## SYNTROPIC FARMING PROMOTED WORLDWIDE BY THE AGENDA GOTSCH

In 2023, through the new website organized by its promoters, the <u>Agenda Gotsch</u> from Brazil continues to make known and apply the Syntropic Farming methodologies by farmers interested in turning monoculture into organic farming and sustainability.



Syntropic Agriculture is defined as an agricultural model where natural processes are translated into agricultural practices in their form, function and dynamics. In Syntropic agriculture the restoration of highly productive eco-systems independent from external resources enables the provision of ecosystem services, with special highlight on the regeneration of soil, the regulation of micro-climate and the enhanced efficiency of the water cycle.

<u>Ernst Götsch is a Swiss researcher</u> who developed soil recovery techniques in the early 1980s on a farm in Bahia (Brazil) through planting methods that mimic the natural regeneration of forests. With the accumulation of more than three decades of work that resulted in the restoration of 480 hectares of degraded land, a set of principles and techniques called *Syntropic Agriculture* have been developed, that enable integrating food producing dynamics with natural regeneration of forests.

In the early 1990s, Ernst Götsch became the owner of the area in Brazil, renamed to "Fazenda Olhos D'Água". In the subsequent period, he was hired by public, private and third sector initiatives and also attended invitations to teach courses and lectures in many countries of the world. The Agenda Götsch project started in 2011 from a partnership with a Life in Syntropy Team, to promote the Syntropic Farming principles, techniques and ongoing projects in order to spread information worldwide and to increase the debate around sustainable agriculture. In 2015, for example, with the support of the *Fazenda da Toca* (Brazil) where Ernst Götsch developed large scale models of Syntropic Farming, the Agenda Gotsch produced the <u>short-documentary Life in</u> <u>Syntropy</u> which was presented in COP 21 events in Paris.

In the Agenda Gotsch website <u>the article Life cycle, stratification</u> and <u>succession</u> presents one of the main characteristics of Syntropic Farming, consisting in the use of consortia of plants in high diversity and density. From the initial moment of planting, the goal is to co-create agroecosystems similar to the original ecosystems of each place, both in its form, as in its function and dynamics. That is why we do not talk about crop rotation but species succession. Our plantations cannot consider just one crop, or simple consortia of 2, 3 or 4 species. In order to recreate the macro-organism, it is necessary to work often with more than 30 different species. A complete syntropic system evolves in time and space, transforming the living conditions and taking the environment to a new (and higher) fertility level. The composition







of the species in a syntropic consortia takes into account a series of factors that combine practical, economic and ecological aspects. But apart from those that may be circumstantial limitations of each case, the puzzle of the composition of a biodiverse consortium observes the synchronization of these three aspects: Life cycle of each species; relative height within each consortia cycle; the successional stage of each species. Choosing species with different life cycles allows us to plant them all at the same time, as each will thrive and stand out in the system at a different moment. We also choose species according to their needs and functions that they will perform in the system.... Orchestrating the consortia over time allows a dense cultivation of a high species diversity. Each plant mobilizes resources and promotes modifications that allow the establishment of other plants. In Syntropic Farming we define which species will be planted considering their suitability to the conditions in which the ecosystem is found, its ecophysiological function, its lifetime and the farmer's productive goals... The whole system benefits from the hygroscopic mycorrhizal associations it creates. That results in more vigorous plants, more photosynthesis, more water.

The Agenda Gotsch website became the main tool to spread the principes and methodologies of syntropic farming. For example, an article written by Ernst Götsch and published in the website explains the difference between syntropic Farming and organic Farming. " Organic and syntropic farming are two sisters, starting from the same idea, but the approach to the solution of the problems they come across with has led them to different paths. organic Agriculture aims to replace chemical fertilization (usual in conventional farming) with primarily organic fertilization (composts made from organic waste, green manure, manure, etc.). In Syntropic Farming, we work the design aiming to arrange different species all the way from the implementation of the system and continuing at each step in the conduction of our plantations, managing them to produce their own fertilizer. For that purpose, we plant trees, grasses, and herbs in high density. They should share the characteristic of vigorous regrowth after pruning. A good farmer manages them accordingly. The periodic pruning results - in addition to the supply of light for our crops in organic matter in large quantities which, on top of the soil, create a prosperous life in it and, indirectly, fertilize our plants...An additional benefit besides the first two (if not greater) - light and fertilizer - is the effect of rejuvenation of the whole system that occurs after pruning: information of new vigorous growth and health for the whole system, induced by regrowth of our allies...."

In the Agenda Gotsch website <u>are also published more than 50</u> <u>articles written between 2007 and 2020</u> by Felipe Pasini and Dayana Andrade, journalists, practitioners and researchers of the Agenda Götsch and by researchers on different topics of syntropic Farming practices in different countries of the world.

The greatest input of the Syntropic Agriculture is the quantity and quality of knowledge accumulated over many years of work and the Agenda Gotsch is engaged in the implementation of training courses and conferences organized in collaboration with the organizations and institutions involved and which request them.



To know more

## Agenda Gotsch website

Differences between organic and syntropic faming

Agenda Gotsch Articles

Article in Portal de la economia solidaria.org

article in swissinfo.ch

Article in believe earth

Article in geographiesofChange.net

Article in propagateag.com

Article in orchadofflavours.com

Article in eyesonbrasil.com

Agenda Gotsch in Facebook

<u>Centro de pesquisa en agricultura sintropica</u> <u>CEPEAS</u>





SYNTROPIC FARMING DISCOVERY WORKSHOP TOUR PORTUGAL \* SPAIN \* ITALY \* HOLLAND \* SWITZEPLAND

NUMBER - APRIL 2018