Technical Report

The Organizational System for Sanitary and Phytosanitary Administration: Department of Agriculture

by Cesar Virata and Associates (CVAI)

Prepared for

Undersecretary Segfredo Serrano
Department of Agriculture
Republic of the Philippines

Submitted for review to

USAID/Philippines OEDG

March 2006

EMERGE
A GRP project supported by USAID

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Preface

This report is the result of technical assistance provided by the Economic Modernization through Efficient Reforms and Governance Enhancement (EMERGE) Activity, under contract with the CARANA Corporation, Nathan Associates Inc. and The Peoples Group (TRG) to the United States Agency for International Development, Manila, Philippines (USAID/Philippines) (Contract No. AFP-I-00-00-03-00020 Delivery Order 800). The EMERGE Activity is intended to contribute towards the Government of the Republic of the Philippines (GRP) Medium Term Philippine Development Plan (MTPDP) and USAID/Philippines' Strategic Objective 2, "Investment Climate Less Constrained by Corruption and Poor Governance." The purpose of the activity is to provide technical assistance to support economic policy reforms that will cause sustainable economic growth and enhance the competitiveness of the Philippine economy by augmenting the efforts of Philippine pro-reform partners and stakeholders.

Aware that the administration of Sanitary and Phytosanitary (SPS) regulations in the Department of Agriculture (DA) is characterized by several dysfunctions at the legal, organizational and procedural levels, DA Undersecretary Segfredo Serrano requested technical assistance (TA) from USAID's Economic Modernization through Efficient Reforms and Governance Enhancement (EMERGE) Project to help streamline DA SPS administration. In response, EMERGE commissioned Cesar Virata and Associates (CVAI) to mobilize a team of six experts, one each in agricultural policy, legislative matters, organizational development, systems, institutional reform, and communication (Ms. Beulah de la Pena, Atty. Elizabeth Macaibay, Ms. Irene Villapando, Mr. Gerry Gazmen, Ms. Marinella Castillo and Mr. Benedicto Rayco), to provide the TA.

The Project Team was tasked to work with an interagency SPS Task Force consisting of selected DA officials on the diagnostics module of the TA. This module has the following outputs: 1) A Report on SPS Regulations and their Importance to Trade, 2) A Report on The Legal Parameters in the Administration of SPS Systems, 3) A Report on The Organizational System for Sanitary and Phytosanitary Administration, 4) A Report on The Business Processes in SPS, 5) A Report on Change Management, and 6) a summary, Integrative Report. (The DA has requested that the Report on Change Management not be distributed or released to the public.)

The views expressed and opinions contained in this publication are those of the authors and are not necessarily those of USAID, the GRP, EMERGE or the authors' parent organization.

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List of Abbreviations

AFTA	ASEAN Free Trade Area
ALPP	Area of low pest prevalence
AO	Administrative Order
ASEAN	Association of Southeast Asian Nations
AVA	Veterinary Authority (Singapore)
BAI	Bureau of Animal Industry
BCI	Business competitive index
BFAR	Bureau of Fisheries and Aquatic Resources
BPI	Bureau of Plant Industry
BPIEA	BPI Employees Association
CODEX	Codex Alimentarius Commission
DA	Department of Agriculture
DBM	Department of the Budget and Management
DOLE	Department of Labor and Employment
EMERGE	Economic Modernization through Efficient Reforms and Governance Enhancement
EO	Executive Order
FAO	Food and Agriculture Organization
FDC	Food Development Center
FMD	Foot and mouth disease
FPA	Fertilizer and Pesticide Authority
FSANZ	Food Standards Australia-New Zealand
FTI	Food Terminal, Inc.
GCI	Growth competitiveness index
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis Critical Control Point
IPB	Institute of Plant Breeding
IPPC	FAO International Plant Protection Convention
IMIC	Imported Meat Inspection Certificate
IRRI	International Rice Research Institute
ISPM	International Standard for Phytosanitary Measures
JICA	Japan International Cooperation Agency
LGU	Local government unit
LOI	Letter of Instruction
MAF	(New Zealand)
MISDTF	Meat Inspection Service Development Trust Fund
MO	Memorandum Order
MRL	Maximum residue level
NFA	National Food Authority
NMIS	National Meat Inspection Service
NPAL	National Pesticide Analytical Laboratory
NVQS	National Veterinary Quarantine Service
NZFSA	New Zealand Food Safety Authority
OIE	International Office of Epizootics
O&M	Operations and maintenance
PAHC	Philippine Animal Health Center
PAL	Pesticide Analytical Laboratory
PC	Phytosanitary Certificate
PD	Presidential Decree

PFA	Pest free areas
PHILRICE	Philippine Rice Research Institute
PQC	Plant Quarantine Certificate
PQS	Plant Quarantine Service
QMS	Quality Management Systems
RA	Republic Act
RCPC	Regional Crop Protection Center
R&D	Research and development
RFU	Regional Field Unit
SO	Special Order
SPS	Sanitary and phytosanitary measures
SSOP	Sanitation Standards Operating Procedures
TA	Technical assistance
UPLB	University of the Philippines at Los Banos
USAID	United States Agency for International Development
VPHL	Veterinary Public Health Laboratory (Singapore)
VQC	Veterinary Quarantine Certificate
WHO	World Health Organization
WTO	World Trade Organization

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1. Background

The administration of sanitary and phytosanitary (SPS) measures is a critical government function in protecting animal, plant and human health; promoting safe foods for the domestic and export markets; and facilitating trade between the Philippines and its trading partners. At the Department of Agriculture (DA), at least six agencies carry out these measures, namely the: (a) Bureau of Plant Industry (BPI); (b) Bureau of Animal Industry (BAI); (c) National Meat Inspection Services (NMIS); (d) Bureau of Fisheries and Aquatic Resources (BFAR); (e) Bureau of Agriculture and Fisheries Product Standards (BAFPS); and (f) Food and Development Center (FDC). The Department is cognizant of the dysfunctions in its SPS administration due to organization-related issues such as the conversion of SPS regulatory organizations from line to staff agencies in 1987 and the diversity in the interpretation of devolution of agricultural services in 1991. The systems and procedures adopted in administering SPS measures have changed over time, but these changes have been unable to cope with changes in the external environment. The measures adopted to respond to changes in the external environment have been constrained by, among others, agency mandates that lend to overextension or duplication of services. The streamlining of SPS administration is long overdue and has become an imperative if the Department is to cope with the increasing demand to protect human, animal, and plant health in the face of the speed, breadth, and depth in the growth of international trade. It has become more imperative with the Department's efforts to reduce bureaucratic red tape, and to cushion the rising costs of business.

The 'Streamlining of the Department of Agriculture's Sanitary and Phytosanitary Administration' is a technical assistance (TA) project that was initiated in June 2005 on the request of the DA. Its objective is to assist the DA in enhancing SPS administration particularly at the BAI, BPI, NMIS, BAFPS and FDC. It is being carried out under the USAID-supported Economic Modernization through Efficient Reforms and Governance Enhancement (EMERGE) Project by Cesar Virata and Associates, Inc., which has mobilized a team of six experts (Study Team).

The TA consists of three phases --- the diagnostic, re-design and installation phases. As a first step under the diagnostic phase, SPS measures were mapped against the volume of trade.[1] The mapping identified 27 SPS measures --- 16 for plant and animal imports and 11 for agricultural exports --- that account for a large proportion of agricultural imports and exports. From 1995 to 2004, the total value of plant and animal imports that is covered by some form of SPS measure is estimated at USD21.4 million, which accounts for 66 percent of total agricultural imports. For the same commodities, including processed food products, about USD16.4 million in agricultural exports or 75 percent of total agricultural exports are covered.

The next step in the diagnostic phase is to document and review the DA SPS system particularly the technical, operational, legal and organizational dimensions of rules and procedures. This report focuses on the organizational aspect. It builds on the analyses and findings on the legal framework and existing business processes for carrying out SPS measures, which are contained in separate reports[2].

[1] Sanitary and Phytosanitary Regulations: Importance to Trade, 30 September 2005.

[2] Assessment of SPS Business Processes, 20 November 2005 and Legal Parameters in the Administration of Sanitary and Phytosanitary Administration, January 2006.

The report is presented in ten sections. Section 2 presents the four-fold objectives of the study. This is followed in Section 3 by the evaluation framework, which identifies the parameters for undertaking the organizational evaluation, and in Section 4, by the methodology. Section 5 presents a brief description of global developments that influence the functioning of SPS-related agencies in the DA. A description of the DA agencies involved in SPS administration --- BPI, BAI, NMIS, BAFPS, and FDC --- is presented in Section 6. Best practices in organizations for SPS administration are briefly described in Section 7. The results of the analysis are discussed in Section 8, organizational issues in Section 9 and the recommendations, in Section 10.

2. Objectives

This report aims to:

a. document the design and functioning of organizations involved in the administration of SPS measures at the DA;
b. identify organization-related factors that block or support DA SPS administration;
c. identify problems and opportunities for organizational change in the DA's administration of SPS measures; and
d. based on the results of (b) and (c) above, to identify options for organizational change at the DA.

3. Evaluation Framework and Methodology

In the evaluation framework used in the study (**Figure 1**), it is the external environment --- international and regional relations and agreements, government policies, clients, competitors --- that influences the design and functioning of organizations. The force drives organizations to change their vision, mission and goals, strategies and policies, plans and targets, systems and procedures, and all internal functionalities. As a management tool, organizational evaluation determines whether an organization is keeping up with the changes in the external environment.

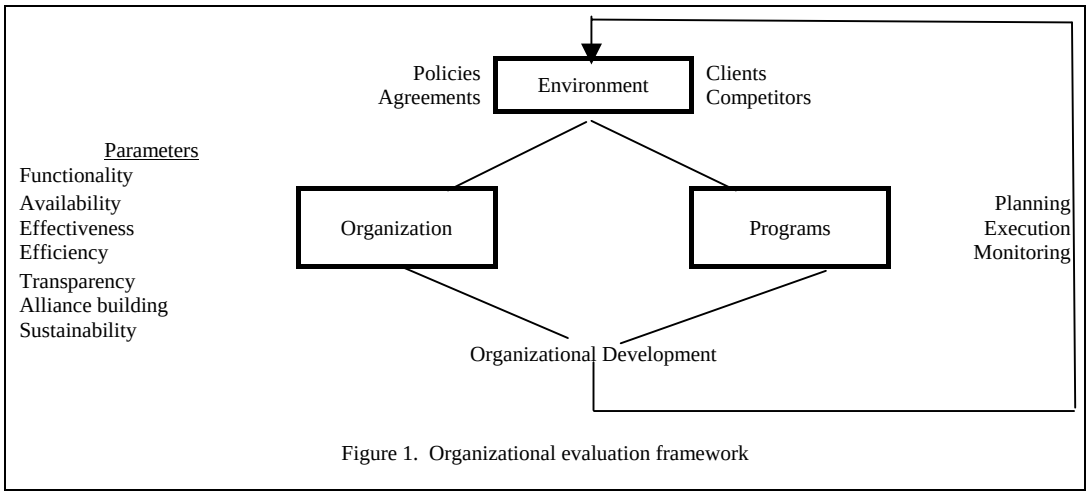


Figure 1. Organizational evaluation framework

Like any evaluation exercise, organizational evaluation is guided by parameters to describe how well an organization is responding to changes in its external environment. For SPS administration, these parameters include:

a. functionality as defined by organizational arrangements such as design and structure, roles and responsibilities of divisions and units, policies, guidelines, systems and procedures, and social factors such as people-related features and processes;
b. availability of equipment, facilities and technical expertise;
c. effectiveness in the delivery of services and, to the extent possible, in meeting set objectives;
d. efficiency in terms of time, targets against accomplishments and, where possible, including cost;
e. transparency;
f. alliance building; and
g. sustainability of operations.

A desk review of review of relevant documents provided by the agencies was undertaken. These documents pertain to: (a) mandates, visions, missions and goals; (b) programs, projects and performance; (c) organizational structures; (d) functions, roles and responsibilities of offices, divisions and units; (e) staffing patterns; (f) job descriptions; (g) human resource development; (h) technical equipment and facilities and their maintenance; (i) revenue generation and utilization; (j) affiliations; and (k) feedback mechanisms. Separate consultations with key officers of agencies and the private sector provided the Study Team with additional insights on the functioning of agencies.

4. Global Developments

One of the forces that drive organizations to change is developments in the global setting. The more important developments related to SPS administration are the World Trade Organization SPS Agreement, the Montreal Protocol and agreements under ASEAN. Special mention is made on the World Economic Forum, which provides indicators, measurements and ranking of competitiveness across countries.

4.1 The World Economic Forum

The World Economic Forum is an independent international organization committed to improving the state of the world by engaging leaders in partnerships to shape global, regional and industry agendas. The measurement of competitiveness --- growth competitiveness index (GCI) and business competitiveness index (BCI) --- and production of competitiveness reports are two of several annual activities of the Forum. The GCI provides a quantified framework for measuring competitiveness by considering three main factors that explain growth in a country --- quality of macroeconomic environment, state of the country's public institutions, and level of country's technological readiness. A complementary approach to measuring competitiveness is the use of the BCI, which focuses on the underlying microeconomic factors that determine economies' current sustainable levels of productivity and competitiveness. It specifically measures two areas that are critical to the microeconomic business environment --- sophistication of company operations and strategy and quality of national business environment in which companies operate. Both indices use official country statistics and data drawn from the World Economic Forum's Executive Opinion Survey.

