

#### Darwin Initiative Annual Report

#### Important note:



To be completed with reference to the Reporting Guidance Notes for Project Leaders: Depa it is expected that this report will be about 10 pages in length, excluding annexes

**Submission Deadline: 30 April 2013** 

#### 1. Darwin Project Information

Project Reference	19-021
Project Title	Values and Valuation: New Approaches to Conservation in Mongolia
Host Country/ies	Mongolia
UK contract holder institution	University of Leicester (UOL)
Host country partner	Mongolian Society for Range Management (MSRM)
institutions	Mongolian Academy of Agricultural Sciences (MAAS) (incorporating Mongolian State University of Agriculture and Centre for Ecosystem Studies (CES)
	Mongolian Nature Protection Civil Movement Coalition (MNPCM)
	Ministry of Environment and Green Development (formerly Ministry of Nature, Environment and Tourism (MNET)
Other partner institutions	Plan Vivo Foundation UK/ Bioclimate
	International Wildlife Consultants (IWC)
Darwin Grant Value	Total for 3 years = £234,828. For Year 1 only = £87046
Start/end dates of project	1.4.2012- 1.4.2015
Reporting period (eg Apr	April 2012-March 2013.
2012 – Mar 2013) and number (eg Annual Report 1, 2, 3)	Annual Report 1
Project Leader name	Dr Caroline Upton
Project website	www2.le.ac.uk/departments/geography/research/projects/darwin-values-and-valuation-mongolia
Report authors, main contributors and date	Dr Caroline Upton; Professor D. Dorligsuren; Dr D. Ichinkhorloo; Dr N. Nyamaa; Professor J. Undarmaa; B. Bayarmaa; Dr Roy Bradshaw. 29 April 2013.

#### 2. Project Background

As a signatory to the major global biodiversity conventions (CBD, CITES, CMS), Mongolia is officially committed to the protection of an important biodiversity heritage, but is currently struggling to meet these commitments. Recent CDB country reports highlight growing threats to and loss of biodiversity, linked to factors such as desertification and pasture degradation, a major mining boom, climate change and poorly regulated hunting and logging. The effective participation and inclusion of communities, their local knowledges, values and practices in conservation practice and planning are highlighted as interlinked and critical areas where CBD commitments have yet to be realised.

With the support of Darwin Initiative funding for a 3 year project (2012-2015), partners from the Mongolian Society for Rangeland Management (MSRM), the Mongolian Academy of Agricultural Sciences (MAAS), including the Centre for Ecosystem Studies (CES), and the Mongolian Nature Protection Civil Movement Coalition (MNPCM) are working with Dr Caroline Upton and colleagues at the University of Leicester (UOL) in the UK to develop and implement

novel approaches to conservation issues in Mongolia. Through MSRM's well-established network of herders' Pasture User Groups (PUGs; 'heseg') and drawing on contemporary concerns with ecosystem services and their links to biodiversity and well-being, the team are working with herders in contrasting ecological zones to explore, map and value ecosystem services and to develop and trial pilot Payment for Ecosystem Services schemes. Of particular importance to the approach is the participatory development of locally appropriate approaches to non-economic valuation and to evaluation of cultural services, thus facilitating recognition of customary knowledge, values and practices in conservation planning. These will complement more traditional economic approaches to valuation. Over the three years of the project, the team will pilot test the socio-economic and ecological viability of particular PES schemes, for example to the Plan Vivo standard and the voluntary carbon market, at selected case study sites in Mongolian rangelands. Through these activities the project team aim to provide government policy makers with important decision making tools, including tradeoffs with mining and possibilities for future state funded PES schemes, based on data which incorporates traditional knowledge and values. They further aim to provide local communities with tangible incentives and capacity for conservation and sustainable resource use through the pilot PES schemes and to provide appropriate training and capacity building in PES/ ES to policy makers academic and herders. All of these actions will contribute to enhanced realisation of biodiversity conservation, especially CDB, commitments.

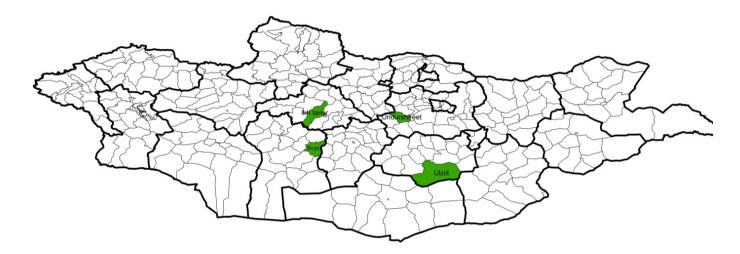


Figure 1: Mongolia, showing location of the four main project sites

#### 3. Project Partnerships

#### Project partnerships: management, roles and responsibilities

The Mongolian Society for Range Management (MSRM) are the main in-country project partners and coordinators. They work closely with University of Leicester (UOL) as the UK lead institution. Other in-country project partners are as listed under 1) above.

In accordance with the project proposal, and as reported in the Half Year Report, a project inception meeting was held in Ulaanbaatar in May 2012, during which draft MOUs between partners were discussed and agreed. Final versions of the MOUs, which set out the roles and responsibilities of all parties, financial and reporting arrangements, have been signed off and form the basis for ongoing collaboration between UOL, MSRM, MAAS, CES and MNPCM and for financial control of the project. These include clear division of responsibilities for project activities as set out in Section 18 of the original proposal. IWC and MNET were not included in these agreements as they are not undertaking paid work as part of the project. UOL are, however, in consultation with them to ensure discharge of mutual obligations, as set out in the original project proposal and confirmed under letters of support therein.

In brief, as PI, Dr Caroline Upton has overall responsibility for the project and component activities, shared and devolved as appropriate to colleagues depending on their specialist skills:

Responsibility for **Activities 1.1-1.5**, associated with the valuation and mapping of ES, is shared between Dr Roy Bradshaw (UOL) and Dr Nyamaa Nyamsuren (MAAS), as environmental economists; Dr C. Upton as a social scientist concerned with development of methods and tools for non economic valuation of ES; Dr D. Ichinkhorloo/ Professor D. Dorligsuren (MSRM) as key partners and experts in community development work, with excellent links to project herder groups; Professor U. Jamsran as expert on evaluation of ecological issues and services. B. Bayarmaa of MNPCM has a specific role in evaluation of mining related issues and impacts, where applicable, with particular reference to cultural ES and trade-offs.

**Activities 2.1-2.8,** associated with the pilot PES schemes, are being undertaken primarily by MSRM and UOL (C. Upton). Specific responsibility for Activity 2.3 has been assigned to Professor U. Jamsran (CES).

**Activities 3.1 – 3.7** are concerned primarily with establishment of baselines and monitoring and reporting against those baselines, again assigned on the basis of specific expertise; for example Professor U. Jamsran leads on the ecological/ biodiversity monitoring; environmental economists, MSRM and UOL on socio-economic/ livelihoods baseline.

