



Darwin Initiative Main/Post/D+ Project Half Year Report (due 31st October 2018)

Project reference	23-031
Project title	Science-based interventions reversing negative impacts of invasive plants in Nepal
Country(ies)/territory(ies)	Nepal
Lead organisation	Royal Botanic Garden Edinburgh, 20a Inverleith Row, EH3 5LR
Partner(s)	Nepal Academy of Science and Technology (NAST); Department of Plant Resources, MoFSC; Central Dept. of Botany, Tribhuvan University (CDB-TU), HELVETAS Swiss Intercooperation, Nepal.
Project leader	Dr Mark F Watson
Report date and number (e.g., HYR3)	31 Oct 2018, HYR3
Project website/blog/social media etc.	http://www.invasiveplantsnepal.org/ https://twitter.com/Darwin_Nepal/ https://www.facebook.com/Darwin.Nepal/ https://www.flickr.com/photos/152233654@N02/albums

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 to end September).

Output 1: Invasive plants controlled and degraded lands restored

1.1 Hold planning and stakeholder workshops, taking a participatory approach to providing training, enhancing the knowledge of local communities and raising awareness on the identification, impact, control and management of invasive plants.

Training and awareness programmes were conducted in all project sites in April and May 2018. Altogether 706 people participated and benefitted from the awareness programmes. More training and workshops are planned for December and January.

1.2 Work with CBFUGs to undertake effective practical action for the removal and on-going control of invasive plants, with training and support, and assess the impact of this work.

Removal of invasive species is ongoing in all three districts.

1.3 Hold meetings with experts to agree on target species for replanting and work with government and local plant nurseries, and CBFUGs, to undertake replanting of reclaimed lands with native, economically useful plants.

All together 16,000 seedlings were planted in three districts between July and September. Timber, fodder and fruit trees, and bamboos were chosen for planting. The CFUGs preferred to plant *Diplkonema butyracea*, *Melia azadericta*, *Bauhinia purpurea*, *Terminalia* spp., *Dalbergia sissoo*, *Phyllanthus emblica*, *Dendrocalamus bambusa*.

1.4 Research, build and disseminate a science-based knowledge resource for invasive plants, and take a participatory approach to incorporating into CBFUG Management Plans the lessons learned in best practice in restoration of lands degraded by invasive plants.

The text for the first drafts of 12 species for the bilingual photographic manual have been completed. The fieldwork to collect occurrence data and photographs (funded through RBGE's Expedition Fund) was carried out in Sep-Oct 2018. All together 85 herbarium collections of invasive species plus data from 92 localities were collected across

Midwestern Nepal. Work continues on the amendment of community forest management plans to include control and management of invasive species.

Output 2: Weed species evaluated and communicated

The preparation of comprehensive checklists (including weeds and naturalized species) in three districts has been completed. A total of 791 species were recorded in Kailali, 455 in Nawalparasi, and 895 in Makwanpur. MSc thesis students - Ganesh D Joshi, Rashmi Paudel and Bhawani Nyaupane - presented part of their research results in a symposium on 'Biological Invasion in the Changing World' which was organized as a part of 3rd International Conference on Mountains in the Changing World' (MoChWo 2018) organized by Kathmandu Institute of Applied Science in Kathmandu from 9-10 October 2018.

A national level workshop to prioritize invasive species of Nepal was organised on 17th and 18th of May. A TV program on National Television (NTV) was broadcasted on 26th of May highlighting the workshop and issues relating to invasive alien plant species of Nepal (<https://www.youtube.com/watch?v=8OK4WLvb9Ys>).

Output 3. Bio-briquette technologies successfully implemented

The business plan for the installation of a pelletizer in Makwanpur district is at the final draft stage.

Output 4. Biochar technologies successfully implemented

1st June 2018 was celebrated as Biochar Day in Bardiya district to train and encourage people to produce biochar from invasive plant species and forest waste. Biochar was made in 13 different places in the district with more than 100 participants involved (photos in Flickr: <https://www.flickr.com/photos/152233654@N02/albums/7215770141630313>). More biochar will be produced during December-January in all three districts. Prativa Poudel from Golden Gate College is working on her MSc thesis on carbon sequestration through biochar and its soil amendment at the project site in Nawalparasi district.

2a. Give details of any notable problems or unexpected developments/lessons learnt 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.

No major problem has been encountered in the last six months. The installation of the pelletizer will have a significant effect on the income generated for local communities, but this is taking longer than expected. The final costs of the project will be calculated after the pelletizer is in place, but changes are not expected to be significant because additional funding to offset costs has been negotiated from external sources.

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:	No- will do after the installation of pelletizer
Formal change request submitted:	Yes/No
Received confirmation of change acceptance	Yes/No

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

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project, please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

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

As advised by the reviewers (Y2 report), the business plan was drafted for the installation of pelletizer and charcoal production. The final document will be available for the next annual report.

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document. Additionally, if you were funded under R24 and asked to provide further information by your first half year report, please attach your response as a separate document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also be raised with LTS International through a Change Request.**

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 22-035 Darwin Half Year Report**