The GCI and BCI of ASEAN-member countries from 2002 to 2005 is shown in **Table 1**. During the 4-year period, Singapore maintained its lead in GCI rank in ASEAN,

followed by Malaysia and Thailand. The Philippines slid from 4th in 2002 to 5th in 2003 and 2004, unable to surpass Vietnam in 2003 and Indonesia in 2004. The Philippines still ranked 5th last year, which means that the quality of macroeconomic environment, the state of public institutions and the level of technological readiness had not improved significantly compared to other ASEAN countries.

Table 1. Growth competitive index and business competitive index rank by country, ASEAN, 2002-2005.

Country	GCI Ranking				BCI Ranking			
	2002	2003	2004	**2005**	2002	2003	2004	**2005**
Singapore	7	6	7	**6**	9	8	9	**5**
Malaysia	30	29	31	**24**	26	26	23	**23**
Thailand	37	32	34	**36**	35	31	37	**37**
Indonesia	69	72	69	**74**	64	60	44	**59**
Philippines	**63**	**66**	**76**	**77**	**61**	**64**	**70**	**69**
Vietnam	62	60	77	**81**	60	50	79	**80**
Cambodia	na	na	na	**112**	na	na	na	**109**
Total No. of Countries	80	102	104	**117**	80	95	103	**116**

Source: Global Competitiveness Reports, World Economic Forum

In 2005, the ranking of ASEAN countries in terms of business competitiveness is the same as that of growth competitiveness. On a positive note, the Philippines ranked 6th in 2002 and 2003, then went up to rank 5 in 2004 and 2005 in terms of BCI. This reverses the behavior in GCI where it maintained its 5th rank in 2002 and 2003, then slid to 6th rank in 2004 and 2005. Whether this is the result of improvements in sophistication of company operations and strategy or in the national business environment could not be ascertained.

Table 2. Ranking of countries by quality of the national business environment, ASEAN, 2004 and 2005.

Country	2004	2005
Singapore	8	5
Malaysia	23	23
Thailand	36	37
Indonesia	46	59
Vietnam	79	77
Philippines	77	78
No. of Countries	103	116

Source: Global Competitiveness Reports, World Economic Forum

The Philippines' performance in terms of the quality of its national business environment is dismal compared to its ASEAN partners. In 2004, it was in the bottom 25 percent among 103 countries worldwide with rank 77, and 5th among 6 ASEAN countries. When the number of participating countries increased by 13 (from 103 in 2004 to 116 in 2005), the Philippines slid to rank 78 worldwide and to rank 6 in the ASEAN. Worldwide, Singapore increased in rank from 8th to 5th together with Vietnam, from 79th to 77th. Malaysia maintained its rank at 23rd, while Thailand slid one rank (Table 2). It appears that it is in Indonesia and the Philippines where the national business environment had not been as 'friendly' and as conducive to economic growth.

4.2 The WTO SPS Agreement

The Philippines is signatory to the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), which is based on the right of member-countries to take such measures as necessary for the protection of human, animal and plant life or health, provided that these do not discriminate countries and are not disguised restrictions on international trade. SPS

measures are to be applied only to the extent necessary to protect health and must be based on scientific justification, which is either through an assessment of risks or the use of international standards. In the assessment of risks, a member-country must make known, if requested, the factors taken into consideration, the procedures used and the acceptable level of risk. Should the member-country use international standards, the standard setting bodies are the FAO/WHO Codex Alimentarius Commission (CODEX), International Office of Epizootics (OIE) and the FAO International Plant Protection Convention (IPPC). The responsibility to ensure that the Philippine Government adheres to the provisions of the agreement rests with the BPI and the BAI.

4.3 The Montreal Protocol

As party to the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer[3] , the Philippines is under obligation to take appropriate measures to protect human health and the environment against adverse effects arising from emissions of certain substances that significantly deplete the ozone layer. The Montreal Protocol provides for a gradual and final phase out of the production and consumption of these substances by 2015, except for allowable exemptions. The exemptions include the quarantine and pre-shipment exemption to eliminate quarantine pests, and the critical use exemption for agricultural users with no technically or economically feasible alternatives. Methyl bromide, an odorless and colorless gas classified as a Class 1 ozone-depleting substance that is presently used in the fumigation of wood used as container or packaging material for plants, animals and all other kinds of goods, is part of the exemption. The Protocol however requires each party to establish and implement a system for licensing the import and export of new, used, recycled and reclaimed controlled substances including methyl bromide. In the Philippines, licensing for the import and export of methyl bromide rests with the Fertilizer and Pesticide Authority (FPA), while certification on fumigation using the same substance is the responsibility of the BPI.

4.4 ASEAN Cooperation

When initiated in 1992, the ASEAN Free Trade Area (AFTA) agreement mandated a comprehensive program of regional tariff reduction until 2008. Later, the target date was moved to 2003 while additional activities were initiated. Among these activities are the elimination of non-tariff barriers and quantitative restrictions, the harmonization of customs nomenclature, valuation, and procedures, and the development of a common standard for product certification. To date, the following have been completed: (a) ASEAN scheme for the accreditation of halal food establishments; (b) harmonization of the maximum residue levels (MRLs) of pesticides covering 36 pesticides, 50 vegetables, 22 fruits and 9 cash crops; (c) standardization of procedures for the registration of animal vaccines such as canine parvovirus vaccine; and (d) accreditation of livestock establishments for livestock production and pig and chicken slaughter. Agreed procedures have been documented into manuals such as the Manual of ASEAN Standards for Animal Vaccines, Manual of ASEAN Rules and Procedures for the Registration of Animal Vaccines, Manual of ASEAN Standards for Good Manufacturing Practices for Animal Vaccines, Manual of ASEAN Accreditation Criteria for Animal Vaccine Testing Laboratories, Manual of ASEAN Code of Practice for the

[3] International treaty adopted in 1987 and last amended in 1999 to eliminate the production and consumption of ozone-depleting chemicals.

Commercial Storage, Transportation and Handling of Animal Vaccine, Protocol for Accreditation of Animal Vaccines Testing Laboratories in ASEAN Member Countries and Guidance on Registration of Animal Vaccines.

The ASEAN Strategic and Action Plan (2005-2010) for the agriculture sector spells out the programs and activities that require participation of relevant agencies of the DA. The more important ones include:

a. harmonization of phytosanitary measures for cut flower, citrus, mango, durian and banana;
b. enhancement of compliance to WTO SPS requirements to market access and competitiveness;
c. strengthening of national frameworks for pest risk analysis;
d. biosecurity planning;
e. harmonization of MRLs for additional pesticides;
f. establishment of an ASEAN Genetically Modified Food Testing Network; and
g. establishment of ASEAN harmonized standards for mango, pineapple, durian, papaya, pomelo, rambutan and mandarin.

5. Organizations in SPS Administration

The five SPS-related agencies covered by this study report to different DA undersecretaries (**Figure 2**). The BPI and the FDC, which is a part of the National Food Authority, are under the supervision of the Undersecretary for Operations. The BAI and the NMIS report to the Undersecretary of Fisheries and Livestock, and the BAFPS, to the Undersecretary for Policy, Planning, Research and Regulation. The reporting relationship is even more disorganized with respect to the Regional Field Units (RFUs), which report to the Undersecretary for Operations. The field personnel of the BPI and the BAI are under the administrative supervision of the RFU Directors who, in turn, report to Operations. The same personnel are technically supervised by the respective central offices, which are supervised by different Undersecretaries. The problem lies in the clustering of offices, which is based on a combination of commodity and thematic scope.

The rest of the section deals with each of the SPS-related agencies. Discussions for each agency start with the legal bases, and then followed by the SPS measures it administers. The organizational system is discussed following the four components that comprise it, as follows:

a. Organizing arrangements or the formalized guidelines for coordination such as the organizational structure (division of tasks) and span of control and the organizational structure (reporting relationships) including the chain of command. Policies, systems and procedures are part of the organizing arrangements. However, these are taken up under a separate report on business processes.

b. Human resource factors or the people-related features and processes of organizations such as culture, interaction processes, individual attributes, informal patterns/networks.

c. Technology factors or aspects of the business processes through which system inputs are transformed into outputs such as equipment and their maintenance,

technical expertise and job design. The work flow design and technical procedures are part of this component, but are also taken up in the business processes report.

d. Physical factors, which include the location of offices and facilities in relation to the location of clients and competitors, as well as general physical setting of place of work such as provisions for the safety of people working.

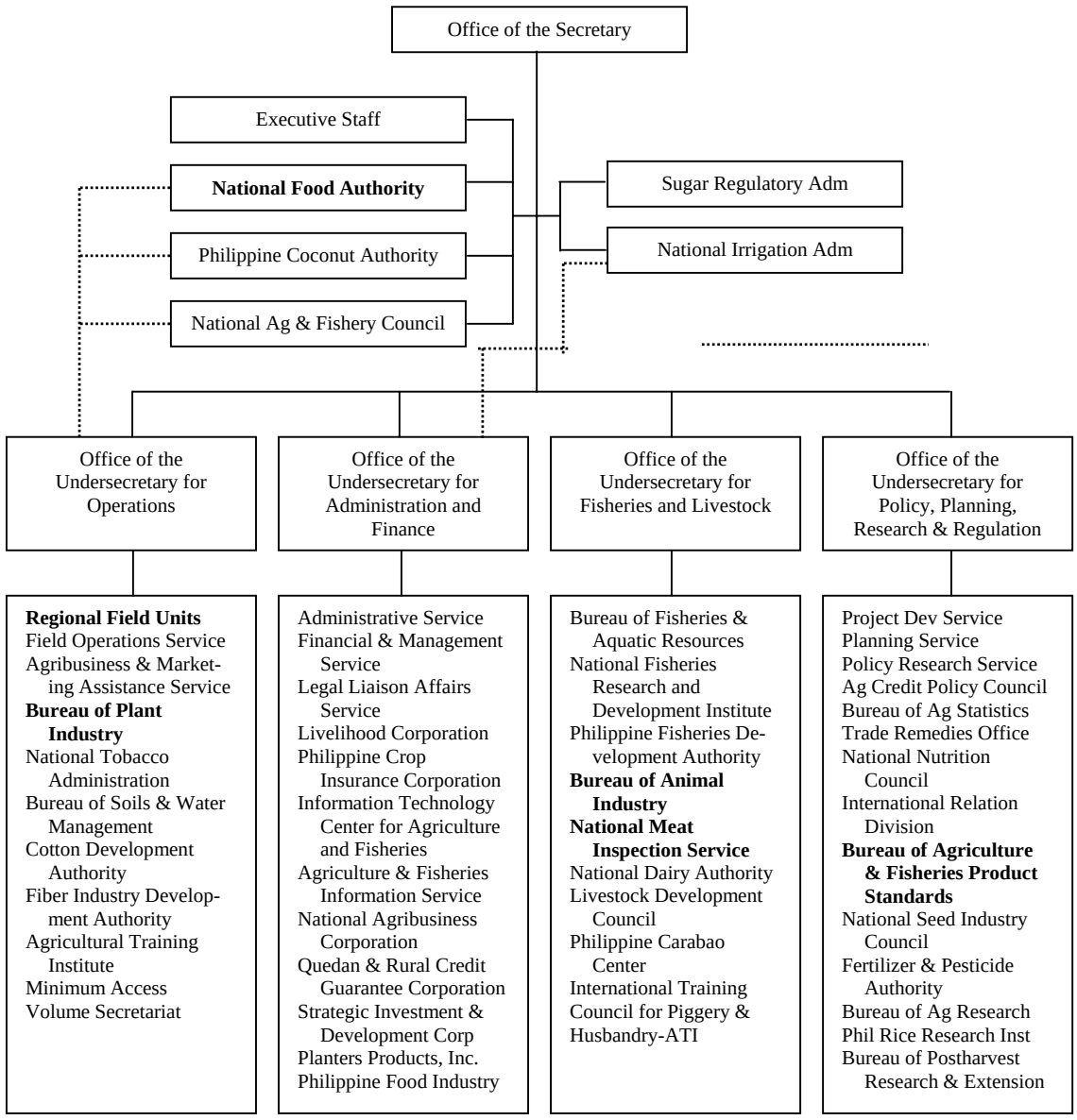


Figure 2. Organizational chart, Department of Agriculture

Note: Based on SO No. 331, s 2001.

5.1 Bureau of Plant Industry

5.1.1 Legal bases

The existence of the BPI dates back to January 1930 when it was created through Act No. 3639, although government work on plant research and crop production started even before under the Bureau of Agriculture. Its mandates, functions and powers had expanded over time through subsequent legislations such as:

a. Act No. 4007 (1932), which added technology transfer as one of the Bureau's responsibilities and added new divisions in the structure;
b. General Memorandum Order No. 186 (1936), which added the responsibility for crop utilization research and development and created another new division;
c. Executive Order No. 216 (1957), which included farm mechanization in its areas of work and created the corresponding division;
d. Executive Order No. 116 (1987), which classified the BPI as a staff bureau under the production group;
e. Republic Act (RA) 7308 (1992) or the National Seed Industry Development Act, which put more focus on seed quality control services of the Bureau with the conversion of the Seed Quality Control Section under the Crop Protection Division into a National Seed Quality Control Services, and added responsibility over field inspection and control services as well as seed testing laboratories; and
f. RA 8435 (1997) or the Agriculture and Fisheries Modernization Act of 1997 and Special Order No. 302 in 2000, which categorized the BPI as a research and development bureau.

