



## Darwin Initiative Annual Report



Department  
for Environment  
Food & Rural Affairs

**Important note:** To be completed with reference to the Reporting Guidance Notes for Project Leaders:

it is expected that this report will be about 10 pages in length, excluding annexes

**Submission Deadline: 30 April**

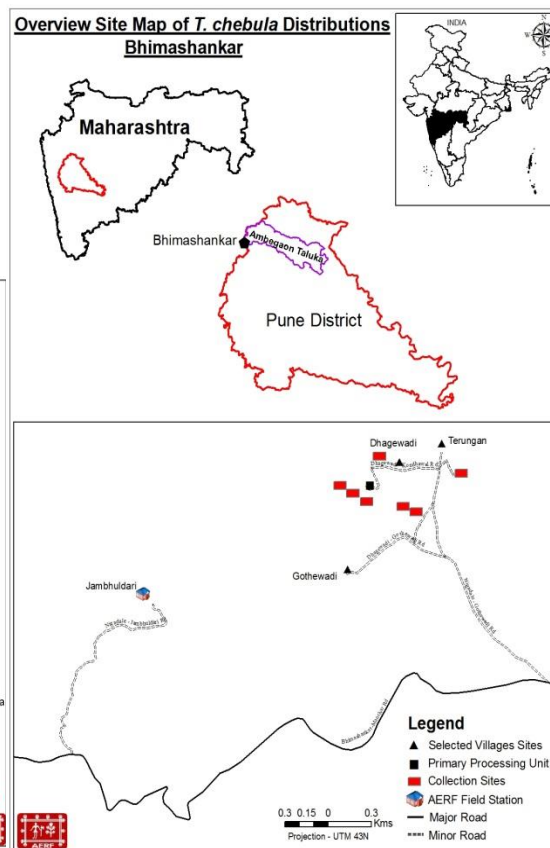
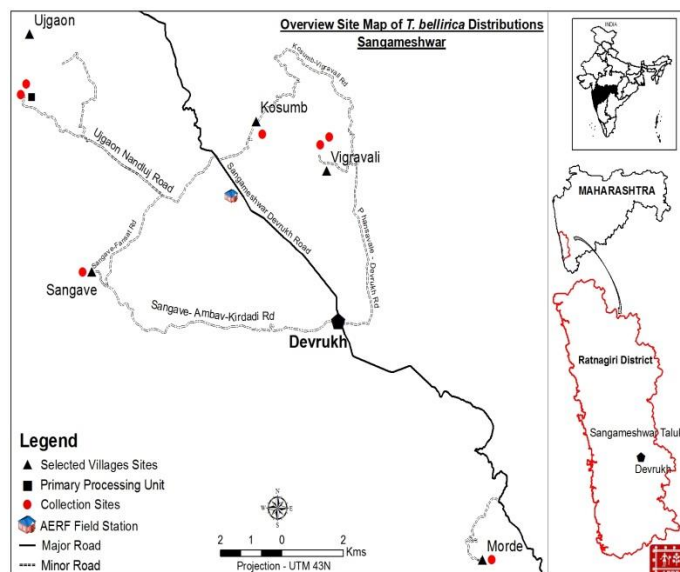
### Darwin Project Information

Project Reference	20-016
Project Title	Reviving socio-ecological landscapes for biodiversity conservation and climate change adaptation
Host Country/ies	India + UK
Contract Holder Institution	Durrell Institute of Conservation and Ecology (DICE)
Partner institutions	Applied Environmental Research Foundation Pukka Herbs Ltd.
Darwin Grant Value	£171,317
Start/end dates of project	1 <sup>st</sup> June 2013 – 30 <sup>th</sup> May 2016
Reporting period (eg Apr 2013 – Mar 2014) and number (eg Annual Report 1, 2, 3)	April 2013 – March 2014 Annual Report 1
Project Leader name	Prof. D.MacMillan
Project website	Tba.(see notes below)
Report author(s) and date	Prof. D.MacMillan, Dr.I.Bride, Dr. A.Godbole, Dr.J Sarnik 6/05/2013

### 1. Project Rationale

In the wider project region of the Western Ghats, a global biodiversity hotspot, the livelihoods and culture of the local communities are directly dependent on the biodiversity and ecosystem services provided by the socio-ecological landscapes. Yet the pressures to sustain livelihoods is driving the replacement of traditional crop varieties with hybrid cash crops, the clear felling of forests, and the erosion of traditional knowledge, causing degradation of ecosystem services and loss of key species. DICE is working with experienced partners (AERF and Pukka Herbs) to address this problem through exploiting the economic opportunity offered by a diversity of medicinal plants, many in demand commercially by the Ayurveda medicinal system and/or having considerable potential on international markets. Central to this process is the development of a supply chain for the fruit of two endemic tree species (*Terminalia bellirica* and *T. chebula*) and an associated community regulated Access and Benefit Sharing (ABS) mechanism, and the creation of agro-forestry nurseries and plots with the aim of demonstrating how ecological restoration can also revive the social and economic capacity of fragile rural communities.

The two principle project sites are around the village of Dhagewadi, Bhimashankar and several villages in the vicinity of Sangameshwar, both in the state of Maharashtra, India. The two figures show the location of these sites and the main nearby distributions of *Terminalia bellirica* and *T. chebula* recorded by project surveys.



## 2. Project Partnerships

The project partnership between DICE, AERF and Pukka Herbs has strengthened considerably over the first year of DI funding. Pukka Herbs and DICE representatives have met formally at the Pukka Herbs offices, Bristol, and both have worked closely together with AERF during two co-ordinated field visits to India (October 2013; February 2014). In addition to the dialogues focussed around specific workshops and meetings, the project visits have involved a near continuous discussion between the partner representatives, whether during site visits, travel between sites, over meals, or in the evenings spent together.

There has been a degree of ‘bedding in’ between the partners in terms of developing a mutual understanding of the differing institutional needs of each (academic/government, business and NGO). However, the relationship between partners is very open and positive and all agree that the different perspectives each partner brings to project planning, actions and project outputs is a major strength of the collaboration. It offers a valuable learning experience for each partner, together with an enhanced capacity to support one another by drawing upon different knowledge and skill sets. Clearly, the key to this understanding has been regular and frank communications (by Skype and email) in addition to the time spent together in the field (an estimated 60 person-days spent by individuals from at least two of the partner organisations).

