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STORIES FROM THE FIELD - FOCUS GROUP DISCUSSIONS (FGDS) REPORT ON CHENNAI URBAN FARMING INITIATIVE

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Introduction

The Chennai Urban Farming Initiative (CUFI) was established to serve a multi-pronged goal – improving access to nutritious food, providing training and livelihood opportunities in gardening for people from vulnerable communities, and increasing green spaces and urban gardens in the city with obvious positive implications for greening and cooling the city.

Mobile Vegetable Garden Kits (MVGKs) were distributed among the participant communities, which comprised potting mixture, vermicompost, organic fertilizer, and seeds. The Chennai Resilience Centre (CRC) team provided in-person training and online support to the participants to introduce them to best practices in growing and maintaining urban gardens. Apart from the initial training, CRC also provided the participants with 'Maintenance Kits' which consisted of all the items in the MVGK except the grow bags, to support participants in continuing their efforts.

To evaluate progress and plan for future iterations of the project, CRC conducted intensive Focus Group Discussions (FGDs) with around 40 program participants across different participant groups – partner NGOs, ICDS centers, schools, and a homeless shelter between September 2022 and March 2023.

Figure 1: FGDs at an ICDS centre (top left), pudiyador community (top right) and at Perumbakkam (bottom left); taking a pledge to eat nutritious food at a centre (bottom right)









Following discussion highlights the key thematic learnings from these FGDs and interaction with the beneficiaries.

Improved access to nutritious, organic food

Through conversations with the participants, it was evident that the project has had a positive effect on access to organic vegetables and greens. Several participants mentioned that they harvested vegetables such as okra (*vendakkai*), tomatoes, and broad beans (*avarakkai*). Majority of the participants mentioned that they harvested greens such as different types of spinach (*keerai*), mint (*pudhina*), and green chillies and have stopped buying these from the market. The following quotes from participants highlights their interest in growing their own food.

"My generation is from the village and we ate everything fresh. Here in the city, everything has chemicals. I want to bring fresh eating back to my generation. I want to give my kids organic food that is good for their health". - a participant from the community garden at Perumbakkam.

"...We get fresh organic food for our children, whereas we don't get any good quality vegetables in the market. Teachers and helpers maintain the garden well. If the harvest is more, they also provide it for our homes" – a teacher at an ICDS centre in Chintadripet.

"We use the plants to cook curry and sambar. We make tomato sabzi (poriyal).

Instead of buying the vegetables from the market, we are able to cook them with the vegetables that grow in the garden. We have reduced purchase from outside, especially green chilli and tomato." – a coordinator at a homeless shelter for women with psycho-social disabilities

Figure 2: A participant at a homeless shelter



A side-benefit of improved access to organic, freshly harvested vegetables is improved nutrition, particularly for vulnerable populations such as children and pregnant women. Many participants mentioned providing some of the harvested spinach and moringa leaves to pregnant women with iron deficiencies and low haemoglobin levels and mothers of the children. Several mothers who we have interacted with across ICDS centres told us that their children are consuming greens more if they are grown in the centres and at home. One mother explained, "...at the centre, they gave us Pasala keerai, which I made into a kootu and as a poriyal, which was very tasty and my daughter relished it."

Figure 3: Produce being handed over to a pregnant woman at centre (right) and an IRCDUC member harvesting produce at Perumbakkam community garden (left)





Medicinal Plants

Similarly, a positive effect of the project that emerged through conversations with the participants was easy access to medicinal plants. The World Health Organisation estimates that 80% of people across the world rely on medicinal plants for some aspect of their primary health care needs. India has approximately 21,000 plant species which are used for medicinal purposes. These plants also play a critical role in the garden especially as they can be used as natural pest control solutions. For instance, Neem is one of the most common herbal plants whose flowers, seeds, leaves and twigs are widely used for consumption and to prepare biopesticides.

The presence of medicinal plants like neem, thulsi and karpooravalli in institutional gardens like those in the ICDS centres are acting like conversation starters. They are attracting parents and encouraging them to talk to the teachers and helpers not just about how medicinal plants can be used but also about the other edible vegetables, fruits and greens that are being grown in the gardens.

Several gardens grow medicinal plants such as basil (thulasi), karpooravalli, thuthuvalli, and aloe vera. Many participants mentioned using these medicinal herbs to cope with common illnesses such as cold. Parents in the neighbourhood were inspired to plant these herbs in their own homes. The benefits of growing medicinal plants were highlighted by a helper at an ICDS centre, who stated the following –

"My husband was affected by jaundice. Doctors said that no more treatment can be done since the

disease has spread all over his body and that it would be difficult to treat. But I knew that "Killanalli" is a good medicine to cure jaundice which we grow in the garden. Everyday I ground it and gave it to him. Within a few days, he was completely cured".

