## **Organic Farms**

#### VANAGAM

## **Headquarters:**

Nammalvar Ecological Foundation, 60/3, L B Road, Thiruvanmiyur, Chennai 600 041.

#### Field office:

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VANAGAM (Heaven on Earth) is a new NGO registered in the name of the Nammalvar Ecological Foundation for Farm Research and Global Food Security.

The new organization will primarily focus on developing ecologically friendly and sustainable agriculture methods. It expects to carry on the Nammalwar tradition of training the farmers all over the country in ecologically and sustainable agriculture methods of farming The organisation will also focus on traditional medical systems and to create an affordable health centre based on alternative therapies.

As a centre, VANAGAM will do research to bring back our traditional culture and seeds and exchange these with other farmers in India. 'We are in search of permanent solution for not using fertilizers and pesticides in agriculture', says Nammalwar.

The centre will work with indigenous breeds of cattle, integrated pest management solutions and examine how human activities can be made to decrease their contributions to green house gases.

I visited the centre in June and was delighted to see the work already being done. VANAGAM has brought a new youthfulness to Dr Nammalwar. We can only benefit.

#### **SIVAPRAKASAM**

Aranarai, Perambalur, Thiruvalluar District, Tamil Nadu.

Sivaprakasam cultivates on six acres of irrigated and six acres of rain-fed land with assistance from his family and hired help.

Sivaprakasam gives the following reasons for his shift to sustainable agriculture:

He was a progressive farmer in the late 1970s, but later incurred losses year after year such that at one time he incurred an expenditure of Rs.7000 on cotton and got a profit margin of Rs.100 only.

Deeper awareness of the dangers of using too much chemical fertiliser was driven home by the realisation that yields remained more or less the same even though smaller amounts of fertilisers were used (due to price hikes).

He had been looking for alternatives. Having consistently reduced chemical inputs he now has no losses and has finally begun to reap a profit.

Sivaprakasam has been growing onion without fertiliser and pesticides and getting a yield of 260 kilos per 10 cents. He uses organic pest repellent for his brinjal crop.

Sivaprakasam cultivates cumbu, chilies, groundnut, cholam, coriander, red gram, sunflower, onion, sugarcane and rice. In one plot he grows a combination of crops and trees, namely tomatoes, chilies (three month crops), lemon (four years, 20 foot spacing) and moringa (10 foot spacing) with teak and casuarina plants around.

The organic manure needs of the farm are met with animal waste from his cattle. Vermicompost is prepared on the farm and leaf manure comes from Morinda tinctoria which grows naturally on the contour bunds.

Sivaprakasam's future plans include practising a combination of permaculture and organic methods on a half acre experimental plot to explore the possibility of meeting needs of an average family from its produce.

This farmer is the secretary of CAD (Community Action for Development) and believes that sustainable agriculture is the only way to stop the continuous distress sale of land by small and marginal farmers.

(Source: M. Karthikeyan)

#### G. BALAKRISHNAN

Putharam Farm, Nemam, Thirukkathipalli (via), Thanjavur District, Tamil Nadu.

Balakrishnan is an energetic and inquisitive retired engineer looking after part of the family land. His is basically a tree farm. He has planted a variety of trees and has plans to introduce many more.

When he took up the land for cultivation, it was a sandy upland, created long ago by the overflowing of the river Cauvery. He levelled the land and started growing trees –primarily timber and fodder rather than fruit trees. The trees include teak, eucalyptus, guava, maramalli, gooseberry, etc. He has grown a live fence with trees like subabul and eucalyptus.

This farmer is very particular about using organic matter. He collects whatever organic matter is available in the village and makes it into compost. He is also very interested in microbial action on organic matter during decomposition and has tried two different treatments with two different fungi. One is Plerotus species and the other is collected by skimming the surfaces of water tanks.

He is also experimenting with the ability of fungi and algae present in tubs and other wet surfaces to decompose organic matter in small vessels. The micro-organisms multiply quickly, acting on organic matter (animal and plant wastes) and produce froth. He has applied this microbial solution on the farm to learn more about its effectiveness.

The farmer maintains two adjacent vermicompost tubs and harvests vermicompost alternatively from each of them. He has provided holes for movement of earthworms between the two. When he increases the moisture content in one, the earthworms move to the other for air and comfort. Then compost is harvested from the first pit, thus saving the need to sieve the compost for reclaiming earthworms.

(Source: M. Karthikeyan)

# ASSOCIATION FOR RURAL COMMUNITY DEVELOPMENT (ARCOD)

Royakottai, Dharmapuri District – 635 116, Tamil Nadu.

ARCOD is working in rural areas of Dharmapuri District.

Promoting the practice of organic farming in the villages is closely integrated into all aspects of their work.

(Source: M. Karthikeyan)

### UMESH CHANDRASEKAR AND MEENAKSHI – PUVIDHAM

Nagarkoodal Village, Post via Indur, Dharmapuri 636 803, Tamil Nadu. Ph.: 04342-311641, Email: puvidhamtrust@yahoo.com. Contact: Meenakshi Umesh

Umesh is a mechanical engineer by profession and works part time in the NGO, 'Agriculture Man and Ecology' (AME). Meenakshi is an architect, who specialises in low cost housing. Growing up in Mumbai, Umesh and Meenakshi felt that working in rural areas alone would be sensible and meaningful. Meenakshi was exposed to agriculture in Auroville, while Umesh was motivated after a stint with AME.

In 1992, they invested in 12 acres of land in interior Dharmapuri. The land, located on the slope of a hill, was totally degraded and barren, except for a few shrubs. Since then, over the past ten years, they have planted a number of trees of different varieties and introduced major soil and water conservation measures. Despite the erratic rainfall, the restoration efforts have resulted in regeneration of the land and several trees are now regrowing from the existing root stock.

As self sufficiency was still beyond their reach despite leading simple lives, they decided to buy some more land, this time with a good source of water. In 1996 they invested in an acre and half of land which had some irrigation. However because of the previous extensive use of chemicals on that land it took three years for the land to gradually become productive.

By 1999, the community around were gradually moving from curiosity to conviction that they too could do away with chemical inputs on their land. They had observed that Meenakshi and Umesh had successfully grown, using organic methods only, reasonable quantities of paddy, ragi, wheat, green-gram, tuvar dal, blackgram, turmeric, coriander, bananas etc. They used organic methods (neem, chillies, cow urine and anything else they found handy) to deal with the pests.

It was around this time that the city couple, now with considerable experience behind them, decided to transfer their knowledge and philosophy directly to the children of the community (the next generation of farmers). It was also a way of passing on information through the children to the adults who, because they are not literate, cannot read how dangerous chemicals can be, nor do they take necessary precautions while handling them. Adequate education and examples of alternative agriculture are therefore of critical importance.

So, a learning centre which focused on farming was started in 2000. Most of the children who attend the learning centre are from dalit and marginal farmer families. Here they are taught that farming is an honourable profession and that it is possible to make a living from it.

Some additional information regarding the farm:

Crops grown include cholam, cumbu, varagu, red gram, cow pea, green gram, groundnut, etc. The following cropping pattern is adopted:

- (i) Samai (July) Sanhemp and Daincha (October) Wheat (December)
- (ii) Samai Cholam Redgram (Samai harvested after 75 days replaced with 'kollu' which helps in controlling weeds.)

Cow pea is grown as intercrop and groundnut is grown as single crop. Fodder and green manure crops include sesbania, subabul and glyricidia, timber such as teak and fruit trees like papaya, citrus and guava are also grown. Vegetables needed for the family are also cultivated.

Seedlings are produced in the farm nursery. Straw for the cattle is bought from outside. Compost is produced on the farm itself. Solar pumpset helps irrigation.

Pest control measures include: (i) Ash and buttermilk (ii) Neem extract application, (iii) Cow's urine, (iv) Chilli leaves affected with virus, ground to powder and mixed with cow urine and applied for viral disease on black gram.

Umesh and Meenakshi live in a house designed by Meenakshi. They use solar panels for lighting and a smokeless choola for cooking.

Puvidham today is an excellent learning centre for children where much of the learning is farm based. The school has grown in size and number. A resident facility for over a hundred children from the villages is presently under construction. Puvidham is presently working on developing a farm based curriculum for children

(Source: As communicated to OIP)

#### **GANAPATHY**

Sakthi Farm, Veerapathy, Puliyur Post, Kulathur Taluka, Pudukottai District – 622 504, Tamil Nadu.

Ganapathy lives on a small farm with his mother, wife and three children. He is an innovative, knowledgeable farmer who views each day's activity in terms of energy spent. Hence he does everything with a view to minimising use of energy while at the same time satisfying needs. He has named his farm 'Sakthi'.

Ganapathy practices eco-friendly farming on 2.5 acres of land. He also owns another eight acres in two different places where rainfed cultivation is practiced. The soil is sandy clay with slight alkalinity. Average

rainfall is around 650 mm with light showers in July and heavy rains in November and December. No machinery is used on the farm except for a three horsepower pumpset for pumping water, a plough and other simple implements. Work like harvesting and weeding is done manually by the farmer, his wife and mother without hiring outside labour.

Ganapathy decided to practice sustainable agriculture because:

- (a) he did not want to spend money on 'poison,' i.e., farm chemicals, as he believes food for a healthy mind and body should be poison-free;
- (b) he views every activity on the farm from the point of view of energy spent and so employs all possible means to minimise the workload (this automatically leads to low external input agriculture); and
  - (c) he envisioned, from the beginning, living in an environment full of trees.

This farmer has cattle. He also has turkeys, guinea fowl, goats, fish, ducks, hens, doves, rabbits and geese, because he is interested in adding to and integrating as many living creatures as possible on his farm. He grows several varieties of trees like coconut, bamboo, subabul, mango, neem, eucalyptus, etc. since he wishes to live surrounded by trees.

The crops include rice and cotton inter-cultivated with greens, okra, sunflower, daincha, gingelly, radish and cluster beans. In a small area, he has jasmine and sugarcane.

On four acres, he grows rain-fed groundnut and pulses along with pulichai in one season, followed by varagu in the next season. This helps him get continuous returns from the 60th day onwards. On another four acres he plans to have mixed forestry.

Farming practices: The following indigenous methods are practised:

- a) ash obtained from the brick-making process is spread on the plants in the mornings so that it sticks to the dew-laden leaves;
- b) a mixture of five kilos rice bran with one litre of kerosene is applied in the mornings so that dew helps glue the powder to the leaves;
  - c) neem cake applied during ploughing has an insecticidal effect;
  - d) natural control by birds attracted to the farm by the numerous trees, especially the fruit trees;
  - e) in the plot where fish are let into the paddy field (Plot 1) the fish feed on the insects;
  - f) the mixed crops like sunflower, marigold, okra and tomato prevent the attack of insects on cotton;
- g) ducks are let into the paddy field to eat weeds from 20 days after planting upto two months and this normally reduces the manual labour needed for weeding from six people to one;
  - h) and ducks which are let into the fields to control weeds also feed on insects and their egg masses.

Farm economics: In Plot 6 (.25 acre), cotton is inter-cropped with nine other crops mentioned earlier, so that all the domestic need for vegetables, greens and pulses are met and some is left over for sale. He also grows many medicinal plants like yellow karisalanganni, white karisalanganni, thuthuvalai, mumusukhai and vallarai.

Innovations: Ganapathy's zeal for experimenting has led him to develop the following innovations:

- a) curing 'fox disease' of fish (considered incurable) by using turmeric and neem paste;
- b) a two pulley system for lifting stones from the well with a mechanical advantage of 1:3;
- c) preventing invasion of his farm by the red hairy caterpillar by adding kerosene to the water in the channel surrounding the field;
  - d) also using kattukottai and erukku to attract red hairy caterpillars and thereby controlling them;
  - e) using hot iron rods to burn the side shoots of bamboo so that side growth is arrested; and,
- f) maintaining his coconut nursery with minimum effort by using pits along irrigation channels so that separate watering of the seedlings is not needed.

Ganapathy feels that anybody who wants to follow this sort of integrated farming, which involves managing many factors at the same time, should have patience, intellectual maturity and total involvement. He believes

that it is a prerequisite that the home is located on the farm and the whole family is involved in the endeavour. (Source: M. Kartikeyan)

# N.S.A. VELU MUDALIAR

4, Chidampara Vinayagar Kovil Street, Puliangudi, Nellaikattabomman District – 627 855, Tamil Nadu.

Velu Mudaliar has 45 years experience in agriculture of which, for the past 15 years he has been practising sustainable agriculture. He is a highly committed farmer with a remarkable inclination to experiment. He and his youngest son look after the farm.

Velu Mudaliar owns about 17 acres of land in the foothills and some in the plains. The land in the plains is leased out while he personally nurtures the trees he grows on the land in the foothills. The soil on his farm ranges from clay to gravel. The uplands have a rocky substratum with meagre surface soil. He has a bore well 275 feet deep which is run on a five horsepower motor and an open well which has a depth of 85 feet.

He also uses water from a neighbour's well, which is pumped for one hour every five days on a share basis. From another well constructed by 15 neighbours at a cost of Rs.1 lakh each and six kilometres away, water is brought by PVC pipes. Each farmer can use the pumped water for two and a half hours, every 15 days. Velu employs 20 permanent labourers with varied skills. Two two-wheelers transport the produce and inputs.

Velu got into organic farming because of degradation of the soil over the years as a result of conventional farming using chemical fertilisers, increasing economic losses over the long-term, and depletion of water sources.

Crops: This farmer grows fruit trees like guava, lemon, coconut, mango, gooseberry and other trees like teak, sesbania, subabul and Nagai.

Guava: He maintains 600 guava trees. The fruit is harvested twice a year. Planting is done in the usual way, but a circular bund-like structure is built around each tree. Irrigation, fertilization, weeding and other cultivation practices are carried out only within the circular structure. It is irrigated once a week normally and twice a week during fruiting.

Compost is used once a year at the rate of 80 to 100 kilos per tree. Small amounts of sulphur are added occasionally. At the appropriate time, pruning is done to induce flowering, to allow greater use of sunlight by the trees and to avoid disease and insect attacks that dense foliage attracts. Practically no weeding is done in the guava orchard. The farmer also believes that disturbance of the soil by weeding results in more weed growth.

Lemons: Velu has 375 lemon trees. As intercrop, curry leaf is planted. These trees are five years old. As with the guava trees, a round bund is built around the lemon trees and cultivation is carried out only within this space.

Manuring with compost is done at the rate of 55 to 70 kilos per tree. The soil around the trees is loosened once in 45 days. The rest of the area is dug up once a year. Irrigation is once every 15 days. Composting and weeding are done immediately after the rains, in the months of September to November. There is fruit all the year round and harvesting is four times a week.

Velu has another 200 lemon trees in the uplands mixed with teak trees. They are planted as shown in the figure below. Since the soil is rocky and has a lot of gravel, neem cake, 20 baskets of silt and 10 baskets of compost were used in the pits while planting the seedlings. Over the next three years, no fertiliser was added. BHC was applied once to guard the trees from ants. Green leaf manuring was done during the rainy season.

Mangoes: There are also 250 mango trees which are maintained with meagre irrigation and 30 to 35 kilos compost per tree per year. Irrigation is once a month. While planting the mango seedlings, six foot deep pits were dug and a mixture of compost, silt and neem cake was put in them. The rocky substratum has little to offer by way of nutrients to the plants, so they have depended entirely on the contents of the pits.

Farming practices: In order to control ants, termites, etc., a mixture of zinc sulphate and lime is put at the foot of the tree trunk. (Zinc sulphate and lime are dissolved in water until a right mix is reached. The test is, if turmeric powder is applied, it will turn red). Turmeric, varikkampatti fruit (local name) and sulphur are mixed

and used to control pests. Spraying with neem oil is done if needed. Also neem kernel extract is applied and neem cake is used (in the soil) when needed. Velu has found an effective method to control insects by spraying the trees with an extract prepared by soaking a mixture of turmeric powder, kadhi soap and garlic for some time.

The plot grown with mango, lemon and subabul was considered unfit for cultivation. But the farmer's determination and perseverance paid off; he has grown the trees with little water and no external inputs. He says the teak grown here is of very good quality.

He has coconut groves on another 11 acres. According to Velu, profit from coconuts is low and the amount of water consumed is high. In the space between coconut trees he has grown guava, gooseberry, mango, sapota, subabul. Irrigation is done through channels. No compost is used for the coconut trees any more. Fronds and other plant material are placed at the foot of the trees which form manure, mulch and absorb rainwater. Nowadays harvesting is not done manually. Only the nuts that fall by themselves are collected and sold.

Rainwater is prevented from running off by the mulch formed by leaves on the surface and the two foot high strong bunds around the field. A 'live fence' of subabul, neem and other trees also helps in soil conservation.

The irrigation system followed in the guava, lemon and mango orchards is unique to this area. The main PVC pipes from the pumpset which pass through the orchards have side outlets. When water is needed, the outlet near the tree in question is opened and a pipe section of the needed length is fixed. This helps irrigate only that tree but the same side pipes are used for irrigating the orchard area. The soaking up of water by channels is avoided by this method.

In Conclusion: Organic farming costs more in terms of labour than conventional farming, because of pruning, manuring, etc. But, according to Velu, the shelf life of organically grown fruit is longer than chemically grown fruit and so one can charge a higher price for the produce. The fruits from this farm last for 10 days on the shelf.

The sesbania on the bunds are allowed to grow into thick poles. Their leafy portion is used as leaf manure. Three year old sesbania poles are sold.

Velu is a pruning specialist. He has succeeded in making his guava trees bear fruit during seasons when the market price is high. He is attempting to get his trees to bear fruit throughout the year through special pruning methods. Disease and pest attacks are the main hindrances to this effort. The farmer does grafting himself and thereby produces the needed seedlings. (Source: M. Kartikeyan)

#### P. THANGASAMY

Karpaga Solai, Sendhangudi, Nagaram Post, Alangudi Taluka, Pudukottai District – 614 624, Tamil Nadu.

Talkative by nature, Thangasamy's life revolves around tree cultivation. Whatever the topic he chooses to speak on, he finishes in praise of trees. He emphasises that trees have given him constant income, fodder, leaf manure, good micro-climate and what is more significant, they have made him a virtuous man.

Thangasamy owns 25 acres altogether: 12 around his home and the rest in another place. He has been practising alternative farming for the past 15 years.

The soil of the 12 acres plot is slightly saline with a pH of 7.5 to 8.5. The other plot which had a pH from around 5.0 now has a pH level of 7.5. Average annual rainfall in the area is 600 mm to 750 mm.

This farmer owns cattle and sheep. He also keeps turkeys, geese, ducks and chickens. He feels that it is difficult to practice organic farming without cattle.

Why does Thangasamy practice sustainable agriculture?

- a) He incurred a heavy loss following modern farming and so had an economic incentive for the switch to alternate ways of farming.
- b) He is convinced that agriculture should be in harmony with nature as otherwise it has negative effects on farm resources, like a continuous fall in the water level of wells.
  - c) He also believes that soil has life and should not be treated with 'poison' (agrochemicals).

Fodder for the cattle and sheep is grown on the farm itself. He is cultivating nearly 125 species of trees on the 12 acres near his home. As these trees have different physical features like different canopy levels and root lengths, they assist each other and enrich the soil in a wholesome way.

He grows crops like paddy, groundnut, black gram and daincha, in rotation on the 13 acres. Gingelly, chillies, banana, guava, coconut and other fruit trees are also grown. He grows crosandra, sappayru and calophogonia as cover crops, so there is no need for weeding. He also grows about 100 species of medicinal herbs.

Five acres have crops in rotation which includes paddy, black gram and daincha. Coconut is cultivated along with banana, guava, pomegranate and gourds so that income is generated three months onwards from gourds, one to four years later from guava, banana and pomegranate and five years onwards from coconut. These plots are not ploughed.

Thangasamy harnesses the potential of natural agents for pest control. Small tubs are placed in many places in his tree garden so that the birds which come to drink water feed on the pests and leave their droppings. Additionally, he has prepared a solution with plant products like neem cake, erukku (Calotrophis) and kanchara, and keeps it in different places on the farm. Insects attracted by the smell fall into the pots and die. He has not faced any major pest problem during the last five years of organic farming of paddy. He attributes this largely to crop rotation followed on the farm. He believes that daincha and sappayru prevent pest attacks. The crop rotation pattern followed reduces weed growth considerably. Further, the cover crops suppress the weeds. He feels that weeds come up only if the fields are ploughed. If left unploughed, the growth of weeds is very low and workload is reduced.

