# ANISHA

## **Two Day Training**

### Report

### on

### Nutritional and Food Security Through Organic Agriculture

Two-day training for farmers held on 18th and 19th March 2023

Organized by 'ANISHA' with the support from NABARD, Chamarajanagar District



Venue: ANISHA RESOURCE CENTER, Kadaburu, Hanur Taluk, Chamarajanagar District, Pin - 571320 <u>Nutritional and Food Security Through Organic Agriculture</u>

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### Day:1

The day began with a very positive note, as all the participants and the resource persons were on time. It is usually an issue with the farmers who are far flung in valleys of the rugged hills of Male Mahadeshwara Hill ranges. Soon after the registration, the two day's training on 'Nutritional and Food Security through Organic Agriculture' was inaugurated by elderly farmers through lighting a lamp. There were 49 participants from Kadaburu, Bidarahalli, Martalli and other far-off villages like Lokkanahalli and Hanur of Hanur Taluk in Chamarajanagar District.

To begin with Mrs.Valliammal, the Director of the project welcomed the gathering and expressed her happiness about having that many farmers on their campus. She recalled the good old days, when ANISHA began its work with the farmers, nearly a decade ago and all the cooperation they found in the community. She also mentioned about how they were compelled to work with children and how they found it essential to shift focus from farmers to children, in order to instill confidence in agriculture in them. She welcomed all the participants and the resource persons for the workshop.

Mr. Rajan in his Key note address elaborated the issues related to the Farm crisis of our region and how it is a consequence of our mismanagement in treating the land. Having given up all native wisdom, we are aggressive upon nature and our land in terms of handling and treating our soil. Therefore, it is high time we start finding out what has gone wrong with our agriculture practices and what methods could be adapted to overcome the difficulties.

Mr. Manu.K began with some basic facts about nature and the world we live in- its age and all the changes it went through to form the earliest life and its evolutionary processes. The long evolutionary path of life has rewarded the world with all the rich biodiversity in life forms we see today. Making clear the cosmic time line of arrival of all the families on planet earth, primitive man arrives at the end. On a planet that is 4.6 million years old human kind is just about a few lakh years old. His nomadic life ends and a settled life begins with the mark of agriculture. Thereafter, his hunting priorities and all the knowledge accumulated in order to attain his food security were replaced with information about seed germination, plant care and harvesting. Thus, the human kind became an agriculturist and his population flourished. He colonized every continent. In the present world our population has gone past 900 crores and food production go on in industrial proportion. With all possible water source tapped, and every piece of arable land exploited, food production seems a herculean task. As

a result, our scientists are restoring to more aggressive versions of supplementing and taming nature. Added to it is of course, all the space lost to development-urbanization, industrialization and the wastes generated and dumped to make mountains of garbage. And how it all affects human and animal husbandry. Short documentary film of pesticide impact on human and animals was shown to the participants for clearer understandings.



Resource person Mr. Manu.K session on impact of chemical farming on human and animal health



Documentary film viewing by the participants the impact of chemical farming

Mr. Srinivasu started in a friendly tone, and an incredibly local dialect the importance of soil, its composition and its current status. His vast reading about the subject and

unfathomable experience in teaching the farming communities about soil has equipped him with a variety of activities.

Through a song he made clear, the ignorance, greed and glut of humans which is the root cause of plight of soil; -lack of humus, lack of moisture holding capacity, non-replenishment of exhausted nutrients were all enumerated. He made use of a Power point presentation to talk about Soil Science. How is it formed? what are its variations? How does their structure affect their behavior? How does chemical fertilizers effect the soil structure in the long run and so on? The farmers were all spell bound with the details that were presented.

In the post lunch session, it was absolutely hands on activities. Participating farmers were asked to bring half a kilo of soil sample from their respective fields. There was an activity of testing them for various parameters like soil texture, smell, moisture dust particles, organic content and Bio carbon demand in it. In order to break the monotony of first hour after the lunch, he involved the participants in another song. The song was scripted by himself and it explained the characteristic and types of soil and their relevance in a farmer's life. The song spoke about the lifeless soil and how one has to keep it rejuvenated always and have a bountiful harvest with all of Natures creations happy and un effected by agriculture.

The activity was set with a tone of "How is my soil?" and worked out reach at "This is how my soil is!" most of the activities were simple and involved testing by human senses and were tested in the following lines.

