

# Towards an ethical horticulture: natural and social values as a productive direction

## Abstract

In recent years, the world has suffered an exaggerated and disproportionate exploitation of natural resources that directly affects people's lives both now and in the future. This utilitarian way of understanding the environment also extends to our society, which is becoming dehumanized, producing the so-called social exclusion. Horticulture, as the basis of food production for humanity, also has a notable influence on the Earth ecosystem, in its environmental and social perspective. Depending on the approach we take to horticulture, we can either relate appropriately to our environment or, on the other hand, cause environmental damage and, therefore, social damage. The values behind the horticultural activity will be decisive when it comes to achieving an environmentally harmful horticulture or a horticulture aligned with the natural and social cycles and processes: this is what is called ethical horticulture which includes sustainable principles based on ecological and social criteria.

**Keywords:** ethic horticulture, values, environmental damage, social exclusion, care, respect

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## Introduction

In recent years the world has suffered an exaggerated and disproportionate exploitation of natural resources unprecedented in the history of mankind. The current capacity of the human species to exploit these resources on a global scale and to produce a transformation of our environment has led to the appearance of major environmental problems, both local and global.<sup>1</sup> Humanity is breaking the person-territory binomial,<sup>2</sup> ignoring that it is laying the foundations of its own destruction, defying even some of the main natural laws, among them that of respect for the Earth and its natural cycles.<sup>3</sup> He is breaking the harmonic balance that linked him to other living beings, to the ecosystems and to the Earth.<sup>4</sup> It is forgetting its responsibility with the enormous legacy that nature represents. It is breaking this balance without yet having sufficient knowledge to understand the enormous complexity of the biosphere and the effects it is having on it, many of which are irreversible. It does not seem to realize or understand the transcendent consequences that its behaviors are causing in the present and may cause in the future.

The person has not heard that the biosphere represents a precious symphony, of incomparable beauty, played in a harmonious and melodious way by a multitude of tuned instruments and that any change in one of these, in an element of the environment, already provokes the detuning and loss of the beauty conceived in its music. Unfortunately, there are many instruments that are nowadays going out of tune and even disappearing from the orchestra, running the risk of affecting and corrupting definitively this marvelous music, transforming it into a disordered and useless noise. In short, the human species, in a pretentious way, has wanted to control environmental processes, unaware of the intrinsic difficulty of this task. It has tried to use nature by reducing it to mere merchandise, a mere resource that it can dispose of as it pleases, forgetting its role as manager, its role as custodian and that it is its own existence, its own being, that is at stake. The human species has forgotten that it is with Life that it is playing, trying to impose its own rules on the natural ones. They seem to forget that every time they attempt against Life they are attempting against themselves. And the fact is that ontogenetically we people are entirely, indissolubly, radically linked to our environment.

If the biosphere dies, if its plants and animals die, we will die too. Precisamente estas consecuencias es lo que busca paliar la perspectiva posthumanista.<sup>5</sup>

The repercussions of these serious environmental problems on people's health and lives are evident, while the need to remedy the enormous environmental impacts that people are causing on the planet is becoming more and more imperative. To adequately address the solution or minimization of these environmental impacts, of these negative effects on the environment, we have to be aware that we need complex, integral and global solutions, which include a holistic consideration of the environment. Only in this way can we be aware of the multitude of elements of the environment that we are directly or indirectly affecting and think about how we can avoid or reduce these effects as much as possible. This way of thinking is the one we can use in the paradigm proposed by sustainable development, making development compatible with respect for natural resources, for the Earth, for Life.

But this form of development, this so-called sustainable development, poses a conceptual problem in that it does not include limits or define exactly what is considered sustainable development and what is not. Among other requirements, it does not clarify the dimension of the needs that future generations will have. Therefore, since it does not define limits, it is necessary to look for ethical and moral references that delimit and frame the development of our human activities.