He has two wells, one on the tree farm and the second, a bore well, on the other farm. The bore well is 300 feet deep and the water level is falling by 10 feet each year. He is therefore forced to use water sparingly. For paddy, he uses an alternate wetting and drying method. In the case of tree crops, the compost helps to retain the rain and irrigated water. He plants trees in long pits of three feet depth and three feet breadth. Crop waste and other plant materials are filled in these pits. When the rains come, not a drop runs off from the pits, thanks to the composting material. It also prevents water evaporation from the soil by minimising direct exposure to the sun. Further, this method enriches the soil as micro-organisms proliferate in these conditions and erosion of soil is prevented.

He has reclaimed his once alkaline land (pH 8.5 to 9) by using coir waste, leaf waste and cattle waste and now the pH is 7.5. He extensively uses compost manure and green manures like daincha, sappayru and sesbania to enrich soil. He also uses bio-fertilisers like Azolla, blue green algae, Azospirillum and Rhizobium. Recently, he experimented by using red gram plants as green manure for cultivating chillies.

Before the changeover to organic farming, Thangasamy's yield was only 900 kilos per acre. Now he gets 1500 to 1800 kilos per acre. When both farms are taken into account, his annual income is enough to meet expenses. Fluctuations in income and occasional losses from agricultural crops can only be offset by income from tree crops like teak, rosewood, etc which he considers a great wealth that he is accumulating for future generations.

He holds the following precepts to be important for the practice of organic farming:

- a) Nutrition should be given to the soil and not to crops;
- b) Cultivation should be for both, the food requirements of the farmer and for the health of the soil;
- c) Crop rotation and mixed cropping are essential;
- d) Trees are necessary components of a farm;
- e) The family must be located on the farm; and,
- f) Sustainable agriculture is practical to the extent that one integrates plants, animals, micro-organisms and other organisms. (Source: M. Kartikeyan)

#### **GLORIA LAND**

Sri Aurobindo Ashram, Pondicherry – 605 002, Tamil Nadu. Ph.: 0413 2666337, 2339017, Cell: 094432 87531, 094432 72780, Email: glorialand@sancharnet.in

Spread over 40 hectares (100 acres), Gloria Land dairy farm has been a pioneer in organic farming. Realising the ill-effects of chemicals and pesticides way back in 1967, Gloria Land persisted with organic techniques all through the halcyon days of the Green Revolution when the usage of chemicals was proclaimed as the best way of farming. The dairy is an integral part of the farm, with nearly 120 heads of cattle mainly of Indian pedigree. No vaccination is given to the animals. The average milk production is 325 litres per day. Approximately 250 kg of cow dung is used in the biogas plant. Slurry from biogas plants is used as manure. Approximately 15–20 acres of land is used for rice production with an average yield of 40 tonnes per crop.

Gloria Land aims at self-sufficiency in organic farming. The primary motive being to stop the input of chemicals into the system which comes through cattle feed purchased from the market. The crops are therefore dairy oriented, so that some of the products and all by-products can be effectively used as feed for cattle.

Groundnut, maize, cumbu, ragi, soybean, jowar etc. are some of the crops grown. Also coconut, mango, sapota, guava and papaya trees are grown. A number of vegetables are cultivated. Honey is provided by beehives.

Gloria Land makes special efforts to promote research on native varieties of plants with the use of biological, low tillage or no-tillage mulching methods and the harvesting of air and sunlight which is a new concept in organic farming. Innovation on the irrigation front is also a continuous process. The results have been very encouraging. The work being done at Gloria Land has been acknowledged internationally and articles on the farm have appeared in newspapers and magazines in India and abroad. The late Manindra Pal, the genius behind Gloria Farm introduced several people to organic farming, including Prof. Radhamohan of Orissa. The farm is now managed by his daughter.

(Source: Communication with OIP)

## **BHAGYADHAN ESTATE**

P.O. Box 63, Kodaikanal – 624 101, Tamil Nadu.

Contact: Arthur Steele

The Bhagyadan Estate is located in the Palni Hills about 20 kms from Kodaikanal. The average annual rainfall is 80 to 100 cms, mainly from September to December. The soil of the area is classified as Alfisols. The land was formerly part of the Shola forest. It is situated in a valley near a river. Three acres of land are planted with coffee bushes and another 1.5 acres are with pineapple. One quarter of an acre is used by the Palni Hills Conservation Council (PHCC) and the Wasteland Development Corporation as a tree nursery. It is managed by Arthur Steele.

The farm is entirely rainfed except when Arthur is establishing young coffee bushes. Then he has water carried to the plants from the river bordering his property. Three women and two men are employed on the farm. He hires more people during coffee picking.

Arthur objects to conventional farming methods using chemical pesticides and inorganic fertilisers and insists that nothing would convince him to switch over to chemical methods. He said that he once used inorganic fertiliser, and saw that it induced lush growth which was susceptible to insect attack. This confirmed his belief that it is not advantageous to use chemical pesticides and inorganic fertilisers.

Farming practices: Arthur's main crop is coffee. He also expects to get returns on the citrus and pepper he has planted. Two acres are planted with variety '795 Coffee', and one acre with catimore. The shade trees which are intercropped with the coffee and citrus include jackfruit trees. Arthur is planning to train his pepper vines up the trunks of the jackfruit trees because he has heard that their bark is superior for this purpose.

Arthur digs crescent bunds for each of his coffee bushes in order to improve moisture and soil retention. This helps the bushes establish themselves. He considers his work with soil conservation and mulching as most important in maintaining soil fertility. Crescent bunding not only conserves soil, but also helps with 'self-mulching', that is, the leaves that fall are retained near the base of the bush. Arthur avoids exposing the soil to

erosive forces, by slash-weeding instead of clean-weeding, and thereby returns organic matter to the soil and allows the weeds to serve as mulch. Arthur also applies cow and goat manure to his coffee bushes.

Neither the coffee bushes nor the citrus trees have had any problems with insect pests except for one outbreak of aphids. Kerosene oil and soap were used to counter the outbreak. Fungus in particular the powdery mildew, has been problematic. So far, Arthur has simply clipped affected leaves and burned them to prevent the spread of the fungus. Slash-weeding is used to control weed growth. This means that the weeds are cut at the stem and the roots are left in the soil undisturbed.

Arthur's most expensive input is the cow and goat manure which he purchases from nearby villages. Transporting the manure is also costly. Arthur estimates that it costs Rs.200 for every Rs.500 worth of manure to transport manure from the villages to his land.

(Source: Deborah Rosenstein and Brenna Muldavin)

## SAVE THE EASTERN GHATS ORGANISATION - SEGO

104/109 Raja Street, Valaiyambattu, Chengam P.O., Tiruvannamalai Dist - 606 701, Tamil Nadu. Cell: 094188291122

K. Venkatachalam, President of SEGO has been working on issues related to organic farming since 1983. He cultivates crops like paddy, millets, oil seeds, medicinal plants, rice, oil etc. The organization conducts periodic campaigns in villages and also exhibitions in schools, colleges and distributes seeds to the farmers free of cost. Nannan Nadu is a monthly bulletin of the organisation.

Extensive tree planting, distribution of saplings of indigenous trees, volunteer awareness programmes have been undertaken by them. His own four hectare, Amritham Organic Farm was converted to fully organic with assistance of student volunteers in 2002. The rich biodiversity on the farm attracts many a students and environmental enthusiasts'.

In the year 1997-98, SEGO organised a thirty five days long Seed Yatra (A Roadshow for Conservation of Traditional Seed Varieties) covering a distance of 1500 km and 15 districts in Tamil Nadu to highlight the importance of traditional seeds. The yatra was a joint effort of more than 35 NGOs working in the area of agriculture in various parts of Tamil Nadu. The roadshow helped raise awareness among several farmers and NGOs working in agriculture and the Traditional Agricultural Producers' Association. The Traditional Seed Exchange Network was established as a follow up of the yatra (See Seeds chapter). (Source: Communication with OIP)

## N. CHOKKALINGAM

No 82, Virattipattu, Madurai – 625 010, Tamil Nadu.

Chokkalingam has 20 years experience in farming. He owns 25 acres located in two different places. He cultivates paddy, coconuts and bananas.

The soil is sandy clay. He has five wells and therefore no water scarcity. In the 1995 season, he cultivated paddy entirely by organic methods for the first time.

He switched over to organic cultivation of paddy because over the years using chemical-based methods, both yields and soil fertility were declining. Earlier, this farmer used to get 10 young banana plants around the mother plant but subsequently he was getting only three suckers.

The farmer says all the grains in the panicle of the organically grown crop were full, while those in the chemically-produced crop were only half full. He also found that bananas following the paddy crop had relatively better growth.

(Source: M. Kartikeyan)

up. This increases the salinity of the soil. So, to reduce the salinity, well-irrigated fields must have farmyard manure. Otherwise the fertility of the soil will keep decreasing.

Whether he likes it or not, the farmer who uses well irrigation must use farmyard manure for his soil, at least once in three years. Otherwise he won't get profit. Farmyard manure is a must. Now people are using alternatemethods. They have caged poultry from which you get good manure. It is very high in nitrogen phosphorous and potash. Apart from that they feed the birds micro-nutrients, so those too come with the waste.

People are now coming up with bio-fertilizers. But even the bio-fertilizers won't work if the soil is dead. To revive it you have to apply farmyard manure.

CA: How did you changeover from chemical use to natural methods?

S.R: I was getting very good yields of turmeric in the early stages but slowly the crop got nematode and rhizome rot. I started pouring chemicals into the soil. Its efficacy dropped sharply, eventhough I put in 250 cartloads of farm manure. Then I realised that I had killed all the living things in the soil. So I started thinking about using traditional agents and methods like neem seed powder, neem cake, letting the soil rest for two or three months, or growing leguminous crops like gram or pulses. This process of reviving the soil took me five to six years. Now it is all right. Now I totally avoid using chemical pesticides and fungicides, and I am trying to tell other farmers not to use granulated chemicals like the fungicides Thimet and Furadan. They kill the living organisms in the soil completely.

Similarly, mercury compounds, like Emison. It is very effective against all root zone diseases, but it is also very, very poisonous. Mercury has very high residual toxicity.

CA: Is it easy to practice traditional agriculture?

SR: There are practical problems in practising traditional agriculture. Advance planning must be done. Take the case of neem seed for example. You must powder the neem seed and soak it in water for 24 hours; you must prepare it for three to four days before you spray it. Similarly in the case of dusting with turmeric powder, ash, neem seed powder, tobacco powder, etc. you have to dust the plant at three to seven day intervals, two to four times, according to the pest infestation. You must start the work early in the morning and finish it in one and a half to two hours. For this you need two to four people in the morning to work quickly and dusting should be uniform. It is only possible if you have labour. Because of such problems, farmers are reluctant to adopt these methods. Whereas with chemicals you just go to the shop and buy them, spray them and it's finished.

CA: Are there any special tactics that you have come up with in order to deal with pests, without using chemicals?

SR: In order to confuse the pests, we are first of all having a multicropping pattern. In a plot, we try to have many crops - some may be short-term and some long-term. Accordingly, the plants are spaced while planting. Multicropping is a very good tactic for reducing the pest nuisance.

We also follow alley cropping. At regular 15-20 metres intervals, in the east-west direction, we sow jowar, maize and bajra in alternate rows and therefore every portion is completely isolated. The pests are attracted to crops by smell only, so the different species will prevent build-up of the pest population.

Then we have live fence in which there are three of four crops - glyricidia, castor, acacia/agathi and chembai. We plant these on the four sides of the plot. These come up quickly. The pests go to this live fence first and are thereby prevented or controlled from going to the crops.

If a farmer grows vegetables or cotton, then after every 6 rows, we ask the farmers to sow one row of pulses - cowpea, black gram, red gram, horse gram.

All pests first settle for the peripheral plants and leave the main crop. At the same time, predators know where their prey dwells and attack them. One catches the other. Thus the biodiversity is also maintained. Alley cropping and the pulses crop slow down the pest attacks. These are the natural methods being adopted.

CA: Are these methods to be adopted irrespective of whether or not you have pests?

SR: These methods of pest control are done in a prophylactic way. In the inorganic system you wait to see the yield of the crop, then only you spray chemicals. Otherwise, you postpone the activity. It is called the Economic Threshold Level - ETL. That is not the case with us. Here everything is prophylactic. According to the season,

we know which type of pest or fungus will come. Accordingly we design. Pre-planning is a must. Similarly, for preparation of plant extract you also need a minimum 20-day plan, then only you can do things systematically.

All the organic farmers have switched to prophylactic spraying using only plant extracts and growth promoters. We grow, on the farm itself, those plants whose leaf extracts we use in pest control. Earlier, it was suggested to spray plant growth promoters separately and plant extract as repellent separately. In this way the work was doubled and I wanted to avoid that. So I started to mix growth promoters with plant extract. But you cannot give the recommended dose for the crop. For example, if you spray panchagavya separately, you have to take 1 litre for 50 litres of water i.e. 200 ml for 10 litres of water. If you take only plant extract, 1 litre of extract can be sprayed in 10 litres of water. When you combine both, the concentrate of the liquid increases. So to be on the safer side, you have to reduce the dosage. That we decide according to the plant. If you need plant growth at a particular time, we use the plant growth dosage in full strength and reduce the extract dosage in half. For example, if you use panchagavya it will be 200 ml and the plant extract will be half a litre only. Whereas if the pest problem is more and growth problem is not, then we will use 1 litre plant extract and reduce the panchagavya to 100 ml only.

CA: How do you explain all these ideas to the farmers?

SR: Depending on the various conditions, various location specifics and various crops, I regularly visit the fields and advise the farmers and explain to them why I am adopting a particular method. I also ask them to communicate with me on telephone any problems or changes they notice. Thereby I gain their confidence to suggest to them what to do.

For the past 35 years, in inorganic farming, people had been given chemical dosage and pesticide dosage. For any problems they had been given a package of practice by the agriculture extension department and have grown accustomed to it. So if you start telling them basic, fundamental principles and if you ask them to adapt them to their fields, they are not ready to do it. They are not ready to apply their minds at all. They want the easy way. So I have to be somewhat aggressive too. I ask the farmer if he wants immediate results and making various types of combinations I suggest to him what he must do.

I have to conduct constantly field-level trials. For banana, turmeric and paddy, a minimum of 5 to 8 trials are required. If I go during one season to a place, I teach the farmers there everything so that they know what to do and what not to do. Then I won't go there again. During the time I am there they can ask me anything and I will help them. Whether he is a big farmer or a small farmer, it does not matter because if the message gets there, it must be executed and we must get results. This is the only way to propagate organic methods among the farmers.

CA: What is your opinion about biological pest control and have you tried it?

SR: Yes, I am combining that also. Biological control is a must. For example there are 3 kinds or categories of caterpillars - egg-eating caterpillars, larvae-eating caterpillars and insect-eating caterpillars. You have to release the appropriate larvae in the fields in order to get desired results. I have a close tie-up with John, Ammapettai, Erode district. I ask John to contact the farmer and instruct them how to use the appropriate method. He then follows up to see whether the farmer is doing it accordingly. This type of coordination between us creates awareness among the farmers who are in touch with us. This builds confidence and they follow our suggestions. If you do these methods in the beginning only, combined with release of predators, you get excellent results.

CA: Can you spray pest repellants simultaneously with release of predators?

SR: Yes. First, I spray the plant extract then after one or two days, I release the caterpillars. Pests which are harmful to the crops, are all vegetarians and pests which are predators, are non-vegetarians. The vegetarians have antennae and with the help of these, they can smell the leaves and start eating them. The predators are not bothered about the smell, they just go in search of prey. Another good reason for using this combination i.e., spraying first and then releasing the predators is, after spraying, the harmful insects' activity slows down and since they are very sluggish in nature the predators find it easy to catch them and eat them.

CA: So according to you, there is no need to use even 1% chemical pesticide on farms.

SR: Yes definitely. Even in severe conditions, I tried these measures and had good results. I have 100 per cent confidence now to make recommendations. I can give you one example. I have a close friend of mine, just 3 kms from here. Last year, he planted one acre of paddy. I suggested to him to do it my way. I said, I won't come to your place to see the crop and you don't communicate to me what is the state of the crop, don't tell me anything. At regular intervals I will tell you to do certain things, spray certain things. Just do it and if you suffer a loss, I will bear it. About 15 days before the harvest, Narayan Reddy and I happened to visit the farm. I showed him the crop. Everything was fine. The farmer also was fully satisfied. This I could achieve because I have experimented in various conditions. I also have previous experience with inorganic cultivation, so I could foresee what kind of problems would be there, at what stage they will come, and so it was easy for me to assist him on what to do. That is my experience with planned production.

CA: What methods do you practise on your farm?

SR: Here I have two main crops, one is sugarcane, the other is banana. The side-income crops are sespania and agathi. Another advantage is that these two are leguminous crops, they store nitrogen in their roots. Both banana roots and sugarcane roots mingle with these roots and take the nitrogen stored in the plants and use it. So we call these 'companion' plants. In this case, sun harvesting is uniform for all crops. One is not disturbing the other - that is an important factor. This is Dabholkar's Method. His basic system is that the resources can be built up in the plot itself. For each and every crop you can build up organic resources there itself. Thereby you can avoid the external inputs. For that he gives the principle. Here it is a partitioned area. If I grow sugarcane as a mono-crop, I have to use 20,000 sets per acre. Since it is partitioned area, you will get 8,000 sets only. What I have done here is I have taken 10 ft. x 10 ft., centre to centre, E/W and N/S direction, and a 3 ft. circle plot around it. First I made circled plots with 10 ft. x 10 ft. basis. In this way I made 250 plots in the partition. As I told you, for partitions 8,000 cents are needed. If you calculate 8,000 divided by 250 gives you 32 cents per plant. So instead of sowing it throughout the area, (250 plots x 10 sq. ft. equals 2,500 which is one fifth of the area in partition) i.e. in 32 cents, I have planted in one fifth of the area and have four fifths of the area in my hand.

CA: So, by this method, you are planting the same amount of sugarcane plant on one fifth of the area only.

SR: Yes. The basic concept is to create the biomass there itself and use it for the main crop. So in between four plots you have one centre plot. In this plot I have planted banana. By that method, I have 150 banana plant plots. Both put together i.e. sugarcane and banana, I have one fifth of the area with the main crop and in remaining four fifths of the area in the early stage I have grown 5-6 varieties of vegetable plants. After harvesting, all the biomass is given to sugarcane and banana.

Once again, you have left over a big area which is vacant. There I have sown a multiple variety of seeds. That's the second mulch. Fifty days I take it out and give the biomass back to the sugarcane and banana. Again in the leftover plot, the sugarcane waste is given back to the plot as biomass. At every stage, at regular intervals, we are giving back to the soil biomass - this is the secret. So from both these areas you are getting income as well as biomass.

With each and every irrigation, I use cowdung slurry and I use, one at a time, cow's urine, panchagavya or buttermilk-coconut milk solution, in rotation. So I am not spending money, but I am feeding micro-organisms and thereby microbial activity enhances and microbial population enhances. The micro-organisms then quickly digest all the biomass that is applied and thereby the main yield is improved.

I can give you the calculations. I have 30 canes per field. So 250 x 30 = 7,500 canes. Let us take 1 kg. per cane. It comes to more than 1kg, but let us take 1 kg. So it works to 7,500kg or 7.5 tonnes. The sugar factory gives Rs.826 per tonne. After deducting cutting and transporting charges of Rs.150, this comes up to Rs.650. 650 x 7.5 = 4,550 through sugarcane income. I also have 150 banana plants. I sold these at Rs.50 each and I got Rs.7,500 from banana plus 4,550 from the sugar. So that's around Rs.12,000. Then I have 500 poles. For each you get around Rs.2. I have not taken the income from vegetables into account. If you reduce the total amount to Rs.10,000 per 40 cents. Per acre, you get Rs.25,000. So it is good business sense also.

CA: Could you explain to me what you were saying about panchagavya creating a certain population of microbes because of the nutrient mix which you can increase 2 or 3 times?

SR: You add this archae mixture - slurry with panchagavya, slurry with archae, slurry with buttermilk-coconutmilk. Slurry is important because the basic feed of all microbes is cowdung. Microbes grow well in slurry solution. Best is gobar-gas slurry because the methane is released. If you don't have gobar-gas, take 50 kgs of cow dung, mix it with 100 litres of water, keep it for a week, all the methane will be released and then it is ready for use. If you put any microbes in it keep it for 24 hours, the population will increase.

CA: What is 'archae'?

SR: It comes from 'archaeology'. Before living things come first there exist the microbes. Balakrishnan named it that way.

CA: How do you get archae?

