



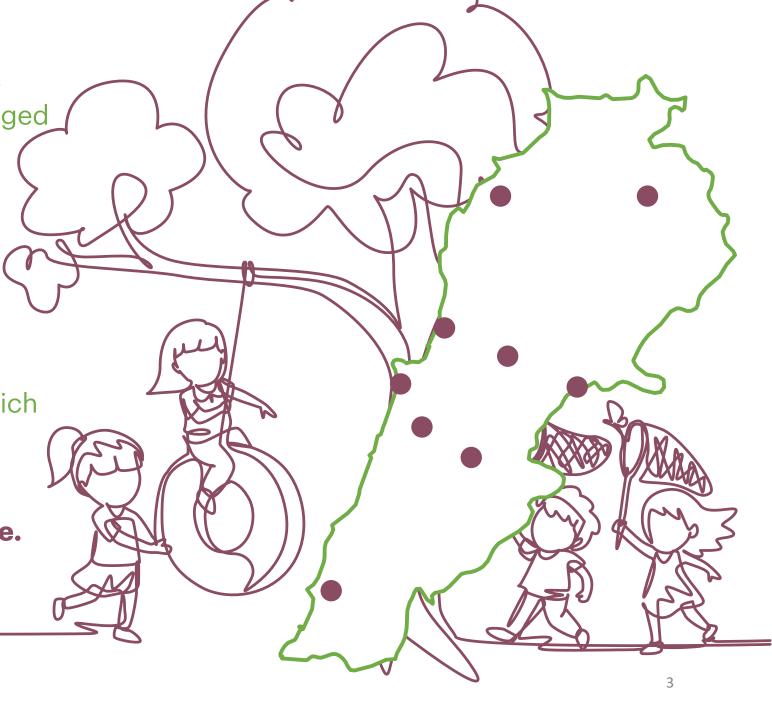


UN researchers define Garden Based Learning as "an instructional strategy that utilizes a garden as a teaching tool. The pedagogy is based on experiential education, which is applied in the living laboratory of the garden" (p.20) from that statement, a general definition of a Learning Gardens can be extracted "a garden or natural space that is used as a living tool for experiential learning."*

^{*}Desmond, D., Grieshop, J., & Subramaniam, A. (2004). Revisiting garden-based learning in basic education. http://www.fao.org/3/aaj462e.pdf

Recently, a number of alternative educational initiatives have emerged in Lebanon, many of which have begun addressing, for example, connection to nature and land, place-based immersion, food justice and sustainability more generally.

These initiatives fall within the category of 'learning garden', which can be broadly understood as a dynamic space outside of the traditional classroom where experiential learning takes place.



'Learning gardens' (LGs) in Global North contexts typically consist of a defined garden space or plot in the schoolyard used for educational activities.

Garden-based activities are used as a supplementary tool for academic enrichment by encouraging hands-on and inquiry-based learning, often as an entry point to the math's and sciences.

Through this study, identifying the social and well-being components of LGs helped to gain a baseline idea of their various uses and benefits.

Hence, this study will re-imagine the dynamics and presence of LGs as they relate to the Lebanese context specifically.

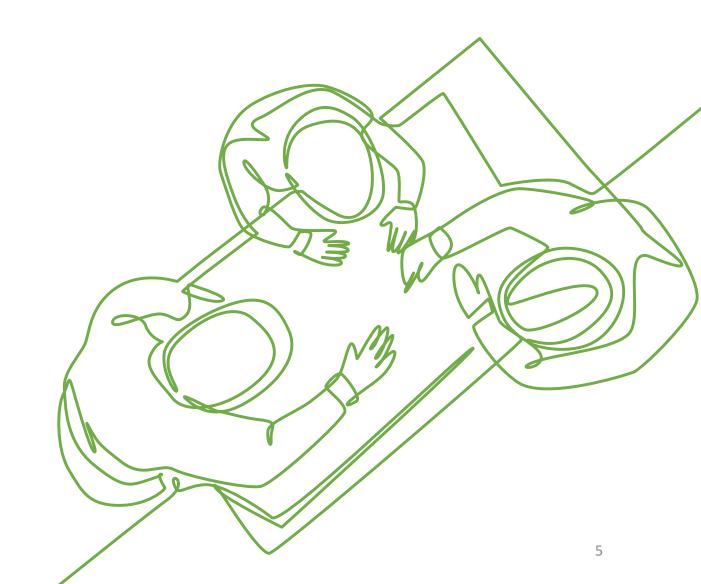
We hope a more contextually relevant definition can support the spread of an LG model in the country, equipped to meet the gaps in the Lebanese education system.