Recognising that several ICDS centres are growing medicinal plants of their own interest, CRC decided to provide additional support to these centres by providing them with medicinal plant saplings and by conducting a training session in January 2023. This session focused on common medicinal plants that should be grown in every garden and how they can be used as biopesticides and for human consumption. Read this report for further details on the session.



Gardens as communal spaces and sites of learning

The project was envisioned to have broad-beneficiary participation in maintaining the garden and create a shared space for learning and sharing. Several participants noted that the children in the neighbourhood took an active interest in the garden. They helped in watering the plants and the teachers in the neighbourhood used the garden as an opportunity to teach them the scientific names of plants and identify shapes, sizes, and colours. As explained by one ICDS teacher, "we educate the children in our garden space. We teach them colours, shapes, sizes using leaves, flowers and stems."

Another participant from the Perumbakkam community garden had this to say with regards to gardens as spaces for education –

"if you consider the children here, they don't know anything about plants. The other day we had gone to Tolkapia Poonga and only there did the kids see some plants which were commonly found earlier. If there is a garden here then they can see where for instance tomato or gooseberry (nellika) comes from, what the plant looks like. They wont let us into other gardens but if it is our own garden, they can see it and learn from it and we can also use it for learning". - IRCDUC Member, Perumbakkam.

Some participants noted the involvement of mothers in the area in providing equipment such as pots and donating plants for the garden. Similarly, participants from the Perumbakkam shelter also mentioned positive interactions with government officials. One participant mentioned that they sold tomatoes to officials from the Tamil Nadu Urban Habitat Board (administering the space) for a sum of INR 20.

Figure 5: Mothers from the local community interacting with teachers at a centre



Participants, from ICDS centers, stated that gardening helps them relax and feel peaceful. One teacher stated that children loved to study and have lunch in the garden, especially during power cuts, because it provided shade. Another a staff member from the ICDS Chintadripet garden site, said the following – "We get fresh food. Also our tension and stress goes away once we stand in the garden and we feel relaxed. And the children are very much involved in it, it makes us feel happy".

Practicing sustainable behaviour

The gardens also became sites of learning and spaces practicing sustainable behaviour such as composting, resource conservation and recycling. Composting is currently being done in 14 centres with involvement from the extended community. Mothers and children in the neighbourhood are encouraged to bring organic waste from their homes to the centres for composting. A teacher at one centre said that waste segregation and composting enables her to reuse and recycle waste at work and provides nutrition to the garden resulting in more produce for the mid-day meals cooked at the centre.

To promote composting and enable the centres to self sustain their gardens, CRC is conducting a Composting Champion contest awarding centres which compost for a minimum of 3 months, a certificate and tools to aid their efforts. These are some pictures of winners.

Figure 6: Winners of the composting competition in June



Several other participants also practiced composting – they composted food and garden waste such as vegetable waste, fallen leaves, and tea waste to use as fertilizers in the garden. Some have even inspired those in the neighbourhood to also compost their waste.

Participants, especially those from the centres also spoke about how they reuse and recycle resources like water and discarded items. An ICDS teacher shared an anecdote about how someone in the neighbourhood had left an old bed on the road which contained cotton and cocopeat. The teacher and her colleagues collected all the cocopeat and mixed it with leaves and food waste to make compost for the garden.

Further, during visits to several centres, the team noticed several instances of recycling and reuse:

Teachers and helpers are commonly recycling water used for washing their vessels, vegetables and rice in their gardens in an effort to conserve water and add nutrients to the plants. At some centres, with encouragement from CRC, teachers used discarded pet bottles as drip irrigation

tools to water to ensure constant hydration for the plants during summer holidays. And, at one centre, to keep away the bandicoots, the teachers had used discarded 20 litre water cans suspended from the ceiling as containers to grow *keerai*.

Figure 7: Centres using reusing material in their gardens





Children also learn and practice sustainable behaviour through the gardens. At an ICDS centre in Ashok Nagar, children prepared manure by bringing in waste from their homes which was then mixed in a composting pit. Often, mothers in the neighbourhood bring in their kitchen waste to the garden site which is composted and used, as an ICDS teacher in Nungambakkam noted. This experience was shared by teachers at centres in Nungambakkam and Thiruvottiyur

respectively. Two other ICDS teachers from Anna Nagar, said the following with respect to practicing sustainable behaviour in the gardens –

"Using the waste to make compost results in getting organic vegetables for the centre. All the vegetables and keerai grown in the centre is used for cooking the mid day meal which makes us all very happy. We will continue to do this. By doing this we can keep our environment clean which also improves our health."

Challenges

Challenges faced by the participants revolved around the maintenance of the plants in the garden including dealing with pest attacks. However, despite highlighting these challenges, participants also recognise the co-benefits from gardening and see value in continuing their efforts.