The scope of the government's plant protection services likewise evolved over time through the following government issuances:

a. Presidential Decree (PD) No. 1433 (Plant Quarantine Law of 1978), which revoked Act No. 3027[4] (March 1922) and Act No. 3767[5] (November 1930), revised and consolidated plant quarantine laws to make them compatible with those of other countries, and to comply with the provisions of the Food and Agriculture Organization-International Plant Protection Convention, and strengthened the plant quarantine service of the BPI;
b. PD 936, which strengthened the BPI's crop protection function through the establishment of 7 Regional Crop Protection Centers (RCPCs);
c. Letter of Instruction (LOI) No. 986 (1980), which authorized the establishment of Pest Analytical Laboratories under the BPI and mandated the Bureau to establish tolerable levels of pesticides in foods;
d. LOI No. 987, which established 5 additional RCPCs, thus, increasing the number of RCPCs to 12 and covering all regions; and

[4] Act to protect the agricultural industries of the Philippine Islands from injurious plant pests and diseases existing in foreign countries and further to regulate the domestic movement of plant materials in order to minimize the injury from pests and diseases already introduced

[5] Act regulating the importation, bringing or introduction into the Philippine Islands of living animals, such as insects, birds, crustaceans, bats, mollusks, reptiles, mammals, and other animals, not falling within the scope of the term 'domestic animals' as provided and defined in Section four of Act No. 3639, in order to protect the agricultural industries of this country and for other purposes

e. RA 7394 (1992) or Consumer Act of the Philippines, which mandated the BPI to ensure the safe supply of fresh agricultural corps, to improve the quality of fresh agricultural crops and to promote their export and to ensure the supply of quality seeds and planting materials.

5.1.2 SPS-related mandates and measures

The mandates of the BPI with respect to the administration of SPS measures are summarized, as follows:

a. To prevent the introduction of exotic pests in the country and to prevent the further spread of existing plant pests in infested areas to pest-free areas (PD 1433);
b. To enforce phytosanitary measures for the export of plants, plant products and regulated articles (PD 1433);
c. To protect agricultural crops from pests and diseases through the establishment and operation of 12 RCPCs (PD 936 and LOI 987);
d. To monitor the levels of pesticide residue in crops and the environment to protect local and international consumers from possible health hazards (LOI 986);
e. To check possible indiscriminate use and application of pesticides on food and other food products (LOI 986);
f. To determine pesticide degradation rates for different crops to be able to establish 'waiting time' and to recommend improvements in agricultural practices (LOI 986);
g. To determine and evaluate practices on pesticide use for possible modification to reduce pesticide residues in agricultural crops to acceptable low levels (LOI 986);
h. To establish pesticide laboratories throughout the country (LOI 986 and reiterated in PD 1144, the decree that created the Fertilizer and Pesticide Authority, which recognized BPI's mandate on pesticide residue analysis);
i. To monitor the level of chemical residues in agricultural crops and by-products and to recommend policies for the safety of consumers (RA 7607 or the Magna Carta for Small Farmers);
j. To ensure safe supply of fresh agricultural crops, to improve the quality of local fresh agricultural crops and to promote their export (RA 7394 or Consumer Act of 1992).

It is in line with these mandates that the BPI formulates and enforces key SPS measures in the form of regulations, procedures and guidelines that are effected through government issuances such as administrative orders (AOs), quarantine orders or circulars or memorandum orders (MOs). The key BPI-led SPS measures are listed in **Table 3**.

Table 3. SPS-related measures implemented by the BPI.

Commodity	On Importation	On Exportation	On Domestic Trade
Plant & plant products	Accreditation of importers of fresh fruit and vegetables only	No accreditation of exporters	Accreditation of plant nursery operators
	Issuance of Import Permit	Issuance of export clearance	Issuance of Permit for Domestic Transport of Plant & Plant Product/ Domestic Plant Quarantine

Commodity	On Importation	On Exportation	On Domestic Trade
			Permit
	Issuance of Plant Quarantine Certificate (PQC)	Issuance of Phytosanitary Certificate (PC)	
	For regulated materials, issuance of Biosafety Permit for --- Propagation (if intended for commercial use), Field Test (if intended for field test), Direct Use (if intended for direct use as seed or food)	Issuance of Convention for International Trade of Endangered Species for wild plants only	
	Issuance of Import Clearance		
All including wood packaging materials		Accreditation of quarantine treatment service providers such as fumigators of wood packaging materials	
		Issuance of Fumigation Certificate	
Big birds and small animals	Issuance of Import Permit for Potential Agricultural Pests		

5.1.3 Organizing arrangements

Organizational structure

The BPI is structured according to its mandated functions covering production, research, quality control, engineering, laboratory services, planning, finance and administration (**Figure 3**). The last three are staff functions, while the rest are line functions. Two divisions are directly involved in SPS administration, namely: (a) the Plant Quarantine Service (PQS); and (b) the Laboratory Services Division. The DA-RFUs play a coordinative role given that field PQS personnel are under their supervision. The PQS maintains what it calls PQS stations in six locations in Metro Manila specifically in three major ports, at the international and domestic airports, Central Post Office and International Trade Center. Outside Metro Manila are 26 PQS stations that are strategically located close to, or in major ports and airports. Note however that the PQS is a staff unit, while the Laboratory Services Division, its closest partner in delivering quarantine services, is a line division. While the dysfunction does not seem to negatively affect delivery of services, workflow is facilitated if both units are structured to perform line functions. There is no overlap in division functions, but work is strongly coordinated across concerned divisions.

The separation of tasks among the SPS-related units and divisions is clear (**Table 4**). The functions of the PQS at the central office are grouped under three sections --- support to PQS stations section, support to international cooperation and agreements section and operations section. Support to PQS stations is purely on technical matters given that the field staff is administratively under the supervision of the RFUs. All commitments to international, regional and bilateral agreements are handled by the Support to International Cooperation and Agreements Section. All operational matters such as the issuance of permits, pest risk assessment and other phytosanitary measures

that are of national interest are handled by the Operations Section. Quarantine service at the ports, seaports and Central Post Office is the responsibility of the PQS stations.

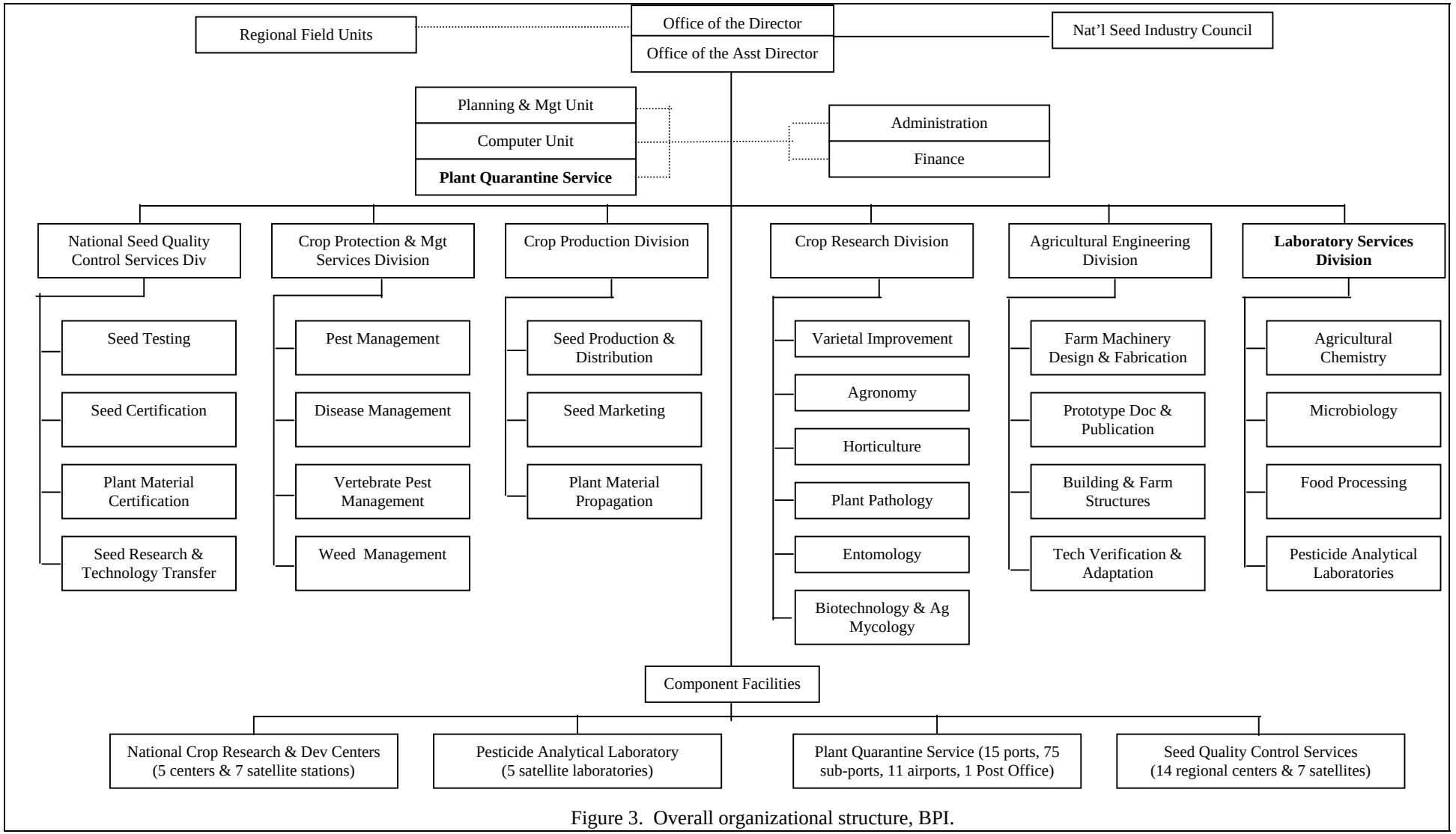


Figure 3. Overall organizational structure, BPI.

The functions of the Laboratory Services Division are categorized into two --- pesticide analysis and non-pesticide analysis. Pesticide analysis, which essentially involves services for pest residues in crops and setting of maximum residue limits rests with the National Pesticide Analytical Laboratory (NPAL) and its satellite laboratories. All other laboratory services are provided by the laboratories at the central office and in PQS stations.

The BPI has regional presence, even provincial or site-specific presence in some cases. The 8 crop research centers, 5 pesticide analytical laboratory satellites and 102 PQS stations/sub-stations are location-specific and not necessarily in the seat of the DA's regional office. Only the regional seed quality control centers are located in the same regional seat of the DA.

Table 4. Functions of divisions and units involved in SPS administration, BPI.

Service/Division/Unit	Function
1. **Plant Quarantine Service (PQS), Central Office**	General: ▪ Enforces the phytosanitary system of the country. Specific: ▪ Implements plant quarantine rules and regulations to prevent the introduction of foreign pests and further spread of such quarantine pests that are already present in the country; ▪ Facilitates safe trade of plants and plant products; ▪ Plans, formulates and reviews programs, bilateral and multilateral agreements and other plant quarantine instruments; ▪ Represents the office in international and regional I on plant quarantine and related matters.
Operations	▪ Issues import permits, domestic permits and phytosanitary certificates; ▪ Undertakes surveillance of proposed pest free areas; ▪ Establishes Pest Free Areas (PFA) and Areas of Low Pest Prevalence (ALPP); ▪ Conducts Pest Risk Analysis (PRA); ▪ Accredits importers and quarantine treatment service providers; ▪ Maintains International Phytosanitary Portal; ▪ Undertakes phytosanitary capacity evaluation; ▪ Supervises and coordinates the export program; ▪ Implements AO No. 8
Support to International Cooperation and Agreements	▪ Acts as Secretariat to the Plant Quarantine Board; ▪ Monitors, verifies, evaluates rules and regulations issued to make these consistent with international agreements; ▪ Participates in bilateral, multilateral and international quarantine agreement negotiations; ▪ Responsible for compliance to obligations under the IPPC and APPC/SPs pest categorization, pest reporting, etc.
Support to PQS Stations	▪ Provides plant quarantine technical support services; ▪ Undertakes plant quarantine special projects; ▪ Undertakes consultations on plant quarantine matters; ▪ Performs other functions related to training, data gathering and data processing.
PQS in ports, airports, etc	▪ Undertakes phytosanitary inspection; ▪ Issues phytosanitary certificates, carrier clearance, commodity clearance and domestic quarantine permits; ▪ Undertakes grow-in and post entry monitoring; ▪ Maintains PFAs/ALPPs; ▪ Monitors quarantine-accredited entities.
2. **Laboratory Services Division**	▪ Characterizes agricultural crops and their by-products; ▪ Undertakes crop utilization and product development; ▪ Monitors pesticide formulated products, pesticide residues and other

Service/Division/Unit	Function
	contaminants in food.
National Pesticide Analytical Laboratory (NPAL)	▪ Monitors the level of pesticide residues in local, exportable and imported agricultural crops; ▪ Monitors pesticide formulated products for quality, stability and label guarantee; ▪ Provides analytical services for formulated products and residues in commodities; ▪ Generates data used in establishing the maximum residue level.
Satellite Pesticide Analytical Laboratories	▪ All of the above except the provision of analytical services for formulated products; ▪ Provides analytical services for residues in commodities ▪ Determines pesticide residues in agricultural crops in order to protect local and international consumers from any health hazards; ▪ Checks the indiscriminate use and application of pesticide in food crops and other agricultural products; ▪ Determines pesticide degradation on different crops in order to establish 'waiting times'; ▪ Determine and evaluate practices on the use of pesticides.
3. **DA Regional Field Units**	▪ Exercises administrative supervision over personnel assigned in plant quarantine stations.

