

Experience in Organic Agriculture

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Evolution of Sustainable Land management Practices

I have been born and have lived at Welimada area where exotic vegetables are grown at commercial level. In early 1970s, farmers in this area obtained high yield from exotic vegetable cultivation and their socio economic condition was improved during at that time. Eg : General yield from Potato cultivation was one to twenty times. (Twenty kg of Potato harvest was obtained by planting one kg of seed Potato). I have grown many kinds of exotic vegetables such as Potato, Tomato, and Beans by using chemical fertilizer and pesticides during the period from 1976 to 1983 and I helped to my surrounding farmers also to grown exotic vegetable by using chemical fertilizer and pesticides. Farmers expanded their vegetable cultivation even in to water logged paddy fields by drain out water. After 20- 25 years of cultivation of exotic vegetable famers, experienced following

- Gradually decreasing yield from exotic vegetable cultivation
(Average yield of Potato was decreased up to 5 to 10 kg from planted one kg of seed Potato and some time some famers did not harvest the amount seed potato which have been grown as a seed Potato)
- Pest and diseases attacked was increased
- New pest were immerged
- Keeping quality of the vegetable grown with chemicals were decreased

As a result of issues of exotic vegetable cultivation, socio economic conditions of the farmers were gradually decreased. In addition I have observed critical environment issues such as desiccation of water sources, heavy soil erosion and an increase of wild animal attack. In addition health condition of the farms has decreased. In 1984,I met Dr Rani Senanayake and I had opportunity to learn about the impact of chemical agriculture as well as impact of unsustainable land management practices, such as cultivation of Pinus and Eucalyptus monoculture plantation at Uva high land and cultivation of vegetables in water log Paddy fields. Therefore I had an interest to find out the root causes of those issues and find out a solution for issues.

In 1990 I had opportunity to implement pilot project on agroforestry with collaboration of environmental section of National Cooperative Council of Sri Lanka under leadership of Dr P.A Kiriwadeniya with Technical guides of Dr Ranil Senanayaka. This project was implemented in Welimada and Maho AGA divisions as an Agro forestry project with Participation primary societies of Cooperatives. Tree crops were cultivated after implementation of soil and water activities and inter cropped with short term crops at these lands at early stage. However short term crops were cultivated at those lands by applying compost in Maho project area and exotic vegetables were cultivated in Welimada project area as inter crops at tree planted area using agrochemicals, because I did not have knowledge on organic farming at that time. Many training programs on proper usage of agrochemicals and intergrated pest management method were conducted for farmer community with help of Agriculture department. In addition hand outs were prepared with recommendation of chemical fertilizer and integrated pest management method. In 1995 Lanka Organic (Pvt) Ltd stared project in Maho area with participation of Maho farmers who have implemented Agro forestry project with National cooperative council. Farmers of this project were certified by different international certification agencies since 1995 up to now as a group certification. Perennial crops such as Cashew, Mango, Coconut, Lime and Guava were purchased from famers as certified organic products by Lanka Organic (Pvt) ltd. In addition short term crops such as Gotukola and

Lemon grass were grown successfully as certified organic products since 1997.

Organic farming was used as tool for conservation of watershed at rural water supply project in National water supply drainage board in 2000. Agro forestry and organic farming were implemented in 18 sub project in 6 Districts under this project. Many training programs were conducted for project staff and famers with help of Dr Ranil senanayaka, Mr Upawannsa and Mr Rangith Silva. In addition many training manual were also prepared under this project.

In 2009 organic exotic vegetable cultivation was introduced to Welikadagna watershed restoration activities with help of UNDP JEF project under the supervision and guides of Dabavinna Agrarian Center. Ecological agro forestry model was established at 12 Ac of degraded coconut land by private investor in late 2008 in Kurinagala.

Forest garden tea project was implemented by Rain forest Rescue International (Pvt) ltd since 2009 in Baddegama Galle district and it was studied by me in latter 2010. According to my past experience this was the project which consist most of the component of the organic farming technology and proper implementation analog forestry technology.

Experience of implementation of sustainable land management practices and organic farming

At early stage I have clearly understood the effect of unsustainable land management system and chemical agriculture on environment, health and socioeconomic condition of the farmers. But I did not have enough knowledge and experiences on implementation of organic agriculture.

Knowledge on organic agriculture is gained from out side of formal educational institutes, individuals and experiences of filed implementation of the sustainable agriculture practices.

Problems and issues rose while implementation of sustainable land management practices have been solved with help of experiences gained while field implementation of sustainable land management and with help of the other parties involved in organic field.

Concepts and principles of organic farming and situation of the organic agriculture in other countries were learned from IFOM publications.

Many water and soil conservation methods, soil fertility improvement systems and pest and diseases control methods are available in organic agriculture practices and other sustainable land management systems.

Short term crops such as vegetable, pulses and serial , biannual and non woody perennials such as Papaw, Banana and Pineapple and perennial such as Tea Coconut spices can be grown organically and level of the yields and profitability of organically grown those crops will be determined by level of application of organic practices and other sustainable land management practices.

According to my experiences, people who are converting in to organic agriculture from chemical agriculture to obtain environment, health and socio economics benefits are in following stagers.

Stage one

People who are in this stage believe that proper implementation of correct technologies, which are given by chemical agriculture recommendation will be minimize the environmental and health impact which will be created by chemical agriculture.

Stage two

People who are in this stage believe that integration of some technologies of organic farming technologies in to chemical farming can be mitigate the environmental , health and socio economic impact which could be raised from chemical agriculture.

Stage three

People, who are in this stage, cultivate crops with some organic farming technologies and try to get environmental, health and socio economic benefits which can be obtained from organic agriculture.

Stage four

People who are in this stage practices organic farming as a whole package of organic farming technology and get environmental, health and socio economic benefits which can be obtained from organic agriculture.

Stage five

People who are in this stage implement whole package of organic farming with incorporation of some biodynamic techniques (Ecological agriculture) and obtain environmental, health and socio economic benefits

Stage six

People who are in this stage implement whole package of biodynamic farming and obtain environmental, health and socio economic benefits.

Stage seven

People who in this stage have knowledge on restoration of ecosystem by using total ecosystem management technology which include organic farming, biodynamic farming and analog forestry technology and get whole benefit of environment, health and socio economic including carbon fixation.

Constraints and issues in Sri Lanka for promotion of organic farming and other sustainable land management practices.

- Lack of proper technologies on organic farming and other relevant technologies on sustainable land management practices in formal education system in Sri Lanka
- Lack of proper printed documents on organic farming and other relevant technologies
- Proper training institutes which have practical training courses on organic farming are very rare.
- Practical example on successful implementation of organic farming and other sustainable land managements are very rare in Sri Lanka
- Knowledge and experiences on organic farming in leading people of organic sector in Sri Lanka are not in a satisfactory level.
- Government assistance for promotion of organic farming is very week.

- Coordination and collaboration among key players of organic farming in Sri Lanka is very weak
- Available technologies on organic farming are not being shared each other who are involved in organic agriculture

According to my 25 year experiences on this sector, organic farming and other relevant sustainable land management practices can be implemented in Sri Lanka to obtain its environmental, health, socio economics benefits with economical profits.

But we have to go very long way and all parties who have genuine interest on organic farming have get together and work hard. We are very far away when compared to other Asian countries which were far behind us 20 year ago.