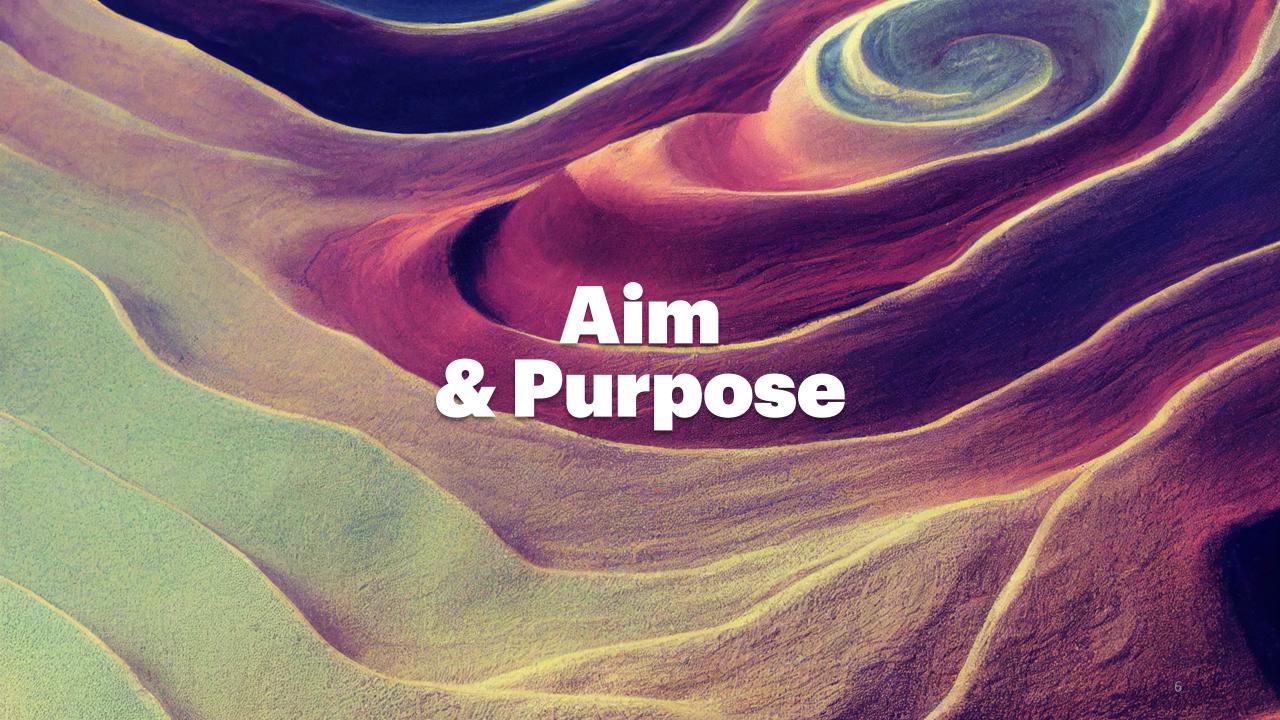


We would like to give a huge thanks to everyone who engaged in conversations with Jibal, and recognize their openness to share, exchange, and remain curious.

Your insights lay the path towards the future co-creation of more critical and regenerative education in the country.

The following pages will begin telling a collective story of LGs in Lebanon, based on a handful of actors' experiences, but we aspire to deepen these conversations over the coming years and provide an open space for reflection on this subject.





The aim of this study is to define what a 'learning garden' is in the Lebanese context as well as connect these relevant educational actors together.

'Learning Gardens' can encompass a variety of approaches and philosophies, but this study will begin identifying general trends regarding motivations, challenges, successes, and more.