Detailed step by step breakdowns and timelines for particular activities have been agreed and formed the basis for work in Year 1 e.g. for Activities 1.1 and 1.2 (between UOL; MAAS – Nyamaa Nyamsuren; MSRM – D. Ichinkhorloo; CES- Undarmaa Jamsran); for Activity 2.3 (CES- Undarmaa Jamsran; Plan Vivo/ Bioclimate – Rob Harley) (example for Activity 2.3 attached). This approach is being replicated in Year 2, where the whole team are liaising on detailed planning and sequencing of summer fieldwork with sub teams, as indicated above, working on technical aspects for their specific activities.

**Relationships** between project team members are managed through a) meetings with all partners during Dr Upton's regular visits to Mongolia (at least twice per year); b) regular email exchanges; c) shared information through project drop box site, accessible to all partners, wherein key documents; breakdowns, timelines and progress reports on particular Activities etc are shared, d) skype calls, e) local liaison with the (small) project team through MSRM.

Dr Upton is in regular contact with all team members via e mail, with MSRM as main in-country partner and coordinator copied in to correspondence between UOL and other partners (MAAS, CES etc). MSRM also liaises directly with the other in-country partners, as requested by Dr Upton for specific tasks. Dr Upton liaises with Plan Vivo/ Bioclimate in the UK, with whom a separate MOU has been agreed and signed, but has also facilitated direct links between Bioclimate and Undarmaa Jamsran (CES) for the discharge of Activity 2.3.

During the past year, strong working relationships have been developed between all partners, especially between Dr Upton (UOL) and Dr D. Ichinkhorloo and Professor Dorligsuren (MSRM). There have been no major changes to management structures over the first year of the project and current structures are operating successfully.

**Formal partnerships** with other UK based institutions are with Plan Vivo/ Bioclimate, as set out in the original project proposal. They are vital partners in the development of the pilot PES scheme. Recognition against the Plan Vivo standards will enable issuing of certificates for participating herder' groups onto the global market, facilitating income flow to these groups as part of the pilot PES schemes and against measured carbon, biodiversity and livelihood baselines. This partnership has been formalised through an MOU and payments dispersed for work done on development of the technical specification (with Professor U. Jamsran at CES) and review of the Project Information Note or PIN, a vital step in the Plan Vivo accreditation process (copy attached).

#### Other Collaboration:

The project has established links with the following persons and projects in the host country, for mutual exchange of information, support and learning:

- Bunchingiv Bazartseren, Environment Team Leader, UNDP, Mongolia (<u>www.un-mongolia.mn/</u>)
- Oyuntsetseg Dashnyam, Program Officer, GIZ 'Sustainable Use and Management of Protected Areas in Khangai Region' project (<a href="http://www.giz.de/themen/en/36087.htm">http://www.giz.de/themen/en/36087.htm</a>).
- Munkhjargal Begzsuren, National Coordinator, ADB 'Strengthening Carbon Finance for Regional Grassland Management in Northeast Asia' project (http://www.adb.org/projects/39369-012/main)
- Wildlife Conservation Society (WCS) Mongolia (<a href="http://www.wcs.org/where-we-work/asia/mongolia.aspx">http://www.wcs.org/conservation-challenges/local-livelihoods/community-based-conservation/the-herdsmen-of-eastern-mongolia.aspx</a>

As part of the already well-established links between the project and the Mongolian Ministry of Environment and Green Development, the focal point for the CBD in country, meetings and consultations were also held with the following persons on UOL's last visit to Mongolia in January 2013:

- D. Enkhbat, Director General, Department of Environment and Natural Resources (signatory to initial letter of support for the project)
- D. Dagvadorj, Special Envoy for Climate Change, Chairman of Climate Change Coordination Office (provided letter of support as part of Plan Vivo process, February 2013, appended).

The project proposal sets out clearly how it will assist host country institutions to meet CDB obligations (summarised above). With specific reference to capacity building, this is covered primarily under Activities 4.1-4.5, of which Activity 4.2 is of particular relevance to policy makers. The meetings and discussions itemised above form part of the ongoing consultations under this Activity. At local and regional scales the project, especially through MSRM, has well established links and cooperative relationships with local administration officials, reaffirmed through meetings as part of Dr Upton's most recent visit in January/ February 2013. Specific training activities are designed to arise from these and from outcomes of empirical work with herders groups and will thus be discharged at a later stage of the project.

In the UK, the project has established links with Flora and Fauna International (FFI), including through a joint presentation on cultural ecosystem services and non-economic valuation at a recent Zoological Society of London (ZSL) conference (see Section 9 for further details; copies of slides also appended).

#### 4. Project Progress

#### 4.1 Progress in carrying out project activities

Output 1: Key Ecosystem Services (ES) at selected sites in contrasting ecological zones valued, with participation of local herding communities

Of the five activities related to this output (Activities 1.1-1.5), two were timetabled for completion in Year 1 (Activities 1.1. and 1.2) with two others (Activities 1.3 and 1.4) to be initiated in Year 1, but only completed in Year 2. Activity 1.5 is not due to commence until Year 2.

As advised in the Half Yearly Report in October 2012, progress on Activities 1.1 and 1.2 was delayed over summer 2012 due to the serious illness of Dr Roy Bradshaw, the UK environmental economist who has a leading role in these activities. The proposed strategies put in place for dealing with this situation have since been successfully discharged. Specifically, Activity 1.1 was completed through fieldwork in January/ February 2013. Activity 1.2 has followed from this, with the project team and local communities at the four study sites agreeing a timetable for completion of the mapping and valuation activities under Activity 1.3 between

June and September 2013, as per the original project implementation timetable. As a result of work completed under Activity 1.1, a suite of strategies for evaluation of economic and non economic values such as deliberative, group based strategies, conjoint analysis and choice modelling experiments, participatory mapping and visual methods, have been agreed. An outline timetable for fieldwork in summer 2013 to enable completion of Activity 1.3 has also been agreed by all partners. Collation of existing land use data (e.g. GIS, satellite/remote sensing, vegetation mapping) is underway and is being led by MSRM in-country. Again, this will be completed as part of Activity 1.3 by 30/9/2013, as per the original project implementation timetable. As set out in the half yearly report, Activity 1.4 will also be completed by the end of quarter 2, Year 2.

## Output 2: Pilot PES schemes developed and implemented at selected study sites, with participation of local herding communities

Of the eight activities related to this output (Activities 2.1-2.8), two were timetabled for completion in Year 1 (Activities 2.1. and 2.2) with one other (Activity 2.3) to be initiated in Year 1, but only completed in Year 2. Other activities related to this output are not due to commence until Year 2 or 3.

