



Democratic Socialist Republic of Sri Lanka

NATIONAL POLICY AND STRATEGY ON CLEANER PRODUCTION FOR AGRICULTURE SECTOR

Ministry of Agriculture

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Preface

The Sri Lankans whose main occupation has been agriculture being the life line of the Nation have developed and inherited the same for benefit of the future-generation as well. The aspiration of our forefather aimed at developing agriculture by economical use resources while maintaining ecological balance. This is clearly indicated through the declaration by King Parakramabahu the Great that “Even drop of rain water shouldn’t be allowed to be flown to the sea without having used by man.” This statement emphasized what kind of state patronage had been accorded towards efficient and economical use of land and water resources to achieve the agricultural development in our country.

As a result we have inherited an island wide irrigation network associated with advanced technologies and required infra-structure. According to the historical evidence the country had produced rice then not only to meet the local need but also to export. Where as we have increased agricultural production with the half of modern technology, many problems have been encountered including price increase due to various reason.

In these circumstances, the development of sustainable agriculture has now become a National requirement towards achieving prosperity to the Nation. In view of the increasing population coupled with diminishing resources and environmental degradation, it is essential to exercise extreme care in the utilization of resources.

The main ingredients of the sustainable agriculture are pure air, clean water and soil fertility. However, the life style of the modern man has led to many socio-economic problems such as global warming, change of rainfall pattern, elevating sea level and prolonged droughts, adversely affecting agriculture and lifestyle which the modern man accustomed to.

Therefore the application of Cleaner Production Concept on the sustainable agriculture is the only way out of this unfavorable situation. The every agriculture production should be environmental friendly which are accessible by the increasing population. Therefore in the development of agriculture the Cleaner Production technologies should be implemented either individual or at institutional level. In this regard I am much thankful to the Ministry of Environment and the National Cleaner Production Center for their effect at dissemination of the Cleaner Production Concept.

W. Sakalasooriya
Secretary
Ministry of Agriculture

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01. Preamble

The economy of many developing countries including Sri Lanka is based in agriculture, and the natural resources should be gainfully utilized for maintaining a sound agriculture base. The environmental problems associated with the degradation and limitation of soil, water, land and forest resources in relation to the increasing population has adversely affected the agriculture of those countries.

Therefore, it is essential to develop sustainable agriculture for National prosperity by minimizing environmental degradation bearable to the economy in proportionate to the increasing population also maintaining the balance in consumption.

In our effect to facilitate the emergence of agriculture products through the concept of developing sustainable agriculture, it is essential to manage soil, air, and water and land resources sustainable. At the same time it is also necessary to prevent both excessive production and excessive consumption while maintaining the balance in the utilization of resources.

The development of sustainable agriculture should be followed by the expansion of market management. In this regard it is imperative to encourage the use of organic fertilizer and discourage the application of agro-chemicals harmful to the environment at the same time by increasing the environment friendly agriculture productions.

In the application of Cleaner Production Policy to the Agriculture the areas where the attention has to be paid are increasing environment friendly agro- productions, minimization of environmental pollution due to the use of ago-chemicals, marketing management, correct polices and planning, accurate land management, development of soil conservation methods for agricultural lands and delivery of agricultural production to the market under the production label of environment.

Mainly the food security of the people has to be ensured while maintaining the ecological balance for the benefit of the mankind

It is timely and opportune to apply this Cleaner Production Policy towards enhancing the living standard and socio- economic life of the famer community and building a prosperous nation endowed with food and nutrition.

02. Vision

Sustainable agriculture for national prosperity.

03. Mission

Achieve food security of the nation through ecologically sound, economically viable and socially acceptable agricultural systems.

04. Policy Goals

- 4.1 Ensure food and nutrition security to the nation.
- 4.2 Improve eco- efficiency in the entire agriculture sector.
- 4.3 Ensure efficient and effective management of natural resources.
- 4.4 Achieve sustainable socio- economic development in Sri Lanka.

05. Policy Objectives

- 5.1 To ensure standard quality and required quantities of foods and other agricultural products.
- 5.2 To promote ecologically sound agricultural practices.
- 5.3 To enhance income and quality of life of the farming community.
- 5.4 To promote efficient utilization of inputs and natural resources for economically viable food production.

