



حديقة القرآن النباتية

QUR'ANIC BOTANIC GARDEN

عضو في مؤسسة قطر

Member of Qatar Foundation

Success Stories

Qur'anic Botanic Garden

Community Development Town
Hall

Oct 23rd , 2017



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Qur'anic Botanic Garden

A Garden comprises all the plant species, botanic and environmental terms mentioned in the Holy Qur'an and Hadith

Vision

"A garden of a worldwide center of excellence for knowledge, education and research, and bridge cultures in inspiring appreciation of nature and fostering responsibility for our environment".

Mission

"To promote a complete understanding of the plants, botanic terms and conservation principles mentioned in the Holy Qur'an Hadith and Sunnah by applying scientific innovations, building appreciation of cultural traditions and by creating a garden that will provide unique opportunities for learning."

Qur'anic Botanic Garden's Outreach Program 2017

Facilities of the Qur'anic Botanic Garden

Although the QBG physical Garden is still under construction, but the QBG was capable to facilitate alternative solutions in order to run Garden's agricultural, conservational and outreach programs.

QBG Plant Nursery; accommodates the 59 plant species of the QBG that belong to three different geographical zones; desert, Mediterranean and tropical habitats.

Herbarium & Seeds Unit; which is a part of the Ex Situ conservation program of the QBG that preserves seeds , herbarium specimens and germinate the plants of the plants of the Holy Qur'an and Hadith.

Botanic Museum; to display modules of plant parts and traditional tools, traditional medicinal plants of the Hadith and traditional food & drinks tools that may still be used in our daily lives.

Oxygen Park; it is one of the QF shared facilities that contains many elements of the Botanic & Islamic Gardens such as water, fountains, shade and heritage areas which are the significant components of both botanic and Islamic garden designs.



Four Roles of Qur'anic Botanic Garden towards the Community

Environmental Role

Preserve the diversity of plants collected from different regions of the world.



Educational Role

Produce basic and applied information on plants, horticulture, conservation and cultural heritage.



Scientific Role

Facilities research on Horticulture, Conservation, Biotechnology, Medicinal and Socio-economics of plants.



Cultural & Recreation Role

Revival of cultural tradition and to be the first destination for the whole family.



Success stories of the QBG

Conservation Program

Preserve plants inside and outside its natural habitats

Outreach Program

Engage Students, Families,
Local and international
communities

Publications

Produce scientific and
educational issues on the QBG

Conservation Program

Conservation Program

Preserve plants inside and outside its natural habitats

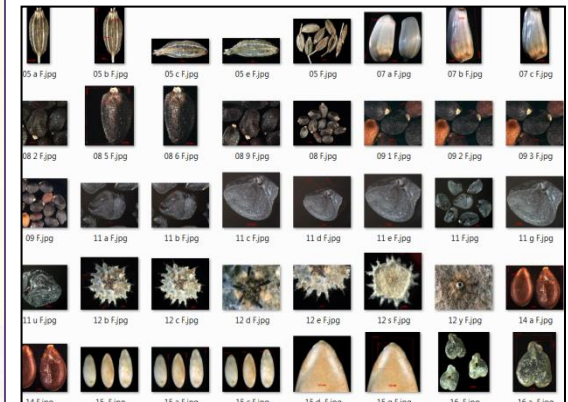
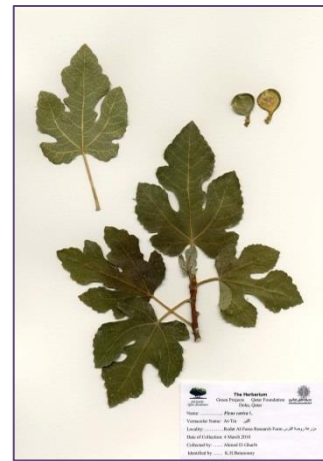
The Plant Nursery

To accommodate and produce the plants of the QBG and under different weather conditions.

