

**TAMILNADU AGRICULTURAL UNIVERSITY****COIMBATORE-641 003****RAWE-RURAL AGRICULTURAL WORKING EXPERIENCE (0+6)****ANAMALAI BLOCK****“SUSTAINANCE OF SOIL BIOTA THROUGH NATURAL FARMING”**

When it is understood that one loses joy and happiness in the attempt to possess them, the essence of natural farming will be realised. The ultimate goal of farming is not the growing of crops, but the cultivation & perfection of human beings

-Masanobu Fukuoka

Natural farming also referred to as sustainable farming or do nothing farming is a distinguishable method of farming compared with other systems of farming which exploits the biodynamic nature of each and every component of an ecosystem. It was introduced by Masanobu Fukuoka, a Japanese farmer and philosopher in his book “one straw revolution”, it excludes the exploitation of inputs including chemical fertilisers, pesticides and weedicides, and also other conventional farming practices. The major principles of natural farming as stated him are (i) No tillage (ii)No fertilisers (iii) No pesticides and herbicides (iv) No weeding (v) No pruning

Mr.Madhuramakrishnan a practitioner of natural farming relies only on Mr.Masanobu's principles of natural farming in his farming profession. We visited his field at Ponnalamman thurai commercially under the name of his son as 'Santhosh farms'.



He deliberately abstains from the provision of commercial & external inputs including organic & inorganics .his general particulars are as follows.

Name : Mr. Madhuramakrishnan

Father : A.Duraisamy

Born at: Malayandipattinam,kotturr

Qualification: M.E(Mechanical engineering)

Studied at Coimbatore Institute of Technology (UG)

PSG Institute of Technology (PG)

He completed his masters and graduated in the year 1970.he first worked in TamilNadu Agricultural Engineering Department for about one and half years. He then pursued his profession in teaching & joined as Assistant professor in farm

machinery in TamilNadu Agricultural University. Owing to some personal reasons, he resigned his job in the year 1975. In the same year he started a business in trading of agricultural inputs. In the same year he started a business in trading of agricultural inputs.in the year 1987,He started a coir industry at Thensangampalayam. His tenure in farming profession began in the year 1992 when his father expired. His exposure farming was obscure and had no exact idea of what to do next. He found that no accounts were maintained for the field by his father and incurred a huge loss during the preceding years. The expenditure for the farm was vividly greater than the income. This was the pivotal reason for him realising the importance of organic farming.



In the year 1996, he completely stopped the application of chemical fertilisers and understood the importance of organic farming. In the year 1998, he formed group of 9 members and took a tour from Kanyakumari to Kashmir to study the various practices involved in organic farming. In the year 2002, he attended a 15 DAYS training programme at Dehradun conducted by famous Japanese farmer and philosopher “Mesanobo Fukhoka” who is also the author of a famous book “ one

straw revolution”, he is regarded as “father of natural farming”. His age was 92 at that time.

According to Mr.Madhuramakrishnan, the major concepts of natural farming involves

- (i) Fertilisers should not be brought from external sources
- (ii) Minimal water should be utilised
- (iii) Weeds have to incorporated with in the field
- (iv) No special care should be given to protect the plants
- (v) Reduction in labour and efforts

## HOLDING

He has the total holding of about 50 acres of which 28 acres with Coconut as the main crop. The inter crops in the field have been split into 5 sections which are as follows:

- |       |                   |   |         |
|-------|-------------------|---|---------|
| (i)   | Cocoa             | - | 8 acres |
| (ii)  | Arecanut          | - | 8 acres |
| (iii) | Bread fruit       | - | 5 acres |
| (iv)  | Fruit trees       | - | 7 acres |
| (v)   | Medicinal plants- |   | 1 acre  |



The fruit trees used as inter crop includes Guava, Ber, Amla, Mango. The medicinal plants include Aloe vera, Vetiver , Vasambu , Sirianangai , Perianangai and Notchi. The composition of the rest of the holding are as follows:

- (i) Teak plantation - 7 acres
- (ii) Lemon - 7 acres
- (iii) Amla - 3 acres
- (iv) Grazing land - 5 acres

The variety of coconut is West coast tall.

#### **WATER FACILITY:**

He has a total of 3 wells and 2 rain water harvesting tanks. In addition to this water is available for irrigation through PAP –canal, but water is received only in alternative years depending upon the rainfall.

#### **IRRIGATION METHOD:**

Mr. Madhuramakrishnan has involved almost all methods of irrigation in his farm, both micro and macro irrigations. He has an aim of making his farm as a model farm to the whole world

#### **VERMICOMPOST:**

Vermicompost is his major preference of choice as organic supplement for his coconut trees. Vermicompost production points have been formed beneath the trees itself as he believes that earthworms prefer natural environment the most. He consider this method as best when compared to the shed or pit method of vermicomposting. *Judilus eugine* is the species of earthworm used in vermicomposting. The raw material for it includes coir pith, dry and green leaves as well as cow dung.



### **ELEPHANT MENACE :**

His farm located at foot hills of the Western Ghats experiences elephant menace right from when his father handled the farm. He had erected close and zig zag logs of Palmyrah with the idea that fragrance of farm will repel them. But it was an utter failure, 2 electric fences were also erected but it was also to no avail.