In terms of challenges, some participants noted that the vegetables would not grow to the expected extent, despite efforts from the gardener and constant technical support from CRC. While plant growth is unpredictable, the growth of vegetables and greens directly affect two key themes of the project – access to nutritious, organic food and reducing the expenditure on food by being able to consume what is grown in the garden.

Participants across the Perumbakkam, Pudiyadhor, and the Otteri garden sites also spoke about frustrations in dealing with pests such as rats and other diseases contracted by the plants despite various efforts. ICDS staff members Ramya and Maragatham expressed that they would need more soil and organic fertilizers to combat pest attacks and ensure healthy growth of the plants.

Organic gardeners and farmers including Sempulam concur that the nature of organic gardening is such that it can only keep away pests and diseases for a certain duration of time and not for ever. Therefore, constant care and maintenance is required to detect the pests and manage them as soon as possible before they spread widely. In all our day-to-day interactions with CUFI beneficiaries via WhatsApp and field visits and training sessions, CRC imparts this message and provides technical support on how detect and manage pests and diseases early using simple biopesticides which can be made on site. The team also emphasises the need for constantly increasing nutritional content of the soil by adding compost and other bio-growth enhancers such as Panchakavya.

Key Takeaways

Summary

Participants recognise the co-benefits of vegetable gardening despite every day challenges such as pest and disease attacks

Gardens with medicinal plants are attracting the local community, especially at the ICDS centres to engage more actively in gardening and teachers are using it to create awareness about importance of organic vegetable gardening at home.

The gardens are fostering community spirit among children, parents, and adults in the neighbourhood who are taking an interest in the garden and becoming inspired to setup their own home garden. This interest can be levergaed to build cross-site learning.

More discussion and planning is required on how to make the gardens self reliant such that they sustain in the long-term.

Through the FGDs, the CUFI participants revealed both the benefits and the challenges arising from the project. Together, these learnings are being used to shape the future design and implementation of the project. There are three broad areas of improvement that have been identified by analysing the conversations with the participants.

Several participants placed high values on being able to harvest greens and medicinal herbs from the garden. Due to the size of the garden, participants noted that the vegetable harvest was not enough to completely substitute purchases from the market. However, several of them noted that they had stopped purchasing greens from the market. Many also highlighted the everyday benefits obtained from the medicinal herbs while participants at ICDS centres spoke about these plants attacting mothers to the gardens. In response to these findings, CRC is already issuing herbal plants, increased the quantity of keerai seeds and changed the mix of seed packets that are being distributed among the beneficiaries.

The most recurring challenge that the participants faced was that of garden maintenance. Problems such as lack of soil and pest attacks were common across many project sites. Thus, future project iterations have improved the 'Maintenance Kits' that are provided to all gardens after the initial set-up. These kits contain organic growth enhancers – panchakavya and more soil. Since several participants noted the problem of rat infestation in the gardens, the team has been documenting learnings from those participants who have successfully kept away rats and shared them with others to try out.

CRC has a very active WhatsApp platform through which all the beneficiaries can reach out to each other and us regarding any challenges they face. Responses are provided within 24hrs. CRC also conducts random field visits on a weekly basis to assess the state of gardens and shares advice on challenges as required. This system has been in place since April 2021 when

kits were issued to our first beneficiaries. Most of the beneficiaries are comfortable with using WhatsApp and this system seems to be working well.

A theme that emerged from the FGDs was that of fostering community spirit. Several participants noted that the children, parents, and adults in the neighbourhood took interest in the garden and became inspired to set-up their own home gardens. Participants also expressed how the gardens became sites of learning for children who otherwise would not get hands-on access to gardens easily. Building on that theme, future project iterations could champion cross-learning among the different garden sites and build a community network among the project participants. This could be through cross-learning and sharing among those responsible for maintaining the gardens. Another suggestion could be to have children associated with specific gardens visit different gardens. This would give them the opportunity to see and learn about plants that need not be available in their own gardens, as well as learn from each other.

Finally, there has to be more discussion and deliberation on how to provide support to the gardens in tackling the above-mentioned problems without creating a loop of continued reliance on the CRC team. The long-term vision of the project is for communities to be self-reliant and sustain their gardens independently. CRC is already beginning to reduce the maintenance kits issued to its beneficiaries and is conducting advanced training sessions for the ICDS teachers to focus on self sustenance. To incentivise this, CRC is conducting monthly competitions among the ICDS centres to encourage them to maintain their gardens, create compost and involve the local community in their efforts – 30 centres were chosen as Monthly Garden Champions in 2022 and 14 centres have been chosen as Composting Champions in 2023 with the composting competition still ongoing. These non-financial incentivisation measures have helped to increase interest among the centres.

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