



HONDURAS

DRAFT/PROPOSAL

for a

NATIONAL BIOSAFETY FRAMEWORK

Honduras, November 2007



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ACRONYMS

AFE	State Forestry Administration <i>Administración Forestal del Estado</i>
NEA	National Executing Agency
CCA	Scientific Advisory Committee <i>Comité Científico Asesor</i>
CNC or NCC	National Coordinating Committee <i>Comité Nacional de Coordinación</i>
COHDEFOR	Honduran Forest Development Corporation <i>Corporación Hondureña de Desarrollo Forestal</i>
CPB	Cartagena Protocol on Biosafety
DiBio	General Department for Biodiversity <i>Dirección General de Biodiversidad</i>
DR-CAFTA	Dominican Republic-Central America Free Trade Agreement
EAPZ	Pan American Agricultural School "El Zamorano" <i>Escuela Agrícola Panamericana "El Zamorano"</i>
FTA	Free Trade Agreement
GEF	Global Environment Facility
GM	Genetically modified
GMO pl. GMOs	Genetically modified organism.
LMO pl. LMOs	Living modified organism
NBF	National Biosafety Framework
NBFP	"National Biosafety Framework" Project
NPC	National Project Coordinator <i>Coordinador Nacional de Proyecto</i>
OIRSA	International Regional Agency for Agricultural and Livestock Health <i>Organismo Internacional Regional de Sanidad Agropecuaria</i>
PES	Payment for Environmental /Ecosystem Services
PESA	State Policy for the Agro-Food Sector and Rural Areas of Honduras <i>Política de Estado para el Sector Agroalimentario y el Medio Rural</i>
PRS	Poverty Reduction Strategy
RBEP	Regulation on Biosafety with emphasis on Transgenic Plants <i>Reglamento de Bioseguridad con Énfasis en Plantas Transgénicas</i>
SAG	Ministry for Agriculture and Livestock <i>Secretaría de Agricultura y Ganadería</i>
SENASA	Service for Agricultural and Livestock Health <i>Servicio Nacional de Sanidad Agropecuaria</i>
SERNA	Ministry of Natural Resources and Environment <i>Secretaría de Recursos Naturales y Ambiente</i>
UNA	National University of Agriculture <i>Universidad Nacional de Agricultura</i>
UNAH	National Autonomous University of Honduras <i>Universidad Nacional Autónoma de Honduras</i>
UNEP	United Nations Environmental Program

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I. INTRODUCTION

Human beings are the supreme end of Society; therefore, the State must ensure their well-being and prevent mistakes due to the lack of prevention or unfounded fears, in the name of an ambition for technological application, the pursuit of scientific knowledge or simple prejudices. The conflicts generated by the use of biotechnology¹ have proved that it is not enough to rely on axiology or ethics, because the negative consequences of its "misuse" or its "unrestricted use" would affect the great majority - there must also be a guaranteed possibility of demanding the fulfillment of responsibilities.

Modern biotechnology² has generated a series of products with the potential to solve problems afflicting humanity, such as hunger, degenerative diseases, or the negative effects of industrial progress; however, these applications are not free from risks, which makes it necessary for countries to establish their respective *national biosafety frameworks*.

This national framework implies the immediate guarantee of the State that the application and use of modern biotechnology and its products are embedded in a policy which meets the needs and visions of all the actors involved in the matter³, while protecting rights recently recognized by the International Community, as well as enforcing the sanctions due to violations of the law and abuse of the rights granted. This means that the scientific verification of the data, in order to create knowledge, must not cause ecological disasters such as those caused by the introduction of exotic species into virgin ecosystems, nor must it put the livelihood of indigenous groups at risk. The State must guarantee that investments in humans/ time / money made in accordance with the national framework for research have the possibility of being developed and yielding higher revenue for investors.⁴

Nevertheless, this does not mean that the corporate interest in gaining profit and the intention to avoid this ambition from provoking apocalyptic scenarios, where human safety is threatened by the reckless pursuit of profits⁵, is the reason for regulating modern biotechnology. It is the potential of this new and still innovative knowledge that requires mechanisms of control; i.e., the danger does not lie in the pursuit of knowledge, but in its application.⁶

¹ "biotechnology" means any technological application that uses biological systems and living organisms or their derivatives to create or modify products or processes for specific uses.

² *Modern biotechnology* means the application of: i). *in vitro* manipulations of nucleic acids, including *in vitro* recombinant deoxyribonucleic acid (DNA) and ribonucleic acid (RNA), including deoxyribonucleic acid (DNA), and the direct injection of nucleic acid into cells or organelles, or ii). The fusion of cells beyond the taxonomic family, in both cases exceeding recombinant reproductive or natural physiological barriers that are not techniques used in natural breeding and selection.

³ Scholars, agro industry, farmers, consumers, private enterprise, government and ethnic groups

⁴ The intellectual property rights are the only monopoly recognized by the Constitution of the Republic, but are subject to a time limit and legal spatiality reinforced by a complex international framework.

⁵ The law presumes good faith in contractual business activities, and the contrary has to be demonstrated, letting the burden of proof fall on those who state the claim.

⁶ The cases of undesired secondary effects to patients caused by doctor's treatment (diatrogenia), nuclear fission and dynamite show that the intentionality depends on the individual and that the Law is the first deterrent available to the State to prevent acts prejudicial to humanity.

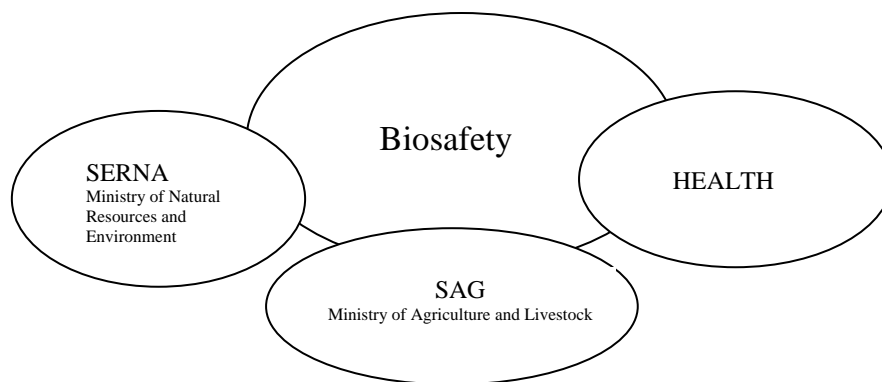
New ways of doing politics and legislating⁷ make it possible for the policies of each sector to be heard before the drafting of a national policy and the creation of its respective instruments. The ideal is to exploit biotechnology appropriately, avoiding abuse. Even philosophers have indirectly cooperated in the development of new forms of ethics, both for government leaders and for scientists, which have served as a basis for the current behavior of those who do research work, its promoters, as well as those who direct scientific development projects.

As LMOs are a highly controversial issue, the application of this technology needs specific frameworks that may be complemented by institutional attributions and competences, in order to understand the intricate nuances that go hand in hand with public participation. The pros and cons of biotechnology seem to be the product of the knowledge gap between scientists and ordinary people. It is suggested by the scientist that laymen should be better informed, and the latter demand that the scientists should speak in a language which is more understandable for the ordinary person; in short, a suitable method for the dissemination of information on LMOs should be established, so that the general public can exercise its right to comment and form appropriate judgments on these technologies, their uses and products.

With regards to the regional policies, in the case of Central America the controls and normative processes have been gradually matched, and emphasis has been made on finding points of agreement and convergence in order to avoid environmental and health crises with corresponding negative effects; nevertheless, regional harmonization is still far-off.

At the national level, specific guidelines prevent the creation of new institutions; instead, the chosen path is to grant more powers to already existing entities (Chart 1), thereby generating complex regulatory structures, which make interinstitutional confluence inevitable with deficiencies in the applicability of laws and their regulations, due to reasons that range from budget deficiencies to the lack of specific rules.

Chart 1. Interinstitutional Structure Related to Biosafety



⁷Lobbying for an open legislature has become an increasingly common political practice, particularly in the discussion of laws relating to environmental matters, such as in the case of the proposed new legal frameworks for forestry and mining, and in the case of protected areas.

At the international level as well there is a lack of regional and national heterogeneity; therefore, UNEP and GEF decided to establish a Project for the "**Development of National Biotechnological Safety Frameworks (Biosafety)**". It was launched in June 2001 with the aim of assisting the participating countries to establish their national frameworks for the management of GMOs.

Honduras initiated project activities in November 2002. At the national level, the Project has been executed intermittently, as a result of the changes in the National Coordination, but it has managed to develop each of the corresponding phases, in the first place thanks to a clear vision (or motivation as to the design of the project), its guiding principles and the establishment of institutional and management structures by their members (the CNC, the NEA and the NPC); and secondly, to the preparation of inventories in the different sectors related to biosafety and biotechnology within the country and their introduction into a national database, which facilitated the identification of stakeholders and the consultation, analysis and training needed to identify the priorities and parameters for the drafting of the National Biosafety Framework (NBF); and, thirdly, to the cohesion obtained through consultations with stakeholders associated with the Project on the purpose and content of the NBF and the achievement of its approval by all participants.

The phases are: establishment of the administrative structures needed with regards to the project, the collection of basic information, the analysis of that information in consultation with stakeholders, and the preparation of the official draft of the national biosafety framework.

While taking into account the specific situations, needs and priorities of the countries, each NBF shall consist of five elements, namely:

- A regulatory system (a law or amendment of laws)
- An administrative system (regulations for the implementation of this law or laws)
- A decision-making system that includes risk assessment and management
- Mechanisms for the information and participation of the general public
- A monitoring, control and follow-up system

The goal of the "National Biosafety Framework" Project (NBFP) has been to achieve advances in these areas, either by defining specific proposals to strengthen, build and / or implement these elements of the NBF, or by stimulating processes of discussion and analysis to help the country envision the areas where more efforts are required. In the case of Honduras, the NBFP developed proposals to adjust the Biotechnology Policy of the Country, to legislate biosafety through a broader law, to regulate two specific areas of LMO-biosafety (agricultural use and the contained use of LMOs) and to provide technical documents (application forms) for the future operation of the proposed legislation.