Organizational chart

The organizational chart in **Figure 4** shows the reporting relationships among the SPS-related units and divisions at central office and between the central office and field offices. The PQS is headed by an Agricultural Center Chief III who is responsible for the overall technical supervision of PQS station staff, but this is not being shown in the chart mainly because the PQS is a staff unit. What magnifies the reporting divide in SPS administration is the fact that all PQS field staff hold plantilla positions that belong to the RFUs. Designated PQS station heads therefore report to the RFU Director administratively, and to the PQS central office head technically. In terms of reports, the PQS stations send to both offices. This reporting relationship results in the double counting of accomplishments reported by the RFUs which, according to the PQS central office staff, is a recurring problem.

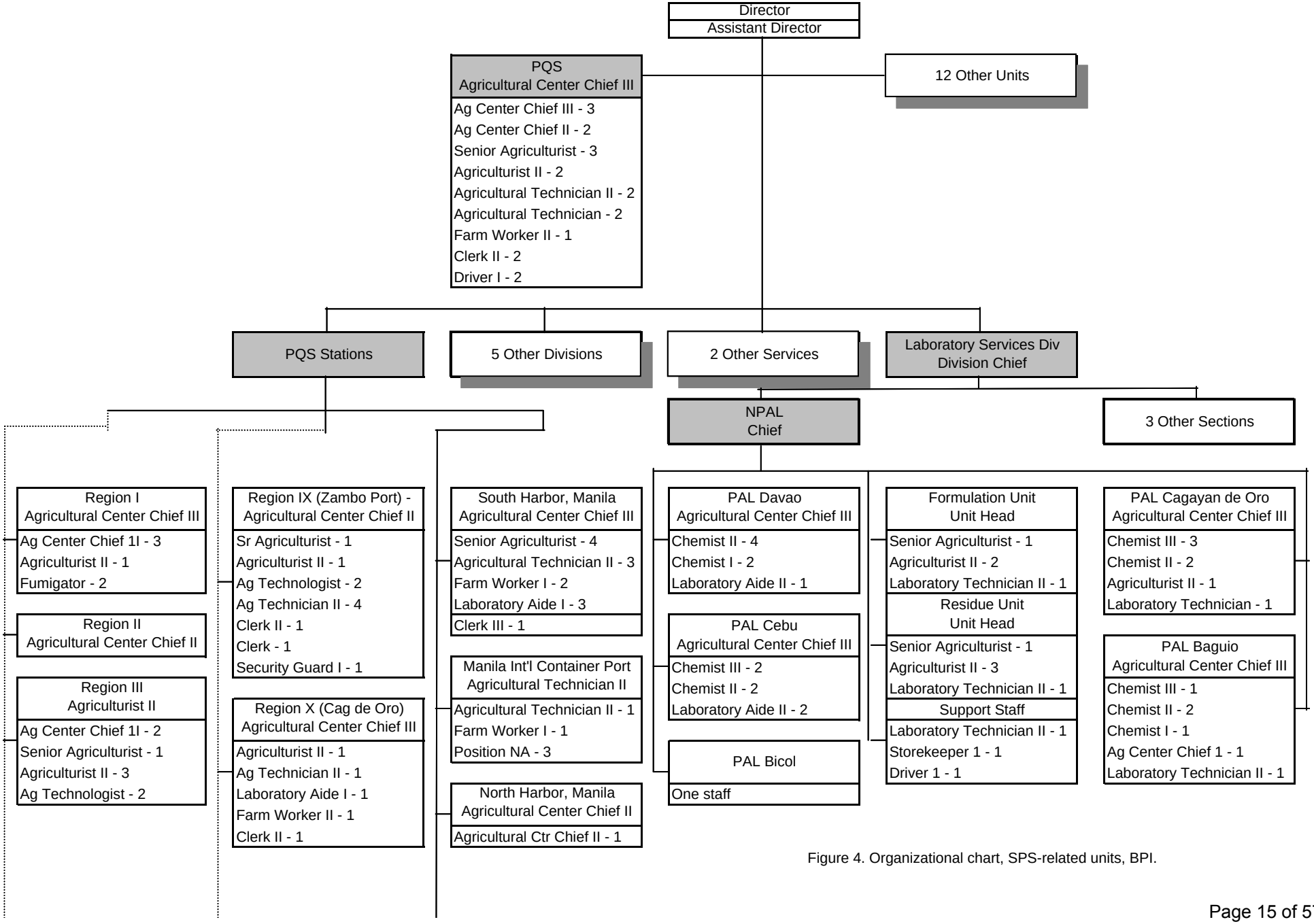
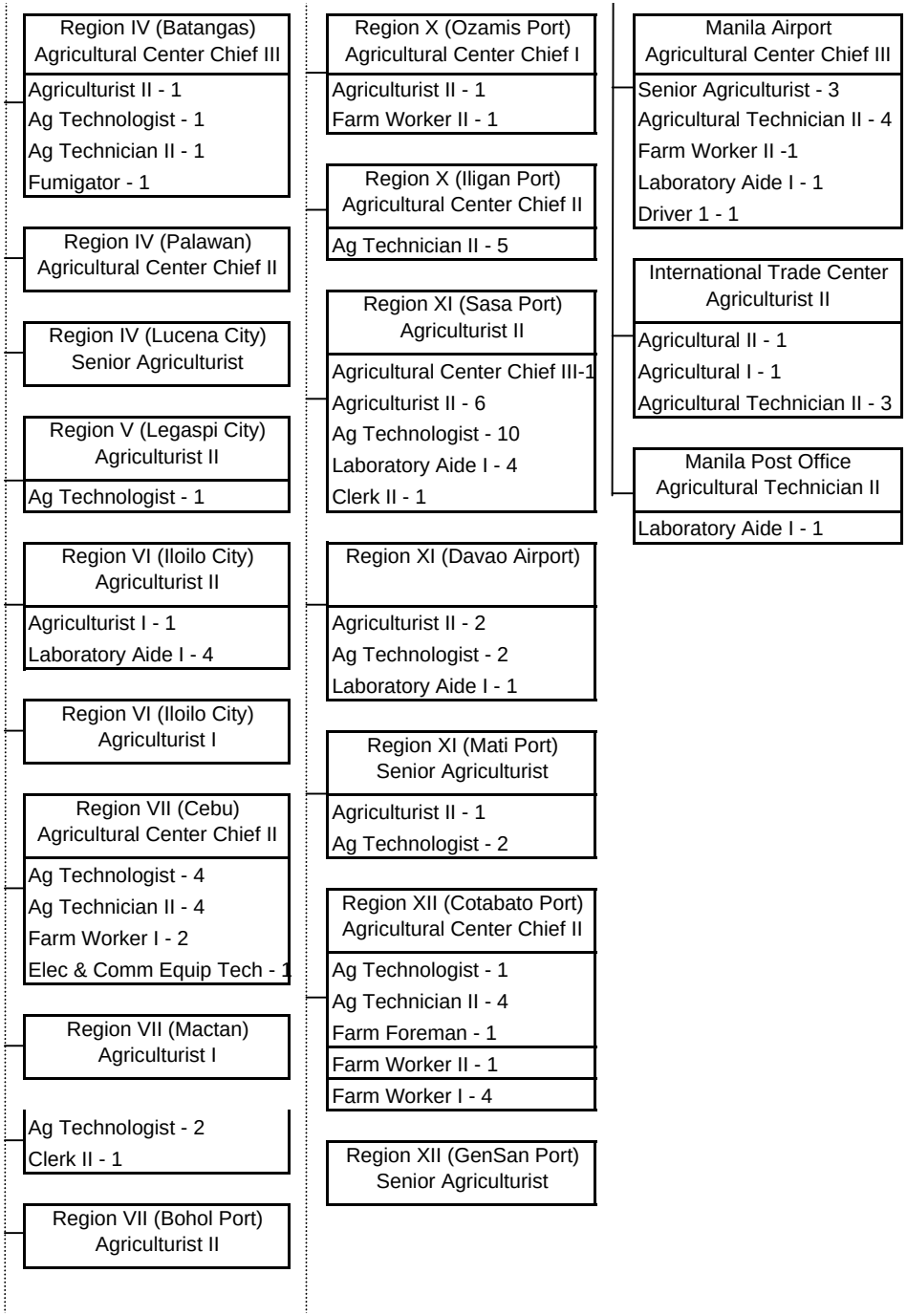
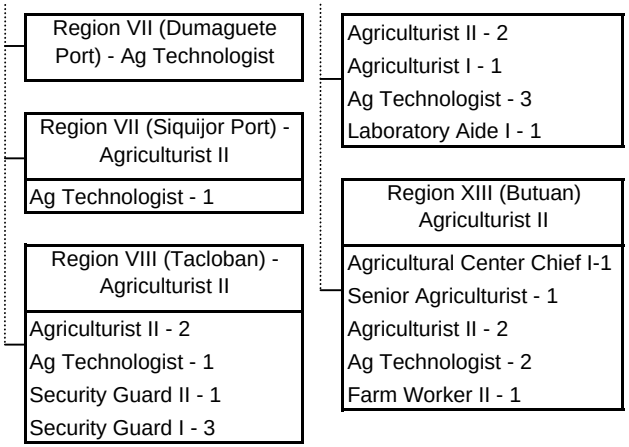


Figure 4. Organizational chart, SPS-related units, BPI.


Region IV (Batangas)
Agricultural Center Chief III
Agriculturist II - 1
Ag Technologist - 1
Ag Technician II - 1
Fumigator - 1
Region IV (Palawan)
Agricultural Center Chief II
Region IV (Lucena City)
Senior Agriculturist
Region V (Legaspi City)
Agriculturist II
Ag Technologist - 1
Region VI (Iloilo City)
Agriculturist II
Agriculturist I - 1
Laboratory Aide I - 4
Region VI (Iloilo City)
Agriculturist I
Region VII (Cebu)
Agricultural Center Chief II
Ag Technologist - 4
Ag Technician II - 4
Farm Worker I - 2
Elec & Comm Equip Tech - 1
Region VII (Mactan)
Agriculturist I
Ag Technologist - 2
Clerk II - 1
Region VII (Bohol Port)
Agriculturist II
Region X (Ozamis Port)
Agricultural Center Chief I
Agriculturist II - 1
Farm Worker II - 1
Region X (Iligan Port)
Agricultural Center Chief II
Ag Technician II - 5
Region XI (Sasa Port)
Agriculturist II
Agricultural Center Chief III-1
Agriculturist II - 6
Ag Technologist - 10
Laboratory Aide I - 4
Clerk II - 1
Region XI (Davao Airport)
Agriculturist II - 2
Ag Technologist - 2
Laboratory Aide I - 1
Region XI (Mati Port)
Senior Agriculturist
Agriculturist II - 1
Ag Technologist - 2
Region XII (Cotabato Port)
Agricultural Center Chief II
Ag Technologist - 1
Ag Technician II - 4
Farm Foreman - 1
Farm Worker II - 1
Farm Worker I - 4
Region XII (GenSan Port)
Senior Agriculturist
Manila Airport
Agricultural Center Chief III
Senior Agriculturist - 3
Agricultural Technician II - 4
Farm Worker II -1
Laboratory Aide I - 1
Driver 1 - 1
International Trade Center
Agriculturist II
Agricultural II - 1
Agricultural I - 1
Agricultural Technician II - 3
Manila Post Office
Agricultural Technician II
Laboratory Aide I - 1


Region VII (Dumaguete Port) - Ag Technologist
Region VII (Siquijor Port) - Agriculturist II
Ag Technologist - 1
Region VIII (Tacloban) - Agriculturist II
Agriculturist II - 2
Ag Technologist - 1
Security Guard II - 1
Security Guard I - 3
Agriculturist II - 2
Agriculturist I - 1
Ag Technologist - 3
Laboratory Aide I - 1
Region XIII (Butuan) Agriculturist II
Agricultural Center Chief I-1
Senior Agriculturist - 1
Agriculturist II - 2
Ag Technologist - 2
Farm Worker II - 1

Each PQS station and NPAL satellite office has a designated head. The position names as well as the number of support staff differ across stations and satellites with no discernable pattern. The designated heads of the PQS at central office, the PQS satellites in Regions I, IV and X, the South Harbor (Manila) and the Manila International Airport hold Agricultural Center Chief III positions. Other designated PQS satellite heads hold much lower positions such as Agriculturist I and Agricultural Technical II. In Region III, the designated PQS head is an Agriculturist II, but it supervises personnel holding higher positions (Agricultural Center Chief II and Senior Agriculturist). The Study Team is unable to find out the reasons for this disarray in personnel placement. According to some key informants, some placements are accommodations made by management for personal reasons such as proximity to family.

