

Opportunities behind Agriculture certificates: Sustainable farming is the world future hope.



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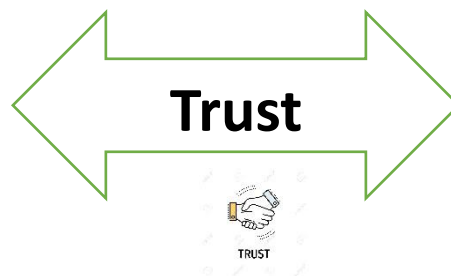
What is green certifications system made for?

Green product certifications are intended to explain and certify that a product fulfils a particular standard and gives an environmental benefit. These are multi-attribute programs since many products labelling and certification programs certify items based on life-cycle characteristics. Among these criteria are energy consumption, recycled material, and air and water emissions from production, disposal, and use. Others concentrate on a particular factor, such as water, energy, or chemical emissions that simultaneously affect the environment and people.

Why to choose certified products?

Certification essentially aims at ensuring, regulating, and facilitating the production.

**Consumer requests
healthy &
environmentally
sound products.**



**Farmers produce
according to
defined standards.**

Certified products insure trust between consumer and producer, especially for sustainable based certification like the Organic and Biodynamic certification.

What are the different certification scopes based on sustainable concept?

On international level:

- Demeter
- Organic
- Fairtrade
- Carbon credit
- PGI (Protected Geographical Indication)

On Local level

- Organic
- PGS organic (PGS: Participatory guarantee system)
- PGS Demeter
- PGI

How can Agricultural certifications Maintain sustainability?

Environment, economy, people, and social aspects of life may all be strengthened with sustainable agriculture. But how can this be achieved through certification? In this report the focus will be on environmental aspect more than the other ones.

I. Environmental level

Demeter and organic certifications:

Certificates like Demeter which adapt biodynamic agriculture system is basically depends on the farm as a whole, like a closed cycle the inputs and outputs comes and goes to the farm, it's also based on the contact between human and nature spiritually and physically as they link practices of the system with the soul of nature and human at the same time. According to Demeter international website Biodynamic approach and principles care for the Earth "Biodynamics take ideals and ethics into practical reality, respecting the ecology, culture, and tradition of a place. This is agriculture as a collaboration between human beings and nature in which both can flourish". We can say the same about organic agriculture system but there are differences between both systems as from environment point of view organic is divided into levels as in many cases it does not consider the farm as whole entity cause some crops or factors in the farm can be certified and others not.

Speaking of how these certified systems can contribute to sustainability, it is important to note that they take great care, when applied to a farm, factory, or animal production, to preserve the soil and its biodiversity. In addition, they shield products, cultivations, soil, and people from chemical products that could harm all the aforementioned subjects.

Practices that enhance and help on sustaining healthy environment:

- Planting more trees to mitigate gas emissions and it can also be shelter for different species of birds and insects that can increase biodiversity.
- Forbidding the usage of chemical.
- Controlling the usage of fossil products and machinery and depend more on renewable energy and humans interfering (more labor).
- Limiting the usage of plastics and encouraging the usage of biodegradable materials.
- Controlling the shipping methods that cause more emission like (airfreight).
- Adding compost to soil and other natural fertilizers can increase the beneficial microorganisms that improve the quality of soil what will affect after a while the food quality and plant needs from the soil.
- Good soil will partially help in solving irrigation water problems like using less amounts of water cause agriculture considered to be a sector that consumes large amounts of water.
- Plant cultivated using Organic and Biodynamic systems will help in filtering more quality air that leads to a healthier atmosphere.

Absence of the factors listed in agriculture can cause severe environmental harm and exacerbate the already complex issue of climate change.



Carbon credit certificate:

CO₂ emissions now is one of the major problems of climate change crises facing planet earth, a problem that need an urgent move to try stop it or at least trying to stop it from exacerbation.

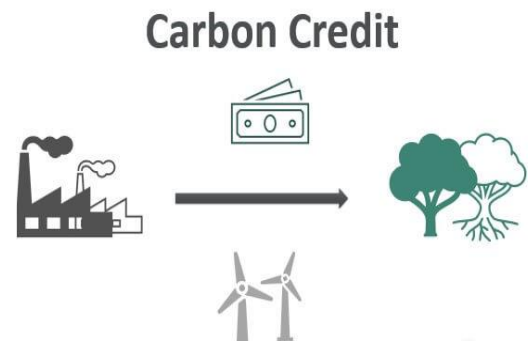
As a component of the 1997 UN Kyoto Protocol, the first international accord to reduce CO₂ emissions, trade in carbon credits was established.

