



Darwin Initiative Annual Report

2008

Darwin Project Information

Project Ref Number	15/029
Project Title	Certifying Peccary Pelts in Peru: Catalysing Community-based Wildlife Management
Country(ies)	Peru United Kingdom
UK Contract Holder Institution	University of Kent
UK Partner Institution(s)	Durrell Institute of Conservation and Ecology (DICE)
Host country Partner Institution(s)	Instituto Nacional de Recursos Naturales (INRENA), CITES-Peru, Wildlife Conservation Society – Peru (WCS), WWF-Peru, Universidad Nacional de la Amazonia Peruana (UNAP), Universidad Particular de Iquitos (UPI)
Darwin Grant Value	£177338
Start/End dates of Project	July 2006/July 2009
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	Reporting period (1 April 2007-31 March 2008) Annual Report Number 2
Project Leader Name	Dr. Richard Bodmer
Project website	http://www.kent.ac.uk/anthropology/dice/research/peccary
Author(s), date	Richard Bodmer, 30 April 2008 Tula Fang, 30 April 2008

1. Project Background

Bushmeat hunting is an important economic resource that has been traditionally used by rural poor of the Peruvian Amazon. If well managed, bushmeat hunting can provide long-term socio-economic benefits to local communities and help conserve Amazonian biodiversity through maintaining intact rainforests. If poorly managed, bushmeat hunting will lead to the extirpation of animal populations, reduced socio-economic benefits that rural people obtain from wildlife, and a decreased value of intact forests. Subsistence hunting is permitted in Peru only in rural and native communities according to Article 230 of the *Reglamento de la Ley Forestal y de Fauna Silvestre* (Forestry and Wildlife Law 2001) and the consumption or the sale of bush meat is restricted to settlements of fewer than 3,000 inhabitants. Communities are permitted to sell peccary pelts if the animals were hunted for subsistence. Peccary pelts are exported to European countries, including the UK, where they are used in the manufacture of luxury gloves and shoes. The peccary pelt certification programme would act as a mechanism to add value to the pelts in communities that manage their bushmeat hunting sustainably, through a process that certifies those communities that meet the standards of certification. Bush meat hunting of tropical forest mammals is commonplace in the Peruvian Amazon and currently one of the greatest conservation issues in tropical forests. However, there is currently no mechanism to manage subsistence hunting in the Peruvian Amazon. The peccary pelt certification programme will be a mechanism to manage subsistence hunting using the international trade in peccary products. Local communities will only become certified if they manage all of their bush meat hunting sustainably. The project is setting up a pilot programme for peccary pelt certification in the Peruvian Amazon of Loreto with participating communities in the proposed Greater Yavari reserve, Tamshiyacu-Tahuayo Community Reserve and Pastaza-Tigre RAMSAR basin (Map 1).

2. Project Partnerships

Collaboration between UK and host country institutions

INRENA

The Instituto Nacional de Recursos Naturales (INRENA), Department of Biodiversity Conservation, is the Peruvian government office responsible for implementing the CBD (CBD focal point in Peru) and CITES, and is responsible for managing the peccary pelt trade in Peru. Collaborations with INRENA, both at the national level in Lima and the regional level in Iquitos were realised with the Darwin project and the other host country partners. INRENA has been, and continues to be, involved in many aspects of the Darwin funded peccary pelt certification programme since its inception and during this past year. Many meetings were held between INRENA and the Darwin Project (through DICE) during the reporting period. The major collaborations included 1) INRENA requesting DICE to help determine the peccary pelt quotas for Loreto, Peru for 2008, 2) INRENA participating in the formation of the peccary pelt certifying committee, which was facilitated by the Darwin project, 3) staff from INRENA participated in the field course on Wildlife Management and DISTANCE Analysis funded by the Darwin project, 4) meeting between INRENA and DICE were held at the CITES COP to discuss the Darwin project on peccary pelt certification, and 5) INRENA actively participated in the development and publication of the Peccary Pelt Certification Manual/Book.

CITES- Perú

The Peruvian Scientific Authority of the International Convention on the Trade in Endangered Species (CITES) is responsible for evaluating the authorised peccary pelt quotas granted by INRENA and to oversees exportation. There were close collaborations between the Scientific Authority of CITES and the Darwin project. The co-PI of the Peccary Pelt Certification Project, T. Fang, gave a presentation of the pilot programme during the Fourteenth meeting of the Conference of Parties of CITES in the Hague (Netherlands), between 3-15 June 2007. The peccary pelt certification programme was used as a case study during that meeting. In addition, meetings between CITES authorities, DICE and the host country partners were held in Iquitos during the process of forming the certifying body. CITES was also involved with the preparation of the Peccary Pelt Certification Manual/Book.

Wildlife Conservation Society (WCS-Peru)

The Wildlife Conservation Society (WCS-Peru) is actively collaborating with DICE in the implementing the Darwin project. WCS-Peru helped co-ordinate the peccary pelt certification workshops and field-based courses on the certification guidelines and methodologies with local communities in the Yavari and Tamshiyacu-Tahuayo community reserve. In addition, meetings between WCS, DICE and the other host country partners were held in Iquitos during the process of forming the certifying body. WCS also participated closely with the writing and publishing of the Peccary Pelt Certification Manual/Book.

World Wildlife Fund (WWF-Peru)

The World Wildlife Fund (WWF-Peru) collaborated closely with DICE in implementing the Darwin project. World Wildlife Fund (WWF-Peru) helped co-ordinate the peccary pelt certification workshops and field-based courses on the certification guidelines and methodologies with local communities in the Pastaza RAMSAR sites. In addition, meetings between WWF, DICE and the other host country partners were held in Iquitos during the process of forming the certifying body. WWF also participated with the Peccary Pelt Certification Manual/Book.

UNAP

The Universidad Nacional de la Amazonia Peruana (UNAP) participated closely with DICE and the Darwin project. Undergraduate and postgraduate students from UNAP were involved with field courses and field training as part of the Darwin project. Students participated with the wildlife censuses, community-based activities and data analysis. Staff from UNAP also participated in meetings during the process of forming the certifying body.