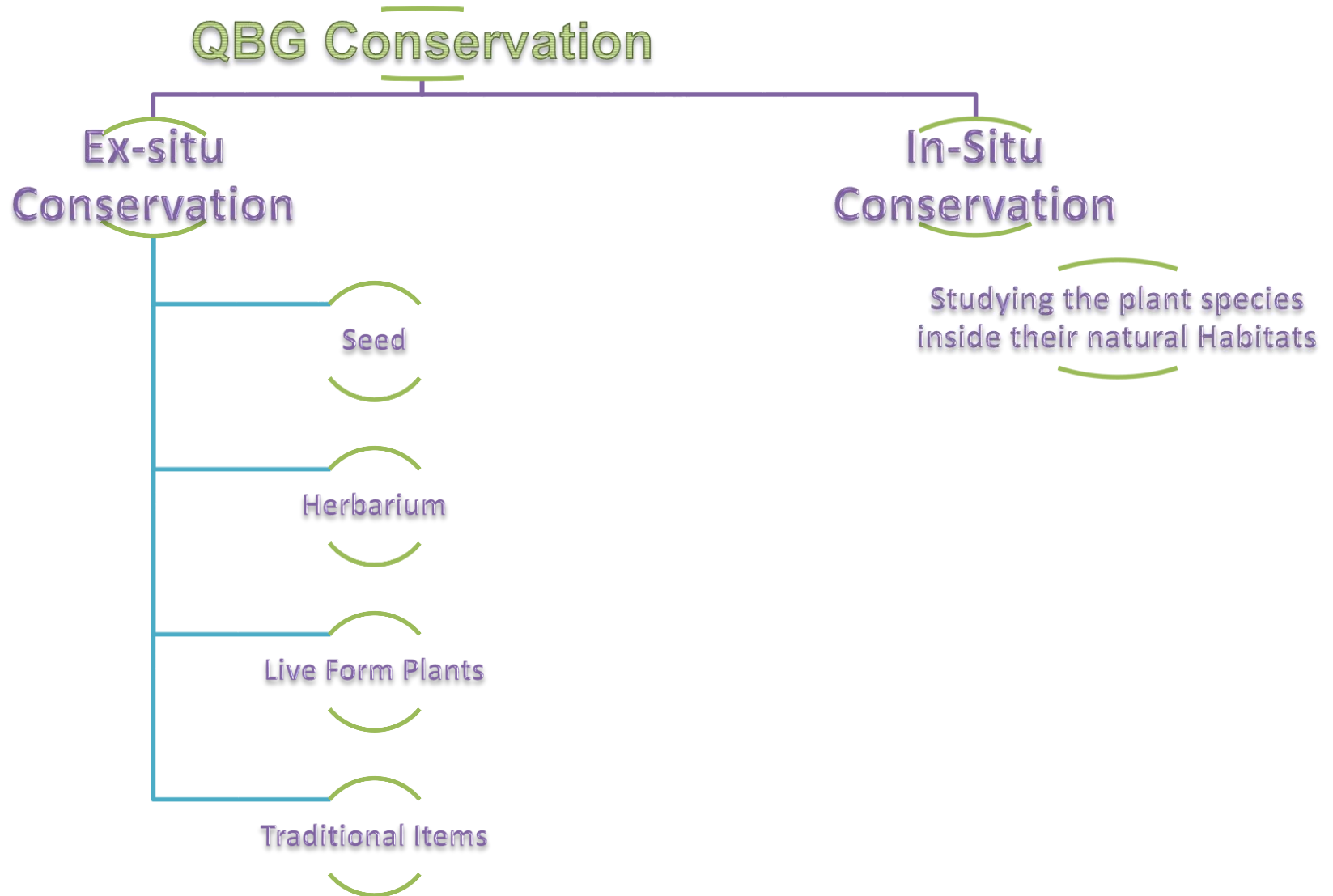


Herbarium & Seeds Unit

To document and preserve the plants of the QBG and preservative of biodiversity.



Conservation Program



Conservation Program

Seed Biometric Profiling at QBG Lab.



Seeds weight; measuring 100 seeds weigh and number of seeds per gram using the seeds counter and precise balance

Coding and Freezing: seeds coding, storage in airtight bottles for long and short term Preservation



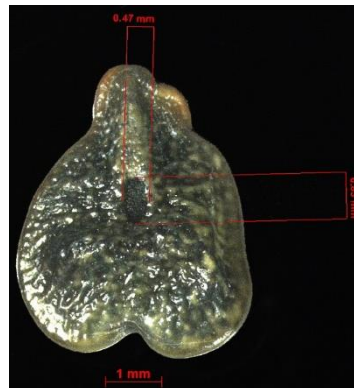
Seeds description; description seeds measurements and shape i.e. length, width, and thickness using stereomicroscope and measuring tools



Seeds Moisture; by measuring the active water inside the seeds that indicates to Equilibrium Relative Humidity



