


**SENATE OF THE PHILIPPINES** )  
**SIXTEENTH CONGRESS** )  
*First Regular Session* )



**Senate**  
Office of the Secretary

13 AUG -6 P4:56

**SENATE**

RECEIVED BY: 

Senate Bill No. 1236

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Introduced by **SENATOR JOSEPH VICTOR G. EJERCITO**

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**EXPLANATORY NOTE**

Soil is a vital resource for human survival in that it is the medium in which most plants grow, it cleans and stores water, detoxifies pollutants, and plays a key role in the regulation of the Earth's temperature. Soil is also the habitat of a multitude of soil organisms necessary for the cycling of elements and for keeping a healthy environment for human beings (Blum, 2007).

Many soils in the country are degraded due to the accumulation of various types of wastes and toxic materials from the industry, mining, households and agricultural activities.

Land degradation is a major ecological problem in the Philippines. Degraded lands are widely seen as a major contributor to the frequent occurrence of heavy and catastrophic floods in the parts of Luzon, Mindanao and the Visayas. Not only that, degraded lands exacerbate the poor economic conditions of our upland farmers in the countryside.

On the same front, water is an indispensable natural resource for humankind. In other words, it is a key and vital to the development of any country. Thus, water conservation measures are a must not only during abundance but more so during crisis time.

This piece of legislation seeks to established support for sustainable land management programs for livelihood improvement particularly of upland farmers and indigenous people, and for the prevention of land degradation and protection of the environment and natural base.

Thus, approval of this bill is fervently sought.

**JOSEPH VICTOR G. EJERCITO**



Senate  
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**AN ACT PROMOTING SOIL AND WATER CONSERVATION TECHNOLOGIES  
AND APPROACHES FOR SUSTAINABLE LAND MANAGEMENT IN THE  
PHILIPPINES AND FOR OTHER PURPOSES**

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

**SECTION 1. Short Title.** – This Act shall be known as the “Soil and Water Conservation Act of 2013”.

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

**SECTION 3. Definition of Terms.** – For purposes of this Act, the following terms are defined as follows:

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

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

(c) *Rain-fed area* refers to an area not served by any irrigation facilities and mainly relies on rainfall for crop and animal production.

(d) *Rainwater harvesting system* refers to a system that collects, accumulates and stores rainwater and surface runoff for purposes of supplemental irrigation, inland fish production and other agricultural purposes. For the purpose of this Act, small-scale rainwater harvesting system refers to reservoir storage facilities with a height of not less than five (5) meters and a surface area of not more than two thousand five hundred (2,500) square meters.

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

(f) *Soil and water conservation technologies* refer to measures that control soil and water degradation and enhance productivity in the field.

(g) *Soil and water conservation approaches* refer to ways and means of support that help to introduce, implement, adapt and apply soil and water conservation technologies in the field.

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

(i) *Soil and Water Conservation Farm Plan* refers to a plan that considers the right mix of farm enterprises and appropriate soil and water conservation technologies, which is formulated with reference to existing biophysical and socioeconomic conditions of the farm and in consultation with farmer-cooperators.

(j) *Soil conservation* refers to the management of soil to prevent or reduce soil erosion and depletion by wind and water.

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

(l) *Upland* refers to the extensive portion of land located within one hundred to five hundred (100-500) meters above sea level with slope of less than eighteen percent (18%).

(m) *Water conservation* refers to the protection, development and efficient management of water resources for beneficial purposes.

(n) *Watershed* refers to a land area drained by a stream or fixed body of water and its tributaries having common outlet for surface runoff. This includes small watershed with an area of ten thousand (10,000) hectares and

below; medium-scale watershed with an area of more than ten thousand (10,000) to fifty thousand (50,000) hectares; and large-scale watershed with an area of fifty thousand (50,000) hectares and above.