## 3. Project Progress

### 3.1 Progress in carrying out project activities

The activities reported against implementation timetable over the first four quarters of Year 1 are virtually all on track (note: the 2-month start delay means the Y1Q4 quarter ends 30<sup>th</sup> May 2014). The biological surveys have been completed in the relevant sacred groves and the community-conserved forests for the purposes of the project, with assessments made of floral diversity, insect/pollinators and bird diversity, together with a study of the use of native timber species. These data have been considered in combination with socio-economic and other survey data collected from twelve candidate sites for pilot agro-forestry interventions associated with villages in the vicinity of Sangameshwar and also in Dhagewadi. The best sites for

collection and the location of processing facilities, nursery establishment and pilot plots have thereby been narrowed down.

A significant amount of informal education and training of local people has taken place in the context of conducting the surveys and the development of the contractual agreements between the local communities and *Nature Connect*, which is the business entity set up by AERF to oversee the front end of the species supply chain and then eventually manage the community returns deriving from the FairWild certification-associated premium. Formal training of collectors has been conducted and additional training will take place in association with the establishment of the plant nurseries and restoration plots, as well as in the context of the first harvests to be put through the supply chain once it is set up.

Preliminary work has been carried out on the design of the knowledge-sharing workshops, with a collection module/manual currently being drafted by AERF supported by Pukka and DICE, which will be informed by a review of existing agro-forestry systems operating elsewhere. Stakeholder consultations included 'status of knowledge' surveys, group discussions, and village level meetings. In three villages - Talwade, Morde and Kalambaste - multi-purpose, native species-based agro-forestry models were considered. Following discussions with these communities, comprehensive assessment monographs have been prepared for fifteen species. Meanwhile, existing data and materials held by AERF on NRM practice are currently being catalogued and organised by one of the field workers.

Extensive discussions have already taken place between AERF, Pukka and DICE as to the nature and operation of a suitable ABS mechanism. The idea of a benefit sharing mechanism has been discussed in five of the targeted villages during governing body meetings - namely Kosumb, Ujgaon and Morde from the Sangameshwar block and Kondhwal and Nigdale in the Bhimahshankar Wildlife Sanctuary. In one village (Kosumb) a biodiversity management committee also has been formalized. The precise nature of the ABS will very likely vary according to the specific site/community, and the project partners are well aware that such mechanisms need to be carefully crafted through a process of dialogue. Because the FairWild premium will not be on stream until the supply chains are up and running, ABS development can take place at an appropriately considered pace so that it will need the mutually agreed needs of the specific communities and have a biodiversity focus built in.

It is expected that the intended project output of providing viable alternative, ecologically-sound, livelihood options, will be demonstrated when a functioning supply chain for at least one NTFP is established. However, in practice the partners are expecting to have two such supply chains in operation by project end. To date the primary project focus on the supply chain development has been around the requisite organic certification through the IMO (Institute for Marketecology). Currently, important ownership issues and training needs are being dealt with, and agreement has been reached between AERF/Pukka Herbs and the village of Dhagewadi, Bhimashankar, for the collection and processing site location for *Terminalia chebula*, with primary candidate sites identified in a total of six villages in the area of Sangameshwar – Ujgaon, Kosumb, Morde, Vighravali, Sangave and Nandlaj – for *T. bellirica* collection. In addition to the ongoing drafting of the design for the collection and processing facilities for *T. chebula*, which is continuing through dialogue between the project partners and key stakeholders, a nutcracking machine has already been made and supplied to Dhagewadi villagers to enable them to add significant economic value to existing stocks at a time when their income has suffered markedly due to a drop in local market prices.

### **3.2 Progress towards project outputs**

The conservation status of some sacred groves is already improved, as is evidenced by contractual and non-contractual agreements and understandings between AERF and local communities (see logframe). Similarly, the creation of a platform for gathering and sharing Indigenous Knowledge based NRM practice is underway, with the first IK-NRM workshop having been conducted in Dhagewadi in February 2014. This identified key issues relating to the *T. chebula* groves in terms of sustainable harvesting and other candidate species for exploitation, as well as the sort of agroforestry practice interventions that might be considered.

Community workshops and meetings have also been conducted in the villages of Morde, Talawade and Kalambaste in order to gauge the potential for promoting agro-forestry as a strategy for sustainable management of forests and generating steady revenue streams over the next 10-15 years. A total of five candidate sites have been identified and agreements have been signed for promoting agro-forestry with the farming communities in the villages of Ujgaon, Vighravali, Morde, Kalambaste and Talawade in Sangameshwar. It is intended that these agreements will help precipitate the alternative, ecologically-sound, yet commercially-viable, livelihood options sought by the project. To this end the sustainable commercial collection of *T. chebula* fruits for Pukka Herbs has been agreed with Dhagewadi villagers and of *T. bellirica* in the Sangameshwar villages of Ujgaon, Morde, Nandlaj, Kosumb and Vighravali. These examples should demonstrate the viability of alternative sustainable options, and with a total three nurseries of native multi-purpose species having been established in the villages of Kosumb, Ujgaon and Wada Vesaravat, which will enable agro-forestry pilot plantations to be established at five sites (covering a total area of 75 acres) during the forthcoming monsoon season.

In regards to the output target of establishing a viable supply chain for at least one NTFP, we have in fact initiated two separate supply chains for two species. Both are under development and progressing well. A community workshop on the value chain of *Terminalia chebula* in Bhimashankar and village discussions on the value chain of *T. bellirica* have contributed to an improved understanding of economics of the exploitation of these species. In addition, the domestic market survey of medicinal plants has indicated that there is significant opportunity to sell the sustainably collected and processed fruits locally with reasonable profit margins. Once the organic and FAIRWILD certification process is completed, we will likely have the preliminary economic data on the supply chains.