Seeds Germination; by testing the germination rate of the plants using various treatments



Conservation Program

Herbarium

A sustainable scientific resource that supports the conservational research, document and preserve the plants of the Qur'anic Botanic Garden and the indigenous plants of Qatar

Plants Profiling at QBG Herbarium

- Collecting the living and dried organs
- Preparing the authentic herbarium samples to Identify ,preserve & Record the habitats and the habit
- Documenting the Morphological structures of the plants to solve Taxonomical problems of the species

Digital herbarium;

Catalogs the specimens of the plants mentioned in the Qur'an and the Sunnah, and ingenious plants of Qatar



Traditional Items

Collecting and displaying of the Botanical terms to establish the QBG Museum for educational purposes



Saa' & modd = scales measurements



العرجون
Inflorescence of the Date palm tree

Live Form Plants

1. Managing the Nursery where we accommodate more than 50 plants species originated from 3 different habitat that are mentioned in Quran and Hadith as well as Flora of Qatar. By different type of propagations such as **Cuttings, Aerial Layering, Ground Layering, Propagules (pulp, rhizomes , Corms)**



cutting



Propagules (Pulp)



Propagules (rhizome)



Conservation Program

Live Form Plants

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Aerial Layering



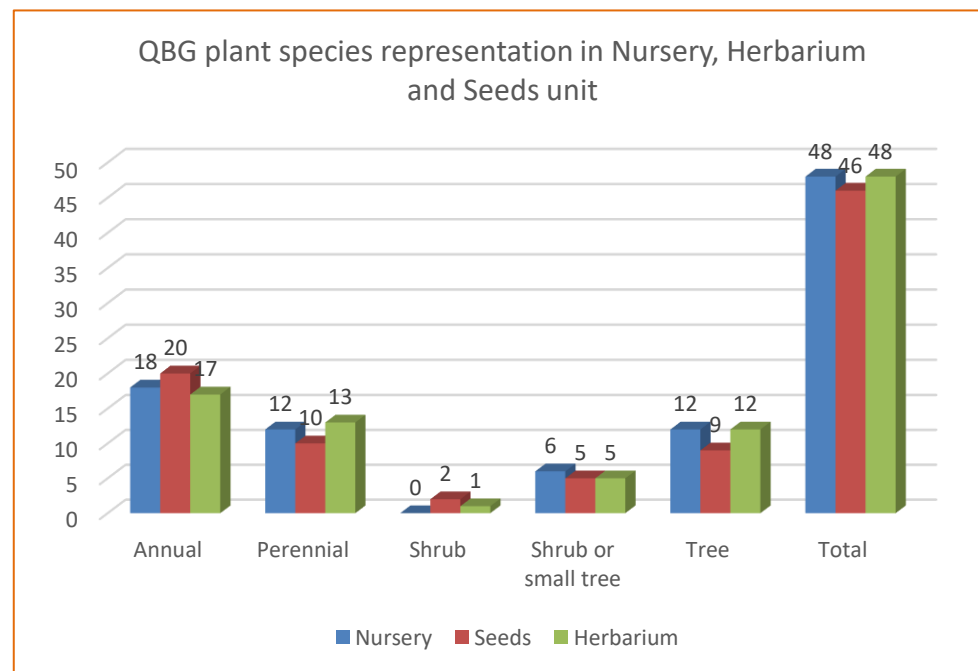
Propagules (rhizome)