SR: Balakrishnan came here and stayed for some time. He designed the plant, so to say, in which you can prepare archae. You take about 50 kgs. of cowdung, mix it in 75 litres of water and pour it in a barrel or a large jar. Then take 100 gms of ferrous sulphate and mix it in 2 litres of water and after it dissolves completely, pour it in the barrel. Then you take about 20 litres of water separately in a plastic container, put 3 kgs of sugar or jaggery, 250 gms castor oil and 100 gms yeast. Keep this separately for 3 hours, during which time the yeast which you have added will start working. Every 15 minutes you have to stir the mixture well since the castor oil won't naturally mix with the water. The activity of the yeast makes the oil soluble in water. After 3 hours, you pour this mixture into the barrel.

If the barrel is not full, add water to it till it is completely full and becomes anaerobic. The archae works in anaerobic conditions and digests the cowdung slurry inside and new nutrients are formed. Seven days later, you remove it and boil it in a container. During boiling, all the microbes, both beneficial and non-beneficial, die and you will get a sterile solution. After cooling, divide it into five equal parts and put it in separate containers. In each one, you use pseudomonas, t. viridi, bascillus subtilus, t. harcianum, and pycillomycis, 200 grams each and put it separately in each container and keep it for 24 hours. In 24 hours, the contents will build up ten times. So if you use 200 grams, after 24 hours you will get 2 kg. You need to use only one fifth, so this activity can be shared by farmers, thereby reducing the cost. If you use it for 3 years, then it is not necessary to use it afterwards because the soil gets everything on its own and as long as you regularly give biomass to the soil it is enough, the rest will take care of itself.

Once a farmer asked me, how will you use it. I answered that I will once again use 100-200 units of gobar-gas plant in which I will put this built-up solution, keep it for another 24 hours and again those microbes will feed on the slurry and multiply. The next day during irrigation, I will use the complete solution in water. Immediately the farmer said: You boiled the archae and killed all the microbes, and now you are once again mixing it in slurry. In slurry you again have beneficial and non-beneficial organisms and will not the non-beneficial organisms destroy the others. I answered, since the population of the spores is at a very high level, they will suppress the others. To reduce competition, we keep all the micro-organisms separately and they will grow freely. These basic things were taught to me by Balakrishnan, who also helped me to gain confidence.

CA: Have you heard of this new technology called EM - 'Effective Microorganisms'? It is developed by a Japanese professor.

SR: Yes, I have. I prepare extended EM (EEM), treated cow urine (TCU), bokashi, and fermented plant extract (EM-FPE). Above preparations can be used for spray as well as in irrigation. To rectify micronutrient deficiency, we use EMFPE preparation. For this various types of leaves are used. Waste fruits, the waste material removed from the intestines of cows and goats are also used.

#### **KUDUMBAM**

No. 17, Highways Colony, Subramanyapuram, Trichy 620 020, Tamil Nadu. Ph. 0431-2331879, 2331842, 2332175, Fax: 0431-2332175, Email: kudumbamtry@eth.net,

Contact: Oswald Quintal

Kudumbam is a non-profit voluntary organization promoting sustainable agriculture since 1990. Kudumbam also offers home delivery services of its products.

Products available: Rice, Red gram, Black gram, Green gram, Bengal gram, Cow pea, Ground nut, Gingelly, Pepper, Coriander, Chilli, Turmeric, Chilli powder, Coriander powder, Sambar powder, Turmeric powder, Idly flour, Dosai flour, Nutrient flour, Ragi flour.

Kulinji is also the ecological research and demonstration farm cum training centre offering training in integrated farming systems, animal husbandry and nature cure.

Trials, experiments, demonstrations, trainings and farmers' interactions are the main core programmes. It is located on 35 acres of rainfed land in an interior area of Kulathur Taluk in Pudukottai District.

It can provide seed, seedlings and saplings.

(Source: Brochure)

## **GOMATHINAYAGAM**

No. 18, Ulchi Magaliamman Koil Street, Puliangudi, Nellaikattabomman District – 627 855, Tamil Nadu. Vivasaya Seva Sangam, C.B.Complex, Gandhi Bazaar, Puliankudi-627 855, Thirunallvelli District, Tamil Nadu. Ph: 0463 6233235, Cell:9629952636.

Sri. Gomathinayagam is an organic farmer from Puliyangudi village in Thirunelveli district. Aged 75, once a teacher, he has been in farming for three decades. He and his friends have started a farmers' sangam where they meet every evening. Through the sangam they subscribe to over 20 journals and magazines which they read to understand the world. He enjoys commenting on any social event through a post card, which the newspapers publish now and then. His entire family, i.e., his wife, two sons, daughters-in-law and grand children are all involved in farming. He decided to stop education of his sons at the 10th standard as he felt that they don't need more of this kind of education.

He gives the following recipe for the use of panchagavya:

Take 5 kg of cow dung and add one litre of ghee. Then mix them well and keep in a shady place for five days. On the sixth day, mix to this three liters of cow's urine, two liters of cow's milk, two liters curd, three liters tender coconut water and three liters sugar cane juice. Put the mixture in a shady place for 15 days. Everyday mix it well, morning and evening. After 15 days it will be ready for use. Add five liters of water. The ratio is 3% (3 liters of panchagavya for 100 litres of water). Panchagavya can be used for all crops before flowering and after. Sri. Gomathinayagam uses panchagavya for paddy twice – first on the twentieth day after planting and again on the fortieth day. It acts as manure and pesticide. Besides, panchagavya increases the shelf life of rice and improves its taste as well.

(Source: Communication with OIP)

## KHORAM ESTATES

'Fleurette,' Sivanadi Road, Kodaikanal – 624 101, Tamil Nadu. Contact person: Minoo Avari

The Khoram Estate was purchased in August 1980. It is located 16.3 kms. from Kodaikanal, in a valley called Middle Palnis. The nearest town is Perumalmalai which is five kms. away. The property is around 4,000 feet above M.S.L. To the north, it overlooks the plains of Palni. West are the hilly massifs which form part of the Anamallai tract while to the south one can see the extreme boundaries of Kodaikanal Municipality.

This area is therefore essential for access into the hundreds of acres of land available for sale in the north. The lands there are as gentle as they are fertile. The panoramas they afford are as exquisite as their myriad hidden mysteries. These magnificent lands are the last remaining portions that are up for sale by farmers.

The Estate came with seven acres of Arabica 795 coffee variety, fourteen acres of citrus and other trees on its total twenty-five acres. The water is abundant, and it is potable. In 1986 one acre of the new, high yielding

imported dwarf variety of coffee, known as Catimore, was grown. In 1988 a further four acres were planted and the programme completed in 1989 with a balance of six acres.

Coffee planting was accompanied with citrus planting at 20 by 20 feet spacing. Temporary shade trees were also grown at 15 feet intervals and followed each year with permanent shade trees at 60 feet spacing. All the newly planted areas were first thoroughly dug up. Unearthed rocks and stones were used to put up massive revetment walls. A 1,50,000-gallon seepage tank was constructed over a period of four years.

Pepper was grown on a commercial scale from 1987 after trials were conducted to find the most suitable hybrid for this area. There is little doubt that this is the crop of the future. Requiring no maintenance, it is easy to harvest and is harvested at a time when there is plenty of labour available, i.e., after the coffee and citrus harvests are completed. Yields on a single vine have been upto 120 kg green /40 kg of black pepper!

The eastern (top) section of Khoram Estate has been ear marked for setting up an eco tourism complex. It will harbour, in addition, a cattle shed with attendant gobar gas plant which will supply milk, lighting, cooking gas and slurry for the orchard below.

The climate is ideal for agriculture. It has been rated as excellent for dairy and/or stud farming. It has now been internationally acclaimed as having that perfect ambience for a world class health spa. The weather pattern lends itself to making the area more than suitable for alternate energy resource projects.

Khoram Estate has the distinction of being amongst the highest yielding coffee properties anywhere in the country. It also sports a wide variety of produce and plants. To name a few:

Cinnamon, leechis, mangoes, peaches, apricots, avocado, bananas, chillies, vegetables, Monstera deliciosa, pomegranate (seedless), arecanut, guavas (seedless), citrus (oranges, mosambi, kedar narthangai, grapefruit, Salem orange, sweet lime and acid lime), kadukai (soap nut), nellikai, jackfruit, jambool, laquaat, African mahogany, albizzia, singattu, Grevellia robusta (silver oak), white cedar, vangai, kona, kumul, croteleria (Indegofera Tasmania), rosewood, athi (wild fig), kelaa, oapaya, custard apple, vaikalli, Mysopsis emminni and Dadaps.

Several hundred imported silk-cotton hybrid plants have already been planted along the estate perimeter. Again, every tree that is large enough has a pepper vine on it.

The estate is now totally organic. By using stone walls and allowing soil to build up as well as transporting large quantities manually they have recovered several acres of waste land, which have since been planted such that the major part of the estate is now covered with trees. Research trials with the highly successful Vetticelium were first conducted on this property.

Applications of BD 500 and compost etc., are all that the estate requires and though the crop levels per acre have dipped, the quality is far superior with individual bean/fruit size much greater than before. In addition the shelf life of perishable products has been considerably enhanced.

In conclusion, it must be noted that Khoram Estate is chemical free. It is totally organic and follows a self-sustainable eco-friendly pattern interlinked with highly scientific principles. (Source: Communication with OIP)

#### ANNAPURNA FARM

Bharat Nivas P.O., Auroville – 605 101, Tamil Nadu. Ph.: 0413 3155660, Email:brooks@auroville.org.in Annapurna farm is managed by Tomas, Andre and Brooks. This 135 acre farm belongs to the experimental international township called Auroville, near Pondicherry. The primary purpose of the farm is to produce food for the residents of Auroville.

The farm is presently growing approximately 5 acres of paddy, and around 35 acres of millet. Only indigenous crop varieties are used. The millets grown are barnyard millet (kuderaivalli in Tamil, sanwa in Hindi) and kodo millet (varagu in Tamil, kodon in Hindi). There are also some tamarind plantations, and plots of casuarina trees. The farm also grows Hibiscus sabdariffa, or Rosella. The fruit of this crop is dried and used for juice production in Auroville's solar kitchen.

Annapurna has a dairy with 10 cross bred cows. Indigenous animals are preferred, so the farm is presently raising two pure Gir bulls which will be used for breeding as well as for local transport.

The performance of rice has been very disappointing at Annapurna, with yields averaging only1,200 kg per acre. The poor yields may be due to increasing concentrations of salt and the increasing EC in irrigated plots. It also may be due to the high pH of the soil, which is between 7.8 and 8.2, depending upon the depth. The system of rice intensification (SRI) is being tried on some small plots, however the performance of SRI plants in the first year was very disappointing.

Millets grow well here, but consumer demand for such crops is low in Auroville.

The farm depends heavily upon donations for its existence, as production related and operational expenses are greater than income from the crops.

Much effort is devoted to recording and analyzing data of the production processes.

Rainwater harvesting ponds have been created with catchment capacity of approximately 24,000 cubic meters. These ponds, when filled, provide irrigation water for the rice crops.

(Source: Communication with OIP)

#### **KOLUNJI FARM**

Kudumbam, Ezhil Nagar, Keeranur, Pudukottai District – 622 502, Tamil Nadu.

This farm was established by Kudumbam, an NGO, in 1992. There are five families living on it and looking after the activities. At the time of purchase it was barren land. Thanks to efforts at water harvesting and planting pioneer trees, the farm is now well wooded.

Some good practices demonstrated on the farm are:

- a) Water Harvesting: Starting from the highest part, water harvesting is done in various ways, like contour bunding, percolation pits, deepening of ponds, etc. so that rainwater is fully harvested.
- b) Regreening: Plants which are native to the place and which survive in difficult conditions pioneer plants are grown, to bring green cover quickly to barren land.
  - c) Soil conservation: Soil erosion is controlled by contour bunding and vetiver.
- d) Stone mulching: To make trees grow with rainwater only even when rain is erratic –stone mulching is done around the tree trunks. This helps retain moisture.
- e) Shelter belting: Part of the farm is left undisturbed so that thick bushes establish themselves. This acts as a shelter for many creatures like mongoose, peacocks and birds which become part of the natural system of the farm.
  - f) Alley cropping.
  - g) Deep litter system: To maintain birds for food.
  - h) Aquaculture: Rearing fish in rainwater-fed ponds.
- i) Permaculture: At the lower end of the farm, where there is a well with a pumpset, a plot of land is cultivated with the permaculture methodology. Tree crops include sesbania, subabul, fruit trees like guava and trees like teak. Vegetables and tapioca along with cover crops are also grown here.
- j) Home Gardening: This is propagated mainly to look after vegetable needs of the home in poorly rainfed conditions.

Kolunji acts mainly as a training centre for NGOs and farmers. (Source: M. Kartikeyan)

# SUGAVANAM (MEDICINAL PLANT CONSERVATION PARK AND PEOPLE'S AGRICULTURAL FARM)

27, Ayyanar Nagar Pudukkotai – 622 303, Tamil Nadu. Ph.: 04322-265094/266613 Email:paf@eth.net Sugavanam is a Medicinal Plant Conservation Park (MPCP) established with the financial and technical support from Foundation for Revitalization of Local Health Traditions (FRLHT), Bangalore. It is conserving the

medicinal bio-diversity of Pudukkottai district and trying to revitalize local health traditions. There are 500 species growing in natural conditions. They maintain a herbarium of 300 species.

Present Activities:

## 1. Watershed Training:

Sugavanam is part of a micro watershed which was developed from 1990–1996. The impact of soil conservation and tree planting can be seen clearly. People who want to learn the impact of watershed components on degraded lands come for an exposure visit here. A comprehensive training on watershed approaches and soil conservation and tree planting techniques is offered here.

# 2. Organic Farming:

Training in organic farming including composting techniques is offered to farmers' groups. Sugavanam has become a thick forest and wherever some sunlight is available organic trial beds have been formed and demonstration crops raised. Various organic manures and natural plant based pest control measures are taught and demonstrated.

# 3. Nursery:

A well designed nursery with a capacity of 1,00,000 seedlings is functioning here. Besides medicinal species required for a home garden, agroforestry plants are also raised and supplied on demand. About forty to fifty species are available always. (Source: Communication with OIP)

#### **ECHO TRUST**

M Vadipatti, Dindugul Anna District – 624 211, Tamil Nadu. Ph.: 045436-4404

Contact: Muthusamy

ECHO Trust, an NGO established in 1985, has from 1991 initiated activities related to agriculture. The trust has 85 cents of land in M.Vadipatti. Fruit trees like guava and mango are grown. Ploughing and weeding are both avoided and the area is left undisturbed.

ECHO Trust is involved in organic farming promotion and campaigning.

(Source: M. Kartikeyan)

#### M. S. MURUGAPPA

35 Devarajanar Street, Vedachalam Nagar, Chengalpattu-603001, Tamil Nadu. Ph.: 04114-228271, Email: murugaps 14@yahoo.com

Murugappa was the first farmer in his area to use Azotobacter, the nitrogen fixing agent for sugarcane on a large scale thus substituting nitrogen-based (inorganic) fertiliser.

## **LEISA NETWORK**

22, Highways Colony, Subramaniyapuram, Trichy – 620 020, Tamil Nadu. Ph.: 0431 2331879, Email: kudumbamtry@eth.net

District office:

LEISA Network – Madurai, Post Box No. 87, Madurai – 625 020, Tamil Nadu. Ph.: 0452 2533493, Email: pardmdu@eth.net / leisa\_madurai@hotmail.com

Resource Poor Farmers (RPF) around the world have been marginalized and excluded from development with the unbridled spread of the 'green revolution'. LEISA Network has been an initiative of farmers (and farmers eco-clubs) to counter such threats to life and livelihood.

LEISA Network comprises of a coalition of 82 NGOs and over 2000 resource poor and landless farmers spread across nine districts of Tamilnadu. The State Resource Cell, based in Trichy, provides financial support and technology updates while the district level leading NGOs have been assigned the responsibility to monitor and oversee the program. Headed by district coordinators, all the district level activities are steered by field executives along with participation and cooperation from the farmers and animators.

(Source: Brochure)

# SHRI A M M MURUGAPPA CHETTIAR RESEARCH CENTRE (MCRC)

Tharamani, Chennai – 600 113, Tamil Nadu. Ph.: 044 2430937, Fax: 044 2430369, Email: energy1@vsnl.com, Web: http://education.vsnl.com/mcrc

Developed spirulina technology for rural application as well as a technology package for natural indigo dye extraction and dyeing. Under the late Dr C.V. Seshadri, did serious and pioneering work on organic farming. The Institute continues to do work on organic farming even today.

(Source: Communication with OIP)

He grows paddy, pulses and vegetables using bio-dynamic inputs and sells organically grown products in and around Chennai.

(Source: Communication with OIP)

## CENTRE FOR INDIAN KNOWLEDGE SYSTEMS (CIKS)

30, Gandhi Mandapam Road, Kotturpuram, Chennai - 600 085, Tamil Nadu. Ph.: 2447 1087 / 2447 5862, Fax: 2447 1114, Email : ciks@vsnl.com / info@ciks.org, Web:www.ciks.org

CIKS was formed as an autonomous organization in September 1993 and it was registered as a Trust in January 1995.

Some activities of the Centre:

- Action, research and training programmes on various aspects of organic farming;
- Research on cultivation of organic rice, cotton, oil seeds, vegetables, etc.;
- Setting up of rural gene banks for the conservation of traditional seed varieties;
- Development of the use of biological control agents for the control of pests in different agro ecosystems;
- Research on the applications of vrkshayurveda (traditional Indian plant science);
- Setting up of an organic farming resource centre which would act as a clearing house for information on organic practices;
  - Arogyam a scheme to make available organic food from farmers to consumers at reasonable prices;
- Seed banks in villages across Tamil Nadu with on farm conservation of over 130 paddy and 50 vegetables varieties;
  - Research and publications on medicinal plants;
  - Training programmes on the use of traditional medicine for various groups;
  - Preparation of audio visuals on various aspects of traditional healthcare systems;
- Publication of newsletters, manuals, posters and monographs on traditional health care and traditional agriculture.

Their main field work area is Kancheepuram district which has two experimental farms as well as a training centre and a field office. A field station is also located in the town of Sirkazhi, Nagapattinam district. The organization has twenty six full time staff members, a panel of consultants and a team of volunteers to help it fulfil its objectives.

'CIKS Wire' is the online monthly newsletter of CIKS. Those interested in receiving it can send a mail to infor@ciks.org / ciksorg@gmail.com For a list of prominent publications check its website: www.ciks.org

## **ALI MANIKFAN**

Do Nothing Farm, Madapuram, Vallioor, Tirunelveli Katta Bomman District, Tamil Nadu.

Ali Manikfan is a multifaceted man and has proved his mettle in fields like astronomy, fish species collection and identification, electronics, alternative technology, ship making, etc. along with natural farming and natural cure. He started following natural farming some 20 years ago. He has found a way of preventing sea erosion at

Rameshwaram when he lived there on a small farm. He runs all the electric instruments in his home by harnessing solar and wind power with an indigenously made fan. (Source: Communication with OIP)

# T.S. SRINIVASAN CENTRE FOR RURAL TRAINING

C/o TVS Academy, SIPCOT-II Phase, Bethallapalli, Hosur 635 125, Tamil Nadu, Ph.:04344 260489, 260448, Fax: 04344 260419

Contact persons: Ms. Bindumathi Mohan & Mr. S.Murugakani (Coordinator – Ms.Srividya Mouli)

The T.S. Srinivasan Centre for Rural Training (TSSCRT) was set up to establish a model farm, educate and train local farmers in organic agricultural practices, build a network of farmers and disseminate the benefits of organic products to the public.

For the past four years TSSCRT has worked with farmers in and around Hosur. It has created awareness in small and marginal farmers about the harmful effects of chemical based farming. It has helped farmers who wish to switch to organic farming practices by providing them training, guidance and marketing facilities.

It conducts research and experiments on bio-pesticide preparations, composting processes, organic bio-growth promoters, mulching, green manuring practices, etc. These are then standardised and taught to farmers in the various training programmes conducted by the NGO. Use of various predators and parasites like Crysoperia, Trichogramma, NPV and pheromone traps are also included in the integrated pest control research programmes.

Training programmes and demonstrations are held regularly at the Centre and in various farmers' fields to introduce various eco-sensitive, traditional (not yet forgotten) farming practices. Farmers are also exposed to new innovations like EM Technology etc. for an easy and quick switch over to organic farming.

The TSSCRT has also addressed itself to resource conservation techniques and actively promotes rainwater harvesting in various village forums. By making available expert guidance it helps farmers to restore water sources, harvest and conserve rainwater and prevent erosion.

A producer consumer network has been created, thus assuring the farmer of a steady market for the crops. This ensures that the farmers' produce is marketed efficiently and that the farmer gets a fair price for the crops.