As stated in the Half Year Report, Activity 2.1 was undertaken through MSRM and Dr Upton in May and June 2012 and through additional MSRM field visits and meetings in August 2012. PES groups, who will be linked to carbon markets via Plan Vivo have been identified at the case study locations on the basis of detailed consultations to establish their willingness and capacity to participate and in accordance with MSRM and Plan Vivo established protocols for work with community groups. It is an essential part of the Plan Vivo process that clear evidence of a community-led design plan and overall governance capacity is demonstrated. Outcomes of Activity 2.1 have fed into the Plan Vivo Project Idea Note (PIN) (appended), which is under review by Plan Vivo. Training has thus been initiated in accordance with Activity 2.1. Numbers involved in initial training and training needs analysis across the project sites total 106 herders from key PUG/ heseq. Follow up training is planned for May 2013 with all Plan Vivo/ PES groups to ensure capacity for effective delivery and management of the Plan Vivo activities proposed by the *heseg* (herder groups) themselves, as part of the community-led design plan. As set out in the attached PIN, Activity 2.2 has effectively been discharged, with final signing off on specific roles within hese to be completed as part of the May 2013 training exercises, as this must be linked to the particular activities proposed by the different heseg during Year 1.

Activity 2.3 has been initiated, again as reported in the Half Yearly Report. Professor Jamsran, in consultation with Bioclimate/ Plan Vivo is developing a technical specification for validation of carbon sequestration under the Plan Vivo standard and as part of the specific, innovative tri partite certificate proposed for this project (see PIN document, attached). A lengthy skype conference between Professor Jamsran and Dr Upton (in Ulaanbaatar) and Dr Rob Harley and Dr Mike Riddell (Bioclimate, in Scotland), in support of previous e mail discussions and meetings between Dr Upton and Bioclimate, was conducted 30 January 2013 at which the former's work thus far and proposed future strategy for development of the technical specification was discussed and approved. The MOU between UOL and Bioclimate for technical support for this aspect of the work, to facilitate successful validation under the Plan Vivo standard, is available on request.

## Output 3: Assessment of contributions of PES to livelihoods and conservation in different ecological contexts

Of the seven activities related to this output (Activities 3.1-3.7), only one (Activity 3.2) was timetabled for completion in Year 1, with one other (Activity 3.1) to be initiated in Year 1, but only completed in Year 2. Other activities related to this output are not due to commence until Year 2 or 3.

Work on Activity 3.1 commenced through discussions with herder groups as part of the January/ February 2013 fieldwork, with further evaluation on the basis of MSRM lengthy experience of working with these groups. This will be completed in summer 2013, as per the project implementation timetable.

For Activity 3.2, an in-depth socio economic survey, focusing on established livelihood indicators, amongst other parameters (database and survey instrument available on request) has been completed for 3 of the 4 study sites already (total 300 herder households), with analysis currently underway in SPSS to finalise the most appropriate sub suite of indicators for project sites. Thus Activity 3.3 has also been partially completed (e.g. for established indicators), well ahead of schedule. Similarly for biodiversity indictors, extensive vegetation surveys were completed in summer 2012, as set out in the Half Yearly Report, and in partial fulfilment of Activity 3.4, well ahead of schedule. Finalisation of established indictors for each site is ongoing, based on the survey report by Professor Jamsran.

# Output 4: Education and capacity building of key stakeholders (government officials, local herders) in ES values, development, management and efficacy of PES schemes in Mongolian context.

Of the five activities related to this output (Activities 4.1-4.5), none were timetabled for completion in Year 1, with only three of the five to be initiated in Year 1 (Activities 4.1, 4.2 and 4.5). Activity 4.1 relates to training of herder groups in relation to PES/ Plan Vivo and is reported on in relation to Activity 2.1, above. Activity 4.2 relates to liaison with and training of government officials throughout the three years of the project. As set out in Section 3 'Other Collaboration' above, training is scheduled for later in the project, while initial consultations have been undertaken and consultation and liaison is established and ongoing. For Activity 4.5, dissemination activities to date are summarised in Section 9 of this report.

#### 4.2 Progress towards project outputs

## Output 1: Key Ecosystem Services (ES) at selected sites in contrasting ecological zones valued, with participation of local herding communities

*Indicators*: Economic/ non economic values for key ES at study sites produced; ranking and mapping of key ES completed; analysis of contributions re biodiversity, well being reported.

As highlighted in 4.1 above, progress towards this Output is on track, as evaluated against its component Activities. All Activities under Output 1 are due for completion in Year 2, thus means of verification (reports, articles, maps etc) will be available against these indicators by the end of Year 2 at the latest. Much of this data will be available for the Year 2 half yearly report in October, following the summer 2013 fieldwork season. There are no changes in assumptions or measurement of output indicators.

## Output 2: Pilot PES schemes developed and implemented at selected study sites, with participation of local herding communities

*Indicators:* Appropriate technical specifications for evaluation of scheme benefits agreed; schemes validated and agreed with herders' communities; appropriate PES management and monitoring practices implemented; certificates issued on voluntary carbon market, mechanisms for profit sharing implemented.

As highlighted in 4.1 above, progress towards this Output is on track, as evaluated against its component Activities. Activities under Output 2 are not all scheduled to be completed until the end of the project in Year 3. Indicators as stated above relate to the whole project period. To date, the technical specification is under development and will be completed in Year 2, in accordance with the project implementation timetable. Validation of PES schemes, as proposed by participating herding communities, and through the Plan Vivo process, is underway, as evidenced by submission of the Project Information Note (PIN) to Plan Vivo for review and approval (attached). There are no changes in assumptions or measurement of output indicators. The second main assumption against this output, namely 'Continued support from local government officials for implementation of scheme, including continued support for tenure agreements with herders' groups', continues to hold true, despite the election of a new government in summer 2012. The project team have taken care to consult with key members of the new administration, for example in the case of D. Enkhbat (Director General, Department of Environment and Natural Resources), through reaffirmation of his support as an initial backer of the project and in the case of D. Dagvadorj, (Special Envoy for Climate Change, Chairman of Climate Change Coordination Office) through new commitment, as evidenced by the letter of

support appended. Meetings have also been held with newly elected local officials, where these have changed in case study areas since project inception and their support obtained. Written examples of previous agreements with herders' communities are included in the Plan Vivo PIN document. As the next stage in the Plan Vivo process, we will obtain written evidence of local government recognition of carbon ownership rights of participating communities and hence rights to any income accruing. There are no changes in assumptions or measurement of output indicators.

## Output 3: Assessment of contributions of PES to livelihoods and conservation in different ecological contexts

*Indicators:* Monitoring programmes completed using agreed technical specifications for evaluation of carbon benefits, and established and participatory biodiversity and well-being indicators.

The technical specification is currently under development and is due for finalisation by the end of Quarter 2, Year 2, in accordance with the original project implementation timetable. Thus monitoring against this specification was not due to be initiated in Year 1. Baseline monitoring for livelihoods/ well being and biodiversity/ ES status (Activities 3.3 and 3.4) has been initiated ahead of schedule. There are no changes in assumptions or measurement of output indicators. However, it should be noted that through discussions between UOL and Plan Vivo/ Bioclimate the latter have agreed that a new tripartite certificate encompassing not only carbon, but also well-being and biodiversity measures, will be admissible for this project, thus ensuring the close integration of all three dimensions throughout the project.

# Output 4: Education and capacity building of key stakeholders (government officials, local herders) in ES values, development, management and efficacy of PES schemes in Mongolian context.

