

# ***Botanical Gardens Network of Afghanistan***

*An Initiative of*

*Afghan Fellowship Legacy Projects (AFLP) and*

*Emerging and Developing Economies Network (EDEN)*

*Webinar #1 Planning Meeting*

*Hosted by Shizenkan University, Tokyo*

*May 14, 2020*

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## **Webinar Participants**

Nassrine Azimi	Najibollah Sabory
Monte Cassim	Najibullah Ahmadzai
Cody Marschalk	Zakir Hussain Hassanzada
Humaira Kamal	Mihoko Kumamoto
Sabahuddin Sokout	Faezeh Mahichi
Ari Novy	Jenny Luan
Peter Raven	Taiga Nishimura
Stuart Pimm	Yuko Baba
Sarada Krishnan	Kaitu'u Funaki
Abby Meyer	Ambassador H.E Bashir Mohabbat

*Rapporteur: Saeeda Razik*

## **Introduction**

Upon the completion of the Afghan Fellowship Program (AFP) by the UNITAR Hiroshima Office in 2018, some of us among its original founders<sup>1</sup> came together to spearhead an initiative that would safeguard the bonds of the 500+ AFP learning community and set the foundations for future work in Afghanistan. We have named the initiative the Afghan Fellowship Legacy Projects (AFLP).

The AFLP has two components/projects: the first is a book, that aims to capture the experiences of the many individuals, in Afghanistan, Hiroshima and around the world, who took part in the 15-year program. The second is to work with Fellowship members to create a network of university-based botanical gardens, since no such functioning institution exists in Afghanistan. The book project was launched in October 2019. The botanical garden project was launched on 31 January 2020, in the presence of Afghanistan's Ambassador to Japan, at the EDEN Seminars hosted by Shizenkan University in Tokyo.

Since then three universities in Afghanistan — Kabul University, Paktia University, and Bamyan University —have accepted to pioneer the work, and a large team, including some prominent international leaders of botanical gardens, have rallied to help. A workshop was intended to be held in Tokyo from 12 to 14 May. However, due to the fallout from the COVID-19 pandemic, it has been postponed to the fall. and an introductory planning webinar was held instead for members of the core team on 14<sup>th</sup> of May (13<sup>th</sup> in the United States). The Webinar allowed these members to meet and share ideas. Five scientists, from the international advisory committee of the project, presented their preliminary ideas, and shared advice on how to ensure the project remains sustainable and effective. AFP focal points for each university were given the opportunity to respond, ask further questions, and report back to the participating universities respectively.

The focus of this first webinar was to understand the importance of creating the botanical gardens network in Afghanistan and the crucial steps that should be taken by the Afghan representatives. It also aimed to introduce to one another the team members—many of whom were meeting for the first time. It was the preliminary step for hopefully what will become the first of many conversations among the institutions in Afghanistan creating and implementing the project, and the international coalition that has rallied to help them make it happen.

- Nassrine Azimi, Co-founder/Chair EDEN Seminars,  
Afghanistan Fellowship Legacy Projects (AFLP) Team Leader

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<sup>1</sup> Nassrine Azimi, Humaira Khan-Kamal, and Sabahuddin Sokout

## **Agenda**

- 8h30 (JST)            Opening  
*Cody Marschalk*, EDEN and webinar coordinator
- 8h35 - 8h40           Welcome/ice breaker  
*Monte Cassim*, President, Shizenkan University
- 8h40 - 8h50           Introduction/updates/review of project goals  
*Nassrine Azimi*, Team Leader; *Humaira Kamal* and *Sabahuddin Sokout*,  
Coordinators, Afghan Fellowship Legacy Projects (AFLP)
- 8h50 - 9h00           Introduction to webinar objectives  
*Ari Novy*, President, San Diego Botanic Garden
- 9h00 - 9h40           Botanical Garden/biodiversity advisors  
*Peter Raven*, Emeritus President, Missouri Botanical Garden  
*Stuart Pimm*, Professor of Conservation Ecology, Duke University  
*Sarada Krishnan*, Director, Horticulture and Center for Global Initiatives,  
Denver Botanic Garden  
*Abby Meyer*, Executive Director, Botanic Garden Conservation  
International/US
- 9h40 - 9h50           Break
- 9h50 - 10h20          Commentary/questions from Afghanistan and All  
*Najibullah Sabory*, Coordinator for Kabul University  
*Najeebullah Ahmadzai*, Coordinator for Pakta University  
*Zakir Hussain Hassanzada*, Coordinator for Bamyam University  
  