(Source: Communication with OIP)

#### **KEYSTONE FOUNDATION**

Keystone Centre, P.B. No. 35, Groves Hill Road, Kotagiri 643217 Ph.: 04266 272277/272977 Fax: 04266 272277, Email: kf@keystone-foundation.org Web:www.keystone-foundation.org

Contact person: Mathew John, Director

Keystone has within its fold, both, a registered trust and a partnership firm. Both, though independent with divergent philosophies, consciously attempt to complement each others' activities.

The Keystone philosophy: Today there are only a handful of development groups with a conscious mandate of working with both conservation and basic needs issues. Thus, it becomes imperative to synchronise social, economic, and ecological systems and introduce effective strategies for change. Keystone strives to achieve this synchrony. It has decided to work in the field, specifically in mountain ecosystems with indigenous people. Keystone believes that a small yet effective group of professionals, in touch with ground realities is capable of carrying through an issue from the concept to the implementation stage.

Keystone is involved in the incorporation of millets into the public distribution system is are looking forward to increase their net working partners. It is involved with 32 local groups and 300 farmers. Products grown and promoted through them are coffee, millets, spices, silk cotton and honey. They are part of the National PGS group and IFOAM International.

Keystone has within its relatively young lifespan established linkages with a large number of individuals and organizations with whom it exchanges ideas, skills and shares experiences. The group members are a part of The Shola Fellowship, a network of like-minded individuals, and a member of Apimondia – the world federation of beekeepers.

Keystone is centrally involved in the Participatory Guarantee System of certification with OFAI

(Source: Communication with OIP)

## SANTOSH FARM

Ooruppannadi Nivas, Kottur Malayandipattanam, Pollachi, Coimbatore District – 642 114, Tamil Nadu. Ph.: 04259 –286499 to 286504 Cell: 09442416543 Email: santoshfarms@gmail.com

Contact: Madhu Ramakrishnan

Madhu Ramakrishnan hated agriculture in his youth, as the income was very low when compared with other professions. He studied to be an engineer and then entered industry. Inspite of this, he has been farming for the past 25 years. Only recently he has began to understand its real nature after reading Fukuoka's 'One Straw Revolution.'

The farm layout is as follows: 32 acres coconut, 5 acres mango, 5 acres teak, 4 acres tamarind and 2 acres of fodder crops. The coconut plantation is interspersed with cocoa, silveroak, arecanut, kadepela and medical plants as well as leguminous crops. The teak plantation has pepper plants. A small orchard is also maintained with jack fruit, chickoo, amla, guava etc. The plants and trees selected for intercropping provide a large amount of leaf fall. Vetiver is cultivated to avoid soil erosion.

The farm has plenty of water with three open wells plus canal irrigation. There are 15 cows and 40 sheep. Gobar gas plant is also established and the slurry is used for making panchgavya. Only vermicompost is applied to the entire farm. He gets 5 tonnes of vermicompost per month. Vermicomposting is demonstrated to interested farmers every second Saturday of the month.

There is zero tillage on the farm since 1996. Medical plants are grown for the preparation of bio-cides for plants. All coconut wastes are recycled. Arrangements for wind breaks are now under development.

Ramakrishnan has found that as a result of organic farming there is no need for tillage, no fertiliser is necessary, weeds are much less, water requirement is less yet the health of the soil has improved, the plants have natural resistance against pests and diseases, the produce is of good quality and there is less labour requirement, less expenditure and less work for the farmer. He strongly advocates organic farming.

(Source: Correspondence with OFAI)

#### **NARDEP**

Vivekananda Kendra – NARDEP, Vivekanandapuram, Kanyakumari – 629 702, Tamil Nadu. Ph.: 04652 246296, Fax: 04652 347177, Email: ngc\_vknardep@sancharnet.in

Or

Technology Resource Centre, VK-NARDEP, Kalluvilai, Tamil Nadu. Ph.: 04652 270755, 271270

VK-NARDEP is a project of Vivekananda Kendra. VK-NARDEP is working in the fields of cost-effective housing, water management, organic farming, medicinal herbs and propagation of non-conventional energy sources.

To propagate organic farming, VK-NARDEP undertook the dissemination of the following technologies:

- i) Farm yard manure;
- ii) NADEP compost;
- iii) Biogas slurry;
- iv) Vermicompost, etc.

With harmful side-effects and contra-indications of synthetic medicines taking their toll, the search is on for a more humane alternative. For us Indians, long reared on mother's medicine-chest, it comes as no surprise that grandma's household herbs are proving their worth today. Long forgotten, and once freely available, these herbs today scream for attention. Widespread deforestation has also confined their spread to a few places. The aggressive patenting and copyright of these remedies by commercially oriented global interests make it imperative that we safeguard our age-old wisdom.

VK-NARDEP appreciates the need for proper documentation of the geographical spread and use of various herbs besides their non-commercial motive production. Armed with its widespread contacts with scientific institutions, other agencies and general public, VK-NARDEP endeavours to establish a network of indigenous health workers and physicians to raise herbal nurseries and gardens, and to train people in raising such nurseries and prepare herbal medicines.

The enormous potential of biogas technology encouraged quite a few to install bio-gas plants. Obtaining energy from waste and organic fertiliser by-product enthused many. The initial enthusiasm soon wore off as defects came to the fore and the lack of trained technicians for repair work was felt. This need was fulfilled by VK-NARDEP. It launched biogas users' awareness camps, as well as training courses for users and masons. Today it is one of the largest turn-key agencies for bio-gas construction, having constructed 1500 plants. VK-NARDEP has published, in association with Ministry of Non-conventional Energy Sources, Govt. of India, a manual (in English and Hindi) on repair and maintenance of biogas plants.

As a result of its R&D efforts VK-NARDEP has also developed a new biogas plant model 'VINCAP which tries to reduce the cost of the existing models. The model is presently undergoing rigorous field trials before it is offered to the general public. (Source: Brochure)

## N. NAGARAJ

N. N. Farms, 244, Bahuttampalayam, Ekkaraithatthapalli P.O. Via Bhavanisagar – 638451, Erode District, Tamil Nadu. Ph.: 04295 221895, Cell: 09443071495

Nagaraj is a well known jasmine flower grower. He grows banana, turmeric and vegetables organically.

Panchkavya, herbal pesticide and vermicompost are all prepared on the farm. Surplus is sold.

(Source: Communication with OIP)

## S. POONGODI/R SELVAM

Pudhu Nilavu Organic Farm / Manonmani Vermi Farm,

Thalavumalai, Arachaloor, Erode District - 638 101, Tamil Nadu. Ph.: 0424 2357537

Email: manpulu@rediffmail.com

Pudhu Nilavu Organic farm / Manonmani Vermi Farm was started in 1999 by S. Poongodi and R. Selvam with the aim of producing vermi-composters and not just vermi-compost. Selvam and his wife wanted to create awareness and train farmers in vermin composting. Manonmani is a Tamil epic in which the earthworm is referred to in detail. Hence Nammalwar gave it this name.

The farm is 2.6 acres and has more than 400 trees of 80 different species. Around 1/4 portion of the farm is being developed as a model farm for training programmes. Although water from canal irrigation is readily available, this source of water is not being used since they prefer to use water sources from within the farm property. They utilize water from a tube well for drinking and so far have taken water from the well for saplings only on 7 or 8 occasions. When they bought the farm in 2003 there was hardly any organic matter except for some hardy weeds. Now the whole farm has knee high carpet of a multitude of grasses that can feed the cattle and goats reared in the farm.

In 1999 Poongodi has started a vermi-composting unit with help from a bank manger (as at that time banks considered vermi-composting a losing venture). Realising that vermi-compost is very essential for a farmer to be able to shift to organic farming she decided to build a training center for promoting vermi-composting among the farmers. At that time vermi-composting training was available only in research centers and colleges or at some NGOs farms.

She initially started vermi-composting in tanks constructed using cement slabs. Many farmers trained but the number of those who started units on their farms were very few - the reason being that this system needs money for constructing tanks and shed to cover the tanks. So she tried various methods and finally found that leaving the worms in natural way is the easiest one. She has now developed an open bed method of vermicomposting in

the open yard even where there are no trees – just under the sun. She has innovatively used mulching over the bed of about 1 foot high and 3 feet wide (length varies). Poongodi says: 'Previously the shed was constructed over the heads of the people. Now a roof is constructed over the heads of the worms'.

After developing this method almost all the trainees have started their own vermi-composting units. Many of the commercially successful units are following this low or no cost vermi-composting. Several farmers (men and women), women self help groups, college students (including agricultural college students) have came to her farm for training. Banks too have now started giving loans for vermi-composting with out any hesitation.

Poongodi is now on the faculty of vermi-composting training programmes of many community colleges. Poongodi and Selvam were instrumental in starting an UGC approved, add-on course on vermicomposting and solid waste management in a local womens' college.

The earthworm used is Eudrillus eugeniae species. However, other types are reared here for exhibition purposes. The centre also has seven different types of vermi-composting models – ranging from pots to cement tanks. The training course includes lectures and demonstrations. Fees for a one day training course are nominal – women pay Rs.250, men Rs.300 and couples Rs.450. A maximum of 20 persons at a time are taken for training to ensure better interaction.

The training centre also offers a 3 days intensive residential course which includes topics such as: agricultural history of India, soil health, water management, compost making, mapping, indigenous plant protection techniques (amrut pani, panchagavya, insect repellants), cattle breeds, etc.

Selvam has written many articles on organic farming, farmers' issues, genetic engineering etc. in various dailies and farmers' magazines and has also written and co-authored some books in Tamil.

(Source: Norma Alvares)

#### **GANDHEEPAM**

Kuringi Bhavanam, Kilavayal – 630 410, Sivagangai District, Tamil Nadu. Ph.: 04577-244222/244177/244111 Contact Person: V. Ramani

Organic practices for medicinal plants conservation and promoter of kitchen herbal gardens.

(Source: Communication with OIP)

## M.A. APPAN

Natural Life Center, 32/1, East Street, Kulasekaran Pattinam – 628 206, Tamil Nadu, Ph.:04639 251425

Appan has a three acre plot near the sea under orchard cultivation since he believes that humans need natural food, not cereal or cooked vegetables to remain healthy. He grows primarily coconut and a few other fruit trees which can survive the saline air and soil. He has always practiced organic farming. Mulching is the only organic farming technique he employs, using cow dung or goat dung mixed with leaves to provide nutrition to the trees. He believes that the best manure for any plant is the waste product of the same plant. Hence all the waste products of the trees are given back to it through mulching. He claims, that alone is sufficient for healthy growth of the tree and good fruit crop.

He teaches that all kinds of diseases, both physical and mental, can be cured only by raw-food diet with yoga and without any medicine or surgery.

He is the author of two books published in English - How to cure diseases with natural foods (2 vols.) and How to live without diseases.

(Source: Norma Alvares)

#### **SOPORT**

M-3, Housing Unit, Salai Road, Woraiyur, Trichy – 620 003, Tamil Nadu. Ph.: 0431 2761029 (O), 2762257 (R),

Cell: 09842476063

Contact: Smt. S. Muthumala Devi

SOPORT stands for Society Organized for the Promotion of Rural Tribals. SOPORT has been set up by a young married lady, who by her own admission is a wealthy landowner. She is heir to about 100 acres of family owned land in Theni district. The area is known for its coffee plantations and orchards. Most of the land is hilly and is cultivated with coffee, cardamom and a variety of fruit trees like orange, guava, pomegranate etc. On the plains they grow paddy, sugarcane, banana, coconut and tapioca.

Muthumala herself doesn't farm the land – she has plenty of workers engaged by her family who from earlier times work on the land and thus earn their livelihood. Muthumala visits the farm regularly and takes keen interest in its running.

She says that the farm has totally moved to organic farming since the past five years. Even before that, they were not strictly chemical farmers as their use of fertilisers and insecticides was mixed with some time-honoured traditional practices followed by all farmers in the area. So the decision to be fully organic was not difficult to take at all.

Asked about the consequences of not using pesticides she says that there is no serious threat of pests though there are attacks now and then. Earlier they used to inject into the plants to ensure that they remained healthy but now they have stopped pesticides altogether. Instead they have adopted another technique. When they find pests attacking one species of plants they allow the pests to have their fill of the food they want. That takes their attention away from the other plants and saves the rest of the crop.

Muthumala who is a post graduate in family counselling organises Self Help Groups and actively promotes organic farming through them. (Source: Norma Alvares)

#### V. S. ARUNACHALAM

Elunkathir Organic Farm, P. Vellalapalayam Post, Gobichettipalayam, Erode District – 638 476, Tamil Nadu. Ph.: 04285 246301, Cell: 094433 46323

V.S. Arunachalam, son of a small farmer from a rural background is an ITI diploma holder. Instead of using this training he decided to farm and fortunately chose to do it the ecological way. The special features of his farm are:

- (i) Integrating goat rearing with crops;
- (ii) Preparing panchagavya with goat products;
- (iii) Mixing cattle urine with irrigation water;
- (iv) Vermiculture in between banana trees:
- (v) Mulching in sugarcane;
- (vi) Single seedling plantation in rice; and,
- (vii) Green manure preparation by sowing 20 kinds of crop seeds.

He made significant contributions to farm reclamation efforts of salinated lands during the tsunami. His present engagement is with Nariguravas (tribal) children.

(Source: Revathi and Nammalwar)

#### K. MOHANASUNDARAM & PUSHPARANI

Amudha Surbhi Organic Farming Training Centre, 12, Thingalur Road, Nasiyanur Post, Erode District – 638107, Tamil Nadu. Ph.: 0424 2555227

Mohanasundaram and his wife Pushparani farm, teach and train others in natural/organic farming on their farm land. The plot is three and half acres, of which one and a half is owned by them and two acres is on lease. They were not always organic farmers, but have been so for the past eight years. In 1986 when the farm used chemical fertilisers, Mohanasundaraman's father got the first prize in the state for growing maize. However even at that time they did not use chemical pesticides or insecticides, only chemical fertilisers.

Mohanasundaram's conversion to organic farming came when he realised that it was not fertilisers that were having an impact on the crop.

According to him eight years ago he had used DAP as fertiliser for growing lady's fingers. On one occasion he noticed that even after three waterings the fertiliser had not dissolved but remained intact around the roots where he had applied it. So he questioned the shopkeeper from whom he had purchased the bag. The seller told him that sometimes the bag is not a good one and the fertiliser does not dissolve. It had happened occasionally to others as well; the shopkeeper had said that it was just plain bad luck.

That set him wondering, for he had noticed that the lady's fingers were growing reasonably well despite the fact that they were obviously getting no nutrition whatsoever from the applied fertiliser. He understood then that the chemical fertilisers are not really necessary and from then onwards stopped using them altogether on the farm. Instead he started using micronutrients and found that this not only improved the yield but also the colour of the vegetables.

Mohanasundaram's farm grows vegetables, turmeric, bananas and green fodder. He needs the fodder to feed the large cattle population. If there is enough water he grows paddy. He never uses a bore well as he believes this is anti-national. In¬stead he uses water from an open well. He has two bullock carts and one hand power tiller.

His cattle population comprises of two bulls of 'Aligarh' variety, two 'kangeyam' cows (they are an indigenous variety that are very sturdy and can work like bulls – unfortunately they are fast disappearing) and three hybrid cows. He also has ten 'Jamuna' goats and forty odd mixed poultry of desi variety. He believes that desi is best explained this way: You can feed two Aligarh bulls the fodder required for one kangeyam cow. You can feed two Kangayam cows what is needed to feed one buffalo. And you can feed two buffaloes with what is required for one hybrid cow. So when you have to feed hybrid cows there is bound to be fodder scarcity. That is why he says that although he once owned twenty-eight hybrid cows he sold off as many as he could and purchased local breeds instead.

To enrich the soil with cattle manure he simply puts all the animals at night on a plot which is not under cultivation. Over a period of time, the accumulated dung and the urine generates earthworms and the soil improves naturally. He rotates the cattle in this manner around the different plots and saves himself the manual labour of having to clean sheds etc., and the bargain of getting good soil as well. It's the lazy way of doing farming, he laughingly claims.

There is no dearth of purchasers for the products of his farm. In fact, he always sells at a premium. He avoids brokers and wholesalers as far as possible and prefers to sell directly to the consumer at the farm itself. If no middleman is involved he claims he earns a 60% profit from such sales. For the past four years he has been selling the green turmeric as a root crop for planting material to other farmers.

He believes that panchagavya can cure people with ailments like psoriasis, ulcers, diabetes and arthritis and prepares panchgavya for sale for human consumption. Many officers from the agricultural department and the university visit his farm and though he is just an SSC, he is often invited to deliver guest lectures at the university in biology and zoology. Pushparani, his wife, is one of the leaders of TANWA (Tamilnadu Women in Agriculture).

His message: For the future, there is no choice except organic farming, if you want both agriculture and the agriculturist to survive. Many have already changed over. It is high time everyone does.

His recent interest is in promotion of eco system based agriculture. (Source: Norma Alvares)

#### E. ANAND

Ph.: 0431 2553757, Cell: 098942-53757

Anand a young man who actively pursued his father's dream of creating a forest on barren land while still in college. To his father's dream he added his own vision of creating a forest that could sustain a community of people who could work on the land, living in harmony with nature and with each other. A tall order indeed but one that Anand pursued with great fervour.

About a decade ago, his family purchased a plot of four and a half acres of land in a drought prone area. Three and a half acres were planted with a variety of fruit bearing trees like chickoo, mango and guava. One acre is cultivated with paddy and other cereals. The fruit trees have begun to bring in an income now. The cultivated crop is sufficient to feed the family of two adults and three children who live and work on the land. They have experimented with the Madagascar method of cultivating paddy.

His farm has been wholly organic from the beginning as he firmly believes in the natural way of life. He uses panchgavya which is self prepared and also some bio-fertilisers, which he purchases.

As there are no other sources available nearby he gets water from a bore well. His farm is presently the only green spot in an otherwise parched and barren landscape all around. He intends that one day, in the not too distant future, his forest will have not only fruit trees but a mixture of timber, fodder and medicinal trees, all indigenous forest species.

Anand says he is a first generation farmer. He has no prior experience in farming and is learning from those who are working on the land. Initially he took up the study of botany in college, not finding it of much use, he switched to biotechnology.

He is presently the state coordinator of the tree planting programme initiated by the Isha Foundation, Coimbatore.

(Source: Norma Alvares)

## R. NALLUSAMY & SHANTI

Koppampatty Post, Thuraiyur Taluka, Trichy – 621 012, Tamil Nadu. Ph.: 04327-253366

Nallusamy and his wife Shanti are well known tapioca farmers who have only recently converted their entire twenty-five acre farmland to organic. Nallusamy says that a few years ago he met Nammalvar who strongly advocated that he turn to organic farming. However, rather than take Nammalvar's word for it, Nallusamy decided to visit several organic farms. Being completely convinced, he converted his own farm to fully organic. The benefits were immediately visible.

Ten acres of the 25 acres farmland are under tapioca plantation, turmeric is grown on five acres, coconut plantation occupies another six acres and the remaining four acres have a mixture of paddy, onions and vegetables. Shanti is the one who actually manages the farm with Nallusamy co-ordinating the activities and assisting from time to time. They own five Sindhi cows. They now prepare herbal pesticide, panchgavya and vermicompost. Nallusamy says that with this combination of organic nutrients and pest management strategies no insects dangerous to the crops visit his field. Even rats do not dare to visit his farm, he confidently asserts.

He sells the rice directly to the consumer and at a premium -40% more than the market rate. There are enough local customers who want to buy from the farm itself so he does not have marketing problems for rice. Turmeric and onion are sold wholesale to the market while tapioca goes to the sago factories. The vegetables are for personal consumption only.

According to him, the ten acre tapioca plot gave them a harvest of four thousand 80-kg bags of tapioca. This was much more than they were getting earlier. Besides, with chemical farming the roots of the tapioca would break below the surface more easily, so part of the crop used to be lost that way. Now with organic farming the starch content in the roots is more, the soil is also looser and so the root crop comes out completely. It is the starch content that decides the sale price of tapioca and people even come all the way from Kerala to buy their tapioca at a premium.

Turmeric too has shown a better crop with organic farming. Previously he used to get 16 quintals per acre but now it has increased to 20 quintals. He attributes this increase in yield to the fact that he has gone in for mulching in a big way in the turmeric plot. Mulching also conserves water and prevents weeds from growing.

And if a farmer is still hesitant about switching to organic farming, Nallusamy offers one final reason which he says never fails to impress: 'We straightaway save Rs.1.5 lakhs a year by not having to purchase chemical fertilisers.' What more arguments will anyone need after this in favour of organic farming? That is why

Nallusamy has now joined the band of campaigners for organic farming, eagerly recommending to all farmers to switch to this form of agriculture at the earliest opportunity.

