

**Sa\100082**

**Biodiversity and traditional  
knowledge flourish through Bishkek's  
Botanical Garden**

**Kool, Anneleen | Natural History Museum, University of Oslo**

---

**Funding sought**  
**Project start/end**

**£6,445.00**  
**25 Oct 2018 - 8 Nov 2018**

---

## 1. Contact Details

---

### Q1. Lead applicant contact details

Please enter the contact details for the lead applicant. The lead applicant is the same as the Flexi-Grant account holder. Please note that the Flexi-Grant account holder will be the only contact point for the application.

Anneleen Kool

University of Oslo

Primary Applicant

<http://www.nhm.uio.no/english/about/organization/botanical-garden/people/anneleek/> (Work)

P.O. Box 1172 Blindern, Oslo, Oslo, 0318,  
Norway (Work)

### Q2. Lead organisation contact details

Please enter the applicant organisation details

Natural History Museum, University of Oslo

<http://www.nhm.uio.no/english/>

P.O. Box 1172 Blindern, Oslo, Oslo, 0318,  
Norway

Please add any 'Committee Feedback' to the field below:

|

**Please add any 'Specific Ineligibility' feedback to the field below:**

|

**Please add any 'Conditions' to the field below:**

|

**Please add any 'Positive Feedback' to the field below:**

|

## 2. Title & Location

---

### Q3. Working title of the proposed Darwin project

Biodiversity and traditional knowledge flourish through Bishkek's Botanical Garden

### Q4a. Host country (of proposed Scoping trip)

Kyrgyzstan

### Q4b. Other collaborating country/ies

### Q5. Is this a resubmission of a previous scoping application?

No

### 3. Scoping Principals & Lead Organisation Summary

#### Q6. Principals in Scoping work i.e. the travellers

Please give the details of the individuals (up to 2) from the lead organisation who would be directly involved in the Scoping work - i.e. making a visit to a host country. One page CVs must be provided.

Details	Main traveller	Second traveller
<b>Surname</b>	Kool	Teixidor Toneu
<b>Forename(s)</b>	Anneleen	Irene
<b>Post held</b>	Senior lecturer and curator	Associate researcher
<b>Department</b>	Botanical Garden	Department of research and collections
<b>Telephone/Skype</b>		
<b>Email</b>		
<b>Country travelling from</b>	Norway	Norway
<b>Please attach the traveller's CV</b>		

#### Q7a. About the lead applicant organisation

Briefly discuss your expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record you have in this field. You may be asked to provide evidence of this track record.

The Natural History Museum has coordinated and participated in several conservation and capacity building projects in developing countries. The Museum has trained numerous African students in plant taxonomy, ethnobotany and conservation, co-leads

a restoration ecology project in Brazil and organises collection management and DNA techniques courses for colleagues in Central Asia. It also trains Norwegian nature management agencies and involves the general public in research and conservation through citizen science.

Anneleen Kool has extensive experience in biodiversity conservation through botanic garden living collections, and raising awareness about plant conservation. She has led and organised several (ethno-)botanical expeditions in Africa and Central and Southeast Asia, always involving and training local counterparts and students. She started her work in Central Asia by leading the botanical component in a National Geographic funded expedition to the Pamir-Alai region. In Tajikistan, she organised and taught a botanical collection course and an intensive course on herbarium management in collaboration with a Tajik NGO (Zan va Zamin, "Women and Earth").

Irene Teixidor-Toneu has collaborated with two Darwin Initiative projects led by the Global Diversity Foundation in Morocco since 2014, co-leading community engagement activities, ethnobotanical research, and participating in the overall study design and project management.

**Q7b. Would you like to include a letter of support from the lead applicant?**

Yes

**The limit for any single file uploaded as supporting materials with your application is 6MB. Please ensure documents are saved in PDF form where possible in order to minimise size.**

## 5. Project Partners

---

### Q8. About the partner organisation(s)

Please list all the partners involved and explain their roles and responsibilities in the Scoping work. Briefly discuss your partner's expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record they have in this field. You may be asked to provide evidence of this track record. If there is more than 1 partner organisation, you can enter the details of more partners below. Please specify which of the partners is new to the partnership.

<b>1. Partner Name:</b>	Archa Initiative Public Foundation
<b>Website address:</b>	<a href="https://www.facebook.com/archa.initiative/">https://www.facebook.com/archa.initiative/</a>
<b>Details of anticipated roles and responsibilities:</b>	Archa Initiative will be a partner implementing the project activities in Kyrgyzstan by leading the workshop organisation with the Bishkek Botanic Garden and NHM, contacting further local partners, organising with them the community visits, and being the liaison between national and international partners.