II. THEORETICAL ASPECTS

II.A. The Precautionary Approach

The basis of the legislation in question lies in the well-known precautionary approach, which is nothing else than the *ratio* that, in the case of danger or threat of serious or imminent harm, the absence of scientific certainty should not be used as a justification for postponing the adoption of effective protective measures.

A restriction on development can occur therefore when there is reasonable suspicion of possible harm, without waiting for full scientific proof and, therefore, without considering the costs and benefits.

However, lately this principle has been affected by provisions of international trade law stipulating that the absence of information about negative impacts of a particular matter constitutes no justification for an importing country to create obstacles to the flow of trade or cross-border movement of goods and services.

The rapid advancement of science has roused legitimate concerns among the population, which demands the transparency of information with regards to matters relating to public health, the environment and research. This does not mean opposition to the progress of science - what is required is a calm and deep reflection of the matter.

Establishing the parameters of the precautionary approach demands an analysis of the current state of existing laws, a clarification of its potential consequences on the development of science and its application, as well as the regimes of responsibility. These of course must include decision-making mechanisms, while first and foremost guaranteeing access of information to the general public.

The absence of certainty, scientific knowledge and the current techniques must not delay the adoption of effective measures to prevent the risk of severe and irreversible damage to the environment at an economically acceptable cost.

The precautionary approach should not be turned into the precautionary principle, as this generally tends to result in a systematic recommendation of abstention; the regulatory framework establishes the acceptable residual risk.

The precautionary principle appears in the wake of the shortcomings of preventive policies as well as the emergence of new potential risks. Precaution concerns primarily technological risks, including natural hazards that would cease to exist if the technology itself could anticipate them.

These shortcomings of preventive policies will disappear through the establishment of a specific national framework.

II.B. The right of access to information

The right of access to information on environmental matters is a principle belonging to and complementing an emerging generation of instruments of Environmental Law. Environmental Law is also a right in evolution: it began with repressive instruments, the classic and traditional fines and imprisonment - concepts which are now considered a last resort. Since the development of the environmental impact assessment (EIA) and the gradually developing environmental awareness in mankind, Environmental Law is increasingly moving away from applying that punitive norm and replacing it by prevention.

The new institutions of Environmental Law aim at joint social responsibility for the management of the environment; i.e., these institutions intend to incorporate society into the "conflict of values" that arises from the optimum preservation of the environment into society (something is missing here), which is something that should not be overlooked. Environmental conservation creates a conflict for a certain way of life and production that has triumphed in this society because it was legitimized, and that conflict can only be solved through social responsibility. It is absolutely vital for society to be willing to assume the costs involved in environmental conservation. Each

environmental decision usually involves a change in the standard of living to which western society has led us.

In relation to this new purpose, the right of access to information pursues the fulfillment of participation, which in turn is a fulfillment of the democratic principle. Social control, environmental decisions, any public decision, are or should be, in principle, subject to public scrutiny, which is what allows us to assume that those decisions are indeed the most appropriate ones; it is based on the principle of transparency, which is a principle of a Democratic State, and does not exclude the environment, but is simply the conduct of a country abiding by the rule of law. Public decisions and the actions of the government should be controllable by informed citizens. This is the theory. In reality, there is a reverse process: in fact the citizens are becoming more transparent to the public authorities, and they have more and more information about us, while public administrations tend to become less transparent.

In our country this principle is stipulated by Article 103 of the General Law on the Environment, in recognition of the right of people to be informed about the state of the environment.

III. LIVING MODIFIED ORGANISMS IN HONDURAS

In November 2004, the National Polytechnic Institute of Mexico reported that the entry of transgenic organisms into Honduras had been proposed in 1996. Two years later, the Ministry of Agriculture and Livestock (SAG) created the Biosafety Regulation with emphasis on Transgenic Plants (RBEPT). In 1999, experimental crops were established, in 2002 their pre-commercial use was allowed and since 2003, their free sale. In August 2004, responding to concerns of some Members of Parliament as to the information that two thousand hectares (2000ha) of transgenic corn were cultivated in Honduras, representatives of the SAG denied this assertion. They added that those materials had been allowed entry only for scientific purposes, and that this entry had been requested by the National Agricultural Health Service. The SAG reaffirmed that it had not granted licenses for the commercialization of transgenic corn.

In general, the information about LMO releases in Honduras is contradictory:

a) In May 2004, the website of the SAG (Ministry of Agriculture and Livestock Farming) announced that trials were being carried out with corn genetically modified by introducing a gene from the *Bacillus thuringiensis*, in order to confer resistance to attacks by Lepidoptera (insects).

In addition, there was a discussion on the future of commercial releases of GM-crops in Honduras. However, other information sources stated that in that year a variety of GM-corn tolerant to the herbicide glyphosate was released commercially. It was reported (by personal declarations of interviewees) that since June 2002 corn with two events has been sold, one conferring tolerance to glyphosate and the other resistance to Lepidoptera.

b) Faced with questions from the audience in a workshop held in the EAPZ (2004), officials from the SAG confirmed their stand in favor of biotechnology, including LMOs, referring to the RBEPT as an expression of this position. On that occasion, it was reported that the SENASA was doing tests with a corn resistant to Lepidoptera with *B. thuringiensis* genes. (See <http://www.sag.gob.hn/noticias/190804.htm> on the latest news published in La Prensa about the possible commercial use of GMOs in Honduras).

c) In November 2005, the news service Inter Press Service reported on its website Tierramérica: "Two thousand hectares of genetically modified corn are grown in Honduras with official approval." In what could be interpreted as a reflection of the tendency of the publication rather than as information, it is added that "In the rest of the region, the cradle of the graminea species, cases of transgenic contamination of local varieties have been reported." According to other reports, it seems that to this date the commercial cultivation of LMOs in Honduras has reached 1200 hectares approximately.

The impression created by these observations is that the general picture of the development of LMOs in Honduras is confused. For this reason, the construction of a national regulatory framework and its institutionalization with the necessary administrative tools is now particularly opportune.

On the other hand, it is clear that before 2001 there was no explicit policy on the safety of modern biotechnology; however, the Government of Honduras maintained a tacit policy of control and regulation for specific LMOs through the Regulation on Biosafety with Emphasis on Transgenic Plants⁸.

IV. CURRENT POLICY

Currently, the country has a clearly formulated policy on biotechnology, which is included in the National Biodiversity Strategy officially adopted in 200. Under the Thematic Area "Biotechnology and Biodiversity" of the Strategic Guideline "Equitable Distribution of the Benefits of Conservation" it states:

<p>Policy</p> <p>Promotion of the dissemination and application of biotechnology and guarantee of biosafety norms.</p>
<p>Strategies</p> <ul style="list-style-type: none"> • Promotion of the subscription, ratification, and implementation of the Central American Protocol of Biotechnology and Biosafety. • Ratification of the Biosafety Protocol (The Cartagena Protocol) in the framework of the Convention of Biodiversity (CBD).
<p>Actions</p> <ul style="list-style-type: none"> • Creation, approval and promotion of mechanisms for the implementation of the Central American Protocol of Biotechnology and Biosafety. • Formalization of the National Biodiversity Commission (CONABIOH) as an advisory entity on matters of bioethics, genetic resources, sustainable use, biotechnology and biosafety, in the framework of the CDB. • Promotion of the agreements within the industry, the academic and research sector for the strengthening of the intellectual property office. • Strengthening of the system of intellectual property rights in relation to biological diversity through the creation of the required regulations. • Periodic emission and dissemination of the lists of products derived from biotechnology which are apt for human consumption, according to the biological diversity components authorized by the State.

⁸ Moises Burachik, General Coordinator Biotechnology Office Secretariat of Agriculture, Livestock Farming, Fisheries and Food of the Ministry of Economy and National Production, Argentina. At the request of NBFP-Honduras, Dr. Burachik, an international expert in the field, made a review of the progress of the Preliminary Draft Law on Biosafety and prepared a detailed report. Many of his suggestions, if not all, have been included.

The ratification of the Cartagena Protocol on Biosafety (CPB) has been the main concern of the Ministry of Natural Resources and Environment (SERNA). The DiBio has duly followed up on the process within the Executive Branch; at present, the drafting of this document is in its final stage within the Executive Branch, prior to its presentation to the Sovereign National Congress, which has to decide on the respective ratification.

As demonstrated in the ratification process of the CPB, the implementation of strategies and operations of this policy is the result of many decisions. Except for the formalization of the CONABIOH, so far none of them have been put into practice; nevertheless, the formalization of the CONABIOH has not been a minor achievement, but an important one, and it has had two positive effects in the field of application and use of biotechnology in Honduras:

- The creation of the Committee of Biotechnology, an organization that supports the SAG in the implementation of RBEPT has become part of its structure, and
- Many members of the NCC of the NBFP (National Biosafety Framework Project) come from the Committee of Biotechnology; their reputation as individuals and as a group endorses the validity of the process of the Project in Honduras, since they represent different fields of knowledge and different sectors related to the subject (mostly the Academic sector).

The system of intellectual property in the matter of biotechnology has been significantly strengthened, but more as a result of the necessary updating of national legislation in order to comply with the international obligations under free trade relations, so that foreign investment can be guaranteed by the national legal system.

In short, the current policy, its strategies and operations have been overwhelmed, first, by the impossibility of being achieved with the participation of few decision-makers from the government and political levels and without extra-national influences; and secondly, by the results obtained from the execution of the NBFP.

V. NATIONAL POLICIES, PLANS AND STRATEGIES RELATED TO BIOSAFETY, PROTECTION OF THE ENVIRONMENT AND THE UTILIZATION OF NATURAL RESOURCES.

Historically, mankind has used natural resources as the primary basis for its development, and these were initially considered as abundant and inexhaustible, which led to their indiscriminate use and insufficient management.

Today we understand that there is a lack of resources. Due to this situation, a new attitude was required on the part of the Administrator of public resources and also, that the Administrator transfer this attitude to the Society as a whole, through the generation of policies that will ensure access to the natural resources, in a way that neither the access nor the benefits derived from its use are compromised for the present and future generations.

Politics is the art or skill with which an issue is dealt with or with which means are deployed to reach a determined objective; a policy, in general terms, is a set of orientations or guidelines that control the actions of a person or institution in a specific matter or field.

Microsoft Encarta Reference Library 2005

In Honduras, the national policies related to the environment and natural resources have been developed in a systematic way since the beginning of the decade of the nineties and were greatly influenced by the outcome of the Rio Summit. Their first achievement in planning was what was once called the *environmental variable*, now converted into a clear guideline that has been incorporated into each of the country's productive sectors.

