

Oral presentation submission

Title of presentation	Resilience based on the principle of the individual living organism
Subtitle	N/A
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Session of interest	Practitioner's track: - Building organic bridges between strategies: Cradle to cradle strategies
Key words	Resilience, biodynamic agriculture, sustainability

Summary:

This paper aims to propose practical actions towards resilience capacity strengthening based on the principle of the agricultural organism as an individual living organism. The concept application and practice, strengthens the stability of the organism when facing adverse events, including environmental, economic and social issues.

Background:

The accelerated climate change and environmental impact due to industrial agriculture technology, as well as other sources of contamination, together with economic and social instability; are altering the dynamic balance of the farms, including organic systems, leading us to a food crisis. The ability of the agroecosystem to overcome these external disturbances is called resilience. The first time this term was applied in Ecology was by Holling (1973) based on Psychology, incorporating the idea of protection against stressor agents (negative life events).

Such a scenario facing difficulties to render viable agricultural production systems depend on the degree of resilience to restore the dynamic balance and productive agroecosystems. In the last decades, important contributions to increase resilience in agroecosystems have been done: enhanced biodiversity, soil fertility and protection, social web, etc. There are biological and social actions. This study aims to renew the basic concept of resilience, based on psychology and adapting to the agroecological system.

Main chapter:

The farm as a living organism. Based on the principle of W. Goethe: "The truth can be found in different ways and knowledge variations should be considered only as forms" and from R. Steiner who considers the agricultural unit, regardless size, as a single organism, "an agricultural property becomes a living organism into the landscape, a body comparable to a human being", is then considered as a productive unit as much closed it can be, with its various sub-systems as organs of the body. These relationships and analogies may

be of great practical use, broadening the technical vision into more innovative and transforming aspects for organic agriculture facing new challenges. For psychology, resilience is a dynamic, constructive, interactive and sociocultural process, leading to optimization of resources and allows to overcome adverse situations. To overcome this adverse situation, perseverance, tenacity, positive attitude and actions, are needed. It is multifactorial with three main components: commitment, control and challenge.

Factors associated with resilience: 1) "Insight" or introspection: self-examination ability, to raise difficult questions and give honest answers. 2) Independence: ability to maintain physical and emotional distance regarding problems without falling into isolation. 3) Interaction: ability to establish intimate and satisfying relationships with others. 4) Initiative: ability to handle problems and exert control over them. 5) Creativity: ability to create order, beauty and objectives from chaos and disorder. 6) Humor: predisposition of the spirit to joy, give a relative perspective and be positive. 7) Conscience: covers the full range of values internalized by each person through their life. Besides this, it must return to a state of SALUTO GENESIS, the balance that generates health. The emphasis should be on the factors that create health and not on those generating the imbalance.

Factors associated with resilience applied to agricultural unit:

Introspection: The agroecological farmer must learn to reflect about his actions on the stage of nature. It has been verified that there are more losses due to poor agricultural planning, than losses caused by pests, diseases or even, by climate disasters.

Independence: One of the major achievements for organic farmers is their independence from inputs. Most successful organic enterprises have strengthened their economy due to inputs self-elaboration and not because of premium prices.

Interaction: The more the organic farm serves its community and is regarded as a social good, the more successful the farm is. The ability to establish relations of mutual trust with other farms and their customers guarantees economic stability in difficult times.

Creativity and recreational artistic activities: Art is a necessity and as a dynamic activity is complementary to the learning process. When farmers work on artistic elements, they are increasing their consciousness capacity.

Humor: The presence of flowers in a farm, changes the mood of individuals, the presence of wild animals, flags, sculptures, water fountains and others, produces a qualitative changes in the daily lives of farmers.

Existential or spiritual vision: The farm is recognized as a social being, committed to its community, seeking not only economic benefits but the satisfaction of their customers who are no longer customers but partners in an institutional entity. When a farm achieves this social quality, stability is achieved independent from economic, social or political changes.

Core messages and conclusions:

When the farm is approached as an organism, applying the same qualities, it can be obtained the same qualities with a higher resilience capacity in every sense, economic, social and political. By this way, the project has a great stability and balance.