06. Policy Statements

- 6.1 Enhance capacity of entire agricultural sector to improve quality of production processes and products by application of Cleaner Production practices.
- 6.2 Promote sustainable consumption and production practices by application of Cleaner Production practices considering the entire supply chain and value chain management.
- 6.3 Adapt sustainable land management practices in agricultural sector.
- 6.4 Ensure efficient use of water resources in the agricultural sector.
- 6.5 Apply life cycle approach to reduce overuse/misuse of resources/ raw material and waste generation.

- 6.6 Develop appropriate market based instruments to improve the sustainable productivity of the agricultural practices.
- 6.7 Prevent usage of POPS (Persistent Organic Pollutants) pesticides and other ecologically harmful materials.
- 6.8 Take measures to reduce/mitigate environmental pollution due to agricultural practices.

07. Strategies

- 7.1 Enhance public awareness and knowledge management on sustainable food production, utilizing ecologically sound agricultural practices and consumption of clean products.
- 7.2 Promote Integrated Water Management Practices.
- 7.3 Prevent/minimize post harvesting losses with environmentally sound packaging, storage and transportation.
- 7.4 Establish integrated food production and processing industries to ensure optimum utilization of resources/wastes throughout the life cycle.
- 7.5 Promote value chain management from crop growing to consumers to improve the productivity, nutrition value and quality of the agricultural products.
- 7.6 Promote ecologically friendly integrated farming system management practices.
- 7.7 Apply agricultural practices that prevent/mitigate environmental pollution.
- 7.8 Develop and implement regulatory and Market Based Instruments to facilitate productivity improvement in the agricultural sector.
- 7.9 Establish monitoring and evaluation mechanisms to evaluate performance of the implementation and take measures to address the policy failures and institutional failures.
- 7.10 Establish information systems on best environmental practices and appropriate environment technologies.
- 7.11 Promote appropriate land use practices and adoption of soil conservation techniques.

- 7.12 Introduce a quality control and assurance procedures for agricultural inputs and outputs.
- 7.13 Assist development of eco-friendly food production systems such as organic products and eco labels.
- 7.14 Promote community participatory systems in management and decision making.

USEFUL DEFINITIONS

Cleaner Production

The continuous application of an integrated and preventive environmental strategy to processes, products, and services, to increase overall efficiency, and reduce risks to humans and the environment.

Production processes

Conserving raw materials, water and energy; eliminating toxic and dangerous raw materials; and reducing the quantity and toxicity of all emissions and wastes at source during the production process;

Products

Reduce the environmental, health and safety impacts of products over their entire life cycles, from raw materials extraction, through manufacturing and use, to the 'ultimate' disposal of the product; and

Services: Incorporating environmental concerns into designing and delivering services.

Environmentally Sound Technologies (ESTs)

The following criteria can be used to determine whether the techniques and technologies could qualify as ESTs:

- In comparison to the technologies they replace, ESTs are
 - a. Less polluting,
 - b. Use all resources in a sustainable manner (people, economics as well as natural resources),
 - c. Recycle more and handle residual wastes in a more acceptable manner.

- In the context of pollution ESTs are
 - a. Processing and product technologies,
 - b. Generating no or low waste also including end-of-pipe treatment (which extends beyond CP techniques).
- The total system where EST is implemented should consider
 - a. Know how in the organization,
 - b. Procedures in use in the organization,
 - c. Goods and service providers,
 - d. Equipment and local support,
 - e. Organizational and managerial procedures with trained managers and workers,
 - f. Compatibility with nationally determined socio-economic, cultural and environmental priorities.

Eco-efficiency

The delivery of competitively priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life cycle to a level at least in line with the earth's estimated carrying capacity.

The concepts of eco-efficiency and Cleaner Production are almost synonymous.

Eco-efficiency starts from issues of economic efficiency which have positive environmental benefits.

Cleaner Production starts from issues of environmental efficiency which have positive economic benefits.

Sustainable Development - Brundtland Commission definition

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable consumption and production

Sustainable consumption and production involves business, government, communities and households contributing environmental quality through the

efficient production and use of natural resources the minimization of wastes, and the optimization of products and services.

“Sustainable consumption implies that the consumption of current generations as well as future generations improves in quality”

Waste minimization

Waste prevention through on-site reduction of waste by changes of input raw materials, technology changes, good operating practices and product changes.

Off-site recycling by direct reuse after reclamation are also considered to be waste minimization techniques, but have a distinctly lower priority compared to on-site prevention or minimization of waste.

Pollution prevention - means not generating waste in the first place by reducing it at the source.

Waste minimization - is a broader term that also includes recycling and other means to reduce the amount of waste which must be treated/disposed off.