## **Darwin Initiative: Half Year Report**

(due 30 Sept 2014)

Project Ref No	20-016
Project Title	Reviving socio-ecological landscapes for biodiversity conservation and climate change adaptation
Country(ies)	India + UK
Lead Organisation	Durrell Institute of Conservation and Ecology (DICE)
Collaborator(s)	Applied Environmental Research Foundation
	Pukka Herbs Ltd.
Project Leader	Prof. D.MacMillan
Report date and number (eg HYR3)	HYR2
Project website	http://www.kent.ac.uk/sac/research/projects/dcm_ghats.html

## 1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up).

## Key achievements-

a) With the support of the Darwin Initiative the Applied Environmental Research Foundation (AERF) designed and manufactured nut cracker machines for the primary processing of fruits of *Terminalia bellirica* and *Terminalia chebula*. These machines will significantly improve the efficiency of processing and add value at source, thereby substantially increasing the income from the collection of the fruits for the marginal farmers and tribal groups. Dr. Bride formally handed these machines at Bhimashanker to the beneficiaries in a short ceremony during his project visit in June 2014. The Dhagewadi village will also be able to earn additional income by the primary processing of fruits for neighbouring villages. Moreover, this initiative has helped leverage financial support from KNCF, a Japanese funding agency, to meet the costs of high efficiency solar drying equipment, which has been procured and handed over to the collectors at respective locations.

b) AERF also completed the organic certification of **all** the proposed collection sites, both from the Bhimashankar Wildlife Sanctuary protected area and the sites in the Sangameshwar region for the target species-*Terminalia bellirica* and *Terminalia chebula*. The certificates of compliance were received from IMO, India office in the second week of September. This is a very significant milestone, both in its own right, and as progress towards achieving FairWild certification.

c) Following discussion with the DICE project partners, AERF has also initiated work on the value chain development for the conservation of a third species - *Pterocarpus marsupium*, an IUCN Redlisted tree species. This tree is known for the medicinal qualities of its timber, which has shown promise in the treatment of diabetes. Promoting its medicinal use under the Fair-Wild banner will avoid indiscriminate felling of this tree and facilitate sustainable use.

d) Nature Connect, the company set up by AERF to oversee the supply chains in India, has received a letter of intent for the purchase of 1 tonne each of organically certified fruits of *Terminalia bellirica* and *Terminalia chebula* from Phalada – a leading exporter of medicinal plants from India. This represents an additional order over and above that required by Pukka Herbs when FairWild certification is achieved.

e) The project was instrumental in helping Pukka Herbs win the 2014 2Degrees Sustainability Champion Award in the Sustainable Supply Chain category – see:

http://www.traffic.org/home/2014/7/10/fairwild-standard-helps-pukka-herbs-achieve-2014-sustainabil.html

## Y2Q1 and Q2 Activities against implementation timetable

A1.1. Biological surveys – Rapid surveys of amphibian and reptile diversity were completed at three target sites in Sangameshwar – the Ujgaon, Vighravali and Morde sacred groves - while a detailed assessment of amphibian and reptile diversity was completed for the sacred grove of Kundi.
A1.2. Vegetation, carbon stock assessment and botanical surveys were completed for a community-conserved forest spread over 538 acres at the target site village of Kalambaste.

**A1.3. Capacity building sessions in restoration and conservation of sacred groves** were conducted for community representatives in **two new sites** the villages of **Sangave** and **Lovale**. As part of this training a total of 450 saplings of 15 different species were planted as a restoration intervention in the sacred grove of **Sangave**, and 250 saplings of 17 different species planted in the sacred grove of **Lovale**.

**A2.2.** In progressing the **research and provision of the Traditional Knowledge based NRM practice**, as well as organising the existing holdings and developing a framework for online access, key informants (4 to date) are being identified with whom detailed recorded ethnographic interviews will be conducted. **A3.1** Consultations were held with marginal farmers and community leaders from the 4 villages for establishing **agro-forestry pilot plots** and 5 locations were finalized i.e. the Community forests in the villages of **Kalambaste** and **Wada Vesaravat**, two locations in the village of **Morde** and one location in the village of **Vighravali**. The conservation and management of these plots for the next 5 years has been agreed with the community members through signed formal agreement. Out of these 5 locations, agro-forestry plantations were completed at 2 locations – with 450 saplings of native timber and multipurpose species planted in community forest in the village of **Kalambaste** and 400 saplings of 13 species planted in the community forest of the village of **Wada Vesaravat**.

