

Organic Farming: The Only reality
(Conjecture by a retired professor of Mathematics)

It is quite unusual permutation that indigenous practices have successfully been used in modern farming systems by a mathematician, Mr. Valavala Subba Rao, a resident of a remote village (Irusumanda) in Malkipuram mandal of East Godavari district. He made it possible in showcasing sustainable farming practices in his paddy, coconut and mango farms. He was a mathematics professor at IIT, Madras and after superannuation, he took farming as a challenge to become a role model to fellow farmers. He got an assortment of indigenous practices and followed them with a great conviction, which made him stand out as an organic farmer.

What difference he has made?

He never visits fertilizer or pesticide outlet and prepares compost as well as biopesticides on his own using locally available plant and animal material. Being a member of SOFT (Society of Organic Farming Technologies, a group of likeminded people working towards organic farming, more so with EM technology) he did pioneering work to use EM (Effective microorganisms of Maple Orgtech, Dehradun) based derivatives such as EM compost, EM-5, Extended EM, leaf Extract (see table no.1), panchagavya (a product made out of cow milk, urine, dung, ghee etc.,). He scrupulously follows SRI cultivation (a modern practice of cultivating rice)



EM Derivatives

With this, cost of cultivation has come down by 50%, pest and disease incidence is almost nil and paddy yields are consistent. While fellow farmers worried about pest and diseases, weather abnormalities, water availability and no. of pesticide sprayings, Mr. Subba Rao is unruffled as he believes in “prevention is better than cure”. He sells hand-pounded organic rice through his own network of people and he has even standardized the cooking process.



Organic rice (hand-pounded) ready for sale

How it was started?

Post retirement, his endeavors towards organic farming started with usage of neem oil, neem cake and slowly moved to EM technology and vermicomposting coupled with SRI cultivation. His close associates, Mr. N.V.Naidu (Head- SOFT), Mr. Ch.Dutt (Prakash Organic Farm, Nuziveedu), Mr. Narayan Reddy (International consultant for organic farming) keep guiding him.

How he has achieved sustainability?

Farming is integrated with allied enterprises such as dairy, coconut coir making, vermicomposting. Thus, waste from one enterprise becomes an input for the other and it is a closed cycle approach. Locally available plant material like water hyacinth (in canals), leaves of congress weed, calotropis, seethaphal, jatropa, neem (on bunds, road sides) are used for compost making and preparation of biopesticides. Even kitchen waste is subjected to composting and used for kitchen garden. Thus soil health is protected, atmosphere is not polluted, and human health is taken care.

What he says about this achievement?

Determination, conviction and constant updating of information driven him towards this achievement. He got about 5 trained skilled labor who enjoy working with him, striving hard and joining hands with him in the journey of sustainability. He says “ agriculture is a profitable enterprise when farmer does visit the farm daily and cares for environment.”



Mr. Subba Rao (extreme left) with his skilled labor

What are his future plans and his concerns?

To have more credibility and export value of his product, he planned to test the produce for pesticide residues. He worried about organic rice gets mixed with inorganic rice and may not reach the customer as it is with current marketing system. He feel that government should have a policy on restricted or banned usage of chemical fertilizers and pesticides.

What fellow farmers say?

Though every farmer appreciates his efforts, they are not bold enough to adopt these practices even on a trial basis. When reasons were probed in, its just resistance towards change, and while everything is possibly ready- made in the market, why to spend time to prepare compost and other organic inputs.

Comments of Agriculture Officer...

“The pioneering work of Mr. Subbarao is highly appreciable and he hardly needs our guidance and government subsidies. Considering this new approach as a platform, the village has been adopted as a biovillage to showcase the best practices to other farmers. His approach is scientific, logical and thought provoking. With regard to significant observations in crop performance, paddy leaf texture is rough and not amenable to pest. The rodent damage is nil in spite of presence of many rodents, soil is puffy with lot of humus, increase in earthworm count and paddy yields are relatively high and consistent (25 bags per acre) with a new variety of paddy, MTU 1071 (while other farmers are struggling to get as low as 15 bags per acre). He meticulously follows several indigenous practices which needs to be validated by research team for wider application”



Paddy crop (MTU1071) grown with EM derivatives

Authors of this note:

Mr. N.V.Naidu

Head- SOFT (9440545512)

Mr. M.Radha Madhav

Agricultural Officer (9440131030)