Nallusamy now takes classes on vermiculture for farmers at the agriculture department.

(Source: Norma Alvares)

#### M. KRISHNAMURTHY

Kullampalayathar Thottam, Perumapalayam, Nagalur Post, Via Athani – 638 502, Bhavani Taluk, Erode District, Tamil Nadu. Ph.: 042567-261463

Despite owning a fifteen acre plot of farmland, Krishnamurthy almost gave up farming since he simply could not make ends meet. His is a drought prone area and the main problem naturally is water shortage. Ironically, however, weeds grew in abundance and this state of affairs nearly drove him to despair.

Then he came to know of organic farming. He switched overnight to organic farming practices as he had nothing to lose. To his amazement he found that not only was expenditure on maintenance of the farm greatly reduced but that both the problems of water shortage and abundance of weeds become manageable issues instead of the nightmare they earlier were for him. So he has decided to continue to be a farmer instead of selling his land and migrating to the city.

He now owns thirty sheep and two cows. Three acres of the farm are under coconut plantation, two acres are sown with maize, two acres have bajra, one acre is for mixed vegetables and the rest of the farm is reserved as sheep grazing ground.

He follows some permaculture practices on the farm. He also prepares panchgavya and herbal pesticides but firmly says that it is the simple organic farming practice of mulching which turned his fortunes around. Not that he makes much money even now. Due to continuous drought over the past several years it is difficult for the land to yield as much as it should. He is forced to sell the sheep kids when they are just weaned even though at that age they don't fetch as good a price as they would if he were to rear them for a while, but he says he cannot afford to take a chance as later on his source of fodder could be scarce and insufficient.

All his energies are now spent trying to harvest every drop of water that falls on his land. He has tried rainwater harvesting on one acre. He has done farm bunding for all the plots, solely to ensure that all the water received is trapped. Mulching, he says, will take care of the rest.

He is a firm believer in organic farming for the simple reason that this alone has been able to give him reason to hope for the future.

(Source: Norma Alvares)

#### **VOICE TRUST**

18, Thathachariyar Residency, Mampala Salai, Tiruvanai Kovil (post), Trichy – 620 005, Tamil Nadu. Ph.: 0431-2433809/2650253

Contact Person: Mr. A. Gregory & Mrs. A. Jecintha

Voice Trust trains farmers in organic farming. It also buys the produce if a farmer cannot find a market for goods. Vegetables, maize and rice are some of the items that it purchases and are then sold in the open market. Voice Trust staff say that they have trained over a thousand farmers in organic farming persuading many of them to make a complete shift. It is their experience that the majority of farmers are able to find customers for their products without any assistance from them and very few in fact actually need help with making marketing arrangements.

(Source: Norma Alvares)

#### **FAARMS**

Office: 1 – A, Seeman Complex, Sivagangai Roadm, Madurai – 625001, Tamil Nadu. Ph.: 0452-2535603/2530143

Residence: 84-F, Kaliamman Koil Street, Pasumpon Nagar, Madurai - 625 001, Tamil Nadu. Ph.:

0452-2336659, 0452-3104616 Contact Person: Smt. K.S. Valli

FAARMS stands for Farmers Association for Agricultural Reformation and Modernisation Systems. It endeavours to establish a market for the organic produce of women, tribal communities and small farmers.

(Source: Norma Alvares)

#### DANIEL & JAYANTI KUMARAN

19 A, Shanmuganagar, SIPCOT, Pudukottai – 622 001, Tamil Nadu. Ph.: 04322 244551, Cell: 09443430963, Email: venturetrust@rediffmail.com

Daniel and Jayanti are a couple actively involved in promoting the concept of organic farming. On their five acres of land at Thiruvilaisolai they help to conserve in situ a variety of indigenous seeds that were going extinct. They also demonstrate various techniques of organic farming to farmers' groups interested in learning. Daniel says he learnt organic farming from Nammalvar. He also worked with AME and in 1982 did flood relief work with Oxfam. At that time the people told him there were varieties of crops that out of natural selection were found to be flood resistant. They were rarely sown, leaving the population in total distress when they were hit by floods.

Realization dawned on them that such seeds must be conserved and they began by conserving thirty-five different seeds on their farm. They have also given the seeds to over fifty other farmers for they believe that seed conservation practices to be truly effective should never be centralized.

Daniel is the convenor of the LEISA network in Pudukottai and the project director of Venture Trust. He also leads Green Action Network, which comprises of fifteen NGOs in the district. Daniel's work through LEISA and Green Action Network aims at developing farmers as scientists in their own land. Farmers are encouraged to experiment with practices that will help resolve the problems faced on farms. These land-to-lab farmer field schools are conducted all over Tamilnadu and are very popular especially for integrated crop management. The farmers' attention is particularly drawn to the need for nutrients to strengthen the crop's resistance to pests and other diseases.

On their own farm they grow paddy, maize, fodder and casuarina (the only mono-crop that fixes nitrogen in the soil). They have two 'Umblacherry' bullocks (indigenous to Tamilnadu) and two horses for transport. They also keep poultry - eighteen turkeys - which fetch them a good price on sale. They practice vermicomposting on the farm and train women farmers in vermicomposting.

They also undertook a project with the Pudukottai municipality to convert the garbage of the town into vermicompost.

(Source: Norma Alvares and Brochure)

#### V.C. KANNAN

220, Thirumalirunsolai, Pudukaraipudur Post, Gobichettipalayam – 638 313, Erode District, Tamil Nadu. Ph.: 04285 – 266303, Cell: 098427 61232

Kannan converted his six acre farm to 'fully organic' some years ago. Three acres are for sugarcane, one acre for paddy and two acres have a mixture of bananas, vegetables, turmeric, etc. He switched over to organic farming as he found that the chemical farming which he was earlier practising was not profitable. Also he learnt of the negative effects of chemical farming and how it degrades the soil.

Earlier he used to sell the sugarcane to the sugar mills but now with organic farming he finds that even 'waste products' have a use so he processes the sugar cane himself, making jaggery for which he has ready customers. He specializes in making jaggery powder which can be used directly in the tea, and is very popular. Earlier he used to buy hybrid seed but now he uses traditional seeds which he gets from his own farm and is therefore not dependent on the market.

His twenty animal cattle holding, four buffaloes and some bulls, all of indigenous breed provide him with plenty of cow-dung. He also owns a bullock cart and plough. He manages to sell the vermicompost that he produces from the sugarcane waste. Kannan also makes panchgavya and herbal pest repellants, using plants that are not eaten by cattle. Kannan also has a herbal clinic in his place. He has received good response to his treatments.

Kannan is an educated man having graduated in Tamil literature. Being an only child he was expected to look after the family plot. With his enthusiasm and interest in agriculture he is happy in the farming profession.

(Source: Norma Alvares)

## **REETA GANAPATHY**

Illuppakkorai – 614 202, Via Ganapathiagraharam, Papanasam Taluka, Tanjore District, Tamil Nadu.

On a five acre plot of farmland, Reeta cultivates paddy, vegetables, coconut and sugarcane, with turmeric being the intercrop in the coconut grove. The farm produce meets the family's personal requirements. Only the surplus is sold. Reeta says that they regularly get an income from the sale of vegetables and other farm produce. The family alone works on the farm keeping the costs down by engaging extra help only when they cannot manage themselves.

They have become organic farmers since the past ten years. Earlier they used chemical fertilizers and with it one naturally had to also use pesticides and so on. Finding the fertiliser cost very high they switched to organic farming. They also realised that chemical farming spoils the soil which is why you need more and more chemicals each year to give the same results and this is what makes chemical farming so costly. Now with the cattle they own they are able to prepare panchagavya, do vermicomposting, make their own herbal pesticides and so on.

Reeta is involved in more than just farming for sustenance on her own land. A school teacher, she resigned from her job and joined her husband in the farming profession. Frustrated with the place women are given in society and especially the injustices that her daughter had to undergo on account of being a girl she decided to start a womens' group. The women were trained by TANWA a Danish aided programme for women in agriculture. She was selected as the farmers' discussion group convenor at the Farmers Training Centre, Sakotai.

Hearing of a women farmers field training conducted by an NGO in another village the group approached the organisation for a similar training for them also. Training was held for 30 farm women from Iloppakorai village despite a lot of reservation from the men in the village. This proved to be an enormous confidence builder for the women. The NGO - Centre for Ecology and Research with assistance from the National Bank for Agriculture and Rural Development (NABARD) started an all women farmers club in the village.

A self help group to encourage the saving habit was started with Reeta's encouragement. Following the initial hesitation and reservation other women also gathered courage and started more self help groups. At present there are 20 such groups with 20-25 members in each.

- The women farmers club of Iluppakorai is involved in various programmes such as:
- Cattle health camps
- National environment awareness campaign
- Vermicompost training programme for solid waste management and organic farming using local resources
- Coir pith compost training
- Eco-development training for farm women and raising and maintaining a herbal garden in the backyard
- Training on bio-fertiliser and bio-pesticide productivity for sustainable agriculture
- Training in coir and coir mat making

The group was involved in taking over and protecting a sacred grove, Illupaithopu of 200 trees which was in a state of degradation and disrepair. By the efforts put in by the women the forest is on the path towards

restoration. This and other developmental initiatives taken by the women have enabled a breakthrough in the perspective of the village society at large towards the role of women in decision making. Women who till recently could not step out of their house are now approaching the women's group for assistance and involvement in different initiatives.

The All Women Farmers Club led by Reeta was awarded the 'Women's Creativity in Rural Life -2003 award by the Women's World Summit Foundation, Switzerland.

(Source: Norma Alvares)

## P. C. SUBRAMANIAM

Nasiyanur, Pallivalayam, Erode District – 638 107, Tamil Nadu. Ph.: 04326-240555

P.C. Subramaniam is a marginal farmer who practices integrated organic farming. He keeps his sheep in a deep litter house. He gets very good prices for his sheep. The manure from the deep litter house is used to enrich the soil and increase its water holding capacity. All his sheep are of the indigenous variety; he has carried out all his organic farming activities and experiments using sheep manure on his own and is pleased with the results.

(Source: Revathi)

#### K. S. RAGHAVAN

No. 2 Uppukinar Street, Kottur, M. Patnam PO, Pollachi, CBE – 642 114, Tamil Nadu. Ph.: 04259–2522271 Writes K.S. Raghavan:

I have inherited 6 acres of coconut plantations from my father and grandfather. 430 coconut trees of the age 27–30 years are growing on my farm. On this land, not a single ounce of chemical has been utilized since the 1960s despite the 'green revolution'. My grandfather had used considerable quantities of organic manures during his time but my father who planted coconut trees 30 years ago never used any form of manure whatsoever. A flood irrigation system had been adopted and coconut yields used to be, on an average, 90 nuts per tree.

In 1993 I took charge of the farm after my father's passing away and in 1994, the region experienced a severe deficit of rain. The well on our land could support only an hour of irrigation at a time and so I introduced a drip irrigation system for the coconut trees in order to cope with this water shortage. This proved insufficient and following problems in the drip system itself I went in for a bore-well, finding water at around 300 feet. I was able to revert to basin irrigation and introduced some organic inputs. The yield increased to around 120 nuts per coconut tree.

Hearing about Bhaskar Save in 1998 I thought I should pay a visit to his farm and tried to get some neighbouring farmers to accompany me. Since there was no interest from the others I ended up going alone to Gujarat where I stayed for two days with Bhaskar Save and learnt about his experiences personally.

Returning from Gujarat and inspired by what I had seen I began paying attention to mulching, even purchasing coconut waste from other places for this and also formed trenches between the rows of trees. I persevered with this 'extra trouble' every year much to the amusement of farmers around who could see no sense in my endeavours. An Eriophid mite epidemic affected the coconut crop in the state around that time resulting in a drop in my yield from 120 to about 100 nuts per tree. n,' 'The Natural Way of Farming' and the 'The Road Back to Nature' and meetings with our own natural scientist Nammalvar helped me continue to learn and apply the best natural options to my farm. I have received yields of 180 and even 200 nuts per tree from the farm.

In 2001 when I noticed profuse vegetative growth and decreased yields I again consulted Bhaskar Save. I decided to reduce the irrigation by adopting the platform and trench irrigation method. Besides this, two rows of glyricida plants which have a green manure value were also planted. My yields have regularly been better than the yields of those using chemicals to promote and safeguard their crops.

I am convinced about this approach and my goal is to move completely into pure natural farming eventually, spoken of by Fukuoka. Since 1998 onwards the moisture retention capacity of my soil has increased enormously and it is full of earthworms and other micro-organisms. All this, in a region where 6000 acres of coconut plantations were drying up and dying due to drought!

Mono-cropping and the intensive use of chemicals that have destroyed the soil are the main culprits. Farmers have not mulched their land resulting in a reduced capacity of the land to retain moisture and therefore large-scale water evaporation. Due to inadequate recharge wells also go dry.

My hope is that even without irrigation my land will yield good results in the future and Fukuoka's approach will be proved correct in India too.

(Source: Communication with OFAI)

#### S. THANGARAJU AND BANUMATHI

236/4, Akkarai Kodiveri Post, Kasipalayam (Via), Gobichetti Palayam, Erode District – 638 454, Tamil Nadu. Ph.: 04285 264150

Thangaraju and Banumathi are a couple from a middle income family who decided to switch to organic farming a few years ago. They follow all the standard organic practices. They specialize in relay cropping.

(Source: Revathi)

## MR. NALLASIVAM

Arachalur village, Erode District, Tamil Nadu.

Mr. Nallasivam has been practicing organic agriculture in rice cultivation for the past five years.

(Source: Revathi)

## MRS. SEETHALAKSHMI DEVARAJAN

Kalyana Mahal, 18, Venkatadasar Street, Sathyamangalam Town, Erode District – 638 401, Tamil Nadu. Ph. – 04295 220245

Mrs. Seethalakshmi hails from semi urban area. She decided to farm and initially used modern farming methods. However over the past few years she has switched over to organic farming and now she is a full-fledged organic farmer. The farm has an excellent sugarcane crop mulched with multiple green manure crops.

(Source: Revathi)

## **MARAPPE GOUNDER**

Marappe Gounder is an enthusiastic organic farmer doing organic farming for the last five years. He owns four acres of land, half the area being purely under rain fed conditions. He practices mulching on a large scale. The major income of the farm is from banana and sugarcane. Ha also keeps some cattle which provide him with additional income and organic inputs.

(Source: M. Revathi)

# P. K. DHANANJAYAN

READ Trust, Paramanandal Village & Post, Chengam Taluk, Tiruvannamalai District- 606 710, Tamil Nadu Cell: 09443019519, Email: readtrust@yahoo.co.in

READ Trust is a farmer information centre. Dhananjayan's farm is spread over 3.5 acres of dry land located at the foot hills of the Jawadhu hills. The main crops are paddy, groundnut and banana. The fringes of the farm have been planted with teak and coconut. The leaves of teak trees are regularly lopped to convert into green manure using earth worms. The farm uses panchakavya and herbal repellants and local plant species such as aadathoda, vitexnegunda, calopropics, neem, pongamia and lantana camara for pest control.

The Read Trust shares its knowledge on organic farming with interested farmers in the neighbourhood. It runs a Farmers Information Centre (FIC) in which news letters, pamplets etc., are displayed for the benefit of

farmers. The Trust also promotes the importance and use of biofertilizers like Azospirillum, Rhizobiam etc., to improve the soil conditions as part of conversion to organic farming. Dhananjayan is a district trainer for self-help groups and individual farmers in Tiruvannamalai District for vermicomposting and other organic practices.

(Source: Communication with OIP)

## MR. KUMARAVEL

Kanchikovil, Erode District, Tamil Nadu.

Kumaravel tries to innovate on his farm, particularly since he has limited water source. He combines trash mulch with live mulch. (Source: Revathi)

#### V. RAVI

Rajchettyar Thottam, Uppupallam, Kenjanur PO, Sathyamangalam via Erode District - 638 401, Tamil Nadu. Ph.: 04295 24779

Ravi is growing a variety of trees on his farm like nelli (gooseberry), pathimukham (from Kerala, bark used as a coloring agent), sapota, and guava. His farm looks like a wild patch of upcoming forest. He has put in place drip irrigation, inspite of enough water in the well. He sells earthworms and vermiwash.

(Source: Ramki Ramakrishnan)

## SARASWATHI KRISHI VIGYAN KENDRA

Pulutheri Village, R.T. Malai (PO), Kulithalai (TK), Karur 621 313, Tamil Nadu. Ph: 4323 290666, Cell: 09442190234, Fax: 4312768283, Email: skvkk@yahoo.co.in, Web:www.skvkk.org Saraswathi KVK is promoting agriculture through various approaches of technical assessment, refinement and demonstration of technology. Its technical team has experts in Agronomy, Horticulture, Plant Protection, Agricultural Extension, Agricultural Engineering, Home Science and Animal Science. It is supported by ICAR, New Delhi.

Their expertise is put to use in identifying location specific sustainable land use, training programmes in organic farming, sustainable agriculture, and appropriate rural employment. Their trainings are based on practice.

KVK is a service provider for the promotion of organic farming, group certification assistance to small and marginal farmers through ICS – Internal Control System under the scheme of National Project of Organic farming, Department of Agriculture and Cooperation, Ministry of agriculture, New Delhi.

(Source: Brochure)

#### **TEDE TRUST**

Office: 16, Vanigar Street, Thirupporur 603 110, Kanchipuram Dist., Tamil Nadu. Ph: 044 2744 6369

Residence: 1/123, I.T. Highway, Padur, Kelambakkam 603 103, Kanchipuram Dist., Tamil Nadu. Ph: 044-27474273/27446369, Cell: 09443346369, Email: tedetrust@rediffmail.com

Contact: R. Ranganathan

In Tamil Nadu, organic farming trials and experiments started from 1985. Tede Trust is one of the pioneers in the organic movement having built a wide grass-root farmer-cum-NGO net work in the state and is part of LEISA.

Their activities cover:

- Training in organic farming, permaculture and bio-dynamic agriculture.
- Campaign against pesticide poisoning.
- Production and marketing of all organic produce required for domestic consumption from honey to vegetables. (Source: Brochure)

#### N. GOPALAKRISHNAN

No. 4/19, Akila Nagar First Cross, Ganapathy Nagar, South Extension, Mambazhasalai, Thiruvanaikoil, Trichy - 620 005, Tamil Nadu.

Farm: Panickampatty village, Kuliathali Taluk, Karur District, Tamil Nadu. Cell: 094431 48224, 099421 67789, Email: dngopal2003@gmail.com / dngopal2003@yahoo.co.in

I am rooted to the village and my native village is Panickampatti of Karur district. My father and mother had no basic education. But through hard work they increased their land holding from a mere ½ acre to 60 acres and provided us with education. Out of these 60 acres I inherited 10.5 acres as my share. I used to follow the agricultural practices adopted by fellow agriculturists. My experience with chemical fertilizers and pesticides was not so encouraging. Cost of cultivation increased due to price escalation of basic inputs, at the same time there was steady decline in the yield. My see-saw battle continued with chemical farming till 1998. Having strongly felt the need to enhance agriculture production and also to do away with chemicals to save land from degradation and man from health hazards, I started experiments with natural ways of farming and organic farming in 1998.

My baptism with organic farming was with the preparation of vermicompost. Traditionally, even during my father's time, we used to compost about 400 to 500 tonnes of farm yard manure. This exposure proved to be a stepping stone for me. Instead of making farm yard manure I opted for vermicomposting.

Methods of vermicomposting at our farm at Panickampatti are:

Under Thatched Shed: Heap and tank method.

Under shadows of trees: Heap method.

Allowing earthworms to grow and multiply in between rows of plants like sugarcane, banana, etc.

In house: Earthworms in mud pots.

To get quality vermicompost the raw materials used are partially decomposed cow dung, farm waste, municipal waste, stalks of banana plants, small quantity of press mud, etc. Other organic inputs prepared onfarm are vermiwash, panchakavya, herbal pest repellants, lemon–egg solution, fish solution and amrutha karaisal.

All these organic inputs are being used in our lands. The other organic methods deployed to enhance soil quality and productivity are mulching, live mulching, etc. To know the extent of organic farming in our farms one may dig one square feet pit and easily find a minimum of 10 to 15 earthworms. Fertigation tank method is used to disperse organic inputs.

To enhance the efficiency of Panchagavya the following ingredients are added with primary panchakavya inputs.

Asafetida - To induce flowering and to avoid shedding

Eggs of Chick - To increase mineral content of Panchakavya

Tricoderma Viridi and Pseudomonas – To check the spread of diseases and to create resistance.