<p><b>Expertise in sustainable use or conservation of biodiversity and/or development:</b></p>	<p>Archa Initiative is legally registered in Kyrgyzstan, aiming to restore and develop the Bishkek Botanical Garden via education, outreach, science programs, and reconstruction works.</p> <p>The Public Foundation was established by a circle of Bishkek city residents in 2016 willing to help the Bishkek Botanic Garden get revived. For two years since the establishment of organization in 2016, Archa Initiative has developed a new concept for the Garden; an Asian Mountain Garden, where the unique mountain flora of Central Asia will be displayed for the visitors. The NGO restored educational infrastructure in the Botanical Garden (plant labels), implemented a number of educational programs for the public on horticulture with participation of the Garden staff, organised dissemination events, strengthened relations between the Garden administration with the Kyrgyz Government, and currently is at the stage of seeking approval from the City Architecture Council for a reconstruction plan of the Bishkek Botanic Garden with new plant displays and infrastructure projects. The organisation has also implemented various greening projects in Bishkek.</p> <p>Archa's plans for 2018 include a collaboration with the Kyrgyz Government to develop the infrastructure of the Botanical Garden, its irrigation system and the displays.</p>
<p><b>Name of main contact point and post held:</b></p>	<p>Zukhra Iakupbaeva, Botanical Garden Programme Manager, z.iakupbaeva@gmail.com</p>
<p><b>Would you like to include a letter of support from this organisation?</b></p>	<p><input checked="" type="radio"/> Yes</p>



<b>Letter of Support:</b>	<p><b>The limit for any single file uploaded as supporting materials with your application is 6MB. Please ensure documents are saved in PDF form where possible in order to minimise size.</b></p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
---------------------------	--

**Do you have more than one partner involved in the Scoping work?**

Yes

<b>2. Partner Name:</b>	Bishkek Botanical Garden
<b>Website address:</b>	www.botanica.kg
<b>Details of anticipated roles and responsibilities:</b>	<p>The Bishkek Botanical Garden will provide its conference hall to host the workshop and will collaborate with Archa Initiative and NHM to organise the workshop. Relevant staff will lead the visit to the living collection, installations, herbarium and the discussions to critically identify knowledge gaps and potential for development.</p>
<b>Expertise in sustainable use or conservation of biodiversity and/or development:</b>	<p>The Gareev Botanical Garden (BG) in Bishkek falls under the National Academy of Sciences of the Kyrgyz Republic, and is a member of BGCI. It is the biggest BG in Central Asia, with nearly 160 hectares. It is also the only state scientific institution with a greenhouse hosting tropical / subtropical plants. Living collections contain about 6,500 taxa of higher plants.</p> <p>The Garden's main work focuses on:</p> <ul style="list-style-type: none"> <li>in- and ex-situ conservation of woody and shrubby plants;</li> <li>horticultural and biological studies on ornamental and medicinal plants;</li> <li>genetic research on traditional local fruit crops;</li> <li>basic research on plant adaptations to high-mountainous conditions.</li> </ul>

<b>Name of main contact point and post held:</b>	Nazgul Kenzhebaeva, Scientific Secretary of the Botanical Garden, gareev100@mail.ru
<b>Would you like to include a letter of support from this organisation?</b>	<input checked="" type="radio"/> Yes
<b>Letter of Support:</b>	

<b>3. Partner Name:</b>	
<b>Website address:</b>	
<b>Details of anticipated roles and responsibilities:</b>	
<b>Expertise in sustainable use or conservation of biodiversity and/or development:</b>	
<b>Name of main contact point and post held:</b>	
<b>Would you like to include a letter of support from this organisation?</b>	<input type="radio"/> Yes <input type="radio"/> No

<b>4. Partner Name:</b>	
<b>Website address:</b>	
<b>Details of anticipated roles and responsibilities:</b>	
<b>Expertise in sustainable use or conservation of biodiversity and/or development:</b>	

<b>Name of main contact point and post held:</b>	
<b>Would you like to include a letter of support from this organisation?</b>	<input type="radio"/> Yes <input type="radio"/> No

