

Sustainable Agriculture: a success story from the Daughters of Mary and Joseph in Uganda



It is not sufficient to tell people our values but we also embody and live our values. AEFJN is on the frontline of the struggle for sustainable food system and agriculture; and our member Congregations are committed to this value. It is not satisfactory to identify problems of industrial agriculture without proposing alternatives. The AEFJN Secretariat shares with you the best practices of one of her members in the promotion of sustainable agriculture.

Sustainable farming or, in a broader term, Sustainable agriculture is using farming practices that do not do harm to the ecosystem. It is sensitive to the microorganisms as crucial members of the ecosystem and their equations with the environment at large. In simpler terms, sustainable farming involves promoting farming methods and practices that are economically viable, environmentally sound and protect public health. It does not only concentrate on the economic aspect of farming, but considers the use of non-renewable factors in the process thoughtfully and effectively. This contributes to the growth of nutritious and healthy food as well as brings up the standard of living of the farmer.¹

In a world of expanding industrial agriculture or agribusiness with all its unprecedented negative impacts on the human health, the environment and its wide range of human rights violations; agro-ecology provides an alternative and better means to sustainable agriculture and food systems. Greenhouse farming is a form of agro-ecology. Sister Alice Kyasiimire; of the Daughters of Mary and Joseph shares the story of her Greenhouse farming in one of the Congregation's farms in Uganda.

*"I had a great experience through which I learnt many things in all aspects of life among which two statements are still guiding me: **"Think outside of the Box"**; **"Find a way!"** When we arrived in Israel it was summer; the place was dry, dusty and very hot. In their welcome address and throughout our stay the Agrostudies CEO and the Staff encouraged us to think outside of the Box and to find a way. As we travelled visiting different places I kept asking myself "what do these people survive on in this unproductive place?" Not knowing that I was yet to discover that Israeli people produce everything out of nothing! They make use of everything. Nothing is wasted! One of the farms we visited was Cohen Propagation Nurseries where they produce high quality standard cuttings for export. At this farm I realized how wrong I was to think that Israel was unproductive! The farm had over fifteen big and modern Greenhouses. Having worked with this farm, as well as in other farms, I learnt, understood and appreciated how important and productive Greenhouse farming is. It was here that I started dreaming of Greenhouse farming in one of our farms in namely the one of Bisheshe (one of the three Sub-Counties of Ibanda District in the Western Region of Uganda).*

A greenhouse is a structure with walls and roof made mainly of transparent materials such as glass, net, in which plants requiring regulated climatic conditions are grown. These structures range in size from small shades to industrial sized buildings. Some of the materials used in greenhouse construction include wood, galvanized steel-iron and aluminium, ultra violet sheets etc.

When I arrived, I explored the possibilities to make my dream come true and in September 2019, the Greenhouse project started! We started preparing for the first season. In November 2019, we transplanted Sweet Pepper

¹ <https://www.conserve-energy-future.com/sustainable-farming-practices.php>

seedlings (yellow and Red) Varieties into the Greenhouse. The plants grew vigorously and the first harvest was at the end of January 2020! Well, the harvest went on for the following seven months! We had a rich harvest from a very small piece of land which was “unproductive”. We got more than we expected.

Greenhouse farming is a solution to the effects of Global warming that has changed seasons which has led to poor or no harvest at all. This has led to food insecurity in spite of people’s hard work. With Greenhouse farming, one doesn’t need to have a big fertile piece of land (as is the case in ordinary farming) and production is throughout the year regardless of harsh weather conditions and seasons. Greenhouse covers a small piece of land and yet it accommodates a big number of crops /plants hence high yields. The piece of land where the Greenhouse is constructed does not necessarily have to be fertile especially when crops are planted in pots. Plants are protected from adverse /harsh weather conditions like drought and hail storms which are very destructive to crops grown in open field. Crops grown in the greenhouse environment are less affected by pests which affect the quality and quantity of the produce as is the case with the open field farming. The methods used in greenhouse farming are friendly and protective to the human being and the environment. In our case, we make sure that integrated pest management approach is practiced; therefore, bees and other useful insects are protected and there is no contamination of water sources with chemicals, residues etc. We use pest repellent crops like onions, rosemary which are planted around the Greenhouse, sticky bright colored traps (inside the green house) which attract small insects and these help us in pest monitoring. Concerning fertilizers; supplements used are majorly organic in nature and are properly utilized. Soil erosion is controlled; water is properly utilized because crops are given water that is sufficient for their growth. Some of the materials used in green house farming for example Potting bags, ground covers etc. are recycled products. Monitoring and evaluation of the seasonal growth patterns of crops is easily done since the crops are grown in a controlled environment.

I am very happy that many people especially our workers and students are learning and benefiting from this project. Some had heard of a greenhouse but never got a chance of seeing one. Students had been failing photograph interpretation of a greenhouse because they had never seen one. The teachers and students who have visited us are excited! People have learnt that there is an alternative way of farming which is more productive in every sense”.

After such a success story, one can easily realize how this method of farming participates in the achievement of food sovereignty and the right to adequate food for those rural communities that work hard and still don’t get enough food. Large scale investments that aim at responding to the industrial needs with all the human rights violations and the destruction of the environment have to stop. From her greenhouse, Sr. Alice has been supplying enough and quality food to a large community near and far and she has provided knowledge to those who have heard and seen her innovations in that remote village of the Pearl of Africa.

Information collected by Odile Ntakirutimana

VIDEO: Jutta Kill | WRM - World Rainforest Movement on renewable energy:

<https://www.youtube.com/watch?v=sxXJaoNuvFI>