

# EXPLANATORY NOTE

Agriculture has been the traditional backbone of the Philippine economy. It is a principal source of income and employment, employing almost half of the total labor force. It is thus considered a major industry in the Philippines.

However, it has been observed that small farm holders and tenant farmers have depended on the traditional subsistence level of farming systems. In spite of the extension efforts made by government agencies and institutions and non-government organizations, these farmers have not been able to adopt new agriculture technologies that have otherwise made the large new agribusiness farms in the country highly productive and profitable.

Low investment in research and development (R&D), inadequate generation and ineffective transfer of agricultural technologies are the primary reasons why the majority of small and marginalized farmers have remained technologically outdated and economically powerless.

The Philippines cannot afford to allow the present state of affairs to continue. Otherwise, with increasing population, the country may not be able to produce or import the food to meet the needs of its people.

In order for the Philippines to become a progressive industrialized nation, it should have a strong and highly productive agricultural sector. Its strength and productivity, however, lie on the empowerment of the majority of its farmers and the promotion of the development of cuttingedge agricultural technologies to enable our country to become highly competitive in the international market.

This bill is in response to the strongly felt need to integrate R&D and technology generation and transfer into a single coherent and harmonious national system dedicated to the socio-economic well-being of the Filipino farmers and development of the nation. It aims to transform traditional peasant agriculture to modern highly productive agriculture through generation and transfer of more productive and useful technologies of farming and rural living.

A sustained expansion of the national economy requires sustained growth in the agricultural sector. We must transform our farmers into a resource of renewed national vigor and creativity in our drive for global competitiveness.

In view of the foregoing, approval of this bill is earnestly requested.

RODOLFO G BIAZON Senator

• •	OFFICE OF THE SECRETARY
FOURTEENTH CONGRESS OF THE REPUBLIC OF THE PHILIPPINES First Regular Session	) ) 7 JUL -3 P3:16
S E N A T E S. No. <u>827</u>	HECEIVED BY :
Introduced by Senator Bia	azon

# AN ACT

#### TO ESTABLISH AN INTEGRATED SYSTEM FOR AGRICULTURE TECHNOLOGY GENERATION AND TRANSFER AND APPROPRIATING **FUNDS THEREFOR**

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

# **CHAPTER I. TITLE AND POLICIES**

1 SECTION 1. Title- This Act shall be known as the "Agriculture Technology

2 Generation and Transfer Act of 2007."

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SEC. 2. Declaration of Policy. -

4 a) The State shall protect and promote the socio-economic welfare and 5 well-being of Filipino farmers, particularly those in the countryside. Towards this end, it is the purpose of this Act to establish an Integrated System of Agriculture 6 7 Technology Generation and Transfer that will most efficiently and effectively provide the agricultural technology services as a means of empowerment of 8 9 farmers and enable them to help sustain a self-sufficient and self-reliant food and agriculture production for its people and accelerate agro-industrial development 10 of the country. 11

12 b) The State also commits itself to the protection of the environment and the promotion of sustainable agriculture 13

SEC. 3. Scope. This Act shall apply to, and govern all existing agricultural 14 research and extension activities of the National Government, the local 15

government units, farmer's and non-government organizations and the state
 universities and colleges in the country.

3 SEC. 4. *Definition of Terms-* The following terms shall mean as defined
4 herein:

a) Agriculture- refers to the art, science and business of cultivating the
soil, planting of crops, growing of fruit trees, management of forests, raising or
catching or both of livestock poultry or fish; including the harvesting and postharvest handling of such products, and other activities and practices performed
by persons whether natural or juridical in conjunction with such operations.

b) Research and Development (R&D)- pertains to all organized activities
designed to search for new knowledge or modify existing ones, develop new
methods and techniques of operation, tools, equipment or types of organisms
through the application of the scientific method.

14 c) Technology Generation- R&D activities that are directed principally 15 towards the development of such methods, techniques, computer softwares and 16 hardware, tools, equipment, or types of organisms that may be used or applied 17 for the benefit of man. The product of such activities may be referred to as 18 technologies.

d) Technology Transfer- pertains to all organized activities designed to
 enable individuals or groups to effectively adapt a particular technology.

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e) Farmer-any person who engages in any agricultural activity

f) Sustainable Agriculture- any principle, method and/or practice that
 aims to make agriculture economically viable, ecologically sound, socially just,
 and culturally appropriate.