<b>5. Partner Name:</b>	
<b>Website address:</b>	
<b>Details of anticipated roles and responsibilities:</b>	
<b>Expertise in sustainable use or conservation of biodiversity and/or development:</b>	
<b>Name of main contact point and post held:</b>	
<b>Would you like to include a letter of support from this organisation?</b>	<input type="radio"/> Yes <input type="radio"/> No

<b>6. Partner Name:</b>	
<b>Website address:</b>	
<b>Details of anticipated roles and responsibilities:</b>	
<b>Expertise in sustainable use or conservation of biodiversity and/or development:</b>	
<b>Name of main contact point and post held:</b>	

**Would you like to include a letter of support from this organisation?**

- Yes
- No

**Q9. Can you confirm that none of the partners (excluding the lead applicant) have led a Darwin Initiative Main Project before?**

Yes

## 6. Justification & Concept Notes

---

### Q10. Justification of need for a Scoping Award

**Please provide written details of why alternative funding is not available from within your own organisation or from other sources. Will matched funding be provided?**

There is no funding available at the University of Oslo for building partnerships to develop collaborative applications, which are necessary to design a meaningful Darwin Initiative. Matching funding can only be provided in the form of working hours from the museum's permanently employed staff.

Anneleen Kool and Zukhra Iakupbaeva met at the 6th Congress of the Botanical Gardens of the World in Geneva, where the idea of the partnership emerged. However, in order to develop a solid relationship between the Natural History Museum, Archa Initiative and other relevant partners in Kyrgyzstan, the possibility of a face-to-face workshop and field visit that the Scoping award offers is essential. To develop the proposed Darwin Initiative important partners including governmental institutions and local communities have been identified in Kyrgyzstan. Whilst they will be able to attend the workshop, linguistic and logistic barriers impede remote communication with the lead applicant. A workshop will be an invaluable opportunity for building rapport and discussing key aspects of project design. Equally important are visits to the Botanic Garden and rural communities to evaluate biocultural conservation priorities, governmental agendas, and kick-off a participatory approach to community research and enhancing local livelihoods and wellbeing amongst both Garden users and rural populations.

The proposed project has two pillars: plant diversity conservation and traditional plant knowledge revitalisation and mobilisation. The Scoping award will provide funds for both a botanist and an ethnobotanist with relevant experience to travel to Kyrgyzstan. Their complementary expertise is essential to write a robust Darwin Initiative application.

### Q11. Concept note for the Scoping Award

**This question concentrates on the scoping study work and should demonstrate the objectives of the Award including:**

- objectives of the visit
- what work (including research, remote communications or other collaborations) has been carried out prior to applying for this Award
- what work will be carried out under the Award – please see the guidance for advice on what type of activity can be funded
- evidence of the proposed partners' intentions to collaborate in your Scoping work

The NHM and Archa Initiative have discussed the challenges faced by the Bishkek Botanic Garden to conserve and enhance Kyrgyz biodiversity and traditional

knowledge through remote meetings. Available documentation such as the Kyrgyz Republic Biodiversity Strategy and Action Plan (Ministry of Environmental Protection, 1998), the Biodiversity Conservation Priorities of the Kyrgyz Republic till 2024, and the 5th National Report on Conservation of Biodiversity of the Kyrgyz Republic (State Agency on Environment Protection and Forestry, 2013) were studied in detail.

A two-week visit is necessary for partnerships to be fully established to design a strong Darwin Initiative proposal. The visit will include three main activities: a workshop with future partners, visits to rural communities, and an evaluation of the Bishkek Botanic Garden's resources and biodiversity data.

### Workshop

A two-day workshop at the Botanic Garden will bring together future Darwin Initiative partners, including Archa and the Gareev Botanical Garden. In addition we will invite the National Academy of Sciences, the State Agency on Environment Protection and Forestry, and NGOs with experience implementing community-based projects (i.e. Taalim Forum, Aigine Cultural Research Center, and / or CAMP Ala Too) and representatives of rural communities. The workshop will develop the ideas for the future project collaboratively, identify additional partners and address the partners' expectations, roles and responsibilities in the future project. MoUs with key partners (Archa, the Botanic Garden) will be prepared previous to the visit and signed during the workshop. Remaining MoUs with other partners will be drafted during the workshop. The workshop will also serve to discuss complimentary funding and in-kind support to supplement that of the Darwin Initiative: for example, from the Friends of the Garden Society in Oslo for botanical collection trips and from the Norwegian Centre for International Cooperation in Education for bilateral capacity building.

