**Organic Gardening: An Agricultural Practice for 21st Century**

Mr. David T Chand, Assistant Professor, Teacher Education Department

School of Education and Human Sciences, USC

“And the Lord God took the man, and put him into the garden of Eden to dress it and to keep it” *(Genesis 2:15).* The Bible is clear in suggesting agricultural work assigned to our first parents. White (1903) in the book, *Education* states that “Useful occupation was appointed as a blessing, to strength the body, to expand the mind, and to develop the character” (p.21). Mrs. White further states that agricultural work is “the occupation most favorable to development-the care of plants and animals” (p.43). She emphasizes under the leading of God’s Spirit that “No line of manual training is of more value than agriculture” (p.219).

What is agriculture? The word ‘agriculture’ is derived from Latin words: ‘agri’ from ‘agrarius’ meaning ‘of the land’ and ‘cultura’ from ‘culture’ meaning ‘to till or cultivate’. Therefore, agriculture is associated with land and its cultivation. Henry (1991) defines agriculture as “the business of growing crops and rearing animals through application of scientific principles and facts acquired over a period of time” (p.1). According to Baldeo “Agriculture is defined as purposeful work through which the elements in nature are harnessed to produce plants and animals to meet human needs”.

Land is an important resource of production. God granted land to Israel when they entered the promised Canaan. “They were tillers of the soil and keepers of flocks and herds and in this free, independent life, with its opportunities for labor and study and meditation, they learned of God and taught their children of His works and ways” (White, 1903, p.34). The cultivation of land provides livelihood and basic necessities of life to living organisms including man. All living creatures depend upon the resources of the land for their existence and sustenance of life.

What is organic gardening? This is a kind of agricultural practice that involves use of plant and animal resources for growing foods for our use in our backyards or any available land spaces. We use natural ways to cultivate soil and rear animals. In organic gardening we make use of organic manures to increase humus (organic matter) in the soil. The use of chemical fertilizers is minimized if not, avoided at all cost. Organic gardening draws conceptually from organic agriculture.

Sir Albert Howard’s practice of organic agriculture gives him the title of being “father of organic farming”. His best publication of “An Agricultural Testament” in 1940 is still the most referred source on organic farming. He focuses on natural processes in organic farming. Interestingly, he worked in India as an agricultural advisor to central states at that time.

What can we produce through organic gardening? All plants can be cultivated organically. Horticulture, specifically looks into production of vegetables, fruits, and ornamental plants. These can grow through the practice of organic gardening. The green leafy vegetables like Lettuce, Patchoi, Spinach (Bhagi), Cabbage can be grown easily in a short period of time. The root crops like Cassava, Yam, Dasheen, Tannia etc can be cultivated in our yards at home. Tomatoes and Melongene can also be grown. Fruits like Banana, Papaya, and Citrus can be grown in home gardens. Lilies, Orchids, Roses, also grow in soil enriched organically. Plant based foods most of them can be home-grown.

What are the benefits of organic gardening?

1. Organic gardening provides healthy nutritious food for our consumption. These foods are free from chemicals that cause harmful effects to our human body.
2. Vegetables and fruits are supplied fresh from the garden that build our health and protect us from sickness and diseases.
3. We can save our financial resources through its practice.
4. It affords us opportunities to raise funds for church and community projects.
5. Ornamental plants cultivated organically beautify our living surrounding habitat. It enhances aesthetics of our place.
6. Organic gardening offers us physical exercise for our body in the nature.
7. It is environment friendly; the natural eco-systems are not affected through its practice.
8. We develop appreciation for God’s nature and learn of our Creator.

Who can grow plants and rear animals organically? Any person who wishes and have desire to grow plants can practice organic gardening either at home or at workplace, provided some land is available and permission is obtained for its use. Landless gardening is practiced in boxes and containers. Anyone can do organic gardening anytime and anywhere.

What is required for practicing organic gardening? Remember, in fertile soil all plants do well. We need gardening tools like fork, cutlass, hoe etc, for preparation of land for gardening. We can begin gardening in our backyards. Cut down branches of trees and shrubs around your house to get some hours of sunshine for plants every day. Plants prepare food through photosynthesis therefore we seek sunshine. Pull out weeds so that insects will not have place to habitat around them. Insects cut, bite and draw sap from plant parts like leaf, stem, and flower and finally destroy plant.

Soil fertility need to be maintained all the time for plants to bear flowers and fruits. In organic gardening we depend on plants and animals for supplying organic manures for maintaining soil productivity. The organic manures like Farm Yard Manure (FYM), compost, Gobar- animal based manure do well in increasing organic matter in the soil. We can enhance soil fertility through green manuring, vermiculture and through crop rotation.

Farm Yard Manure (FYM) comprises of plant wastes and animal litter. All decomposable matter from plants and animals sources decay after some time. Those farmers who practice mixed farming (plants and animals are raised together on a farm) make FYM.

Compost involves decomposing of plant remains. Mostly leaves are used but other parts of plants can also be utilized for compositing.

In green manuring, the plants that are leguminous (like beans, peas) are grown for a few months period and ploughed back into the soil. Sunn hemp is an excellent green manure crop. These leguminous crops fix nitrogen in the soil.

Gobar is organic manure that is collected from cattle farms. When it is decomposed it is mixed into the soil. It is excellent organic manure for soil.

Vermiculture is a practice of raising earthworms for agriculture. These earthworms are nature’s gift for cultivating our soil for any agricultural activities. They make soil fertile. Plants do well where earthworms are present in the soil.

Home based compost can be easily prepared at home for organic gardening. All kitchen wastes are decomposable like peelings from fruits and vegetables. These can be collected and put in a pit for it to decompose. We need not buy any organic manure because we generate a lot of kitchen wastes on daily basis throughout year.

To kill insects we apply plant- based insecticides that can be prepared at home and also available in market. Neem leaves from Neem tree (*Azadirachta indica****)*** are good insecticide. Leaves can be made paste, boiled in water and sprayed on the plants. Also the leaves, branches, and wood can be burned and ashes can be sprinkled on the plants. Pesticides that are plant-based are excellent for destroying pests. We can use biological control methods to kill insects and pests as well. These organically based insecticides and pesticides are not harmful to human body.

Plants and animals grow healthy and nutritious when organic gardening is practiced. The food harvested from organic gardening is safe and healthy for our human consumption. Organic farming and organic gardening are the best agricultural practices for this 21st century. Grow organically your food requirements and enjoy optimum health with abundant life.

References

* Genesis 2:15 KJV
* White, E.G. (1903). *Education.* Mountain View, Calif.: Pacific Press Publ. Ass., pp. 43,219.
* Henry, A.I. (1991). *Caribbean Agricultural Science.* Published by Macmillan Education Ltd.
* Ragoonanan, S. (2001). *CXC Agriculture.* San Fernando: Caribbean Educational Publishers.
* Howard, A. (1943). *An Agricultural Testament.* (Website*)*