Continuing its new links to similar projects formed during the last reporting period

Wildlife Management in Forestry Concessions

The project continues its collaboration with the INRENA and WWF-Peru initiative on implementing wildlife management in forestry concessions. The Darwin project has provided the guidelines that will be used in the forestry concession project. Currently, INRENA is working with a proposal to develop wildlife management in forest concessions since the government forest concessions strategy requires transformation and has requested the Darwin project for advice.

Reproduction and Health in Bush Meat Species

The certification project continues its collaboration with Dr. Pedro Mayor of the Autonomous University of Barcelona on researching the reproduction of peccaries in the Peruvian Amazon. Dr. Pedro Mayor is consolidating his project with INRENA.

New links formed during this reporting period

Universidad Particular de Iquitos (UPI)

Undergraduates from the Department of Ecology and Conservation from the Universidad Particular de Iquitos (UPI) participated in field courses and field training activities. UPI has recently begun its academic division in ecology and conservation and is set to be an important institution for this field. UPI plans to continue its collaboration with the Darwin project over the coming year.

3. Project progress

3.1 Progress in carrying out project activities

Activities related to the Output: Local communities implementing community-based wildlife management

The purpose of this project is to catalyse community-based wildlife management in the Peruvian Amazon through the implementation of a pilot programme for peccary pelt certification. During the first year of the Darwin project local communities were selected and workshops and training courses were held to start the process of involving communities in more sustainable wildlife management. During the second year of the project, covering this reporting period, the wildlife management implemented by the communities was developed further with the intention of getting communities ready to apply for certification. This involved workshops and extension activities in the communities.

Interactive dialogs were used to help communities develop and implement wildlife management plans and to find out peoples' perspectives on converting unsustainable hunting to more sustainable hunting. Wildlife management workshops and extension activities included: 1) presentation of the objectives of the workshop and activities, 2) evaluating the involvement of communities in wildlife management activities, 3) assisting the communities in developing and implementing community-based wildlife management plans, 4) helping communities set up and implement hunting registers, and 4) monitoring of wildlife populations.

Hunting registers are a key component of community wildlife management plans and have been implemented in the communities involved with the peccary pelt certification programme. Hunting registers can be used to calculate Catch-per-Unit-Effort (CPUE) that can be used to evaluate the abundance of wildlife species and to measure trends in wildlife populations.

Four Peruvian biologists, Alfredo dos Santos, Luis Moya, Annie Escobedo and Mary Inga continued to work with the communities of the Pastaza river basin in the peccary pelt certification programme. Workshops on wildlife management were conducted in the communities of Puerto Tangama, Puerto Barranquillo, Ihuacui Cocha, San Ramon and Puerto America in the Pastaza river basin during the months of April- May 2007. As a result of the workshop there are 24 hunting registers in the communities of the Pastaza river basin were involved.

In September 2007 and January 2008 wildlife extension activities were conducted with the communities of Puerto Tangama, Puerto Barranquillo, Puerto América, Ihuacui Cocha and San Ramón (Pastaza river basin). All five communities are actively participating in the peccary pelt certification programme and plan to continue their wildlife management activities. They have made good progress towards certification, but still require more time before applying to the certifying body, because non-hunted areas still need to be consolidated.

In August 2007, 4 Peruvian biologists, Claudia Rios, Zina Valverde, Kelly Moya and Camila Pérez were selected to evaluate the progress of the peccary pelt certification programme in the Yavari and Tamshiyacu-Tahuayo sites. The project leader, and host country co-ordinator, Tula Fang, worked with the biologists in selecting and elaborating workshop materials for the communities.

Interviews were used to co-ordinate the evaluation workshops with local authorities of each community. A letter of invitation to participate in the workshop was sent to each authority. The dates of the evaluation workshop were then established during the communal assembly. Interactive dialogs were used for the development of the evaluation workshop as follows: 1) presentation of the objectives of the workshop 2) introduction of the main topics 3) re-capitulation of the wildlife management guidelines (review), 4) verification of the fulfilment of the wildlife management guidelines and 4) closure of the workshop. Interactive dialogs were also used to review the wildlife management guidelines. The method allows for interaction with people in an informal manner, and participants can contribute with valuable information.

Two workshops were held during the months of June–August 2007 to evaluate the progress of the participant communities and determine if they were close to applying for certification. The communities included Nueva Esperanza and Carolina in the Yavari river basin, and El Chino, San Pedro, Buena Vista and Diamante-7 de Julio in the Tahuayo-Blanco river basin.

A total of 73 local people participated in the workshops. Workshop materials, including explanatory booklets, workshop programmes, and other materials were elaborated by the project leader, host country co-ordinator and the 4 Peruvian biologists working on the project. The workshops carried out in the Tahuayo-Blanco basin determined that these communities were advanced in incorporating and implementing wildlife management guidelines in their communal agreements and are close to being certified. These communities have begun the paperwork to apply for certification. However, the communities of Nueva Esperanza and Carolina in the Yavari Miri basin are still in the stage of implementing wildlife management plans as part of the certification programme and require more time before applying for certification.

Participatory activities were used to relate with the participants. The participants were assigned to work together in groups and each group had a representative of the community. This participatory dynamic was applied for the up-dating of the hunting and non-hunting areas.

Activities related to the Output: Pilot programme of peccary pelt certification in place

Another key aspect of the peccary pelt certification programme is to understand the pelt trade and how it relates to bushmeat use in terms of economics and chain of custody.

In 2007 the movement of the peccary pelts in Loreto was investigated to determine the chain of custody of peccary pelts in Loreto. The maximum sustainable quota of peccary pelts for 2007 was 29,374 for *Tayassu tajacu* and 29,168 for *T. peccary* set by INRENA. The Darwin assisted the Peruvian government in establishing the current sustainable quota for peccaries in Loreto.

In August 2007 the commercialization of peccary pelts was studied in Iquitos, which is the major collection centre in the Peruvian Amazon. Three middlemen are collaborating with the project to evaluate the current sale of peccary pelts. The middlemen work with the national tanneries in Lima and Arequipa and the collaboration of middlemen is key for moving certified pelts within the chain of custody.