*Mihoko Kumamoto*, Director, UNITAR Hiroshima Office and Division for  
Prosperity  
*Faezeh Mahichi*, Associate Professor, Ritsumeikan Asia-Pacific University
- 10h20 - 10h40        Responses/2nd Round by scientific advisors
- 10h40 - 10h50        Wrap up and Summary of content  
*Ari Novy*
- 10h50 - 11h00        Next Steps  
*Nassrine Azimi*, *Humaira Kamal*, *Sabahuddin Sokout*
- 11h00 - 11h10        Concluding Comments  
*H.E Bashir Mohabbat*, Ambassador of Afghanistan to Japan
- 11h10 - 11h15        Closing - *Monte Cassim*

## **1<sup>st</sup> Session: Presentations by the Botanical Gardens/Biodiversity Advisors**

This segment was moderated by Dr. Ari Novy.

The session began with a brief introduction to the history of botanical gardens in Italy and the important role of plants in providing protection from the plague several centuries ago. He emphasized that many of the original botanical gardens have evolved into five areas: research, horticulture, recreation, education, and outreach. He concluded with an introduction to the four scientists who presented afterwards. This segment expressed the objectives of this webinar, which are listed below:

- Affirm a shared connection to advance botanical gardens all over the world;
- Provide inspiration and assistance in efforts to build botanical gardens in Afghanistan;
- Share knowledge of botanical gardens operations all over the world;
- Learn more about the goals and desires of botanical garden partners in Afghanistan so that we can be responsive to local goals and objectives.

### **Prof. Peter Raven – The global power of botanical gardens to catalyze positive change**

The challenges that Afghanistan faces amidst the political problems are challenges of water, climate change, harvesting of forest resources, gathering of shrubs, and the practicing of drylands farming in unsuitable places. An additional problem is the growth in population; with a current population of 38 million, Afghanistan is projected to grow by one million each year and reach 71 million in 30 years. As this will result in a large youth population, educating and reaching out to them is important.

Botanical gardens started as an adjunct to medical schools since plants were used as medicine in the past. A network of botanical gardens would be useful in educating the youth on the importance of agriculture and help them appreciate plants. This will also teach the population the beauty of the plants as well as their utility in agricultural purposes. Illegal deforestation is destroying the forests in Afghanistan and botanical gardens can assist in motivating the youth and general population to conserve these lands.

Afghanistan has great extremes in terms of its physiography and consists of many zones that must be taken into consideration. The three proposed gardens are all located in almost similar vegetation zones; the network must ensure that the diversity of the land and its plants are captured in different parts of the country, which has 4000 different species of plants—a quarter of which are only found in Afghanistan.

Plants are advantageous over other organisms in terms of conservation as their genetic material and tissue culture can be stored in seed banks requiring small areas of land.

## **Prof. Stuart Pimm – The importance of plant conservation and its relationship to botanical gardens**

Professor Pimm reiterated the importance of the flora and fauna of Afghanistan, recalling his experiences on a two-month research expedition on behalf of Oxford University to study migratory birds in his early days as an ecologist. Afghanistan has a unique biodiversity and some of the world's most fascinating ecology and ranges of habitat, and he felt he owed a great debt to the country for he learned much there as an ecologist.

