The Jakkur Lake Community Garden

Jakkur lake

Gathering area

Forest Garden

Raised beds

Earth <mark>G</mark>arden

Compost zone

Fishermen's dock

Pathway



Jakkur Lake and Community Garden (Illustrator: Shreya Mahabalshetti)

Ananas is an ecological design team based in Bangalore. Our projects range from small garden design to large-scale land regeneration and agriculture projects, using techniques and approaches of permaculture. We plan systems and spaces that grow diverse vegetation, restore soil, harness and conserve water which over time becomes a sustainable system. We are dedicated to teaching people about land and helping them transition to more regenerative lifestyles by making them active participants of the process. Through knowledge-sharing we seek to empower our community partners to operate the systems we create together.

In order to be part of the solution and not the problem we need to practise the following:

Care for Earth: Care for all living and nonliving things; soils, species and their varieties, atmosphere, forests, micro-habitats, animals and waters. It is important to respect the natural cycles of growth and decay of living systems

Care for people and self: To promote self-reliance and responsibility towards the community and to take responsibility for one's community by sharing knowledge and experience to up-skill people. Participating in a collaborative effort to ensure individual and community wellbeing.

Fair share: To ensure the wellbeing of the earth and people we need to share the surplus we acquire. Ananas practises an open-source policy for all information they create for and with clients.

Everything gardens: Our work in the commons has always been rewarding and we aim to bring permaculture to urban spaces.

The Jakkur Lake Community Garden: Since late-2017, Ananas has been working with JaLa Poshan, a citizens' initiative supported by the charitable trust Satya Foundation at Jakkur Lake to create a community garden. The initial idea was to create gardens for the community in and around Jakkur as well as for the garden workers (from a women's self-help group) and the fisherman working at the lake. The idea was to bring food and water close to dwellings by reducing dependencies on resources coming from a distance. The community garden represents a model that creates a sense of responsibility in the community to volunteer and actively nurture their commons for produce. The design concentrated on creating zones based on the different functions determined for the community. The area was divided into three basic zones:

(i) Earth Garden,

- (ii) Food Forest and
- (iii) Water Garden.

Earth Garden is a space to grow perennial vegetables on a raised bed. The zone was defined to be separate as these plants require more attention and regular care. Food Forests are biodiverse, productive and regenerative systems modelled after natural forests, with careful species selection to suit the needs of the human inhabitants of the area. Water Gardens include creating a garden along the lakeside that functions as a gathering space for different scales of interactions among lake users.

Materials were also carefully selected by the Ananas team and JaLa Poshan Trust based on local availability. Donated materials including gravel, *kadappa* stones, bamboo and Mangalore tiles from nearby construction sites were used.

In 2018 the design was executed by community members, a self-help group (SHG) that works at Jakkur lake, gardeners and volunteers from across Bangalore. The volunteers were given an understanding of the design and the end goal. In time, we saw a growing sense of responsibility among community members for the garden. Volunteers came up with ideas and design interventions that they wanted to add to the community garden.

Through the volunteering programme, the community garden was used as a space to learn permaculture principles, gardening and design strategies. In May 2019, Ananas and JaLa Poshan received a three lakh rupees grant from Bangalore Sustainability Forum (BSF) to conduct volunteer days and continue work on the Earth, Forest and Water Gardens and have them ready by May 2020 to a point where they could self-sustain with minimal maintenance.

Having a garden in a public space, tended by volunteers, brought with it a range of challenges that led to the vision and design of the project to evolve continuously. The yield of the garden is not quantifiable, but can be seen and experienced. The project aimed to create a sense of responsibility, ignite active participation and to create a space for interacting and learning. The project involved multiple stakeholders and hence many challenges were faced in the course of the 3-4 years.



Vision for the community garden: Closing the loop.



Jakkur Lake Community Garden - Design and Zones (Illustrator: Shreya Mahabalshetti)







Volunteers making trenches and filling them with mulch, in preparation for planting

The following points summarise our experience and highlight the activities, challenges, impacts and benefits from the project.

- The post and pre-pandemic period posed a huge gap in the volunteering activities at the lake which included volunteers from nearby communities, schools, company employees, etc. There was a halt in work, and that is when the need for regular volunteering to ensure maintenance of the garden until it has been established.
- During the pandemic, it observed that the maintenance of the community garden could not be taken up by the SHG alone as they were occupied with the maintenance of the rest of the lake.
- Recognizing these challenges with the JaLa Poshan Trust we realised that there is a need for a nodal community lead volunteer who would take on the responsibility of the volunteering activities. Through this intervention we have seen a gradual improvement in the involvement of the community members especially children who are enthusiastic and regulars in volunteering.

Milestones

The tool shed: The tool shed is used to store tools, seeds, gloves and other materials required regularly.

From monthly to weekly: We decided to call out particularly to those who live within walking/cycling distance from the lake. Some very enthusiastic locals show up, volunteer and make decisions together.