With the support of Consumers Association of Penang (CAP) training programmes were conducted in Malaysia and Malaysian farmers were given training on our farm at Panickampatty. I had the privilege of meeting our former President of India Dr. APJ Abdul Kalam at Delhi in March 2004. In 2007, earthworms from Panickampatty farm were taken to Mughul Gardens, Rastrapathi Bhavan, New Delhi to setup vermicompost beds. More than 4 lakh people have visited our farm over these years for a firsthand exposure to organic farming.

Organic farming is popularized by holding exhibitions, practical demonstrations and through newspaper articles, radio and television shows. You are welcome to visit my farm at any time to gain first hand experience on organic farming.

(Source: N Gopalakrishnan)

## P.B. MUKUNDAN

H. No. 92, Rajaji Street, Chingalpet 603 001, Dist. Kanchipuram, Tamil Nadu. Ph.: 044 27423902. Cell: 09382337818.

P.B. Mukandan has an organic farm and keeps a dairy of 40 indigenous breed cows. Five years ago, Mukandan made a trip all the way from Tamil Nadu to Rajasthan in search of indigenous, hardy cow breeds to start his dairy farm. On his first trip he collected 11 Tharparkar breed cattle from Bassi and Durgapur Gaushalas in Rajasthan. Subsequently, some locals helped him to scout remote villages in Jaisalmer and add 30 more to his collection. He has successfully established his dairy by selective breeding of these indegenous cows. He says it is ideal to introduce a fresh bull into the group after every three years; otherwise inbreeding causes deficient quality off-springs. He has recently obtained a Tharparkar bull from a line that has recorded 3200 liters of milk per lactation. He sources his fodder from Sundararaman's organic farm in Satyamangalam. The feed consists of ragi, makha, black and red gram kernels/powder. Groundnut cake and boiled bran are procured only from known sources to maintain the quality of milk and health of cattle. The cows average eight to ten liters of milk per day per lactating season.

The milk is sold locally at Rs. 20 per litre and he claims, the fresh milk (unprocessed) has a shelf life of 15 days in the refrigerator. There is no dearth of customers, who come every evening to his home to buy milk and at the same time pickup other fruit and vegetables that he grows organically. His expense per cow comes to about Rs. 50-60 per cattle head per day. He is presently trying to introduce an alternate feeding process whereby the cost will further be reduced to Rs.15 to 20 per day. He selected Tharparkar variety because it is a country animal and easiest to maintain.

On his organic farm he grows fresh vegetables, local paddy and sugarcane. His coconut palms yield 200 to 300 nuts per season. His technique of growing groundnut has been studied by the Agriculture University of Tamil Nadu, and has also been recognised with an award for innovation. This season, instead of sending the sugarcane to the mills, he extracted fresh juice on the farm mixed with lime and ginger. The packaged drink is being sold in Chennai very successfully- fetching him premium returns.

His views on organic outlets are worth noting. He believes that growing of vegetables organically along side dairy is worth exploring by farmers as consumers want fresh vegetables everyday. This can generate ready cash income everyday for the farmer. While most organic outlets only stock grain and processed/ semi processed products that consumers' do not necessarily shop for on a daily basis.

He believes that a little bit of planned and organized hard work in the initial stages on a farm can make the further running of the farm smooth. For example he has prepared a raised bed for vegetable growing. A plot of 8'x 70' with radish and beans gives him an income of Rs. 8,000 sowing. His distress over the plight of his fellow farmers who are in debt or struggling to make ends meet comes across very clearly in his articulation on how farmers are either misinformed or mislead by the proponents of synthetic farming, official agencies, pesticide and fertiliser industry etc. while others are plain lazy.

Even mechanisation in agriculture attracts his dissent, and he says, 'A farmer only needs small indigenous tools for his practices and not huge machines that are promoted as indispensable by manufacturers.' His faith in the bullock being a farmer's best companion is undeterred. He says, only Gandhi and the bullock have understood, served and worked in the interest of the farmer.

(Source: Tele-interview with OIP)

# **ILANGOVAN & BEAUTY TRUST**

39, Thirumanjana Street, Tal: Lalgudi, Dist.-Tiruchirapalli, Tamil Nadu 621601. Ph.: 0431-2543755, Cell: 09842411953

The 3 hectare farm is located in Edaiyatrumangalam, Lalgudi. He is using vermicompost and other organic farming methods since five years, before which the farm used chemical inputs for 10 years. Rice, sugarcane, banana, coconut are cultivated. Surplus produced is sold alongside educating the consumer on benefits of organic foods.

Ilangovan has been a Zilla Parishad Board Member for three terms since 1996 and has used his position well to propagate organic farming methods within the district through the panchayat and the Beauty Trust. The trust works with 45 local associate groups in close association with 1000 farmers within Tirichirapalli through 408 village panchayats.

#### **V.ANTONY SAMY**

#53, Westcar Street, Sinthamani, Pulliyangudi, Taluk Sivagiri, District Thirunallvelli, Tamilnadu. Ph.:04636 233343 Cell: 9443582076

V Antony Samy is farming organically for the past 19 years on his 150 acre farm. In 1991 he converted to organic methods of farming. His first organic crop was paddy and later he began to cultivate other crops like sugarcane, fruits, vegetables using organic practices. Presently he is cultivating sugarcane – 20 acres; lemon – 60 acres; amla – 20 acres, paddy – 30 acres. On the rest of the farm he grows vegetables.

Prior to 1991, he applied all fertilizers – N P K and micronutrients – to his fields as per recommendations and popular practices. However, the fertility of the soil did not show any improvement. So he began by introducing the practice of mulching, and then in time converted to organic fully.

He makes jaggery from the sugarcane and uses the byproduct – molasses – for the preparation of fish extract. This is used to improve nitrogen fixation in the soil.

During his chemical farming days, he says, he used to spend in thousands on synthetic inputs because everything had to be purchased. But now, nothing comes from outside except diesel, electricity and salt. He is also saving 40% water as compared to previous use, the crops are drought tolerant and there is less of pest and disease incidence and total self-reliance.

(Source: Tamilarasi)

#### R. SRINIVASAN

Vil: Kurumbarai, Post: Polambakkam, Taluka Cheyyur - 603 309, Kancheepuram District, Tamil Nadu. Cell: 09884756090

The 15 acre farm is in Kurumbarai village. After having farmed chemically for 40 years he switched to organic farming a few years ago. Maize, Ragi, Chili, Sugarcane, peanuts, corn, pulses etc are grown on the farm. He uses sprinkler irrigation for groundnut agriculture after the harvest of which black gram and maize are cultivated on the same ground. Surplus is marketed. (Source: Communication with OIP)

## A. RAJA PANDIAN

No. 2, U.V. Saminathan St., Maruthi Nagar, Raja Keelpakam - 600 073, Chennai, Tamil Nadu. Ph.: 044-22270687, Cell: 09840620660

The farm is in Moovalur, P.O. Malliyam in Nagapattinam district. After farming chemically for 20 years he switched to organic farming two years ago because the yield on his farm was going consistently down. With urbanization creeping into rural areas, availability of labour also was a difficulty. Coconut, paddy, some vegetables, cotton, sugarcane are cultivated. Every acre of land yields 25 bags of paddy which is sold to the government department, CTNCSC Civil Supply Corporation. Vermicompost, panchagavya, mulching, farmyard manure, compost are used. Cows on the farm provide dung, bore well is used for flooding paddy field. Paddy and sugarcane crops are interchanged. Paddy and cotton is sown in the proportion of 2:1, paddy and pulses are sown in the proportion of 2:1. This is alternated with growing green manure for one season. He is part of a local organisation of 700 farmers that meets once every three months to share farming notes.

(Source: Communication with OIP)

# P. ADAIKALARAJU

82/36, S.M.E.S.C. Colony, II Cross, K.K. Nagar (P.O.), Tiruchirapalli – 620 021, Tamil Nadu. Cell: 09443581704

The 4 hectare farm is located in Valanadu of Manapparai Taluka. Raju has been farming organically for the past two years. Paddy and cotton are cultivated using cow dung compost and he wishes to now experiment with mulch.

(Source: Communication with OIP)

#### A.DHANRAJ PATIL & ARIVAGAM TRUST

Arivagam Trust, 36 Thirumangalam Road, Santhaipettai, Lalgudi - 621 601, Tamil Nadu. Ph.: 0431-6541986, Cell: 09943018554, Email: humenreach@gmail.com, Web: www.tamilwriters.com

A. Dhanraj's 5 acre farm is located at Kovilady in Tiruraiyaru. He has been farming organically for the past 25 years cultivating paddy, banana and growing green vegetables for home consumption. Some vegetables are sold to friends at cost. Panchagavya, green manure, organic pesticides are prepared from 'bitter leaves' and used on farm. He also uses Cyanobacteria. Water is sourced through channels from river Kaveri.

ARIVAGAM TRUST has been working on organic farming issues for the past five years. They are linked to 15 NGO groups and 250 women groups. They work directly with 2500 farmers who are being slowly converted to organic methods. These methods are being introduced for paddy, banana, vegetables and herbals. Their approach is through trainings and advocacy. Some experiments in coordination with University of Bharadhidhasan, Trichy on Cyanobacteria in the vegetable gardens have yielded very good results.

Contact Person: A. Dhanaraj, Project Director.

(Source: Communication with OIP)

# R. RAMAKRISHNAN

Vil. & Post Vaipoor, Tal. & Dist. Tiruvanamalai - 606 774, Tamil Nadu. Ph.: 04175-244791, Cell: 09787179096

The 9 acre farm is located at Vaipoor. He has been farming organically since 1998 before which he practiced chemical farming for 20 years. He grows 3 acres paddy, 2 acres sorghum, 4 acres sugarcane and vegetables for home consumption on 5 cents of land. Produce is sold to co-operatives and the Pasumai Angadi Green House in Erode. This has been set up by member farmers throughcontributory payment. He uses panchagavya, pusivariti (organic pesticide), cow dung, mulch, green manure, sanapai on the farm. When panchagavya is applied, paddy is 30% larger in size and there is 6-7 times increase in yield.

(Source: Communication with OIP)

# S.A. DHARMALINGAM

250 Suneisandai, Taluka Senumpatti Bhavani, Dist.-Erode - 638 504, Tamil Nadu. Ph.: 0425-8258527.

The 5 acre land is located at Suneisandai. He has been farming organically since 1985 and converted fully in 1992 before which he practiced chemical farming for 30 years. Chili, papaya, pumpkin, local vegetables, banana, onion, tomato, brinjal and beans are grown on his farm. The vegetables and fruits are marketed through associations, banks and offices. Mulching, compost, man-pullu (earthworm) vermicompost and panchagavya are used.

(Source: Communication with OIP)

## M. SHANTHIMANI

Uppupalayam, Kuppon (PO), Tal. Aravakkurchi, Dist. Karur, Tamil Nadu. Cell: 09994523911.

(Source: Communication with OIP)

## **NARAYANAN SWAMI**

Kanakilianallur, Lalkudi Tal., Trichy Dist., Tamil Nadu. Ph.:0431-2651143

Narayananan Swami has very recently started experimenting with organic farming. His farm is located in Kanakilianallur, Lalkudi. He grows paddy, bajra, ragi, chilli and cotton. He uses cow dung, panchagavya, EM and fruit toddy mixtures for applying on his farm.

(Source: Communication with OIP)

#### PALANISWAMY K.V.

Venkataswamy Illam, Kethanur – 641 671, Tal. Tiruppur, Dist. Coimbatore, Tamil Nanu. Ph: 04225 279220/279241, Cell: 09843059241, 09943979791

Prakash Paper Mills, Pattam, Pottapalayam – 630 611, Sivagangai District, Tamil Nadu. Ph. 0452 2465744, 3092767.

The 10 acres of Palaniswamy's farm are devoted to organic vegetable farming. He has been farming organically for the past two years before which he practiced chemical farming for 34 years. He has a variety of vegetables that are supplied to the market. He practices raised bed farming and supplies water for just 15-20 minutes per day. Pheromone and light traps are used for keeping away insects. Azolla is fed to the cows and the water is used for the vegetable plantations. Panchagavya is the main spray used. He uses fish solution for his vegetable garden. Old fermented butter milk is kept for 7 days and then sprayed on plants to stimulate higher flowering. This directly translates into extra vegetable produce. Vermicompost is used on the whole farm. He produces bitter gourd, snake gourd, ridge gourd, lady finger, tomato, gherkins, beans and drum sticks. The seeds are supplied to the local agricultural university.

(Source: Communication with OIP)

#### DR VIJAYAKUMAR

Pudukarai village, Gobichettipalayam, Erode district, Tamil Nadu. Cell:9976025215, 9842744412.

Dr. Vijaykumar started his organic farming activity in 2007-08 on five acres of land in Pudukarai village, Gobichettipalayam. Since it is a river belt area, paddy was the main crop in the first two seasons. Presently he is cultivating paddy on one acre, sugarcane on two acres and turmeric on two acres. Four cows are being reared on the farm to meet the requirements for biological preparations like panchakavya, amurtham solution, arappu, coconut-buttermilk solution and also for other preparations. He converted to organic under the guidance of Mr. Sundararaman.

In the cultivation of paddy - for land preparation - he uses green and green leaf manures to build up soil nutrient levels; followed by the usage of various bio items – MEM (Microorganisms Enriched Mixture), Archea bacterial solution and bio-fertilizers like Azospirillum, Pseudomonas, VAM (Vesicular-Arbuscular Mycorrhizae), Phosphate solublising bacteria, Potash solublising bacteria and growth regulators such as panchakavya, fruit gaudi etc.

Says Tamila, "On my visit, I noticed the colour difference between his and his neighbour's paddy fields. The neighbour's farm was a very dark green – a specific response to the application of urea. In contrast, Dr. Vijaykumar's paddy field was a normal light green."

In the cultivation of sugarcane - for the initial buildup of soil nutrients he applys poultry manure at three tons/ acre before 60 days of planting. During planting, he sows multiple varieties of seeds in alternate furrows and the de-trashed thrashes are mulched in the furrows to increase biomass. After cutting of the first crop, the crop residues are not burnt; instead they are mulched in between the furrows and grown as a ratoon crop.

The turmeric crop is grown using various bio-fertilizers, poultry manure, bio-items and bio-control agents for uniform growth and management of pest and diseases.

Dr. Vijaykumar reports that, of his eight years of farming experience, in the past two years, the yield has been good in quality and quantity.

(Source: Farm visit by Tamilarasi)

#### **K.NALLASAMY**

Errikari Thottam, Perumal kovilpudur, Nakalur post, Anthiyur – 638502, Erode District, Tamil Nadu. Cell: 9842729596, 9842829596

K Nallasamy's farm is situated at Anthiyur, Erode district. He started organic farming on seven acres in 2003, growing paddy. Comments Tamila, "I have never seen a crop with such luxurious growth; free of pest and disease."

In the past seven years, he has tried to grow varied crops like cotton, maize, organic SRI paddy- white ponni, kichadisamba-native varieties of TN, Kadali banana (with ratooning) and sugarcane. The turmeric crop is exceptional and pest free. Presently he cultivates paddy (white ponni, kichadisamba) on two acres, turmeric on two acres and the 2nd ratoon banana crop stands on three acres. The leftover sugarcane thrashes are mulched in between in the standing banana crop.

He started organic farming with various preparations, but has now switched to natural farming practices with minimal inputs. Biogas slurry is mixed with the irrigation water for all crops. Cow urine is added into the chamber of the biogas plant to obtain high quantity of methane and also to enrich the biogas slurry. This he says is giving excellent yields consistently, that too, without much investment. He firmly believes that continuous sustainable yield can be achieved only through organic agriculture.

(Source: Farm visit by Tamilarasi)

# PARVATHI VENKATESHWARAN

W/o Venkateshwaran, Pallatu Thottam, Alukuli post, Karatadipalayam, Gobichettipalayam Taluka, Erode District, Tamil Nadu. Ph: 04285 264103, 264646

Mrs. Parvathi Venkateshwaran is doing organic farming for the past six years on 40 acres of land. She grows sapota on ten acres, turmeric on two acres. Coconut & cocoa is intercropped on ten acres of land; white ponni, delux ponni on eight and half acres.

The farm benefits from the application of various preparations like panchakavya, coconut butter solution, puchiviratti, EM & Extended EM solution and fruit gaudi prepared by using the over ripe, diseased, and damaged sapota fruit. Earthworm rearing is undertaken for the production of vermicompost which is used on the farm to enhance the soil and improve crop productivity. Biodynamic preparations are made using cow horns, cow dung, cow intestine etc. Goat rearing is in practice on a large scale- over 25 goats of the Telecheri and Jamunapari cross. Azolla, for feeding to the cattle, is grown under coconut trees.

(Source: Farm visit by Tamilarasi)

## SENTHIL FARM

Bangalapudur,28, New Hospital Road, Gobichettipalayam- 638452, Erode District, Tamil Nadu. Cell: 9842089273, Email: HYPERLINK "mailto:visualv@gmail.com" visualv@gmail.com

Contact: V.Senthilkumar

Senthil's father, late Shri. Venkatachalam, a leading organic farmer started organic farming in 1998 in horticultural crops like guava, amla and mango. Now Senthil continues in his father's footsteps. The farm is 34 acres in size with eight acres each of guava, amla and mango. Pathimugam (a medicinal plant) is grown on an eight acre farm located at Kallipatti in Gobichettipalayam Taluk,

He has intercropped alovera within the orchard to conserve soil moisture in the farm and uses rice paste to control sooty mould disease in guava and mango. Irrigation is through drip lines. Panchakavya and EM are applied through irrigation.

He has perfected a growth promoter recipe of his own – coconut water is collected and left to stand for a week, after which panchakavya and EM are added to the fermented liquid and left to ferment for another week. (The proportions being- coconut water-350 L: panchakavya -1L: EM solution-1L). This can be applied through irrigation or can be sprayed at weekly intervals.

He says that five banyan trees in a village can fulfill the water needs of that particular village. Also, the soil under a banyan tree contains millions of beneficial microorganisms. So he recommends that five kg. of this soil be applied per acre. This will improve the soil quality by increasing microbial population. (Source: Farm visit by Tamilarasi).

## A. MEENAKSHI SUNDARAM

No. 104, Karuneegar - Street, Kalasapakkam-Post, Polur Taluka, Tiruvannamalai - 606 751, Tamil Nadu. Ph.: 04181 - 241402

(Source: OFAI)

## PASUMAI BIO CONTROL LAB

15, Main Road, Ammapettai, Bhavani Taluk Erode District, Tamil Nadu. Ph.: 04256 227080, Email: pasumai bio@rediffmail.com

Mr. John started a Bio-control lab in 2000 at Ammapettai. He is producing and selling Braconoid eggs, Trichogramma japanicum, T.cholonis eggs, NPV virus and also bio-control agents like Trichoderma viridii, Pseudomonas, Ervid bugs etc.

All these Bio products are recommended for pest & disease control in various crops like sugarcane, paddy, turmeric, coconut, mango, banana and most types of fruit crops.

(Source: Farm visit by Tamilarasi)

## **U. K. PALANISAMY**

Unchapalayam, Budapaddi post, Bhavani Taluk, Erode District -638311, Cell: 9842457266, 9965557266

U K Palanisamy is a retired Elementary School teacher doing organic farming on seven acres of land since 2009 at his farm in Unchalur. He started by growing cotton organically and moved to crops like sugarcane, paddy, red banana, tapioca. Presently he has intercropped three crops – groundnut, sugarcane and onion - with perennial trees. He has maintained a distance of eight feet between two rows; in this space onion and groundnut is intercropped, sugarcane is planted according to the pit method, irrigation is through drip lines.

He intercropped cowpea with sugarcane and found cowpea to be the best crop for pest control. He applies EM and jeeva amritham solution through irrigation water. For control of pest and disease he sprays a mixture of Calcium carbonate, green chili, tobacco powder. All the needs of the home like vegetables, rice, oil, pulses and fruits are met by the farm itself.

(Source: Farm visit by Tamilarasi)

# **RAMALINGAM**

Annur Gounder Thottam, Sathyamangalam-638402, Tamil Nadu. Cell: 9965699288.

Ramalingam has been farming organically since 2000 on 40 acres of land. He is now well experienced in growing crops like turmeric, banana and tapioca. He uses Bio-controllers like Pseudomonas fluorescens, Bacillus sps. for the management of disease and applies chicken manure to the farm during land preparation to supplement soil nutrient content. He recommends Pseudomonas + Panchakavya for leaf spot disease and Trichoderma viride + Bacillus for root diseases.