Outcomes of the Conservation Program 2016-2017

Green Outcomes

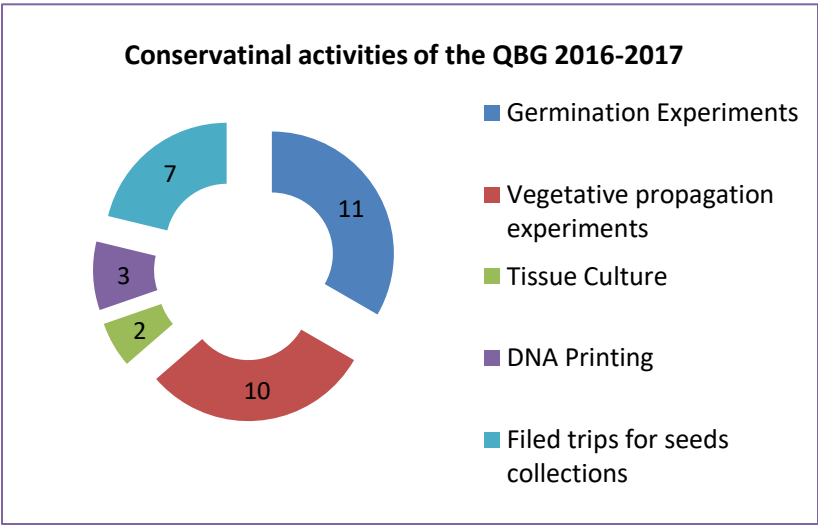
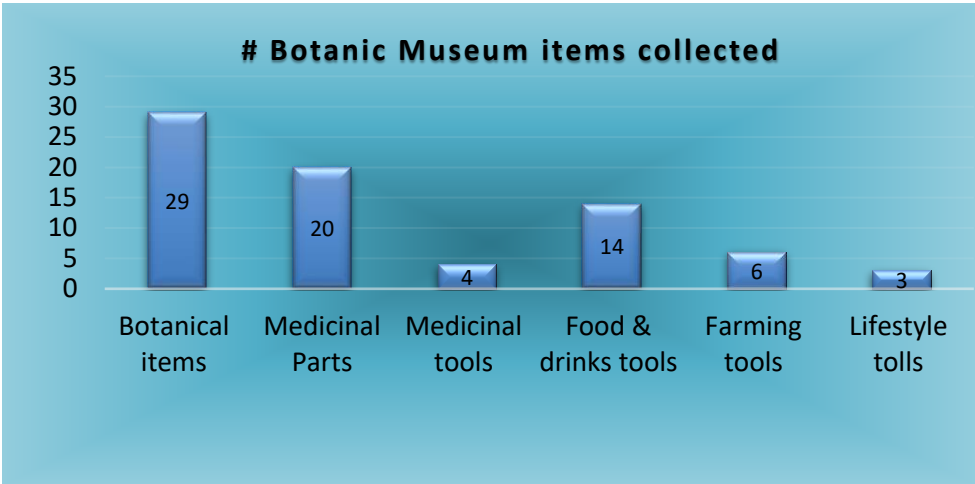
- Preserving 83% of QBG plants **(48 plant species)** including green lifeforms, herbarium specimens and seeds.
- Propagating and accommodating over 2500 saplings at the QBG Plant nursery that include desert, Mediterranean and Tropical plants
- Planting of **169 tress** at the Education City and schools in order to preserve plants outside their natural habitats



Outcomes of the Conservation Program 2016-2017

Green Outcomes

- Collecting **"84"** items of QBG botanical museum that included traditional food & drinks tools, farming tools and Cosmo-medicinal items, herbarium sheets and seeds.
- Proceeding **11 germination experiments** for 11 plant species that **adding 520** new Saplings to the QBG .
- Preserving **46 types of seeds** in the QBG seeds that includes 7 new plant species for the seeds unit of the QBG; Cotton, sesame, Wars, Yaqtin, linen, Kafur and Panicum
- Collecting of **48 herbarium sheets for 48 plant species** including the desert, Mediterranean and tropical plant that be propagated at the QBG or collected from the Desert.
- Proceeding **3 DNA** finger prints for 3 plants species, and proceeding **two tissue culture** experiments in collaboration with MME in Qatar.



Outreach Program of the QBG



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Outreach Program of the QBG

[To raise community environmental Education, awareness and advocacy conservation by providing diverse opportunities to gain knowledge of biodiversity in local, regional and international context.]

Beneficiaries

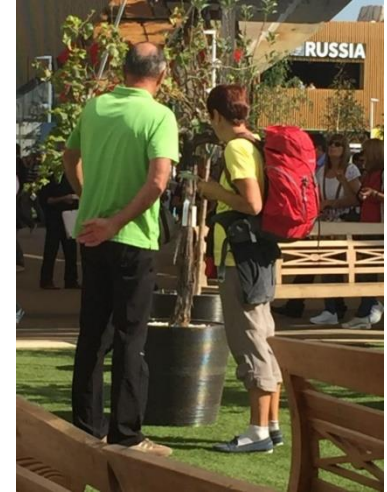
- **Students:** an interactive Edutainment programs for Kg-12 year old students in addition to university students



Outreach Program of the QBG

Beneficiaries

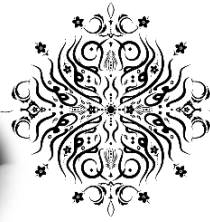
- ❑ **Families:** exhibitions, workshops and campaigns for all family members.
- ❑ **Professionals:** site visits, lectures and field work programs.
- ❑ **International Community:** outdoor exhibitions and QBG website.