### Community engagement

Visits to three rural communities with which the partner organisations have a long-standing relationships will be conducted. Community participation and engagement in the Darwin Initiative project will be discussed, including participatory research on traditional ecological knowledge, and sustainable natural resource use plans. Moreover, through participation in community meetings in each rural community, the local needs will be assessed, to be later addressed in the main project proposal.

### Botanic Garden

The Bishkek Botanic Garden does not have a published plant catalogue nor a computer plant record system, an important goal during the visit in Kyrgyzstan will be to get a preliminary overview of the living collections and herbarium records. This will allow us to identify areas in the country where plant biodiversity has not been accurately surveyed, which is necessary to plan further plant collection trips. Moreover, the garden's human capacity, as well as the garden's current outreach methods, will be assessed. This will allow to devising strategy to strengthen local gardening, curation, outreach and dissemination capacity at the Bishkek Botanic Garden.

The Archa Initiative and the Bishkek Botanic Garden have provided support letters. Other partners have long-standing relationships with Archa and have already agreed to participate in the workshop and facilitate community visits.

## Q12. Concept note for the resultant project

This question concentrates on the full Darwin application you intend to submit after the Scoping Award and should discuss:

- the expected outcome and outputs of the resultant Darwin project
- how the resultant Darwin project would meet a need in the host country (and the wider region if applicable e.g. if the proposed project would be based in a UMIC)
- how the project would contribute to any or all of the following Conventions: the Convention on Biological Diversity (CBD); the Nagoya Protocol on Access and Benefit-sharing (ABS); the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- how the project will contribute to sustainable development in the country concerned
- briefly what the proposed partner/s' expected role in the resultant Darwin project will be
- briefly the expected role of the Scoping travellers in the resultant Darwin project.

The Darwin Project's expected outcome is to conserve Kyrgyz biodiversity and traditional ecological knowledge through Bishkek's Botanical Garden, a space that will maintain plant diversity, revitalise traditional knowledge in the urban environment and support rural communities in sustainable development. The outputs will be based on local capacity building and include:

- Improved and digitalised collections at the Botanic Garden, including endemic, threatened, and useful species;
- Improved documentation of traditional ecological knowledge;
- Sustainable use assessments and plans;
- Community-based improvements in sustainable harvesting and increased livelihood benefits for a number of target species in three rural communities;
- Improved capacity for in situ, ex situ and participatory biodiversity conservation;
- Improved dissemination of biocultural diversity value;
- A report on "Kyrgyz Native Plants for Livelihoods".

Low social importance of biodiversity and ecosystem services has been identified as a conservation challenge in Kyrgyzstan, resulting in an uninformed population, a devaluation of traditional ecological practices and lack of resources for biodiversity research and conservation. This project will improve the knowledge on Kyrgyz biodiversity, and its importance for livelihoods. Plant diversity will be conserved and sustainable use in rural communities assessed and improved through a participatory process, and public and governmental agencies better informed.

This project will contribute to several of the CBD's Global Strategy for Plant Conservation targets. Improving the knowledge on Kyrgyz plant diversity and digitalising the collections at the Botanic Garden will address Target 1. Increased living collections at the Botanic Garden including useful flora and improved documentation of traditional plant knowledge directly contribute to Targets 8, 9 and 13. Sustainable use assessment and harvest plans, and the national report on useful plants for livelihoods contribute to Targets 12 and 13. All generated information and reports will be freely available online; together with capacity building and dissemination activities this contributes to Targets 14, 15 and 16. A participatory, community-based approach to

ethnobotanical research and sustainable development will ensure ABS.

This project will identify opportunities for sustainable development of plant products and for ecotourism. Sustainable use assessments and harvest plans of key botanical resources will be invaluable for further sustainable development, and will be a community-led process. Sustainable development needs will be discussed with the communities during the workshop and field visits.

Archa will coordinate the project's implementation with local partners. Archa will also organise dissemination and outreach events and oversee improvements made in the Botanical Garden. The Botanical Garden and National Academy of Science will participate in all research. The Botanical Garden will improve its collections and documentation system. Communities and NGOs with experience in community-based development will co-lead the knowledge documentation process and sustainable use assessments, as well as sustainable development action. The State Agency on Environment Protection and Forestry will participate in capacity building and sustainable development plans.

