

RESOLUTION OIV-VITI 654-2021

OIV GUIDELINES FOR THE SUSTAINABLE PRODUCTION OF GRAPE JUICE, CONCENTRATED JUICE AND FOR PROCESSING

THE GENERAL ASSEMBLY,

CONSIDERING the resolutions:

CST 1/2004 providing the definition, objectives and implementation steps of sustainable vitiviniculture,

OIV-CST 518-2016 defining the five general principles of sustainable vitiviniculture while considering equally environmental, social, economic and cultural aspects and,

OIV-VITI 641-2020, OIV guide for the implementation of principles of sustainable viticulture

CONSIDERING that there is a great diversity of vitivinicultural environments and grape and wine production systems on which the various factors contributing to sustainability have a different impact,

CONSIDERING the need to provide comprehensive and concrete tools that illustrate the application of sustainability principles in vitiviniculture and thus facilitate their acceptance,

CONSIDERING that there are many different and potentially equally appropriate approaches to evaluating a sustainable development system,

CONSIDERING the general need to understand the sustainability concept and its implications,

CONSIDERING the article 2, paragraph 2 k) of the Agreement of the 3rd April 2001, one of the activities of OIV is “to contribute to the promotion or recognition of the world vine- and wine-growing heritage and its historical, cultural, human, social and environmental aspects”,

DECIDES to adopt the following “OIV Guideline of Sustainability for the production of Grape Juice, Concentrated juice and for processing”,

RESOLUTION OIV-VITI 654-2021

OIV GUIDELINES FOR THE SUSTAINABLE PRODUCTION OF GRAPE JUICE, CONCENTRATED JUICE AND FOR PROCESSING

1. Scope of application of the document

2. General principles of sustainability applied to grape juice, concentrated juice and processing methods

- 2.1. Principle No. 1 – A sustainable approach integrates environmental, social and economic aspects
- 2.2. Principle No. 2 – Sustainable vitiviniculture respects the environment
 - 2.2.1. Site selection
 - 2.2.2. Soil management
 - 2.2.3. Preservation of biodiversity
 - 2.2.4. Preservation of the natural landscape
 - 2.2.5. Management of use of inputs
 - 2.2.6. Product management
- 2.3. Principle No. 3 – Sustainable vitiviniculture is sensitive to social and cultural aspects
 - 2.3.1. Working conditions
 - 2.3.2. Integration within the socio-economic and cultural environment
 - 2.3.3. Health and safety of the consumer
- 2.4. Principle No. 4 – Sustainable vitiviniculture seeks to maintain economic viability
 - 2.4.1. Resilience
 - 2.4.2. Efficiency
- 2.5. Principle No. 5 – Sustainable initiatives require planning and implementation evaluation
 - 2.5.1. Planning
 - 2.5.2. Evaluation/Self-evaluation
 - 2.5.3. Monitoring and evaluation of knowledge generated
 - 2.5.4. Communication

1. Scope of application of the document

In accordance with the concepts defined in Resolution CST 1/2004 and in resolution OIV-CST 518-2016 and OIV-VITI 641-2020, this document has a global focus, within the different scales and systems of the field of production, while at the same time taking into consideration the processing industry and the rest of the links in the chain. Sustainable vitiviniculture is defined by the OIV (resolution CST 1/2004) as the “global strategy on the scale of the grape production and processing systems, incorporating at the same time the economic sustainability of structures and territories, producing quality products, considering requirements of precision in sustainable viticulture, risks to the environment, products safety and consumer health and valuing

of heritage, historical, cultural, ecological and landscape aspects”.

This document will concentrate on guidelines that define actions to ensure sustainability in the production of grapes for juice and concentrated juice, also taking into account the processing units into consideration.

The objective of the document is to define and suggest actions for grape juice, concentrated juice and processing methods within the framework of the OIV, to serve as guidelines for the application of the principles of sustainability so that Member Countries may adapt their internal standards; and to promote understanding of the concepts of sustainability involved in vitivinicultural production.