### **3.3 Progress towards the project Purpose/Outcome**

The project purpose remains unchanged: to increase the capacity of targeted local communities in the North-Western Ghats to adapt to climate change and participate in biodiversity conservation through the improved management of socio-ecological landscapes. Much of the focus in this first year has been on resource assessments, developing the formal agreements with the local communities, and planning and organising the activities and detailed paperwork required for successfully meeting the vital requirement of achieving IMO (Institute for Marketecology) organic certification for the collection of the fruit of *Terminalia bellirica* and *T. chebula*. This organic certification is required by Pukka Herbs for them to be able to use the material in their Ayurvedic preparations, and is a pre-requisite for the FairWild Certification (scheduled for November 2014). Both certifications are key to the establishment of the full supply chain for these two species, with the FairWild certification eventually providing resources to be returned to the communities via the ABS mechanism. Being the first FairWild certification in the whole of India, this project output will constitute a major project outcome that will facilitate future supply chains of other species and offer considerable opportunities for publicity and promotion throughout the region. At the same, significant progress has also been made in regards to the agroforestry interventions, with ~4000 saplings of sixteen different species being raised at three different locations in Sangameshwar region and fifteen farmers having signed up for the agro-forestry pilot in four villages.

### **3.4 Goal/ Impact: achievement of positive impact on biodiversity and poverty alleviation**

The original project goal was to reverse the degradation, restore and improve the value of socio-ecological landscapes in the North-Western Ghats, India, by training and educating local people to understand that preserving and sustainably harvesting natural biodiversity can directly improve their standard of living. This goal remains unchanged and important steps have been made in making a contribution towards it, notably in regards to the economic and developmental improvements associated with the two species supply chains that are under development.

#### **4. Project support to the Conventions (CBD, CMS and/or CITES)**

Through the promotion and establishment of agro-forestry schemes on degraded lands in the Western Ghats hotspot, the project is contributing to Aichi target 5 - reducing rate of habitat loss, fragmentation and degradation. AERF has identified a total of six sites for promoting these schemes, and agreements have been signed with the respective landowners – with the aim to restore an area of 75 acres.

Secondly, the project offers a premium price to the local communities for the sustainable collection of fruits of *Terminalia chebula* and *Terminalia bellirica*. This activity contributes to fulfilment of Aichi target 3 - providing positive incentives to local communities for biodiversity conservation. In fact, the FAIRWILD certification scheme associated with the sustainable collection currently being implemented through this project is the only such initiative in the country. AERF is promoting the sustainable collection of these medicinal fruits in a total of eight villages in the Bhimashankar (2) and Sangameshwar (6) regions. This season, a total of 600kg of *T. bellirica* and 3000kg of *T. chebula* have been collected.

The promotion of sacred groves as flagships for biodiversity conservation and climate change adaptation is one of the key objectives of this project. Project activities aimed at achieving this objective are contributing to the Aichi Target 14 - safeguarding ecosystem services. AERF has collected data on pollinator diversity from six sacred groves and has held community meetings with the six participating villages of Sangameshwar, highlighting the role of pollinators in sustainable agriculture.

#### **5. Project support to poverty alleviation**

The project's economic evaluation of the collection of *T. chebula* at Dhagewadi has estimated that the amount received per kilo by the villagers will increase from the current amount of approximately 5INR/KG to 25INR/KG once the FairWild certified supply chain is in place – with an initial 3 tonnes to be imported by Pukka Herbs – and an additional amount of 10% of the value of the retail price to be contribute to relevant community projects via the to be agreed benefit sharing mechanism and *Nature Connect* (one possible target already identified is the provision of proper sanitation facilities for the whole village). Similar benefits are anticipated for the supply chain of *T. bellirica* from the sites in Sangameshwar, but in the meantime AERF has tied up with a local Ayurveda drug manufacturer to sell collected medicinal plants independent of certification and this company has communicated their annual requirement for the species collected in the context of the Darwin project, with local collectors already having received direct benefits for their collection of *T. bellirica* fruits in Sangameshwar region.

#### **6. Monitoring, evaluation and lessons**

The project has been monitored over its first year through a combination of regular communication and discussion, and the field visits. AERF is maintaining records of its activities and has supplied much of included in this report. In terms of demonstrating that outputs and activities of the project will contribute to the project purpose/outcome, we expect that this will become clear as the project moves through the next two years.

There have clearly been some important lessons learned during this first year, whether in regards to the financial arrangements or certain deliverables (e.g. see publicity below). Dr. Bride's forthcoming visit in June 2014 will be dedicated to a project review and planning with a view to ensuring that the project processes work effectively in Year 2 and that the monitoring and evaluation framework is adapted accordingly.

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

N/A

## 8. Other comments on progress not covered elsewhere

The project design has not been changed significantly over the past year. The notable adjustment has been an earlier than planned introduction of one component of the first stage processing equipment at Bhimashanker in the form of a nutcracker machine for stone removal from the dried *T. chebula* fruit. This was done to enable the Dhagewadi villagers to obtain a better price for their existing stocks and was a response to a large fall in the market price (from 8INR/KG to 5INR/KG) and the concomitant loss of a significant amount of income to this poor community. AERF has been helping the villagers find buyers for the de-stoned fruit in the Indian market (since this product is not certified organic it is of no use to Pukka Herbs).

The only really significant difficulty encountered during the year has been the management of the UK-India cash flow and the financial reporting mechanism by AERF. This is because AERF is required to retain original receipts for their own official audit and so must have this audit completed after the half-year or full-year end date before copying all the receipts and sending the originals over to the UK. This requirement delays the University receiving the staged financial reports and associated receipts and then has the knock-on effect on AERF because it cannot receive money until all advances etc. have been accounted for by the UoK Research Office. This has precipitated cash flow problems for AERF (an indeed, has delayed the production of this report), but DICE project staff are working with the School of Anthropology's Senior Administrator and the University's Research Office to find the best way of addressing this problem.

## 9. Sustainability

Because of the considerable efforts having been put into getting key project elements progressing, the promotional and publicity aspects have perhaps been neglected to some degree – although perhaps necessarily so since the project's achievements have not been materialised to the extent that are ready to be widely demonstrated. However, the project activities have certainly generated considerable interest in those villages it has been involved with and there is plenty of scope for building on this in the coming years. As to the issue of sustainability, the supply chains will be designed to continue indefinitely, be added to with new species, and be supported through the continuing existence of *Nature Connect*. A detailed exit strategy will also be drawn up towards the end of Year 2.

