

OIKOPOLIS Monsoon Semester 2022 Samyuktha N P

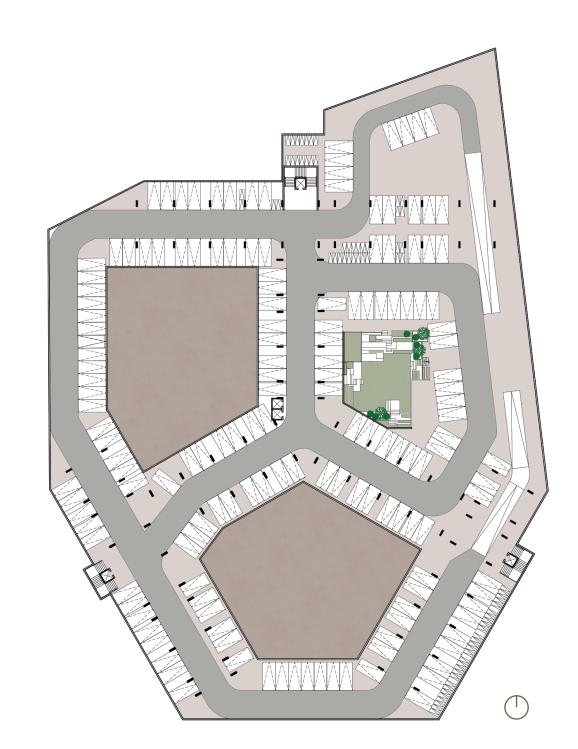


The project Urban Sanctuary aims to bring urban farming as a means to add greater well-being and sustainability to city-dwelling. High-density living is becoming increasingly prevalent in fast-growing cities. In this context, people's access to nature is becoming increasingly constrained. People's understanding of how plants, including edible crops, grow is also becoming limited or non-existent. Such disconnect underpins a range of public health and social issues. The intend of the project is to reconnect people to nature, utilizing the idle spaces of terrace and ground plane into useful green.

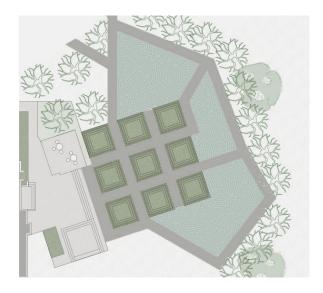
BASEMENT

The basement opens upto the ground level with steps and seating, making it an active space. All car parkings are provided at the basement making the ground floor car free and safe for children.





GROUND





Entry to the project



Waiting room at the entrance



Entry to the building from the basement seating



View of the urban farm

Land is maximum utilized through urban farm and landscaping leaving minimal footprint.

Various seating arrangments are given to users for community engagement. The urban farm acts as a catalyst for the same.



TYPICAL FLOOR



The corridor block opens up on both sides into the green courts with water body. Either facades of the units are immersed in green creatting an experience of living amidst the forest.



INTERMEDIATE FLOOR



Two units are given a shared balcony. Skywalks connect the balconys for interunit interaction.



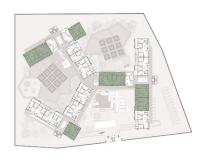
TERRACE FLOOR



The idle spaces of terrace and ground plane are converted to useful spaces for urban farm.

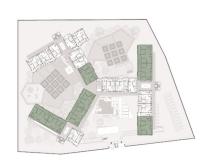


UNIT PLAN



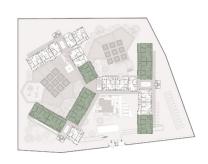
1BHK CARPET AREA - 65.76M2 NO. OF UNITS -60





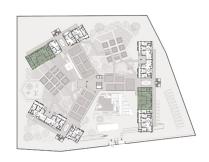
2BHK CARPET AREA - 90.75M2 NO. OF UNITS-113





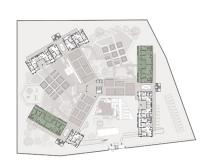
3BHK CARPET AREA -134.44 M2 NO. OF UNITS - 105