Between September 2006- August 2007 a study on the use of bushmeat was carried out in the markets of Iquitos which included: a) monitoring the sale of bushmeat in the urban markets of Iquitos, b) determining what wildlife species are being sold in the Iquitos market, c) determining the origin of the bushmeat being sold, d) evaluating seasonal fluctuations in the sale of wild meat in the markets of Iquitos, and e) propose conservation strategies for regulation of bushmeat sales.

The methods included informal interviews and a registry of sales of the bushmeat species. The information was collected in the markets Modelo and Belen in Iquitos. Visits were made to the Belen market on Mondays, Wednesdays, Fridays and Sundays. Whereas, visits were made to the Modelo market on Tuesdays, Thursdays and Saturdays.

The peccary pelt certification programme is based on a set of wildlife management guidelines that communities need to follow to attain certification. Between May-September 2007 a study was conducted to improve and refine the guidelines for peccary pelt certification by incorporating more biological information on natural population fluctuations, on the maximum margin of harvest for game species and on the size of source areas.

Distance sampling and CPUE were used to obtain estimates of population density and examine for the effects of natural fluctuations on game animals. Results showed that the white-lipped peccary goes through natural population fluctuations. During peak populations of white-lipped peccary, collared peccary populations become smaller, and during low populations of white-lipped peccary, collared peccary populations become larger, presumably due to competitive

interactions. These natural fluctuations need to be incorporated into the sustainability analysis and the calculation of the peccary pelt quotas.

The socio-economic and cultural reality of local Amazonian communities needs to be incorporated into the wildlife management guidelines. One of these realities is that hunting of species vulnerable to overharvesting will probably never be eliminated totally, and some hunters will continue to occasionally take these species. Therefore, the wildlife management guidelines needs to consider the permissible number of individuals of species vulnerable to overhunting that can be taken by local communities. The maximum sustainable harvest quota at different observed densities was calculated from data on productivity and theoretical values of the maximum proportion of production that can be harvested for each species. To allow future predictions of sustainable quotas for a given population density, a regression equation was calculated to describe the relationship between female population density and maximum possible hunting offtake. The dependent variable was the maximum number of individuals/ km² that could be harvested as calculated from the harvest models [$H=0.5D(Y*g)(0.4)$]. The regression relationship was used to calculate the maximum sustainable quota for a given density.

The Vortex software 9.71 was used to investigate the predicted size of source areas by calculating the population size required to maintain a population with zero probability of extinction over 50 years. To calculate the minimum area required to maintain this population, the lowest initial population size was divided by the current density. This are was then used to estimate the size of source areas required by the wildlife management guidelines.

The formation of the certifying committee is an important step towards implementing the peccary pelt certification programme. During 2007, meetings were held in Iquitos and Lima on the best way to proceed with the certifying committee. In December 2007, a Certification Committee was formed with members of different institutions from IIAP, IVITA, WCS, CITES and INRENA who all agreed to be part of the Certification Committee to evaluate certification requests from local communities, grant certification, and monitor certified communities. The Darwin project facilitated the formation of the Certification Committee and in December held a workshop with its members to inform and discuss all aspects of the peccary pelt certification programme and the responsibilities and workplan of the committee.

The implementation of the peccary pelt certification programme will require dissemination of the background to certification, the mechanisms of implementing certification, and the socio-economic and biodiversity justification for certification. This information needs to be available to local communities, NGO's, government offices, and the public in general. A comprehensive manual, in the form of a book, has been prepared on the peccary pelt certification programme as part of the Darwin project. The manual is being published in hard copy in Lima, Peru and will also be available through the peccary pelt certification web site. The manual was prepared in collaboration with all of the project partners.

Activities related to the Output: Local professionals have capacity to implement the peccary pelt certification programme

The Darwin project realises that capacity building within Peru will be important for the full implementation of the peccary pelt certification programme. Peruvian students and professionals were trained in community-based wildlife management and wildlife monitoring techniques and how they relate to the peccary certification programme.

In March 2008 a field-based course for capacity building in wildlife management and DISTANCE was held for students and professionals of conservation and management from different institutions including UNAP, UPI, WCS, Universities of Lima and INRENA. The field-based course was held in the Pacaya Samiria National Reserve and had a total of 12 student participants and 6 project participants.

During August 2007, September 2007 and December 2007, Peruvian students from UNAP and UPI were involved with capacity building field activities related to the peccary pelt certification programme during field based expeditions.

A Peruvian MSc student, Pedro Perez, completed his MSc studies in September 2007 at Durrell Institute of Conservation and Ecology (DICE), University of Kent in International Wildlife Trade. Pedro's dissertation was on "Refining the guidelines of the peccary pelt certification programme". Pedro received a Distinction for his thesis and a Merit overall.

In August 2007, a Peruvian MSc student, Claudia Ríos, who works with community-based wildlife management and the peccary pelt programme was selected for the DICE MSc programme in International Wildlife Trade and in September 2007 she began the MSc programme. Claudia will conduct her dissertation on "Evaluating the peccary pelt certification programme in local communities of the Peruvian Amazon". Her research will assist the certifying programme by assessing the implementation of certification guidelines in participant communities, determine stakeholder attitude toward implementing the guidelines, determine the limitations and difficulties of setting up the guidelines in local communities, determine the impact of certification on wildlife numbers and revise the certification guidelines in accordance with the realities of local communities.

Monitoring wildlife populations is key to determining the impact of community-based wildlife management for biodiversity conservation. Wildlife monitoring was conducted in the field sites during April, May, June, July, August, September and December 2007 and January and March 2008. Eighty students from Peru, the UK, Canada, and the USA participated with the wildlife monitoring activities. Terrestrial wildlife transects were used for monitoring wildlife populations using DISTANCE and fixed width methods.

3.2 Progress towards Project Outputs

The project has three outputs that include 1) Pilot programme of peccary pelt certification in place, 2) Local communities implementing community-based wildlife management, and 3) Local professionals have capacity to implement the peccary pelt certification programme.