## 10. Darwin Identity

Darwin Initiative support has been used for the distinct project set out in the application. Educational and promotional materials are in the process of being produced (T-shirts, caps etc.) all of which are prominently labelled with the DI logo. The goals and objectives of the Darwin Initiative and of how they relate to this specific project have also been clearly explained in the context of both formal and informal village meetings. In relation to the development of the project website, staff turnover in the School of Anthropology and Conservation has caused a delay in setting this up, but it will be a priority in Year 2.

## 11. Project Expenditure

**Table 1 project expenditure during the reporting period (1 April 2013 – 31 March 2014)**

Project spend since last annual report	2013/14 Grant (£)	2013/14 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				

Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
<b>TOTAL</b>				

Highlight any agreed changes to the budget and explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin?

**12. 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 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)

Nearly all of the documentation required for successful IMO (Institute for Marketecology) organic certification for both *Terminalia bellirica* and *T. chebula* have been completed and, following his site visits, the IMO inspector has informally stated that he has been very impressed by what AERF have put in place. The final documents are shortly to be submitted and formal certification should then be not far off. **Just as soon as this status it is granted it will be reported to the Darwin secretariat** (with an article submitted to the Darwin Newsletter).

With the support of the project AERF has been able to secure protection to 10 giant trees of *Terminalia bellirica* in the sacred grove of Nandlaj, with the villagers coming to recognise the value of these trees and deciding not to them trees in order to build their new temple.

## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2013-2014

Project summary	Measurable Indicators	Progress and Achievements April 2013 - March 2014	Actions required/planned for next period
<p><b>Goal/Impact</b></p> <p>To reverse the degradation, restore and improve the value of socio-ecological landscapes in the North-Western Ghats, India, by training and educating local people to understand that preserving and sustainably harvesting natural biodiversity can directly improve their standard of living.</p>		<p>Progress towards the sustainable production of wild species and the concomitant impact on livelihoods and biodiversity conservation is gathering pace with the immanent granting of organic certification for both <i>T. bellirica</i> and <i>T. chebula</i> collection at the chosen sites.</p>	
<p><b>Purpose/Outcome</b> To increase the capacity of targeted local communities in the North-Western Ghats to adapt to climate change and participate in biodiversity conservation through the improved management of socio-ecological landscapes and the adoption of alternative, ecologically-sound livelihoods based on agroforestry principles and practice coupled with an effective access and benefit sharing mechanism that improves the situation of poor people. To these ends the project will conduct a NTFP feasibility study focussed on Sacred Groves, set up and run a supply chain for two products at two study sites, and seek to establish economically viable nurseries and experimental plots.</p>	<p>Ecological surveys and biodiversity assessment at target sites show increased biodiversity health of sacred groves and community forests within socio-ecological landscapes</p> <p>New participatory agro-forestry pilot schemes, with collection and marketing of non-timber forest produce by the local community following the FairWild scheme and standards, and a functioning complete product chain for the two pilot species</p> <p>Significant increase in income for the NTFP collectors and other primary stakeholder participants</p> <p>Increased knowledge and understanding of traditional adaptive agricultural practices amongst project partners and stakeholders, and increased local stakeholder knowledge and practice of ABS, GACP and basic commercial principles</p>	<p>Following feedback on the logical framework during the Darwin workshop for new projects in June 2013, and discussion between DICE and AERF during field visits and online, it has become clear that the value of 'before and after' biological measures of biodiversity at target sites across the lifespan of the project will be questionable. The initial surveys have been of value in contextualising the project and selecting harvesting sites etc., but we have recognised that less direct, anthro-centric measures will be more appropriate in evaluating biodiversity impacts in due course.</p>	<p>To complete the certification process, by adding FairWild status to the organic certification.</p> <p>Develop the agroforestry pilot scheme design and implementation, using materials sourced from the nurseries set up under this Darwin Initiative project.</p>
<p><b>Output 1. The conservation status of sacred groves is improved.</b></p>	<p>Existence of co-management plans for community forests</p> <p>Increase in number/area of forests conserved by the community</p> <p>Restoration activities in target forests/groves</p>	<p>In the last year, AERF field researchers conducted village meetings for securing community participation in discussion and action for conservation and restoration of sacred groves in following villages: Talawade, Morde, Sangave, Kosumb, Nandlaj, Vighravali and Chafavali. Through AERF's efforts, it has been possible to give protection to 10 giant trees of <i>Terminalia bellirica</i> in the sacred grove of Nandlaj, with the villagers deciding not to fell these trees in order to build their new temple. Similarly, in Chafavali village, through the persistence of</p>	



	Improved community & stakeholder attitudes to sacred groves.	and vigilance of AERF field staff, a huge specimen of an endangered red sandalwood tree – <i>Pterocarpus santalinus</i> has been saved in the sacred grove. In addition, co-management plans for the restoration of sacred groves have been developed for the villages of Talawade, Sangave and Vighravali. The restoration work will be carried out in these groves during the monsoon period.
Activity 1.1. Baseline monitoring of target site biodiversity – and subsequent measurement		Plants, birds and pollinator diversity surveys have been completed for sacred groves of Vighravali, Talawade, Morde, Kosumb, Ujgaon and Sangave. Amphibian and reptile diversity surveys will be carried out during the monsoon. Further surveys will be undertaken during November-December to monitor the restoration activities in the selected sacred groves.
Activity 1.2. Baseline surveys of community-conserved forests		Completed for candidate sites to enable selection of working project sites.
Activity 1.2. Education and training in forest/grove restoration		Has taken place in the context of the discussions to gain community support – and will be an integral part of the forthcoming restoration activities (see above)
Activity 1.2. Design and implementation of pre and post project community and stakeholder attitudinal survey		The initial surveys have been completed for Kosumb, Ujgaon, Vighravali, Talawade, Kunde, Bellari, Pur, and Dhamlui.
<b>Output 2. A platform for gathering and sharing Indigenous Knowledge based NRM practices is created.</b>	Locally facilitated knowledge-sharing workshops for indigenous communities. Information archive of Traditional Knowledge based NRM practices. Community acceptability in developing an ABS mechanism	Four categories of workshops/consultations have been conducted to document indigenous knowledge associated with biodiversity. The first focused on indigenous knowledge associated with pollinators; the second, on traditional knowledge associated with medicinal plants, and the third, on traditional knowledge associated with native timber and multi-purpose species. These were conducted in ten Sangameshwar villages and two Bhimashankar villages.
Activity 2.1. Organise and deliver knowledge-sharing workshops		Two workshops conducted - attended by a total of 60 participants.
Activity 2.2. Research, record and create TK base NRM practice archive		The assessment of existing data and materials, and design of organisational framework are currently underway.
Activity 2.2. Make this archive available through various media - subject to IP considerations and agreement with indigenous people		Currently N/A
Activity 2.3. Work with target communities to develop acceptable ABS mechanism		The dialogue between project partners and with target communities has begun and will continue through the project lifespan to ensure economic benefits from the product supply chains and agroforestry interventions are equitably shared.
Activity 2.4. Establish community organisation to manage ABS and process infrastructure		An organisation for this purpose ( <i>Nature Connect</i> ) has been formally constituted for this purpose.
<b>Output 3. The viability and acceptability of alternative, ecologically-sound, yet commercially-viable, livelihood options are demonstrated.</b>	Existence and performance of pilot plots No. of endemic species planted & and no. of saplings established Number of farmers signed up to pilot a/f scheme	Some 4000 saplings have been raised of 16 different species at three different locations in Sangameshwar region.  So far 15 farmers have signed up for the agro-forestry pilot in four villages.  Community surveys and village meetings in 10 villages in Sangameshwar region and three villages in Bhimashankar region along with capacity building