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# TECHNOLOGY GENERATION AND TRANSFER

CHAPTER II. THE INTEGRATED SYSTEM FOR AGRICULTURE

27 SEC.5. *The Integrated System of Agriculture Technology Generation* 28 *and Transfer (ISATGaT)* – All government agencies and institutions, including 29 local government units, farmers and non-government organizations that are engaged in R&D, training and extension activities in agriculture shall be organized and formed into an Integrated System of Agriculture Technology Generation and Transfer (ISATGaT). It shall be organized into hierarchical and interlocking councils at the national, regional and provincial levels. The national and regional councils shall be concerned with both the technology generation and transfer activities while the provincial councils shall be concerned with technology transfer activities.

8 SEC. 6. *Purpose*. – The purpose of the ISATGaT is to most effectively 9 and efficiently respond to and provide for the technology needs of farmers and 10 enable them to attain higher productivity and market competitiveness in the 11 context of sustainable agriculture principles and practices.

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# SEC. 7. Components of the System.-

13 a) Department of Agriculture

b) Institutes and Centers for Agricultural Research Development and
 Training

16 c) Local Government Units

17 d) State Universities and Colleges

18 e) Farmers' and Non-Government Organizations

19 CHAPTER III. ROLES AND FUNCTIONS OF COMPONENT UNITS IN EACH

20 LEVEL OF THE SYSTEM

#### 21 SEC. 8. The Department of Agriculture (DA) shall:

a) Provide the office of the Chairman and the Secretarial of the National
 Integrated System for Agriculture Technology Generation and Transfer
 (NISATGaT) Council:

b) Organize and operate a Bureau of Agriculture Technology Generation
and Transfer (BATGaT) out of its existing research centers and outreach
stations and training institutes for purposes of addressing agriculture technology
issues or for national concern; and

1 c) Coordinate the activities of the NISATGaT Council with that of the 2 other units within its department and with other agencies and instrumentalities of 3 the Government in order that such activities shall be consistent with and in 4 pursuit of the National programs and objectives of the country.

5 SEC. 9. The Autonomous National Institutes and Centers for 6 Agricultural Research, Development and Training shall:-

a) Undertake such technology generation and transfer activities as may
be recommended by the NISATGaT Council; and

b) Maintain and improve high level technical manpower and appropriate
facilities to be able to effectively undertake whatever technology generation and
transfer activities may be deemed necessary.

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# SEC. 10. The Local Government Units (LGUs) shall:-

a) Designate a Provincial Agriculture Officer (PAO)- in each province who
 will represent the respective provinces in the Regional Integrated System for
 Agriculture Technology Generation and Transfer (RISATGaT) Council and
 coordinate all activities pertaining to agricultural technology services to farmers in
 his/her provinces; and

b) In collaboration with a duly recognized provincial college of agriculture,
shall organize a Provincial Agriculture Technology Transfer (PATT) Council
whose members will include the head of the agricultural institution, the PAO,
Municipal Agricultural Officers, representatives of recognized local farmers' and
non-government organizations.

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# SEC. 11. The State Universities and Colleges (SUCs) shall:-

a) Designate an Agriculture Technology Generation and Transfer
(ATGaT) Coordinator who will represent the institution in the Regional Integrated
System for Technology Generation and Transfer (RISATGaT) Council in the case
of duly accredited regional SUCs;

b) Designate an Agriculture Technology Transfer (ATT) Coordinator for
 the institution and who will represent the institution in the Provincial Integrated

System for Agriculture Technology Transfer (PISATT) Council in the case of duly
 accredited provincial agricultural colleges or provincial technical institutes of
 agriculture;

c) Undertake research, technology generation and/or technology transfer
on such areas as may be recommended by the NISATGaT, RISATGaT or
PISATT Council in the case of duly accredited national, regional or provincial
agricultural institution(s), respectively:

d) Provide the office of the Chairman and Secretariat of the RISATGaT
Council in the case of the regional state agricultural institution or of the PISATT
Council in the case of the provincial agricultural institution as may be designated
by the NISATGaT Council; and

e) Provide facilities and staff for and conduct training of agricultural
 technologies, technicians and farmers in the utilization of the various agricultural
 technologies.

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# SEC. 12. Farmers and Non-Government Organizations (NGOs) shall:-

a) Volunteer facilities or certain portions of their farms for tests and/or
 demonstration of certain agricultural technologies that are of potential benefit to
 them;

b) Actively participate in the problem/ opportunity identification, planning
 and implementation of research and development of promising technologies; and
 c) Share in the cost of research and development of technologies that are
 potentially beneficial to them.

