

GUIDELINES FOR ACTIONS ON SOIL AND WATER CONDITIONS

Principle 2 of the UEBT standard promotes sustainable use of biodiversity. One important aspect of this is the conservation and improvement of soil and water conditions in cultivation and wild collection areas¹.

REFERENCE

¹ Cultivation or wild collection areas are the areas that encompass the cultivation or wild collection site, but that also include areas that are adjacent to, and in the vicinity of, the sites: these areas may be positively or negatively affected by cultivation or wild collection activities.

Cultivation or wild collection sites are the terrestrial or aquatic areas where cultivation or wild collection of natural raw material is taking place.

Actions to conserve and improve soil and water conditions can be carried out by:

- Producers: People or organisations directly involved in the cultivation or wild collection of natural raw material, including farmers, smallholders, farm managers, farmer associations, cooperatives and pickers.
- **Suppliers:** People and organisations in the supply chain that provide natural raw material for further processing or manufacturing.

Companies buying and processing ingredients from producers or suppliers at source can support these actions. They can do this by commissioning studies on biodiversity, providing training, engaging biodiversity experts, covering costs associated to the improvement of water and soil conditions, and other support. In the case of small farmers or pickers' groups, information can be gathered at the group level.



A DEEPER LOOK AT CRITERION 2.3 IN THE UEBT STANDARD

Let us look at the indicators for 2.3 in detail and explore some additional guidance:

2.3.1 Critical Information on the level and quality of ground and surface water in cultivation and wild collection sites is gathered through existing studies and other scientific or local knowledge.

2.3.2 Critical Practices are adopted in cultivation, wild collection and related activities to conserve and enhance the quality of surface and ground water, including through practices to reduce pollution foreseen in 2.4 and 2.5.

Tips and guidance

- Carry out / commission studies to assess the level of surface and/or ground water (e.g. using catchment context methodology or similar approaches).
- Check water quality aspects through water analyses.
- Check other aspects such as the presence of toxic substances and other residues as well as the chemical and biological components.
- Gather information on the level and quality of ground and surface water when it can be used to define practices that improve soil and water conditions.
- Update information at least once every three years.
- Use the UEBT water use register template to report about water use and conditions. Write to us at certification@ethicalbiotrade.org

For example

When water use is authorised by a provider

In some countries water for irrigation or processing is provided by authorities that also establish the quantities that can be used and take care of ensuring the quality of water is appropriate to the use. In these cases, farmers or processing companies are not required to show results of an analysis to assess the quality and the extraction levels. The authorisation to use the quality assurance from the water provider would be sufficient.

Tips and guidance

- Make sure you consider improvement for all activities affecting water quality, such as cultivation and wild collection as well as initial-stage processing activities when these take place on site.
- Define practices to prevent, reduce, and stop contamination of surface and ground water that derives from those activities.
- Ensure you or your suppliers are respecting laws and permits on the use of surface and ground water as well as appropriate management of waste and agrochemicals.
- Use the UEBT water use register template to report about water use and conditions.

For example

When water contamination comes from other sources

In some cases, water resources are polluted by different sources than by a supplier's or producer's farming or processing activities. Water analysis may therefore show traces of toxicant and other pollutants that are not attributable to farming or processing. In those cases, a company should use their analysis to show any potential run-offs their activities to the community's water sources, so as to ensure that contamination is not being spread further or is being reduced.

2.3.3 Regular Practices are adopted in cultivation, wild collection and related activities to maintain levels of surface and ground water.