The viticultural approach (varietal selection, water supply, management system, date of harvest) and the technological approach (extraction and stabilization of juices, organoleptic characterization of products, control of acidity and pH) must be taken into account in these recommendations.

In this sense, the document will be based on the different durability principles defined in resolution OIV-CST 518-2016 to be able to associate them with the specificities of grape production for juice, concentrated juice and processing.

2. General principles of sustainability applied to grape juice, concentrated juice and processing methods

2.1. Principle No. 1 – A sustainable approach integrates environmental, social and economic aspects

The activities of the vitivinicultural industry (grape juice and concentrated juice) depends on the natural resources involved (genetic resources, energy resources, water, climate, soil, air quality and the ecosystem of the productive environment) and on the socio-economic and cultural environment it belongs to. The development of production systems and practices that preserve and improve the conditions of use of these resources, as well improving the socio-economic conditions of areas of production, is fundamental to guaranteeing the viability of vitivinicultural activity in the long term, with reduced impacts on the natural environment.

This basis of sustainability should be founded, in perfect equilibrium and equity, upon the three fundamental components: social equity, economic growth and environmental protection.

As the resolution OIV-CST 518-2016 points out, depending on the specific conditions of each vitivinicultural region, company or product type in environmental, social and economic terms may differ and take on different dimensions. For this reason,

companies that implement a sustainable development initiative should be given a certain degree of flexibility in doing so, those to apply procedures that are optimal for their environment.

2.2. Principle No. 2 – Sustainable vitiviniculture respects the environment

The protection of the soil, water, air, biodiversity and natural landscape are fundamental factors for determining sustainability in the vitivinicultural sector. It is possible to guarantee this protection by means of rational planning in the establishment of new vineyards and industrial plants, and the restructuring/adaptation of existing vineyards and industrial plants, by applying basic ecological principles and optimising the management of new or existing environmental assets. Processing infrastructures should be planned in such a way as to mitigate the anthropic pressure on natural and modified ecosystems, and promote the maintenance and expansion of permanent areas of preservation, as well as the regeneration of degraded areas.

The management of inputs (energy, water, technological processing aids and packaging materials) is the basis for revision in order to initiate a process of adaptation to the principles of sustainability, through the optimisation of their use and reuse.

The basis of waste management (effluents, waste and by-products) is to cause the minimum possible impact on the environment and prioritise the reuse, recycling and proper disposal of the waste.

2.2.1. Site selection

In order to choose the location of new vineyards and processing units, factors to be considered include whether the site is an environmental buffer zone, along with the risks of potential contamination, always in accordance with the environmental legislation of the relevant national authority. Special attention should be paid to the risks of contamination of water resources and to the management of the use of these resources, as well as to the contamination of marginal crops and other production systems.

In the definition of the location of new vineyards, the management system to be adopted as well as the necessary inputs for their operation should be considered, with emphasis on the lowest possible use of inputs throughout the production chain and mitigating the risks of environmental contamination. As such, it is necessary to consider previous land use, the type of soil, slope, drainage, barriers of protection, spraying systems. Climate parameters are also important for grape juice vineyards, as

temperature and relative humidity of the air, precipitation, wind frost risk, etc. The interactions of all characteristics of the environment can alter the composition and quality of the grapes and, consequently, the aroma and taste of the juice.

Legal mechanisms that impede the use of areas with a high contamination risk for the surrounding environment or marginal crops should be guaranteed.

Access to vineyards or processing units should be distributed in such a way as to optimise movement and access to transport systems.

2.2.2. Soil management

It is necessary to adopt management practices that guarantee protection against risks of erosion and loss of nutrients, preserving organic material and effectively managing ground cover, whether spontaneous or sown. The maintenance of biological diversity and soil fertility should rather be planned so as to cause the least environmental impact possible, by adopting sustainable management strategies with low use of inputs or the use of inputs with a low environmental impact.