While it is true that the national economy is primarily based on natural resources as raw materials⁹, the way in which the exploitation of such resources should be continued is still been discussed; therefore, the biosafety policy should closely observe that discussion and include all aspects of the various connected sector policies and dispositions related to free trade.¹⁰

a) **Environmental Policy**

The Environmental Policy of Honduras was adopted in 2005 by an Executive Agreement No. 361-2005. Its aim is to contribute to the country's sustainable development and improvement of the quality of life of the Honduran people, as well as to maintain the productive potential of the natural resources through the protection and sound management of the environment and ecosystems. This policy is the product of an extensive analysis, including various national initiatives as well as international experiences, and intends to create the necessary conditions for the fulfillment of the duties connected with the protection and exploitation of water resources, new and renewable sources of energy, mining activities, protection and conservation of the flora and fauna, the environment, ecosystems, the National System of Protected Areas, with the participation of the communities, local governments, public and private sectors and an organized civil society, thereby enhancing their possibilities of boosting the country's sustainable development.

With the establishment of this policy, the sustainable development of the country will be strengthened and a road map will be produced to guide the coherent actions of society and government in order to achieve high standards of environmental quality and to ensure the sustainable use of natural resources, for the purpose of improving the quality of people's lives, achieving sustainable economic growth and preserving the opportunities for future generations.

The objectives of this policy directly related to this aim are:

- i. **Promotion of Territorial Management** by applying a consistent set of principles and rules to regulate the process of managing land and human settlements for sustainable development, promoting harmonious relationships between the human population, natural resources and economic and social activities.
- ii. **Promotion of a Balanced Development Model** by seeking guidelines and tools for the harmonization of economic growth with environmental conservation and natural resources.
- iii. **Guarantee of the enforcement of the current Environmental Legislation**, developing de-

⁹In this sense, we can state that the raw materials of the tourism sector are the beauty of the country's landscape.

¹⁰ In any case, it must also observe the balance between relevant national policies, free trade treaties and the NBFP and its likely approval.

concentrated and decentralized capacities to monitor the environment and to respond efficiently and effectively to any critical situation at the national and local level.

iv. **Modernization of the Environmental Management System** by clarifying the role of the different institutions at the central and municipal levels, and simplifying and harmonizing the current legislation, including international treaties and agreements (environmental certification, carbon market, cleaner production, among others).

The Environmental Policy is fulfilled along eight guidelines:

- 1) To prevent environmental degradation, the State shall prioritize the preventive management and apply the precautionary principle in the use of the following instruments:
 - 1.1. Communication, awareness and environmental education
 - 1.2. Education and training for professionals in environmental issues
 - 1.3. Generation, management and exchange of information
 - 1.4. Scientific research and technology
 - 1.5. Tools for preventing environmental damages

- 2) To restore and improve environmental quality, the State shall create specific mechanisms and tools, for the different environmental elements such as: water, air, soil, biodiversity.
 - 2.1. Integrated management of water resources
 - 2.2. Atmosphere and management of air quality
 - 2.3. Conservation of the resource soil
 - 2.4. Protection and restoration of ecosystems

- 3) The State shall promote land management as a planning system for sustainable development and environmental management at national, regional, departmental, supra-municipal and municipal levels and in areas under special regimes.
 - 3.1. Development of tools and environmental standards
 - 3.2. Studies and Research

- 4) The State shall implement the existing environmental legislation through the de-concentration and decentralization of responsibilities and the systems of economic incentives.
 - 4.1. Delegating institutional responsibilities
 - 4.2. Strengthening the system of incentives
 - 4.3. Updating environmental laws

- 5) The State shall strengthen the environmental management system by promoting de-concentration and decentralization and it will enhance the institutional capacities and the legal framework.
 - 5.1. Deconcentration
 - 5.2. Decentralization
 - 5.3. Modernization

b) State Policy for the Agro-Food Sector and Rural Areas of Honduras 2004-2021 (PESA, 2004-2021)

This policy recognizes that biotechnology is an axis of current technological development with unpredictable consequences, and that it still is in its initial phase; it recognizes the remarkable achievements of modern biotechnology in the cultivation of soybeans, corn, tomatoes, cotton and pineapple, and the creation of new production processes that can be more efficient from an economic point of view, and in some cases, from an environmental point of view.

The PESA expressed its reservations by asserting that biotechnology creates questions that have no answers in the current state of scientific knowledge and generates legitimate doubts among consumers and environmental organizations. This situation forces to opt for decisions, at the country level, that can be adopted by society as a whole, considering its historical, geopolitical and cultural conditions - an affirmation that supports the development of a NBF that reaches beyond the immediate economic objectives and results. For this reason, between the lines and very subtly, the content of the PESA demands from the NBF clear concepts and strategic goals and a cautious and prudent approach to the scientific communities and government authorities, as well as a debate to keep citizens informed.

As a result, one of the PESA's sector policies consists of the *Promotion of technological innovation, diversification and added value*, determining that the Government should encourage and implement policies aimed at institutional transformation, financing of research and technical development and access to and incorporation of technologies for sustainable and competitive agricultural development, within a framework of equity. Among the priorities of the policy are the following measures related to modern biotechnology:

- Encouraging the development of a National System of Innovation and the Transfer of Agro-Food Technology (SNITTA *Sistema Nacional de Innovación y Transferencia de Tecnología Agroalimentaria*), strengthening public capacities as well as encouraging public-private connections and strengthening the participation of universities, the producers themselves and rural communities along the food chain;
- Reassessment of priorities and the allocation of resources for research and technological development towards alternatives with higher economic and social impacts and less negative impacts on the environment;
- Increase of the level of public funding and the incentives for an adequate private investment in research;
- Promoting the development of greater national capacity for the development of *new biotechnologies* and their safe incorporation into the food chain and the environment;
- Provision of instruments for and harmonization of an appropriate policy framework, *particularly on access to genetic resources, development of new biotechnologies, intellectual property rights and biosafety*, respecting the sovereignty of each country and the rights of their communities;
- Recapitalization of the human resources for scientific and technological development;
- Strengthening of the conditions and optimization of the cooperation among countries of the hemisphere and the connection of the Region with other parts of the world;
- Promotion of the development and management of information and communication technologies, and
- Creation of public awareness and policy instruments that strengthen the link between the scientific-technological sector and society.

Technological innovation in the agro-food sector and the current institutional structure are facing the huge challenge of fundamental changes in the light of the new institutional, technological and political requirements framing their activities. A decentralized model for the management of research and transfer of technologies is required, with an increasing participation of a multiplicity of actors and stronger presence of the private sector in the financing and management of its institutions. To that end, the PESA has considered that:

- The development of a technological environmental policy, technologies for small and medium-sized agricultural producers, quality and food safety control, and regulations for the protection of intellectual property rights will be among the topics in which the public sector will play an important role as executor and chief guide.
- The operational decentralization and the separation of the regulatory functions and funding of research, the management and development of mixed public / private projects will constitute an increasingly interesting line of action that will be strengthened.

On this basis, the generation and transfer of technology will respond to three major criteria of technological policies: *competitiveness, sustainability and equity*.

- a. Competitiveness will be expressed in terms of the articulation of research with the elements of the production chain: on-farm production, post harvest handling, processing, transportation, packaging, storage, marketing and consumption.
- b. Sustainability will give rise to multiple priority lines of work. Among them are:
 - . i. Land management practices to improve the deterioration of its structure.
 - . ii Optimization of the use of irrigation systems in particular
 - . iii. Maximization of the intrinsic productive potential of biological resources
 - . iv. Preservation of the genetic resources from extinction
 - . v. Improvement of the efficiency of the environmental offer by replacing the use of artificial inputs
- c. Equity will be of special importance in the search for solutions to make the technology accessible to small producers in particular. This will require:
 - i. Guidelines for research into peasant production systems.
 - ii. Development of alternatives for restructuring and technological diversification.
 - iii. Studies on the environmental and economical impact of the technologies.

These criteria will constitute the starting point for the development of the National Plan for the Agricultural Technological Development, which will be the main steering tool for the national efforts in this field¹¹. This instrument will be used recurrently and dynamically in the annual reviews so as to reflect possible changes in the policies and needs of the productive sectors

c) Strategic Operational Plan for the Agro-Food Sector of Honduras (2006-2010)

As a result of the general framework of the PESA (2004-2021), the objective of this plan is to promote and consolidate a modern, diversified, efficient, competitive and environmentally sustainable agro-food sector that can lead processes of creating added value, is a key factor in the reduction of poverty and guarantees food security. This requires the achievement of production

¹¹The Strategic Operative Plan for the Agro-Food Sector of Honduras 2006-2010 was recently adopted as the first instrument developed in the framework of the PESA.

levels and structures that can respond to its comparative advantages and to the domestic demand for food and raw materials, generating decent jobs, a significant increase in the incomes of the rural population and contributing to a positive commercial balance by exporting products of a high economic value.

The strategic outcomes pursued are:

- Increase in production and productivity, giving priority to small producers.
- Development of human resources, prioritizing small farmers.
- Integration and development of the agro-food chains in different branches.
- Qualitative advance in terms of competitiveness in order to achieve a favorable insertion into the Free Trade Treaties, in particular the DR-CAFTA, which will result in a significant increase in exports.
- Agricultural development and strengthening in the Honduran economy as a whole
- Improvement of living conditions for the rural population
- Better organization of the farmers and indigenous populations
- Fulfillment of the objectives and achievement of its strategic outcomes; the Plan identifies a set of challenges and proposes a selection of instrumental policies that cover a substantial part of the agro-food sector.

These results are pursued through the following policies¹²:

- Access to innovative technology
- Efficient and fair trade
- Sustained improvement in food safety and health
- Generation and dissemination of strategic information
- Capitalization of human resources for agricultural and forestry development.
- Public-private alliances for competitive investments
- Sustainable access to agricultural credit and rural financing
- Access to land: legal security and social equity
- Sustainable management of natural resources
- Institutional reform of the agro-food sector, with special emphasis on decentralized entities as much as possible

d) Policy for the Sectors of Forestry, Protected Areas and Wildlife

General Objective

To consolidate a participatory and decentralized model for the management of forests, protected areas and wildlife, aimed at putting a stop to the degradation of forest resources and at promoting the appreciation and sustainable management of the existing forestry potential, in order to optimize the sector's contribution to the economic, social, and environmental development of the country.