Tips and guidance

- Make sure you consider improvement for all activities affecting water levels, such as cultivation and wild collection as well as initial-stage processing activities when these take place on site.
- Define practices that allow tackling any possible negative impact of those activities on the level of surface and ground water. Practices include:
- prefer the use of renewable water sources such as harvested rainwater or recycled-treated water.
- (for cultivation) use the most efficient irrigation techniques possible in the cultivation areas (e.g. drip irrigation, (mini) sprinkler, evening irrigation).
- (for cultivation) record water applications and use.
- (for cultivation) use plant varieties and cultivation practices better adapted to the climatic conditions in the cultivation areas.
- (for cultivation) define water application based on available information, including the needs of cultivated species, meteorological information (gathered through decision support tools such as meteorological stations, dedicated software, tensiometric probes, water budgeting or information on crop needs) and performance of the irrigation system.
- improve insulation and ground water retention by planting trees and plants that serve this purpose and creating relevant natural structures (e.g. ditches, check dams, ponds, terraces, etc.).
- comply with the applicable laws and permits for the withdrawal of surface or ground water for cultivation and processing purposes.
- Where laws and permits are applicable on the withdrawal of surface and ground water, comply-ing with them is the minimum required to reach compliance.
- Use the UEBT water use register template to report about water use and conditions.

2.3.4 Critical Stepwise (For cultivation) Information on soil structure, fertility and nutrient contents, stability, moisture and drainage conditions in cultivation sites is gathered through soil analysis, existing studies and other scientific or local knowledge.

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Tips and guidance

- Make sure you consider improvement for all practices affecting soil components such as (heavy) mechanical soil management, monoculture, intensive farming, and simple or traditional farming.
- Monitor at least every three years soil components that can be affected by those practices such as:
- structure
- stability
- fertility
- organic matter and other nutrients contents
- biological components
- moisture
- drainage conditions
- Use the UEBT soil management register template to report information on soil conditions resulting from the monitoring.

2.3.5 Critical (For cultivation) Practices are adopted to maintain or improve soil fertility and nutrient contents.

Tips and guidance

- Define practices to maintain and improve soil fertility based on the results of the monitoring of soil conditions.
- Make sure that the practices are adequate to tackle any possible negative impact on soil fertility and nutrient contents in cultivation sites that come from cultivation activities.
- Implement practices identified as relevant to maintain or improve soil fertility and nutrient contents, including:
- use local varieties better adapted to soil conditions in cultivation sites
- consider the nutritional needs of the cultivated species, the state of productivity of the land and provide compensation for nutrient loss
- cover soil with appropriate cover crops or with organic matter (e.g. mulch, crop residues, green leaf manure, vermicompost, neem cake)
- follow crop rotation plans that include planting nitrogen-fixing species, crops with different soil use, and plants with deep roots and good foliage to decompose into biomass
- follow fallow periods
- do intercropping or inter-tillage such as grasses, oilseeds, etc.
- use manure and livestock grazing for soil management
- Use the UEBT soil management register template to report about implemented practices and soil conditions.



2.3.6 Critical Practices are adopted to conserve and improve soil stability and drainage.

Tips and guidance

- Define practices to maintain and improve soil stability and drainage based on the results of the monitoring of soil
- Make sure that the practices are adequate to tackle any possible negative impact on soil stability and drainage in cultivation sites that come from cultivation activities.
- Implement practices identified as relevant to maintain or improve soil stability and drainage, including:
- plant tree borders to reduce soil erosion
- re-vegetate steep areas
- plant vegetation cover that contributes to increasing aggregate stability in the soil
- not using fire to clear vegetation when preparing fields
- avoid using heavy machinery, especially in areas with wet, fragile soils or areas with a high risk of soil erosion
- build terraces and other natural structures to reduce the slope of the land
- dig trenches, water canals and other natural structures that contribute to drainage
- Use the UEBT soil management register template to report about implemented practices and soil conditions.

2.3.8 Regular Stepwise Practices to conserve or improve soil and water conditions are assessed for performance and impact and adjusted with a view to continuous improvement, changing conditions, and/or addressing unintended negative effects.

Tips and guidance

- Monitor progress in the implementation of practices for soil and water conditions annually.
- Asse the conditions of soil and water at least every three years.
- Use internal monitoring systems and expertise or commission external experts (e.g. universities/laboratories).
- Adjust practices when results of the monitoring do not show the expected positive results.
- Use the UEBT Biodiversity Action Plan (BAP) tool template to monitor and report improvements in soil and water conditions.

For more guidance and training, please contact UEBT at certification@ethicalbiotrade.org or biodiversity@ethicalbiotrade.org

Picture references Aloe vera Alove Vera, Common Mallow Malva silvestris.



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Published December 2021