

DACA'S FIVE LAYER FARM

DR. AMBEDKAR CULTURAL ACADEMY

Mandela Nagar, Madurai – 22, Tamil Nadu, India

IMPLEMENTATION REPORT

FIVE LAYER FARM (FLF), the long awaited Green Project of DACA was successfully set up on 29th Nov, 2019 with able guidance and timely support of Mr. Vetri and his team. The project was implemented in more than a half acre of land (North-South 100 ft x East-West 270 ft = 27000 sq ft) belonging to DACA at Kuthiraikuthi village. DACA farmers worked hard to keep the land ready and Frs. Marianathan and Vargheesh Antony traveled a lot to purchase the suitable seeds and saplings before the project. This Joint venture of DACA and Vetri team took nearly 4 days to complete the plantation process.



Wide Shot of the FLF taken on 3rd Feb, 2020

1. MAKING RAISED BEDS AND TRENCHES:

We took nearly two days (25, 26 Nov, 2019) to make raised beds and trenches in the Project area. Each raised bed running from South to North with trenches on either side measures 2.9 ft width or 100 ft length. Altogether we made 57 beds in the Project area. The trenches made on the right side of the each bed measure 2 ft width and 100 ft length and are used for holding both mulching stock and rain hose. The trenches made on the

left side of the bed measuring 1.6 ft width and 100 ft length are used for mulching only. The raised beds serve for longer growing seasons and better growing conditions. The trenches with mulching stock help in soil aeration and intensification of essential micro organisms and earthworms.



2. PLANTINGS SEEDS AND SAPLINGS:

The next three days with hot climatic conditions in Madurai region (27, 28 & 29 Nov, 2019), we carried out the plantation work. All the seeds and plants were planted at the centre of each bed. All the beds are grouped into two – Banana beds and Papaya beds. In each banana bed, nearly 12 banana saplings were planted with 9 ft distance in a straight line. With similar distance, 12 papaya saplings were planted in a papaya bed. In-between bananas, Maize, Marigold, Black gram, Brinjal, Radish and Greens were planted with required space and distance. Drumstick, Green Chilly, Black gram, Ladies finger, Tomato, Radish and Greens were planted in-between papayas. We have also recently (27, 28 Jan, 2020) planted Turmeric on either side of Banana and Papaya lines. Altogether 28 different saplings have been planted in the project area. We have also set up irrigation system with facility for supplying Jeevamrutham.

