

Climate Resilient Agriculture (2025/2050): Climate Resistant Crops + Fossil-Fuel-Free Farming

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Improvements of crop qualities and the **implementation of fossil-fuel-free farming systems** are key challenges today and in future to safeguard healthy life of all people living on earth.

Prerequisites for the NEW Millennium Agriculture:

1. Improvement of Plant Breeding by a Second Green[®] Evolution – a Green DNA-mRNA-[®] Evolution

Concerning the cultivation of crops in 1819: *“To acclimatize non-indigenous cereals in our regions, we must reproduce the conditions under which they thrive in their country of origin and as far as possible the factors which cause them to fail. At the same time we should not subject them to excessive artificial refinements, thereby turning them into weaklings attracting a host of diseases which we seldom observe in the wild growing plants”* (Ignaz Magini, Vienna, Austria, 1819).

This means in 2023: To understand the dialogue of genes and develop it further – to decipher, to marvel it and to understand nature’s primary language, to add to it with a sense of responsibility and to make use of it in an ethically acceptable way.

2. Development and Implementation of a Tripartite Bio-Vision 2050

- **F⁴: Fossil-Fuel-Free Farming + Mostly Emission-Free Farming + Sustainable Bio-Economy**

A selected spectrum of innovative approaches is presented in order to highlight a roadmap to enable a climate resilient agriculture for high-tech as well as smallholder agriculture.

“The seed sprout”, or in other words: **“Planting the right ideas, so that they can also be harvested in future.”**

Last, but not least:

- 1. Science and technology will win, to enable a better life and a better future!**
- 2. Do more with less, do it better, do it with less waste, do it with less emissions, do it for people, do it for the planet and do it in time!**
- 3. Let’s do it together for a better life! – 2023 and beyond ... in Freedom and Peace!**

P.S.: In memory of Kern, M. (1998): **The Food Needs of the Earth = To the Uttermost Limit of Necessity**, International Conference on Food Security & Crop Science, CS Haryana Agricultural University, Hisar, India, Nov. 3-6, 1998.