The use of machines and tools should be managed so as to reduce the impacts of compaction and guarantee the preservation of the soil's physical and biological structure, with an increase in the necessary resources for the development and equilibrium of soil activity.

For the establishment of new vineyards – as for the restructuring of existing vineyards –, the use of inputs, and operations to move soil and manage vegetation should be planned so as to reduce the negative impacts on the soil, environment and local landscape, and as such large-scale movements of earth are not advised.

2.2.3. Preservation of biodiversity

Promote intra and inter varietal diversity in commercial vineyards.

With regard to the natural environment, schemes should be established to preserve and promote biodiversity on where vitivinicultural activities are developed, with the aim of encouraging the development of local microorganisms, flora and fauna. These schemes should guarantee the preservation of biological diversity in natural ecosystems, and the restoration or growth of biological diversity in the modified ecosystems where the production system operates, with special attention to threatened extinction species.

Structures that represent ecological niches should be preserved and mapped, by subjecting them to analysis and planning, thus guaranteeing the formation of biological corridors, and strengthening their positive aspects in environmental interaction and in landscape preservation.

2.2.4. Preservation of the natural landscape

In the new vineyards installation, the evaluation of the impact on the landscape during the phases of soil preparation, seedling plantation, the definition of areas and the training system are required, in order to define which elements of the landscape should be preserved and which should be restructured (replanting). These concerns should also be taken into account in the planning and architecture of the processing installations. Local legislation and programmes of preservation and development should be considered in this regard.

2.2.5. Management of use of inputs

i. Optimisation of energy use

In selecting energy sources, the reduction of greenhouse gas emissions should be considered, giving preference to the use of renewable energies and energies with a low environmental impact. Wherever possible, strategies that aim to reduce energy consumption, even with renewable energy, should be adopted. In the planning of vitivinicultural units, it is necessary to consider the optimisation of energy consumption – taking into account the operational efficiency of the equipment or processes that will be used – as well as to rationalise the movement of machines and equipment. The architectural project should consider the most efficient use of energy and give preference to alternative energies.

It is necessary to optimize the establishment's logistics.

The possibility of energy production within the vitivinicultural establishment itself should be considered.

ii. Optimisation of water usage

The use of water should be considered in terms of its local availability and impact on water quality and groundwater table levels as defined by the resolution OIV-CST 518-2016.

The recommendations made in OIV resolution VITI 02/2003, "Reasoned vine irrigation", should be observed. Irrigation systems with low water consumption to overcome physiological stress of vines should be preferred.

Priority should be given to systems favouring efficient and effective use (rainwater collection) and reuse of water (without excess or abuse) at all stages of production.

Monitoring consumption may facilitate the establishment of a plan or strategy to optimise water consumption.

iii. Optimisation of the use of technical inputs in production and in processing

Viticultural establishments should optimise and rationalise the use of materials, equipment and inputs for viticultural production, as well as the inputs for the production of juices and concentrates.

With regard to the planning of vineyard management:

- It is important the use of alternatives to chemical methods for herb management, biological fight, use of models to predict the possible threats of fungus and pests and use the new approach of functional biodiversity.
- In order to be able to respond to the adaptation objectives of production practices, the choice of new varieties that incorporate genes for resistance to fungal diseases such as powdery mildew and mildew should be prioritized, almost completely eliminating the application of fungicides, as for the use of insecticides, it can be dispensed with fighting pests with the use fungicides, as for the use of insecticides, it can be dispensed with fighting pests with the use of pheromones, traps, natural enemies and microorganisms.
- Taking account that the grape juice, is produced without fermentation and for human consumption, special attention should be paid to residues of plant protection products.
- Strategies should be adopted that prioritise substances of lower environmental impact and lower acute and chronic toxicity, with a view to promoting and maintaining the equilibrium of the production system as a strategy to promote and maintain the health of the vineyard, for which the adoption of phytosanitary alert mechanisms should be prioritised.
- Where possible, it is advisable to opt for inputs permitted for use in organic viticulture due to their low impact on the environment and on health; in terms of the use of fertilisers, organic and mineral fertilisers with low solubility and low environmental impact should be prioritised.
- The recycling of organic material should be the basis for the maintenance of soil fertility and vineyard nutrition, as well as for the maintenance of the biological activity of the soil, considering the incorporation into the soil of pruning remains