The farm has yielded 13 to 15 kg of banana (Kadali variety) per tree and 18 tons of tapioca per acre. He uses biogas slurry as multiplication base for the microbes, 15 days prior to application. (Source: Farm visit by Tamilarasi)

## **K.R.SUNDARAM**

1/1A Kovil thottam, Annur, Coimbatore – 641 653, Tamil Nadu. Ph.:04254 264278, Cell: 9600916166

K.R.Sundaram has been farming organically for the past five years on 3 acres of land. The use and application of panchakavya, EM solution, jeeva amritham have given an yield of 15 to 16 kg banana (netharan variety) per

plant. In sugarcane, he has achieved an yield of 80 tons per acre in the first crop and 68 tons in the third crop He says dipping the young banana suckers in the above solutions will avoid most of the pest and disease problem in the initial stage of the crop. He normally divides his field into two equal parts, in one part he plants banana while the other is left fallow for a season. In the next season this land is cultivated while the just harvested land is left fallow.

In his experience, panchakavya is an excellent growth promoter. He sprays it on the banana bunches to get good quality fruit. A vegetable garden is maintained to meet home needs.

(Source: Farm visit by Tamilarasi)

# A.P. RATHINASAMY

Guruva Rettiyar Thottam, Allikullam, Annur, Coimbatore- 641653, Tamil Nadu. Cell: 9943196914

He started organic farming according to Subash Palekar method in 2007 and has intercropped red gram, green gram, black gram, onion with banana on two acres. Jeeva amrita and panchakavya are applied to the farm through irrigation.

(Source: Farm visit by Tamilarasi)

## **Smt. INDRA RAMANATHAN**

Vadakku Thottam, Kanakkam Palayam Post, Kallipatti, Erode-638505, Tamil Nadu. Ph: 04285 263333, Cell: 9345981081

The 152 acre Indra Ramanathan Farm at Kallipatti is being farmed by Smt. Indra since 2008. It is an organic orchard with tree crops; On 60 acres, 2000 coconut trees are intercropped with cocoa plants and a1000 dates palms and 300 mango trees. On 75 acres 3000 coconut trees are intercropped with malaivembu, savuku, kumil, rosewood (timber value tree), jathikai, pomegranate, jackfruit and guava. On 15 acres is sapota. White ponni rice is cultivated on two acres

Jeeva amrita is applied to the farm through drip irrigation.

An organic nursery sells malaivembu, dates, jack, jathikai, nagalingam and many other tree seedlings. Five cows are maintained. She makes her own preparation by using goat manure, cow urine, gobar gas slurry and Azospirillum to enrich soil microbial population. There are no external inputs to the farm, only the produce goes out.

(Source: Farm visit by Tamilarasi)

#### S. A. MYILSAMY

Kannakan thottam, Chettipalayam, Aalathur post, Kavanthapaddi via, Bhavani Taluka- 638455, Erode District, Tamil Nadu. Cell: 9965154640, 9965154642

Myilsamy has a 20 acre organic farm and has in the past decade gained good experience of growing turmeric, sugarcane and paddy. Presently he grows Bhavani rice on 2 acres. This land was initially not at all suitable for agriculture; however using organic practices along with various soil enrichment techniques like use of green manures, application of FYM, panchakavya and jeeva amirtham solution, he cultivated paddy - SRI method.15 acres are cultivated with sugarcane. Mulching has helped in increasing the biomass to a great extent. (Source: Farm visit by Tamilarasi)

# **BALASUBRAMANIUM**

S/o Palanisamygounder, Thoppampatti, Narasimmanayakan palayam, Mettupalayam, Coimbatore, Tamil Nadu. Cell: 9944475099

Balasubramanium practices organic farming on seven acres of his land and is well experienced in growing mulberry and banana. Banana has yielded bunches weighing 18-19 kg. He says the cost of cultivation using organic methods is low and the keeping quality of the fruit is very good.

(Source: Farm visit by Tamilarasi)

#### ARUN LAKSHMINARAYANAN

AIG Farms, vedapatti, Thondamuthur road, Coimbatore, Tamil Nadu. Cell: 9843015951, 9442222908

Arun Laxminarayanan is farming organically on 10 acres since 2000. He has grown 700 coconut trees, 2500 areca nut trees. The land is fully mulched with areca nut and coconut palms. Glyricidia has been planted to fix the free nitrogen from the atmosphere. He applies panchakavya to the farm once in every 15 days. (Source: Farm visit by Tamilarasi)

## KASTHURI RANGIAN

Malankuli, Thalavadi, Sathyamangalam-638461, Tamil Nadu. Cell: 9443388145, 9442222908, 9842255908.

Kasthuri Rangian is a former Mechanical Engineer practicing organic farming on 98 acres of the 150 acres of total land. He cultivates 40 acres of amla, 25 acres of cashew, 15 acres of mango, 12 acres of coconut, 4 acres of sugarcane. On the remaining two acres, vegetables, sapota, banana, dates and so on are cultivated.

Since the land was uncultivated, he offered to build cowsheds for the local cattle keepers. The cow dung and urine was then purchased by him and used for improving the soil on his land. (Source: Farm visit by Tamilarasi)

## **NANDHAKUMAR**

Sri venkateswara Blue Metal, Mangalakarai pudur, Karamadai via, Mettupalayam, Coimbatore – 641301, Tamil Nadu. Cell: 98452 72 439

Nandakumar is practicing Biodynamic Farming on 40 acres since 2007. He has cultivated 20 acres of coconut, 8 acres of banana, 7 acres of curry leaves, 5 acres of mango and sapota. Within the banana plantation is intercropped red gram, lady's finger, black gram, sorghum, avare (bean) and green gram.

On the farm, he rears eight Kangayam breed cows, six Jersey cross breed cows and 95 sheep. He prepares panchakavya, amirtha karisal, Cow pit pat (CPP) 500, 501 and fish based manure. He has a dedicated building for the purpose of making these preparations, giving it a degree of professional efficiency. This was developed with the assistance of Mr. Navaneetha Krishnan of Mettupalayam.

Apart from this, the biomass is dumped as mulch in the banana field. Using Biodynamic farming techniques he has achieved a yield of 30 kg per bunch in G9 variety banana. He says that in the initial stage the yield had reduced, but now it is beginning to improve and the keeping quality of the fruit is very good. (Source: Farm visit by Tamilarasi)

# **R.RAMAMURTHY**

52-Gt, Annur Road, Mettupalayam – 641301, Coimbatore, Tamil Nadu. Ph.: 04254 223952, Cell: 98422 23952.

R Ramamurthy is doing organic farming on four acres since 2001. He is well experienced in growing different varieties of banana - kadali, red banana, robusta - using organic methods. The yields have been exceptionally high. He grows vegetables using the double digging method for his home consumption. He says there are less pest and disease attacks in organic cultivation. (Source: Farm visit by Tamilarasi)

#### K. SURESHKUMAR

B-4 Lakshmi Narayana Apartments, Dr.Suburayan Street, Tatabet, Coimbatore-12 Tamil Nadu. Ph: 0422 2490612

Sureshkumar is farming organically on eight acres since 2000. He cultivates banana-(nethran, kadali), brinjal and tomato. Borders are cropped with ridge gourd. He is one of the rare farmers maintaining country bullocks for land preparation activities. Initially this eight acre farm had alkaline soil, which he nursed back to the appropriate pH through organic applications. (Source: Farm visit by Tamilarasi)

#### RAVICHANDRAN

Prasath textiles, Veerakeralam, Vedapatti, Coimbatore, Tamil Nadu. Ph.: 0422 2572144

Ravichandran's 25 acre farm is planted with coconut trees. He has kept 35 cows under intensive rearing method. The dung from these cattle is utilized for vermi-composting, which is done under coconut trees. One can see a good population of earthworms and very high soil fertility.

(Source: Farm visit by Tamilarasi)

## **S.CHINAPPAN**

Vattul valasu,malliyam palayam, Karumandam palayam, Erode District, Tamil Nadu. Ph: 0424 2351136, Cell: 94430 19781.

He started organic farming in 2004- growing turmeric. Prior to cultivation he sows green manure crops like diancha, sunhemp. Presently, he has three acres turmeric, five acres coconut intercropped with fodder grasses and one acre ragi. He owns 5 goats and 12 cows. (Source: Farm visit by Tamilarasi)

#### **C.V.SUBRAMANIUM**

3' R Spiritual farm, Polumvampatti road, Thanamanallur post, Thondamuthur, Coimbatore-641109. Ph.: 0422 2906200, Cell: 9994368998.

Subramanium, a retired Engineer and his wife practice natural farming on their 12 acre farm. Of these, two and half acres are planted with coconut intercropped with different varieties of banana -red banana, rasthali, thenvalai, nentharan, kadali - drumstick and pomegranate. Irrigation is supplied through two feet deep trenches along which are grown pigeon pea, cowpea and maize.

An acre and half is planted with amla and kadali banana. On the border grow neem, pungam, banyan, glyricidia. Another two and half acres are occupied by 40 species of trees. The tree species diversity on the entire farm is over a hundred. Rainfed crops are cultivated on the remaining five and half acres. Vegetables, greens and millets are grown for home consumption.

He designed and built his house using eco-friendly materials. It is surrounded by green plants and trees. The eco-friendly home has fetched him many awards and citations. Source: Farm visit by Tamilarasi)

#### **A.ARAVIND**

13, Saminathapuram post, Erode District-638104, Tamil Nadu. Ph.: 0424 2500057, Cell: 9443909980.

A Aravind has been farming organically for the past five years on three acres of land. The main crops are sugarcane and tapioca. The vermi composting unit on his farm produces 40 tons of compost every month. It is sold to floriculture units in Hosur. A ton of organic sugarcane from his farm produced 110 kgs of sugar.

Aravind uses azolla for animal feed and various preparations like neem cake extract, EM solution, Humic acid and panchakavya for growth promotion pest and disease control. He utilizes composted coir pith as main raw material/substrate for vermi composting. For the composting of coir pith, cow urine and cow dung is mixed in layers.

(Source: Farm visit by Tamilarasi)

# ABDUL AHEEM FARM, METTUPALAYAM

Abdul Aheem, S/o.Shaik Mohammad, 2/1 main road, flower Avenue, Cheranmanagar, Coimbatore -35, Tamil Nadu. Ph.: 0422 2669034, Cell: 98409 87434.

He is a retired Botany Professor from Govt Arts College, Coimbatore, using his time well after retirement, by farming organically on his two acre farm. He sells organic coconut seedlings, coconut oil, and coconuts.

(Source: Farm visit by Tamilarasi)

## T.S.RAMAN

Green Kovai farm, AIMS for SEVA, Annaiketti post, Coimbatore- 641108, Tamil Nadu. Ph: 0422 265 7001, Cell: 94426 46713.

Ramam ji is the project manager of the 18 acre Green Kovai farm that is farming organically since 2002. The farm is spread in units, cultivating medicinal plants and an orchard. The farm keeps 23 cows.

The farm cultivates medicinal and aromatic plants like sweet margoram, geranium, rosemary, Gymnema silvestris on three acres; amla- two acres; guava and mango- two acres; eucalyptus- seven acres; and half an acre has different species of trees. The farm has its own oil extraction unit. The oils are sold as raw material for further value addition. Amla is sold after drying. It is a good medicinal plant farm cultivating several varieties. (Source: Farm visit by Tamilarasi)

#### **SELVARAJ**

M S organic Farm, Uvasimangalam, Alanthurai, Siruvani, Coimbatore-641101, Tamil Nadu. Cell: 9344451474, 9965975534.

Mr. Selvaraj is farming organically on his ten acre farm since 2004. He cultivates crops namely banana (poovan variety) intercropped with onion on three acres, tomato on two acres and ragi on one acre. The predominant crops in these areas are vegetables such as tomato, brinjal, ridge gourd, snake gourd, coconut and grapes.

Additionally, he has an organic nursery and selling point, in which vegetable seedlings, flower crop seedlings are prepared. He uses composted coir pith as bed material along with vermicompost in the proportion of 9:1. Coir pith is composted using panchakavya. According to him, the survival rate of saplings and keeping quality of the fruit is high when grown in this fashion. The tomato and onions from his farm have a shelf life of one and six months respectively. In his experience, organic farming requires less water too.

(Source: Farm visit by Tamilarasi)

# **C.GANESHAN**

21, Senguntapuram, II nd. cross, Ramanutar Nagar, Karur-639 002, Tamil Nadu. Cell: 9865209217

C Ganeshan is an organic farmer and a breeder and collector of high yielding indigenous cattle breeds since 1980. His experience over the years has made him into an expert in this field. Mura buffaloes; cow breeds - Red Sindhi, Tharparkar, Kangayam, Gir, Sahival; and pure breeds of goat-Telecheri, Jamunapari are maintained on his farm.

About 50 acres of land is under cultivation of various fodder crops like cumbu napier, glyricidia, subabul, fodder sorghum, guinea grass, lucerne, muyal masal, velli masal. He prepares his own concentrate mixture of cattle feed with rice bran, maize, cumbu, red gram, black gram, salt etc.

About 20 acres are devoted to cultivation of paddy, coconut, amla and sapota.

(Source: Tamilarasi, farm visit)

## VENKAT RASA

S/o K R Radhakrishnan, No. 2, Erode Main Road, Valayutham Palayam Post, Namakkal, Karur Taluka & District– 639 117, Tamil Nadu. Ph.: 04324 270398, Cell: 9842770398, Email: rasaokr@gmail.com

Venkat Rasa has been farming organically for the past ten years on his 20 acre farm. He grows sugarcane intercropped with black gram on 11 acres and coconut on six acres. The coconut farm is covered with coconut palm leaf and sugarcane trash mulch. He prepares and uses panchakavya, avuttam, EM solution for growth promotion and crop protection.

(Source: Tamilarasi, farm visit)

#### **K.RAMAKRISHNAN**

Bangalore Thottam, Poyankuttai, Bhavani Taluka ,Erode District, Tamil Nadu.

K.Ramakrishnan has been farming organically on his four acre farm for the past five years. He grows groundnut, cotton and tapioca. Tobacco is grown and ploughed insitu as green manure. Other organic practices include application of FYM, panchakavya, amirthakarisal and poultry manure.

(Source: Tamilarasi, farm visit)

#### A.R.SELVARAJ

S/o. Ramasamy Reddiyar, Aathirediyur, Kettisamuthuram post, Anthiyur via, Bhavani Taluka, Erode-638 501, Tamil Nadu. Ph.: 0456 263331, Cell: 9750050605

A.R.Selvaraj is farming organically for the last 5 years. He grows cotton, tapioca, groundnut and cumbu, mango and bamboo. VAM production beds have been installed to enrich the soil with microorganisms. The cotton yield on his farm was a remarkable 13.5 quintals/acre.

(Source: Tamilarasi, farm visit)

# **R.RAJU**

S/o. Ramappa Gounder, D.No:467, Karuppana Mothiliyar Thottam, Anna Nagar, Bommanpattti, Bhavani Taluka, Erode District, Tamil Nadu. Ph.: 04256 253152, Cell: 9976723940

R Raju has been farming organically for the last 3 years growing cotton, tobacco and fodder sorghum on 6 acres. There are 12 cattle and 30 hens on the farm. He practices various techniques like intercropping black gram, cowpea with cotton, preparing and using various organic solutions like devaamirtham, panchakavya etc. (Source: Tamilarasi, farm visit)

# PERUMAL KOVIL THOTTAM

Bommanpatti, Vellithiruppur, Bhavani, Erode-638 314, Tamil Nadu

Perumal Kovil Thottam may be contacted for reaching the following organic farms and meeting these farmers:

Shanthi's Farm: Smt. Shanthi grows cotton and gingili (oil seed) using organic methods

Govindasamy's Farm: Govindasamy has been farming organically for the past four years. He grows cotton, turmeric, tobacco on his three acre farm.

Suresh's Farm: Suresh has been farming organically for the past four years. He grows cotton, groundnut, sorghum, gingili on four acres of land

Ramados's Farm: Ramados grows cotton and gingili organically on his two acre farm

#### **KARUPANARAJ**

Bejalatti, Thalamalai, Thalavadi, Sathyamangalam, Erode District, Tamil Nadu

Karupanaraj is a farmer in a small village in the hills of Thalamalai. He has been farming organically for the past 40 years without giving in into the lure of the Green Revolution. The family's lifestyle is in tune with agricultural practices and they have used every inch of land and the available natural endowments very resourcefully. He uses FYM, vermicompost, crop residues and various leaf extracts for crop production and protection.

(Source: Tamilarasi, farm visit)

#### P.B. MURALI

77, Lush Church, Allvarpattai, Myllapur, Chennai, Tamil Nadu. Ph.: 044 24991203, H/Ph No.: 9380691203, Email: pbm50@rediffmail.com

P.B.Murali runs and owns a sprawling 60 acre organic orchard 90 kms. south of Chennai. Only Alphonso, Himampasand, Banganaballi and Rumani varieties are grown here. The farm is about 12 yrs. old and has been in organic practice from day one. He runs an organic shandy in Chennai every Saturday, sourcing vegetables and fruits from other organic farmers.

Says Murali, "We also sell non pasteurized, unprocessed natural deshi cow milk. Our entire produce is marketed directly as organic without involving any middlemen. We also help other farmers to market their organic produce through the shandy. The shandy also sells the entire range of groceries and cold pressed vegetable oils.

P B Murali is a member of the National Steering Committee of the Organic Farming Association of India.

(Source: Communication with OIP)

#### M. SETHURAMAN

Kidathalimeadu, Kalai post, Mailladuthurai – 609811, Tamil Nadu. Ph. 04364236467 Cell: 9952844467.

M Sethuraman is a long term organic farmer. He a member of the National Steering Committee of the Organic Farming Association of India. (Source: OFAI)

# ANTHIYUR KALAIVANI

Bommanpatti, Annanagar, vellithiruppur, Bhavani TK, Erode district, Tamil Nadu. Cell: 9865485221

A. Kalaivani is an organic farmer and works with SHGs in Tamil Nadu. She single handedly promoted organic Cotton Cultivation not only around other villages but also in her village for the past 4 years. Presently the number of Organic Cotton farmers she works with is more than 500 and the acreage is around 700. A very dynamic women willing to take up responsibilities, she is a member of the National Steering Committee of OFAI.

#### **A SATISHKUMAR**

No.14, Maryammankovilstreet, Ganapathy Palayam, Alukuli Post, Gobichettipalayam, Erode district, Tamil Nadu. Cell: 09842651456

A Satishkumar is a youth representative in the National Steering Committee of OFAI.

#### **PARIYASWAMY**

Pachaimalai D.M.O.S. Trust, 154/54A, Thiyagi Singaravelar Street, Thuraiyur Post & Taluk, Trichy District – 621 010, Tamil Nadu. Ph: 04327 222426, Cell: 099432 34363

Pariyaswamy is a practicing Sidha doctor. He has been working on issues related to organic farming since 2007. He grows his own medicines and herbs. The two acre farm has dozens of varieties of herbs and medicinal plants from which he makes medicines. He also has an herbal research unit and is involved in herbal cultivation, marketing of herbals, health exhibition and awareness programmes. He specialises in treatment of chronic diseases like asthma, kidney stone, peptic ulcer, diabetes, skin and urinary infection.

(Source: Communication with OIP)

#### **HAND-IN-HAND**

Environmental Protection Division, Flat 15/16, 1 Pinjala Subramaniam Street, T Nagar Chennai 600 017, Ph: 044- 421 27623, Email: envi@hihseed.org, Web: www.hihseed.org

'Hand in Hand' has developed an innovative enterprise opportunity for rural women through supporting conversion of farm, garden and domestic waste into rich, organic manure using the vermicompost process. Two day training is given along with a 90% soft loan to initiate them into self reliance through vermicomposting. These units are able to generate as much as 2 tons of compost per month, fetching a market price of Rs. 3000 to 4000 per ton. There is a facility to market the end product under the collective banner of V-Compost, thus meeting vital ends of managing degradable waste, self employment and providing compost for farms.

(Source: Brochure)

#### VALLALAR HOLISTIC HEALTH CENTRE

Town Centre: 206, Cherry St, Puducherry -1

Sales Centre: 186 Needarajappaiyer St. Puducherry -1, Ph: 2337478, Email: appa2008g@gmail.com, Web: www.pranacentrefreeservers.com

The centre offers organic foods along with natural healing treatments and health counseling.