**A3.2. Training** was conducted in the village of **Kalambaste** and personal meetings were held to train the plot owners from the village of **Morde** in the management of those species planted as part of the agroforestry pilots. Emphasis has been given to native and fast growing high value timber species as well as multi-purpose tree species with a view to facilitating the most cost-effective development and management of these plots.

**A3.3.** Detailed discussions were held with community members before finalizing **the make-up and locations of the agro-forestry plots**. The management challenges associated with grazing, the availability of water and the distance from the village were given due consideration during these discussions and approaches were developed to address these challenges; including the appointment of community guards for the regular management of the pilot plots and the establishment of living protective hedges.

**A3.4.** In addition to the education provided in the form of training and planning discussions, a more widely **publicly oriented educational programme** is being developed now that tangible developments can be seen on the ground. The plan is to bring members of the local communities, especially potential participants and graduate students, along to present and interpret the pilot plots to them.

AERF has also begun talks with the ASP College for Science and Commerce, which is based at Devrukh, with a view to **developing educational programmes** in the context of this project that involve their graduate students.

**A3.5.** Collectors from target site villages in the Sangameshwar district **followed the FairWild protocol** while collecting the fruits of *Terminalia bellirica*. A total of 700 Kgs of *Terminalia bellirica* fruits were collected at 4 target sites as part of this trial collection/training exercise.

**A4.1.** The **pilot supply chains** were strengthened and formally institutionalised at all the collection sites in Bhimashankar and Sangameshwar. Detailed discussions with community members, marginal farmers were conducted to address the equitable distribution of benefits, and ensure the transparency, accountability and monitoring of the supply chain. Moreover, as part of compliance of organic certification, contracts were signed between collectors and Nature Connect ensuring a long-term supply of the fruits of the two target species *-Terminalia bellirica* and *Terminalia chebula*.

**A4.3.** A thorough and detailed documentation **pilot supply chain** for two species was completed as part of the organic certification. All the collectors have been registered, their resource areas mapped and marked, production yield estimates documented, and primary processing equipment tested.

**Budget** The budget spend is currently on track.

2a. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

Climatic variations have impacted upon the rainfall pattern and duration in the project region. Thus the onset of the monsoon – critical for paddy cultivation- was delayed by a full month, which caused a significant delay in the sowing of paddy, which in turn negatively impacted the participation of community members in the pilot plantation. Moreover, the rains have been highly erratic – with very intense short spells of monsoon causing floods and landslides at many places in the pilot plot planting activities and means that the establishment of the remaining three sites has been postponed until next year.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS:	Yes/ <u>No</u>
Formal change request submitted:	Yes/ <u>No</u>
Received confirmation of change acceptance	Yes/ <u>No</u>

3a. Do you expect to have any significant (eg more than £5,000) underspend in your budget for this year?

Yes 🗌 No 🗹

**3b.** If yes, and you wish to request a carry forward of funds, this should be done as soon as possible through the formal Change Request process. However, it would help Defra manage Darwin funds more efficiently if you could give an indication now of how much you expect this request might be for.Estimated carryforward request: **£** 

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

The project partners in India (AERF) have been negatively impacted by the slow movement of finance caused by the need in India for approved accounts to be signed off prior to their being sent to the University of Kent as the fund holder (along with all the receipts as demanded by the University's research office) and then checked their in detail. So far AERF has been able to address the resulting cash flow problem with the aid of funds from other project sponsorships. Of course, this issue is unavoidable and all parties have been endeavouring to ensure that the financial arrangements are executed as efficiently and quickly as possible, but it is worth flagging up because it may result in slight delays when it comes to the project's financial reporting to Darwin.