*Indicators:* Workshops/ training events at study sites and in Ulaanbaatar, including information exchange/ training by PES ambassadors from selected PUGs. Implementation of PES schemes. Valuation of ES at study sites, including development of methodology for non-economic valuation.

As set out above, workshops/ training events under this Output were not due in Year 1. Progress towards implementations of PES schemes and valuation of ES is covered in reports on Outputs 1-3 and their component activities, above. There are no changes in assumptions or measurement of output indicators.

#### 4.3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Yr 1 Total	Yr 2 Total	Yr 3 Total	Total to date	Planned for reporting period	Total planned during the project
Establish	ned codes						
4a	No. of undergraduate students to receive training (through MAAS and partner institutions)	0			0	0	100
4B	Number of training weeks to be provided	0			0	0	1
4C	Number of postgraduate students to receive training (through MAAS and partner institutions, see above)	0			0	0	50
4D	Number of training weeks to be provided	0			0	0	1
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above) (MSRM herder groups, under Activity 2.1)	106			106	100	200

Code No.	Description	Yr 1 Total	Yr 2 Total	Yr 3 Total	Total to date	Planned for reporting period	Total planned during the project
6B	Number of training weeks to be provided (across various types and over duration of project, see above)	2			2	2	5
7	Number of (i.e. different types - not volume - of material produced) training materials to be produced for use by host country (video resources, maps, summary reports, posters/leaflets)	0				0	4
8	Number of weeks to be spent by UK project staff on project work in the host country	7			7	7	22
11A	Number of papers to be published in peer reviewed journals	0			0	0	6
11B	Number of papers to be submitted to peer reviewed journals	0			0	0	10
12A	Number of computer based databases to be <b>established</b> and handed over to host country (baseline socio-economic livelihood surveys; to be updated throughout the project and handed over completion)	1			1	0	2
14A	Number of conferences/seminars/ workshops to be <b>organised</b> to present/disseminate findings	0			0	0	4
14B	Number of conferences/seminars/ workshops <b>attended</b> at which findings from Darwin project work will be presented/ disseminated	4			4	2	10
15A	Number of national press releases in host country(ies)	0			0	0	2
15B	Number of local press releases in host country(ies)	0			0	0	3
15C	Number of national press releases in UK	0			0	0	1
16A	Number of newsletters to be produced (1 as article for Darwin newsletter; 1 annual newsletter, based on this report, in preparation for posting on project website)	2			2	2	6
17A	Number of dissemination networks to be established (project partners, PES herder groups)	2			2	2	2
18C	Number of local TV programmes/features in host country(ies)	0			0	0	1
19A	Number of national radio interviews/features in host county(ies)	0			0	0	2
19C	Number of local radio interviews/features in host country(ies)	0			0	0	2
23	Value of resources raised from other sources (i.e. in addition to Darwin funding) for project work	4072 3				40723	84893

Table 2 Publications

Туре	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	
*Plan Vivo PIN report (final version will be uploaded to Plan Vivo website by PV for publicity purposes by July 2013, copy of version under review attached)	Plan Vivo Project Idea Note (PIN); 'Values and Valuation: New Approaches to Conservation in Mongolia'	Plan Vivo	Plan Vivo website: http://www.planvivo.org /	None for publication. Cost for review and approval of PIN by PV as set out in original project documents
*Plan Vivo PIN summary (as above)	Plan Vivo Project Idea Note (PIN), Summary; 'Values and Valuation: New Approaches to Conservation in Mongolia'	Plan Vivo	Plan Vivo website: http://www.planvivo.org	(as above)
Article for Darwin Initiative newsletter, July 2012	'Values and Valuation: New Approaches to Conservation in Mongolia'. Project 19- 021. Caroline Upton, July 2012	Darwin Initiative	Darwin Initiative website: http://darwin.defra.gov. uk/resources/	none
Presentation (powerpoint slides and audio)	Joint presentation with Flora and Fauna International (Mark Infield) for ZSL/ Valuing Nature Network workshop, London, December 2012	ZSL (via website)	ZSL website: http://www.zsl.org/scie nce/events/conservatio n-and-human- wellbeing,650,EV.html	none

#### 4.4 Progress towards the project purpose and outcomes

**Project purpose:** To generate policy and practice relevant knowledge of values of ecosystem services (ES) in Mongolia and pastoral contributions therein and to test efficacy of Payment for Ecosystem Services (PES schemes), in order to enhance biodiversity and livelihoods.

Progress towards the overall project purpose is clearly demonstrated through the above review of progress towards Activities and Outputs. The measurable indicators for the project purpose are clearly linked to Outputs, their constituent Activities and indicators. For example the first measurable indicator for the project purpose, namely: 'ES mapping and valuations in diverse ecological contexts, incorporating traditional knowledge and values, and linked to associated resource management/ conservation planning', is clearly linked to Activities 1.1-1.5. Means of verification are appropriate. The main assumptions still hold true. Assumptions 1 and 3 (government emphasis on ES/ PES schemes etc in delivering conservation obligations; herding communities such as MSRM Pasture User Groups/ heseq willingness to be involved in schemes) have been demonstrated and confirmed throughout Year 1, as specified in Sections 3, 4.1 and 4,2 above. The second assumption, namely 'buyers willing to purchase carbon credits in the voluntary market' continues to hold true for Plan Vivo projects generally, according to their latest reports, but has not and cannot yet been tested for this specific project. The issuance of certificates from the PES scheme for participating herders' groups at project sites in Mongolia can only commence later in the overall project and Plan Vivo timescale (Activity 2.6, scheduled for Year 3). Marketing will commence prior to this date, but requires approval of the technical specification and PIN first. These are currently ongoing, as reported above.

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

The project is designed to enable measured, verifiable progress towards all three aspects of the final goal as specified below:

- a) a change in state of biodiversity; species, population or habitat loss reduced, etc.
   This will be measured and evaluated for case study/ PES sites under Activities 3.1-3.7
- b) unsustainable use moving to sustainable use, or

  Again, current use, and associated biodiversity and livelihood impacts will be evaluated through Activities 31.-3.7; also Activities 1.1-1.5. The proposed PES scheme through Plan Vivo (Activities 2.1-2.8) is designed to facilitate this change.
- c) a human community living with biodiversity has the costs reduced or benefits increased stemming from the conservation or use of that biodiversity.

This is designed to be facilitated through the PES scheme, linked to assessment of ES values and benefits under Activities 1.1-1.5, and measured livelihood changes/contributions under Activities 31.-3.7, all underpinned by training and education (Activities 4.1-4.5)

Progress towards these specific activities has been set out in some detail in Section 4.2 above and thus is not repeated here. In accordance with the overall project timetable, measurable indicators of final contributions, with appropriate means of verification are in place, but are not due for completion until Years 2 and 3.