Horticulture is one of the many activities currently carried out by humankind that affect our environment. This activity has probably been carried out since the Neolithic period, some 10,000 years ago. Already in the modern period, in the last years it has reached a great significance, due to the population increase and, already at family level, to the value of complementary economy that this activity can provide. In addition, this work, mostly associated with rural environments, is being promoted and is increasingly present in urban environments, either through terrace and balcony gardening, or through private or municipal gardens<sup>6</sup> that local authorities make available to their neighbors. The horticultural work has consequences

on the environment and not only in its creation phase, but also in its production and management phase.

Until now, sustainable development in horticulture was being implemented through the so-called organic horticulture, which implies the exercise of good environmental practices. And that is very good. Taking into account the environment in each and every phase of the creation of the garden and its maintenance can gradually make us move towards a responsible and respectful conscience with our planet and the improvement of our natural resources. These good practices are even affecting the design style of the orchard (for example, using the technique of raised beds). Changing management models of natural resources such as water, through efficient irrigation systems, can gradually improve our environment and, therefore, ourselves.<sup>7</sup>

But it is not enough to be aware of ecological criteria alone. In this person-environment ontogenetic duality, we cannot swing only towards the term environment. We cannot forget the term person. Or at least, we cannot exclude it from the ecological vision. That is why it is a matter of integrating social aspects into horticultural work. It is about including the social, of course, in the ecological, giving it the prominence it deserves.

The way of life of today's Western society, conditioned by a marked neo-liberalism and unbridled consumerism, supported by intense advertising, also causes a series of social problems, possibly more pronounced in the cities. The emergence of a group of socially excluded or at risk of social exclusion in what Novo<sup>1</sup> calls the fourth world, makes it even more urgent to take into account this social-environmental problem in all our activities. Therefore, horticulture cannot be oblivious to these problems and must be aware of the great benefits (obviously we are not referring only to economic benefits) that its development can provide to people.

Among these benefits are the environmentalization of cities, creating life where there is none, regenerating degraded spaces, creating welfare spaces that can meet, albeit sometimes partially, some of the needs of people, such as the approach to natural life, providing constructive leisure, physical activity, peace, tranquility, play, joy, contemplation, socialization. Gardens can thus help to rehumanize society, helping to rebuild the binomial person-environment and recover part of the alienation that often the urban environment causes us.

In short, gardens can bring many benefits, as a result of the promotion of values in people.<sup>8,9</sup> These values are those that help people to be better, to grow positively, to realize themselves in the best possible way and thus achieve fairer, more balanced and humane societies, defenders of Life in all its dimensions.

With the aim of helping to build a better world that recovers the role played by the environment in people's lives, we want to name and conceptualize with the term "*ethical horticulture*" the type of horticulture that takes into account both ecological and social aspects in the development of its activity in an integral way. By "integral" we mean everything related to horticultural cultivation throughout its life cycle, both during its creation phase and in its cultivation and management phase. Of course, ethical horticulture is a way to go. It is not intended that from the first minute of the horticultural activity all the creation and management is already perfectly carried out in an ecological and social way. Far from it. It is not easy. Ethical horticulture is a path to follow, where the path is as important as the result. It is also a path of learning, a horticulture open to discover new good practices among all. It is a participative path, where any contribution will be welcome.

We are aware that the term "ethical" may seem pretentious and that sometimes it has been manipulated and used. In our case, we have not wanted to be pretentious, nor to manipulate the term, nor to pass judgment on what is ethical and what is not. Taking this idea to the extreme, it might seem that those who do not carry out the recommendations set out here are not being "ethical". Nothing could be further from our intention. As has been mentioned, the ethical garden is a way of doing things, a resource for forming people that follows a dialogical and participative path that begins here. A path in which there is room for many mistakes and not a few inconsistencies, but which little by little we intend to smooth out in order to work in a more humane scenario.