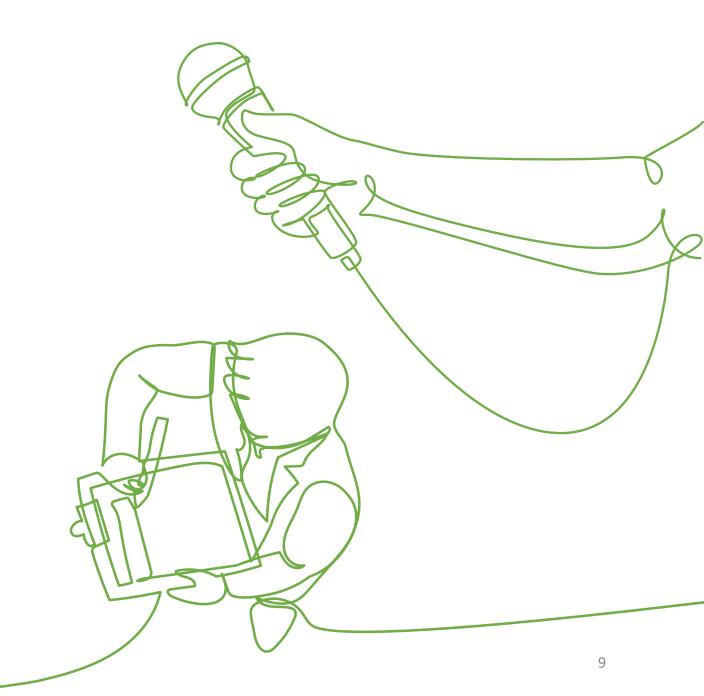
Jibal strives to foster true collaboration and reciprocity within its network. We hope the findings of this study will act as the groundwork for future exchanges and partnerships among relevant actors and grow interest in transformative approaches to education in Lebanon.





12 in-depth interviews were conducted with actors already involved in outdoor alternative educational initiatives in Lebanon in order to explore thematic questions. We present insights from their models and draw out key trends.

A survey was created, inspired by the conversations that took place during the interviews, it was distributed and filled by 26 actors in the field of Learning Gardens in Lebanon.



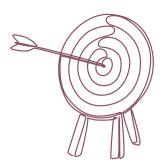




Educational Content



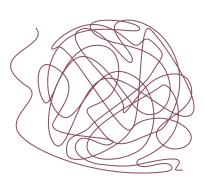
Length of Intervention



Target Audience



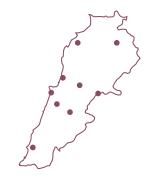
Motivations



Challenges



Collaborations



Lebanese Context



Origin Story



Successes



Model Growth



Emerging Definition of Learning Garden

Among the people we interviewed, there was an open understanding of what types of spaces could be considered a learning garden, ranging from forests to farms or gardens, including both urban and natural settings. A common understanding was that the space is often an experientially suitable match with the subject matter being learned (i.e., workshop about seed saving takes place on a farm).

Learning Strong emphasis was put on how learning gardens should provide more holistic learning through interactive and hands-on engagement and experimentation.



"A Learning Garden is a safe, non-traditional learning space where you can teach any subject to any group of people using a practical and experiential approach."





Pedagogical Tools

- 1. Play-Based Learning
- 2. Sensorial Learning
- 3. Time for Observation
- 4. Time for Experiments
- 5. Hands-On Learning
- 6. Time for Creative Expression
- 7. Inquiry-Based Learning

Topics Covered

- 1. Agroecology
- 2. Urban-Planning
- 3. Environmental Justice
- 4. Sustainability
- 5. Social Justice
- 6. Farm-to-Table Cooking

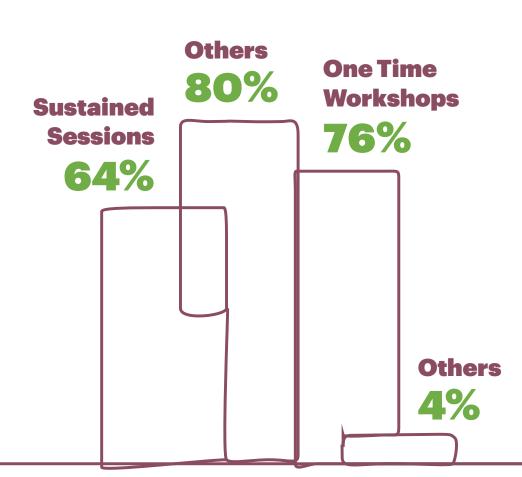
Group Composition

Age groups of persons involved varied from one initiative to another, though children and youth were involved in almost all initiatives. The greatest successes were found when working with smaller-sized groups with a relatively narrow age range, and when the parents of said children or youth were also engaged in the Learning Garden.