#### 5. Monitoring, evaluation and lessons

The progress of the project is monitored and evaluated against specific Activities, as set out in the original project implementation timetable, and in accordance with assigned responsibilities and detailed work packages and timelines, as explained in Section 3. These are in turn linked to the specific measurable indicators and means of verification for each Activity, all of which are tied to the overall project purpose, as explained above. As set out in the original project proposal, and included within these Activities, a variety of specific, technical monitoring activities are proposed for different aspects and at different stages of the project. These include i) monitoring against technical specifications for carbon sequestration, to be agreed and developed during the project; ii) monitoring against agreed suites of biodiversity and livelihood/ well-being indicators and participatory indicators (the latter developed with herders' groups) pre and post implementation of PES schemes. These enable clear tracking of progress towards project goals in terms of livelihoods, biodiversity conservation and PES efficacy/ implementation. In the case of i) they are also integral to validation of carbon sequestration and issuance of carbon certificates. Host country partners have been closely involved in all aspects of this monitoring e.g. through collaboration of Professor Jamsran (CES) with Plan Vivo/ Bioclimate and UOL staff in developing and agreeing technical specifications for i) and suite of biodiversity indicators for ii). Local stakeholders (e.g. herders in participating herder groups) will also be closely involved in monitoring through participatory development of indicators in Year 2. MSRM and MNPCM staff, in conjunction with UOL and MAAS will undertake monitoring and evaluation of training through liaison with herders' groups, policy makers and for academic aspects, with student trainees. There have not been any changes to the basic M and E plan over the reporting period, although on the basis of experience in Year 1, all partners will now be required to post written progress reports against detailed work packages and timelines for various Activities on the shared project dropbox site, to be updated on a regular basis until completion of the specified Activity.

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

Not applicable. A half yearly report was submitted in October 2012. No comments were received from Darwin Initiative on the basis of this report.

#### 7. Other comments on progress not covered elsewhere

The design of the project has not changed significantly over Year 1. It has been enhanced by the proposed inclusion of a fourth case study site, to complement the three sites initially agreed and identified at the project inception meeting. The fourth site (Bogd soum, Bayankhongor aimag), in the steppe/ desert steppe ecological zone (see PIN document attached), is well known to Drs Nyamsuren and Dr Upton, offering the opportunity to benefit from well-established links and networks and also to include a different type of herder group (other than the MSRM PUG/ heseq) in the PES element of the project.

The development and refinement of methods for evaluation and valuation of ES is any case part of project activities, and is ongoing in accordance with the project implementation timetable, as set out above.

Significant difficulties have not been encountered in Year 1, other than the illness of Dr Bradshaw, which delayed early progress on some Activities, as previously reported. These are now back on schedule. Risks were associated with the change of government in summer 2012, in case this brought about a complete change in key aspects of conservation policy and practice. However, this has not occurred and indeed the same key person, D. Enkhbat (see Section 3) remains in post and has recently reaffirmed his commitment to and support of the project. For the coming year, risks may relate to forthcoming legislation around land rights and mining issues, for example should herder's rights land use and conservation no longer be deemed a priority by the government in the context of the ongoing mining boom. However, there is no evidence to suggest that this will be the case; rather that issues of trade-offs, including protection of important biodiversity, will assume a higher profile, thus making the current project even more timely and important.

#### 8. Sustainability

Key in-country links are highlighted under 'Other Collaboration' in Section 3. These have all contributed to establishing and raising the profile of the project in its initial year and amongst a diverse group of stakeholders. Especially critical for sustainability has been the establishment/ strengthening of links with key policy makers in the new government, as reported above. Other efforts made to promote the work include presentations at important workshops and conferences in Mongolia and also in the UK. These are specified under Section 9 Dissemination, below.

As set out in Sections 4 and 5, much of the capacity building and training activity of the project (Activities 4.1-4.4) is scheduled for Year 2 onwards. Associated indicators and means of verification will provide evidence of increasing interest in and capacity for biodiversity conservation associated with the project. The exit strategy for the project, designed to ensure its sustainability, is also closely linked to these training, capacity building and dissemination activities, through their focus on the key groups of i) government officials/ policy makers; ii) 'ambassador herders'; iii) students at key host country academic institutions. The PES work though Plan Vivo (Activities 2.1-2.8) and evidence of its impact (Activities 3.1-3.7) is also designed to enhance sustainability, through herders' groups themselves and also through government policy makers, in conjunction with the evidence presented from Activities 1.1-1.5. As part of the exit strategy, end of project workshops, briefings and consultations with policy makers will seek to agree specific mechanisms and strategies for government support in the future, based on the evidence obtained through the project for values and trade-offs around ES, efficacy of PES schemes and contributions to key biodiversity commitments through conventions such as CBD.

#### 9. Dissemination

Dissemination activities in Year 1 have been to the following key target audiences:

- 1) Government officials/ policy makers
- 2) members of the NGO/ donor community
- 3) academic networks
- 4) herder groups

Specific activities in relation to these target groups have been as follows:

- i) Individual meetings between members of project team and target audiences (for 1, 2 and 4 in particular see Section 3 'Other Collaboration' and Section 4 for details).
- ii) Training events (for 4 through MSRM in relation to Activity 2.1 see Section 4 for details)
- iii) Workshops and presentations (for 1,2,3 and 4), specifically:
  - a. Upton, C. 2012. 'Natural capital': Mongolian pastoralism and contemporary environmental values. Invited presentation at National University of Mongolia/ International Association for Mongolian Studies conference on contemporary research in Mongolia. Ulaanbaatar, Mongolia. June 2012.
  - b. Upton, C. and Nyamsuren, N. (with Moore, K). 2012. Community, place and pastoralism: nature and society in post Soviet Central Asia. End of Leverhulme project workshop, attended by donors, policy makers and members of herding community. Delivered presentations on 'Conservation and environment: insights and recommendations', 'Community and cooperation: livelihoods and herders' groups'. Darwin project introduced and discussed as part of this workshop. Ulaanbaatar, Mongolia, September 2012.
  - c. Upton, C. 2012. Cultural services, values and wellbeing: social, conceptual and methodological insights from Indonesia and Mongolia. Joint presentation with Mark Infield (Director of Cultural Values and Conservation Programme, Flora and Fauna International), and Sian Morse Jones (FFI) for Zoological Society of London event 'Conservation and human wellbeing: Integrating local voices into natural resource management'. ZSL, London. December 2012.
  - d. Upton, C. 2013. Communities, culture and commodification: Mongolia's new resource politics. Invited presentation at University of Cambridge, Mongolia and Inner Asia Studies Unit conference 'Geopolitics and Mongolia's Natural Resource Strategy'. Cambridge, UK. March 2013.

The above events were conferences organised by others (a, b, d) or around other projects (c), not specifically organised by the project partners in relation to this Darwin Initiative project. However, ongoing and planned Darwin project work was presented at these meetings, which were attended by a diverse group of stakeholders. A book has been commissioned from d) to which a chapter drawing on and acknowledging the Darwin work will be submitted. The book is due for publication in December 2013 and, as Open Access, UOL will ensure this is made widely available in-country. The co-authors of c) are currently exploring opportunities for future publications, which will be also disseminated in-country.

