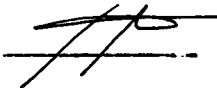


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**NINETEENTH CONGRESS** )  
**REPUBLIC OF THE PHILIPPINES** )  
*Second Regular Session* )

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**SENATE**  
**S. No. 2439**

(In Substitution of S. Nos. 9, 1914, and 2041, taking into consideration H. No. 8443)

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Prepared and submitted jointly by the Committee on Economic Affairs (upon recommendation of its Sub-Committee on PENCAS Law and Blue Economy); Committees on Environment, Natural Resources and Climate Change; and, Finance with Senators Legarda, Revilla, Jr., and Villanueva as authors thereof

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**AN ACT**  
**INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL CAPITAL ACCOUNTING SYSTEM, MANDATING ITS USE IN POLICY AND DECISION-MAKING, DESIGNATING THE AGENCIES RESPONSIBLE FOR ITS IMPLEMENTATION, PROVIDING INSTITUTIONAL ARRANGEMENTS AMONG RESPONSIBLE AGENCIES, AND APPROPRIATING FUNDS THEREFOR**

*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 “Philippine Ecosystem  
2 and Natural Capital Accounting System (PENCAS) Act”.

3           **SEC. 2. *Declaration of Policy.*** – It is hereby declared the policy of the State to:

- 4           (a) Recognize natural ecosystems as an integral part of our patrimony and heritage;  
5           (b) Protect and promote ecological balance and resilience, and advance the right of  
6           the people to live in harmony with nature;  
7           (c) Adhere to internationally accepted System of Environmental-Economic Accounting  
8           (SEEA) that measures and monitors the dynamic interaction and intersections of  
9           the environment, economy and society;  
10          (d) Develop a comprehensive information system and accounting framework that will  
11          take into consideration the role of our natural capital, consisting of both

- 1 environmental and natural resources including ecosystem services, and its impact  
2 on the economy;
- 3 (e) Compile and progressively integrate natural capital accounts in macroeconomic  
4 indicators, strengthening and building on Republic Act (RA) No. 10625, otherwise  
5 known as the "Philippine Statistical Act of 2013", which mandates the compilation  
6 of national accounts, including environmental accounts, statistics, and indicators;
- 7 (f) Provide indicators that will facilitate the integration of environmental and natural  
8 resource concerns in planning and policymaking at the national and subnational  
9 levels, in allocating budgets, and in designating statistics that will be produced  
10 regularly for an identified period of analysis;
- 11 (g) Establish and improve interagency coordination for the purpose of linking natural  
12 capital information as well as efficient data management among concerned  
13 agencies and their partner institutions, and establish an office to guide such  
14 coordination; and,
- 15 (h) Understand nature's pricelessness, its heritage and intrinsic value, and its  
16 interdependencies in the implementation of the foregoing policies to consider that  
17 nature and ecosystems have inherent rights to exist, with an end view of  
18 recognizing legal rights that serve to protect endangered ecosystems and applying  
19 the precautionary principle, especially when economic values cannot be estimated.

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

- 21 (a) *Ecosystem* refers to all living things in a given area, as well as their interactions  
22 with each other, and with their non-living environments (weather, earth, sun, soil,  
23 climate, atmosphere, water, etc.).
- 24 (b) *Ecosystem accounting* refers to a coherent framework for integrating measures of  
25 ecosystems and flows of services from them with measures of economic and other  
26 human activity.
- 27 (c) *Ecosystem services* refer to the benefits supplied by the functions of ecosystems  
28 and received by humanity and all elements of living systems, which support life  
29 systems on the planet. Ecosystem services consist of provisioning services,  
30 regulating and maintenance services, and cultural services.

1 (d) *Environmental indicators* are environment statistics that have been selected for  
2 their ability to depict important phenomena or dynamics. Environmental indicators  
3 are used to synthesize and present complex environment and other statistics in a  
4 simple, direct, clear and relevant way.

5 (e) *Natural capital* refers to the stock of renewable and non-renewable resources,  
6 including plants, animals, air, water, soils, ores, and minerals, that provide a flow  
7 of benefits to people and living things. Natural capital includes but is not limited  
8 to ecosystem services such as air and water filtration, flood protection, carbon  
9 sequestration, pollination of crops, and habitats for wildlife.

10 (f) *Natural Capital Accounting (NCA)* refers to an accounting framework that provides  
11 a systematic way of measuring and reporting on stocks and flows of natural capital.  
12 NCA covers accounting for individual environmental assets or natural resources,  
13 both biotic and abiotic such as water, ores, minerals, energy, timber, and fish, as  
14 well as accounting for ecosystem assets, biodiversity, and ecosystem services.