## 10 Values of ethical horticulture

Ethical horticulture, as horticulture that integrates and develops ecological and human aspects, needs to be defined by a code of practice based on ethical principles. Even more so considering the era of moral relativism that reigns in our current western society. It needs to establish criteria and limits that define its field of action and point out the direction to follow in order to set off the "alarms" when we deviate from the path. Ethical horticulture shows us a path to follow that should lead us towards a better coexistence and a better environmental welfare, and, consequently, towards a better social welfare. This would be its purpose: to promote through horticulture a better personal and social welfare, through the exercise of responsibility, care for the environment and care for others.

Through different regulations, such as Council Regulation (EC) 834/2007 of 28 June 2007 on organic production and labeling of organic products, we can collect some principle of organic horticulture that appears in its "consideration I" and also includes social aspects:

"Organic production is a general system of agricultural management and food production that combines the best environmental practices, a high level of biodiversity, the preservation of natural resources, the application of high animal welfare standards and a production in accordance with the preferences of certain consumers for products obtained from natural substances and processes. Thus, organic production methods exercise a dual social role, providing, on the one hand, organic products to a specific market that responds to consumer demand and, on the other hand, public goods that contribute to environmental protection, animal welfare and rural development."

Based on this idea, and already in the case of horticultural production, ethical horticulture should be based on a ladder of environmental and social values that propose a code of conduct, a set of good ethical practices, which direct us towards this personal fulfillment and social welfare. These values should frame the main strategies, guidelines and actions of the different tasks carried out in horticulture. They should also be considered integrally in all phases of the horticultural activity: from the phase of realization of a creative project to the production and management phase. Specifically, 10 of them have been chosen, those considered the most important, which are presented in the following paragraphs. These principles and values are not presented here as if they were abstract and unattainable entities. They are not just theoretical values, but require putting them into practice. It is through concrete actions, through daily practice, that we will internalize and develop these values. As will be seen, the proposed values are not new. They are well known. As Camps (2013) says: "It is not a matter of talking about new values, but about the usual ones, but adapted to today's situations."

## Responsibility

It is considered as the cornerstone, the key piece, in the

development of ethical horticulture. Responsibility for what one should do, whether it is an institution, a company or an individual, is one of the main drivers of change and includes both environmental and social responsibility through empathy.

## Respect

The second key piece. Understood as “consideration for the other”, it frames us and facilitates the path to follow in ethical horticulture, setting off an alarm when we stray from the right path. This respect is focused on the person and also on nature and all its life forms.

## Freedom

Of course, responsibility and respect can only be exercised in a context of freedom, a fundamental value and definitive condition for the development of the person, to give the best that we can give of ourselves, to reach full maturity. People’s freedom is concretized and exercised in decision making, taking into account ecological and social ethics.

## Equality

This is another fundamental value to be applied in ethical horticulture. Equal dignity among people, regardless of their gender and abilities. This is why this type of horticulture must serve to integrate people. It must propose the integration of any type of collective, aware that we cannot pretend to improve the biodiversity of the planet if we do not previously understand the value of human diversity. Therefore, within the differences that each group and each person presents, the presence of a diversity of gardeners is promoted in this type of horticulture, so as to include disadvantaged groups such as physical or mental or social disabilities, as well as taking into account the gender perspective.

## Participation

Possibly developed through the horticultural tasks that require teamwork and through the activities that can be developed in the garden, it is also considered a fundamental value to foster a sense of community among people, which is necessary to advance in the solution of our environmental and social problems.

## Solidarity

This value can give meaning to many of the actions carried out during its practice. For example, if it is decided to save water by installing drip irrigation, it is convenient to know the reasons why it is being done. Saving water is being done out of respect for water, out of respect for the living beings that need water, but also out of solidarity towards people, either in our society or in other parts of the world, who lack this precious liquid. In addition, of course, we do it for ourselves, as we grow personally in the value of responsibility, respect and solidarity. We are becoming better people. Yes, also by saving water. That is why we must always save water.

## Love

Love for living beings, for the Earth and for others must also be present in the actions of ethical horticulture. Obviously, it appears in the context of respect. Love reinforces respect for otherness. It is the main motive that sustains us, a great engine of change of behaviors and attitudes. If well focused, it can encourage the acquisition of ethical habits, both environmental and social.