Prof. Pimm encouraged webinar participants to seek out as many examples around the world as possible and learn from the experiences of others. When attending a seminar at Al-Quds University in Palestine, for example, he had been most impressed by the small and modest botanical garden near the university's biology department—it was not only beautiful but also a representation of Islamic science in plants. Palestine, also going through similar circumstances to Afghanistan, could be one model to study towards this initiative. He concluded that most importantly the Afghan project had the capacity to inspire the youth of Afghanistan to know the value of their resources in terms of their own country's plants and biodiversity. Later on, reflecting on the diversity of the project itself, Prof. Pimm wrote to the organizers that 'such a group of people spanning the entire planet, many of its cultures and religions, is a most hopeful sign for peace in these troubled times'.

## **Dr. Sarada Krishnan – Horticulture and agriculture in botanical gardens**

Humans transitioned from a hunter-gatherer society to an agricultural one. However, with urbanization, the connection with nature has been lost. Among the number of challenges society will face in the 21<sup>st</sup> century, there will be a need to double agricultural output by 2050.

Dr. Krishnan proceeded to define Horticulture and explain its functions at a botanical garden: collection, display, production/propagation, research, conservation, education, outreach, and human well-being

One case study was presented: The M. S. Swaminathan Botanical Gardens (MSSBG) in Kerala, India. The MSSBG master plan was shared giving insight into steps taken in its creation. The strategic plan spanned four thematic areas: (a) Research, Conservation Demonstration, Education and Capacity Building, Community Outreach.

Dr. Krishnan also referred to a recent survey conducted on Denver's cultural organizations, most of which are currently closed. The survey sought to identify which institutions citizens were most eager to visit upon reopening after the COVID-19 closure. The largest percentage of hoped-for visits were for the Denver Botanic Garden. This emphasized again the importance of botanical gardens and the connection plants have with humans.

## **Abby Meyer – The role of the Botanical Garden Conservation International (BGCI) in assisting botanical gardens throughout the world**

There are over 3000 botanical garden institutions around the world but around 30 countries do not have a registered botanical garden. Botanical gardens reach over half a billion people each year, so they are among key institutions at the service of the public. An explanation of the BGCI was given and their work to train people around the world. The BGCI offers four global databases: Garden Search, Plant Search, Threat Search, and Global Tree Search. BGCI also facilitates coordination among regions and offers a manual that could prove most useful for this project (the Afghan representatives have volunteered to translate the above-mentioned manual).

Ms. Meyer introduced a few examples of seed banks around the world. She referred in particular to the Rancho Santa Ana botanical garden and seed bank, which although is a very small facility, holds the world's largest collection of California native plants.

Finally, she shared that from the list of some 30 native species of plants, sent by partners at Paktia University, roughly one-third were plants 'under-represented' (in less than 20 worldwide collections) in the BGCI database.

### **Conclusions from 1st Session**

The presentations were successful in inspiring, motivating, and sharing knowledge regarding different botanical gardens around the world. It was concluded that this network of botanical gardens has the potential to make a global impact, and its importance in the conservation of plants was emphasized.

The different botanical gardens provided as examples were inspiring as their success and benefit towards their societies were made evident. The master plan and strategic plan from the MSSBG gave insightful knowledge on the steps to be taken when planning to create botanical gardens.

The presentations depicted the challenges of Afghan society that can be overcome through botanical gardens and the significance it could hold for the youth and the next generation. These gardens will be significant not only in the conservation of plants but will help conserve Afghan culture and heritage.

Afghanistan has various agricultural zones and at the same time 4000 different species of plants, of which a large number are endemic. Thus, the need to create botanical gardens that would encompass a greater variety of plants for conservation was expressed. This was to be later addressed as the long-term vision for this project— going beyond the three proposed universities and creating a larger network of botanical gardens throughout Afghanistan.

### **2<sup>nd</sup> Session: Questions and Answers**

The 2<sup>nd</sup> session of the webinar shifted the platform to the Afghan representatives who were given the chance to share ideas and raise questions directed to the scientists from the advisory panel.

