

# Sustainable agricultural production policy

## Objectives and commitments:

Vinamilk is dedicated to implementing sustainable and regenerative agricultural practices across its self-cultivated farmlands, with a steadfast commitment to:

- Protecting and improving soil quality to sustain a thriving ecosystem and preserve natural fertility.
- Conserving the biodiversity and maintaining an agricultural ecosystem in harmony with nature, with no impact on local flora and fauna.
- Optimizing land, water, and energy usage, minimizing environmental impact, and advancing towards net-zero emissions.
- Leveraging cutting-edge science and technology to enhance production efficiency and safeguard the environment.
- Adopting internationally recognized sustainable management frameworks, including:



### Nutrient conservation and soil health

#### Organic fertilizer use and effective nutrient management

- Utilize self-produced organic fertilizers and farm manure (livestock manure is processed through dewatering and composting, while liquid manure is processed through anaerobic biogas systems) to enhance soil structure and provide essential nutrients for crops.
- Implement the 4R Nutrient Stewardship System (Right source, Right rate, Right time, Right place) to ensure soil nutrient balance.
- Repurpose agricultural by-products such as straw, ash, and tree bark as organic fertilizers to reduce resource waste.

#### Water management and soil moisture conservation

- Develop natural water collection systems and reservoirs to harvest and reuse rainwater, ensuring soil moisture retention during dry seasons.
- Reduce groundwater use and promote water recycling in agricultural production.

#### Regenerative agricultural techniques for soil health improvement

- Maintain year-round living roots to reduce erosion and enhance soil moisture retention.
- Implement crop rotation and intercropping with leguminous plants to naturally replenish nutrients and promote biodiversity.
- Use cover crops such as grasses to improve soil structure, prevent erosion, and increase organic matter content.
- Adopt no-tillage or reduced-tillage methods to preserve soil structure, protect beneficial microorganisms, and enhance carbon sequestration.
- Apply biotechnology-based pest control solutions to minimize reliance on chemical plant protection products.

#### Soil quality measurement and analysis

- Conduct soil sampling, analyze nutrient and soil structure, and develop nutrient management maps to monitor soil quality and optimize fertilization application.

### Organic farming

#### Fertilizer and pesticide management

- Organic farms certified under the European Organic Standard (Organic EU) adhere to the following principles:
- Prohibit the use of synthetic fertilizers and chemical soil amendments.
- Utilize only organic and biological fertilizers from sustainable sources, such as composted manure, compost, and bio-based fertilizers.
- Implement biological pest control.
- Eliminate chemical fertilizers and plant protection products.
- Regulate nitrogen input to enhance nutrient efficiency and protect the environment.
- Ensure full transparency and traceability of all materials used.

#### Biological pest and weed control

- Eliminate the use of chemical pesticides, herbicides, and growth regulators.
- Leverage natural predators such as ladybugs and parasitic wasps for pest management.
- Implement crop rotation strategies to naturally suppress weed growth.

#### Seed sources and natural cultivation

- Strictly prohibit the use of genetically modified (GMO) seeds and chemically treated seeds.
- Prioritize plant varieties with inherent resistance to pests and climate variability.

### Biodiversity conservation

#### Biodiversity loss prevention & natural ecosystem protection

- Prohibit wildlife hunting within farm areas and prevent any activities that negatively impact natural habitats.
- Prevent deforestation and conversion of natural vegetation to agricultural land to protect local ecosystems.
- Maintain ecological buffer zones around farms to support pollinators, birds, and wild animals.
- Eliminate post-harvest field burning to prevent air pollution and wildlife habitat loss.
- Conserve natural forests and related ecosystems.
- Maintain biological hedgerows and buffer ponds around farms.

Vinamilk's Sustainable Agricultural Production Policy not only ensures a consistent supply of high-quality, eco-friendly feed for cattle but also minimizes environmental impact, conserves natural resources, and optimizes the use of non-renewable inputs.