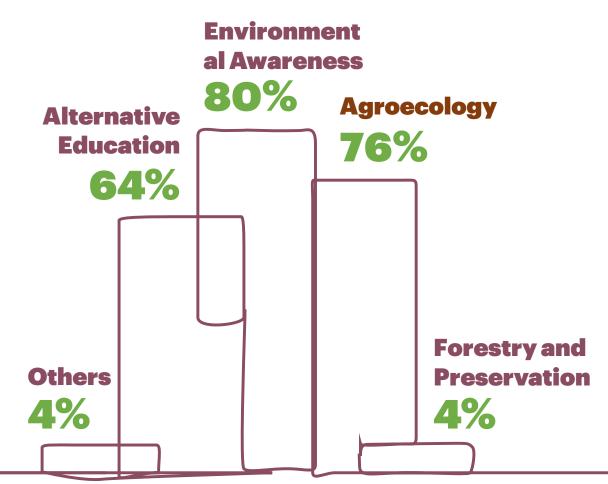
Time Spent Learning

Length of activity varied from single sessions or workshops to year-long engagement; we found a general consensus that long term engagement is associated with more meaningful impact. Example: in both farms and forests, the curriculum and activities are guided by the seasons so participants can observe and engage with changes in the environment.

Type of session held at Learning Gardens



Practices Applied at Learning Gardens





Among most of our interviewees, we found that whatever their main motivation for establishing a Learning Garden, the transmission of this knowledge, these practices, and the psychological benefits accompanying them to the younger generation seems to be a priority, in the hopes for an impact that is both more widespread and longer lasting.

Some of the most common motivations among our interviewees were Regenerative farming along with all the diverse variations, and ecological or environmental preservation: the need for environmental stewardship in Lebanon, and on a more local scale, nurturing a sense of respect and responsibility towards the community and the land, especially in children.

Other LG actors strive to make knowledge and education more accessible in Lebanon, and more relevant to the Lebanese context. In the case of forest schools, cultural aspects such as preserving heritage and local knowledge were considered key motivators as well. Others highlighted the fact that alternative education can supplement the formal school system, providing social and psychological benefits for children as they are brought closer to nature and are encouraged to play, explore, and think freely and creatively.



"When he [student] knows that the life of the plants that have been sown depends upon his care in watering them ... without which the little plant dries up, ... the child becomes vigilant, as one who is beginning to feel a mission in life."*

*Montessori, M. (1912). The absorbent mind. Translated from the Italian by Claude A. Claremont. New York: Dell Pub. Co.



Common Motivations





Finances & Funding Challenge #1

Even though challenges related to finance and funding are not unique to LGs, they do inhibit the long-term presence of these learning models.

Several interviewees describe how they struggle to find funding beyond larger funders, who often have strict requirements that do not align with the goals of LGs. In fact, it is common to encounter funding models that place attention on 'quick' results over more long-term learning processes, or larger number of people reached with short term interventions rather than prolonged interventions with a more limited number of participants, which according to our interviewees proves significantly more impactful. Also, smaller initiatives oftentimes lack the capacity or legal paperwork to apply for large funds as well.

Grass root donors and smaller NGOs that facilitate funding are mentioned as one of the main factors contributing to success, and generally easier to work with than bigger NGOs. Still, receiving donor funds via smaller NGOs is described as possibly having challenges of its own, as it can create codependence and can come with additional administrative tasks.

It is no wonder that "funding and finances" is the most common challenge mentioned in our interviews and survey since more funding is considered by many to be the solution to most of the challenges mentioned in this assessment.

Even though most of our interviewees' objectives are not to generate monetary revenue through their learning garden but to facilitate learning, creating a sustainable model that does not rely on external funding is proving to be quite the challenge, especially in the first few years.



Workload Challenge #2

High workload was the most common challenge among learning garden actors. Whether physical or administrative, it is mentioned as an everyday challenge that has consequences on the growth & development of an LG initiative.