SEC. 13. *Creation of the National Integrated System for Agriculture Technology Generation and Transfer (NISATGaT) Council.*- To carry out the programs for generation and transfer of agriculture technologies of the country, the National Integrated System for Agriculture Technology Generation and Transfer (NISATGaT) Council is hereby created and attached to the Department of Agriculture for administrative purposes only, with the following composition and functions: a) Composition. The following shall serve as members of the NISATGaT
 Council with its Chairman to be elected from among its members and serve for a
 period of three (3) years:

One outstanding scientist from each of the fields of Crop Science,
 Animal Science, Agricultural Engineering, Fisheries, Forestry and Veterinary
 Medicine who shall be nominated by heads of faculties, scientific or professional
 groups for a term of three (3) years, and from among themselves, a Co chairperson shall be chosen;

9 2) The Director of the Bureau of Agriculture Research, Technology 10 Generation and Transfer (BARTGaT) who shall also serve as the Executive 11 Director of the Secretariat of the Council;

12 3) The Dean, College of Agriculture of the University Council of the
 13 Philippines at Los Baños;

14 4) The President of the Philippine Association of Agricultural Colleges
 15 and Universities;

16 5) The Executive Director of the Philippine Council for Agriculture and
17 Resources Research and Development (PCARRD);

18 6) One representative of the National Farmers' Organizations and
19 one representative of the National NGOs involved with agricultural technology
20 transfer;

21 7) Chairperson of each of the RISATGaT Councils;

22 8) The Director, Bureau of Animal Industry; and

23 9) The Director, Bureau of Plant Industry; and

10) The Director, Bureau of Fisheries and Aquatic Resources.

b) Functions- The NISATGaT Council shall have the following duties and
functions:

Scan the environment of the Philippine agriculture and study new
 development and trends where problems and opportunities could arise and taken
 advantaged of in the development of new technologies;

Study new technologies in agriculture and related fields and determine
 whether these could be advantageously adapted by Filipino farmers;

3 3) Formulate policies that will encourage and promote the expeditious
4 generation and transfer of technologies that are most beneficial to the Filipino
5 people;

6 4) Prioritize national programs for research, technology generation and
7 transfer that government should support;

5) Make representation with the Department of Budget and Management and see to the timely and sufficient allocation of funds for agriculture research, technology generation and transfer programs as recommended by NISATGaT; and

6) Formulate policies regarding technology, protection, commercializationand dissemination.

SEC. 14. *Creation of the Regional Integrated System for Agriculture* **Technology Generation and Transfer Councils-** To carry out the regional programs for generation and transfer of technologies appropriate for each of the regions, a Regional Agricultural Technology Generation and Transfer (RISATGaT) Council is hereby created in each of the geographical regions of the country and attached to a chartered regional state university or college as designated by the NISATGaT Council.

a) Composition. – The RISATGaT Council shall be composed of the
following members whose Chairman shall be elected by its members for a term
of three (3) years and assisted by a Secretariat;

1) The Heads of the accredited agricultural university(ies) and college(s)
in the region;

26 2) The Directors/ Heads of Regional Integrated Agriculture Research
 27 Center and of other duly recognized agricultural commodity research and training
 28 centers in the region;

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3) The Manager/ head of the Regional Outreach Station;

4) The Provincial Agricultural Officers of each province of the region;

5) The President (s) or Chairperson (s) of duly recognized farmers and non-government organizations involved in the promotion of agriculture in the region; and

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6) The Coodinator of Agriculture Technology Generation and Transfer
of the institution to which the RISATGaT is attached and who shall also serve as
in charge of the Secretariat.

b) Functions.- The RISATGaT Council shall have the following duties andfunctions:

1) Periodically discuss problems and opportunities for developing agriculture in the region and plan and cause the implementation of research, technology generation and transfer programs that will most effectively address such issues;

14 2) Coordinate the research, technology generation and technology
15 transfer activities in the region and see that they are consistent with the plans
16 and programs approved by the RISATGaT;

17 3) Determine the priorities for research, technology generation and
18 transfer that may be implemented in the region and accordingly recommend
19 financial support by the Government or by any interested parties;

20 4) Periodically review on-going research and development projects and
21 programs and see that they squarely address their objectives; and

5) Plan and facilitate the transfer of new and appropriate agricultural
technologies to farmers and other end-users in the region.