5.1.4 Human resource factors

Plant quarantine services are provided by the PQS central office, 7 stations in Metro Manila and 26 others throughout the country, mostly in the ports and airports. The NPAL and the microbiology and chemical laboratories in Manila together with the 5 satellite pesticide analytical laboratories (PALs) located in key cities provide the laboratory service requirements of the PQS. These offices and facilities are manned by **287** personnel (90 percent are holding plantilla positions), but not necessarily in the designated office location as identified by the Department of the Budget and Management (DBM).

Manila-based personnel account for 29 percent of the total, while the regions and selected key cities account for the rest (**Table 5**). It appears that the distribution of personnel is not proportionate to the volume of transactions given that about 80 percent of business processes take place in Manila. Using 2004 data, the monthly average number of transactions in Manila is estimated at 1,300 PQCs, 950 PCs and 2,500 domestic PQPs. These translate to a daily average of 60 PQCs, 40 PCs and 110 domestic PQPs. On top of these are the in-vessel inspection of cargoes and issuance of clearances and the issuance of fumigation certificates, which are done on a daily basis as well. About one-third of the workforce is engaged in laboratory work, while the remaining is involved in various quarantine and inspection work.

Table 5. Location of SPS-related facilities and number of personnel.

Facility and Location	Specific Location	No. of Personnel
All Locations/Facilities		**287**
Plant Quarantine Stations		**50**
Ports	Manila, South Harbor, Gate 3	14
	Manila, North Harbor, Pier 8	2
	Manila, International Container Port	6
Airports	Manila, Ninoy Aquino International Airport	9
	Manila, Domestic Airport	2
Post Office	Manila, Central Post Office	2
Others	Manila, International Trade Center	6
	Los Banos, Laguna, Central Post Entry Quarantine	9
Plant Quarantine Service Offices		**182**
Central Office	Manila, BPI	21
Regional offices	Region 1 – Poro Point, San Fernando, La Union	7
	Region 2 – Aparri, Cagayan	1
	Region 3 – San Fernando, Pampanga	9
	Region 4 – Port of Batangas	4

Facility and Location	Specific Location	No. of Personnel
	Region 4 – Puerto Princesa City, Palawan	1
	Region 4 – Lucena City, Quezon	1
	Region 5 – Legaspi City, Albay	3
	Region 6 – Iloilo City, Iloilo and Bacolod City	16
	Region 7 – Cebu City, Cebu	12
	Region 7 – Port of Mactan, Cebu	4
	Region 7 – Port of Bohol, Bohol	1
	Region 7 – Port of Dumaguete	1
	Region 7 – Port of Siquijor, Siquijor	2
	Region 8 – Tacloban City, Leyte	8
	Region 9 – Port Area, Zamboanga City	13
	Region 10 – Cagayan de Oro City	7
	Region 10 – Port of Ozamis	3
	Region 10 – Port of Iligan	6
	Region 11 – Sasa, Port Area, Davao City	24
	Region 11 – Davao International Airport	5
	Region 11 – Port of Mati, Davao Oriental	4
	Region 12 – Port of Cotabato	12
	Region 12 – Port of General Santos	8
	Region 13 – Butuan City	9
Pesticide Analytical Laboratory		**55**
National laboratory	Manila	18
Satellite laboratory	Baguio City	8
	Bicol Region	2
	Cebu City	9
	Davao City	9
	Cagayan de Oro City	9

The number of PQS personnel in the ports appears to be proportionate to the volume of business. Relatively large ports such as the Manila South Harbor, Cebu City, Zamboanga City and Davao City have from 12 to 23 staff members. Only one officer is assigned in relatively small ports such as in Aparri (Cagayan), Puerto Princesa City (Palawan), Lucena City (Quezon), Bacolod City (Negros Occidental), Bohol and Dumaguete City (Negros Oriental). The problem however is not much in the manning of PQS stations, but in the supervision of personnel. Field plant quarantine plantilla items are with the RFUs, thus, officers are under their administrative supervision. The BPI Central Office exercises technical supervision over the field officers. The negative effects of this arrangement are manifested in the higher priority given by the officers to work assigned by the RFU and the lower priority given by RFU heads in the allocation of resources for quarantine work.

The organizational charts for the PQS and the laboratories do not show any distinct pattern even across units with similar volume of business. The head of a PQS station could hold any position from Agriculturist II to Agricultural Center Chief. The head of the PQS in an extremely busy port like Sasa Port Area in Davao City holds an Agriculturist II position, while a much less busy port like the Port of Ozamis has an Agricultural Center Chief I as head. No standard number and composition of staff is evident across PQS stations in ports and airports. The common positions are Senior Agriculturist, Agriculturist I or II, Agricultural Technician and Agricultural Technologist positions. Some stations are manned by laboratory aides, farm workers, security guards and fumigators.

As indicated earlier, most of the personnel hold plantilla positions. However, the number of plantilla positions in each division or unit had not coped with the expanded scope of work. It is for this reason that some incumbent in divisions or units hold plantilla items that belong to other divisions. The PQS-Central Office, for example, has 13 plantilla items, but only 6 of these are held by personnel who are actually assigned in the unit. The 7 other items are held by personnel assigned in Region IV. In order to cope with the growing volume of business, personnel from Research, Administration and Laboratory Services Divisions were assigned to the PQS (**Table 6**).

Table 6. Number of personnel by original location of plantilla positions and present location of incumbent, PQS, BPI

Location of Plantilla Positions Based on DBM	No. of Incumbent Personnel	No. at Present Location of Plantilla Positions
PQS-Central Office	20	6
Research	-	7
Administration	-	6
Laboratory	-	1
PQS-Regions		
Region 1	7	7
Region II	1	1
Region III	9	9
Region IV	55	55
PQS-Manila	41	34
PQS-Outside Manila	14	14
PQS-Central Office		7
Region V	2	3
Region VI	7	16
Region VII	17	17
Region VIII	3	3
Region IX	12	13
Region X	15	16
Region XI	32	33
Region XII	20	20
Region XIII	8	9
NPAL and Satellites	51	27
Total	259	

Notes: NPAL plantilla items are all under the Crop Protection Division.
Figures may not tally with figures in other tables due to multiple data sources .

Job specifications for plant quarantine personnel exist, but these are not strictly followed. There are plant quarantine officers whose educational backgrounds are not in any way close or related to agriculture. Some fumigators or inspectors have very little knowledge of correct and appropriate fumigation practices. There is a need for the quality of plant quarantine service to cope with the rapidly expanding volume of trade. Measures ought to be taken to professionalize the plant quarantine service in the country.

The BPI Employees Association (BPIEA) is an organization of the Bureau's permanent and casual rank-and-file employees. Registered with the Department of Labor and Employment in November 2002 and accredited by the Civil Service Commission in September 2003, it generally aims to protect the interest of its members. As the sole and exclusive representative of majority of the employees, the BPIEA entered into a Collective Negotiation Agreement with the BPI management in 2004, which includes security of tenure provisions (Article VIII) that ought to be considered in case a re-engineering or streamlining of the SPS functions of the Bureau is pursued. The important provisions state that:

a. The BPI agrees that in cases of additional activities to be undertaken by the Bureau, or in case of some changes in its operation, it assures that no employee will be displaced and that affected personnel shall be given preference in re-training to acquire and possess the requisite skill and competence; and

b. The BPI and the BPIEA agree that in case of reorganization, the former shall exhaust all possible means to preserve the security of tenure of its employees. In the event of merging of services with other agencies or the expansion of scope of its services, the BPI shall see to it that its employees will have equitable workload and benefits

5.1.5 Technical factors

The main functions of PQS stations are to prevent the entry of foreign pests into the country, to prevent further spread of pests that already exist in the country and to facilitate safe trade in plants, planting materials and plant products. In order to properly and adequately perform these functions, PQS stations must necessarily be equipped with facilities for laboratory analysis as well as with personnel with the appropriate technical background. Of the 102 PQS stations nationwide, provisions for laboratories are made for only 17 stations (**Table 7**). Among the 17 stations with laboratory facilities, only four --- the Central Office Biotechnology Laboratory, the PQS laboratory at Central Office and the South Harbor and the Post Entry Laboratory in Los Banos --- appear to be technically-equipped in both facilities and personnel. The laboratories in the RFUs including the one located at the one-stop-service center in Manila are either non-operational or minimally used due to lack of or non-functional equipment and lack of personnel.

Table 7. Capacity and capability of BPI laboratories.

Location	Clients	Laboratory Test Capability	Laboratory Equipment		Laboratory Staff (Position and Number)
			Type	No.	
1. Central Office Biotechnology Laboratory, Manila	Importers of commodities containing GMO (i.e., Monsanto, Universal Robina Corp. etc.)	ELISA test for commodities containing GMO; pathological examination	ELISA kits ELISA reader Refrigerator Laminar flow Microfuge Magnetic stirrer Micropipettes pH meter Water bath		Agriculturist II/Plant Pathologist (2)
2. PQS Central Office Laboratory, Manila	Importers of onion, garlic, potato, fruits and vegetables	Routine laboratory tests for pest and disease detection and identification	Dissecting/stereo microscope Compound Microscope Photomicroscope		Senior Agriculturist (1)
3. Philtrade Roxas Blvd., Manila	Private sector exporters of plants, planting materials (i.e., Uni-Green Inc, Exotic Products, Angeles Salabit, King Louis Flowers and Plants, AITI, Agri Crop International, First Transcontinental Development of Asia Corp)	Routine lab tests for pest and disease detection and identification (Nematology Analysis, Seed Health Test, Seed Purity Test); others as may be required by country of destination	Compound microscope Hot plate stirrer Digital balance Refrigerator	1 1 1 1	None in particular
4. Gate 3, South Harbor, Port of	Importers of plants and plant products,	Seed pathological test Insect and disease	Stereo Binocular Microscope	1	None in particular, but with 1 Laboratory

Location	Clients	Laboratory Test Capability	Laboratory Equipment		Laboratory Staff (Position and Number)
			Type	No.	
Manila	exporters of seeds and live plants specifically to Japan	identification (ocular and microscopic) Nematology test	Compound Microscope Photo Stereo Binocular Microscope Photo Compound Microscope Autoclave oven Laminar Flow Refrigerator Distilling Apparatus NUV Incubators Weighing balance (8kgs) Hot plate stirrer Magnetic Stirrer Laboratory Table Digital Camera	1 1 1 1 1 1 1 1 1 3 3 1 1	Aide I
5. Post Entry Quarantine Station, BPI Compound, Los Baños, Laguna	Institutions (IRRI, UPLB-IPB, PHILRICE), private sector (i.e., Pilipinas Kaneko, Insular Botanicals, Grinika, East-West Seed Co, Monsanto Phils, Pioneer Hi-Bred, Syngenta Phils, Bayer) and other non-regular (walk-in) clients	PCR-based method of pathogen and GMO detection Routine seed health test using the blotter method	Micropipettors Mini-cycler Easy Water Purification System Water bath Analytical balance Top-loading balance Microcentrifuge Autoclave Oven Micropipettors Gel documentation system Microplate reader pH meter Magnetic stirrer with hotplate Compound microscope with photomicrograph Stereo-microscope Purifier clean bench		None in particular except Laboratory Aide I (1); IRRI and UPLB provide the staff for their lab analysis and treatment of import and export rice seed materials.
6. PQS-Port of Batangas, Batangas City	Private sector particularly General Milling Corp, Purefoods, Monde Nissin Corp and San Miguel Foods Corp.	Insect pests (stored product pests) identification using direct examination	Nikon Stereoscope	1	None in particular
7. DA-PQO, Legazpi City	Government particularly NFA	Insect pests (stored product pests particularly rice pests) identification using direct examination	Compound microscope Stereo zoom microscope	1 1	None in particular. PQS seldom conducts analysis as shipment of commodity is not frequent
8. BPI Compound, Parola, Iloilo City	Private sector (Mango Growers Federation, Cutflowers Association, Philippine Foremost Milling Corporation) and government (NFA)	Insect pests identification using direct examination	Microscope		Laboratory Aide I (4) Deputized contractual PQOs assigned in Guimaras to implement Proclamation No. 314 (18)
9. Port of Cebu, Arellano Blvd., Cebu City	Importers and exporters of plants, planting materials and plant products	Pest and disease identification using direct examination	Microscope (non-functional)	1	None
10. Jones St., Tacloban City	Not available	Pest identification for purposes of issuing Phytosanitary Certificate	Digital Balance Cannon camera with accessories Hot plate Magnetic stirrer Microscope – compound and stereoscopic Moisture meter Thermohygro-graph		Contractual entomologist (1)