after its chopping and other by-products (scrapes, skins, seeds ...) as an optimal way to improve the organic matter of the soils compared to other organic fertilizations derived from animal production waste should be used in such a way as to ensure care is taken with regard to soil contamination, via composting systems in line with current legislation.

In the production of juices and concentrated juices, when production inputs (additives, technological processing aids) are used, these should be adapted to comply with the International Code of Oenological Practices, with the prioritisation of recyclable materials or those obtained through minimum environmental impact, taking into account their useful life and stability, and avoiding waste.

Packaging materials (bottles, labels, closures, bags and boxes) should preferably be recyclable or have the least environmental impact possible. The management of the use of processing aids, before and after treatment, should take into consideration everything related to the reduction of their use – storage, recycling and the removal of waste and effluents.

2.2.6. Product management

i. Waste management

The production of waste should be planned in such a way that volumes are limited and actions are promoted in favour of good waste management practices. The recycling and reuse of waste should be considered, with the aim of reducing the impact on the environment and on public collection services. Each type of waste should receive the appropriate treatment and final destination according to its category.

Solid organic waste, where possible, should be composted; non-toxic solid inorganic waste should be recycled. Solid organic and inorganic waste with a high toxic load (unused or expired phytosanitary products) should be collected and stored appropriately with the aim of avoiding environmental contamination, and subsequently appropriate disposal should be arranged. The following shall be considered solid waste: unused and expired phytosanitary products; plastic, glass or metal packaging; materials for training systems; pruning waste; oenological substances such as filtering and diatomaceous earth; filters; lees; and tying elements.

When the reuse of liquid waste is possible, it should be suitably treated before reuse. When this waste contains chemical or biological contaminants, it should be suitably stored for subsequent appropriate disposal. The following shall be considered liquid

waste: effluents, liquid remnants of phytosanitary treatments, fuel waste and lubricants.

When collection and storage of contaminated solid or liquid waste for subsequent disposal, this should be carried out in an appropriate system and manner with the aim of guaranteeing maximum safety so as not to contaminate the environment, especially when it comes to liquid waste with a high contaminant load, as well as the liquid remnants of phytosanitary products or fuels. Even when it is possible to recycle waste, the recycling should be conducted in a controlled and appropriate way so as to cause minimal environmental impact, especially in the case of waste with a high organic load.

Ventures should seek to harness the energy potential of the by-products of solid and liquid waste treatment in the form of biogas or solid and liquid organic fertiliser.

Any vitivinicultural venture should have a (quantitative and qualitative) registration and control plan recording all waste produced, its possible environmental impact and its final destination, while respecting the environmental legislation of the country and site at all times.

iv. By-product management

Priority should be given to viticultural and vinicultural systems that promote a reduction in the quantity of by-products (pruning remains, clusters, skins, seeds, sediments), while always taking into account product quality. Actions should be envisaged that ensure the reuse and recycling of by-products, wherever possible in the vitivinicultural establishment itself, provided that the procedure is appropriately conducted with the aim of reducing the impact on the environment, especially regarding water sources and the public system of effluent collection.

To guarantee a suitable recycling procedure, vitivinicultural establishments should be equipped with an appropriate structure for such a procedure; additionally, when by-products are to be taken to other recycling sites, the establishment should be equipped with an appropriate system for collection and storage before treatment, as well as an appropriate system to the relevant sites.