	<p>Raised awareness and interest amongst stakeholders</p> <p>Collection of non-timber produce based on protocols and standards</p>	<p>sessions have raised awareness and interest among the stakeholders.</p> <p>Trail collections based on the FairWild protocols have been carried out in the five participating villages in Sangameshwar and the two in Bhimashankar. These standards will be maintained.</p>
Activity 3.1. Work with members of target communities to establish pilot plots		Meetings have been conducted in three villages for establishing the pilot plots. Land areas have been demarcated for plantation creation.
Activity 3.2. Train members of target communities to care for pilot plot species		Knowledge surveys have been conducted on agro-forestry species and trainings have been planned during the first quarter of the next year.
Activity 3.3. Work closely with farmers to design pilot agroforestry scheme		Currently N/A – although formal agreements to do so have been made.
Activity 3.4. Conduct educational programmes amongst stakeholder groups		Informal and formal educational activities have taken place in the context of site visits and village meetings. Specific materials and activities are being designed for Year 2 into Year 3.
Activity 3.5. Collaborate with stakeholder groups to produce NTFP protocols		Currently N/A
<b>Output 4. A complete and viable supply chain for at least one NTFP is established</b>	<p>A supply chain for one NTFP</p> <p>Existence of collection/drying facilities</p> <p>Evidence of the successful performance of this supply chain</p> <p>FairWild certification awarded</p>	Three capacity building sessions have been conducted on the supply chains of <i>T.chebula</i> and <i>T.bellirica</i> . Similarly, a total of five orientation and collector training sessions have been conducted for the purpose of making collectors conversant with the FAIRWILD protocol for sustainable collection and compliance requirements. Most importantly, inspection of organic certification has been completed for both sites and IMO approval is awaited.
Activity 4.1. Work closely with Pukka Herbs and target communities to design, create and monitor the pilot supply chains		This has been a primary focus of Year 1 field visits and other activities and continues to be so. The design of the processing facilities will become of greater importance when the IMO certification (which relates primarily to the fruit production and collection) has been completed.
Activity 4.2. Researching and maintaining a detailed record of the complete length of the pilot supply chain		This will be finalised during the forthcoming DICE partner project visit in June 2014.
<b>Output 5. An enabling environment for scaling-up the project activities is catalysed</b>	<p>Training facilities and personnel in place.</p> <p>Demand for training from people outside of the project area.</p> <p>Attendance at dissemination workshops.</p>	Currently N/A
Activity 5.1. Identifying, bringing together and organising training teams and events		Currently N/A
Activity 5.2. Surveying potential training markets and gathering demand data		Currently N/A
Activity 5.3. Designing, organising and delivering project dissemination workshops		Currently N/A

## Annex 2 Project full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>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), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p>Sub-Goal: To reverse the degradation of sacred groves and restore and improve the biodiversity value of community forests in the North-Western Ghats, India.</p>			
<p><b>Purpose</b></p> <p>To increase the capacity of local communities to adapt to climate change and contribute to biodiversity conservation through improved management of sacred groves and the adoption of alternative, ecologically sound land-use practices.</p>	<ul style="list-style-type: none"> <li>• Ecological surveys and biodiversity assessment at target sites show increased biodiversity health of sacred groves and community forests within socio-ecological landscapes</li> <li>• New participatory agro-forestry pilot schemes, with collection and marketing of non-timber forest produce by the local community following the FairWild scheme and standards, and a functioning complete product chain for the two pilot species</li> <li>• Significant increase in income for the NTFP collectors and other primary stakeholder participants</li> <li>• Increased knowledge and understanding of traditional adaptive agricultural practices amongst project partners and stakeholders, and increased local stakeholder knowledge and practice of ABS, GACP and basic commercial principles</li> </ul>	<ul style="list-style-type: none"> <li>• Survey data and reports.</li> <li>• Records of the agro-forestry model; business plans and detailed records of collection and sales along complete pilot supply chain; Fairwild certification granted; attendance at and successful completion of agroforestry, GACP and basic commercial principles training workshops</li> <li>• Data on participants' incomes</li> <li>• Attitudinal survey data and communication/educational materials</li> </ul>	<ul style="list-style-type: none"> <li>• AERF will maintain good relations with the local communities and a minimum number of farmers sign up to the pilot schemes</li> <li>• No major legislative or policy changes in the region and no change in resource tenure</li> <li>• AERF maintains its good relationships with community leaders who will act as workshop facilitators</li> <li>• The good working relationship established between AERF, DICE and Pukka Herbs will be maintained</li> <li>• There are no unforeseen natural disasters or major economic or political changes</li> </ul>