Output: Pilot programme of peccary pelt certification in place

The peccary pelt certification programme is currently in place as a pilot programme at the local and national levels. The major governmental and NGO's stakeholders are participating with the pilot programme. The focal point in Peru of the CBD and CITES (INRENA) are actively involved with the certification programme and form part of the Certification Committee. The major NGO's in Peru that work on wildlife conservation, WCS-Peru and WWF-Peru, are also actively involved with the pilot programme both in the field and with the Certification Committee. Local communities are implementing wildlife management plans and are making progress towards certification, to varying degrees. Some communities are in the process of applying for certification to the Certification Committee. The guidelines for peccary pelt certification have been refined to take into consideration natural fluctuations in animal populations, the permissible limits of hunting species vulnerable to overhunting, and a mechanism to estimate the size of source areas. A book is being published on peccary pelt certification which will enable the programme to expand to more communities and involve a greater number of NGO's.

The peccary pelt certification programme also has the acceptance of the CITES International office and is beginning to have an impact on the European pelt industry. Indeed, in January 2008 the European company Ines Gloves wrote an email to the leader of the project looking for information about the purchase of certified peccary skins for gloves and their interest to purchase peccary products only from certified companies/tanneries. This enquirer shows that interest is growing in Europe in people to buy certified products from peccaries.

This output is on target for the close of the project. National and international bodies recognise that peccary pelt certification is a mechanism to manage bushmeat hunting in the Peruvian Amazon, using community-based wildlife hunting linked to added value economics of the peccary pelt through certification.

The means of verification are functioning, and include workshop reports, field reports, and technical reports, which are included on a separate CD as Annex 3.

The assumptions still hold. Peccary pelts are still legally exported from Peru, and subsistence use of bushmeat by local communities is still an important activity. As mentioned above, all the major stakeholders are involved with the pilot programme.

Output: Local communities implementing community-based wildlife management

Local communities are implementing more sustainable wildlife management as a result of the Darwin project on peccary pelt certification. Workshops and community field-based courses were implemented in accordance with the implementation timetable and output schedule. The outputs stated a minimum of 6 communities and the project is currently working with 11 communities.

The communities of the Tamshiyacu-Tahuayo Community Reserve have developed and implemented their wildlife management plans in accordance to the guidelines for peccary pelt certification, including 1) set hunting quotas on species not vulnerable to overhunting, 2) greatly decreased the hunting of species vulnerable to overhunting, 3) set up hunting registers that incorporate CPUE, 4) collaborated with biologists in evaluating the sustainability of their hunting using the unified harvest model, 5) set up wildlife habitat management especially as it relates to palm trees, and 6) set aside non-hunted areas as sources. These communities are in the process of applying for certification to the Certification Committee.

The communities of the Yavari Miri and Pastaza sites have developed their management plans and are in the process of implementation. They have made significant progress over this past reporting period. Both sites have complications with timber extraction, and the hunting carried out by timbermen or by community members for the timber activities.

This output is on target for the communities of the Tamshiyacu-Tahuayo Community Reserve, but is slightly behind for the Yavari Miri and Pastaza areas. Thus, the pilot programme will be tested more fully with the communities of the Tamshiyacu-Tahuayo sites.

The means of verification are functioning, and include workshop reports, field reports, and technical reports, which are included on a separate CD as Annex 3.

The assumptions still hold true for this output. Subsistence bushmeat hunting by local communities is legal in the Peruvian Amazon and communities consider bushmeat an important livelihood resource.

Output: Local professionals have capacity to implement the peccary pelt certification programme

The capacity building activities of the project are important for the full implementation of peccary pelt certification. The transfer of skills from DICE to Peruvian students and professionals included field based courses, field based wildlife monitoring expeditions, and MSc training.

The means of verification are functioning, and include field reports and an MSc thesis which are included on a separate CD as Annex 3.

This output is on target for the close of the project. The capacity building activities, including university level field-based courses and MSc training at DICE were completed according to the implementation timetable and output schedule.

The assumptions still hold true for this output. DICE has an active MSc programme on International Wildlife Trade and there are now two Peruvian Universities in Iquitos that have academic programmes related to wildlife conservation.

3.3 Standard Measures

Project Standard Output Measures

Code No.	Description for year 2	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
2	01 Peruvian student finished training at DICE for MSc in International Wildlife Trade		2			
4A	01 Peruvian student began training at DICE for MSc in International Wildlife Trade					
4B	12 Peruvian students attended a 2 week training course		12			
6A	8 Peruvian biologist trained 2 weeks		8			
6B						
7	Manual/Book: Certificación de pieles de pecaries (Tayassu tajacu y t. pecari) en la Amazonía peruana: una estrategia para la conservación y manejo de fauna Silvestre en la Amazonia peruana Field Manuals: 1. Guía para implementar la certificación de pieles de pecaries en las comunidades rurales de la Amazonia Peruana. 2. Guía para entrenamiento en metodologías participativas de lineamientos de manejo de fauna Silvestre via la certificación en comunidades rurales. Richard Bodmer		3			
8			24 weeks			
14 B	11 workshops organised by project with 97 participants		11			

17A	A website was maintained to disseminate the peccary pelt certification programme WCS/G&B Moore	1
23	Foundation \$10,000 WWF-Peru Program \$12,000	\$22,000

In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Mark (*) all publications and other material that you have included with this report.

Publications

Type *	Detail (title, author, year)	Publishers (name, city)	Available from (e.g. contact address, website)	Cost £
Peccary pelt certification manual/book*	Tula Fang, Richard Bodmer, Pablo Puertas, Pedro Mayor, Pedro Perez, Rosario Acero and David Hayman	Wust Editions, Lima, Peru	FundAmazonia and DICE	free

3.4 Progress towards the project purpose and outcomes

The purpose of this project is to catalyse community-based wildlife management in the Peruvian Amazon through the implementation of a pilot programme for peccary pelt certification.

The first measurable indicator is that local communities gain certification through the pilot programme. Local communities of the Tahuayo-Blanco basin have set up wildlife management plans and incorporated the guidelines in accordance with the certification programme.