24 SEC. 15. *Creation of Provincial Integrated System for Agriculture* 25 *Technology Transfer Council-* To effectively transfer agriculture technologies to 26 farmers in the provinces and municipalities, the Provincial Agriculture Technology 27 Transfer (PATT) Council shall be established in each of the provinces and 28 attached to the provincial agricultural college designated by the RISATGaT 29 Council. a) Composition- The PATT Council shall be composed of the following
 members with the Chairman to be elected from among the members and serve
 for three (3) years:

4 1) The Head(s) of recognized provincial agricultural college(s) or 5 institute(s):

2) The Provincial Agricultural Officer (PAO) who shall also serve as
Coordinator of Technology Transfer and in-charge of the PATT Council
Secretariat;

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3) The Municipal Agricultural Officer of each municipality; and

4) The chairperson(s) of duly recognized farmers and non-government
 organizations involved in agriculture in the province.

b) Functions- The PATT Council shall have the following duties andfunctions:

14 1) Periodically discuss problems and opportunities for developing 15 agriculture in the province and plan and cause the implementation of appropriate 16 technology for transfer to farmers and other local end-users;

17 2) Coordinate all technology transfer activities in the province and see
18 that they are consistent with its approved plans and programs;

3) Determine priority technology transfer activities that may be
implemented in the province and accordingly recommend financial support by the
local government or by any interested parties;

4) Periodically review on-going technology transfer activities in the
province and see that they squarely address their objectives; and

5) Plan and facilitate the transfer of new and appropriate agriculture technologies to farmers and other end-users in the province.

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# SEC. 16. Budgetary Scheme shall be as follows:

a) The current appropriations or budgets for agriculture research,
technology generation and transfer program of the state agencies, institutes and
centers and local government units and SUCs shall be increased from the present

level by annual increment of 0.2% of the Gross Value Added (GVA) of the
 agriculture sector for the next ten (10) years as recommended by the NISATGaT
 Council and approved by the Department of Budget and Management and shall
 be included in the Annual General Appropriations Act.

5 b) This Act hereby allocates an endowment lumpsum amount of Fifty million pesos (P50,000,000.00) per annum for the next ten (10) years and shall be 6 7 included in the General Appropriations Act starting 2008. This fund shall be called 8 the Agriculture Technology Generation and Transfer Fund to support high priority 9 technology generation and transfer programs of the NISATGaT Council the RISATGaT Councils and the PATT Councils: Provided, That such fund shall be 10 invested in government bonds and securities and managed by the NISATGaT 11 Council using only the interest earnings of the said fund. 12

13 c) The operations of the Bureau of Agriculture Research, Technology 14 Generation and Transfer shall be funded initially from the DA allocation for the 15 operation of both its Bureaus of Agricultural Research (BAR) and Agricultural 16 Training Institute (ATI). Upon the effectivity of this Act, the BAR and ATI shall be 17 replaced by the BARTGaT. Subsequently, the appropriation of the BARTGaT 18 shall be incremented according to the provisions of subsection (a) hereof.

19 SEC. 17. Grants, Fiduciary and Revolving Funds - The Fiduciary and Revolving Funds centralized under P.D. 711 are hereby authorized and 20 reallocated to the government agencies, institutions, centers and SUCs 21 participating in the ISATGaT to encourage them to demonstrate the economic 22 23 benefits of the technologies that have been developed; furthermore endowment funds shall be authorized to be accumulated in the institutions out of the funds 24 25 generated from earnings and from grants and other external sources to be used as incentives for research fellowships, incentives and awards for excellence in 26 technology generation and transfer and the like. Such funds shall be disbursed in 27 accordance with the law and the guidelines set by the NISATGaT Council and 28 29 the Commission n on Audit.

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# CHAPTER IV. INCENTIVES, PRVILEGES AND BENEFITS

SEC. 18. *Incentives for Private Institutions-* Private institutions and organizations may avail of the research, technology generation and transfer fund: Provided, That their programs are approved for funding by the NISATGaT Council. Furthermore, their expenditures for research and development activities shall be eligible for tax exemptions: Provided, That the information that they derive therefrom are shared with the community of researches through scientific publications, seminars, symposia and the like.

9 SEC. 19. Incentives and Benefits for Technologists and Technicians 10 and Farmers Participating in Technology Generation and Transfer-

a) Technologist and technicians involved in research, technology
generation and transfer shall be paid salaries at least or equal to the teaching
staff of the SUCs of equivalent academic training and qualifications. They shall
also be given corresponding incentives and benefits for any patent on products
or processes that they have developed.

b) Farmers who participate in the planning and implementation of technology generation and transfer activities or make available certain areas of their farm lots or farm facilities for such activities shall be entitled to certain incentives and benefits as may be recommended by the supervising Council and approved by the Commission on Audit.

21 SEC. 20. *Repealing Clause* - All existing laws, rules and regulations or 22 parts thereof inconsistent with the provisions of this Act are hereby repealed or 23 modified accordingly.

24 SEC. 21. **Separability Clause-** If any part, section or provision of this Act 25 shall be held invalid or unconstitutional, no other part, section or provision hereof 26 shall be affected thereby.

27 SEC. 22. *Effectivity-* This Act shall take effect fifteen (15) days after its 28 publication in two (2) newspapers of general circulation

29 Approved,