## Transparency

Transparency, in order to show society the correspondence

between what we think and what we say and do, implies the public communication to society of data concerning the activity of the entity that develops the gardening work: institution, company, training center, non-profit entity, individuals, etc. It means not being afraid to explain to society what we do and how we do it, aware of acting in an ethically correct way.

## Coherence

Consistency between what we think, what we say and what we do is a key value of ethical horticulture. Consistency means including in the mission of the organization the promotion and practice of ethical horticulture, so that the institution makes explicit its commitment to this type of horticulture. Once the commitment has been established in its mission, the exercise of coherence is not an easy task. There are many tasks in which this value appears. Coherence with the preservation of the environment, with non-pollution, with respect for life, is sometimes not easy to carry out. Sometimes the coherence to combine productive yields with the promotion of social inclusion of the most disadvantaged groups is not easy either.

## Care

We could understand care as the sum of respect and love.<sup>10</sup> It is the ideal value, since it makes us aware in all our actions of the duty we have with the Earth, with others and with ourselves.

## 18 Characteristics of ethical horticulture

Based on the rationale and values presented so far, we can frame some of the main characteristics of ethical horticulture. Specifically, 18 are presented. It is important to clarify here that they are formulated as trends to be considered. Ethical horticulture is not an “all or nothing”, it implies a path to be followed. It is not easy to be consistent with all its principles and values, but it is convenient to take them into account to gradually move towards the ethical garden. These characteristics are:

### Encounter person-environment

Ethical horticulture seeks to facilitate the encounter of the person with the environment, aware of the benefits that nature can provide to people, including promoting their well-being, rest, recreation, joy and happiness.

### Promotion of environment

It is oriented towards the conservation and promotion of the environment. This means that it is configured in the spirit of maintaining existing life and allowing the regeneration of new life whenever possible. For this reason, it will avoid the destruction of native natural ecosystems and will seek the environmentalization, through the promotion of orchards and green areas in degraded or urbanized areas.

### Reduction of environmental impact

It tends to avoid or reduce the negative environmental impact caused by both the creation of orchards and their use, including maintenance work. On the contrary, it tends to enhance the positive environmental aspects that their creation and maintenance can cause in the environment and in people.

### Innovation

Ethical horticulture is creative and open to new proposals and techniques of management, creation and maintenance that take into account social and environmental criteria. It is not closed to anything,

nor does it renounce anything. It rethinks already accepted models and techniques and is not prejudiced or afraid of change. But in the same way, it recovers and uses traditional systems and techniques, many of them already forgotten by modern horticulture, adapting them to the new times.

### Orchard as an ecosystem

He considers the garden, right from the design phase, as a mature ecosystem that will be reached over the years. Therefore, it is not in a hurry to achieve its aesthetic, environmental and social objectives. The design of orchards will be carried out taking into account the naturalization of the orchard.

### Autochthonous species

Try to work with native species, aware that they are the most adapted to the soil<sup>11</sup> and climate of the orchard and, therefore, once established, they are likely to live better and longer, needing less care and inputs than non-native species. By using native species we are helping to conserve the genetic heritage.

### Increased biodiversity

It tries to preserve the animal and plant species found in the place where the orchard will be implanted, whatever their group of belonging. It also promotes the increase of plant and animal biodiversity, so it will try to make designs that facilitate this task. It should avoid the monospecific and tend to the use of the maximum number of plant species. It should increase the number of different strata, sizes, niches, which can accommodate a greater number of animal species: birds, bees, insects, soil and plant fauna, micro-mammals, etc., aware of the ecological balance that can be achieved in a mature orchard, taking into account the role that each element plays in the orchard ecosystem.

### Natural disease control

Relativizes plant diseases, attempting the prevention and natural phytosanitary regulation of diseases, the control of pests, various infectious agents and phytophagous populations. Additional fertilizers, soil conditioners and phytosanitary products should only be used if they are compatible with the objectives and principles of organic production.