2BHK CARPET AREA -1111.9 M2 NO. OF UNITS - 30

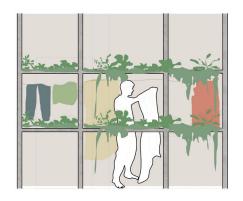






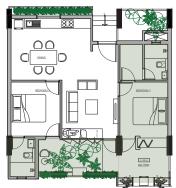
1BHK CARPET AREA -68.18 M2 NO. OF UNITS - 18

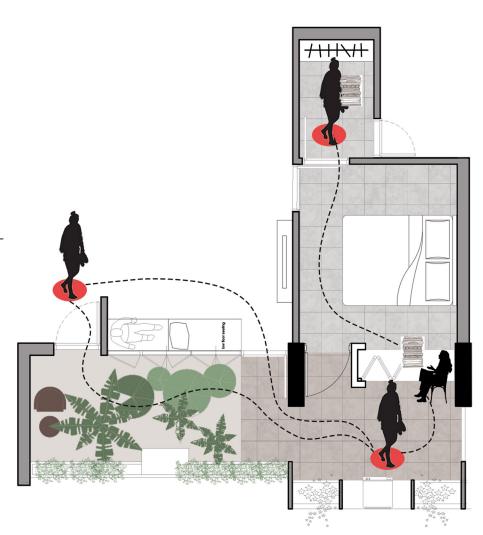
UNIT DETAILS



2.1 UTILITY SPACE

The utility space is made efficient by providing a platform to fold the dry clothes. A grid louvre system is designed to hide the hanging clothes yet bringing in sufficient light







2.2 SEATING SPACE

The seating space is created through play of levelsand it overlooks the balcony outside with lush green.





COMMON SPACES

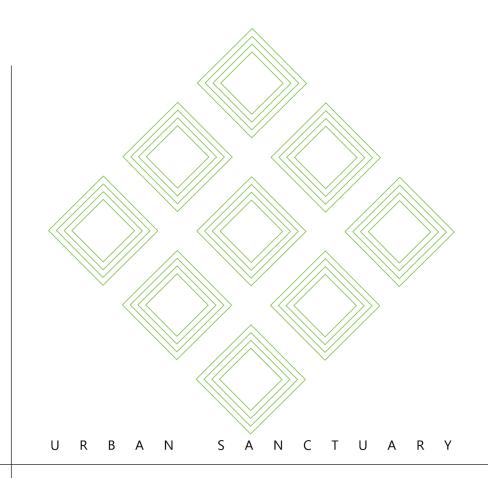










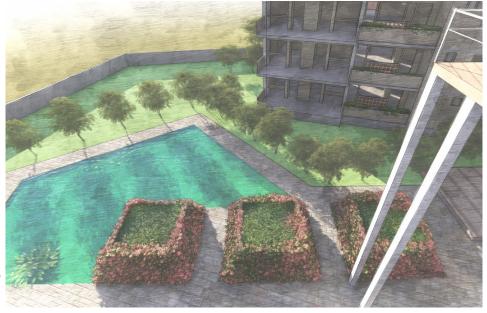


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URBAN FARM

The project Urban Sanctuary aims to bring urban farming as a means to add greater well-being and sustainability to city-dwelling.

High-density living is becoming increasingly prevalent in fast-growing cities. In this context, people's access to nature is becoming increasingly constrained. People's understanding of how plants, including edible crops, grow is also becoming limited or non-existent. Such disconnect underpins a range of public health and social issues. The intend of the project is to reconnect people to nature, utilizing the idle spaces of terrace and ground plane into useful green. It focuses on the supply of fresh, organic food to urban residents in a more decentralised and environmentally friendly way. It offers people the opportunity to engage with food-growing close to where they live as a means to raise awareness of the public health.



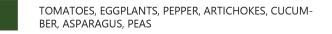
URBAN ZONING

The spaces are assigned considering the sunpath and the requireemnt of sunlight for each crop.





SWEET POTATO, ONIONS, BEETS, CARROTS, ELEPHANT YAM, RADISH, GINGER, GARLIC, CELERY ROOT



FARMING TECHNIQUES AND PROFITABILITY

Companion farming is a technique to grow plant efficiently with planned proximity to one another and benefitting from it. The list on the right will help you to decide on which crops to grow next to each other.

