5a. 100% of the elephant range is covered by vigilance cells working with brigades (the 13% of groups of communities without brigades are outside the elephant range), an increase of 25% since the last report. There are over 600 brigade members, although they have not all yet been formally registered and so exact figures are elusive. All the young men in these communities who did not join the armed groups are either brigade members or associated with them as part of vigilance cells.</p> <p>5b. This is a difficult number to assess as hubs are related to communities and as previously mentioned the boundaries are difficult to determine, however to help measure progress the project is using a database to record activities undertaken by groups of communities, and currently has information for 54, estimated to represent about 75% of the actual number.</p> <p>5c. The slight reduction in security over the last period of the grant has meant that no anti-poaching ranger posts are yet functional although 10 new posts were constructed in 2014 (with Buffet-ANPN funding) and 50 newly recruited foresters are currently being trained to man them (with ECF funding).</p>
Activity 5.1. Extension of vigilance cells across the elephant range	Completed (project reports available)	
Activity 5.2. Deployment of a second anti-poaching ranger post	Anti-poaching ranger posts built but not yet manned (project reports available)	
<p>Output 6. Kick-starting and catalysing a process to extend the reconciliation process to the local level; ensure aid agencies are aware of the implications for their activities; and ensure that reconstruction activities are conducted with awareness of their social and environmental impact.</p>	<p>Attendees and outputs of two workshops:</p> <p>6a. 3-days for the Malian government at national-local.</p> <p>6b. 1 day resultant report presented to Mali's financial and technical partners.</p>	<p>6a. 62 participants attended this high-profile national workshop called <i>Reconciliation and post-conflict reconstruction in the Gourma region of Mali: towards a process to identify & implement the measures required for societal and environmental resilience</i>. They included high ranking officials from 11 Ministries, ex-Prime Ministers, retired generals, representatives of local government, NGOs and local communities over three days. The output was a report with detailed, phased action-plan.</p> <p>6b. This was officially launched at a half-day meeting/press-conference in July 2014 that attracted 18 national and local media, and was reported on prime-time television and radio in the 8 major languages spoken in Mali, and was front-page news in all the national newspapers, reaching a very wide audience very quickly. The support of the Darwin Initiative was prominent. In the following three days, 125 calls were received from all walks of life, congratulating the project on the importance of the initiative and calling for its implementation in full at local level. The</p>

		<p>project includes the importance of reconciliation in all its activities and its activities promote reconciliation through supporting the community cohesion required for successful CBNRM.</p> <p>Three local workshops were organised in the second half of 2014 at the request communities in the elephant range, each attracting many hundreds of people and enabling many people to voluntarily giving up fire arms, disclose arms caches and information on bandits, one instance of which led to the prevention of an attack on Douentza. The result was that the security situation improved in the south and central parts of the elephant range, markets re-opened and people travelled more freely, however this deteriorated again in 2015 partly due to the dilution of military presence in being deployed to deal with attacks elsewhere in Mali, many of which were trying to disrupt the imminent signing of the Peace Accord.</p>
<p>Activity 6.1. A three day workshop for the Malian government at all levels ranging from Ministers to local councils to chart a way forward regarding community reconciliation, aid and reconstruction at the community level in the Gourma</p>		<p>Completed (report attached)</p>
<p>Activity 6.2. Half or one day meeting to present the results to Mali's financial and technical partners</p>		<p>Completed (press cuttings, cd and dvd available)</p>

Annex 3 Standard Measures

We use these figures as part of our evaluation of the wider impact of the Darwin Initiative programme. Projects are not evaluated according to quantity of Standard. That is – projects that report few standard measures are not seen as being of poorer quality than those projects which can report against multiple standard measures.

Please quantify and briefly describe all project standard measures using the coding and format of the Darwin Initiative Standard Measures. Download the updated list explaining standard measures from <http://darwin.defra.gov.uk/resources/reporting/>. If any sections are not relevant, please leave blank.