'Ghars Planting & Awareness Campaign'

'Ghars Planting & Awareness Campaign' is an international green message from the Qur'anic Botanic Garden to the world. *Ghars* Campaign aims to increase the number of the trees in Qatar and around the world by engaging students, teachers, general public and diplomatic people to save our planet.





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امرح وتعلم
FUN & LEARN

برنامج النبات التعليمي للأطفال
Children's Educational Program on Plants



The 'Fun & Learn' is an educational program designed by the Qur'anic Botanic Garden (QBG), member of Qatar Foundation, focusing on students of KG and primary schools. The program attracts private and independent schools from across the country to participate in various edutainment activities at the **Oxygen Park, QF plant nursery and Schools.**

Partners

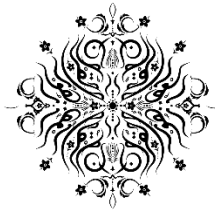
- ✓ Ministry of Education & Higher Education.
- ✓ Qatar National Commission for Education, Culture and Science.
- ✓ QF Pre–University Education.
- ✓ Private and independent schools of Qatar.



'Fun & Learn'

'Fun & Learn' is an educational program designed by the Qur'anic Botanic Garden (QBG), focusing on students of primary schools. During 2017, the program engaged more than 1200 students & teachers from primary schools and provided 100 educational hours by making science fun throughout running various edutainment activities at schools, QF plant Nursery and the Oxygen Park.





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Environmental Research Contest for students is an initiative of the QBG that strives to support schools and oversee scientific research related to conservation, agriculture and the environment. QBG is also committed to encourage students to think systematically in order to find alternative solutions to contemporary environmental problems.



Time & Venue

From October until March at HBKU and QBG . Weekly site visits to QF plant nursery and Field trips arranged to schools every Tuesday.

Partners

- ✓ Ministry of Education & Higher Education.
- ✓ National Scientific Research Competition (NSRC)
- ✓ QF's Qatar National Research Fund (QNRF)
- ✓ Ministry of Municipality and Environment (MME)





'Food Security Program for students'

'Food Security Program for students' is a program of the Qur'anic Botanic Garden that aims to engage students to grow their food at schools for sustainable food security.



Time & Venue

- ✓ A competition between schools to produce vegetables including practicable farming sessions From October 2017 till March 2018.





The Plant Contest is a botanical competition which is a part of the QBG educational program “the Young Botanist” established to teach high school students in Qatar about plant life mentioned in the Qur'an and Hadith. School teams comprise of four students each compete in a league system where they will be required to answer a series of questions to win the competition.



Objectives

- ❑ To create a generation of green ambassadors who respect and understand their natural environment and are committed to working towards a sustainable future.
- ❑ To raise awareness of plant species featured in the Qur'an, Hadith and the Illustrated book of the plants of the Qur'anic Botanic Garden.
- ❑ To promote a spirit of fair competition among high school students.

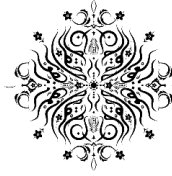
Time & Venue

- ✓ In Dec 2017 during celebrations of the QND and in May 2018 at the Reading week.

Partners

- ✓ Ministry of Education & Higher Education.
- ✓ QF Pre-University Education.
- ✓ Private and independent schools of Qatar.





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ALUTRUJAH Holy Qur'an Contest, is an intuition of the Qur'anic Botanic Garden in collaboration with the Education City Mosque. ALUTRUJAH competition aims to encourage school students under the age of 12-years, as well as the wider Education City community, to memorize the Holy Qur'an, highlighting verses and stories that focus on botanical terms.

Time & Venue

ALUTRUJAH Holy Qur'an Contest conducted yearly at Education City Mosque, in the first two weeks of Ramadan. Registration starts in February.

Partners

- ✓ Ministry of Endowment and Islamic Affairs in Qatar.
- ✓ Ministry of Education and Higher Education in Qatar.
- ✓ Community Development Directorate, Qatar Foundation.
- ✓ Universities and schools of Qatar Foundation.

Activities

- ❑ **Lectures:** based on Ethics and stories of the plants mentioned in the Holy Qur'an and Hadith
- ❑ **Botanic Exhibition:** by displaying photos and live forms of green plants along with traditional tools made from plants that were mentioned in the Holy Qur'an and Hadith.
- ❑ **Awards:** for the first three positions in all the contest categories totaling to 24 winners.