Outputs			Activities
<p>1. The conservation status of sacred groves is improved.</p>	<ul style="list-style-type: none"> <li>• Existence of co-management plans for community forests</li> <li>• Increase in number/area of forests conserved by the community</li> <li>• Restoration activities in target forests/groves</li> <li>• Improved community &amp; stakeholder attitudes to sacred groves.</li> </ul>	<ul style="list-style-type: none"> <li>• Documentary evidence</li> <li>• Surveys (pre and post project), community reports, documentary evidence</li> <li>• Detailed records of restoration activities</li> <li>• Baseline pre and post-project surveys, number of stakeholder groups engaged, no. meetings held.</li> </ul>	<ul style="list-style-type: none"> <li>• Baseline monitoring of target site biodiversity – and subsequent measurement</li> <li>• Baseline surveys of community-conserved forests</li> <li>• Education and training in forest/grove restoration</li> <li>• Design and implementation of pre and post project community and stakeholder attitudinal survey</li> </ul>
<p>2. A platform for gathering and sharing Indigenous Knowledge based NRM practices is created.</p>	<ul style="list-style-type: none"> <li>• Locally facilitated knowledge-sharing workshops for indigenous communities.</li> <li>• Information archive of Traditional Knowledge based NRM practices.</li> <li>• Community acceptability in developing an ABS mechanism</li> </ul>	<ul style="list-style-type: none"> <li>• Workshop reports.</li> <li>• Seed banks of local crop varieties</li> <li>• Existence of archive and dissemination mechanisms.</li> </ul>	<ul style="list-style-type: none"> <li>• Organise and deliver knowledge-sharing workshops</li> <li>• Research, record and create TK base NRM practice archive</li> <li>• Make this archive available through various media - subject to IP considerations and agreement with indigenous people</li> <li>• Work with target communities to develop acceptable ABS mechanism</li> <li>• Establish community organisation to manage ABS and process infrastructure</li> </ul>
<p>3. The viability and acceptability of alternative, ecologically-sound, yet commercially-viable, livelihood options are demonstrated.</p>	<ul style="list-style-type: none"> <li>• Existence and performance of pilot plots</li> <li>• No. of endemic species planted &amp; and no. of saplings established</li> <li>• Number of farmers signed up to pilot a/f scheme</li> <li>• Raised awareness and interest amongst stakeholders</li> <li>• Collection of non-timber produce based on protocols and standards</li> </ul>	<ul style="list-style-type: none"> <li>• Detailed records of pilot plots, including pre and post surveys, on-farm biodiversity inventory, annual data on growth, yield, sales etc.</li> <li>• Nursery logbooks and monitoring records</li> <li>• Register and feedback forms</li> <li>• Record of visits to demonstration sites</li> <li>• Record of the demand for and</li> </ul>	<ul style="list-style-type: none"> <li>• Work with members of target communities to establish pilot plots</li> <li>• Train members of target communities to care for pilot plot species</li> <li>• Work closely with farmers to design pilot agroforestry scheme</li> <li>• Conduct educational programmes amongst stakeholder groups</li> <li>• Collaborate with stakeholder groups to produce NTFP protocols</li> </ul>

		use of documentation and materials	
4. A complete and viable supply chain for at least one NTFP is established	<ul style="list-style-type: none"> <li>• A supply chain for one NTFP</li> <li>• Existence of collection/drying facilities</li> <li>• Evidence of the successful performance of this supply chain</li> <li>• FairWild certification awarded</li> </ul>	<ul style="list-style-type: none"> <li>• FairWild Certification documentation</li> </ul>	<ul style="list-style-type: none"> <li>• Work closely with Pukka Herbs and target communities to design, create and monitor the pilot supply chains</li> <li>• Work closely with Pukka Herbs and target communities to design, build and organise the management of the collection/drying facilities</li> <li>• Researching and maintaining a detailed record of the complete length of the pilot supply chain</li> </ul>
5. An enabling environment for scaling-up the project activities is catalysed	<ul style="list-style-type: none"> <li>• Training facilities and personnel in place.</li> <li>• Demand for training from people outside of the project area.</li> <li>• Attendance at project dissemination workshops.</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of training programme and infrastructure.</li> <li>• Certificates of training issued., attendance and participant f/back</li> <li>• Accounts and records of MFI institutions.</li> <li>• Survey of communities out of proj. area + expressions of interest.</li> <li>• Records of dissemination w/shops</li> </ul>	<ul style="list-style-type: none"> <li>• Identifying, bringing together and organising training teams and events</li> <li>• Surveying potential training markets and gathering demand data</li> <li>• Designing, organising and delivering project dissemination workshops</li> </ul>

## Annex 3 Standard Measures

**Table 1 Project Standard Output Measures**

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Number planned for reporting period	Total planned during the project
Established codes								
6A	Total number of villagers receiving collector training	63					Per need	per need
6B	Half-day collector training sessions conducted in five villages	5					2	per need
7	Best practice collection manual for training workshops	0					0	1
8	Number of weeks to be spent by UK project staff on project work in the host country	4					4	12
11A	Papers to be produced as major milestones are reached and evaluated	0					0	3
11B	As 11A - plus one final	0						4
12B	NRM Practice Archive to be created at AERF	0					0	1
14B	Number of conferences/ seminars/ workshops <b>attended</b> at which Darwin project work findings presented/ disseminated.	0					0	2
15	Local and national press releases in UK and India will be made as significant milestones are reached e.g. FairWild certification granted in Year 2.	0					0	2
18	TV coverage will depend on media uptake from press coverage of major milestones (see 15) – though it will also be solicited in UK and India	0					0	Up to 3
19	Radio coverage will depend on media uptake from press coverage of major milestones (see 15) – though it will also be solicited in UK and India.	0					0	Up to 3
New -Project specific measures								
	Number of plant nurseries to be established	2					2	6
	Number of processing facilities to be set up	0					0	2
	Number of species supply chains to be created	0					0	2
	Number of organic certifications to be obtained	1					1	2
	Number of FairWild certifications to be obtained	0					0	2

	Number of agroforestry pilot plots/interventions to take place	0					0	5
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**Table 2 Publications**

<b>Type</b> (eg journals, manual, CDs)	<b>Detail</b> (title, author, year)	<b>Publishers</b> (name, city)	<b>Available from</b> (eg contact address, website)	<b>Cost £</b>
Journal	Medical and Aromatic Plants: Northwestern Ghats, India <i>Jayant Sarnaik and Umesh Hiremath</i> Vol 26(1) April 2014	Traffic Bulletin	<a href="http://www.traffic.org/bulletin/">http://www.traffic.org/bulletin/</a>	Free

#### Annex 4 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.

Attached: copy of article written by Darwin project staff (AERF) J. Sarnaik and U. Hiremesh  
MEDICINAL AND AROMATIC PLANTS: NORTH-WESTERN GHATS, INDIA, PROJECT

Attached: copy of Agroforestry Report for Kalambaste Village.