### **BENEFITS OF NATURAL FARMING.**

In case of coconut mulching is major advantage with cocoa as an intercrop. The problem faced in field are faced through

- (i) Mulching
- (ii) Vermicomposting
- (iii) Panchakavya and Jeevamirdham

### **BIO DIVERSITY PARK.**

Bio diversity refers to the diversity of plant and animal life with in a region. He had set up a environment just like that. The diverse nature ensures proper communication with in the components of the ecosystem. The various components of the ecosystem includes coconut, cocoa, bread fruit, Arecanut , Pepper , Gyricidia, medicinal plants, Tamarind, Silver oak, Palmyra, Eucalyptus, Cattle shed, Fodder crop, etc. These are all located within a 200X200 meter marked boundary. They are

all satisfied by the complementary effect of each and every component over the other.

**IFS:**

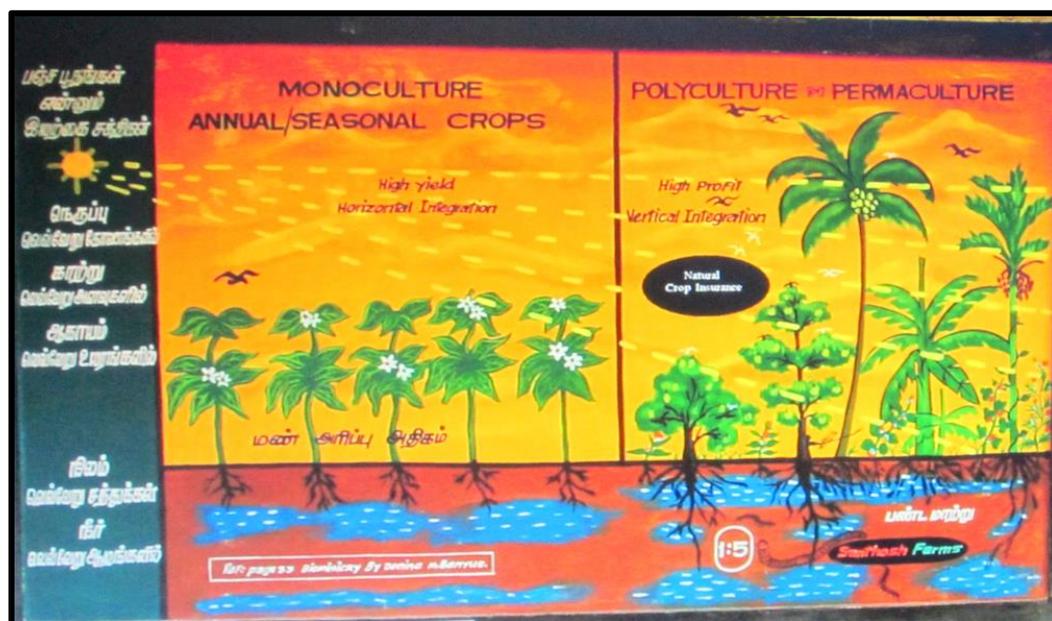
He has 18 cows and 4 bulls of Kangeyam breed for milking and drought purpose respectively and a separate cattle shed for them

**REACHING OUT TO THE PEOPLE:**

The farmer shows great interest and involvement towards making short films and documentary film on natural farming and documentary film on natural farming and promoting the same to the public through his team ‘Siruvidhai’. He showed us some of his short films that inculcate the importance of farming profession and farmers. One of his short films titled “Sathyame nee yen saga vendum”, was shot in his own farm.

**POLYCULTURE (OR) PERMACULTURE:**

Polyculture is agriculture using multiple crops in the same space, in imitation of the diversity of natural ecosystem and avoiding large stands of single crop or monoculture. It may also refered as permaculture or permanent agriculture.



The natural resources such as land, water, sun, wind and space are effectively utilised only to a limited extent. “Yield of the plant is the cumulative effect of reactions of plant for the action of the natural resources on the same plant.

#### **ADVANTAGES OF POLYCULTURE:**

- The micro climate is enhanced by which wide diversity is achieved.
- Acts as a virus filter plants resistance to viruses are not affected
- Mimics the ancient Barter system
- Varied distribution of nutrients
- No heavy investment is required for the next crop
- Primary production is enhanced, (i.e) the produce obtained from the crop without supplying and inputs.
- Increased yield. (i.e) in 1 acre , we can achieve the yield of about 5 acres

#### **HAND-MADE SOAP:**

Mr. Madhuramakrishnan also finds additional profit by producing and selling hand-made soaps prepared exclusively from the plants of his own farm. It took nearly 2 years to formulate the right proportion of ingredients for his product .The main constituents includes coconut oil , sodium hydroxide , teak leaf extract, Aloe vera extract, Neem and Vetiver extracts. TFM is nearly 55%.He came with an innovative idea of packing for his soaps. A box made of Arecanut bark tied together with the soap inside and also messages have been given inside the box.



### AWARDS:

- (i) Kongu semman – conferred by Kongu welfare association
- (ii) Mother Theresa Gold medal award-by Global Economic Progress and Research
- (iii) Long service award
- (iv) Velanmai semmal-TNAU in 1997
- (v) Outstanding agriculture engineer award

Inspite of these, he regards the meeting with Mr. Masanobu Fuknoka as the greatest reward he has ever achieved till now.