'Community Visits Program'

'Community visits' the QBG is giving the chance to people in order to explore and learn about the varieties of plants and botanical expressions mentioned in the Holy Qur'an and Hadith by organizing site visits, exhibitions, lectures and participation in the national and international events.





'Joint Events'

'Joint Events' the Qur'anic Botanic Garden participates in Family days, national and international events i.e. QND, Garangao, Global Environment day, EC Mosque event, Qatar National Environment Day and QF Sustainability Week that are organized by QF or Non-QF centers in order to engage maximum number of local and international community within the QBG program.



Outcomes of the QBG Outreach Program 2016-2017

Statistics

Although the QBG staff is only 5 persons, but the Garden was able to add value to the local and international community in terms of Community outreach and Education based on Conservation.



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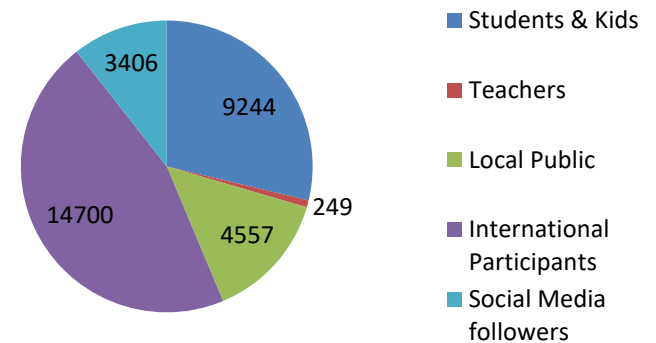
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Outcomes of the QBG Outreach Program 2016-2017

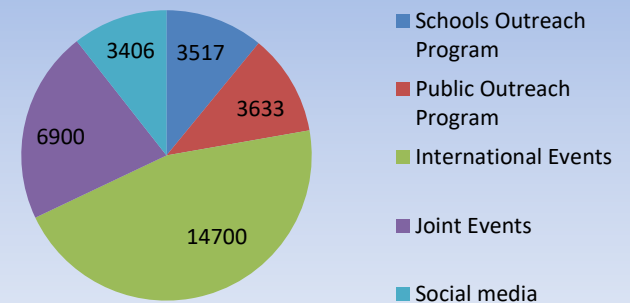
Community Engagement; National & International

- Organizing **21** Community Outreach programs for students, professionals, Families and Internationals that engaged **28345** persons; including students, local and international participants. (Appendix; Tables 2-5)
- Engaging **9244 Students** and **249 teachers** within the QBG Conservation Educational Program 2016-2017.
- Engaging **87 Schools/colleges** within the QBG Conservation Educational Program by Providing “**92**” Educational **sessions** to students in **241** educational **hours** that included site visits, students’ lectures, campaigns, lab experiments, interactive activities in addition to supervising **18 Student’s Research points**, based on conservation, by the QBG 2016-2017.
- Engaging **14700 international** participants during Bayt Qatar, Rio 2016 Event, in addition to **4152 local Adults** have been involved within the QBG Events in Qatar. (Appendix; Table 7)