Location	Clients	Laboratory Test Capability	Laboratory Equipment		Laboratory Staff (Position and Number)
			Type	No.	
11. BPI-PQS Compound, PQS Bldg., Bacolod City	Not available	None	Microscope	2	None. Former lab room used as office of PQS/OIC and former PQS office used by RFU
12. BPI Bldg., Lo-oc, Dumaguete City	None	None	None		None. Lab never used and not provided with equipment since the construction of the Plant Quarantine building.
13. Iligan City	None	None	Glasswares only		None
14. BPI Bldg., Port Area, Zamboanga City	None	None	Various, non-functional		None
15. Macabalan, Cagayan de Oro City	Importers and exporters of plants, planting materials and plant products	Pest and disease identification using direct examination	Microscope Analytical balance Digital balance Refrigerator	2 1 1 1	None in particular, but with 1 Laboratory Aide
16. Sasa Port, Davao City	Importers and exporters of plants, planting materials and plant products	Plant pest and disease detection and identification	Microscope Digital balance Refrigerator	1 1 1	None in particular, but with 4 Laboratory Aides
17. Port of General Santos City	Private sector (Monsanto Phils., Inc, Pioneer Hi-Breed Phils. Syngenta Phils. Inc., Dow-Agro Services, Bioseed Research Phils, Dole Phils, Cargill Phils., Global Fruits Corp, Greenville Agro Universal Elite Fruit, Handa Trade Corp, MDAVI, Tropifresh)	Plant pest and disease detection and identification	Stereoscope Binocular microscope (defective)	1 1	None in particular, but with 1 Laboratory Aide
18. NPAL and PAL satellites	Private sector (i.e., fruit/ vegetable exporters and pesticide companies) and government (i.e., FPA, BFAR, NFA, LGUs)	Multiple and single residue analysis and pesticide analysis	Full line of equipment provided through JICA-funded project		For NPAL, 18 plantilla positions from different divisions; For PAL satellites, 33 plantilla positions and 4 contractual/ casual employees

In addition to the PQS laboratories, the BPI also operates and maintains pesticide analytical laboratories. Established through a BPI-JICA grant aid project, the NPAL is the only laboratory that has the capability and responsibility to analyze pesticide residues in agricultural crops. It is acknowledged as the most modern pesticide analytical laboratory in ASEAN. Aside from the NPAL are 5 other pesticide analytical laboratory (PAL) satellites. The service areas of the NPAL and PAL satellites are listed below:

Laboratory Location	Service Area
NPAL, Quezon City	NCR, Regions 3 and 4
PAL, Baguio City	CAR, Regions 1 and 2
PAL, Bicol	Region 5
PAL, Cebu City	Regions 6 and 7
PAL, Cagayan de Oro City	CARAGA and Region 10
PAL, Davao City	ARMM and Region 11

5.1.6 SPS administration performance

Organization performance is not measured solely by accomplishments in physical outputs, but more importantly, by the effects or contribution of outputs to the achievement of defined objectives. Toward this end, the Quality Manual of the BPI is deficient in that it defines only the division objectives and physical targets, and only for 2003. Moreover, the definition of objectives of most of the divisions, particularly the PQS, is not reflective of its functions[6]. There is also lack of congruence in the physical targets as stated in the Manual and as shown in the annual budget. These deficiencies in data structure do not allow an analysis of the PQS' performance against objectives.

Following the DBM's budgeting procedure, performance targets are based on agency-identified indicators for physical outputs. For plant quarantine services, the indicators are: (a) number of PQCs issued for imports; (b) number of PCs issued for exports; and (c) number of domestic PQPs issued (**Table 8**). From 2003 to 2004, the accomplishment for all indicators went up by between 16 percent (for number of PQCs issued) to 123 percent. In both years, the accomplishments exceeded the targets by a hundred-fold, except in the number of PCs issued in 2003. It appears that the poor performance in the number of PCs issued in 2003 prompted the drastic downward adjustment in the 2004 target.

Table 8. SPS administration performance for selected indicators, 2003 and 2004.

Performance Indicator	2003			2004		
	Target	Actual	% Actual	Target	Actual	% Actual
No. of PQCs (for imports) issued	8,800	17,101	194.3	2,200	19,890	904.1
No. of PCs (for exports) issued	80,000	6,345	7.9	2,125	14,178	667.2
No. of domestic PQPs issued	20,000	21,579	107.9	5,000	37,909	758.2

Source: Accomplishment Reports, 2003 and 2004.

5.1.7 Revenue generation and utilization

PD 1433 authorized the BPI to collect nominal regulatory fees for quarantine services such as inspection, certification, issuance of import permits, and commodity treatments. The Bureau also generates revenues from fees received for seed quality control services and the sale of seeds, plant materials and food products that it develops and produces. Laboratory tests in support of PQS functions are free-of-charge, while those for pesticide residue analysis, which the NPAL and its satellite offices provide, are charged a nominal fee. The BPI retains collections from quarantine services under a Revolving Fund of the National Plant Quarantine Service which, as provided for in PD 1433, is 'to augment all existing appropriations therefore.' Collections of the NPAL are returned to the National Treasury.

Key informants at the BPI informed the Study team that the BPI generates revenues of between Php6.0 million to Php8.0 million annually from quarantine services only. According to BPI officers, these had not been utilized as intended in PD 1433. Except for the NPAL and its PAL satellites, laboratory facilities are poorly maintained. Some equipment are not functional and require repair or complete replacement, while some need upgrading. The re-tooling of PQS staff is dependent on intermittent capability building activities that are provided free-of-charge by other institutions rather than

[6] The objectives of the PQS as defined in the Quality Manual is 'to conduct field survey of pest on mango as a requirement of the importing country for at least four provinces for the year 2003.'

through a regular, in-house program. The NPAL, on the other hand, collects between Php1.0 million to Php2.0 million annually, but remits the full amount to the National Treasury. The unit is already experiencing problems in the supply of chemicals and reagents due to limited funds.

The business sector recognizes the limitations of government and the need to share in the costs of providing regulatory services. This notwithstanding, it raised concern over the lack of standardization in the fees and other charges the BPI imposes for supervision, inspection and certification across locations, particularly for fumigation services. Charges for these services are higher in Metro Manila, prompting exporters to lodge their request for inspection in a BPI office closest to Manila. This has serious implications in the monitoring of methyl bromide consumption for quarantine and pre-shipment use, which is required under The Montreal Protocol. The inherent 'premium' in charges for fumigation services, on the other hand, makes it a 'favored' assignment for BPI personnel. DA AO No. 18, series of 2000, provides that quarantine personnel are entitled to payment of overtime and reimbursable expenses (meals, transportation, lodging, etc) at the rates and following the procedures prescribed, but is open to various interpretations. Some regular BPI exporter-clients for fumigation services have also reportedly been served by the same BPI personnel over time. These are system-related issues, but are affecting personnel and organizing arrangements.

5.1.8 Affiliations

The Philippines is a signatory to the International Plant Protection Convention (IPPC) and has been a member of this convention since 1953. The BPI is the recognized National Plant Protection Organization of the Philippines under Article 3 of the IPPC responsible for SPS of the GATT/WTO. The last amendment to the IPPC was done in 1997 in order to align it with the SPS Agreement under the WTO, but it was not until April 2005 when the Philippines adhered to the revised text of the IPPC. The scope of the IPPC is to secure common and effective action to prevent the spread and introduction of pests in plants and plant products and to promote appropriate measures for their control. As of April 2005, the IPPC has approved and adopted 24 International Standards for Phytosanitary Measures (ISPMs).

5.1.9 Feedback mechanism

The BPI is ISO-9002-1994 certified and the only ISO-certified agency under the DA. It implements a Quality Management Systems (QMS) that supports the agency's quality policy and corporate policy objectives as well as division quality objectives. Each division or office has a quality plan that identifies the relevant business processes and the respective standards/specifications, performance parameters, responsibility centers, frequency of implementation, reference documents and corrective actions in case of non-conformance. The Quality Plans for the Plant Quarantine Service and Laboratory Services Division (**Table 9**) and the operating manuals are impressive, but plans had not been implemented and manuals are either not in use, or had not been updated since the initial release in 2003.

Table 9. Summary of quality plans under the Quality Management System, Plant Quarantine Service, Laboratory Services Division and for common procedures, BPI.

Business Process	Parameters	Standards/ Specifications	Responsible Persons	Frequency	Reference Documents	Corrective Actions for Non-Conformance
Issuance of Import Permit	Timeliness	7 working days without PRA; 5 months with PRA;	PQ Officer PQ Technical Staff PQS Chief BPI Director	As requested	PD 1433 PM-BPI 04-20 Philippine Biosafety Guidelines (1991) Permit to Import IPPC-FAO	Inform client of reason for delay; Deny request for permit
	Conformance to requirements & regulations	100% conformance				
Inspection & issuance of Phytosanitary Certificate	Timeliness	15 days, maximum	PQ Officer PQ Technical Staff	As requested	PD 1433 PM-BPI 04-21 Phytosanitary Certificate IPPC-FAO	Inform client of reason for delay; Deny request for Phytosanitary Certificate
	Conformance to requirements & regulations	100%				
Inspection & issuance of Domestic Quarantine Permit	Timeliness	75 hrs, maximum	PQ Officer PQ Technical Staff	As requested	PD 1433 PM-BPI 04-22 Permit for Domestic Movement BPI Special Quarantine Orders Aos	Inform client of reason for delay; Deny request for permit; Confiscation or destruction
	Conformance to requirements & regulations	100%				
Handling of client complaint	Response time for: Lab services PQS	No. of working days: 10 15	Senior Agriculturist II Technical Staff	As complaints are received	PM-BPI 04-30 Complaint logbook	Prepare action plan; Discuss during Management Review
	Recurrence	Zero				

5.2 Bureau of Animal Industry

5.2.1 Legal bases

Act 3639 (1930) created the BAI to 'investigate, study and report upon the condition of the domestic animals in the Philippine Islands, their improved methods of reproduction and care, inquire into and report the causes of dangerous communicable diseases among them, and the means for the prevention and cure of the same, and in general, to promote the development of the livestock industry of the country.' It also transferred SPS-related functions of the Bureau of Agriculture to the BAI specifically those that are concerned with the following: (a) bringing in of animals imported from foreign countries; (b) prohibition of transfer of diseased animals from province to province; (c) animal quarantine, inspection and sanitation; and (d) regulation of the preparation, sale, shipment and importation of products for the treatment of animals. At present, the BAI describes its mandate as that of: (a) developing and promoting the animal industry to meet the needs of the growing population; (b) recommending policies and procedures governing the flow of livestock products as well as the proper preservation and inspection of such products; and (c) prescribing standards for the quality of manufacture, importation, labeling, advertising, distribution and sale of livestock, poultry and allied products.

These mandates are rooted from other laws and government orders, specifically:

a. RA 1071 on veterinary biologics and medicines;
b. RA 1556 and PD 7 on the Livestock and Poultry Feeds Act;
c. RA 8485 or the Animal Welfare Act.

5.2.2 SPS-related measures

The BAI implements at least 22 SPS-related measures, the highest number among the five agencies (**Table 10**). At least six of its nine operating divisions are involved in the implementation of these measures. The business processes for each of these measures are taken up in a separate report[7].

Table 10. SPS-related measures implemented by the BAI.

Commodity	On Importation	On Exportation	On Domestic Trade
Live animals only	Issuance of Veterinary Quarantine Certificate (VQC)	Issuance of Veterinary Health Certificate (VHC)	Issuance of Shipment Permit
Meat & meat products only	Accreditation of meat & meat product importers through the issuance of a Certificate of Accreditation	No equivalent accreditation for meat & meat product exporters	
	Issuance of VQC	Issuance of International Veterinary Certificate	
Live animals and meat & meat products	Joint BAI-NMIS accreditation of foreign meat establishments through the issuance of a DA Administrative Order		
Animal feeds	Issuance of license to operate as importer/ indentor		Issuance of license to operate as manufacturer, supplier, distributor or retailer
	Issuance of Import Permit		Registration of animal feeds
Veterinary drugs & products	Issuance of Import Permit		
	Issuance of license to operate as importer or indentor		Issuance of license to operate as manufacturer, supplier, distributor or retailer
			Issuance of Certificate of Product Registration
Veterinary biological products	Issuance of license to operate as importer		Issuance of license to operate as manufacturer
	Issuance of Import Permit		Registration of product
Animal facilities			Registration of animal facilities
Meat handlers	Licensing through the issuance of a Certificate of Registration		
Transport carriers	Registration and accreditation		
Laboratories			Accreditation of government and non-government veterinary diagnostic laboratories (AO No. 27, 2004)

[7] *See Assessment of SPS Business Process, January 2005.*

5.2.3 Organizing arrangements

The existing organizational structure of the BAI includes nine divisions, seven of which are DBM-approved, and two are creations of the DA through administrative orders or special orders (**Figure 5**). Out of the nine divisions, seven are involved in some form of industry regulation as well as research and development and training activities (**Table 11**). A separate Research Division is responsible for undertaking applied research on animal health, animal diseases, animal products/by-products and forage/pasture particularly in the areas of biosecurity, animal nutrition, environment and value-adding processes.

Table 11. Functions of divisions and units directly involved in some form of regulation, BAI.

