Responsible Sourcing Guideline

Granularities on Requirements for Water

The Nestlé Supplier Code states that: "The Nestlé Corporate Business Principles prescribe certain values and principles to which Nestlé has committed worldwide. The Nestlé Supplier Code specifies and helps the continued implementation of the Corporate Business Principles by establishing certain non-negotiable minimum standards...that we ask our suppliers, their employees, agents and subcontractors, to respect and to adhere to when conducting business."

The Code further states that: "Nestlé supports and encourages operating practices, farming practices and agricultural production systems that are sustainable. This is an integral part of Nestlé's supply strategy and supplier development. Nestlé expects the Supplier to Nestlé to continuously strive towards improving the efficiency and sustainability of its operations, which will include water conservation programs."

Nestlé is developing and implementing Responsible Sourcing Guidelines for 12 major commodities. For these commodities detailed requirements are included on social and environmental aspects, including water. This document complements the Code by providing water management guidelines that can be incorporated into the Responsible Sourcing Guidelines of the individual commodities. It is however important to note that this document does not repeat commitments covered by the Supplier Code, such as legal compliance.

Water management and conservation is specific to a locality and is also temporal in nature. As a consequence the guidelines comprise a series of requirements that should be applied within the local context. The guidelines are not regarded as comprehensive – rather they are intended as minimum acceptable practices. Some suppliers may choose to go further to improve their performance. In so doing any additional practices should follow the general underlying principles outlined herein.

The guidelines are based upon and consistent with The "Principles and Practices for Sustainable Water Management in Agriculture – At farm level" developed by the SAI Platform, together with the principles of water stewardship incorporated in commodity certification schemes and roundtables.

Summary of Requirements

I: General

- 1. Water Management Plan
- 2. Wetland Management
- 3. Soil Fertility
- 4. Pest Management
- 5. Pollution of Surface and Groundwater
- 6. Crop Processing

II: Water Stressed Areas

- 1. Alternative Farming Systems and Crops
- 2. Alternative Water Sources
- 3. Irrigation Plan
- 4. Schedule Irrigation
- 5. Efficiency of Water Use
- 6. Monitoring

I. General Requirements

1. Water Management Plan

- Farmers¹ should undertake and complete a water management plan. The plan, which should be at the appropriate level (according to farm size and context) and consistent with local rainfall conditions, should cover estimates of the use of blue water and ground water volumes, as well as run-off. It should detail ways to minimise water use, maintain water quality and reduce the impact on the environment as set out in the specific Guidelines in this document. It should also detail methods for monitoring of actions and impacts. It should be in compliance with local regulations and permits.
- Water use should take into account water catchment management issues by: respecting the existing water rights of local and indigenous communities; not being at the expense of water needed by communities that rely on the same water source for subsistence, or that compromise the existing water rights of downstream; and not contributing to the depletion of surface or groundwater resources beyond replenishment capacities.

2. Wetland Management

 Natural wetlands and special sites and values that are directly affected by its management and use of water should be preserved and where appropriate restored.
 This should include the maintenance and/or restoration of riparian buffer zones with native vegetation.

3. Soil Fertility

- Farmers should use practices to protect and enhance soil fertility (physical, chemical and biological) such as residue mulching, intercropping, agroforestry and the use of green and/or organic manures.
- Farmers should develop a nutrient plan that identifies nutrient (including micronutrients) requirements to complement the soil fertility measures.
- Farmers should apply practices to minimise soil erosion on slopes, cultivation should be along the contours; roads should be maintained to avoid run-off that drives erosion; harvesting practices and other mechanical operations designed to minimise soil disturbance
- In areas prone to salinity problems, farmers should manage irrigation regimes to decrease the potential for soil salinisation.

4. Pest Management

 Records are maintained of pests, diseases, weeds and natural predators to permit adaptive management

 Farmers should adopt measures to reduce pesticide use, such as integrated pest management, and/or the use of cultural, biological, mechanical or physical methods

¹ The term Farmer is used throughout, and is intended to cover farmers, growers, enterprises and managers

to minimise the use of chemicals.

- Justification should be available for chemical pesticide use

5. Pollution of Surface and Groundwater

5.1 Pesticides

- Farmers should ensure that all the pesticides used in the farm are approved and are applied according the regulations, and with appropriate protective equipment.
- Pesticides should be stored in a lockable, fire-resistant, dry and frost free environment where spillage and leakage is contained.
- Farmers make sure that the spray equipment is correctly cleaned and calibrated (fresh water tank on the sprayer, no cleaning water rinsing to surface or groundwater).
- Farmers keep a record of pesticide type, dosis and application rates.
- Farmers take appropriate measures to prevent drift to neighbouring areas.
- There should be no application of pesticides within 30 metres of a water course.

5.2 Fertilisers

Farmers should make a balanced application of nutrients. Nutrients should be applied
only at times when the crop needs and can take up nutrients: farmers do not apply
fertilisers when the soil is waterlogged, flooded, frozen hard or snow-covered, when
heavy rain is forecast to fall within 48 hours or under windy conditions.

5.3 Soil Contamination

- Farmers should properly manage storage areas for inputs (eg fertiliser) crops and waste (manure) so as to avoid leaching and pollution of surface/groundwater.
- Farmers should avoid cultivating food crops in contaminated areas (soil or water).

5.4 Contamination

- Pollution response plans are available. Contamination of ground or surface water is reported to, and monitored in collaboration with local authorities

6. Crop Processing

- Farmers should reduce the amount of water used in processing by brushing or scraping any solid waste away before washing down or using pressure washers.
- Water resulting from crop processing should undergo basic organic load reduction treatment before release to watercourses or groundwater.

II. Water Stressed Areas

1. Alternative Farming Systems and Crops

- In water scarce areas and wherever possible, farmers should: utilise innovative agricultural practices that use less water; consider shifting crop seasons, moving for example spring crops into winter periods or avoiding very hot summer seasons; use greenhouses or plastic tunnels to reduce evaporative demand; or select species that are ecologically adapted to the site (stress-resistant varieties, drought tolerant crops, or less water intensive crops) in order to minimise irrigation water requirements.

2. Alternative Water Sources

- Farmers should maximise the use of alternative sources of water (to river or well water) for deficit irrigation or supplementary irrigation. This could be harvested rainwater, or wastewater where the quality is acceptable after primary treatment.

3. Irrigation Plan

Farmers should prepare an irrigation plan which is based upon a water-use inventory (that records volumes and identifies sources of water). Farmers should adhere to the basic tenet of irrigation: "right amount-right time-right method." Water withdrawal from natural watercourses should not modify the course or the physical chemical or biological equilibrium it had before the operations. The Plan should include or consider the following points.

4. Schedule Irrigation

 Farmers should use established forecasted methods and/or recommendations of credible local research organisations to calculate the water requirement of the crop.
 Farmers should apply only sufficient water to meet the predicted or suggested requirements.

5. Efficiency of Water Use

- Farmers should construct good channels or use pipes for water conveyance.
- The land should be occasionally levelled.
- Farmers should visually check for leaks by using indicators such as unusually damp areas of the farm and unexpected vegetation (for a recent leak) or/and reduced vegetation.

6. Monitoring

- Calculations should be recorded (e.g. rain gauges, precipitation, water tension meters).
 Irrigation systems should utilise drip/micro irrigation, and deliver irrigation uniformly throughout the farm.
- Farmers should use water meters, special leak detectors including listening sticks, remote listening devices and pressure fluctuation sensors.