



HOUSE OF REPRESENTATIVES

H. No. 4539

BY REPRESENTATIVES GARIN (S.), YAP (A.) AND GUANLAO, PER COMMITTEE
REPORT NO. 275

**AN ACT PROMOTING SOIL AND WATER CONSERVATION
TECHNOLOGIES AND APPROACHES FOR SUSTAINABLE
LAND MANAGEMENT**

*Be it enacted by the Senate and House of Representatives of the Philippines in
Congress assembled:*

1 SECTION 1. *Short Title.* – This Act shall be known as the “Soil and
2 Water Conservation Act”.

3 SEC. 2. *Declaration of Policy.* – It is hereby declared the
4 policy of the State to promote and support soil and water conservation
5 technologies and approaches through the development, promotion, and
6 implementation of soil and water conservation measures and practices,
7 including rainwater harvesting, to enhance decision-making, planning
8 and potential upscaling of good practices. Towards this end,
9 the State shall support Sustainable Land Management (SLM) programs
10 for the prevention of land degradation and protection of the
11 environment and natural resource base, and to protect the livelihood
12 of farmers, particularly of upland farmers and indigenous people.

1 **SEC. 3. *Definition of Terms.* – As used in this Act:**

2 **(a) *Land degradation*** refers to the reduction or loss of the biological or
3 economic productivity and complexity of rainfed cropland, irrigated cropland,
4 range, pasture, forest, and woodlands resulting from land use or from processes
5 or combination of processes arising from human activities and habitation
6 pattern such as: (1) soil erosion caused by wind and/or water; (2) deterioration
7 of the physical, chemical, and biological or economic properties of soils; and
8 (3) long-term loss of natural vegetation;

9 **(b) *Organic agriculture*** refers to a production system that sustains the
10 health of soils, ecosystems and people. It relies on ecological processes,
11 biodiversity and cycles adapted to local conditions, rather than the use of
12 inputs with adverse effects. Organic agriculture combines tradition, innovation,
13 and science to benefit the shared environment and to promote fair relationship
14 and good quality of life for all involved;

15 **(c) *Rainfed area*** refers to an area not served by any irrigation facility
16 and mainly relies on rainfall for crop and animal production;

17 **(d) *Rainwater harvesting system*** refers to a system that collects,
18 accumulates, and stores rainwater and surface runoff for purposes of
19 supplemental irrigation, inland fish production, and other agricultural
20 purposes;

21 **(e) *Small-scale rainwater harvesting system*** refers to reservoir storage
22 facilities with a height of not more than five (5) meters and a surface area of
23 not more than two thousand five hundred square meters (2,500 sq. m.);

24 **(f) *Sloping Agricultural Land Technology (SALT)*** refers to a simple,
25 applicable, low-cost method of upland farming which consists of alley farming
26 in which field and perennial crops are grown in bands four to five meters
27 (4-5m) wide between contoured rows of leguminous trees and shrubs;

1 (g) *Soil and water conservation technologies* refer to measures that
2 control soil and water degradation and enhance productivity in the field;

3 (h) *Soil and water conservation approaches* refer to ways and means of
4 support that help to introduce, implement, adapt, and apply soil and water
5 conservation technologies in the field;

6 (i) *Soil and Water Conservation Guided Farm (SWCGF)* refers to a
7 farm established to showcase appropriate soil and water conservation
8 technologies for possible replication and upscaling. It is also an approach that
9 facilitates the proper implementation of soil and water conservation
10 technologies through the provision of technical assistance in the field survey,
11 soil and water conservation farm planning and implementation of the plan;

12 (j) *Soil and water conservation farm plan* refers to a plan that
13 considers the right mix of farm enterprises and appropriate soil and water
14 conservation technologies, which is formulated with reference to existing
15 biophysical and socioeconomic conditions of the farm and in consultation with
16 farmer-cooperators;

17 (k) *Soil conservation* refers to the management of soil to prevent or
18 reduce soil erosion and depletion by wind and water;

19 (l) *Sustainable Land Management (SLM)* refers to the use of land
20 resources, including soils, water, animals and plants, for the production of
21 goods to meet changing human needs, while simultaneously ensuring the
22 long-term productive potential of these resources and the maintenance of their
23 environmental functions;