Climate change became an important concern to people who created certification system and to whom consumes products that comes from such agriculture methods, also for farmers who follows this way of agriculture. How this helps in reducing the hazardous influence of climate change is because system like Carbon credit include practices that mitigate the CO₂ emissions like:

- Planting more trees less gas emissions
- Less machinery usage mitigating CO₂ emissions
- Making on farm compost helps in reducing emissions also less usage of chemical fertilization.
- Transporting agricultural products by other ways than airplanes can help reducing emissions.
- Using more human in doing farming work and depending on less machinery can also help.
- Using renewable energy is very good way to solve the problem.

Notes:

- Carbon credit can benefit both sides the farmer, country, region and environment, for more explanation: a farmer or region or a country who applies practices in agriculture like



the ones mentioned before can earn money as an incentive for using ways that mitigate CO₂ emissions. On the other hand, environment will be healthier and sustainable.

- Using certified systems like organic and biodynamic farming can assist in attaining the aforementioned goals and make it simpler for the farm to pursue certification that guarantees this farm has accrued carbon credits.

PGS Demeter and PGS organic:

PGS Demeter and PGS organic certification are close to the international Demeter and organic certifications, but the main differences are:

- PGS Demeter and Organic are for the national level (produce coming from these systems cannot be exported as organic or Demeter certified).
- Less prices but still sold with good prices.
- Less restriction in the standard (rules to hold the certification) followed than international Demeter and Organic.
- Instead of a third-party inspector farmer is doing the inspection process by themselves among each other.



The environmental impact of these two certifications is comparable to those of the international ones mentioned above, but what makes it worthwhile and beneficial for the farmer to try to hold one of them is that it costs him less money and requires less paperwork than the international ones, and the practices that must be followed are also easier. The key takeaway is that farmers who find it difficult to obtain an international certificate find it easier and less expensive to practice conventional farming than sustainable farming. As a result, PGS assists more farmers in beginning the transition to sustainability by advising them on simpler methods that can help them achieve sustainability in a variety of areas, with the environment being one of them.

For more information about PGS organic you can visit the following website:

<https://pgs.ifoam.bio/>

<https://ifoam.bio/our-work/how/standards-certification/participatory-guarantee-systems/pgs-toolkit>

<https://www.youtube.com/watch?v=vb1hfRswKMg&t=360s>

<https://youtu.be/8kAMRIRJKWQ>

Note:

Unfortunately, PGS-Demeter still under consideration so there are no available information about in online.

PGI certification (Protected Geographical Indication):

The protected geographical indications (PGI) identify an agricultural product, raw or processed, which quality, reputation or other characteristics are linked to its geographical origin. The PGI applies to agricultural and agro-food.

The PGI can be based on the reputation of the product (like the parmesan cheese that is made in Italy in **Parma-Reggio region**), which means, the sense of a strong recognition by the public at any given time, and which must be associated with a skill or a specific quality attributable to the geographical origin.

The how this certificate help in maintain healthy environment and sustainability is because it focuses in producing a certain product in its region as mentioned before what means that in agriculture for instance there are the black artichoke of Austoni -Italy or the Egyptian cotton that is widely famous that is native to this area specifically and that means it is adapted to the place including the weather, soil and other conditions that helps it grow let's say organically without needing many inputs to grow in a healthy way with good product quality.



Sources:

1. <https://demeter.net/biodynamics/biodynamic-approach/>
2. <https://e360.yale.edu/features/is-the-legacy-carbon-credit-market-a-climate-plus-or-just-hype>
3. <https://www.wbdg.org/resources/green-building-standards-and-certification-systems>
4. [https://www.iao.gov.fr/eng/Official-signs-identifying-quality-and-origin/Protected-Geographical-Indications#:~:text=The%20protected%20geographical%20indications%20\(PGI,GIs%20were%20established%20in%202013](https://www.iao.gov.fr/eng/Official-signs-identifying-quality-and-origin/Protected-Geographical-Indications#:~:text=The%20protected%20geographical%20indications%20(PGI,GIs%20were%20established%20in%202013)
5. https://www.researchgate.net/figure/The-Participatory-Guarantee-Systems-PGS_fig6_332442041