### Integrated water management

An attempt will be made to manage water in an integrated manner, considering the reduction and optimization of water consumption.

### Soil care

Is considered fundamental. Soil is the great forgotten part of ecosystems. That is why ethical horticulture respects it and takes great care not to destroy or contaminate it, trying to preserve its fertility and the biological activity that develops in it. Therefore, ethical horticulture should contribute to maintaining and increasing soil fertility and preventing soil erosion. Plants should preferably be nourished by the soil ecosystem rather than by soluble fertilizers added to the soil. Therefore, management techniques such as appropriate crop rotation will be used.

### Natural resources

It will try to be based on renewable resources. Aims to reduce and optimize the use of resources and energy, aware of the environmental cost that the production and use of these resources can cause. It pays special attention to natural resources, trying to conserve and optimize

their use. Therefore, it will try to rely on renewable resources integrated in local agricultural systems. To minimize the use of non-renewable resources, waste and by-products of plant and animal origin must be recycled by replenishing nutrients in the soil.

### Responsible management of waste, spills and emissions

The management of waste, spills and emissions must be carried out responsibly, taking into account respect for the environment. For this reason, their minimization will be sought. As far as possible, we will tend to reuse them and, as a last resort, to recycle them.

### Fostering local development

It will try to promote local, endogenous development, in such a way that it will try to seek local suppliers, trying to minimize the transportation of products.

### Promotion of Corporate Social Responsibility

It incorporates the Corporate Social Responsibility (CSR) of companies, local entities and various entities in order to carry it out. It includes in its management, if possible, from the conception of the project, disadvantaged groups, physically, mentally or socially handicapped.

### Prevent occupational risks

Incorporates occupational risk prevention in the orchard.

### Equality

It takes into account the equality of people, gender equality among others, both in its design and in the maintenance work to be carried out.

### Socialization

It provides an added value to the orchards to serve as a scenario of socio-cultural revitalization of the community, as a space for socialization.

### Environmental Education

Promotes environmental education of the population.<sup>12</sup> Education is considered a fundamental factor in favoring people's understanding of the importance of the environment in our lives. Through horticulture, through the knowledge of gardens, we can help people to interact with the environment and thus become aware of the need for its conservation.

### Ethic horticulture and Sustainable Development Goals

Due to its values and characteristics, ethical horticulture is linked to the sustainable development goals proposed by the UN for 2030.<sup>13</sup> Specifically, it is specifically aligned with the following objectives:

- I. 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- II. 3: Ensure healthy lives and promote well-being for all at all ages.
- III. 5: Achieve gender equality and empower all women and girls.
- IV. 11: Make cities and human settlements inclusive, safe, resilient and sustainable.
- V. 12 Ensure sustainable consumption and production patterns.
- VI. It is transversally aligned with the rest of the objectives.

## Conclusion

Horticultural work is of vital importance for the development of peoples and societies, not only because it concerns a basic element for people, such as food, but also because it is intertwined with the way we relate to the environment, including the social perspective, in what could be called ethical horticulture. A proposal has been developed to initiate the path that ethical horticulture wants to follow. This journey includes the conceptualization of its principles, values and characteristics. With the contribution of some possible good practices, we want to recognize and concretize ethical horticulture in its usual practice, in its daily performance. This proposal, in short, begins a path that aims to be traveled by all those who want to work in favor of this way of doing horticulture: ethical horticulture. It is now where, with the objective of environmental and social improvement, it is intended to count in a participatory way with all people, companies, public and private institutions that are related to horticulture. It is now when we have to act. Now is a good time to develop our horticultural activity, supported by ethical values. It is time to use values that give meaning to our actions and help to achieve a horticulture that has a more positive impact on the environment and on the social environment. This is the grain of sand that horticulture can contribute to the solution of environmental and social problems that aim to achieve the sustainable development goals proposed by the United Nations and agreed upon by the international community. This is, in short, the intention of this path towards ethical horticulture.<sup>14</sup>

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## Conflicts of interest

The author declares there is no conflict of interest.

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