24 (m) *Upland* refers to the extensive portion of land located within one
25 hundred to five hundred meters above sea level (100-500 masl) with slope of
26 less than eighteen percent (18%);

27 (n) *Water conservation* refers to the protection, development, and
28 efficient management of water resources for beneficial purposes;

1 (o) *Watershed* refers to a land area drained by a stream or fixed body of
2 water and its tributaries having common outlet for surface runoff. This includes
3 small watershed with an area of ten thousand hectares (10,000 has.) and below;
4 medium-scale watershed with an area of more than ten thousand hectares
5 (10,000 has.) to fifty thousand hectares (50,000 has.); and large-scale
6 watershed with an area of fifty thousand hectares (50,000 has.);

7 (p) *Watershed management* refers to the process of guiding and
8 organizing land and other resource uses in a watershed to provide desired
9 goods and services without adversely affecting soil, water and other natural
10 resources; and

11 (q) *Watershed protection* refers to a management strategy to control
12 soil erosion and prevent illegal cutting of vegetations and other land degrading
13 activities in the watershed.

14 SEC. 4. *The National Soil and Water Conservation Program.* – In
15 order to address the problem of land degradation which affects the state and
16 management of our natural resources, a National Soil and Water Conservation
17 Program, hereinafter referred to as the Program, is hereby established. The
18 Program shall foment synergies between agricultural productivity improvement
19 and sustainable land management through the promotion and implementation
20 of soil and water conservation technologies and approaches.

21 The Bureau of Soils and Water Management (BSWM), in consultation
22 with concerned agencies and other stakeholders, shall prepare the National Soil
23 and Water Conservation Program, subject to the approval of the Secretary of
24 the Department of Agriculture (DA). Upon implementation of this Act, the
25 BSWM shall submit Annual Reports and Progress Reports as may be required,
26 within five (5) years to the Secretary of the DA for review and assessment.

1 **SEC. 5. Goals and Objectives.** – The Program shall support the
2 implementation of the SLM projects for livelihood improvement and
3 prevention of land degradation in the uplands. As such, it shall pursue the
4 following specific objectives:

5 (a) To establish one thousand (1,000) Soil and Water Conservation
6 Guided Farms within five (5) years from the effectivity of this Act in order to
7 showcase sustainable land management best practices such as, but not limited
8 to, sloping agricultural land technology, organic-based agriculture, farm waste
9 and residue management, wastewater recycling and reuse, rainwater harvesting
10 or combination of two (2) or more of these practices, including approaches to
11 implement these practices;

12 (b) To establish ten thousand (10,000) units of small-scale rainwater
13 harvesting systems consisting of rainwater reservoir development, watershed
14 management, and service area development in strategic upland areas
15 throughout the country, within five (5) years from the effectivity of this Act;
16 and

17 (c) To capacitate and empower local government units (LGUs) and
18 farmers associations in the implementation, operationalization and
19 maintenance of soil and water conservation model farms and rainwater
20 harvesting systems.

21 **SEC. 6. Implementing Agency.** – The DA, through the BSWM and the
22 DA-Regional Field Units (DA-RFUs), shall provide the technical and
23 administrative support in the implementation of the Program and all other
24 policies and objectives of this Act.

25 **SEC. 7. Farmers Associations.** – Farmer-cooperators and program
26 recipients shall be organized into associations and/or cooperatives and shall be
27 capacitated on soil and water conservation. The BSWM and the DA-RFUs, in
28 coordination with the concerned LGUs, shall train them on soil and water

1 conservation and shall assist them in accessing available credit windows to
2 sustain the operation and maintenance of the soil and water conservation
3 facilities to be established.

4 The BSWM and the DA-RFUs, in coordination with the concerned
5 LGUs, shall assist and facilitate the registration of such associations and/or
6 cooperatives for purposes of participation in the Program: *Provided*, That
7 the farmers shall select the leaders of their respective aggrupations in
8 accordance with the constitution and bylaws that they shall formulate and
9 firm up.

10 SEC. 8. *Soil and Water Conservation Guided Farms.* – Soil and
11 Water Conservation Guided Farms (SWCGF) shall serve as model farms that
12 will showcase soil and water conservation technologies and approaches in the
13 uplands. These will provide a multiplier effect by encouraging other farmers to
14 engage in soil and water conservation. For this purpose, the SWCGF shall be
15 established in clusters within high impact areas such as watersheds.