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						
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)						
4d	Number of training weeks for postgraduate students						
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification(e.g., not categories 1-4 above)						
6a	Number of people receiving other forms of short-term education/training (e.g., not categories 1-5 above)	1,360	Malian				
6b	Number of training weeks not leading to formal qualification	125.5					
7	Number of types of training materials produced for use by host country(s) (describe training materials)	2				French	Brigade training manual, and guide to establishing local conventions

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)						
10	Number of formal documents produced to assist work related to species identification, classification and recording.						
11a	Number of papers published or accepted for publication in peer reviewed journals	1				English	
11b	Number of papers published or accepted for publication elsewhere	Many articles see publications					
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	1					Elephant deaths and poaching
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)						
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	1					
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be	at least 17					

	presented/ disseminated.						
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Physical Measures		Total	Comments
20	Estimated value (£s) of physical assets handed over to host country(s)		
21	Number of permanent educational, training, research facilities or organisation established		
22	Number of permanent field plots established	Exact number still being determined – see logframe and text	Local communities were supported to establish and protect areas of pasture (to be determined when GPS can be used). These, long with Elephants habitats were protected from bushfire by firebreaks created as one of major outputs for this project. A total of 2617km of firebreaks are now in place.

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	£1,099,716					

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.	√
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.	
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.	
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.	√
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.	
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.	

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.	√
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 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.	
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.	

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)
Blogpost / News story	Protecting the Mali Elephants from War. African Conservation Foundation, 2013	British	British	M	ACF, London	http://www.africanconservation.org/in-focus-current-threats/protecting-the-mali-elephants-from-war
Blogpost / News story	Concerns grow for Mali's elephants as war escalates Wildlife Extra, 2013	British	British	M	Wildlife Extra	http://www.wildlifeextra.com/go/news/elephants-mali-war.html#cr
Blogpost / News story	The War in Mali Isn't Any Good for Its Elephants Stefan Simanowitz, 2013	British	British	M	Vice Magazine. London	http://www.vice.com/en_uk/read/war-threatens-malis-elephants
Blogpost / News story	Mali's Fragile Elephant Population at Risk Stefan Simanowitz, 2013	British	British	M	Huffington Post	http://www.huffingtonpost.com/stefan-simanowitz/malis-fragile-elephant_b_2900108.html
Blogpost / News story	Caught in the Crossfire: Mali's Nomadic Elephants at Risk Stefan Simanowitz, 2013	British	British	M	Toward Freedom	http://www.towardfreedom.com/32-archives/environment/3098-caught-in-the-crossfire-malis-nomadic-elephants-at-risk
News story	Mali's Warzone Elephants Save Our Species, 2013	International	International		Save Our Species	http://www.sospecies.org/sos_news/success_stories/?11828/Malis-Warzone-Elephants
News story	Surviving the War for Mali's Elephants Save Our Species, 2013	International	International		Save Our Species	http://www.sospecies.org/sos_projects/mammals/mali_elephants/?12511/Surviving-the-War-for-Malis-Elephants
Newsletter article	Protecting Mali's Elephants Canney, S., 2013	British	American/ British	F	SCF, L'Isle, Switzerland	http://www.saharaconservation.org/IMG/pdf/Sandscript_13_Spring_2013_Standard.pdf
Journal article	<i>Engaging youth and communities: Protecting the Mali elephants from war.</i> Canney, S. & N. Ganame	British / Malian	American/ British	F / M	FAO / Nature and Faune, 28 (1) 51-55 Rome, IT	http://www.fao.org/docrep/019/as290e/as290e.pdf
Report	Reconciliation and post-conflict reconstruction in the Gourma region of Mali: towards a process to identify & implement the measures required for societal and environmental resilience. Ganame, N. & S. Canney. 2014	Malian / British	American/ British	M / F	The Mali Elephant Project	