15 (g) *System of Environmental-Economic Accounting (SEEA)* refers to a framework that  
16 integrates both economic and environmental data to provide a more  
17 comprehensive and multipurpose view of the interrelationships among the  
18 economy, the environment and ecosystems, and the stocks and changes in stocks  
19 of natural assets, as they bring benefits to humanity.

20 (h) *Valuation* refers to determining the value or worth, in both physical and economic  
21 terms, of natural capital and the services it provides at national and subnational  
22 levels.

#### 23 **SEC. 4. *Philippine Environmental and Natural Capital Accounting***

24 **System.** – The Philippine Ecosystem and Natural Capital Accounting System (PENCAS)  
25 is hereby institutionalized within the government bureaucracy. The PENCAS shall be  
26 based on internationally accepted environmental-economic accounting frameworks. The  
27 PENCAS framework shall include, among others, a list of the officially designated statistics  
28 on the depletion, degradation, and restoration of natural capital; environmental  
29 protection expenditures; pollution and quality of land, air and water; environmental  
30 damages; and adjusted net savings.

1           **SEC. 5. Objectives of the PENCAS.** – The PENCAS shall have the following  
2 major objectives:

- 3           (a) Support economic, environmental, and health policy development and decision-  
4           making;
- 5           (b) Provide a system for the collection, compilation, and development of physical and  
6           natural capital accounts in the government as a tool for physical and development  
7           planning and programming, policy analysis, and decision-making;
- 8           (c) Serve as a comprehensive data framework in the generation of natural capital  
9           statistics and accounts towards their progressive integration in macroeconomic  
10           indicators;
- 11           (d) Provide tools and measures that contribute to the protection, conservation, and  
12           restoration of ecosystems; and,
- 13           (e) Provide valuation of ecosystem services such as provisioning, regulating and  
14           maintenance, and cultural services.

15           **SEC. 6. Institutional arrangement for the implementation of PENCAS.** –  
16 To ensure the effective implementation of PENCAS, the following bodies shall be tapped:

- 17           (a) The Philippine Statistics Authority (PSA) Board shall oversee the implementation  
18           of PENCAS.
- 19           (b) The PSA Board shall direct the relevant interagency committees created under  
20           Section 10 of RA 10625 to assist the PSA in addressing agency and sectoral  
21           concerns that may arise in the development of natural capital accounts, particularly  
22           on the *(i)* techniques and methodologies in generating environment and natural  
23           resources statistics; *(ii)* areas of duplication, discrepancies, and gaps; and, *(iii)*  
24           workable schemes for the improvement of data systems of accounts including  
25           production, dissemination and archiving of data and information.

26           The Interagency Committee on Environment and Natural Resources  
27           Statistics (IACENRS) shall provide support in ensuring that data requirements for  
28           NCA are being generated by all concerned agencies. It shall adopt, implement,  
29           and update an NCA roadmap that will *(i)* guide short-term, medium-term, and  
30           long-term activities for natural capital accounts development; and, *(ii)* prioritize

1 areas for budget support and monitoring and evaluation of NCA implementation in  
2 the country.

3 (c) A Technical Working Group (TWG) on NCA shall be established under the IACENRS.  
4 The TWG shall consist of the PSA as lead accounts compiler, Department of  
5 Environment and Natural Resources (DENR) as main data producer, National  
6 Economic and Development Authority (NEDA), and the Department of Agriculture  
7 (DA). The PSA shall serve as chair and shall provide secretariat support to the  
8 TWG. The TWG shall perform the following roles and responsibilities:

- 9 (i) Provide immediate support to achieve the priority activities across all  
10 components of the NCA Roadmap such as securing budgetary or financial  
11 and technical support and collaborating with development partners for  
12 project preparation and implementation;
- 13 (ii) Serve as a forum for discussion and resolution of issues and concerns in the  
14 compilation, processing, and dissemination of natural capital and ecosystem  
15 statistics and accounts and other related indicators in terms of accuracy,  
16 completeness, timeliness, and relevance;
- 17 (iii) Review and recommend enhancements on the concepts, techniques, and  
18 methodologies used in the collection, processing, and reporting of natural  
19 capital and ecosystem statistics and accounts to ensure conformity with the  
20 prescribed statistical standards and classification system;
- 21 (iv) Identify and recommend statistical measures, strategies, and policies for  
22 the improvement of natural capital and ecosystem statistics and accounts  
23 to IACENRS;
- 24 (v) Recommend improvements in the methodology of compiling natural capital  
25 and ecosystem statistics and accounts, and formulate measures to ensure  
26 that the data requirements of the same are being generated and addressed  
27 by all concerned agencies;
- 28 (vi) Prioritize outputs that will address the more urgent statistical requirements  
29 in the Philippine Statistical Development Program, including those required  
30 to monitor and measure the accomplishment of relevant chapters of the

- 1 Philippine Development Plan and its Results Matrices, and the Philippines’  
2 obligations in multilateral environmental agreements; and,  
3 (vii) Update the PSA Board and the IACENRS on developments in natural capital  
4 and ecosystem statistics and accounts.