DACA'S FIVE LAYER FARM - MAP

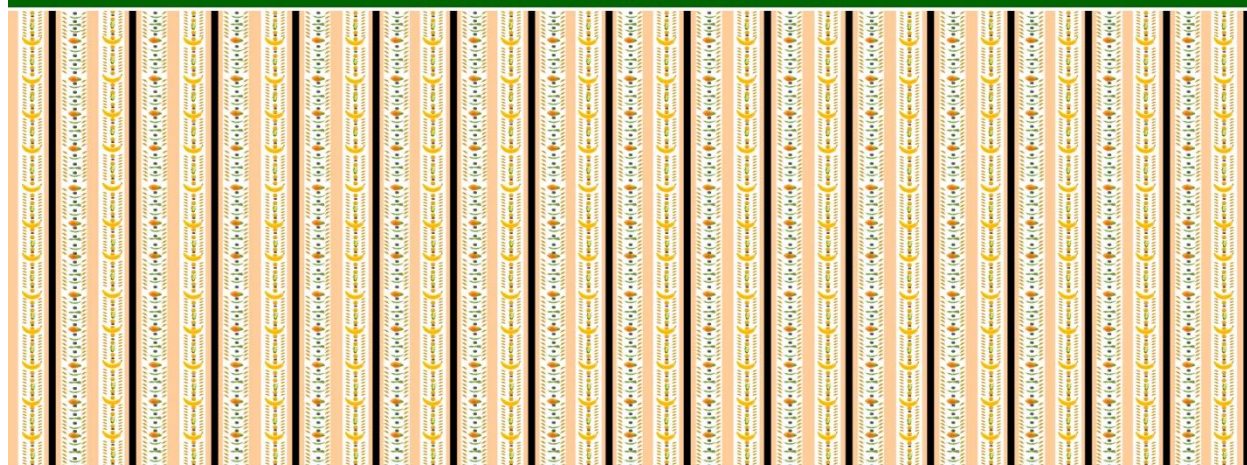


Table 1: *The list of saplings planted in the Project Area*

SN	Name of Sapling	No.	SN	Name of Sapling	No.
1	Marigold	1500	15	Guava	10
2	Sun Flower	500	16	Banyan	50
3	Pigeon Pea	300	17	Ladies Finger	100 gm
4	Black Gram	1 Kg	18	Brinjal	1500
5	Maize	0.5 Kg	19	Chilly	1500
6	Turmeric	4500	20	Tomato	500
7	Amla	6	21	Bumpkin	100 gm
8	Aloe Vera	30	22	Watermelon	100 gm
9	Drumstick	400	23	Radish	200 gm
10	Agathi Keerai	1500	24	Castor	300
11	Greens	0.5 Kg	25	Teak Wood	60
12	Papaya	684	26	Coconut	25
13	Banana	684	27	Tapioca	500
14	Mango	26	28	Bottle gourd	100 gm

3. SUPPLYING JEEVAMRUTHAM:

We supply Jeevamrutham to the soil of the project area four times in a month. Each time, we prepare 200 liters of Jeevamrutham by adding 10 ltr of country cow urine, 10 kgs of cow dung from country cow, 2 kgs of Black gram flour, 2 Kgs of Jaggery, 0.5 kgs of project area soil and 170 ltr of water from our own well. After mixing all these things, we leave it for fermentation for next three days. On the fourth day, the Jeevamrutham is ready for application. When we apply Jeevamrutham, we add nearly 500 crore micro-

organisms to the soil. These micro-organisms help in the conversion of the non-available form of nutrients – nitrogen, phosphate, potash, iron, sulphur, calcium, etc into available forms.



Tamil Nadu Native Cow Kangeyam bought on 2nd Feb, 2020

4. GROWTH IN THE FARM:

After 4th day of the plantation, most of the seeds and saplings pushed their new shoots out. After 22 days, the first weeding was done. After one month, the project area looked so green with grown up plants. From Jan-9 onwards, we are harvesting ladies finger, Jan-26 onwards Marigold and Jan-30 onwards Radish, Chilli and Greens. Soon we will collect Black gram and other vegetables.



Gathering Marigold Flowers on 3rd Feb, 2020

5. CHALLENGES FACED:

1. Due to intensification of plants, some saplings like Brinjal and Tomato become vulnerable to infection.
2. The birds like Parrot and Mynah attack the seeds of sun flower.
3. Certain plants like Ladies finger, Back gram push down the growth of main crop - papayas.

6. REMEDIES TAKEN:

1. Organic Pest Controller (OPC) was prepared once and applied on the plants.
2. By making noise through traditional drums, we try to drive away the birds.
3. Remove the plants close the papayas and use them as mulching stock.



Spraying Organic Pest Controller on 29th Jan, 2020

7. EFFECTS:

1. The Project area looks so green and attracts the travelers.
2. Many people have visited our farm to adopt similar type of farming in their own land.
3. A good number of Jesuits who visited our farm are convinced of promoting Five Layer Farming.
4. Our hostel girls get fresh and healthy vegetables.
5. We also have nominal income from the farm by selling Marigold flowers.
6. DACA Jesuit team is very much convinced to extend the Five Layer Farm in the premises of DACA campus.

Table 2: *Collection of Vegetables and Flowers*

S.NO.	NAME OF THE PRODUCTS	QUANTITY (Kg)
01	Ladies Finger	70
02	Radish	12
03	Palak Greens	5
04	Tomato	2
05	Brinjal	1
06	Green Chilli	6
07	Marigold	56

8. EXPENDITURE INCURRED SO FAR:

With deeply felt gratitude to **LEOPOLD BACHMANN STIFTUNG** and **STIFTUNG JESUITEN WELTWEIT** for their continued support to realize this project in our land.

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