Briefing paper	Regional Security, Community Stabilization & Natural Resource Protection: Peace, Reconstruction & Elephants for Mali. Canney, S. 2014	British	American/ British	F	The Mali Elephant Project	
Briefing paper	Empowering Communities to Conserve the Mali Elephants in Times of War and Peace Canney, S., 2014	British	American/ British	F	The Mali Elephant Project	
Briefing paper	<i>Development of draft urgent measures to address the upsurge of poaching of the Africa Elephant and illegal ivory trade: comments from The Mali Elephant Project for the African Elephant Summit, 2013</i> Canney, S. & N. Ganame. 2013	British / Malian	American/ British	F / M	The Mali Elephant Project	
Briefing paper	Preventing the development of a West African ivory route: a model of community & government empowerment protecting the Mali elephants during war and peace. Paper prepared for the London International Trafficking Symposium. Canney, S., 2014	British	American/ British	F	Zoological Society of London London	
Talk presentation PPT available	Elephant conservation in Mali: engaging with a socioecological system Canney, S. 2013	British	American/ British	F	International Congress in Ecology, London	
Talk presentation PPT available	The Mali elephants: GIS & conserving an iconic elephant population Canney, S. 2014	British	American/ British	F	King's College, London	
Talk presentation PPT available	Empowering Communities to Conserve the Mali Elephants in Times of War and Peace Canney, S. January, 2014	British	American/ British	F	Africa Biodiversity Collaborative Group, Washington	
Talk presentation PPT available	Empowering Communities to Conserve the Mali Elephants in Times of War and Peace Canney, S. September 2014	British	American/ British	F	Global Canopy Programme, Oxford	
Talk presentation PPT available	The Mali Elephant Project	British	American/ British	F	St Thomas School, London	
Talk presentation PPT available	Protecting elephants, biodiversity, livelihoods and people through community empowerment in Mali	British	American/ British	F	Oxford Centre for Tropical Forests	

Talk presentation PPT available	Protecting elephants, biodiversity, livelihoods and people: an integrated community-government response to combat wildlife crime in Mali S Canney and N Ganame	British/Malian	American/ British	F/M	Beyond Enforcement - IUCN Sustainable Livelihoods Specialist Group – IIED-Traffic	
Newsletter article	Mali Elephant Protection Brigade. eLeaf Newsletter, 2013	British/American	American	F	The WILD Foundation, Boulder, USA	http://archive.constantcontact.com/fs163/1102694216162/archive/1113288028120.html
Newsletter article	<i>Protecting elephants through promoting peace</i> Canney, S., 2014	British	American/ British	F	Defra- Darwin Initiative	http://darwin.defra.gov.uk/newsletter/Issue10February2014newsletterFINAL.PDF
Blogpost	Why do the local people protect the elephants? Canney, S., 2014	British	American/ British	F	The Mali Elephant Project	http://www.wild.org/blog/why-do-the-local-people-protect-the-elephants/
Blogpost	Protecting elephants through promoting peace Canney, S., 2013	British	American/ British	F	The Mali Elephant Project	http://www.wild.org/blog/protecting-elephants-through-promoting-peace/
Blogpost	Camels: the key to sustainable elephant conservation in the Gourma Canney, S., 2013	British	American/ British	F	The Mali Elephant Project	http://www.wild.org/blog/camels-the-key-to-sustainable-elephant-conservation-in-the-gourma/
Blogpost	Post-war in Mali Canney, S., 2013	British	American/ British	F	The Mali Elephant Project	http://www.wild.org/blog/post-war-mali/
Blogpost	How locals and conservationists saved the elephants of Mali amidst conflict and poverty Canney, S., 2013	British	American/ British	F	Mongabay	http://news.mongabay.com/2014/04/how-locals-and-conservationists-saved-the-elephants-of-mali-amidst-conflict-and-poverty/
Tedx talk	Punch Above Your Weight: the case of Mali Elephant Conservation	British	American/ British	F	TedxVail	http://bit.ly/KwOrxd
Video	Presentation at the 10th World Wilderness Congress, Salamanca Canney, S., 2013	British	American/ British	F	The Wild Foundation	https://www.youtube.com/watch?v=_LCrCa1YQ90
Video	Mali Elephant Project Canney, S., 2013	British	American/ British	F	The Wild Foundation	https://www.youtube.com/watch?v=-EadQ6Ut2K8#t=47
Technical report	Socio-economic Baseline Study of Lake Banzena Area, Gourma Ganame, N. (2013)	Malian	Malian/American	M	MEP	
Technical report	Socio-Economic Baseline Study for the South of the Elephant Range in Gourma, Mali	Malian	Malian	M	DNEF/ MEP	