Delegates engaged with the QBG Outreach Program 2016-2017



People engaged in the QBG Outreach Program 2016-2017

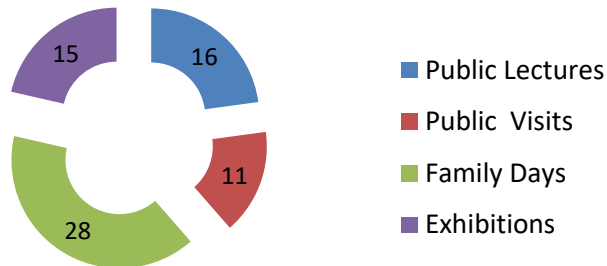


Outcomes of the QBG Outreach Program 2016-2017

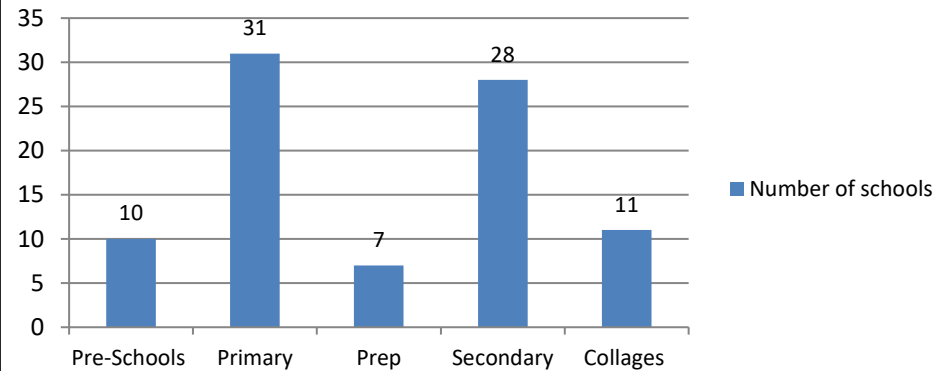
Community Engagement; National & International

- Involving the local community by organizing **16 Public lectures/ workshops**, **11 Public Site visits** to the QBG, **15 exhibitions** and **28 Family days** that included participation in the national events i.e. QND, Garangao, Global Environment day, EC Mosque event, Qatar National Environment Day and QF Sustainability Tent. (Appendix; Table 6)

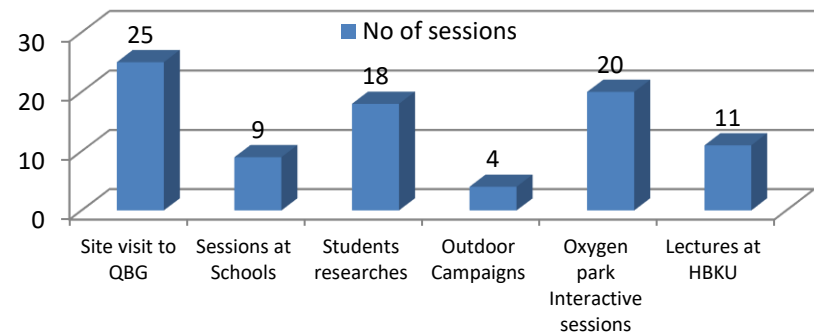
Local Community Program of the QBG 2016-2017



Schools categories involved in the QBG Educational Conservation program 2016-2017



Type of Educational activities provided for schools 2016-2017

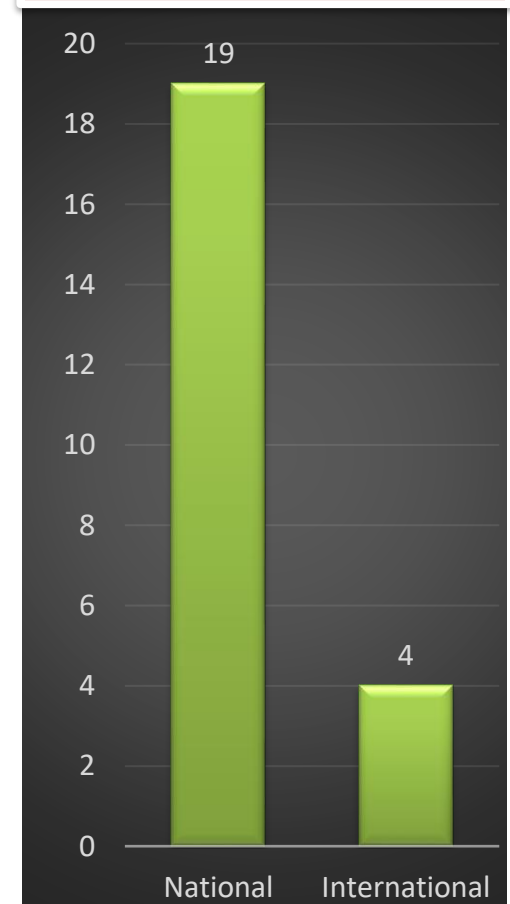


Outcomes of the QBG Outreach Program 2016-2017

Effective Partnerships

- Engaging **23 national and international partners** and proceeding 63 partnerships in order to run the various activities of the QBG 2016-2017.
- Signed 2 **MOU's** with the Ministry of Municipality and Environment (MME) and with Qatar University, Center for Humanities and Social Sciences.
- Engaging **12 volunteers** in 21 community and schools programs during 2016-2017.
- Publishing **25 press releases** for the QBG activities in the local newspapers, QF magazine and QF telegraph.
- Process of **15 TV coverages and 33 Radio series** on the QBG events 2016-2017.
- Organizing **5 interactive Awareness sessions** for the QF stakeholders in order to be more engaged with the QBG activities.
- Collaborated with the Ministry of Education in Qatar to run the relevant educational programs of the QBG.
- Continue cooperating with the Community Development centers and QF Directorates in terms of shared services e.g. CAFM, Procurement, FM...etc. to realize QF synergy.
- Engaging **11 colleges and universities** in Doha within the QBG Outreach program of 2016-2017.