The Certification Committee has been formed according to schedule and is ready to evaluate and supervise local communities applying for certification.

The second indicator is that local communities gain added economic value of peccary pelts through certification. Communities understand the economic value they can attain through certification as a result of the workshops and field-courses. Communities have not yet gained added economic value, since none have yet to be certified. The added value will be in an experimental phase after communities become certified.

The third indicator is an increase in populations of wildlife species in hunting grounds of certified communities. Baseline population estimates have been initiated as part of the annual activities, including wildlife monitoring expeditions with student involvement. This baseline data will be used to evaluate the status of wildlife populations as communities implement wildlife management plans and become certified.

There are important assumptions for the project. The first assumption is that rural communities have discount rates that permit sustainable use of wildlife resources. This assumption continues

to hold true and rural communities continue to be interested in wildlife management for their future.

The second major assumption is that there are environmentally aware consumers in European countries that maintain a demand for peccary leather. The project received a letter from an European company requesting information about certified peccary gloves and peccary products from certified sources: tanneries and suppliers. This assumption continues to be maintained since European consumers continue to be environmentally aware and demand for peccary products in Europe continues.

The third assumption is that wildlife species increase when bushmeat hunting is managed. This assumption still stands and indeed, recent studies in collaboration with this project has shown that wildlife species in the Lago Preto Conservation Concession and Pacaya-Samiria National Reserve have increased as a result of communities participating in wildlife management programmes.

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

The peccary pelt certification programme aims to manage bushmeat hunting sustainably, both in terms of biodiversity and socio-economic benefits. Sustainable use of wildlife will have long-term socio-economic benefits to local communities, by providing food and income. However, many local communities are unable to convert non-sustainable bushmeat hunting to more sustainable bushmeat hunting, because of the economic costs involved. The peccary pelt certification programme intends to provide added economic benefits to those communities who convert non-sustainable hunting to more sustainable hunting, and allow communities to change their hunting patterns. Likewise, the peccary pelt certification programme is based on a set of guidelines that would enhance biodiversity conservation on three different levels. Firstly, species would be hunted more sustainably as a means of maintaining species populations to avert local extinctions. Secondly, wildlife habitat would be conserved with all of its diversity. Thirdly, fully protected source areas would be incorporated into community-based wildlife management plans, which would act as protected areas that are in agreement with the local communities.

The project is making progress towards these conservation goals. Local communities are implementing community-based wildlife management plans with the aim of gaining certification. Non-hunted source areas are being set aside, wildlife habitat is being conserved, and species are being hunted more sustainably. The next stage will require certification of communities through the Certification Committee, and setting up a mechanism to provide added economic value of certified pelts back to the communities.

4 Monitoring, evaluation and lessons

Field reports were used to monitor the outputs and activities.

During the reporting period the following field reports were produced in Spanish:

- 1) Training on the Participatory Methodologies of the Peccary Pelt Certification (*Tayassu tajacu* y *T. pecari*) Guidelines Pilot Programme, carried out in El Chino, San Pedro, Buena Vista y Diamante-7 de Julio communities (Rio Tahuayo- Qda Blanco), May 2007. By Tula Fang, Zina Valverde and Lourdes Ruck
- 2) Training on the Participatory Methodologies and the Wildlife Management Guidelines by the Peccary Pelt Certification (*Tayassu tajacu* y *T. pecari*) Pilot Programme, carried out in Nueva Esperanza y Carolina (Rio Yavari-Mirin), June 2007. By Tula Fang, Annie Escobedo and Maribel Recharte
- 3) Third Field Report: Communal Conservation of the Wetlands-Pastaza River, October 2007. By Alfredo Dosantos and Mary Inga.
- 4) Workshop on the Evaluation of the Peccary Pelt Certification Pilot Programme into four communities from the buffer area of Tamshiyacu-Tahuayo Regional Communal Reserve, January 2008. By Tula Fang, Zina Valverde, Claudia Rios, Camila Perez and Kelly Moya

- 5) Training on the Wildlife Management and Distance Method lead to students and professionals, carried out between 06 and 19 of March, 2008 (Samiria River– Tacshacochoa). By Richard Bodmer, Pablo Puertas and Pedro Perez.
- 6) Evaluating the Peccary Pelt Quota for Loreto for 2008. By Richard Bodmer and Tula Fang.
- 7) List of pelt collector in Iquitos, August 2007. By Tula Fang and Kelly Moya
- 8) Formation of the Provisional Certificate Committee: Peccary Pelt Certification (*Tayassu tajacu* y *T. pecari*) Pilot Programme in the Peruvian Amazon, December 2007. By Tula Fang
- 9) Monitoring of the bushmeat trade in Iquitos markets, April 2008. By Kelly Moya.

There are 11 rural communities involved with the programme who are being monitored by project staff during regular visits. Wildlife management plans are being monitored through regular visits of project staff to the local communities. 11 communities have wildlife management plans in place.

The prices of pelts being bought and sold is being monitored through regular visits to the communities.

Wildlife censuses using DISTANCE methods are being used to monitor the wildlife populations. Wildlife censuses have been conducted in the Tahuayo-Blanco, Yavari Miri and Pastaza sites. Censuses will continue to be conducted in all three river systems.

The lessons learned include the following:

Local communities are interested in participating with wildlife management plans as part of the peccary pelt certification programme, as a way to secure wildlife resources for the future and attain added value of their peccary pelts.

The Peruvian government and Peruvian based NGO's are interested in collaborating with the peccary pelt certification programme over the long term, and there is strong buy in from the stakeholders.

Wildlife management needs to be set up in timber concessions, not only in local communities.

Middlemen and tanneries are interested in the peccary pelt programme, but will require certified communities before they can be fully involved.

INRENA and CITES are very interested in the peccary pelt certification programme, because they see it as a way to implement better regulation in the peccary pelt trade, and as a way to manage the subsistence hunting laws.

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

Proposals are being submitted to the EU for additional financial support in collaboration with the Autonomous University of Barcelona, INRENA and CITES.

All of the reports from the first and second year of the project are being sent in a CD as Annex 3 of this report, as recommended by the previous reviewer.