Many LG spaces hosted on farmlands mention the demanding & consistent physical labor needed for maintaining the LG space. On the other hand, managing and locating human resources for administrative tasks and coordination is often difficult. Most actors involved in hosting or creating LGs are small teams in constant need of resources to support these gaps. Additionally, some interviewees experienced a lack of resources to meet needs specifically when scaling up to welcome larger groups in their LGs.

We note that several LG actors conduct activities outside of their regular jobs and do so on a voluntary basis, which may explain difficulties regarding workload. One actor particularly involved in developing LGs in farming spaces describes how calling for volunteers to take care of the everyday maintenance of the garden has not proved a viable solution, as turnover is a large issue here.



Community Building Challenge #3

Many initiatives mention that maintaining a sense of community around LGs is vital to their sustainability, but it also happens to be a serious challenge. For instance, many LGs have expressed that it is hard to find volunteers, especially ones that can commit for longer periods of time. It is challenging also, depending on each LG, when there's a lack of engagement from parents, teachers and/or neighbors, all of whom are essential for building a sense of community.

Even though community-building is described as a key component of a "successful model" of LGs, many initiatives hinted that it is challenging to nurture this aspect in Lebanon in particular.

This challenge may require re-thinking methodologies used to establish LGs, particularly in the ways in which communities are involved from the start of the project. Reflection on community-building and ownership structures is necessary in the LG ecosystem.



Skills and Training Challenge #4

As a result of the large workload previously mentioned, the challenge of finding skilled and trained staff or team members echoed in many interviews.

The problem is further aggravated by the uneven distribution in the different areas in Lebanon where often instructors are regularly transported long distances to give training sessions or workshops.



Access to Land Challenge #5

Space - Several LG initiatives mention the lack of sufficient space for activities. For example, for projects teaching children agroecology, part of the goal is for them to have ownership over the space that they cultivate. If there are space restrictions, and children cannot have their own dedicated space, it affects their feeling of ownership and motivation.

Otherwise, it was mentioned that there is generally a lack of space for outdoor activities. For the interviewees who had tried to develop LGs inside schools, the school facility creates a natural boundary to the garden size that often gives a limited opportunity for participation. Another participant speaking of growing a garden on school grounds says: "Working with schools also has several restrictions: The educational system is very rigid, the spaces are small, and the locations are not always the greatest. A lot of kids are going around and there is a big chance that the plating area could be stepped on by other kids". A few interviewees have developed methods and designs specifically to meet the needs and opportunities of primary schools' resources and space, such as the Gro-In kit made by ODDD. But they explain that their workshops are not long-term. Several of those interviewed did not imagine their activities tied to a specific physical location. In this perspective, any setting can be a space for learning, as long as the activities are designed to make the participant interact with their surroundings.

Urban/rural - There were distinct challenges between LGs that took place in urban versus rural areas. For example, in urban or semi-rural areas, outside factors often impacted full immersion in a "closed garden circle" (i.e., cars, pollution, noise). Two interviewees hosting LGs in rural areas express challenges of outreach and finding participants to engage with for more than 1-day activities.



Fast Growth Challenge #6

It is important to note here that scaling up is not necessarily a universal aim of LG initiatives. In fact, very few of those interviewed expressed a desire for scaling up their activities or increasing the number of involved participants. A shared sentiment by most interviewees was the desire to see more similar models spread across Lebanon by a diversity of actors.

Several others explained how, at some point, scaling up was done to meet a growing interest in participation. This fast growth caused many challenges such as the inability to maintain quality, the lack of resources available, and a struggle to keep up with administrative tasks.



Other Challenges

The general situation of the country is described as often impacting the ability of initiatives to do work. Still, none mention this as a debilitating challenge, but more of a reason for alternative educational initiatives to rise.

Unfamiliarity of some environmental concepts in Lebanon; niche concepts.

Time needed to establish a successful, productive, and sustainable land to show as an example.

Keeping gardens and outdoor green spaces open and accessible to the community.

Lack of hands-on activities in mature gardens as opposed to empty plots that can reformed.

Lack of a support network of other like-minded schools or organizations.