Specific objectives:

i. To consolidate a National System of Protected Areas which is effectively managed, ecologically representative and integrated into the landscape so as to fulfill its ecological, social and economic functions.

¹²The Operational Plan is developed on the basis of the PESA, so it should be understood that these policies are the internal policies of the SAG and correspond to the different agricultural sub-sectors.

- ii. To promote a model of modern, participatory and decentralized forestry administration, aimed at ensuring the replenishment of the resources consumed, improving the sector's competitiveness in the production chain and guaranteeing legal certainty for long-term investment.
- iii. To contribute to the improvement of the quality of life for the rural populations through their incorporation into sustainable forest production systems by means of long-term forest management contracts and strategic alliances with other actors in the production chain
- iv. To promote the participation of the municipalities and communities in the management of water-protecting micro basins and encourage the establishment of mechanisms for the payment of environmental services.
- v. To promote and coordinate the participation of governmental institutions, local governments, NGOs, communities and the civil society organized in the conservation and protection of forests, control of illegal hunting, control of the change of forest use and control of logging, transportation, industrialization and illegal trade of forest products and wildlife.
- vi. To reduce inappropriate agricultural practices, wildfires, illegal logging and any other activity that is degrading and devaluating forest resources, especially the processes that are destroying the broadleaf forest.

Following are the most important guidelines for the development of modern biotechnology:

1) Conservation and economic development of protected areas

This guideline's strategy is the development of ecotourism and the payment for environmental services, as the prioritized economic options for the consolidation of the protection and development of the Honduran National System of Protected Areas (SINAPH).

This guideline has nine policy instruments: Implementation and timely updating of the "SINAPH Strategic Plan"; Prioritization of the official declaration of the prioritized protected areas known as "proposed areas"; The permanent involvement of the Armed Forces, municipalities and the civil society in the tasks of protecting the protected areas; The promotion of social auditing in the protected areas under co-management, in order to insist on transparency in the implementation of the management plans and on compliance with the agreements subscribed in the co-management contracts; Prioritization of the integration of the protected areas into wider areas, ensuring the connectivity between them by establishing biological corridors in order to guarantee the basic structural and ecological functions; Promotion of information and monitoring systems in order to improve the knowledge about the ecosystems represented in the SINAPH; and, Prioritization of the consolidation and implementation of the "Fund for Protected Areas", to consolidate it as a financial instrument¹³ with credibility and independence and a high capacity to promote and ensure the participation of various donors in the sustainable management of the SINAPH in the long term.

2) Integral Control of Illegal Logging and Trade of Wood and Wildlife.

Establishment of integral and participatory mechanisms of control and surveillance over the illegal use of forest resources and wildlife, which allow the effective detection and repression of the environmental offenses and thus the eradication of the sense of impunity prevailing in Honduran society.

¹³ The correct word is "mechanism"

Political instruments

The signing and implementation of an inter-agency agreement create the "National Control System for Illegal Logging and Trade of Wood and Wildlife" will be encouraged. The AFE-COHDEFOR, Armed Forces, Public Prosecutor and Environmental Attorney and the National Commissioner of Human Rights will be the constituent bodies of the convention.

A manual of rules and procedures will be created to institutionalize social audits and facilitate the bottom up participation of the civil society in the control of the change of use, illegal logging, transportation and illegal trade of forest products and wildlife.

In municipalities with strategically important forest production and protection of the prioritized protected areas, the creation of "Regional Monitoring Committees" will be encouraged, to monitor activities like illegal hunting, change of use, and transportation, industrialization and the illegal commercialization of forest products and wildlife at the local and regional level .

A comprehensive review of the legal framework for environmental offenses will be promoted to develop strategies, techniques, manuals and procedures which can improve the efficiency of the enforcement of regulations and thus reduce impunity.

The personnel of Customs, the National Police, Armed Forces, Public Prosecutor's Office and the Environmental Attorney's Office will be trained on legal, technical and administrative aspects of the control and surveillance of the illegal trading of wood and wildlife.

3) Institutional modernization of the Forestry Sector, Protected Areas and Wildlife.

The strategy of this guideline is to strengthen the institutional capacity of the state to consolidate a model of forest management aimed at effectively responding to the challenges of a sustainable forest management and to efficiently fulfill the duties of guiding, regulating, managing and facilitating investment in the development of the forestry sector, protected areas and wildlife.

The executive branch will guarantee the necessary political instruments: the permanent transfer of the necessary budgetary provisions from the General Budget of the Republic, in order to cover the operational costs of the institution administering the forestry sector, the protected areas and wildlife; one percent (1%) of the public revenue will be permanently guaranteed to fund the Program for the Conservation of the Environment and National Reforestation, as the specific financial instrument to promote the sustainable development of the sector; and an effective system of national forest information will be created in the ruling institution of the sector, with the capacity to provide updated statistics for political decision-making processes, to make transactions between the different actors involved in the forest production chain and in the co-management of the protected areas transparent and to regularly monitor the change of use of the forest resources.

e) Poverty Reduction Strategy

In terms of the environment, the Poverty Reduction Strategy (PRS) proposes to "*reduce the environmental vulnerability and its impact on poverty*", recognizing the correlation between environmental degradation, high rates of poverty and increased vulnerability towards natural disasters.

The PRS includes measures to strengthen the environmental and risk management: the

strengthening of the legal and institutional aspects and of the planning and implementation aspects of the necessary tools to improve the coordination and regulation of the institutions involved in environmental management and risk mitigation; measures to encourage citizen participation in the care and protection of the environment are also being considered.

The PRS recognizes the importance of promoting the use of economic and financial tools such as the following: carbon markets, sales of environmental services, incentives and regulations to encourage the sustainable management of natural resources, environmental protection especially in critical or degraded areas and the financing of environmental investment projects to be implemented by the communities themselves.

In short, the strategy is developed along five guidelines: Prioritization of actions for sustainable poverty reduction, Prioritization of actions in favor of neglected zones and areas of the country, Strengthening of the participation of civil society and the decentralization of the PRS, Strengthening of governance and participatory democracy in the framework of the ERP, and Reduction of the environmental vulnerability and its impact on poverty.

f) National Strategy for Environmental Goods and Services

The payment for environmental services is a recent topic in Honduras. Most of the society still does not know its conceptualization and scope. Its outreach at the national level has been restricted to certain institutions or agencies that are supporting the introduction of compensatory mechanisms.

A large part of the population from different rural and urban environments consider that it is the sole responsibility of the State to prevent or repair the negative environmental impacts caused by anthropogenic actions; today's generation recognizes that the degradation of ecosystems is evident and alarming, but they do not get involved and so the degradation continues.

At all levels, there is a lack of education and sensitization of the importance of the conservation of the natural resources. Sensitization also needs to take into account the economic value of environmental services, since their sustainable use will help to elevate the population's economic level.

For approximately 4 years, some Payment for Environmental /Ecosystem Services (PES) experiences have been promoted in the country. These experiences still need to be strengthened to achieve their financial sustainability. However, they are generating valuable knowledge which helps to understand the people's ownership of these initiatives, and the constraints they face in the social, institutional and legal contexts of their application. In addition, there are still other environmental services to evaluate, like carbon capture, the air, soil and water as receiving bodies of contaminants, scenic beauty, and biodiversity conservation, among others. The emphasis of the PES experiences has so far been set on the collection of water from the micro water basins and testing the quality of this water, which is used through community and municipal distribution networks.

The national experiences which already have completed the process of implementing a mechanism for PES have solved the question of the legal framework at the purely local level, with regulations endorsed by the municipalities and protected by the Constitution of the Republic and the Law of Municipalities.

However, a broader regulatory framework is needed to move beyond the community or micro water basins experiences to the level of entire watersheds, so that all direct and indirect actors act in an

integrated manner in favor of the environmental services that are priorities for the country.

At present, there is no explicit Government policy to promote PES mechanisms as financial alternatives for conservation, to fight poverty, for equity and income growth, although in the past year there has been an incipient interest of government entities to push this issue, among them SERNA, the National Commission on Modernization of the State, the Commissions for the Analysis of the Bill of Law on Water, and several institutions and NGOs, especially the National Committee on Environmental Goods and Services (CONABISAH), which currently is a strong promoter of this mechanism.

The following areas directly linked to the environmental legal framework have been created for a successful implementation of the strategy:

1) Institutional development

Structured, articulated and strengthened management of environmental goods and services through alliances with institutions, organizations and spaces for consensus-building at the municipal, supra-municipal and national levels.

2) Strengthening of the legal and regulatory framework

Development of a legal framework in which the sustainable use of forests and the protection of watersheds and ecosystems is promoted, the economic value of environmental services is recognized and the criteria are created to guide the implementation of the national system of environmental goods and services.

3) Financial Instruments

Development of the economic instruments necessary to channel the PES revenues through the existing institutions or by creating a new institutional structure for this purpose.

4) Management of the socio-political environment Consensus and harmony among the sectors (public, private and civil society) in the development and implementation of payment mechanisms for environmental goods and services.

VI. UPDATING THE POLICY

Although the current policy no longer reflects the progress resulting from the commitments the country has been acquiring and the projects it is executing, it should not necessarily be abolished through the superposition of a new one, but should instead represent and be understood as an evolution.

It has to be mentioned that the current policy also recognizes the existing, and increasingly demanded, relation between the application of biotechnology and guarantee of security. Its clearly dual approach seeks to strike a balance between the promotion of the productive activity and the safeguarding of health and of nature, two mandates of the State that may in occasions contradict each other. Given that the NBF is limited to biosafety, the present proposals aim at changing the current policy towards a more cautionary approach, but without compromising national development.

The public or governmental policy in biosafety should include guidelines to address the following:

- Food security, including access to sufficient and safe foods
- Increasing agricultural productivity, rural development and poverty alleviation.
- Promoting economic growth through high-value productive diversification and technological development.
- Preserving and making sustainable use of biodiversity and equitable distribution of the benefits from biodiversity-related activities.

The inclusion of these guidelines makes the policy on biosafety consistent with both the trade policies and the policies of environmental conservation of the country. This is important and necessary, since the theme of biosafety involves agricultural, environmental, scientific, and business interests, including intellectual property rights, cultural and financial rights, among others.