The Whatsapp group: Has over 100 members and is a great place to share and discuss ideas, activities, timelines and design. Interested people are added to the group - a good way to keep track of attendees.

Garden manager appointed: A lead volunteer from the community was identified to take on the volunteering activities and nurturing the community garden. This has made a tremendous difference to the project as it means there is finally consistency and regularity in management.

Short talks: In addition to working on the gardens, the volunteer days can be used to sit and enjoy the space we have created together. Having short 10-15 minute talks by people who have an interest in a particular field is a great way of slowing down and getting to know each other in different ways. The area selected had soil that had a larger percentage of clay and was lacking organic matter. There were also traces of construction waste and other garbage identified in the soil. The area lacked shade and had a fire threat on the western side from neighbouring farms. There was also less biodiversity observed in this space including flora and fauna.

Observations of the Garden

Yields: Physical

Greens: Malabar Spinach, Ceylon Spinach, *Gongura*, *Palak*, Balloon Vine, *Agase*, Multivitamin, Water Spinach, *Moringa*, Sweet Potato leaves, Tree Spinach Fruit: Mulberries, Passionfruit, Papaya, Barbados Cherry, *Bimbli*, Guava, Rosella, Custard Apple, Star Fruit

Vegetables: Snake Gourd, Bottle Gourd, Brinjal, Chillies, Sweet Potato, Flat Beans/*Chapparada Avarekai*, Elephant Foot Yam, ArrowRoot, Pea Brinjal Herbs and medicinal plants: *Tulsi*, Insulin Plant, Aloe Vera, Basil, Mint, Butterfly Pea, Lemongrass, *Bramhi*, *Doddapatre*, Nasturtium

Green manure and mulch: Gliricidia, Mexican Sunflower, Napier Grass, Sun Hemp, Vetiver Spaces to sit and converse, meditation, exercise, sitting, looking out, resting.

Yields: Biodiversity

Soil life: Building soil health by using leaf compost, domestic compost, green manure, a range of mulches, cover cropping, and water hyacinth from the lake. The soil was regenerated by mulching, supporting species that loosen the soil.

Insect life: Using flowering species and creating a diverse habitat - particularly in the low maintenance Forest Garden - has resulted in a huge increase in insect and spider diversity.

Bird life: Emphasis on trees and dense shrubs for perches and nesting sites, plant species such as Mulberry, Singapore Cherry, Barbados Cherry, that are eaten by birds.

Plant species diversity: To create resilience through water retention, nutrient cycling, nutrient diversity and more, it is important to have a diversity of species adapted to local climate.

Yields: Social

Create and play: There are not many spaces where anyone can go and, without the need for any particular skill or training, create something with others. The gardens are a playground and a space for people to express themselves freely without any pressure to 'deliver'.

Hope: Showing what is possible in our cities and common spaces. Creating a model that can be replicated in other urban commons based on the context of the space.









After







Skill sharing: Volunteers came in with different skills and talents such as natural building, gardening, birding, community living, water management, engineering, how to use medicinal plants and so on. Tackling problems together: We got donations of materials from various people. Other than the labour of volunteers, we got free compost, gravel and Mangalore tiles to set up our gardens.

Bringing together people from a wide range of backgrounds: One of the most wonderful aspects of working in a public space is the wide range and diversity of people who show up. All volunteers brought a different perspective and knowledge to the table.

Pure joy: Many volunteers have expressed the joy of getting their hands dirty and learning from the environment around them. There is an intangible joy in sharing space and working together on a common goal.

Work on the garden continues with renewed objectives. The garden is ever-changing and the community continued its upkeep through the pandemic lockdowns. Our learnings from the community garden project at Jakkur Lake have been in the area of workability, challenges and beauty of urban commons. It is not only a great model to adopt for ecological growth and resilience, but also for involvement of all stakeholders.

Note: All pictures are from the ANANAS Jakkur Lake Project website.

Related references

Ananas (n.d). Ananas Homepage. https://ananas.design/about-us
Biome Trust (2015). 'Jakkur lake ecosystem and its challenges.'
April 26, 2015. http://biometrust.blogspot.com/2015/04/jakkur-lake-ecosystem-and-its-challenges.html

Patil, Rashmi (2020). 'Water Warriors: Communities can change the picture of the current water crisis across India. Here's how.' The New Indian Express, March 16, 2020. https://www.edexlive.com/ people/2020/mar/16/communities-can-change-the-picture-ofcurrent-water-crisis-across-india-heres-how-10611.html

ANANAS is a joyful human endeavour creating regenerative systems for the wellbeing of community and biosphere. Email: info@ananas.design

Shreya Mahabalshetti is an architect, designer and narrator of thoughts, secrets and stories through illustrations with a minimal approach, and is pursuing a M.Des. degree at IIT Hyderabad. Email: shreyarmahabalshetti@gmail.com