Future dissemination activities, following completion of the project, will be undertaken through the PES ambassador herders' network established under Activity 4.3 (see above) and the lecture and training materials developed for students and policy makers (Activities 4.2 and 4.4), through MSRM in-country and with support from UOL. Much of this ongoing dissemination work post project is designed to be self-sustaining. In addition Dr Upton will explore options for annual workshops/ reviews in the immediate post project years to ensure longitudinal analysis of project impacts and their dissemination. Links will also be developed with other training providers such as through aspects of the Darwin Initiative funded Steppe Forward programme delivered through the National University of Mongolia. Academic and policy related publications will continue to be produced by the project team following project completion in 2015.

### 10. Project Expenditure

Table 3 project expenditure <u>during the reporting period</u> (1 April 2012 – 31 March 2013)

Item	Budget	Expenditure	Variance/ Comments
Staff costs specified by individual			
C. Upton (UOL)			None
R. Bradshaw (UOL)			None
GIS (C. Jarvis, UOL)			None
D. Dorligsuren/ MSRM (D. Ichinkhorloo)			None
N. Nyamaa (MSUA)			None
J. Undarmaa (CES)			None
B. Bayarmaa (MNPCM)			None
Overhead costs			None
Travel and subsistence		•	£89 over
Operating costs			None
Capital items/equipment (specify)			0
Others: Consultancy			£307 under – original budget allowed for second round of review of PIN by Plan Vivo, but they were unable to complete and invoice this within Year 1, although the work has been commissioned.
Others (please specify)			£2 under
Consumables:			
Datasets			
Sample analysis for soil carbon for Plan Vivo technical specification			
Laptop, software, GIS equipment, digital/ video cameras for visual methods and analysis, digital voice recorders etc			
TOTAL	£87046	£86826	under by £220 in total due to delay with invoicing of next stage of Plan Vivo review. This work has been commissioned, so permission is requested to carry over this £220

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

I agree for LTS and the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

(The project is on track to delivery against all planned outputs. Year 1, as planned, has focused on initiation of project activities, thus laying the groundwork for future major achievements. As such, major achievements will come through primarily in Years 2 and 3. However, in Year 1, successful planning of and initial steps towards the innovative PES scheme through Plan Vivo, the first of its kind in the country, may in itself be considered a major achievement. If required, the team could provide a further short paragraph on this. We have a set of high quality photographs that we are willing to share, which illustrate and document aspects of Year 1 work. Please contact Dr Upton in the first instance if you would like to review and use these).

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2012-2013

Project summary	Measurable Indicators	Progress and Achievements April 2012 - March 2013	Actions required/planned for next period
<ul> <li>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</li> <li>⇒ The conservation of biological diversity,</li> <li>⇒ The sustainable use of its components, and</li> <li>⇒ The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</li> </ul>		Conservation of biological diversity: This will be measured and evaluated for case study/ PES sites under Activities 3.1-3.7. Establishment of necessary baselines and agreed indicators completed/ to be finalised in May 2013, in accordance with the project timetable (Activities 3.1-3.4)	
		unsustainable use moving to sustainable use: current use, and associated biodiversity and livelihood impacts is being evaluated through Activities 3.1-3.7 (Activities 3.1-3.4 completed/ ongoing); also Activities 1.1-1.5 (Activities 1.1, 1.2 completed). The proposed PES scheme through Plan Vivo (Activities 2.1-2.8) is designed to facilitate this change (Activities 2.1 and 2.2 completed), linked to assessment of ES values and benefits under Outputs 1 and 3.	
Purpose: To generate policy and practice relevant knowledge of values of ES in Mongolia and pastoral contributions therein and to test efficacy of PES schemes, in order to enhance biodiversity and livelihoods.	ES mapping and valuations in diverse ecological contexts, incorporating traditional knowledge and values, and linked to associated resource management/ conservation planning.  PES schemes developed and implemented, including validation, issuance of certified carbon credits for voluntary market, distribution of benefits.	Linked to Activities 1.1-1.5, of which only Activities 1.1 and 1.2 were due for completion on Year 1. These are preparatory activities and have now been completed. The main mapping and valuation activities are not due for completion until Year 2.  Linked to Activities 2.1-2.8, of which only Activities 2.1 and 2.2 were due for completion in Year 1. These have effectively been completed (see below). The first formal aspect of the Plan Vivo process i.e. submission of the Project Idea Note (PIN) has been completed (copy appended).	Completion of Activities 1.3-1.5 as per original project implementation timetable.  Ensure Plan Vivo approval/ signing off of PIN, including protocols for management etc. (Activity 2.2). Completion and approval of technical specification (Activity 2.3). Commence monitoring of agreed Plan Vivo activities (Activity 2.4). Exploratory marketing of carbon certificates.

Project summary	Measurable Indicators	Progress and Achievements April 2012 - March 2013	Actions required/planned for next period	
	Project methods, reports and datasets used/ cited in policy documents, resource management plans at diverse scales.	Linked primarily to Output 4 and reporting Activities under other Outputs, scheduled for Years 2 and 3. Ongoing	Ongoing liaison with policy makers under Activity 4.2. Dissemination of early project results under Activity 4.5; also through reporting under Activity 1.5.	
Output 1.  Key ES at selected sites in contrasting ecological zones valued, with participation of local herding communities.	Economic/ non-economic values for key ES at study sites produced; ranking and mapping of key ES completed; analysis of contributions re biodiversity, well being reported.	Progress towards this Output is on track, as evaluated against its component Activities. All Activities under Output 1 are due for completion in Year 2, thus means of verification (reports, articles, maps etc.) will be available against these indicators by the end of Year 2 at the latest. Much of this data will be available for the Year 2 half yearly report in October, following the summer 2013 fieldwork season. There are no changes in assumptions or measurement of output indicators.		
Activity 1.1  Development and trialling of methodolog	ies for non-economic valuation of ES	Completed through fieldwork in January/consideration of both economic and non-		
Activity 1.2  Agree timetable, strategy and methodologies for valuation and mapping of ES with local communities		Timetable has been agreed between all parties. Methodologies have been trialled and approaches developed by project team members. Prior to fieldwork in summer 2013, the exact sequencing of economic and non-economic techniques to be applied at each location will be agreed and built into the detailed timetable, including any synergies/ overlaps.		
Activity 1.3  Conduct spatial and social mapping of keeting through collation and analysis of existing (timings indicated reflect fieldwork season)	satellite/land use data (e.g. through GIS)	Not due for completion until Year 2. Aspethe main summer fieldwork period in Year existing data is ongoing by MSRM, to be		
Activity 1.4  Conduct ranking and valuation of key ES collation and analysis of existing econom		Not due for completion until Year 2. This summer fieldwork period in Year 2 (June Activities 1.1 and 1.2 above.	Activity will be discharged over the main - September 2013), and drawing on	
(Activity 1.5: not due to commence until	Year 2)	To be completed in Year 2, on the basis	of data from the above Activities.	
Output 2. Pilot PES schemes developed and implemented at selected study sites, with participation of local herding communities.	Appropriate technical specifications for evaluation of scheme benefits agreed; schemes validated and agreed with herders' communities; appropriate PES management and monitoring practices implemented; certificates issued on voluntary carbon market, mechanisms for profit sharing implemented.	end of the project in Year 3. Output level period. To date, the technical specification completed in Year 2, in accordance with	not all scheduled to be completed until the indicators relate to the whole project on is under development and will be the project implementation timetable by participating herding communities, and way, as evidenced by submission of the live for review and approval (attached).	