PROPOSAL
National Biosafety Policy

Encouraging the dissemination and implementation of modern biotechnology, while guaranteeing its safe and sustainable use through appropriate risk assessment and risk management and mitigation of its possible negative socio-economic impacts, will increase agricultural productivity and guarantee food safety, rural development and the alleviation of poverty through diversified productivity with high added value, as well as safeguard biological diversity.

Due to the political, geographical and infrastructural conditions of the country, as opposed to its neighboring countries¹⁴, the actions resulting from the policy should be aimed at the national and regional level, since Honduras, like most Central American countries, aims at a political and economic harmonization of the isthmus¹⁵, which has been an unvarying concern for the Honduran governments over the past 25 years¹⁶.

Thus, at the national level, the country should focus on establishing the conditions for the implementation of the policy, the labeling, awareness-raising and public participation in decision-making processes as well as in managing the funds for technological development; at the regional level it should call for harmonization, standardization and joint negotiations.

Likewise, through the different phases of the project there has been evidence that public participation strengthens the decisions and facilitates the proposition and that the involvement of the various institutions with competence in biosafety is of vital importance; therefore, the cooperation between actors is key. Equally, providing opportunities for participation will ensure the success of the policy once it is up and running.

¹⁴ Puerto Cortes, in the North of the Republic of Honduras, is the main Central American port of the Caribbean and is used even by Guatemala, Nicaragua and El Salvador, which does not have any Atlantic coasts.

¹⁵ A regional agreement to establish a Common Central American Visa has just recently been ratified. (Legislative Decree 22-2007. La Gaceta, June 27, 2007.)

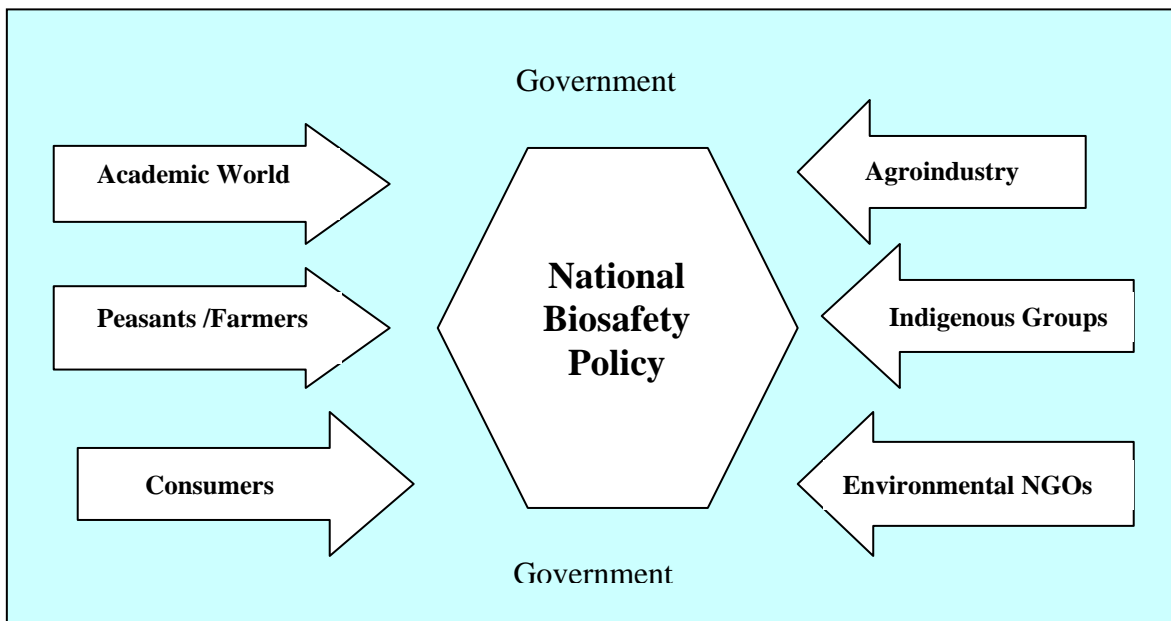
¹⁶ There obviously have been regional disagreements; however, the institutions created at the regional level are still in effect.

VII. CREATION OF POLICY INSTRUMENTS

VII.A. Context

The resolution on the ratification of the Cartagena Protocol on Biosafety is still the responsibility of the Executive Branch, specifically the Ministry of Foreign Affairs, who has to refer it to the National Congress with the expedient additions, so that the national policy will be conducted in accordance with the current legal and institutional framework (see Table 1). This means that it must then be a multi sector policy and, consequently, involve a large and important segment of society with specific interests, sometimes shared, sometimes parallel or even in conflict.

Chart 2. Actors involved in the formulation of the National Biosafety Policy



VII.B. The Institutional Framework

The operational area of the Academic Community, Private Enterprise and Non-Governmental Entities is ultimately determined by the unpredictable nature of their respective statutes, which allows them to make decisions in terms of their interests. This is not the case with the government dependencies, since they are compelled by the law to know the issues to the extent of their competence, and their failure to do so has to be blamed on their employees or officials. With regards to non-governmental actors, private activities and experts have been identified in the field of biotechnology, all of which have existed before the establishment of the current policy, which shows that the country grants space to these capabilities, especially in the Academic Community and Private Enterprise. The NBF presented a Report on Programs and Projects ¹⁷ and

¹⁷ZELAYA of PERDOMO, ADA. "Study on the National, Bilateral and Multinational Programs of Cooperation, in the area of Capacity Building, Research and Development and Application of Biotechnology." 2003. 84p.

one about the Uses of Biotechnology¹⁸. These, in short, establish the following:

- Out of the fourteen universities in the country, only the National Autonomous University of Honduras (NAUH), the Pan American Agricultural School (PAS) and the National University of Agriculture (UNA) create capacities related to biotechnology. Together they have eight laboratories working in areas related to the subject;
- Of the 22 that have been identified, the private sector organizations (companies and NGOs) manage eight inventories and collections of species and varieties of fauna and flora¹⁹.
- There are at least 45 NGOs with national coverage with projects related to the environment, natural resources and agriculture.
- 58 National Experts were identified in various areas related to the safety of modern biotechnology (organic farming, weeds, geneticists, biotechnologists, etc.); and,
- There is no governmental entity to lead the various activities related to the field of modern biotechnology.

The governmental institutions, on their part, confirm the existence of the aforementioned policy but are not consistent with the strategies and operations to be carried out²⁰, the scopes of the governmental institutions involved are clearly identified and only limited by the current policy and each one's budgetary capacity.

There are three governmental institutions specifically involved in biosafety:

a) *The Ministry of Natural Resources and the Environment.*

Competence:

- i.) Formulation, coordination and evaluation of policies for the conservation, protection and improvement of the environment in general;
- ii.) Coordination of activities pertaining to the centralized or decentralized public agencies with competences in environmental matters;
- iii.) All kinds of services for research and control of environmental pollution;
- iv.) The delivery of verdicts on environmental issues, prior to approval by the relevant authorities of industrial, commercial or other similar activities or projects which are potentially contaminant or degrading, in conformity with the law;
- v.) Monitoring of the implementation of the environmental legislation by public and private agencies, including international treaties and agreements to which the State is a Party;
- vi.) Issues resultant from Article 17.2 of the FTA-DR-CAFTA.

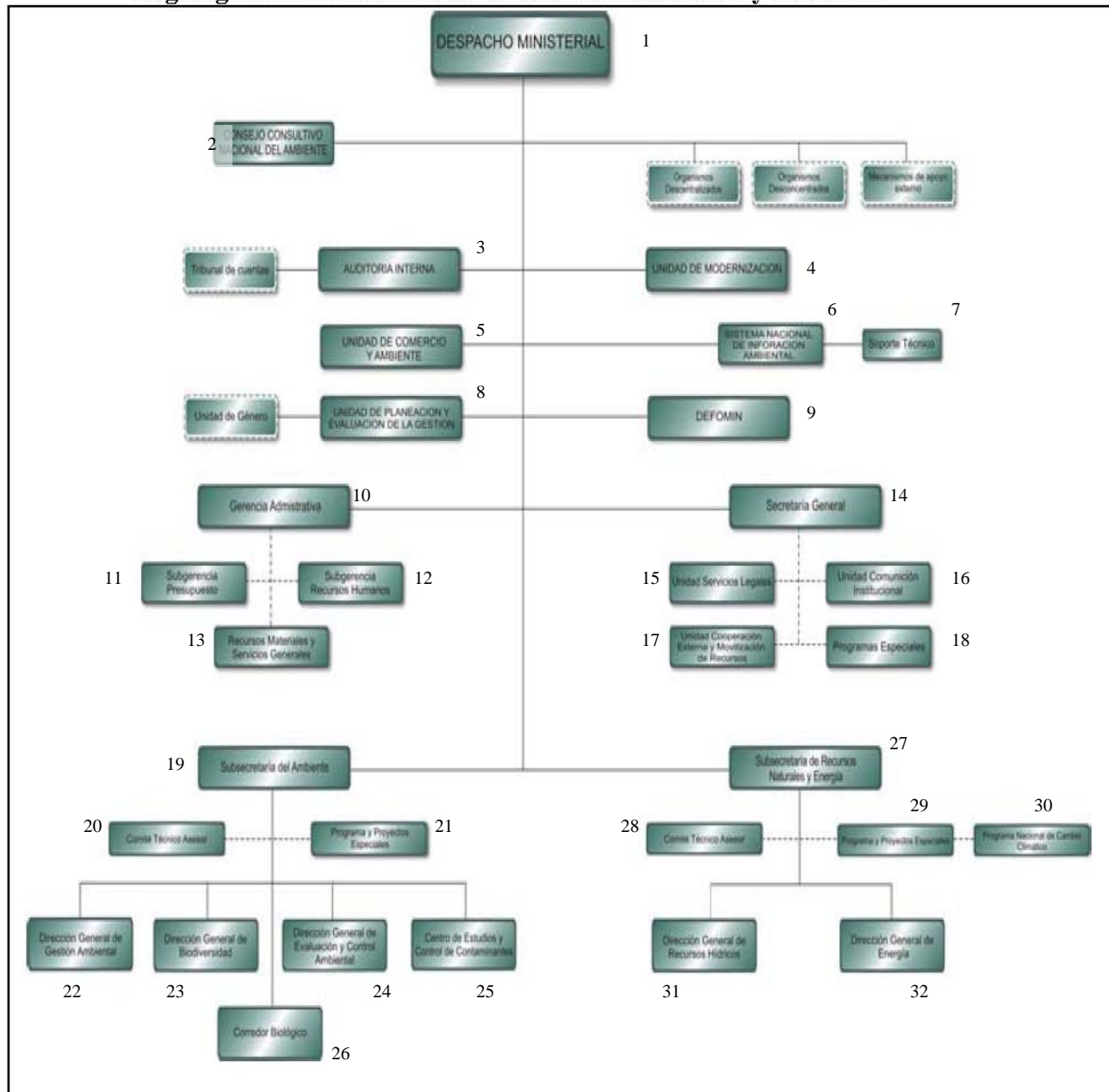
¹⁸ Loc. cit. "Existing Uses of Biotechnology and the Arrangements for the Safe Use of Biotechnology" 2003. 79p.