As vitivinicultural establishments are responsible for their by-products until the final destination, it is suggested that the establishment should implement mechanisms for the control and traceability of by-products (when these are destined for third parties), guaranteeing the least possible impact on the environment. In the case of by-products that cannot be recycled, these should be considered contaminated waste and identified as such, and receiving the proper treatment.

v. Limitation of noise and air pollution

As a general principle, it is necessary to adopt measures for the limitation and mitigation of noise and air pollution (application of powders, contamination of organic and inorganic compounds, smells, etc.) derived from vitivinicultural activity, with the aim of reducing its impact on vineyards and processing installations.

It is preferable to adopt equipment with lower levels of noise, regulated by applicable legislation, and to ensure the maintenance and appropriateness of this equipment so that it remains within globally accepted noise standards, according to the standards established by WHO (World Health Organization).

Vitivinicultural units should be furnished with machines and equipment with reduced formation and dispersion of dust, and the appropriate maintenance should be carried out to guarantee the minimum possible greenhouse gas emissions.

Phytosanitary treatments should be planned so that the drift is as minimal as possible and, when this is not possible, opt for plant barriers that limit dispersion.

Heat-generating equipment should preferably use renewable fuel sources and, when this source is wood, it should come from forest exploration that ensures the use of sustainability principles. Emissions of contaminants should also be kept to a minimum, especially with respect to greenhouse gases. In terms of refrigeration equipment, the same precautions with regard to gas emissions should be considered.

2.3. Principle No. 3 – Sustainable vitiviniculture is sensitive to social and cultural aspects

All sustainable development initiatives should consider the objectives of interested and concerned parties, and especially consider the community where they operate, which is why any social and cultural impacts brought about by the installation of new ventures should be measured.

Vitivinicultural ventures should consider the impact of their activities on socio-economic aspects and plan their integration into the socio-economic development of the region where they are established.

The incorporation of local socio-cultural characteristics is fundamental to the planning of new ventures, as is the establishment of actions for the mitigation of these impacts on ventures that have already been set up.

2.3.1. Working conditions

i. Respect and equality

All recruitment activity, whether it relates to permanent employees, temporary contracts, the sub-contracting of services, or even casual work, should respect the national and international standards in force, guaranteeing the precepts of equality and equity, as well as the respect of human rights.

Viticultural ventures should adopt practices in pursuit of gender equality, and mechanisms that enable

the monitoring and control of harassment of any kind and towards any gender, regardless of the person's level of responsibility.

vi. Health and safety of workers

Employers should guarantee minimum conditions, in accordance with the legislation of their country and international workplace health and safety standards, and should adopt permanent internal monitoring strategies to maintain these guarantees.

Appropriate training should be provided to all workers, qualifying them so that they understand the risks of each activity, as well as the rules to be followed for the reduction of these risks to within acceptable limits, and in order to promote the permanent reduction of risks through ongoing training.

It is necessary to define clear guidelines with health and safety objectives, linking the level of risk, mandatory safety equipment and mechanisms for the ongoing evaluation of compliance with the guidelines, as well as the continuous provision of training in the areas of accident prevention and protection. It is necessary to establish measures for the ongoing evaluation of the condition of protection equipment and to register data on those responsible for the evaluation and maintenance, expiry dates, current condition of the equipment and replacement forecasting, as appropriate. The implementation of an Internal System of Accident Prevention is suggested.

Aspects related to health, safety and hygiene at work are compulsorily included in all work activities and good practices for the appropriate use of hazardous substances.

Ventures should adopt measures of continuous care of the health of workers, in compliance with the legislation of their country and international standards relating to the health of workers.

vii. Integration, training and continuity of the workforce

Viticultural ventures should foster the integration of personnel within the local social and cultural environment. The local cultural and social values of workers should be respected, guaranteeing their complete social inclusion.