Service/Division	General	Regulatory	R&D and Training
DBM-approved units			
Laboratory Services Division	Provision of laboratory support to regulatory, research and animal disease control activities through the production of biologics and pharmaceuticals, quality control testing, feeds and feedstuff analyses and drug assay.	Provision of support to regulatory activities through quality control tests, chemical analysis, drug assay and production of laboratory animals, bacterial and viral vaccines, pharmaceuticals and diagnostic antigens.	Provision of support to R&D work through the same tests, analyses, drug assays and production activities;
Animal Feeds Standard Division	Implementation of the Feeds and Drug Quality Control Program;	▪ Registration, accreditation and issuance of permits for animal feeds, ingredients, veterinary drugs and products; ▪ Inspection and evaluation activities as well as product standardization	▪ Conduct of R&D and training on feeds;
Marketing Development Division	Formulation of plans, programs, policies, rules and regulations regarding marketing development, marketing information and provision of technical assistance in the implementation of the same.	▪ Accreditation of meat handlers and transport carriers;	▪ Conduct of economic, post-harvest and market research studies
Animal Health Division	Assumption of the lead role in the prevention, control, and eradication of communicable animal disease nationwide	▪ Control in domestic movement of animals	▪ Conduct of studies related to the eradication of hog cholera and Newcastle disease and control of important animal diseases
DA-created units			
National Veterinary	Strengthening of	▪ Issuance of	▪ Conduct of import

Service/Division	General	Regulatory	R&D and Training
Quarantine Services (NVQS) through DA SO No. 240 (2000)	veterinary quarantine services for food security, food safety and global competitiveness	Veterinary Quarantine Certificate and other permits related to international trade; ▪ Control of movement of animals/animal products/by-products for import/export; ▪ Accreditation of domestic importers/ exporters and establishments in other countries that export to the Philippines; ▪ Formulation of policies, rules and procedures pertaining to international movement of animals/ animal products/by products; ▪ Establishment of system of surveillance of foreign animal diseases; ▪ Establishment of international quarantine stations.	risk analysis studies
Philippine Animal Health Center (PAHC) through DA AO No. 450 (1995)	Provision of diagnostic laboratory services	Provision of diagnostic laboratory services in support of regulation activities	Conduct of animal health research and training
Animal Welfare Division[8] through DA-AO	Ensuring of the effective and efficient implementation and advocacy of the Animal Welfare Act of 1998 and its implementing rules and regulations	Registration of animal facilities --- aviary, animal control facility, circus/carnival animal show, hog/poultry farms, veterinary hospital/clinic, etc	Conduct of research and monitoring of quarantine and inspection services

[8] Based on Rule 3 of the IRR, RA No. 8485 (1998).

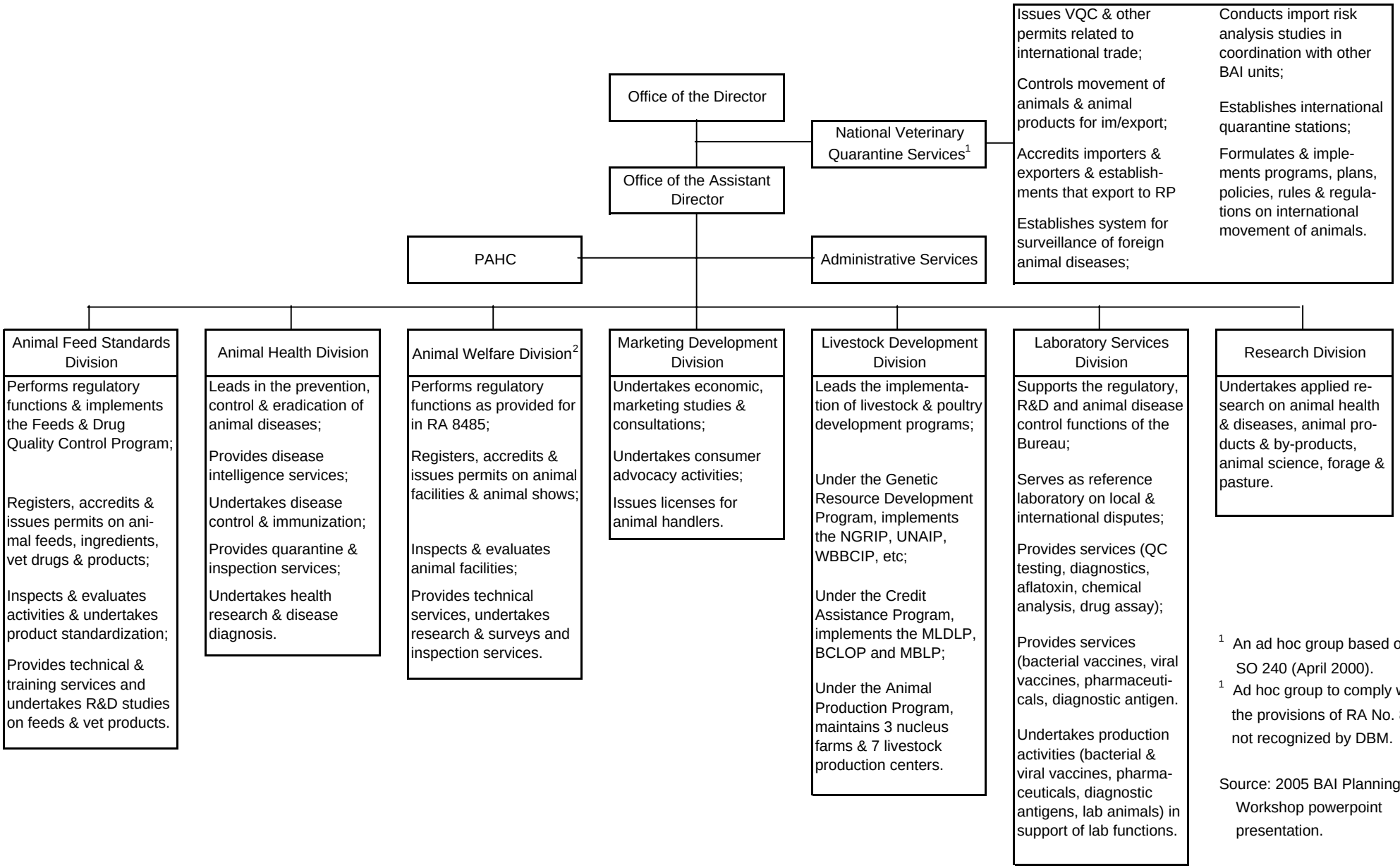


Figure 5. Organizational structure, BAI.

The National Veterinary Quarantine Service

The NVQS is an *ad hoc* operating unit that was created in 2000 in response to a problem on the entry of cattle and beef from Australia. It is in charge of all veterinary quarantine measures covering animals, meat and meat products imported to and exported from the country, a responsibility that used to be with the Animal Health Division. However, the processing of import permits is spread over the other divisions. While quarantine service for imported and exported products rests only with the NVQS, the same service for domestically traded products is distributed among 4 other divisions in the BAI. Support laboratory services are provided by the Laboratory Services Division.

The Philippine Animal Health Center

The PAHC is an offshoot of an FAO-funded project that was implemented until1994. It is, for the most part, a national laboratory with research and development and training functions. The national laboratory serves as support facility in the implementation of the BAI's programs particularly on animal disease control, and in the conduct of research and development as well as regulatory activities. Three sections of the BAI including their staff --- National Animal Disease Diagnostic Laboratory under the Laboratory Services Division, Animal Disease Research Section under the Research Division, Disease Intelligence and Epidemiology Section under the Animal Health Section --- were transferred to the Center to form its initial structure. The cluster laboratory test type for which they are responsible identifies the six sections of the Center (**Annex A**). Both the NVQS and the PAHC have taken over some functions that are originally with the Animal Health Division and the Laboratory Services Division. This has limited the functions of the Animal Health Division to research and development, and to a limited extent, to regulation of some activities in the domestic trade of animals.

The Animal Welfare Division

In 1998, the Animal Welfare Act (RA No. 8485) was enacted 'to protect and promote the welfare of all animals in the Philippines by supervising and regulating the establishment and operations of all facilities utilized for breeding, maintaining, keeping, treating or training of all animals either as objects of trade or as household pets.' The BAI takes animal welfare to mean 'the protection of animals from exploitation by man through the provision and maintenance of appropriate standards of accommodation, feeding and general care, prevention and treatment of diseases and assurance of freedom from harassment and unnecessary discomfort and pain'. RA No. 8485 mandates the BAI to register operators of establishments engaged in breeding, treatment, sale or trading, or training of animals, among others. It is in line with this mandate that the Bureau created the Animal Welfare Division in 2000 as an *ad hoc* division pending the provision of appropriate plantilla positions by the DBM. The BAI's request to formally create the division remains pending with the DBM.

5.2.4 Human resource factors

The BAI has a total workforce of 447, about 40 percent of which are in the 7 divisions involved in some form of regulatory work (**Table 12**). About 96 percent of the workforce hold plantilla items, with the remaining classified as contractual or casual employees. Majority of the employees holding supervisory positions are veterinarians or holders of a masters degree.

Table 12. Number of personnel by division and by type, BAI.

Unit/Division	Total	Plantilla Positions		Contractual/ Casual
		In Approved Division	From Other Divisions	
Office of the Director/Asst Director	24	8	7	9
Animal Feeds Standards Division	19	17	1	1
Animal Health Division	18	16	1	1
Laboratory Services Division	64	61	1	2
Marketing Development Division	30	26	4	0
Livestock Development Division	187	174	13	0
Research Division	55	48	3	4
NVQS	7	0	7	0
PAHC	43	0	41	2
Total Number	447	350	78	19
Percent	100.0	78.3	17.4	4.3

5.2.5 Technical resource factors

The Laboratory Services Division operates and maintains four types of laboratory, namely:

a. Mycotoxin laboratory – For quality assurance for mycotoxin in raw materials for feed milling and feeds sold in the market or used in farms.

b. Veterinary biologics standardization laboratory – For quality assurance for locally manufactured and imported veterinary biologics to ascertain that vaccines used by industry in preventive health care are safe, potent and efficacious.

c. Central animal feed analysis laboratory – For quality assurance of locally produced and imported feeds and feedstuff that are sold in feed outlets and used in farms to ensure feed quality in terms of compliance with declared standard of analysis by manufacturer. The laboratory is equipped with almost 50 types of equipment for proximate and mineral analysis, feed microscopy, miscellaneous analyses, vitamin assay and antibiotic tests. Of the close to 120 units of equipment on record, about 10 percent are either not functional or need repair.

d. Drug assay laboratory – For quality assurance for locally produced and imported antibiotics and vitamins raw materials, veterinary drugs, veterinary vitamins and antibiotic premixes to ensure conformity to specifications in the label claim.

The national animal disease diagnostic laboratory, whose operation and maintenance used to be the responsibility of the Laboratory Services Division, has been transferred to the Philippine Animal Health Center. The laboratory is used also for quality assurance and in animal disease diagnosis of cases brought to the laboratory.

The DA classifies animal diagnostic laboratories nationwide according to their technical capability --- sub-national, regional, provincial/satellite (**Table 13**).

Table 13. Classification of animal diagnostic laboratories based on technical capability, DA.

Technical Capability	Sub-National	Regional	Provincial/ Satellite
Post-mortem examination (necropsy/histopathology)			
Bacterial/fungal isolation			
Antimicrobial sensitivity test			
Agglutination tests for bacteria			
Parasitologic examinations			
Agar gel precipitation test			
Hemagglutination/hemagglutination inhibition test			
Immmunofluorescence assay			
Enzyme-linked immunosorbent assay			
Viral isolation, embryonated eggs or tissue culture			
Total Number of Laboratories			

5.2.6 SPS administration performance

Research and development, extension and training as well as regulation are typical government roles in the development process. The proportion of the BAI's budget for these three major activities to the total budget is estimated at 27.7 percent in 2003 and 22.3 percent in 2004. Among the three major activities, the budget for regulation is highest in 2003 (61.7 percent) and the second highest in 2004 (40.2 percent). The figures suggest that more attention is being given to regulation rather than to research and training (**Table 14**).

The accomplishments in regulation exceeded targets by more than three times for local import permits in 2003, and by close to four times in 2004. Despite the limited resources, the BAI seems to have been able to perform efficiently. Regulation transactions altogether increased from 2003 to 2004 by about 20 percent.

Table 14. Physical targets and accomplishments and budget released by major function, BAI, 2003 and 2004.

Function/Indicator	2003				2004			
	Physical			Budget	Physical			Budget
	Target	Acc	% Acc		Target	Acc	% Acc	
Research & development (no.)				1,835	48	24	50.5	1,524
Extension and training (no.)				2,087	151	89	58.9	4,346
Regulatory				6,308				3,941
Local permits (no.)	7,100	22,891	322.4		7,100	27,162	382.6	
Imp/Exp permits (no.)	12,100	19,253	159.1		12,100	19,673	162.6	
Importers accredited (no.)	60	17	28.3		60	46	76.7	
Foreign facilities visited (no)	4	2	50.0		4	3	75.0	
BAI TOTAL				36,819				35,879

5.2.7 Affiliations

The Committee on Animal Welfare was created to prepare the implementing rules and regulations and appropriate orders to implement the Animal Welfare Act. Consisting of representatives from 6 government agencies and 2 animal welfare societies, the Committee as advisory body in the implementation of the Act reviews the policies and guidelines on animal welfare. The BAI provides the technical and secretariat support to the Committee.