Kool and Teixidor-Toneu will lead the implementation of the project together with partners in Kyrgyzstan. Kool will lead biodiversity assessments and botanical expeditions. Teixidor-Toneu will conduct ethnobotanical research and co-lead sustainable development work. Both will conduct capacity building workshops at the Botanic Garden and among communities.



## 7. Costs

### Q13. Costs

Provide a detailed breakdown of costs to be funded by the Darwin Initiative in GBP.

	Main traveller	Second traveller	Total
Airfare including travel to airport			1,300.00
Visas and other travel documents			0.00
Total daily subsistence claimed (please provide details below)			3,000.00
Workshop costs (please provide details below)			£1,745.00
Other costs (please provide details below)			£400.00
		<b>Total request from Darwin (must not exceed £10,000)</b>	6,445.00

### Additional details to support the figures above

	Main traveller	Second traveller
Daily subsistence rate per day	£100.00	£100.00
Number of days subsistence claimed (max 30 days per traveller)	15	15

### Workshop costs

Please provide further details on your workshops costs.

Three day workshop at the Bishkek Botanic Garden for 20 participants, including

members from all identified potential Darwin Initiative partners and five community representatives. The budget includes two coffee breaks (£5.5/person) and lunch (£8/person) per day for three days, as well as accommodation for the five community representatives who will be visiting from outside the capital (£35/person). The amount also includes budget for stationery expenses (£4/person).

The budget is based on Archa Initiative previous experience organising similar events. The venue space will be lend for free by the Botanic Garden.

### **Other costs**

**Please provide further details on your other costs.**

Public transport expenses for five community members to attend the workshop (£35/person). Travel expenses for the travellers and members of Archa and local NGOs for three one-day trips to rural communities nearby Bishkek (£75/day). Transport costs were calculated based on Archa's experience organising similar events.

The subsistence rates for the two travellers were calculated using the standard rate for Norwegian government employees plus accommodation costs.

## 8. Timetable & Activities

### Q14. Activities and timings

Please complete the Scoping Award Timetable to include your anticipated dates of travel (start and finish) and activities to be undertaken on your trip. **N.B.:** this question is specifically about your travel plans – your dates and specific milestones during travel – NOT your timetable to Stage 1 application. Your application will be considered ineligible if this section does not specifically cover your planned scoping trip.

Date	Milestone
25/10/2018	<b>START</b>
29/10/2018	Meeting between Archa, the Botanic Garden and the travellers. Visit to the living collection, installations, herbarium. Meetings with BG staff. Evaluation of herbarium and collections.
02/11/2018	Three day workshop finished. MoUs signed with Archa and the Botanic Garden. Roles and responsibilities of all partners for the Darwin Initiative agreed.
06/11/2018	Three one-day visits to rural communities that have raised interest in participating carried out. Community meetings, evaluation of local environment, livelihoods and well-being needs achieved.
07/11/2018	Darwin Initiative project writing plan agreed upon with Archa Initiative and the Bishkek Botanical Garden.

08/11/2018	<b>FINISH</b>

**Q15. In what year would you expect to submit the full Darwin project application?**

Round 26

## 9. Certification

---

### Q16. Certification

On behalf of the

trustees

of

Natural History Museum, University of Oslo

I apply for a grant of

£6,445.00

in respect of all expenditure to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the scoping schedule should this application be successful.

*(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)*

- I have uploaded CVs for project principals
- I have uploaded letters of support from the lead application organisation and the partner(s)



<b>Name</b>	Anneleen Kool
<b>Position in the organisation</b>	Senior lecturer and curator of the Botanical Garden
<b>Signature (please upload e-signature)</b>	

**Date**

02/02/2018

**If this section is incomplete the entire application will be rejected.**

## 10. Submission Checklist

---

### Checklist for submission

	Check
Have you provided anticipated start and end dates for your Scoping trip?	<input checked="" type="checkbox"/>
Has your application been signed by a suitably authorised individual?	<input checked="" type="checkbox"/>
Have you read the Guidance documents for both <u>Main projects</u> and <u>Scoping awards</u> , and are you satisfied that your concept would be eligible for a main project application?	<input checked="" type="checkbox"/>
Have you read the current <u>Terms and Conditions</u> for this fund and can you confirm you are willing to be bound by these if your application is successful?	<input checked="" type="checkbox"/>
Have you uploaded 1 page CVs and letters of support as required?	<input checked="" type="checkbox"/>
Have you checked the <u>Darwin website</u> immediately prior to submission to ensure there are no late updates?	<input checked="" type="checkbox"/>