Viticultural ventures should promote workers skills development through appropriate continuing professional training so that they are capable of fully adapting to the complexity and dynamics of technological evolution, in order to guarantee a qualified workforce in the long term across all sectors. Measures of assessment of the qualifications of the workforce should also be adopted, strengthening permanence in the activity and the complete interaction with the production environment, to guarantee the sustainability of the venture in the long term.

2.3.2. Integration within the socio-economic and cultural environment

i. Cultural specificities

Sustainable vitiviniculture involves respecting the culture and history of the region where the ventures have established themselves.

Viticultural ventures should contribute to the recovery, preservation and dissemination of the region cultural identity, strengthening elements of craftsmanship, architecture, music, celebrations and traditional festivities, literature or any other typical cultural event.

The beneficial aspects involved in the recovery and preservation of vitivinicultural cultural assets should also be considered, guaranteeing the sustainability of local cultural heritage.

ii. Development of relationships with viticultural communities

Viticultural ventures should encourage inter-professional and inter-institutional relations, as well as relations with the local viticultural community, through active participation in social and technical events promoted by the sector. Similarly, they should encourage the participation of their collaborators and employees in these events.

A permanent relationship should be established with the research and extension sectors, insisting upon technical qualifications in sustainability-promoting methodologies and practices, supporting actions for the dissemination of sustainable technologies and establishing actions that involve the local community with a view of extending sustainability actions.

2.3.3. Health and safety of the consumer

Ventures should be committed to constantly guaranteeing the hygiene, traceability,

authenticity, origin and food safety of their products. As such, clear and efficient registration and control systems should be envisaged, and access to traceability information should be guaranteed to the consumer.

All of the workers involved in the ventures should receive adequate information and training on responsible sanitation practices appropriate information overviews for the consumer, and ways of verifying and adopting strategies to mitigate risks to the consumer.

In agreement with consumer's expectations, this guideline which must respond to the development of a sustainable environmental, social and economic sector that also requires the selection of grapevine varieties that are resistant to major fungal diseases. This will allow to tend to a more limited use of inputs within the framework of an integrated, organic and biodynamic viticulture.

Efficient and flexible methodologies of informing the consumer of any potential risk or problem associated with their products should be established, together with efficient and flexible mechanisms for the withdrawal of problematic products (recall).

2.4. Principle No. 4 – Sustainable vitiviniculture seeks to maintain economic viability

At the time of implementing a sustainable vitiviniculture programme, the economic viability of the venture should be considered by means of the adoption of sustainability guidelines. For the proper implementation of a sustainability programme, the capacity for innovation and adaptation to technological and socio-economic advances should be developed, establishing appropriate cost management, with the aim of guaranteeing permanent sustainable growth, thus ensuring profitability and work in the future.

To guarantee the objective of sustainability, sustainable viticultural ventures should be constituted in such a way that their economic activities can be economically viable in the long term, nevertheless giving special attention to the preservation of the environment and natural resources, and protecting the socio-cultural aspects associated with the site where they are established.

Particularly with regard to the grape juice sector, the structuring of the sector, that is to say to privilege and promote a sector with specific modes of production that differentiate it from grape wine sector, should be privileged to contribute to economic growth and its viability and optimize the resources used.

Maintaining economic viability with respect to environmental and social aspects is only possible by developing conditions that guarantee a balance between resilience

and efficiency.

2.4.1. Resilience

Within an economic context, resilience is the capacity to adapt to a given evolution in the economic situation, so as to guarantee permanent economic viability. In order to implement actions that guarantee economic resilience, viticultural ventures should have plans for financial recovery that are flexible and adaptable to various economic scenarios. Action plans should be drawn up, to be implemented to meet new needs that might arise as a consequence of changes to production or market scenarios. In response to these changes, ventures should prioritise their capacity to adapt their practices at all phases of production or processing, by establishing new mechanisms for resource distribution, management and sectoral interaction.