**Soil texture Analysis-** A mixture of all the soil was subjected to study the texture of the soil and thereby determine the soil type, and making the right choice of crop. Also, correction of soil for the desired crop was also discussed.

**Soil pH Testing-** two methods of soil pH testing was demonstrated. One using the pH papers and the other by using an electronic soil testing equipment.

**Colour-** how has it changed over the years? Everybody expressed that their soil had lost its sheen and turned pale over the years they spent on the farm.

**Smell-** most sample didn't have any smell at all, except Mahadevi's soil. The hard truth was that she had not cultivated her land since the demise of her father some 15 years ago, as there were no male members at home.

**Presence of Organic matter -** it involved physical search by one's fingers and none of the soil has it and was not taking the shape of a ball or a lump when squeezed. Quantity of Dust particles – this was tested by dropping the soil from about 5 ft and observing where the soil would fall in line with gravity. In fact, it was a bit windy and the most soils were simply blowing off.

**Water holding Capacity -** This test was carried out by passing 100 ml of water through 25 gms of soil held in a filter paper in a funnel and measuring how much water is held

back by the soil. The samples showed very poor water retention capacity and ranged from 15% to 21%. A good organic soil would have up to 50% retention capacity.

**Organic Carbon in Soil -** this is a kit available in the market, and developed by Baba Atomic Research Center and approved by ICAR (Indian Council for Agricultural Research). It basically had two chemicals A and B. A sample of 5 gms was immersed in the mixture of 10 ml of the said solutions each and stirred well in a test tube and left to settle for a few minutes. The color of the solution is matched against a color-coded scale provided by the manufacturers. Most of the soils appeared poor in the soils carbon.



Participants bought soil from their farm land to test by themselves.

In the post tea session, there was a demonstration of four preparations i.e. Panchagavya, Jeevamrutha, Amudham karasal and Fish Amino Acid that could be used in enriching the soil fertility, growth promoter and pest and disease management.



Different types of nutrients demonstration by resource person

### Day 2

The participants were asked to assemble at various pick points at 5.30 am 5 *Tavera* vans carrying 48 farmers set off from Anisha to Sathyamangala a town in the neighboring state of Tamil Nādu. The team reached S R SundaraRaman's farm at about 10.00am. A huge heap of harvested turmeric in the front court yard was in itself a breathtaking sight and was a welcome treat. One of the old farms is maintained organically since the past 40 years. Now it has developed into a training center. The farm has 2 acres of turmeric, 1.5 acres of coconut 4 acres of areca the rest of the farm has trees of fruits and spices.

In the absence of the Mr. SundaraRaman, Mr.Velusamy took charge of the entourage of the property. The first activity was to go round the farm in bare feet. That was to make us feel the spongy nature of the soil and the experience the ambience of the farm to its fullest. Just as we felt very comfortable at our feet, the fragrance and the sounds of many garden birds and the shade made us feel relaxing. We were all made to sit in a common place were explained the importance of organic farming and how to go about it. It cannot be done in a single leap but we gradually move inch by inch away from chemicals and get closer to nature he said.



Mr.Sunderaman's farm tour by our farmers

The sheer scale of generation a processing of farm yard manure was inspiring. There were several large tanks and moats in which cow urine was collected and fermented. They had put up small pumps to shift them to different tanks where they were made to ferment for months together and later diluted with water and used on to the field. There was a showcasing of how various preparations were made like the organic tea, Jeevamrutha, panchagavya, fruit gaudi, compost and vermi compost.



The pleasant environment of the farm, the generous people who interpreted the various nature friendly processes adopted here and the dedication of the farm labor was enough to inspire the participants beyond a critical level.... that elevated them above the mere practice of organic methods but to an understanding of the functioning of nature and how-to live-in harmony with it is the need of the hour. It was a very well spent morning and one of the most useful sessions of the workshop.



Farmers group photo

Feedback from Farmers:

- We need regular programs like this to motivate the farmers
- Interested in growing our own food organically.
- I never thought that my soil is very poor and learnt how to test my soil in simple method.
- I learnt how to prepare nutrients preparation for crop.
- I came to know through my friend about this program participated very useful.
- Will convert my land in small portion organic farming.
- Interested to do organic farming.
- The exposure tour was very interested and learnt more information.
- Very simple but more labour involved