¹⁹ The study does not clarify or emphasize the biotechnological potential of the species and varieties included in these inventories and collections.

²⁰ As stated before, the only achievements that may be relevant to biotechnology or to biosafety are: the creation of the National Commission on Biodiversity (NBC) and strengthening of the patent system.

Chart 3. Organigram of the Ministry of Natural Resources and Environment

Organigrama de la Secretaría de Recursos Naturales y Ambiente



- 1 Ministerial Office
- 2 National Consultative Council on the Environment
- 3 Internal Audit
- 4 Modernization Unit
- 5 Trade and Environment Unit
- 6 National System of Environmental Information
- 7 Technical Support
- 8 Planning and Management Evaluation Unit (UPEG)
- 9 Executive Department for the Promotion of the Mining Industry (DEFOMIN)
- 10 Administrative Management
- 11 Sub-Management for Budget Issues
- 12 Sub-Management for Human Resources

13	Material Resources and General Services
14	General Secretariat
15	Legal Services Unit
16	Institutional Communication Unit
17	Unit of External Cooperation and Mobilization of Resources
18	Special Programs
19	Sub-Secretariat of the Environment
20	Technical Advisory Committee
21	Special Programs and Projects
22	General Directorate of Environmental Management
23	General Directorate of Biodiversity
24	General Directorate of Environmental Evaluation and Control
25	Research and Contaminants Control Center
26	Biological Corridor
27	Sub-Secretariat of Natural Resources and Energy
28	Technical Advisory Committee
29	Special Programs and Projects
30	National Climate Change Program
21	General Department of Water Resources
32	General Department of Energy

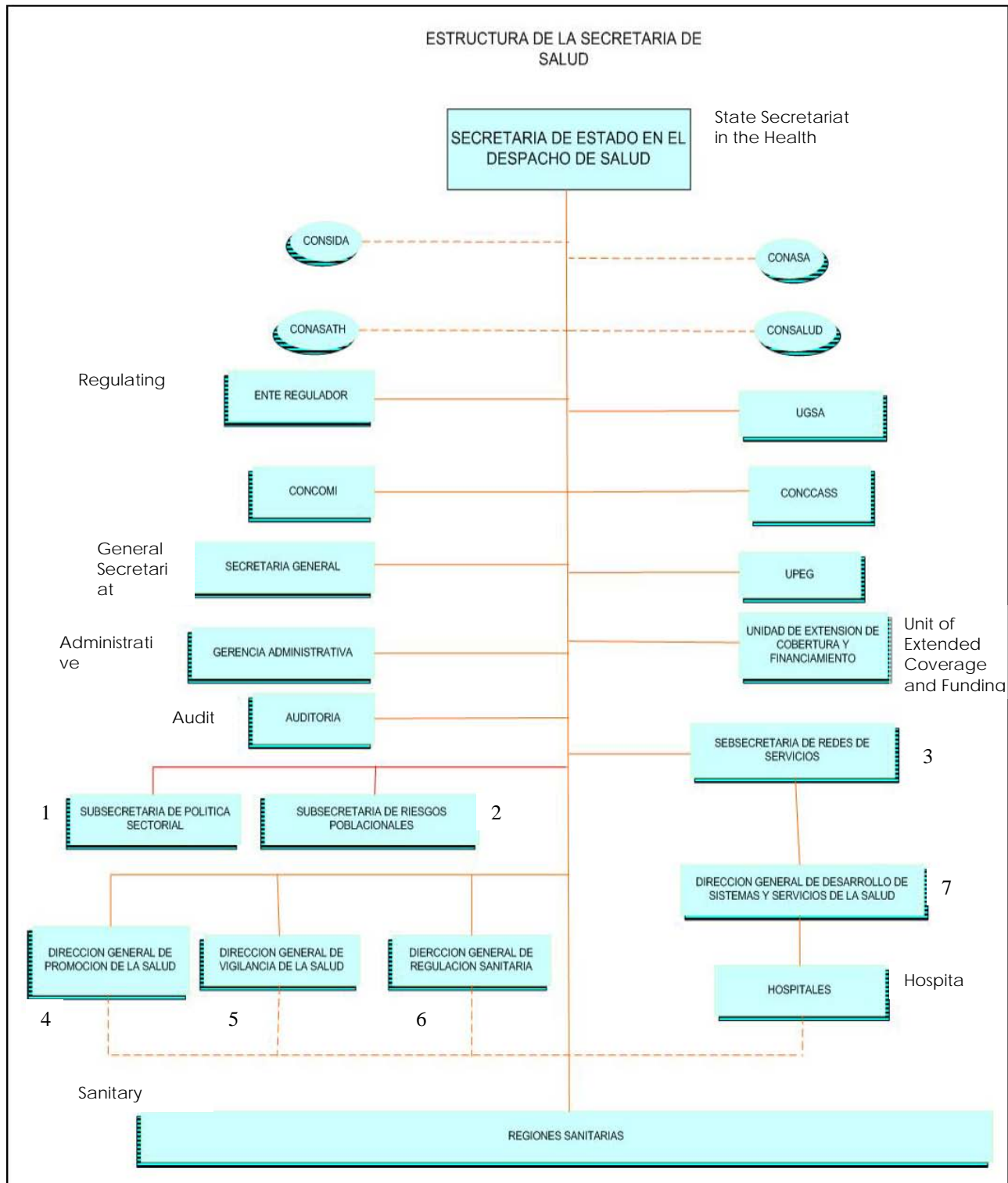
b) The Ministry of Health

Is competent in:

- i.) The preparation and implementation of contingency plans for healthcare assistance in cases of emergency or public disasters;
- ii.) The sanitary regulations for productive activities, the handling and distribution of foods for human consumption, or of habitually consumed substances with or without nutritional value, , including the monitoring of compliance with the corresponding standards;
- iii.) Control and monitoring of the production and the sale of chemical, pharmaceutical and biological products and cosmetics or other similar substances for human use, in conformity with the laws on the subject;
- iv.) The follow-up on international agreements and treaties in matters of its competence

Chart 4. Organigram of the Ministry of Health

- 1 Sub-Secretariat of Sectoral Policy
- 2 Sub-Secretariat of Population Risks
- 3 Sub-Secretariat of Service Networks
- 4 General Directorate of Health Promotion
- 5 General Directorate of Health Watch
- 6 General Directorate of Sanitary Regulation
- 7 General Directorate of Health Systems and Services Development



c) The Ministry of Agriculture and Livestock.

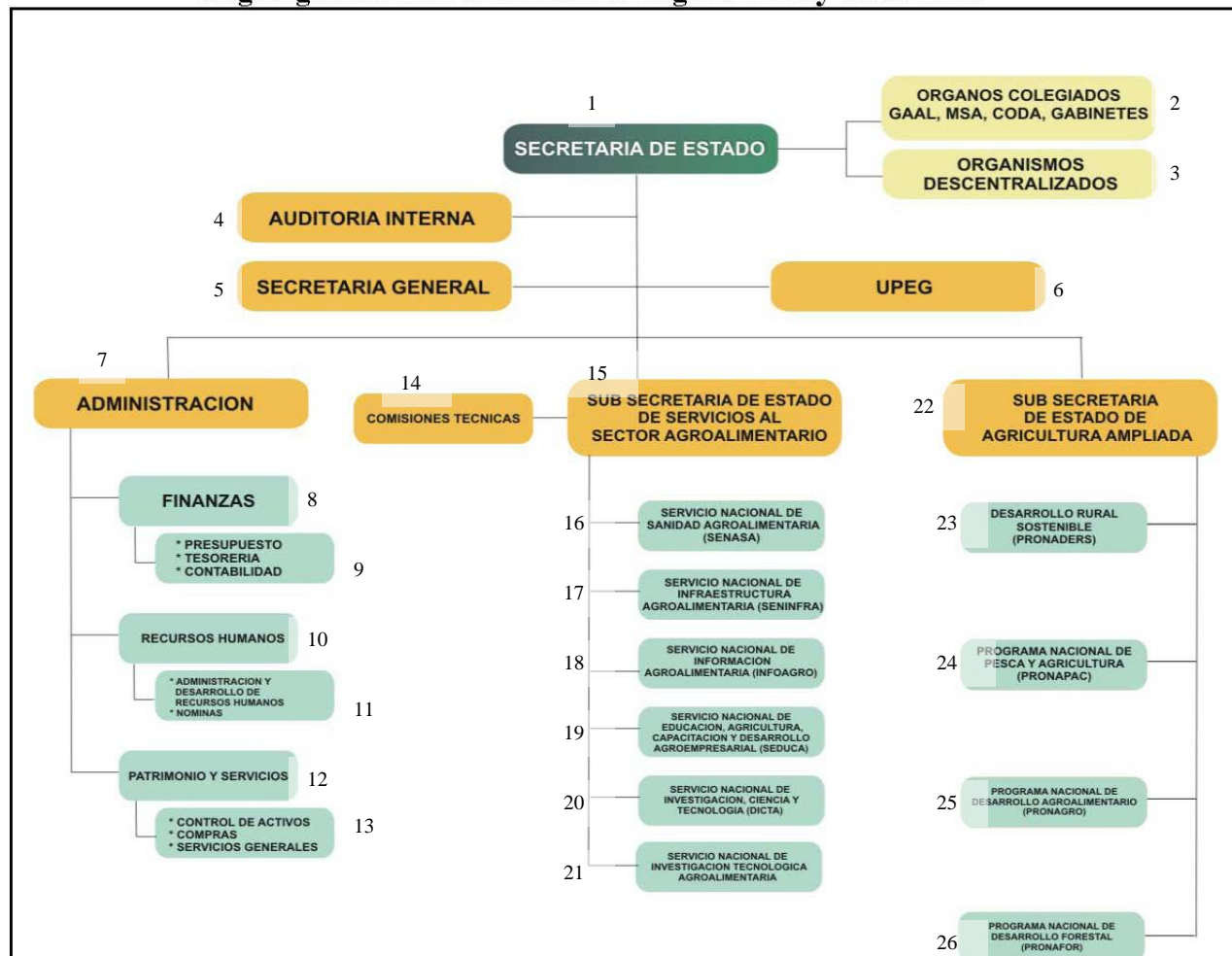
Is competent in:

- i.) The planning, standardization and coordination of all activities related to plant health, animal health, reporting mechanisms and food safety at national, regional, departmental and local levels;

- ii.) The quarantine control of imports, exports and the transit of plants, animals, products and by-products of plant and animal origin, means of transportation, equipment or materials that are potential carriers of pests and diseases posing a threat to the agricultural property and the prevention of their introduction, spreading and establishment in the country;
- iii.) The sanitary and phytosanitary inspection and quality control of seeds or any other propagation material and its respective certification, biological and biotechnological products, inputs, chemicals, pharmaceuticals and food stuffs for use in animals and in agriculture;
- iv.) The control and monitoring of equipment to use and apply agricultural inputs on plants and animals;
- v.) The import and export licenses of agricultural and livestock products.
- vi.) The sanitary and phytosanitary regulations of organisms produced through biotechnology; as a result, any natural or legal person who imports, investigates, exports, experiments, mobilizes, releases, multiplies or markets genetically modified living organisms or their products, biological control agents and other agents for agricultural use produced within or outside the country must obtain prior approval of SENASA, without detriment to other agricultural requirements;
- vii.) The follow-up of the Agreement on Sanitary and Phytosanitary Measures of the World Trade Organization, the International Plant Protection Convention, and the Codex Alimentarius.

Chart 5. Organigram of the Ministry of Agriculture and Livestock

Organigrama de la Secretaría de Agricultura y Ganadería



- 1 SECRETARY OF STATE
- 2 COLLECTIVE BODIES, GAAL, MSA, CODA, CABINETS
- 3 DESCENTRALIZED AGENCIES
- 4 INTERNAL AUDIT
- 5 GENERAL SECRETARIAT
- 6 MANAGEMENT, PLANNING AND EVALUATION UNIT
- 7 ADMINISTRATION
- 8 FINANCES
- 9 BUDGET, TREASURY and ACCOUNTING
- 10 HUMAN RESOURCES
- 11 ADMINISTRATION AND DEVELOPMENT OF HUMAN RESOURCES, and PAYROLL
- 12 HERITAGE AND SERVICES
- 13 CONTROL OF ASSETS, ACQUISITIONS and GENERAL SERVICES
- 14 TECHNICAL COMMISSIONS
- 15 SUB-SECRETARIAT FOR AGROFOOD SERVICES
- 16 NATIONAL SERVICE OF AGROFOOD HEALTH (SENASA)
- 17 NATIONAL SERVICE OF AGROFOOD INFRASTRUCTURE (SENINFRA)
- 18 NATIONAL SERVICE OF AGROFOOD INFORMATION (INFOAGRO)
- 19 NATIONAL SERVICE OF EDUCATION, AGRICULTURE, TRAINING AND AGROBUSINESS DEVELOPMENT (SEDUCA)
- 20 NATIONAL SERVICE OF RESEARCH, SCIENCE AND TECHNOLOGY (DICTA)
- 21 NATIONAL SERVICE OF AGROFOOD TECHNOLOGY RESEARCH
- 22 SUB-SECRETARIAT OF STATE FOR EXPANDED AGRICULTURE

23	SUSTAINABLE RURAL DEVELOPMENT (PRONADERS)
24	NATIONAL FISHERY AND AGRICULTURE PROGRAM (PRONAPAC)
25	NATIONAL AGROFOOD DEVELOPMENT PROGRAM (PRONAGRO)

In view of the above, and of the results of the workshops and events as well as the monitoring of the NBFP, the institutionalization of the National Biosafety Framework (NBF) must have the following characteristics:

- Be defined by Law
- Avoid the creation of new institutions, strengthening existing ones
- A clear definition of responsibilities of the entities involved
- The establishment of public participation mechanisms
- The establishment of inter-and intrainstitutional coordination mechanisms

The basic proposal made here does not imply a change of competence with a consequent change of the governmental actors in the field of biosafety, but rather to ensure that their mandates and actions are covered by the Law, and that the necessary coordination and management mechanisms exist to coordinate the activities of these Competent National Authorities.

VII.C. Legal Framework

After screening the Study on the current legal framework in Honduras, applicable to biosafety and biotechnology, the NBFP, which highlights at least 20 instruments among the International Agreements and Treaties, Laws and Regulations, in addition to including the relevant constitutional provisions, concludes that the instrumentalization of the current policy is restricted to:

a) The Convention on Biological Diversity.

With the inclusion of issues such as the access and use of genetic resources, technology transfer and biosafety, the Convention demonstrates the willingness of the Parties to address all aspects of biodiversity; likewise, by establishing a mechanism to provide funds to the developing countries and support them in the implementation of the Convention, it recognizes the importance and need to allocate funds and multiple support programs from the industrialized countries to developing countries with a highly recognized potential for environmental protection.

b) The General Law on Public Administration and its amendments.

It sets the general rules of public administration and its structure, which are explained in detail in the respective regulation, and describes the competences of the Ministries in a general manner.

c) The General Law on Environment

Besides offering an environmental concept²¹, it makes the regulatory contribution with the greatest impact on society by establishing the requirement of the Environmental Impact Assessments²² for any project to be implemented in the country..

d) Phyto-zoosanitary Law.

²¹"The combination of the natural and cultural resources and the urban and rural areas, which is alterable by physical, chemical or biological agents, or by other factors due to natural causes or human activity, all of them likely to affect, directly or indirectly, the living conditions of human beings and the development of society. "Article 2.

²² Developed by the Regulations on the National System of Environmental Impact Assessments (SINEIA), La Gaceta March 5, 1994.

Recently amended, this regulatory instrument is the one that addresses in a more specific manner the uses of modern biotechnology specifically with regards to agriculture.

e) The Health Codex.

It is by definition the essential framework of the Ministry of Health.

f) Regulation on Biosafety with Emphasis in Transgenic Plants (RBETP).

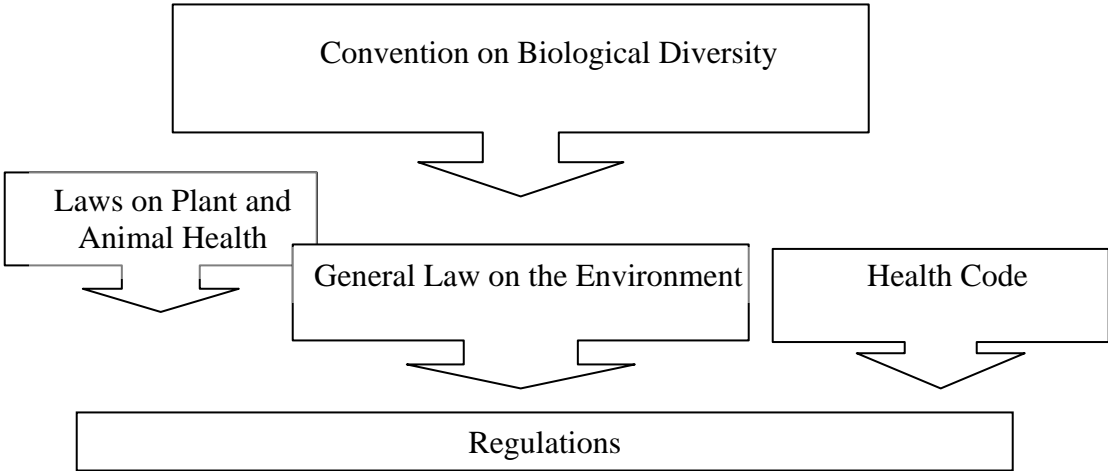
It refers to the procedures for testing and release.

Each of the aforementioned laws has their own regulations which influence a more specific field of action. Chart 6 summarizes how they interact in order to form what today constitutes the applicable legal framework for biosafety and LMOs.

The establishment of policies sometimes generates faults relating to their accumulation and the tendency of these to interact with each other in subtle ways; inevitably, this is reflected in their instrumentalization, so the NBF should at least aim at:

- The reduction and eventual elimination of other instruments related to the matter which distort its functioning
- The correction or mitigation of faults in the existing legal framework
- The consideration and incorporation of the environmental, social and economic effects of the NBF, both due to its application and to its non-adoption.

Chart 6. Current Biosafety Legal Framework



VII.D. Proposal for the Legal and Institutional Framework

The here proposed NBF concentrates its composed of regulatory elements, among them a Bill of Law and two drafts for Regulations (see Annexes) to address the greater loopholes and weaknesses in the current legal framework:

a) Law on Biosafety (in Annex).