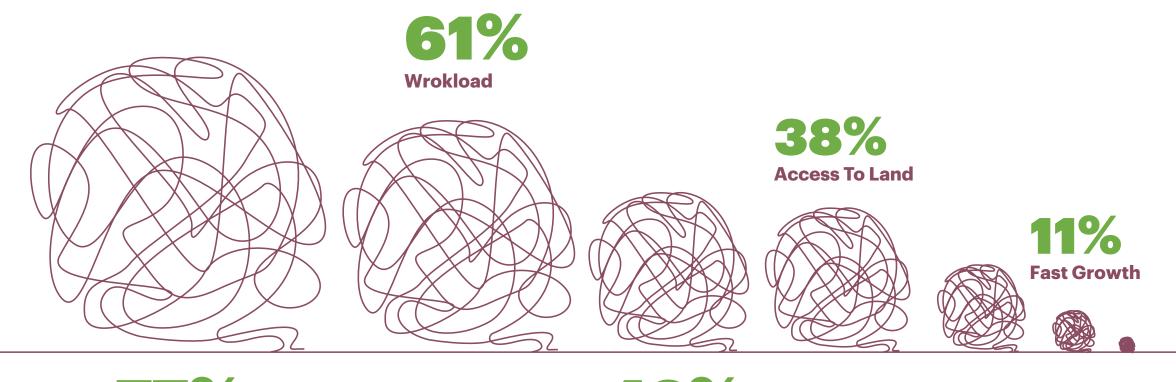
Longstanding farmer habits.

Adapting educational content to farmers.



Challenges mentioned by interviewees are necessary information to understand unrealized potentials, limitations, as well as areas requiring extra attention.

This study provides a list of the challenges that were shared across most or all initiatives.



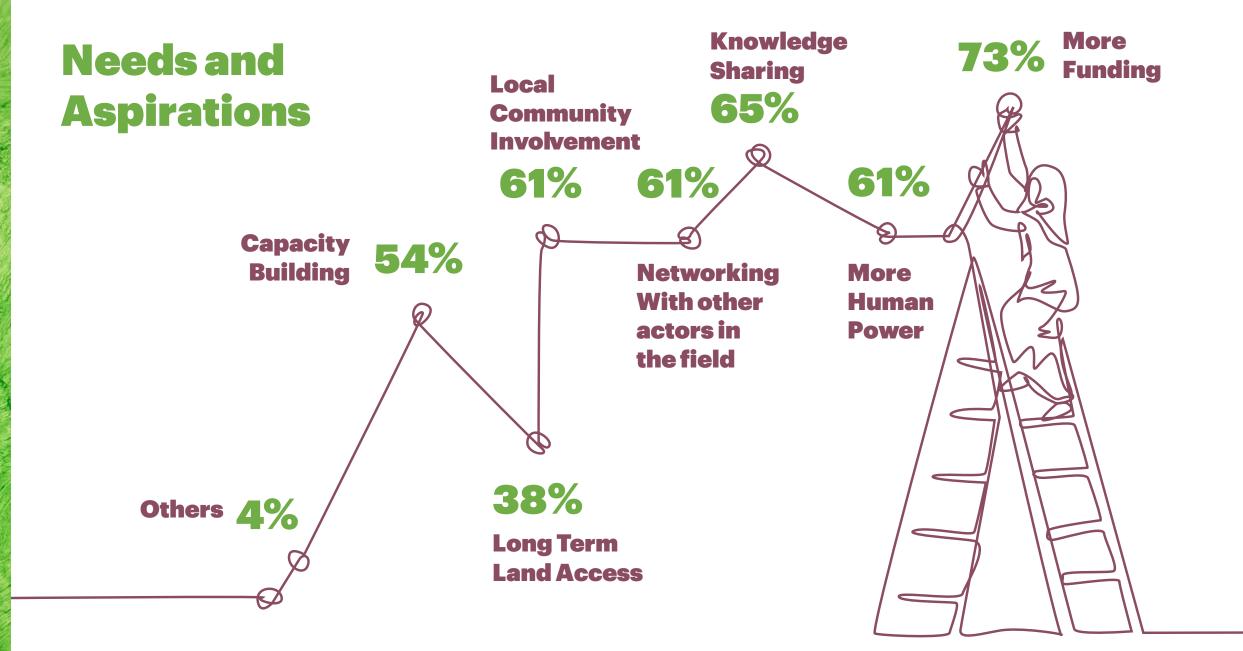
77% Funding

42%
Skills & Trainings

23% Community

4% Others





Despite the fact that ample information is present online on the subjects of agroecology, gardening, garden activities, and alternative education, the need for Knowledge Sharing was expressed by most, and was expanded and elaborated on.