16 Potential sites shall be identified and selected using approved site
17 selection criteria, in coordination with the concerned LGUs and farmers
18 associations. Selected sites shall be subjected to various field surveys,
19 biophysical characterization, and socioeconomic profiling, the results of which
20 shall serve as inputs in the preparation of the Soil and Water Conservation
21 Farm Plan: *Provided*, That the said plan shall be prepared in consultation with
22 farmers based on the site's biophysical characteristics, market potential of
23 crops to be produced, and capability and resources of farmer-cooperators to
24 manage the farm. The SWCGF shall be established in accordance with the Soil
25 and Water Conservation Farm Plan, farmers' capabilities and preferences, and
26 available resources.

1 The concerned LGUs, through the Office of the Municipal Agriculturist,
2 shall provide agriculture support and services to the farmer-cooperators of the
3 SWCGF to ensure its sustainability and facilitate broader adoption by more
4 farmers within a locality.

5 **SEC. 9. *Small-scale Rainwater Harvesting Structures.*** –

6 Small-scale rainwater harvesting structures shall be designed and established in
7 cluster to store rainwater and surface runoff within a watershed. Potential sites
8 shall be identified and selected using approved site selection criteria in
9 coordination with the concerned LGUs and farmers associations. Selected sites
10 shall be subjected to various field surveys, biophysical characterization and
11 socioeconomic profiling. The small-scale rainwater harvesting structures shall
12 be implemented in accordance with the approved engineering plans and design,
13 and field distribution which shall be prepared by the concerned LGUs with
14 technical assistance from the BSWM and the DA-RFUs.

15 The BSWM shall turn over the small-scale rainwater harvesting
16 structures to the concerned LGUs wherein said structures are located. Subject
17 to the requirements to be set by the BSWM, the LGU shall accordingly entrust
18 and delegate the operation and maintenance of structures to duly organized
19 farmers associations as recipients.

20 Farmers shall be required to formulate or prepare the appropriate
21 cropping pattern and calendar that will optimize the use of stored rainwater
22 with the technical assistance from the LGUs through the Office of the
23 Municipal Agriculturist.

24 **SEC. 10. *Research, Development and Extension Services.*** – Research,
25 development and extension services on soil and water conservation shall be an
26 important component of the Program to provide a dynamic technology
27 development, information dissemination and extension support in the
28 implementation of the Program. Research and development shall cover, but

1 shall not be limited to, the following areas: rainwater harvesting design
2 methods, runoff management technologies, soil moisture conservation impacts,
3 and groundwater recharge enhancement.

4 The BSWM, the Bureau of Agricultural Research (BAR) and the
5 Agricultural Training Institute (ATI) of the DA, the Ecosystem Research and
6 Development Bureau (ERDB) of the Department of Environment and Natural
7 Resources (DENR), and concerned state universities and colleges (SUCs),
8 through proper and appropriate institutional arrangements, shall provide
9 technical support and assistance in the conduct of research and development
10 and in the provision of extension services on soil and water conservation to
11 LGUs and farmers associations and cooperatives.

12 The BSWM and the ATI shall also assist the LGUs in the conduct of
13 trainings for beneficiaries and/or cooperators of the SWCGFs and small-scale
14 rainwater harvesting systems prior to operation and/or turnover of said
15 facilities.

16 *SEC. 11. Implementing Rules and Regulations.* – The DA and the
17 BSWM, in consultation with other concerned agencies and stakeholders, shall
18 promulgate the necessary rules and regulations to implement this Act.

19 *SEC. 12. Appropriations.* – The amount necessary for the initial
20 implementation of this Act shall be charged to the budget of the DA under the
21 current General Appropriations Act. Thereafter, such sums as may be
22 necessary for its continued implementation shall be included in the annual
23 General Appropriations Act.

24 *SEC. 13. Separability Clause.* – If any of the provisions of this Act is
25 declared invalid, the other provisions which are not affected thereby shall
26 remain to be in full force and effect.

1 **SEC. 14. *Repealing Clause.*** – All laws or parts thereof, decrees,
2 orders, rules and regulations inconsistent with the provisions of this Act are
3 hereby repealed or modified accordingly.

4 **SEC. 15. *Effectivity.*** – This Act shall take effect fifteen (15) days after
5 its publication in the *Official Gazette* or in a newspaper of general circulation.

Approved,

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