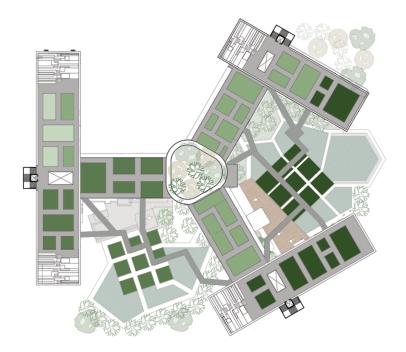
COMPANION FARMING

S. No.	Vegetable Name	Plant With	Avoid Planting With
1	Asparagus	Basil, Tomato, Nasturtium, Parsley	Onion, Garlic, Potato
2	Beans	Carrot, Cabbage, Cauliflower, Cucumber	Chives, Leek, Garlic
3	Broad Beans	Brassicas, Carrot, Celery, Corn, Lettuce, Potato	Fennel
4	Beets	Brassicas, Lettuce, Onion, Sage	Bean (pole)
5	Broccoli	Celery, Chamomile, Dill, Rosemary, Marigold	Oregano, Strawberry
6	Brussel Sprouts	Potato, Thyme	Strawberry
7	Brinjal	Bean, Capsicum, Potato, Spinach	Kiwi, Figs, Pomegranate, Curry Leaves
8	Cabbage	Beetroot, Potato, Oregano, Sage	Strawberry, Tomato
9	Carrot	Bush Beans, Pole Beans, Lettuce, Onion, Pea, Radish, Tomato	Chives, Dill, Parsnip
10	Cauliflower	Beans, Celery, Oregano, Marigold	Nasturtium, Peas, Potato, Strawberry, Tomato
11	Celery	Cabbage, Leek, Onion, Spinach, Tomato	Parsnip, Potato
12	Corn	Bean, Cucumber, Melon, Pea, Pumpkin, Potato, Radish	Tomato
13	Cucumber	Bean, Celery, Lettuce, Pea, Radish, Marigold	Cauliflower, Potato, Basil
14	Leek	Carrot, Celery, Strawberry	Beans, Peas, Spinach
15	Lettuce	Asparagus, Carrots, Radishes, Strawberry, Peppers, Garlic, Onion, Marigold	Beans, Beetroot, Parsley
16	Melon	Corn, Radish, Marigold	Potato
17	Onion	Bean Sprout, Broccoli, Cabbage, Lettuce, Strawberry, Tomato	Bean, Pea
18	Pea	Beans, Carrot, Corn, Cucumber, Radish	Onion Family

URBAN FARM ZONING

The spaces are assgned considering the sunpath and the requirement of sunlight for each plant.

PLANTS	LIFE SPAN	SOWING TIME	HARVESTING TIME	SPACE REQUIRED (cm)	Area(cm2)	PRODUCE PER PLANT	PRODUCE PER SQM(min
Radish	3-5 weeks 3 years(after planting)	spring	till start of summer	11*60.9	669.9	1	9
Asparagus	harvested after every one year	spring or fall	spring or fall	7.6*60	456	20	13
tomato	10 weeks	spring	fall	60*60	1200	5 to 6	1
basil	3-4 weeks	spring or fall	spring or fall	30*30	900	1/2 cup	4.5 cups
lettuce	30 days	spring	fall(turns bitter during summer)	12*12	144	2 to 3	81 81
Onions	80-150 days	spring	fall	12*12	144	100	
Peas	40-60 days	spring and fall	fall and spring	7.62*45	342.9	2 to 4(57 to 114gm)	26
Spinach	45 days	spring	fall	12*12	114	5 to 6	81
Cabbages	38 days	spring	fall	35*60	2100	1	6
Broccoli and							
cauliflower	75 days	spring	fall	60*90	5400	1	1
Carrots	4-5 months	spring	fall	7.6*30	228	1	39
Beets	2 months	spring	fall	45*5	225	1	50



This estimation allows to calculate the amount of produce available and how this could be transformed into an economical model. It also gives a brief on the type of vegetation to be grown in particular parts of the month.