The need for resources in Arabic, be it original content written in Arabic, or international resources translated into it, was mentioned frequently, and a need for these resources to be open source. Many of the interviewees also expressed a wish for the availability of replicable models that they could use, as well as ready local curricula they could directly implement instead of wasting time and human power in rereproducing similar designs, workshops, and content.

More exchanges and site visits between established learning gardens was also pointed out and considered to be a needed form of interaction for mutual learning and enriching interaction among actors in this field

Another aspect of knowledge sharing articulated by many was the need for access to local and Mediterranean knowledge in conjunction with capacity building through training of trainers' programs conducted by international and regional expert, as well as local experts who are knowledgeable on our climate and agricultural heritage.

A major need, which many considered the answer to other needs, is the need for funding support, which when available, facilitates land access, availability of human power, training sessions and so on...

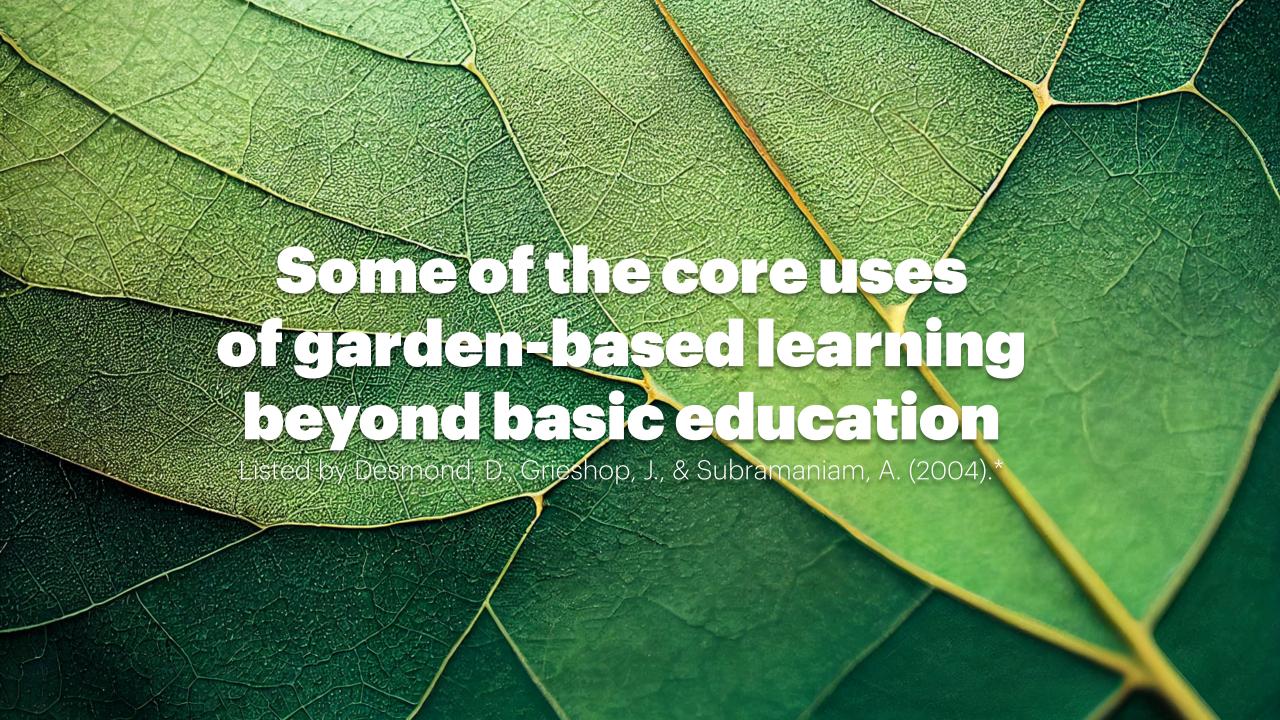
Factors Contributing to SUCCESS

68%Slow and organic growth





Interviewees	Educational focus	Activities	Target Audience
Horshna Forest School	Alternative pedagogy and media	Forest school classes with curriculum inspired by the forest (seasons, plants, animal tracks)	Children
Saida Forest School	Alternative pedagogy and gardening	Free play, boosting creativity and motor skills, teaching about seasons, gardening, insects, and urban nature.	Children
Jibal/ Eedama	Social and environmental justice Sustainable Design	Training sessions and workshops on environmental and social justice (Jibal) Training on Regenerative Agriculture (Eedama)	Children, youth and adults
ODDD	Sustainability	Workshops focused on sustainable urban planning, design, transportation, public space	Youth
Zaher	Environmental justice and sustainable food production	Promoting LGs in under-resourced public schools, non-formal education centers, and in underprivileged communities including training sessions and workshops	Children, youth and adults
Food Heritage Foundation	Conservation of Lebanon's indigenous culinary knowledge	Applied research, ecotourism development, land rehabilitation, transformed foods, drying foods, dairy processing	
Ghossoun Zgharta	Permaculture Garden	Sustained workshops on nature-based activities, farm tours	Children, youth and adults
Buzuruna Juzuruna	Ethics, environment, seed saving, soil, and community	Training sessions and sustained workshops on seed saving and agroecology.	Children, youth and adults
Les Racines du Ciel	Promotion of biodiversity and water conservation	One session workshops, Farm tours, and cooking activities	Children, youth and adults
Li	Sustainable farming, building & living	Workshops on natural building, regenerative farming, creative expression	Children, youth and adults
Samen Eco Gardens	Soil health, urban gardening, & healthy eating	Workshops on permaculture, garden tours	Adults (children and youth less frequently)



Personal development (mental and physical)

To add a sense of excitement, adventure, emotional impact and aesthetic appreciation to learning

To improve nutrition, diet and health