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

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

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

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

**SECTION 5.** *Goals and Objectives.* – Pursuant to the above declaration, the Program shall support the implementation of SLM projects for livelihood improvement and prevention of land degradation in the uplands. As such, it adopts the following specific objectives:

(a) To establish one thousand (1,000) SWCGF within five (5) years from the effectivity of this Act to showcase sustainable land management best practices such as, but not limited to, SALT, organic-based agriculture, farm waste and residue management, wastewater recycling and reuse, rainwater harvesting or combination of two (2) or more of these practices including approaches to implement these practices;

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

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

**SECTION 6.** *Implementing Agency.* – The DA, through the BSWM and the DA-Regional Field Units (DA-RFUs), shall provide the technical and administrative support in the implementation of the Program and all other policies and objectives of this Act, and perform such other duties as may be assigned to it by the Secretary of the DA.

**SECTION 7. *Farmers Associations.*** – Farmer-cooperators and program recipients shall be organized into associations and/or cooperatives and shall be capacitated on soil and water conservation. As such, the BSWM and the DA-RFUs, in coordination with concerned LGUs, shall provide trainings on soil and water conservation and shall assist them in accessing available credit windows to sustain the operation and maintenance of soil and water conservation facilities to be established.

The BSWM and the DA-RFUs, in coordination with concerned LGUs, shall assist and facilitate the registration of such associations and/or cooperatives for purposes of participation in the National Soil and Water Conservation Program: *Provided*, That the farmers shall select their leaders in accordance with the constitution and bylaws that they will formulate and firm up.

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

Potential sites shall be identified and selected using approved site selection criteria, in coordination with concerned LGUs and farmers associations. Selected sites shall be subjected to various field surveys, biophysical characterization and socioeconomic profiling as inputs in the preparation of Soil and Water Conservation Farm Plan: *Provided*, That it shall be prepared in consultation with the farmers based on the sites' biophysical characteristics, market potential of crops to be produced, and the capability and resources of farmer-cooperators to manage the farm. The SWCGF shall be established in accordance with the Soil and Water Conservation Farm Plan, farmers' capabilities and preferences, and available resources.

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

**SECTION 9. *Small-scale Rainwater Harvesting Structures.*** – Small-scale rainwater harvesting structures shall be designed and established in cluster to store rainwater and surface runoff within a watershed. Potential sites shall be identified and selected using approved site selection criteria in coordination with concerned LGUs and farmers associations. Selected sites shall be subjected to various field surveys, biophysical characterization and socio-economic profiling. The small-scale rainwater harvesting structures shall be implemented in accordance with the approved engineering plans and designs, and field distribution which shall be prepared by concerned LGUs with technical assistance from the BSWM and the DA-RFUs.

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

Appropriate cropping pattern and calendar that will optimize the use of stored rainwater shall be prepared by farmers with technical assistance from the LGUs through the Office of the Municipal Agriculturist.

**SECTION 10. *Research, Development and Extension Services.*** – Research and development and extension on soil and water conservation shall be an important component of the Program to provide a dynamic technology development, information dissemination and extension support in the implementation of the Program. Research and development shall cover, but not limited to, the following areas: rainwater harvesting design-methods, runoff management technologies, soil moisture conservation impacts and groundwater recharge enhancement.

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

The BSWM and the ATI are further directed to assist the LGUs in the conduct of trainings for beneficiaries and/or cooperators of SWCGF and small-scale rainwater harvesting systems prior to operation and/or turnover of said facilities.

**SECTION 11. *Implementing Rules and Regulations.*** – The Department of Agriculture and the Bureau of Soils and Water Management, in consultation with other concerned agencies and stakeholders, shall promulgate the necessary rules and regulations to implement this Act.

**SECTION 12. *Appropriations.*** – The amount necessary for the initial implementation of this Act shall be charged to the budget of the Department of Agriculture under the current General Appropriations Act. Thereafter, such sums as may be necessary for its continued implementation shall be included in the annual General Appropriations Act.

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

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

**SECTION 15. *Effectivity Clause.*** – This Act shall take effect fifteen (15) days after its publication in the *Official Gazette* or in at least two (2) newspapers of general circulation.

Approved,