5 **SEC. 7. *Specific Functions of National Government on PENCAS.*** – The  
6 following agencies shall have the following specific roles and responsibilities in the  
7 implementation of this Act:

8 (a) The PSA shall have the overall responsibility for the institutionalization and  
9 progressive implementation of PENCAS following the SEEA framework. It shall  
10 develop and maintain the compilation of natural capital accounts as well as the  
11 environmental and ecosystem accounts at the national and, as necessary, at the  
12 sub-national levels. It shall coordinate with and provide technical support to  
13 interagency committees, task forces, technical working groups, national  
14 government agencies, and local government units (LGUs) in the generation,  
15 compilation, and use of environmental accounts, statistics, and indicators. In  
16 coordination with concerned agencies, it shall designate the required environment  
17 and economic statistics in agencies and bureaus responsible for generating data.

18 The PSA shall create a service to be referred to as Environment, Natural  
19 Resources and Ecosystem Account Service (ENREAS), under the Sectoral Statistics  
20 Office, necessary for the implementation of this Act, subject to the evaluation and  
21 approval of the Department of Budget and Management (DBM), and in compliance  
22 with the Civil Service laws, rules, regulations, and guidelines.

23 (b) The DENR shall be responsible for providing NCA data to PSA. The DENR shall  
24 ensure the participation of its concerned offices, bureaus and attached agencies.  
25 It shall spearhead the setting up of site-specific ecosystem accounts.

26 The DENR, in line with its mandate, shall continue to uphold and convey  
27 that the natural environment, biodiversity and the multitude of ecosystem services  
28 that nature provides are opportunities, benefits or assets as opposed to being  
29 merely a backdrop to absorb impacts. It shall communicate and instill to all  
30 stakeholders the importance of accounting and valuation of ecosystems services

1 and their benefits to people. The DENR shall ensure the wide availability of tools,  
2 methods and skills that can support the consideration of ecosystem services, and  
3 ensure the inclusion of such in the implementation of all its mandates in the  
4 development of the implementing rules and regulations (IRR), further including in  
5 such rules accounting for activities that may degrade natural capital.

6 To perform the foregoing functions, the DENR shall be strengthened  
7 through the creation of new plantilla positions, subject to existing laws, rules and  
8 regulations.

9 (c) The NEDA, including its regional offices, shall ensure that NCA is included in the  
10 national and regional development priorities based on the usefulness of the  
11 accounts in policy analysis, development planning, and investment programming.  
12 It shall provide strategic guidance on improving uptake on policy use and  
13 application, enhancing institutional capacity, and raising awareness and  
14 transparency of NCA work.

15 (d) The Department of Agriculture (DA) shall assist the PSA in the generation and  
16 provision of the NCA information relative to agricultural areas, and fisheries and  
17 aquatic resources, and closely coordinate on associated ecosystem NCA with the  
18 DENR. The Bureau of Fisheries and Aquatic Resources (BFAR), in line with its  
19 mandate, shall provide support in the creation of data and information on fisheries  
20 valuation and accounting. The National Fisheries Research and Development  
21 Institute (NFRDI) shall continue to conduct research and development activities  
22 and studies to support the assessment, including the profiling of the status of fish  
23 stocks of the country. The Bureau of Soils and Water Management (BSWM) shall  
24 ensure that NCA is considered to ensure soil fertility and hydrological stocks and  
25 services. *Further*, the DA, BFAR, BSWM, and NFRDI shall create national capital  
26 units through additional plantilla positions, subject to existing laws, rules and  
27 regulations, and approval of the DBM.

28 (e) The Department of the Interior and Local Government (DILG) shall consolidate  
29 and submit NCA-related data and statistics from local governments to PSA and

1 DENR. *Further*, the DILG shall ensure that LGUs utilize and mainstream NCA into  
2 their local policies, plans, and programs.

3 (f) The Department of Education (DepEd), Commission on Higher Education (CHED),  
4 Technical Education and Skills Development Authority (TESDA), and state  
5 universities and colleges (SUCs) shall craft modules in all levels and modalities of  
6 basic, technical, vocational, and higher education to capacitate the citizenry to  
7 avail of participatory mechanisms in relation to PENCAS.

8 (g) The Professional Regulation Commission (PRC) shall incorporate NCA concepts in  
9 the continuing professional education programs and develop the understanding of  
10 the impact of different professions on the environment.

11 (h) The Department of Finance (DOF) shall integrate NCA considerations into fiscal  
12 policies and regulations, and develop incentive mechanisms that will drive NCA  
13 investments.