2.4.2. Efficiency

Efficiency is the capacity to avoid unnecessary expenses and additional costs to produce as many products as the conditions of use of inputs permit, or to use the least possible quantity of inputs necessary for a given production process. Efficiency is underpinned by the organisation, planning and rationalisation of the use of inputs, equipment, machines and structures, simultaneously reducing production costs, and social and environmental impacts.

To determine maximum efficiency, ventures should adopt practices of cost control, training their collaborators and workers so as to guarantee the management of economic and technological resources.

2.5. Principle No. 5 – Sustainable initiatives require planning and implementation evaluation

2.5.1. Planning

Viticultural ventures should plan their commitment to sustainable initiatives by taking the three pillars of sustainability into consideration. Once the initiative has been adopted, the ventures should follow these principles and draw up a strategy and a list of objectives to be met. These objectives should also include the selection of providers of goods and services that comply with sustainability principles, at least in their basic precepts of respect for the social and natural environment.

The adherence of ventures to the sustainability initiative is always voluntary, but after committing, the pursuit of adaptation should be gradual in accordance with the planning of the venture, but on a mandatory basis.

The adherence of ventures to specifications developed by external organisations, in terms of the management and implementation of sustainability, can provide a greater guarantee of sustainability from these ventures.

A sustainable development initiative requires a process of planning the operations that should be implemented, evaluating their efficiency and future adaptation, with the objective of continuous progress. The suitability of the actions undertaken should be constantly evaluated using an evaluation system that should have the support of external advisory bodies.

The evaluation system should be defined by common agreement with the different sectors involved in local viticulture, within the fields of political representation, research and extension.

2.5.2. Evaluation/Self-evaluation

Indicators and criteria for the evaluation of production sustainability should be established. The criteria and indicators should be constructed collectively with the local viticultural sector, with the aim of establishing parameters that are common to all ventures, and preferably constructed under consensus.

The evaluation process should generate a situation report for analysis and, from this, an improvement plan should be drawn up with the description of the actions, those in charge and the envisaged time frames.

The analysis of the results of the evaluation should establish priorities for sustainability actions, based on the evaluation of risks and opportunities, relative to all the activities of the venture and referenced by the environmental, social and economic context of the site of the venture. In ventures that operate in production and processing, these activities should be evaluated separately, defining priorities and plans that are different, but complementary.

The system of evaluation may be established based on verification by a third party or through self-evaluation procedures. Both cases should provide mechanisms agreed upon collectively by local ventures and representatives in the viticultural sector, and third-party procedures may be governed by the principles of Participatory Guarantee Systems.

2.5.3. Monitoring and evaluation of knowledge generated

In defining a sustainable production system, where this is fully operational, a permanent monitoring procedure should be defined.

Mechanisms to evaluate the knowledge generated as part of the ventures should be established, in relation to the techniques, regulations, agreements and practices that

enable the development of sustainability. The continuous training of local agents promotes the adaptation and inclusion of practices that contribute to sustainable development. In these training spaces, auditing and internal control mechanisms should be regulated.

2.5.4. Communication

A system of internal and external communication is positive and should be encouraged with regard to sustainability principles and their application alongside ventures. Consumers and the local community should be informed of initiatives and policies adopted by ventures with respect to sustainability actions. The public in general should be informed of the efforts carried out and the importance of these for the sustainability of ventures and of the viticultural production sector. All information on sustainability actions should be based on proven evidence that complies with procedures to evaluate and monitor the progress of the implementation of sustainable systems, transmitting the real impacts clearly and precisely.

For any sustainability initiative, the importance of collaboration and information exchange between all parties that are directly or indirectly concerned and linked to the vitivinicultural sector should be taken into account.

Therefore, it is fundamental that communication of the procedure to deploy sustainability initiatives be considered right from the first procedure of evaluation and monitoring, at the moment when a minimal stage of implementation of actions is contemplated. This minimal stage should be defined together with the regulation of procedures, indicators, criteria and monitoring mechanisms.