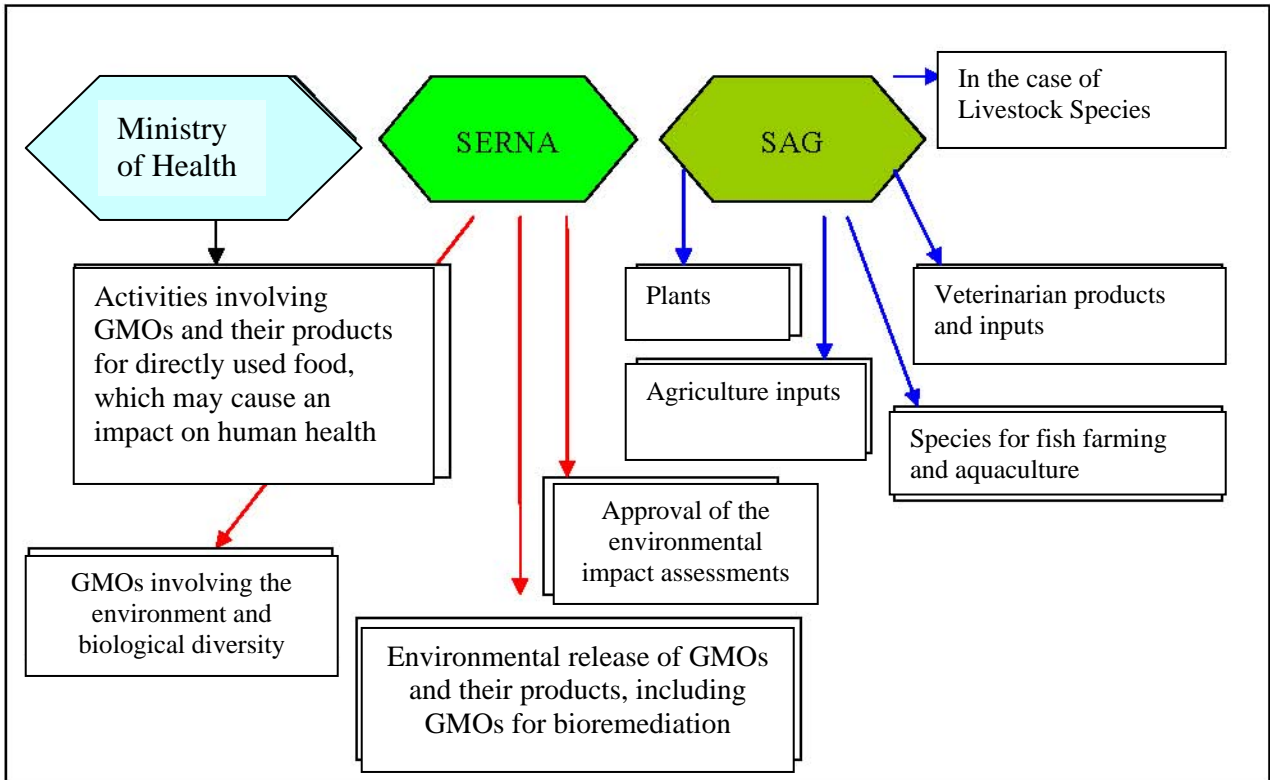
As a regulatory system, the law originates the administrative system for its implementation, the decision-making system, which should include risk assessment and management and/or the mechanisms for public participation and information, in addition to a system to evaluate risk management. It consists of eleven Sections divided as follows:

- **Section I - General Dispositions:** Describing the general aspects, such as the objective and the definitions which must be maintained by the following legislation and the corresponding regulations, as long as the Law is not modified, and the scope of the Law.
- **Section II - Institutional Dispositions:** In Chapter I, the Competent Authorities and their attributions are described. (See Chart 7)

Chapter II of this Section makes reference to the National Commission on Biotechnology, which will be composed of a representative and his substitute from the following institutions: Ministry of Health, Ministry of Agriculture and Livestock, Ministry of Natural Resources and Environment, Ministry of Industry and Trade, the Honduran Council of Science and Technology, National Autonomous University of Honduras, National University of Agriculture, Pan American Agricultural School "El Zamorano" and two representatives of the Consultative Council of the Commission.

As modern biotechnology and LMO-related aspects are technical and scientific, the establishment of a Scientific Advisory Committee of specialists, as described in Chapter III, is essential for this Law.

Chart 7. Competent Authorities of the Draft Bill of Law



- **Section III - Procedures for the Approval of Activities**, distinguishing those of Confined Use and those of Intentional Introduction, for which a simplified procedure applies, according to the dispositions included in the Preliminary Draft; also part of this section are: Confidential Information, Risk Assessment and Management, Transboundary Movements and Decision-making (Resolution) and Communication of the Decision.

- **Section IV - Review and Appeal Mechanisms**

- **Section V - Safeguards** for the monitoring and presentation of new information resulting from such monitoring; however, as a result of an coincidental or accidental event, an unintentional introduction of LMOs into the environment may be caused; **Section VI** defines how to proceed in that case.

- **Section VII** - provides that **Orders of Cessation** can be applied either for an infringement by the applicant or when due to new circumstances activities carried out in conformity with this Bill of Law could generate unforeseen negative effects. As stated in **Section VIII**, the Bill of Law contains the right and obligation of the general public and the State, to have access to the information and to raise public awareness respectively; throughout the process, this has been a crucial and a repeatedly emphasized guideline for all components of the NBFPP.

- **Section IX** - The identification and labeling of LMOs and their products is established.

- **Section X** - The norms which the proposal seeks to establish would be incomplete if there were no measures to ensure their compliance and if no authority were granted to officials to inspect the activities to be derived from the proposal, as stipulated in Section X, which defines illegal activities

and the corresponding penalties for the infringement of this Instrument.

- **Section XI** - At the end of the document, **Section XI** defines the Law's respective regulations.
- **Section XII**: Final Dispositions.

b) Regulation on LMOs for Agricultural use (in the Annex)

This instrument, such as the other ones following in this list, is a proposal based on the Law in the preceding clause a), which, as its name suggests, refers to this specific type of LMO; the SAG should be the Competent Authority to issue and apply it.

The contents of these Regulations should focus on the development of the provisions in the Law which are competence of the SAG, while being careful not to contradict the spirit or the letter of the Law, a very common problem when making technical regulations, as a result of the obvious deficiencies legal bodies have been created with.

Although an RBEPT exists, it presents so many legal and judiciary weaknesses, that its amendment is not possible²³; so the NBF picked up a regulatory initiative which was being developed by the SAG, by which it would have been elevated to a Regulation based on the Law on Plant and Animal Health, thereby repealing the RBETP; the initiative was then updated to be included in the NBF, based on the Law on Biosafety.

The proposal for this regulation consists of twelve chapters, ranging from the Objective to Awareness-Raising, Citizen Participation and the treatment of confidential information. The scope of application of the proposed Regulation should follow the provisions of the Law on Biosafety; its purpose is to regulate the activities of confined use, contained use, release into the environment, research, marketing, propagation, reproduction, transportation, import, export and transit of genetically modified organisms for agricultural and livestock use, generated through modern or conventional biotechnology, which present phenotypes whose employment in today's agricultural practice gives reasons to assume that they represent potential risks to biological diversity or human health.

Even though this regulation would stem from the Law on Biosafety, the country's phyto-zoosanitary regulation would be complementary for its implementation, especially regarding quarantine controls.

c) Regulation of the Requirements and Procedures for the Biological Safety of Facilities that make Use of Biological Agents and their Products, Organisms and Fragments with genetic information (in Annex).

Since biotechnology is a relatively new subject, special norms are required to regulate its activities as well as the corresponding facilities. Therefore, as a result of the "Workshop on a Previously Established Agreement and Risk Assessment and Management", coordinated and held by staff of the National Center for Biological Safety of Cuba in the field of NBF²⁴, the DiBio suggested to

²³ Despite the aforementioned, the RBETP still applies because the SAG has expressed interest in the promulgation and implementation of the NBF and does not want to anticipate the changes.

²⁴ Tegucigalpa, 1-4 March 2004.

follow the guidelines developed on the basis of that event²⁵ in order to establish a regulation on the minimum requirements for the facilities and procedures²⁶

VII.E. The Use of Forms as a Means of Simplification and Harmonization (in Annexes).

The analysis and the corresponding report made by Dr. Moisés Burachik at the time of the proposed Bill of Law on Modern Biosafety, which had been prepared by the NBF, brought forth the guidelines for the preparation of the respective forms; the NBF collected, purified and updated these guidelines with the following purposes:

- Simplification of the administrative procedures of the competent authorities
- Standardization of the presentation of the required information, in accordance with the Law and its regulations, so that it is equally accessible to the public.
- Compliance with the provisions of the Law on Administrative Simplification and the Law on Administrative Procedures in terms of speeding up and reducing the costs of the public administration procedures

These forms have to be filled out and submitted to the Competent Authorities on the matter of Biosafety by the persons interested in carrying out diverse activities permitted by the law. The NBF draft states that these forms must be approved by the National Biosafety Commission prior to making them available to the public.

VIII. STEPS TO INSTITUTE AND CONSOLIDATE THE NBF

The NBF draft was designed and produced according to the guidelines of the Global UNEP-GEF Project on Development of National Frameworks for the Safety of Biotechnology (Biosafety), and taking into account the possible ratification of the Cartagena Protocol on Biosafety (CPB); however, it has been influenced by the results of the national workshops and the international norms on free trade, so the rules included in the various legislative and regulatory proposals to systematize the monitoring and control processes, as well as the exchange of information and public participation have tried to be exhaustive. The proposed NBF should provide sufficient guarantees of transparency to all stakeholders to be legitimate, once it is approved.²⁷ The proposed NBF has to be effective even without the ratification of the CPB, but the ratification of this instrument must strengthen the NBF.

The Government has managed to create confidence in most of the actors and allowed the participation of all biosafety-related sectors, but the debate still continues.²⁸

Considering that the debate is still ongoing and with the aim of establishing and consolidating the NBF, the following conditions have to be fulfilled:

²⁵ Both the NPC and the NCC had learned that Cuba had been a successful pilot project on biosafety in Latin America and the Caribbean, which is why there was never any opposition in this regard.

²⁶ Tegucigalpa, 1-4 March 2004.

²⁷ Striving for perfection is an ideal; however, democracy does not mean consensus, but the benefit of a majority

²⁸ Only organized consumers, some sectors of indigenous groups, groups of farmers and NGOs still dissent from the content of the NBF.

By the government in general:

1. Ratification of the Cartagena Protocol on Biosafety (CPB).
2. Openness and exchange of information through the competent authorities on Biosafety, environmental impact of derived products, food safety, and so on.
3. Taking advantage of the open spaces achieved and maintaining them to facilitate the dissemination of information on the subject between all currently connected dependencies, including the customs system.

By SERNA and DiBio, in particular:

1. Promotion and execution of the Project of the Center for Exchange on Biotechnology Information -Honduras (CIISB-Honduras).
2. Management of the execution (design and funding) of a project for the implementation of the NBF.

By the Academic Community:

1. Inclusion of themes and contents related to modern biotechnology in the higher levels, especially in the areas of chemistry, pharmacy, microbiology, agriculture and agronomy.

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