(Source: Brochure)

# SITHER, G

Agriculturist, Layco's Nature Food Shop, 71/1516, Vanakkara Street, M. Chavady, Thanjavur 613 001, Tamil Nadu. Ph: 04362-239788/272417, Cell: 09443139788, Email: sither 1960@yahoo.co.in

(Source: Brochure)

# THE AHIMSAA RESEARCH FOUNDATION

87-B, Lloyds Road, Chennai 600 014, Tamil Nadu. Ph.: 044-28115768, Fax: 044-28115458

Contact: S.Krishnan, CEO & Research Co-ordinator

#### SHRI MAHALAXMI ORGO AGRONOMICS

302, Hospital Road, Kavin 638 455, Erode Dist., Tamil Nadu. Ph.: 04256 240272 to 240274, Res: 04256 240275, Fax: 04256 240271

Contact: A.R. Shanmuha Sundaram

(Source:OFAI)

#### EXNORA INTERNATIONAL FOUNDATION

20, Giriappa Road, Chennai - 600 017, Tamil Nadu. Ph.: 044-8153377, Email: exnora@vsnl.com, Web: http://exnorc.org

Citizens' Waterways Monitoring Programme

(Source OFAI)

## CENTRE FOR ECOLOGY & RESEARCH

538, Rani Vaikkal Street, Thanjavur 613 009, Tamil Nadu. Ph.: 04362 221410, Fax: 04362 220355

Contact: V. Palaniappan, Honorary Secretary

(Source: OFAI)

## **AURO ANNAM**

Grace, Auroville 605 101, Tamil Nadu. Ph.: 0413-2622044, Res: 0413-2623391, Email: auroannam@auroville.org.in, margarita@auroville.org.in

A.R.Selvaraj is farming organically for the last 5 years. He grows cotton, tapioca, groundnut and cumbu, mango and bamboo. VAM production beds have been installed to enrich the soil with microorganisms. The cotton yield on his farm was a remarkable 13.5 quintals/acre.

(Source: Tamilarasi, farm visit)

# **R.RAJU**

S/o. Ramappa Gounder, D.No:467, Karuppana Mothiliyar Thottam, Anna Nagar, Bommanpattti, Bhavani Taluka, Erode District, Tamil Nadu. Ph.: 04256 253152, Cell: 9976723940

R Raju has been farming organically for the last 3 years growing cotton, tobacco and fodder sorghum on 6 acres. There are 12 cattle and 30 hens on the farm. He practices various techniques like intercropping black gram, cowpea with cotton, preparing and using various organic solutions like devaamirtham, panchakavya etc. (Source: Tamilarasi, farm visit)

# PERUMAL KOVIL THOTTAM

Bommanpatti, Vellithiruppur, Bhavani, Erode-638 314, Tamil Nadu

Perumal Kovil Thottam may be contacted for reaching the following organic farms and meeting these farmers:

Shanthi's Farm: Smt. Shanthi grows cotton and gingili (oil seed) using organic methods

Govindasamy's Farm: Govindasamy has been farming organically for the past four years. He grows cotton, turmeric, tobacco on his three acre farm.

Suresh's Farm: Suresh has been farming organically for the past four years. He grows cotton, groundnut, sorghum, gingili on four acres of land

Ramados's Farm: Ramados grows cotton and gingili organically on his two acre farm

## **KARUPANARAJ**

Bejalatti, Thalamalai, Thalavadi, Sathyamangalam, Erode District, Tamil Nadu

Karupanaraj is a farmer in a small village in the hills of Thalamalai. He has been farming organically for the past 40 years without giving in into the lure of the Green Revolution. The family's lifestyle is in tune with agricultural practices and they have used every inch of land and the available natural endowments very resourcefully. He uses FYM, vermicompost, crop residues and various leaf extracts for crop production and protection.

(Source: Tamilarasi, farm visit)

## P.B. MURALI

77, Lush Church, Allvarpattai, Myllapur, Chennai, Tamil Nadu. Ph.: 044 24991203, H/Ph No.: 9380691203, Email: pbm50@rediffmail.com

P.B.Murali runs and owns a sprawling 60 acre organic orchard 90 kms. south of Chennai. Only Alphonso, Himampasand, Banganaballi and Rumani varieties are grown here. The farm is about 12 yrs. old and has been in organic practice from day one. He runs an organic shandy in Chennai every Saturday, sourcing vegetables and fruits from other organic farmers.

Says Murali, "We also sell non pasteurized, unprocessed natural deshi cow milk. Our entire produce is marketed directly as organic without involving any middlemen. We also help other farmers to market their organic produce through the shandy. The shandy also sells the entire range of groceries and cold pressed vegetable oils.

P B Murali is a member of the National Steering Committee of the Organic Farming Association of India. (Source: Communication with OIP)

## M. SETHURAMAN

Kidathalimeadu, Kalai post, Mailladuthurai – 609811, Tamil Nadu. Ph. 04364236467 Cell: 9952844467.

M Sethuraman is a long term organic farmer. He a member of the National Steering Committee of the Organic Farming Association of India. (Source: OFAI)

## ANTHIYUR KALAIVANI

Bommanpatti, Annanagar, vellithiruppur, Bhavani TK, Erode district, Tamil Nadu. Cell: 9865485221

A. Kalaivani is an organic farmer and works with SHGs in Tamil Nadu. She single handedly promoted organic Cotton Cultivation not only around other villages but also in her village for the past 4 years. Presently the number of Organic Cotton farmers she works with is more than 500 and the acreage is around 700. A very dynamic women willing to take up responsibilities, she is a member of the National Steering Committee of OFAI.

## **A SATISHKUMAR**

No.14, Maryammankovilstreet, Ganapathy Palayam, Alukuli Post, Gobichettipalayam, Erode district, Tamil Nadu. Cell: 09842651456

A Satishkumar is a youth representative in the National Steering Committee of OFAI.

#### **PARIYASWAMY**

Pachaimalai D.M.O.S. Trust, 154/54A, Thiyagi Singaravelar Street, Thuraiyur Post & Taluk, Trichy District – 621 010, Tamil Nadu. Ph: 04327 222426, Cell: 099432 34363

Pariyaswamy is a practicing Sidha doctor. He has been working on issues related to organic farming since 2007. He grows his own medicines and herbs. The two acre farm has dozens of varieties of herbs and medicinal plants from which he makes medicines. He also has an herbal research unit and is involved in herbal cultivation, marketing of herbals, health exhibition and awareness programmes. He specialises in treatment of chronic diseases like asthma, kidney stone, peptic ulcer, diabetes, skin and urinary infection.

(Source:Communication with OIP)

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538, Rani Vaikkal Street, Thanjavur 613 009, Tamil Nadu. Ph.: 04362 221410, Fax: 04362 220355

Contact: V. Palaniappan, Honorary Secretary

(Source: OFAI)

#### **AURO ANNAM**

Grace, Auroville 605 101, Tamil Nadu. Ph.: 0413-2622044, Res: 0413-2623391, Email: auroannam@auroville.org.in, margarita@auroville.org.in

Res: Auroannam Farm (Opp. Auro Orchard) Contact: Margarita Correa, Executive/Manager of Research & Demo Farm, technical expert in EM Technology, organic farming advisory, consultant on vermitechnology & bio pest control.

Auro Annam promotes organic farming, provides quality organically grown foods at fair prices, promotes EM technology for agriculture, for solid waste and waste water management, and for environmental rehabilitation.

Auro Annam is a member of the Bio-dynamic Association of India (BDAI) and a member of Asia Pacific Natural Agriculture Netowrk (APNAN) and an authorized dealer of EM.

(Source: OFAI)

# V. DHANAPALAN

Keela Othiyathur, Kutaur PO 611105, Kilvalur Taluk, Nagapattinam Dist, Tamil Nadu

Cell: 09443587352, 09345484315

(Source: OFAI)

## A.C. PRABHAKARAN

Development Activities for Rural People, Plot no 23, EB Colony, K Pudur, Madurai – 625 007, Tamil Nadu.

Networking, training and creating model organic farms.

(Source: Nammalwar)

#### INTEGRATED EDUCATION & RURAL-URBAN DEVELOPMENT TRUST

Flower Cottage, Kotamavilai, Vanniyur PO, Kuzhituhurai – 629 163, Kanyakumari District, Tamil Nadu.

The trust is raising crops such as paddy, coconut, rubber and vegetables using organic manure. It is also engaged in education, documentation and networking.

(Source: Nammalwar)

## P.R.Y. PRITHIVIRAJAN

Bharatha Seva Trust, Avvaiyar Eco Farm & Training Centre, PO Box 72, Paulo Freire Village, Pudukkottai – 622 001, Tamil Nadu.

(Residence: Avvai Farm, Vadavalam Post, Pudukottai – 622 004, Tamil Nadu.)

Prithivirajan trains NGOs on extension activities for farmers. He also manages a model organic farm. He has translated Erik van der Werf's book, Ecological Farming Principles into Tamil. (Source: OIP archives)

## RESOURCE CENTRE FOR ECOLOGY, AGRICULTURE AND COMMUNITY DEVELOPMENT

Kaattaavilai, Kadayal, Kaliyal – 629 101, Kanyakumari District, Tamil Nadu.

Contact person: T. Francis

The Resource Centre maintains a kitchen garden on about 25 cents of land with crops such as brinjal, chilies, okra, cow pea, groundnut, sweet potato, amaranthus, gourds etc. Only organic manures like farmyard manure, green manure (mainly from glyricidia trees), neem cake, etc. are used. Pests are controlled using neem oil, garlic, custard apple leaves, cow's urine, etc. The results are encouraging and the yield is above average.

The Centre also raises fruit crops like pineapple, cherry, pomegranate, mango, plantain, jack, citrus, etc. with coconuts on 50 cents of land as mixed crops. Tapioca is grown on about half an acre. Mulching with coconut husk is practiced.

A small plot of medicinal herbs with several varieties is cultivated in the new office campus at Kaattavilai, Kadayal.

We are popularising vegetable home gardening among housewives, formed into self-help groups, in about 20 villages in Melpuram area, Kanyakumari District. We are also taking steps to popularise vermiculture and mushroom cultivation among farmers and housewives here.

(Source: Communication with OIP)

# SUSTAINABLE AGRICULTURE ENVIRONMENTAL VOLUNTARY ACTION (SEVA)

45, T.P.M. Nagar, Virattipathu, Madurai – 625 010, Tamil Nadu. Ph.: 0452 2380082, Fax (pp): 0452 2604765 / 2300425, Email: numvali@vsnl.com

Contact person: P.Saravaran

(Source: Communication with OIP)

## DR. S.K.GOPAL

Chief Training Organiser, Krishi Vigyan Kendra, Gandhigram Rural Institute – Gandhigram 624 302, Dindigul District, Tamil Nadu. Ph.: 0451 2452168 Fax: 0451 2454466.

Krishi Vigyan Kendra has used NADEP compost for fruit trees, farm forestry and for paddy. Dr. Gopal has also introduced organic farming in Anna District through training and demonstration sessions, lectures and meetings.

(Source: Communication with OIP)

# **NAVADARSHANAM**

Gumlapuram, Thally – 635 118, Tamil Nadu.

Started by a cooperative led by Dr T.S. Ananthu and Parap Aggarwal. Interests are research and documentation of organic and ecologically based agriculture. Maintain an informative website: www.navadarshanam.org.

# DR. A. R. SOLAYAPPAN

Founder President – Foundation for Organic Agriculture / Principal Scientist (Retd.) T.N.C.S.F / Agricultural Consultant, Foundation For Organic Agriculture, # 28 / B28, Alagesan Nagar, Chengalpattu – 603 001. Ph.: 04114 226222, Cell: 09443331393, Email: arsolayappan@yahoo.com / arsolayappan@hotmail.com / foa\_ars@rediffmail.com

(Source: Communication with OIP)

## **VANYA ORR**

Project Director, Earth Trust, Ketty Post, Nilgiris, Tamilnadu, India. mob.: +919787749943 office: +914232517036 www.earthtrustnilgiris.org

Vanya Orr is a dynamic woman who has energised the organic farming movement in the Nilgiris. She has great programmes for involving school children in organic farming. God give her many more years.

# ECOSCIENCE RESEARCH FOUNDATION

Plot 98, Baaz Nagar, 3/621, east Coast Road, Palavakkam, Chennai - 600 041, Tamil Nadu. Cell: 09384898358, Email: sultanismail@gmail.com. Web: www.erfindia.org,

Contact: Dr. Sultan Ahmed Ismail

The earthworm is the pulse of the soil; healthier the pulse healthier the soil.

Ecoscience Research Foundation (ERF) is a trust initiated by Dr. Sultan Ahmed Ismail. Dr. Ismail has dedicated his life's work to the study of earthworms and its application to agriculture. A crucial component of organic farming practice is vermicompost. The magic begins when bio-waste, subsoil microbes and the earthworms come together under ideal conditions of temperature and moisture.

ERF is dedicated to improve the quality of life on earth by being friends of the earth. It believes that life can be made better by being friendlier to the environment one lives in. This objective is met with research, awareness programmes and the quest for newer methods to conserve the earth's precious resources. Dr. Sultan Ismail has been centrally involved with the Organic Farming Movement in India since its very beginning.

ERF offers services related to organic farming in the following areas: demonstration and assistance with land preparation, understanding of soil as a living environment, waste management, pest repellants, liquid foliar sprays, water management, compost preparation, local biomass and its optimum utilization, post harvest storage, animal husbandry, ayurvedic medicines for ailments in cattle etc. and of course the A to Z of vermicomposting.

The ERF website is a rich resource for understanding the world of earthworms, basics in vermicomposting and has a section devoted to FAQs on earthworms.

(Source: Communication with OIP)

# **UPASI TEA RESEARCH FOUNDATION**

Valparai – 642 127, Coimbatore District, Tamil Nadu. Ph.: 04253 235301, 235303, 235229, Fax: 235302, Email: upasitri@satyammail.com, director@upasitearesearch.org, Web: www.upasitearesearch.org

The United Planters' Association of Southern India (UPASI) established a tea experimentation station at Devarshola in the Nilgiris in 1926. Over the years it has grown into a premier organization for tea research with regional centres at Coonoor, Gudalar, Meppadi, Munnar, Vandiperiyar and Koppa. A Krishi Vigyan Kendra was established by them with support from ICAR in 1983. The tea districts of Karnataka too receive support from UPASI Tea Research Foundation.

UPASI organized two national meetings in the 1990s'on organic farming during the initial stages of the Organic Farming Movement in India.

UPASI has brought out guidelines for organic tea cultivation. Their website is a rich resource for information on the cultivation of tea.

(Source: Website and OIP Archives)

# Interview with Sheela Rani Chunkath

Smt. Sheela Rani Chunkath (IAS), Chairperson and Managing Director, Tamil Nadu Industrial Investment Corporation Ltd., is a recepient of the Prime Minister's Award for Excellence in Public Administration 2008. Her search for poison-free food during her days as Chairperson of the State's Pollution Control Board led her to take up organic farming.

Nyla Coelho talked to her during the OFAI Trichy Biennial Convention. Her email: srchunkath@yahoo.com *Nyla Coelho: Tell us about the nature of your farm and the background to its beginning.* 

Sheela Rani Chunkath: My interest in organic farming took root while I was with the Pollution Control Board of Tamil Nadu. Being in a position to access and have first hand information on pollution levels across the spectrum: industries, water, soil, air etc made me think seriously about the food we were consuming. So my search for poison free food led me to look for organically grown produce. I realised that getting organic food was quite an effort because growing food organically was an exception. The general feedback was that, organic practice was difficult and not economical to growers. So I decided to take up farming to grow my own food.

The farm is a combined land holding along with many of my relatives and my daughter. We started farming organically since 2002. We grow vegetables and have plenty of assorted trees on the farm. Being the trickiest to grow short durational crops, not many produce vegetables organically. Farmers usually do not want to take chances with pests; hence spraying becomes an easy solution. But the irony is, it is vegetables that are mostly consumed raw or with very little cooking time. As a consequence, pesticides gain easy entry into the human food chain.

NC: Are there any special practices you follow or any difficulties that you have run into with your farm?

SRC: I find standardising organic inputs to be the toughest, because one formula doesn't seem to work for all. Inputs are in a way crop specific, so what to give which when can be a tricky proposition. The inputs we use are panchagavya, fish and jaggery solution, vermicompost, vermiwash, bio pesticides, sea weed. My woes are in the realm of green manure too. To this day, my success rate with composting has not reached encouraging levels. However my experience has been that, keeping good cattle, using organic seeds and good green manure inputs does well for the farm.

NC: Coming from an IAS background and in a top state administrative position, where did you pick up your skills for farming?

SRC: I agree that being in a position to have access to information and technical inputs, organic farming should have been quite simple, but in reality help, knowledge and information on organic farming came to me from local farmers doing organic farming and not so much from the government agencies who are the official bodies to be providing information and support on methods of farming. It was the farmers who knew on ground practicality, it was their knowledge and assistance that was the greatest help.

NC: While being Chairperson of the Pollution Control Board, was there an occasion for you to take organic farming to a larger audience; did it link in any way to mitigation?

SRC: In fact my position in Pollution Control Board helped me to popularise organic farming to a great extent. I could see that the non point sources of pollution like agriculture where in chemical fertilisers leach into soil and water bodies could be greatly minimised. Organic farming could be an important agent for abetting and intervention. We conducted several inter departmental meetings with agriculture, forest, health, education, planning department and held exposure exhibitions for educating the farmer community and public, bringing in awareness.

The organic farming movement in Tamil Nadu has leap frogged. Many pioneers of organic farming are from Tamil Nadu. There is significant progress in the organic movement and number of farms going organic is steadily on the rise. Today in Chennai alone, you can find several stores keeping organic produce.

NC: What do you envisage as practical strategies for organic produce to ultimately reach every home?

SRC: I'm not very sure if all farmers who claim to be organic are totally so. If pesticide inputs are avoided while growing food, I think we are going somewhere in the right direction. It is important to have ethical cornerstones around which awareness building is taken on intensely. Organic farming is show cased well; people are taken on farm visits, to farmer markets, to expose exactly why high price for organic produce is justified. Growing organically may have no external chemical inputs, but is labour intensive and people have to be paid justly for their manual labour. If this ethical angle is drawn to public notice first hand, then I think organic produce would receive a fair price and good market.

Today organic farmers are forced to underwrite their produce because of lack of awareness and are forced to sell on the same scale as the one with chemical inputs. If the distinction is clearly brought out into public consciousness, it will tip the scales in favour of organic.

NC: Do you see a role for the NGO sector and farmer associations in this movement?

SRC: I think NGOs have a very pivotal role to play because campaigns, outreach, education and awareness are handled very well by them. They can also pitch in on the practical side for, presently, nobody is able to cope with fluctuations in supply.

NC: And, what about the Government?

## A. JAYACHANDRAN

Ariynur Village, Maduran thagam, Kanchipuram District, Tamil Nadu.

(Source: Communication with OIP)

# MS. ALPHONSA AND MS. MARY

Aussi Project, Pottal, Kallidai Kurichi PO – 627 416, Tamil Nadu.

(Source: ARISE)

# **BHAVANA, SHARANAM**

Village Action Group, Isaiambalam, Auroville – 605 101,

Tamil Nadu.

(Source: ARISE)

# C. SIVARAMAN

Thiruchitrambalam & PO, Via Auroville, Vanur Taluka – 605 101, Tamil Nadu. (Source: ARISE)

# C. JEYAKARAN

Kurinji Organic Foods (India), Periyakulam Road, Gennguvarpatti – 624 203, Tamil Nadu.

(Source: ARISE)

#### K. KAMARAJ

Secretary, Vidiyal (Centre for Social Interaction), Kariappanpatti, Rasingapuram PO – 626 528, Madurai District, Tamil Nadu.

(Source: ARISE)

## R. KESAVARAJ

ARCOD (Association for Rural Community Development), Royakottai Dharamapuri District – 635 116, Tamil Nadu.

(Source: ARISE)

SRC: Government should promote organic farming aggressively. Sikkim is one of the states, which is doing well. Their Chief Minister is known as the green Chief Minister. He has assured that all produce grown in Sikkim is organic.

Individual State Governments should promote organic farming far more aggressively than is being done presently and support it with policy. If this is done, in a couple of years or so, production levels as with chemical farming can be achieved, simultaneously improving the quality of soil and moving towards poison free foods.

NC: As an organic farmer yourself, what is your ultimate goal?

SRC: As an organic farmer I would like everything on the table to be home grown and poison free. I also wish more people would get into home gardening, at least to meet part of their fresh greens needs themselves.

## V. KRISHNAN

Pondicherry Nature Society, 7, Sorna Nagar, Arian Kuppam, Pondicherry – 605 007. Ph.: 0413 2600820 (Source: Communication with OIP)

#### **SMT. PREM ANAND**

Correspondent, Vivekalaya School, 1560, Trichy Road, Coimbatore, Tamil Nadu.

(Source: M. Karthikeyan)

# ORGANIC CERTIFICATION IN TN FOLLOWING THE PARTICIPATORY GUARANTEE SYSTEM (PGS)