The Logframe has been revised to incorporate three outputs as recommended by the previous reviewer.

6 Other comments on progress not covered elsewhere

There were no significant difficulties encountered during the reporting period. The issues with the timber concession continues and is being confronted by incorporating wildlife management in timber concessions.

Local communities that have timber companies operating around their territories will have a more difficult time being certified, because of the economic incentives of timber companies to

buy unsustainably hunted bushmeat from the communities. The project is continuing to work with WWF and WCS on elaborating a programme for wildlife management in timber concessions as a means to overcome this difficulty. Additional funding support is being sought for this new initiative.

7 Sustainability

The peccary pelt certification programme has been included as a strategy by INRENA and CITES to manage the peccary pelt trade. The work has been promoted at both the regional and national levels as a means of managing the subsistence hunting laws of Peru. The project has also been included in the PROCREL management plan at a regional level. At an international level, the project is being used as an example of economic incentives for managing bush meat hunting by CITES during the CITES conference in June 2007. The project has also been included in the Cross Cutting Program on Wildlife Management managed by WCS and the G & B Moore Foundation. The peccary pelt certification programme will incorporate self funding mechanisms via the added value generated by certified pelts. NGO's such as WCS and WWF will support the development and implementation of community management plans. The project is developing mechanisms for self funding of the programme as it's exist strategy. If possible, the major importing countries of Germany, France, Italy and Austria should also help support the programme, potentially via EU funding.

The strong buy in by the governmental and NGO sector is a good indication that the peccary pelt certification programme will be continued after the close of the Darwin project. Over the long term the peccary pelt certification programme should be a self funded mechanism. Over the medium term the buy in by key stakeholders will help fund activities. WCS-Peru and WWF-Peru have contributed \$22,000 towards the programme during this reporting period and have confirmed a similar amount for the next period. WCS-Peru is including the programme in its upcoming proposal for conserving Amazonian landscapes, which they hope to have new funds available for July 2009.

8 Dissemination

The peccary pelt certification project was disseminated during the PROCREL meeting that was held in Iquitos the 14th of March, 2008. This meeting was coordinated by the Regional government (GOREL) and INRENA. The PROCREL is involved with INRENA and CBD.

The second draft of the Peccary Pelt Certification Manual was completed and the book is in the process to be published in Lima, Peru. This manual will help disseminate the certification programme more widely throughout the Peruvian Amazon.

A web page on the project was developed and still in place.

The co-PI of the Peccary Pelt Certification Project, T. Fang, gave a presentation of the of the pilot programme during the Fourteenth meeting of the Conference of Parties of CITES in the Hague (Netherlands), between 3-15 June 2007 and met with the Peruvian delegates of INRENA to coordinate activities.

The PI, R. Bodmer, met with the Princess Royal Anne of England and the British Ambassador to Peru, Catherine Nettleton, and her staff to describe the Darwin project, at the Ambassador's residence in Lima on 7 July 2007

Meetings were held with INRENA and CITES promoting the project.

Dissemination in local communities during workshops and fieldcourses.

Dissemination to Universities during university level field activities.

Dissemination will continue after the project ends by INRENA, CITES, NGO's and other stakeholders involved with certification. Funding will be provided by these institutions.

9. Project Expenditure

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

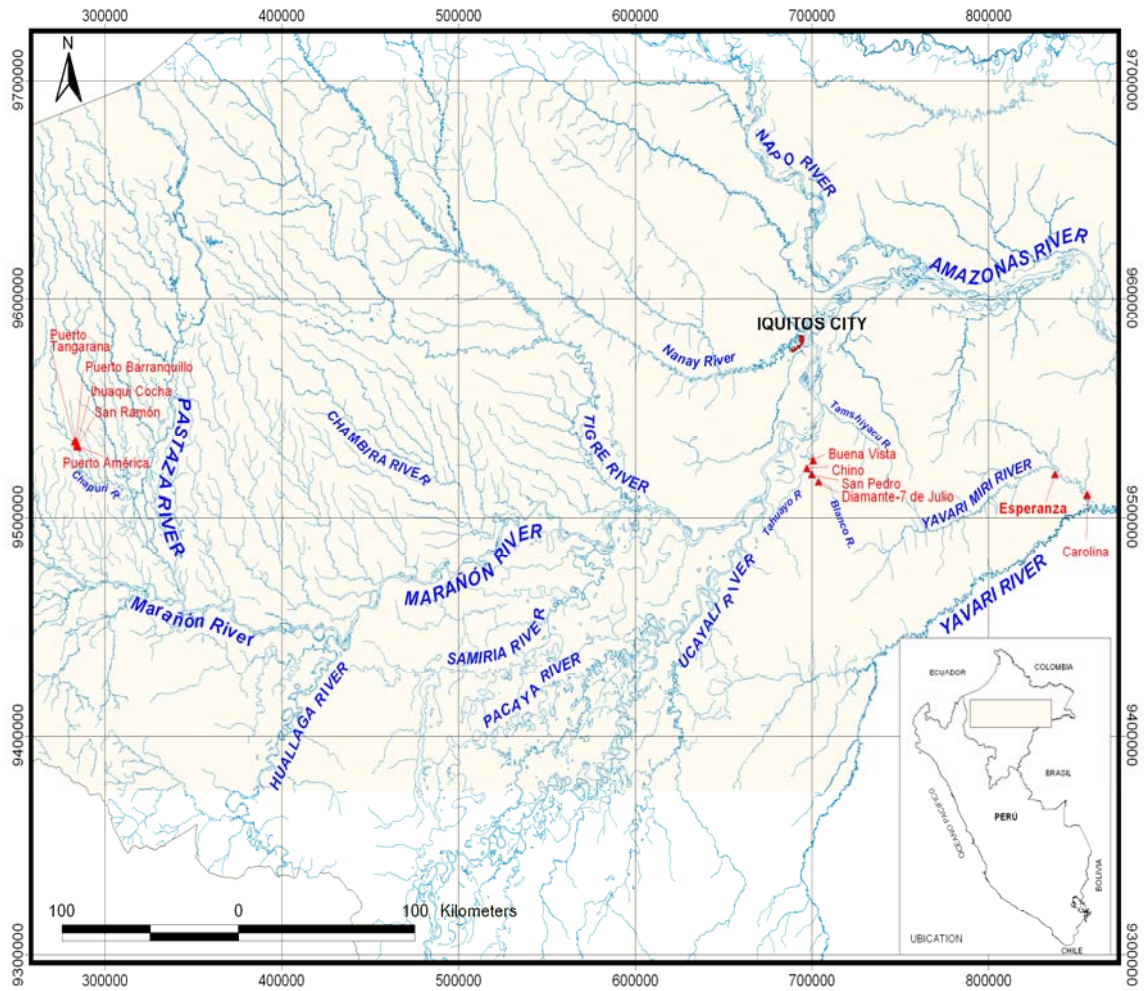
Item	Budget	Expenditure	Balance
Rent, rates, heating, overheads etc			
Travel and subsistence			
Conferences, seminars, etc			
Printing			
MSc Training ,Audit			
Salaries (specify)			
R. Bodmer			
T. Fang			
Claudia Rios			
Pedro Perez			
Alfredo dos Santos			
Lesly Sanchez			
TOTAL			