Project summary	Measurable Indicators	Progress and Achievements April 2012 - March 2013	Actions required/planned for next period	
Activity 2.1		Training needs analysis completed and training instituted as per project timetable.		
Undertake training needs analysis with p necessary training	Undertake training needs analysis with prospective PES groups and institute necessary training		of roles under Activity 2.2, to be completed	
Activity 2.2		Effectively discharged, as set out in Plan		
Agree management, monitoring and land for PES schemes, including record keep of benefits etc. with herder groups (e.g. I amongst project team	ing, roles and responsibilities, distribution	specific roles within participating herder groups to be completed as part of May 2013 training.		
Activity 2.3			rk has been initiated, with development of	
Develop technical specifications for valid community benefits	ation of carbon sequestration and other	Bioclimate and Dr Upton. This is schedu	d by Professor Jamsran and with support of uled for completion ahead of the summer hitoring under Activity 2.4 can commence as	
(Activities 2.4-2.8: not due to commenc	e until Year 2/3)	Only Activity 2.4 is due to commence in from agreement of the technical specific	Year 2. As highlighted above, this will follow cation under Activity 2.3.	
Output 3. Assessment of contributions of PES to livelihoods & conservation in different ecological contexts.	Monitoring programmes completed using agreed technical specifications for evaluation of carbon benefits, and established and participatory biodiversity and well-being indicators.	The technical specification is currently under development and is due for finalisar by the end of Quarter 2, Year 2, in accordance with the original project implementation timetable and as reported above. Baseline monitoring for livelihoods/ well-being and biodiversity/ ES status (Activities 3.3 and 3.4) has be initiated ahead of schedule.		
	,		UOL and Plan Vivo/ Bioclimate the latter ate encompassing not only carbon, but also will be admissible for this project, thus	
Activity 3.1		This Activity is not due for completion un		
Develop participatory indicators for livelihoods/ well-being and key aspects of local biodiversity/ ES with local communities		discussions with participating herders' groups in Year 1, and through further discussions amongst the project team. It will be completed as one of the first activities of the summer 2013 fieldwork period, as per the project implementation timetable and to ensure timely completion of baselines under Activities 3.3 and 3.4.		
Activity 3.2		In-depth socio economic surveys (unde		
Agree suite of appropriate, established livelihood and biodiversity indicators for study sites with project team		established livelihood indicators, have been completed for 3 of the 4 study sites, with analysis currently underway to finalise the most appropriate sub suite of indicators for case study locations. Similarly for biodiversity indictors, extensive surveys were completed in summer 2012, as set out in the Half Yearly Report, and in partial fulfilment of Activity 3.4, well ahead of schedule. Finalisation of established indicators for each site is ongoing.		

Project summary	Measurable Indicators	Progress and Achievements April 2012 - March 2013	Actions required/planned for next period	
( <i>Activity 3.3</i> : Not due to commence until Year 2, but some work already completed ahead of schedule)  Conduct analysis of livelihoods/ well-being and contributions of key ES therein pre PES interventions, using established and participatory indicators		Activity 3.3 has been partially completed (e.g. for established livelihood indicators), well ahead of schedule (see above). This will be completed for site 4 in summer 2013 and for participatory indicators (to be finalised under Activity 3.1) at all sites.		
(Activity 3.4: Not due to commence until Year 2, but some work already completed ahead of schedule)  Conduct analysis of biodiversity/ ES status using established and participatory indicators pre PES interventions		Activity 3.4 has been partially completed (e.g. for established indicators), well ahead of schedule (see above). This will be completed for site 4 in summer 2013 and for participatory indicators (to be finalised under Activity 3.1) at all sites.		
(Activities 3.5-3.7: not due to commenc	e until Year 3)	No activities planned for Year 2, in according timetable.	dance with project implementation	
Output 4.  Education and capacity building of key stakeholders (government officials, local herders) in ES values, development, management and efficacy of PES schemes in Mongolian context.	Workshops/ training events at study sites and in Ulaanbaatar, including information exchange/ training by PES ambassadors from selected PUGs. Implementation of PES schemes Valuation of ES at study sites, including development of methodology for non-economic valuation.	Workshops/ training events under this Output were not due in Year 1.  Progress towards implementations of PES schemes and valuation of ES is cover in reports on Outputs 1-3 and their component activities, above.  There are no changes in assumptions or measurement of output indicators.		
Activity 4.1		(See above)		
(PES training with herder groups (see 2.  **Activity 4.2** Liaison with and training of government opolicy briefing and end of project worksh	officials (ongoing throughout project,	Initial consultations have been undertaken and will be ongoing throughout the project, including with key CBD contact in country. Training is not scheduled until Year 3. Planning and preparation for this will be taken forward in Year 2.		
Activity 4.5 Wider dissemination and communication of project results (articles, newspaper reports, conference presentations, local workshops/ seminars etc.) including through PES ambassador herders. (Ongoing, 6 monthly, annual and final project reports – 6M, AR and FR respectively)		Dissemination activities to date include m presentations, as detailed in Section 9 of		
(Activities 4.3 and 4.4: not due to comm	nence until Year 3)	No specific activities planned for Year 2, timetable. However, further preparatory of project partners, for example between Dr Jamsran to ensure delivery of appropriate Activity 4.4 in Year 3.	Upton, Dr Nyamsuren and Professor	

### Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions			
Goal:						
Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered						
Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained						
in resources.	T					
Sub-Goal:						
Mongolia's ability to meet CBD commitments (especially under articles 8, 10, 11) and as highlighted in CBD 2011-2020 Strategic Plan for Biodiversity enhanced; also CITES/CMS where study sites include habitats of key migratory species.	Development of incentive measures for sustainable use & biodiversity conservation (through ES valuation and PES schemes in study areas).  Livelihood and conservation benefits realised in study areas, (assessed through appropriate established and participatory biodiversity indicators and human well-being).	Project reports and academic papers. Government policy documents, reports e.g. end of project NRCBD. Plan Vivo reports and certification.  (as above)				
Purpose To generate policy and practice relevant knowledge of values of ES in Mongolia and pastoral contributions therein and to test efficacy of PES schemes, in order to enhance biodiversity and livelihoods.	ES mapping and valuations in diverse ecological contexts, incorporating traditional knowledge and values, and linked to associated resource management/conservation planning.  PES schemes developed and implemented, including validation, issuance of certified carbon credits for voluntary market, distribution of benefits.	Project reports, academic papers, local resource management plans (e.g. for herders' Pasture User Groups), Government policy documents (re conservation, livelihoods), reports e.g. end of project NRCBD.  Project reports on and management plans for PES schemes. Certified carbon credits and evidence of marketing, income accrued e.g. through Plan Vivo. Government policy documents, reports e.g. end of project NRCBD.	Government of Mongolia (e.g. through Ministry of Nature, Environment and Tourism [MNET]) continue to prioritise ES valuation and PES schemes in seeking to fulfil biodiversity (e.g. through CBD) obligations and livelihood goals.  Buyers willing to purchase carbon credits in voluntary market.  Herding communities (e.g. through Pasture User Groups) are willing to participate in ES valuation and PES schemes, and these are supported by local government administration at study sites.			
	Project methods, reports and datasets used/ cited in policy documents, resource management plans at diverse scales.	Project reports and academic papers. Government policy documents e.g. end of project NRCBD, PUG plans.				