The University of Kabul attempted to create a botanical garden in 2005. It has been unsuccessful. Therefore, the question of how this project could be sustainable was brought forward. The panel conveyed the importance of not basing the funding primarily in foreign investments. Rather this project should be local, and universities should begin by creating local implementing teams and budgets, to fund the gardens. Emphasis was made on the need to convince local communities of the importance of a botanical garden and its potential in being a symbol of Afghanistan's attempts towards sustainability. The ability to provide training for those involved will help in the project's sustainability and success.

Webinar participants were reminded again that commitment is more important than resources. The chancellor of Paktia University for example fully understands the importance of this initiative and will support the project. Questions were raised as to what would be the next steps and the plan towards implementation of the project (this was discussed in the Webinar's final segment). It was evident that convincing local communities and gathering support should be included in the plans and steps of the project, and the coordinators for Paktia University, Kabul University and Bamyan University all emphasized importance of local ownership.

This session highlighted the importance of making evident the livelihood component and financial benefits botanical gardens can bring. Many from the panel emphasized that the economic and financial benefits of a garden must be taken into consideration when presenting the plans as it will aid in the garden's sustainability and create broader support in its implementation.

Hiroshima as an inspiration not just to AFP but to all post conflict countries was mentioned. The botanical garden in Ethiopia (Addis Ababa) and the botanical garden in the Democratic Republic of Congo, which is working with the Meise botanical garden in Belgium, are also examples of post-conflict botanical gardens. However, it was discussed that too much emphasis should not be put on other botanical gardens in post-conflict regions as each have distinct backgrounds and circumstances. Some other questions raised included:

- Will it be a requirement to obtain a blanket permission from ministries of higher education?
- Is it possible to connect with other universities (out of Afghanistan) that have botanical gardens?
- What factors should be the first to affect the planning and scope of the botanical gardens?
- When will a webinar be scheduled with the universities?

## **Conclusions from 2<sup>nd</sup> Session**



Dependency on solely foreign interests and aids will not lead to the sustainable operation of a garden. This was emphasized throughout. As Prof. Raven reminded participants, any botanical garden should be home-grown, wanted, and driven locally. Building local capacity and enthusiasm is key, as is benefiting from other international experiences: BCGI for example has helped develop botanical gardens and botanical garden programming around the world, including in Africa and Asia, and can be an important source. Another of the key factors for building sustainability could be to have plant products consumed locally and thus ensure that the garden can be incorporated in the local economy to generate income for the institutions. In short, the second segment gave the Afghanistan representatives a platform to address the panel with their concerns and thoughts about the project, and to a collective understanding of its goals. The importance of sustainability, and the next steps needed to be taken was emphasized. It also led to establishing a framework to be kept in mind when creating concept plans for the network.

### **The next steps and closing of the webinar**

A plan of the next steps with rescheduled deadlines was presented. AFLP team leader expressed her hopes to conduct a first face-to-face workshop with the three university teams in the Fall, but that if this were not possible due to Covid-19, a distance learning workshop would be organized. As the three sites have already been selected, working with the universities towards the creation of concept plans would be among key next steps. She also highlighted the idea of starting to rally young architects and landscape designers in Afghanistan (and maybe in the diaspora) to participate in the design and landscaping of the gardens. The implementation of the gardens could commence in mid-2021.

The Ambassador of Afghanistan to Japan conveyed his gratitude to all those present. He reiterated the importance and benefits of botanical gardens and this initiative. The international community was thanked. President Monte Cassim of Shizenkan University concluded the webinar with a closing speech. The spirit of the project was captured in AFLP team member Sabahuddin Sokout, who quoted what he had learned from his Singaporean friends: "**We cannot do anything if we do not see the future**". In this spirit, and affirming that sustainability is the key to long-living botanical gardens in Afghanistan, may this legacy be a thousand-year project!

May 21, 2020