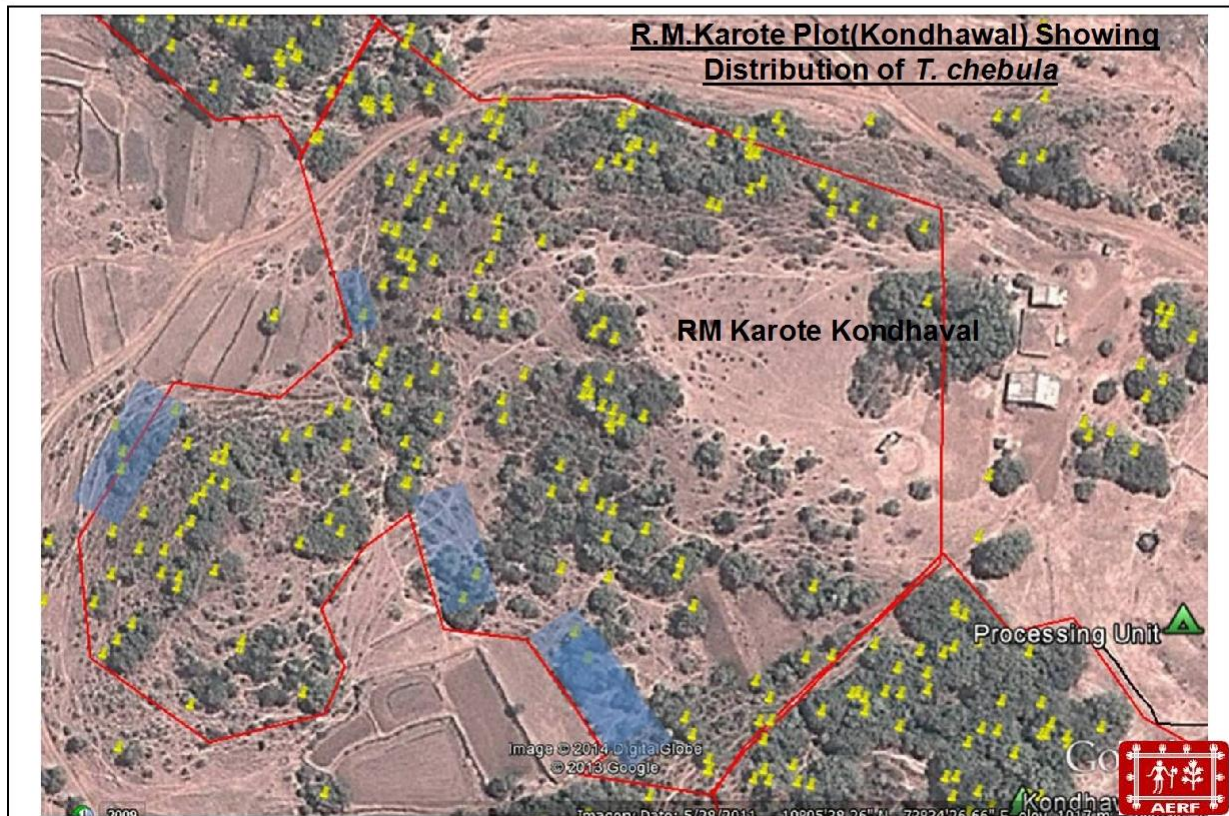
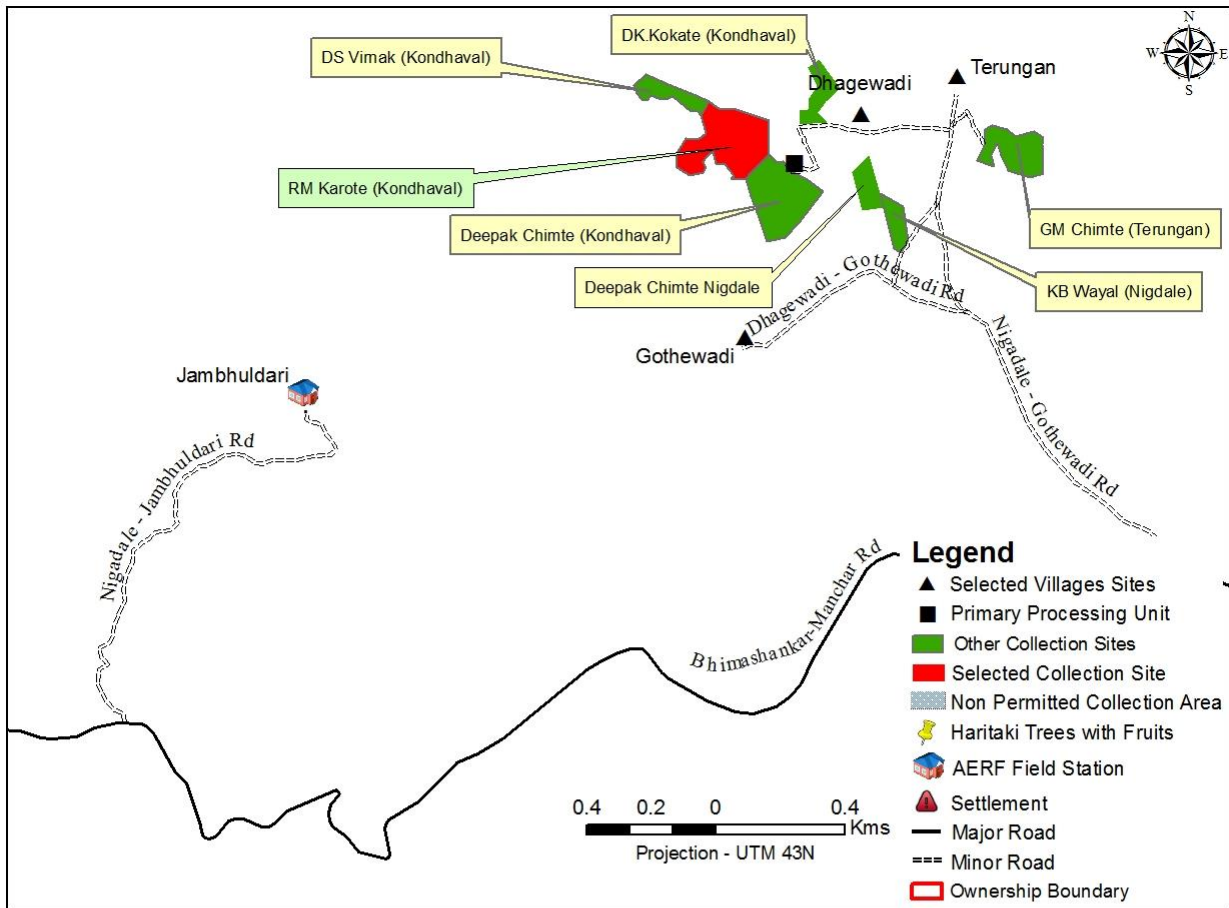
Film made by Pukka Herbs/Banyan of project visit to Ujagon sacred grove (February 2014). Banyan is a USA based company trading in Ayurvedic products, and will be a major purchaser of the Pukka Herb;s trifala product produced using the FairWild certified *T. bellirica* and *T. chebula* that has been enabled by the support of this Darwin project.