National & International Partners of the QBG 2016-2017



Leading of the international authority in terms publications about the plants & Environment in the Holy Qur'an and Hadith

Publications

- ❑ **Illustrated book of the plants of QBG;** Catalogue of 59 plants species of Holy Quran and hadith
- ❑ **Books of Abstracts;** Gathering over 50 abstracts of 1st and 2nd internarial Forums of the QBG
- ❑ **Books of Proceedings;** Gathering over 50 scientific papers of 1st and 2nd internarial Forums of the QBG
- ❑ **Tree booklets:** describing the tree life and importance
- ❑ **Kids publications:** issue on plants life for kids
- ❑ **Articles;** about the QBG plants, terms, ethics and conservation in local and international magazines
- ❑ **Flayers and Brochures;** of the QBG events and campaigns

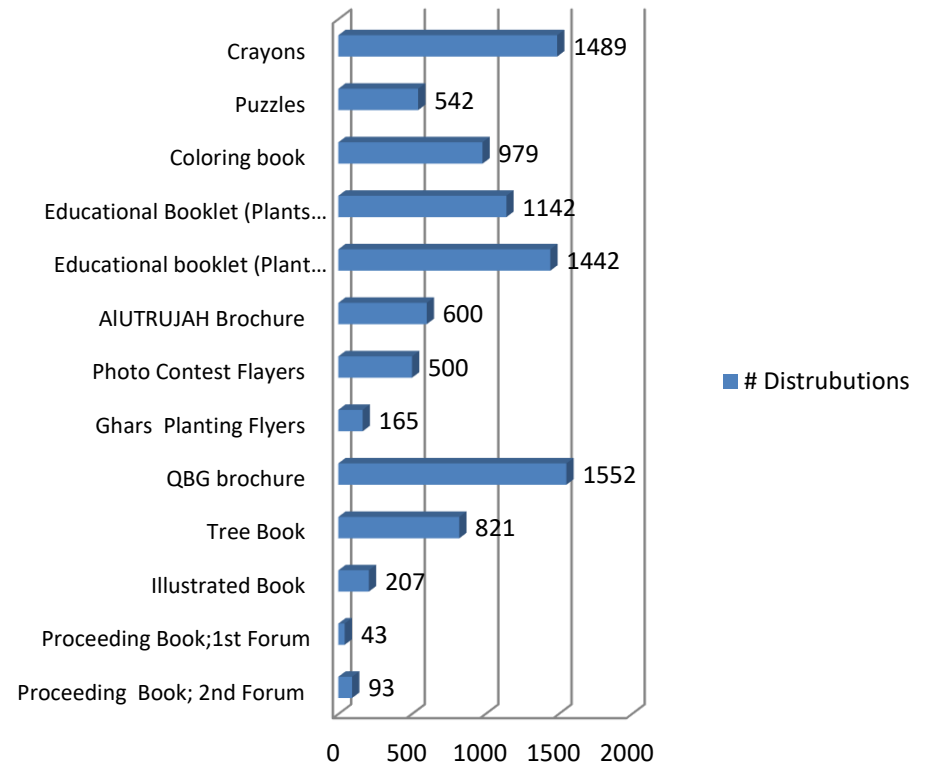


Publications of the Qur'anic Botanic Garden

Publications Distribution 2017

- Distribution of **9575 educational aids** including the QBG books, Edu booklets, brochures and flyers during the QBG outreach program inside and outside Qatar.

Distrubuted publication of the QBG in 2016-2017



❑ Long term Outcomes

Although the QBG staff is only 5 persons, but the Garden was able to add value to the local and international community in terms of Community outreach and Education based on Conservation.

- Promote a comprehensive awareness locally, regionally and internationally around the QBG in order to build a cross bridge between cultures.
- Establish a Conservational Educational program and extra curricula activities for the students by providing diverse opportunities to gain knowledge on plants and biodiversity.
- Encourage the local community engagement and strengthen cultural heritage awareness in Qatar.
- Support the Qatar Foundation's dedication to sustainable development and environmental responsibility.



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Thank You



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