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

Bush meat hunting of tropical forest mammals is commonplace in the tropics and currently one of the greatest conservation issues in tropical forests. Rural people hunt mammals for subsistence food and to sell meat and hides in urban markets. Bushmeat hunting is an important economic resource that has been traditionally used by rural poor of the Peruvian Amazon. If well managed, bushmeat hunting can provide long-term socio-economic benefits to local communities and help conserve Amazonian biodiversity through maintaining intact rainforests. If poorly managed, bushmeat hunting will lead to the extirpation of animal populations, reduced socio-economic benefits that rural people obtain from wildlife, and a decreased value of intact forests. Subsistence hunting is permitted in Peru by rural and native communities and the communities are permitted to sell peccary pelts if the animals were hunted for subsistence. Peccary pelts are exported to European countries, including the UK, where they are used in the manufacture of luxury gloves and shoes. A peccary pelt certification programme is being set up in the Peruvian Amazon as a mechanism to add value to the pelts in communities that manage their bushmeat hunting sustainably, through a process that certifies those communities that meet the standards of certification. The peccary pelt certification programme is a means to manage bush meat hunting using the international trade in peccary products. Local communities will only be certified if they manage all of their bush meat hunting sustainably. There are 11 communities involved in the pilot programme from the Yavari, Tahuayo and Pastaza river systems. The Peruvian government strongly supports the pilot programme, as does CITES, the International Convention on the Trade in Endangered Species. Funding from the Darwin Initiative will be key in setting up the peccary pelt certification

programme as a means to manage bush meat hunting, and in turn help conserve Amazonia biodiversity by involving local people.

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



Annex 1. Report of progress and achievements against Logical Framework for Financial Year: 2007/08

Project summary	Measurable Indicators	Progress and Achievements April 2007 - March 2008	Actions required/planned for next period
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</p> <p>The conservation of biological diversity,</p> <p>The sustainable use of its components, and</p> <p>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</p>			<p>(do not fill not applicable)</p>
<p>Purpose</p> <p>Catalyse community based-wildlife management in the Peruvian Amazon through the implementation of a pilot programme for peccary pelt certification</p>	<p>Local communities gaining certification through the pilot programme</p> <p>Local communities gaining added economic value of peccary pelts through certification</p> <p>Increases in populations of wildlife species in hunting grounds of certified communities</p>	<p>Monitoring the number of rural communities requesting and obtaining certification</p> <p>Monitoring of peccary pelt prices bought and sold in rural communities</p> <p>Conducting census of wildlife populations</p>	<p>Rural communities being certified by Certification Committee</p> <p>Pelts from certified communities are sold for higher prices than non-certified pelts</p> <p>Wildlife censuses show increases in species populations in areas managed by local communities</p>
<p>Output 1.</p> <p>Pilot programme of peccary pelt certification in place</p>	<p>Minimum of 6 communities participating in the pilot programme</p> <p>Middlemen and tanneries participating in the pilot programme</p> <p>Certifying body evaluating communities requesting certification</p> <p>Information on peccary pelt certification available to communities and professionals</p>	<p>Currently there are 11 communities participating in the pilot programme.</p> <p>12 workshops and fieldbased courses were held with the communities</p> <p>Middlemen and tanneries are involved with the programme.</p> <p>The Certification Committee has been formed and is awaiting applications for certification from local communities</p> <p>The manual/book on peccary certification is being published</p> <p>Studies on the bush meat market and peccary quotas have been completed</p> <p>Leaflets on the peccary pelt certification have been distributed</p>	

<p>Activity 1.1 Meeting with local middlemen</p> <p>Activity 1.2 Formation of the Certifying body</p> <p>Activity 1.3 Manual development</p> <p>Activity 1.4 Studies on bush meat markets and peccary quotas</p>	<p>Report on interviews of local middlemen in Iquitos</p> <p>Report on the formation of the certifying body by different institutions</p> <p>A final draft of the Peccary Pelt Certification Manual was produced and in press in Lima Peru</p> <p>Reports on bush meat markets and peccary pelt quotas for Loreto</p>	
<p>Output 2. Local communities implementing community-based wildlife management</p>	<p>Minimum of 6 communities implementing wildlife management</p>	<p>11 local communities are implementing community-based wildlife management plans according to the guidelines set by the peccary pelt certification programme</p>
<p>Activity 2.1 Five workshops held in the Pastaza communities</p> <p>Activity 2.2. Two workshops held in the Yavari Miri communities</p> <p>Activity 2.3 Four workshops held in the Tamshiyacu-Tahuayo communities</p>	<p>Reports on community-based wildlife management plan workshops in 5 communities</p> <p>Reports on evaluating the progress of the pilot programme for peccary pelt certification were held in 06 communities</p>	
<p>Output 3. Local professionals have capacity to implement the peccary pelt certification programme</p>	<p>Two Peruvian MSc students trained in management of wildlife trade in the UK</p> <p>Undergraduate and MSc students trained in community-based wildlife management in Peru</p>	<p>One Peruvian student completed the MSc programme at DICE in International Wildlife Trade</p> <p>A second student began the MSc programme at DICE in International Wildlife Trade</p> <p>12 students from Peruvian Universities and INRENA participated in a two week field course</p> <p>8 Peruvian students had two week training on implementing the peccary pelt certification programme</p> <p>80 students from Peru, the UK, Canada and the USA were involved with wildlife monitoring expeditions to the field sites</p>
<p>Activity 3.1 MSc level training</p> <p>Activity 3.2 Two week field course held</p> <p>Activity 3.3 Wildlife Monitoring field expeditions</p>	<p>MSc thesis produced</p> <p>Report of field course in the Pacaya-Samiria National Reserve</p> <p>Field reports on wildlife monitoring</p>	