	<i>Timbo, S. & Ganame, N. (2015)</i>					
Technical report	Décongestionnement de la mare d'abreuvement des éléphants: Rapport d'enquête de faisabilité d'un point d'eau au sud de la Mare de Banzena <i>Ganame, N. (2015)</i>	Malian	American/ Malian	M	MEP	
Briefing paper	Natural resource management in the Gourma of Mali: strategic interventions to promote local security Canney, S., 2015	British	American/ British	F	MEP	
Briefing paper	Regional Security, Community Stabilization & Natural Resource Protection: Peace, Reconstruction & Elephants for Mali Canney, S., 2014	British	American/ British	F	MEP	
Talk presentation	Protecting elephants, biodiversity, livelihoods & people through community empowerment in Mali. Canney, S., 2015	British	American/ British	F	Dept of Geography Oxford Uni. Oxford	http://www.tropicalforests.ox.ac.uk/sites/tropicalforests.ox.ac.uk/files/Susan%20Canney.pdf
Newsletter article	Mali's Elephants Under Threat Again Canney, S., 2015	British	American/ British	F	SCF, L'Isle, Switzerland	http://www.saharaconservation.org/IMG/pdf/Sandscript_17_Spring_2015_Standard_2.pdf
Blogpost	Slaughter at Indamane. Canney, S. May 2014	British	American/ British	F	MEP	http://www.wild.org/blog/slaughter-at-indamane/
Blogpost	Mali poachers caught!... A superb response to a tragedy. Canney, S, June 2014	British	American/ British	F	MEP	http://www.wild.org/blog/mali-poachers-caught/
Blogpost	Our team in Mali announces recommendations for post-war reconciliation; helping re-establish healthy communities & secure desert elephants. Canney, S., July 2014	British	American/ British	F	MEP	http://www.wild.org/blog/mali-team-helps-reestablish-healthy-communities-and-elephants/
Blogpost	The rocky road to reconciliation: when government fails to deliver, local communities must act. Canney, S., September. 2014	British	American/ British	F	MEP	http://www.wild.org/blog/rocky-road-to-reconciliation/
Blogpost	Protecting Mali's Desert Elephants: Two Steps Forward, One Step Back. Canney, S., February 2015	British	American/ British	F	MEP	http://www.wild.org/blog/protecting-malis-desert-elephants-two-steps-forward-one-step-back/
Blogpost	Elephant Poaching: The Local Context.	British	American/	F	MEP	http://www.wild.org/blog/elephant-poaching-the-local-

	Canney, S., April 2015		British			context
News story	Poaching in northern Mali threatens rare elephant.	Malian source	British	M	BBC London	http://www.bbc.co.uk/news/world-africa-31373711
News story	Elephant deaths in Mali blamed on poaching by extremist groups. Alex Duval Smith, 2015	British	British	F	The Guardian, London	http://www.theguardian.com/world/2015/feb/11/elephant-deaths-in-mali-blamed-on-poaching-by-extremist-groups
Radio story	Mali's elephants in crisis, Alex Duval Smith, 2015	British	British	F	BBC Radio 5	
Radio story – local & national	Reconciliation workshop, July 2014	Malian	Malian	M	ORTM	Available on request
TV – prime time news	Reconciliation workshop, July 2014	Malian	Malian	M	ORTM	Available on request
Manual	Brigade training, N Ganame *	Malian	American/ Malian	M	MEP	*
Manual	L'élaboration d'une Convention Locales Gestion des Ressources Naturelles. N Ganame *	Malian	American/ Malian	M	MEP	*

Annex 6 Darwin Contacts

To assist us with future evaluation work and feedback on your report, please provide details for the main project contacts below. Please add new sections to the table if you are able to provide contact information for more people than there are sections below.

Ref No	1735
Project Title	Developing long-term stakeholder capacity for elephant conservation in Mali
Project Leader Details	
Name	Susan Canney
Role within Darwin Project	Project Leader
Address	Department of Zoology
Phone	
Fax/Skype	
Email	
Partner 1	
Name	Timbo Soumana
Organisation	Direction Nationale des Eaux et Forets
Role within Darwin Project	Key technical partner and main contact point in DNEF
Address	
Phone	
Email	
Partner 2 etc.	
Name	Alassane Boncar Maiga
Organisation	Inspecteur-adjoint de l'Environnement
Role within Darwin Project	
Address	
Fax/Skype	
Email	