<http://www.youtube.com/watch?v=tYkmdCYaNco&feature=youtu.be>



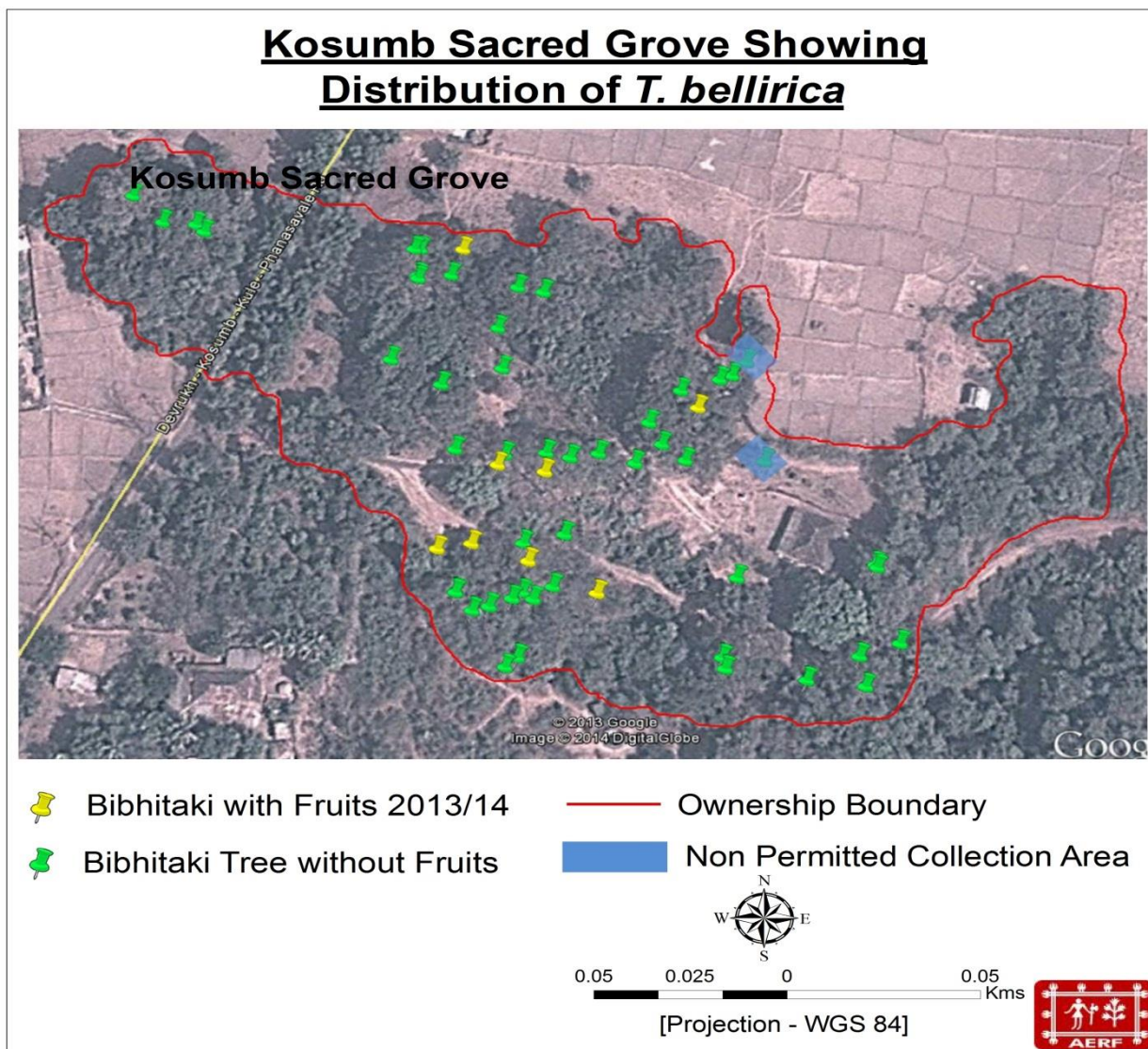
One of two meetings/workshops held in Dhagewadi (Feb. 2014), attended by AERF project staff and Dr. Bride (DICE), to discuss the *Terminalia chebula* supply chain, processing facilities and other potential NTFP candidate species whose exploitation would boost livelihoods. FairWild certification and the development of an ABS mechanism was also discussed.





Example of *T. chebula* GIS-produced detailed distribution data summary map, Bhimashankar

Example of *T. bellirica* GIS-produced detailed distribution data summary map, Sangameshwar.



## Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	✓
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@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.	✓
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number.	N/A
Have you involved your partners in preparation of the report and named the main contributors	✓
Have you completed the Project Expenditure table fully?	X
Do not include claim forms or other communications with this report.	