Annex 2. Project's full current logframe

Revised Logical Framework 15-029

Project summary	Measurable Indicators	Means of Verification	Important Assumptions
<p>Goal: <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</i></p> <ul style="list-style-type: none"> • <i>The conservation of biological diversity,</i> • <i>The sustainable use of its components, and</i> • <i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i> 			
<p>Purpose <i>“Catalyse community based-wildlife management in the Peruvian Amazon through the implementation of a pilot programme for peccary pelt certification”</i></p>	<p><i>Local communities gaining certification through the pilot programme</i></p> <p><i>Local communities gaining added economic value of peccary pelts through certification</i></p> <p><i>Increases in populations of wildlife species in hunting grounds of certified communities</i></p>	<p><i>Monitoring the number of rural communities requesting and obtaining certification</i></p> <p><i>Monitoring of peccary pelt prices bought and sold in rural communities</i></p> <p><i>Conducting census of wildlife populations</i></p>	<p><i>Rural communities have discount rates that permit sustainable use of wildlife resources</i></p> <p><i>Environmentally aware consumers in European countries maintain demand</i></p> <p><i>Wildlife species increase when bushmeat hunting is managed</i></p>
<p>Outputs</p>			
<p><i>Pilot programme of peccary pelt certification in place</i></p>	<p><i>Minimum of 6 communities participating in the pilot programme</i></p> <p><i>Middlemen and tanneries participating in the pilot programme</i></p> <p><i>Certifying body evaluating communities requesting certification</i></p> <p><i>Information on peccary pelt certification available to communities and professionals</i></p>	<p><i>Community workshop reports</i></p> <p><i>Reports on workshops held with middlemen and tanneries</i></p> <p><i>Reports of the certifying body</i></p> <p><i>Information published and available on peccary pelt certification</i></p>	<p><i>Continued market for the peccary pelts</i></p> <p><i>Continued market for bush meat</i></p> <p><i>Stakeholder involvement</i></p>

<i>Local communities implementing community-based wildlife management</i>	<i>Minimum of 6 communities implementing wildlife management</i>	<i>Community-based wildlife management plans</i> <i>Evaluations of community-based wildlife management plans</i>	<i>Bush meat hunting by local communities is legal in Peru</i> <i>Communities are interested in the bush meat resources and their management</i>
<i>Local professionals have capacity to implement the peccary pelt certification programme</i>	<i>Two Peruvian MSc students trained in management of wildlife trade in the UK</i> <i>Undergraduate and MSc students trained in community-based wildlife management in Peru</i>	<i>MSc degrees awarded to two Peruvian students</i> <i>Undergraduate and MSc field courses provided in Peru</i>	<i>Appropriate MSc training course available in the UK</i> <i>Appropriate Peruvian University programmes available</i>
Activities	Activity Milestones		Assumptions
<i>Workshops (7)</i>	<p><i>Yr. 1 selection of participating communities using an in-country workshop with local biologists and community representatives working with community-based wildlife management; Yr1 workshop involving middlemen and tanneries from the private sector for training on certification.</i></p> <p><i>Yr 2 workshop with biologists and community representatives working with participating communities to evaluate progress of the pilot programme; workshop with certifying body selected by INRENA to train on management procedures.</i></p> <p><i>Yr 3 workshop with biologists and community representatives working with participating communities to develop lessons learnt; workshop with middlemen and tanneries from the private sector to determine the effectiveness of implementation including the chain of custody and added value income for communities; workshop with the certifying body to assist with certifying local communities.</i></p>		<p><i>Local communities agree to participate in the project</i></p> <p><i>Middlemen and tanneries agree to participate in the workshop</i></p> <p><i>Local communities participate in the project</i></p> <p><i>Certifying body selected by INRENA</i></p> <p><i>Local communities implement wildlife management as part of certification</i></p> <p><i>Middlemen and tanneries implement certification</i></p> <p><i>Local communities are ready to be certified</i></p>
<i>Field-based courses (3)</i>	<p><i>Yr 1 field-based course on wildlife management and monitoring for rural community members involved with certification</i></p> <p><i>Yr 2 field-based course on DISTANCE and CPUE analysis</i></p>		<p><i>Local community members willing to participate</i></p> <p><i>Participants available</i></p>

	<i>Yr 3 field-based course on Community-based conservation and the peccary pelt certification programme</i>	<i>Participants available</i>
<i>Manual development (1)</i>	<i>Collation of information on peccary biology, sustainable harvesting, community-based conservation, socio-economics of the bush meat trade, and the process and implementation of the peccary pelt certification programme in Spanish. Draft manual by March 07, final publication by Oct. 07.</i>	<i>Information available</i>
<i>MSc level training (2)</i>	<i>Select most appropriate student for MSc training to begin in Sept. 06 by July 06.</i> <i>Select most appropriate student for MSc training to begin in Sept. 07 by July 07.</i>	<i>Student available</i> <i>Student available</i>
<i>Publications in International Journals (3)</i>	<i>Submit publications to International Journals on:</i> <i>Conservation Implications of Certification</i> <i>Economic Considerations of Certification</i> <i>Trade, Bushmeat and Certification</i>	<i>Information available</i>

Annex 3. *supplementary material (optional)*

Reports and publications are being sent by post on a CD.