To teach the art and science of cooking with fresh products from the garden or local farms

To re-establish the celebratory nature of a shared meal

Social and moral development

To teach sustainable development

To teach ecological literacy and/or environmental education

To teach the joy and dignity of work

To teach respect for public and private property

Vocational and/or subsistence skills

To teach basic skills and vocational competencies To produce food and other commodities For subsistence consumption and trade

Vocational education

Gardens represent a historic and contemporary model for developing vocational skills in agriculture, natural resource management and science

Life skills

To teach about food and fiber production

To engage children in community service and environmental care To involve students in lessons of leadership and decision-making Community development

Gardens often serve as a focal point for community dialogue, capacity building, and partnerships

Gardens often organize individuals for action – for water delivery, co-operatives and transportation

Food security

Gardens can address hunger at the individual, family and community levels through planning, growing and sharing Gardens can be the starting-point for teaching and developing food policy

Sustainable development

Gardens are an appropriate arena to introduce children to the interconnections that link nature to economic systems and society



In our exchanges, we noticed that there was a diversity of models and roles that each actor contributed to in the LG ecosystem.

Actors engage with and promote the existence of LGs in many different ways in Lebanon. Some take on very specific roles while others engage in more than one.

Below, we discuss some of the ways LG actors contribute to the growth of the model in Lebanon, noting that many different roles often exist within one initiative at the same time. Individuals wishing to promote LGs in Lebanon can do so through a number of ways, some of which are described below.





Possible ways you could support LGs in Lebanon



The Space Providers

Space Providers can be farms, schools, existing NGOs, or private landowners willing to provide a small plot or access to land for LG activities to take place in their communities.



The Content Creators

Content Creators support the LG ecosystem by sharing ideas and inspiration for educational content. These actors can be diverse and offer various types of content (e.g., environmental justice or sustainable farming)



The Funders

Funders are not necessarily traditional donors. These can be more established organizations willing to support others with proposal writing, direct fundraising, or acting as a middleperson for receiving funds.



The Connectors

Connectors help link together the LG ecosystem. This may include organizing networking events, encouraging openaccess content, or connecting relevant actors together, all of which create room for exchange & collaboration.



The Trainers

Trainers provide vital pedagogical skills to those leading educational activities in the LG ecosystem. These are trainers who have experience in LGs that build the capacity of other trainers.



The Experimenters

Experimenters may be more difficult to spot, and we may all act as LG experimenters at one point or another. Experimenters are important in that they bring innovation and creativity to the LG ecosystem and challenge the status quo.