Outputs (add or delete rows as necessary)  1. Key ES at selected sites in contrasting ecological zones valued, with participation of local herding communities.	Economic/ non economic values for key ES at study sites produced; ranking and mapping of key ES completed; analysis of contributions re biodiversity, well being reported.	Project reports and articles (including participatory/ GIS maps)	Participation of local herding communities.  Access to available resource maps, surveys, socio-economic and ecological datasets provided by government officials.
2. Pilot PES schemes developed and implemented at selected study sites, with participation of local herding communities.	Appropriate technical specifications for evaluation of scheme benefits agreed; schemes validated and agreed with herders' communities; appropriate PES management and monitoring practices implemented; certificates issued on voluntary carbon market, mechanisms for profit sharing implemented.	Project reports. Plan Vivo reports, lists of validated schemes and marketing of carbon certificates on website. Community management reports from PUG groups.	Local herding communities willing to participate and cooperate with each other and thus able to secure Plan Vivo validation.  Continued support from local government officials for implementation of scheme, including continued support for tenure agreements with herders' groups.
3. Assessment of contributions of PES to livelihoods & conservation in different ecological contexts.	Monitoring programmes completed using agreed technical specifications for evaluation of carbon benefits, and established and participatory biodiversity and well-being indicators.	Project reports. Plan Vivo reports, Community management reports.	Appropriate and sufficient data available from external sources, in conjunction with project surveys and technical specification, to enable baseline, interim and end of project evaluations.
4. Education and capacity building of key stakeholders (government officials, local herders) in ES values, development, management and efficacy of PES schemes in Mongolian context.	Workshops/ training events at study sites and in Ulaanbaatar, including information exchange/ training by PES ambassadors from selected PUGs.  Implementation of PES schemes  Valuation of ES at study sites,	Government policy documents, reports e.g. end of project NRCBD; government websites and media outlets; lectures at academic institutions; project reports; training event reports.	Continued engagement and support of government, herders and other stakeholders.
	including development of methodology for non-economic valuation.		

#### **Activities** (details in workplan)

- 0.1 Project inception and start up meeting, Ulaanbaatar
- 0.2 Preliminary field visits for liaison and consultation with rural stakeholders and finalisation of case study sites
- 1.1 Development and trialling of methodologies for non-economic valuation of ES
- 1.2 Agree timetable, strategy and methodologies for valuation and mapping of ES with local communities
- 1.3 Conduct spatial and social mapping of key ES with local communities and through collation and analysis of existing satellite/land use data (e.g. through GIS)
- 1.4 Conduct ranking and valuation of key ES with local communities and through collation and analysis of existing economic data, including through GIS mapping
- 1.5 Analysis and reporting on dimensions and spatial distribution of values of key ES (articles, reports)
- 2.1 Undertake training needs analysis with prospective PES groups and institute necessary training
- 2.2 Agree management, monitoring and land use/management rights and protocols for PES schemes, including record keeping, roles and responsibilities, distribution of benefits etc. with herder groups (e.g. PUGs), government stakeholders and amongst project team
- 2.3 Develop technical specifications for validation of carbon sequestration and other community benefits
- 2.4 Monitor activities and compliance
- 2.5 Obtain Plan Vivo approval of validation report and project registration for carbon-based PES schemes
- 2.6 Issuance of first carbon certificates on voluntary carbon market
- 2.7 Analysis and reporting for all PES schemes (project reports, community PES group reports and analysis)
- 2.8 Further training and capacity building for PES groups as necessary
- 3.1 Develop participatory indicators for livelihoods/ well being and key aspects of local biodiversity/ ES with local communities
- 3.2 Agree suite of appropriate, established livelihood and biodiversity indicators for study sites with project team
- 3.3 Conduct analysis of livelihoods/ well being and contributions of key ES therein pre PES interventions, using established and participatory indicators
- 3.4 Conduct analysis of biodiversity/ ES status using established and participatory indicators pre PES interventions
- 3.5 Conduct analysis of livelihoods/ well being and contributions of PES scheme and key ES (post PES implementation) therein, using established and participatory indicators and against pre PES baseline
- 3.6 Conduct analysis of contributions of PES scheme to biodiversity/ ES status using established and participatory indicators post PES interventions and against pre PES baseline.
- 3.7 Analysis and reporting (articles, project and community reports; government briefings)
- 4.1 PES training with herder groups (see 2.1, 2.8 above)
- 4.2 Liaison with and training of government officials (ongoing throughout project, policy briefing and end of project workshop)
- 4.3 Training of PES ambassador herders
- 4.4 Training of students/ future conservation managers through key academic institutions
- 4.5 Wider dissemination and communication of project results (articles, newspaper reports, conference presentations etc.) including through PES ambassador herders

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

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

It is important, however, that you include enough evidence of project achievement to allow reassurance that the project is continuing to work towards its objectives. Evidence can be provided in many formats (photos, copies of presentations/press releases/press cuttings, publications, minutes of meetings, reports, questionnaires, reports etc) and you should ensure you include some of these materials to support the annual report text.

#### Supplementary materials included with report:

- 1. Copy of Project Information Note (PIN) submitted as part of the Plan Vivo process, plus attachments
- 2. Copy of letters of support from D. Enkhbat and D. Dagvadorj (these were also included as attachments to the Plan Vivo PIN)
- Copy of slides from joint presentation with Flora and Fauna International at ZSL conference, London, December 2012 (also available, with audio of presentation at ZSL website
  - http://www.zsl.org/science/events/conservation-and-human-wellbeing,650,EV.html
- 4. Copy of Activity breakdown and timeline for development of Technical Specification (Activity 2.3)

#### Materials not included, but available on request:

- 1. Copy of MOU between UOL and in-country project partners
- 2. Copy of MOU between UOL and Bioclimate
- 3. Socio-economic survey instrument and database (linked to Activities 3.2 and 3.3 for established indicators)

### **Checklist for submission**

	Check
<b>Is the report less than 5MB?</b> If so, please email to <a href="mailto:Darwin-Projects@Itsi.co.uk">Darwin-Projects@Itsi.co.uk</a> putting the project number in the Subject line.	x
Is your report more than 5MB? If so, please discuss with <a href="Darwin-noiects@ltsi.co.uk">Darwin-noiects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	no
Have you involved your partners in preparation of the report and named the main contributors	yes
Have you completed the Project Expenditure table fully?	yes
Do not include claim forms or other communications with this report.	1