14 (i) The Department of Energy (DOE) and Department of Human Settlements and  
15 Urban Development (DHSUD) shall integrate NCA considerations into the  
16 performance of their mandate, and ensure that its planning and decision-making  
17 consider natural capital.

18 **SEC. 8. *Participation of Specific Bureaus Within the Agencies.*** The  
19 following offices shall contribute to the collection, generation, analysis and presentation  
20 of statistics and data requirements of the PENCAS:

21 (a) All bureaus of the DENR, and the National Mapping and Resource Information  
22 Authority (NAMRIA);

23 (b) National Water Regulatory Board (NWRB);

24 (c) The bureaus of the DA, especially the BFAR, the BSWM, Philippine Fisheries  
25 Development Authority (PFDA), Philippine Rice Research Institute (PRRI),  
26 National Irrigation Administration (NIA) and the Philippine Coconut Authority  
27 (PCA);

28 (d) National Renewable Energy Board (NREB);

29 (e) Research and development institutes, and science and technology services,  
30 especially the Philippine Atmospheric, Geophysical and Astronomical Services



1 Administration (PAGASA) and the Philippine Institute of Volcanology and  
2 Seismology (PHIVOLCS) of the Department of Science and Technology (DOST);  
3 (f) And other bureaus, as necessary.

4 **SEC. 9. *Involvement of Other Stakeholders.*** – The TWG on NCA shall involve  
5 other relevant agencies, private sector, and nongovernment organizations, including  
6 indigenous peoples and local communities, in the implementation of PENCAS, particularly  
7 on the generation and provision of NCA data as well as the use of natural capital and  
8 ecosystem accounts.

9 Subject to the implementing rules and regulations of this Act and national security  
10 concerns, all stakeholders shall regularly publish NCA information on their website and/or  
11 such other medium deemed appropriate.

12 **SEC. 10. *Participatory Mechanisms and Citizen Remedies.*** – The concerned  
13 agencies shall institute consultative mechanisms, and mass collaboration measures to  
14 effectively popularize PENCAS and ensure wide comprehensibility and usage of the  
15 accounts.

16 Any citizen shall have the right to information on any account generated under  
17 this Act, to have the standing to compel the performance of any of the mandates under  
18 this Act, and to seek justification from any government agency that may have ignored or  
19 neglected PENCAS accounts and indicators in their policy or decision-making. Major  
20 PENCAS accounts, results on nature's wealth and the economic value of ecosystem  
21 services, and loss and damage associated with disasters or climate change, shall be  
22 released along with all releases of national economic data, such as Gross National Income  
23 (GNI), Gross Domestic Product (GDP), and other often-released measures of the state of  
24 the country's economic health and highlight the contribution of resources and ecosystems  
25 to the economy, incomes and employment.

26 **SEC. 11. *Rights of Nature.*** – Nothing in this Act shall be construed to mean that  
27 nature has no inherent and intrinsic value separate and distinct from its economic value.

28 **SEC. 12.** The PENCAS shall be fully considered in the implementation of the  
29 Philippine Environmental Impact Statement System.

1           **SEC. 13. Appropriations.** – The amount necessary to cover the initial  
2 implementation of this Act shall be charged against the current year’s appropriations of  
3 the departments or agencies concerned. Thereafter, the amount necessary for its  
4 continued implementation shall be included in the respective budgets of the departments,  
5 agencies concerned in the annual General Appropriations Act.

6           **SEC. 14. Implementing Rules and Regulations.** – Within one (1) year from  
7 the effectivity of this Act, the PSA shall constitute an interagency working group,  
8 composed of the agencies and offices enumerated under Sections 6 and 7 of this Act, to  
9 issue the rules and regulations necessary for the effective implementation of this Act.

10           The relevant agencies shall integrate internationally recognized best practices and  
11 methodologies as they execute and implement this Act and its rules and regulations,  
12 ensuring the progressive integration of the SEEA.

13           The Implementing Rules and Regulations of this Act shall include the timeframe,  
14 manner and such other details regarding the collection, renewal, and review of NCA data  
15 by government agencies and other stakeholders.

16           **SEC. 15. Separability Clause.** – If any provision of this Act is declared  
17 unconstitutional or otherwise invalid, the validity of the other provisions shall not be  
18 affected thereby.

19           **SEC. 16. Repealing Clause.** – All other laws, decrees, orders, rules and  
20 regulations, other issuances, or parts thereof inconsistent with the provisions of this Act  
21 are hereby repealed or modified accordingly.

22           **SEC. 17. Effectivity.** – This Act shall take effect fifteen (15) days after its  
23 publication in the *Official Gazette* or in a newspaper of general circulation.

24 Approved,