5.3 National Meat Inspection Service

5.3.1 Legal bases

Then known as the National Meat Inspection Commission and renamed in May 2004 through RA 9296 (Meat Inspection Code of the Philippines), the National Meat Inspection Service (NMIS) is a specialized regulatory agency that serves as the sole national controlling authority on all matters pertaining to meat and meat product inspection and meat hygiene. It is mandated to promulgate and implement policies, procedures, guidelines, rules and regulations governing the post-production of livestock, meat and meat products including their marketing, handling, inspection, processing, storage and preservation. It aims to 'protect the interest, health and general welfare of the meat consuming public' and to develop the livestock and meat industries through an effective and efficient delivery of inspection service. The NMIS describes its vision as 'the efficient conversion of food animals into safe and wholesome meat and meat products through the application and compliance to global meat inspection codes and practices, enforcement of a national meat inspection system to protect public health, support animal health programs and facilitate local and international trade'.

5.3.2 SPS-Related Measures

The following SPS-related measures are implemented by the NMIS:

For meat and meat products

a. Inspection of imported meat and meat products through the issuance of Imported Meat Inspection Certificate (IMIC);

For meat plants/establishments

b. Accreditation of meat plants through the issuance of a Certificate of Accreditation
c. Joint NMIS-BAI accreditation of foreign meat establishments through the issuance of a DA Administrative Order
d. Good Manufacturing Practice (GMP) and Hazard Analysis Critical Control Point (HACCP) certification through the issuance of GMP/HACCP Certificate

For meat vans

e. Accreditation of meat delivery van through the issuance of Meat Delivery Van sticker

Others

f. Redress of consumer complaints

5.3.3 Organizing arrangements

The NMIS is governed by the Meat Inspection Board, a policy governing body chaired by the Secretary of Agriculture and whose members come from the NMIS, BAI, Bureau of Food and Drugs, Bureau of Local Government Development, BAFPS and a

representative from a consumer organization. It is headed by an Executive Director who is assisted by a Deputy Executive Director. The structure based on RA 9296 provides for six divisions at head office and Regional Technical Operation Centers throughout the country. The divisions and units directly involved in SPS administration, including their mandated functions, are listed in **Table 15** and **Figure 6**. There is no overlap in division functions.

Table 15. Regulatory functions by division/unit, NMIS.

Divisions/Centers Per RA 9296	Existing	
	Division	Relevant Functions
Plant Operation and Inspection Division	In-Plant Operation Inspection	▪ Undertakes technical supervision of meat plant operations ▪ Manages the GMP and HACCP programs ▪ Undertakes certification of local transport for meat and meat products
Accreditation, Registration and Enforcement Division	Regulatory Division	▪ Formulates and implements policies and guidelines for the accreditation of facilities for processing (dressing plants, slaughterhouse, etc), cold storage and transport (meat delivery vans) ▪ Undertakes surveillance of the movement of meat and meat products at times of disease outbreak
Meat Import/Export Inspection and Assistance	Meat Import/Export Inspection and Assistance	• Undertakes inspection of imported meat and meat products; • Evaluates establishments of exporting countries for disease, residues and contamination; • Recommends certification of export products
Laboratory Services Division	Laboratory Services Division	• Provides support to inspection activities; • Undertakes routine monitoring for quality and safety of meat all stages of production, distribution and sale.
Regional Technical Operation Centers	Regional Operation	• Performs the same functions and undertakes activities at the field level.

Notes: Division functions, plantilla positions, job descriptions and salary grades for endorsement to DBM.
Refer to Annex H for the detailed organizational structure and Annex I for the personnel complement.

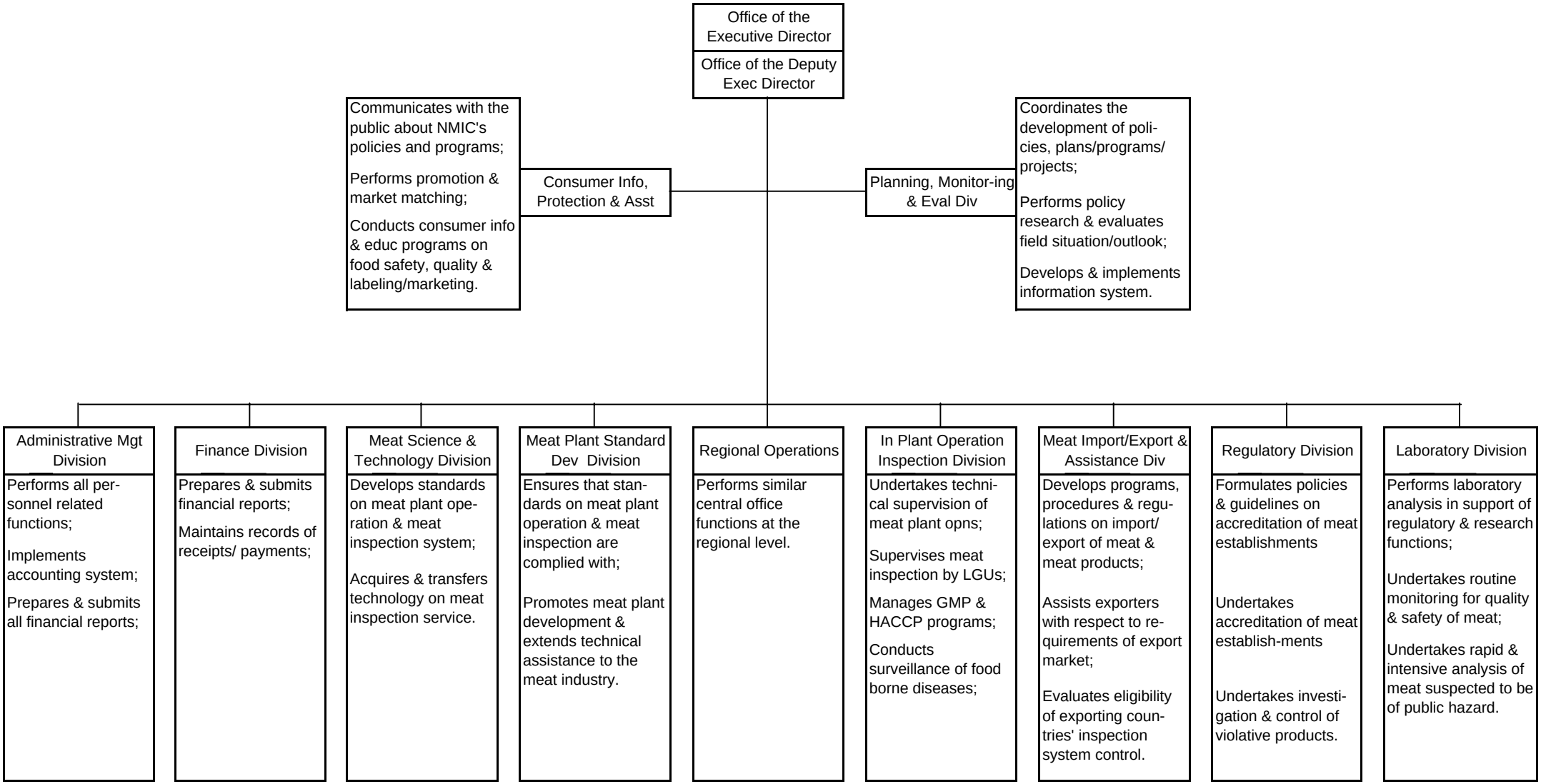


Figure 6. Existing organizational structure as NMIC (AFMA)

5.3.4 Human resources

The NMIS has yet to endorse the delineation of division tasks, job descriptions and salary grades to the DBM. The DBM has approved 395 plantilla positions for the agency, 87 percent of which had been filled.

5.3.5 Technical resources

The central laboratory of the NMIS is capable of providing the laboratory tests listed below. The regional laboratories have the same capability except for the screening test and biotechnology.

a. Product evaluation (organoleptic or sensory evaluation, physical characteristics and pH test;
b. Screening test for antibiotic residue
c. Microbiology examination (standard plate count, Coliform count, bacterial count identification, sterility test and aerobic bacterial isolation)
d. Biotechnology
e. Parasitology for the presence of meat parasites
f. Necropsy

5.3.6 Agency performance

Table 16 shows a typical reporting of program accomplishments among agencies. It is difficult to ascertain how well the NMIS is able to achieve its objectives for two reasons. First, the indicators and target measurements at the objective level are not identified. Second, the physical targets against which accomplishments are to be measured are also not available.

Table 16. Programs and performance, NMIS, 2004..

Program	Objective	Accomplishment
Meat laboratory program	To undertake various laboratory analyses in line with the agency's regulatory functions;	Bacteriological tests for: Local meat -1,784 Canned meat - 838 Processed meat -1,272 Imported, frozen meat - 16,805 Parasitology tests - 16,212; Pathology - 2; Chemical tests - 20,404; Veterinary drug tests - 3,084; Sample evaluation - 20,699; Biotechnology tests - 284.
Plant operation and inspection program	To institutionalize GMP and Sanitation Standards Operating Procedures (SSOP) as requisites to the application of Hazard Analysis and Critical Control Point (HACCP);	Fully implemented for Category 'AAA' meat plants; 49 meat establishments were GMP- certified, and 38 or 78 percent of GMP-certified were issued HACCP certificates.
	To eradicate foot-and-mouth (FMD) disease through cleaning and disinfection of slaughterhouses;	50 slaughterhouses identified, monitored, cleaned and disinfected
	To intensify post-abattoir	15.7 mt confiscated

Program	Objective	Accomplishment
	operations;	
	To develop a master plan for the development of abattoirs nationwide;	Draft National Abattoir Development Master Plan completed;
	To assist LGUs and the private sector in establishing slaughterhouses	10 abattoir module plans developed; 15 slaughterhouses under construction monitored; 18 sets of abattoir plans and designs evaluated; 20 LGUs and private entrepreneurs provided with technical guidance on slaughterhouse construction.
Meat import/export assistance and inspection program		53.6 mt of various meat types re-inspected for domestic transport; 116 traders monitored; 13,604 Certificates of Meat Inspection issued.
Consumer protection and assistance program	To promote meat and meat product quality consciousness among consumers;	35 complaints lodged and resolved;

5.3.7 Revenue generation and utilization

The NMIS levies fees for the regulatory services that it provides. In 2004, the schedule of fees is, as follows:

Service	Fee (Php)
Certificate of Accreditation of meat processing plant by category	
Category 'AAA'	1,800.00
Category 'AA'	1,300.00
Category 'A'	500.00

In the same year, its total revenue from fees, fines and charges amounted to Php61.1 million, which is twice the collection in 2002 (Php30.4 million), and 64 percent more than the amount in 2003 (Php36.8 million).

Until the implementation of RA 9296, receipts from fees are reverted to the National Treasury. Under the Meat Inspection Act and in the agency's first five years of operation or until 2010, no less than 50 percent of fees, fines and charges collected by the NMIS in exchange for its regulatory services shall accrue to a Meat Inspection Service Development Trust Fund (MISDTF). The Fund shall be used to finance the continuous upgrading of laboratory equipment and facilities to meet international standards, training facilities, capability development of technical personnel, research and development, indemnification of condemned animals during ante-mortem inspection, accreditation of foreign meat plants and other forms of assistance and support to the livestock sector.

5.3.8 Feedback mechanism

Established in 2004, the agency's mechanism on redress of grievances allows the general public to lodge complaints through telephone calls or visits to any office of the NMIS. The complaints in 2004 were mostly in the areas of illegal and clandestine slaughtering, sale of lower-than-standard quality meat, unauthorized inter-island transport, adulteration, and mislabeling. All the 35 complaints lodged in 2004 were resolved.

5.4 BAFPS

5.4.1 Legal basis

The Bureau of Agriculture and Fisheries Product Standards (BAFPS) was created through the Agriculture and Fisheries Modernization Act of 1998 (RA 8435) and is tasked with setting and implementing standards for fresh, primary- and secondary-processed agricultural and fishery products. Specifically, the BAFPS is tasked with:

a. Formulating and enforcing standards of quality in the processing, preservation, packaging, labeling, importation, exportation, distribution and advertising of agricultural and fisheries products;

b. Conducting research on product standardization and alignment of local standards with international standards; and

c. Conducting regular inspection of processing plants, storage facilities, abattoirs as well as public and private markets in order to ensure the freshness, safety and quality of products.

Prior to the creation of the BAFPS, the setting of product standards remained with the relevant bureaus and specialized agencies of the DA.

5.4.2 Organizing arrangements

Organizational structure

When created in 1998, the BAFPS did not have provisions for divisional delineation of functions. Up to this time, its formal structure is flat, with only two layers in the hierarchy. In the internal structure, however, the tasks entrusted to the BAFPS are grouped into three major functions --- standards development, laboratory services and technical services. These major functions are distributed across three divisions (**Table 17**). The delineation of functions follows the systems approach whereby standards are set as inputs to implementation and laboratory processes are provided to support it.

Table 17. Functions of divisions and units directly involved in SPS administration, BAFPS.

Service/Division/Unit	Function
1. Standards Development Division	1.1 Formulates and/or modifies national standards; 1.2 Participates in the development of international standards and harmonization of established international standards with national standards; 1.3 Participates in international deliberations and fora on safety and quality of agriculture and fishery products; 1.4 Facilitates consultative meetings and public hearings on the establishment of national standards; 1.5 Serves as Philippine focal point for Codex-related matters.
2. Laboratory Services Division	2.1 Coordinates with laboratories of other agencies with standard enforcement functions on laboratory requirements for testing and method of validation; 2.2 Conducts tests and analysis of raw, primary- and secondary-processed agriculture and fishery products for standards development; 2.3 Conducts research on the safety level for human consumption of

Service/Division/Unit	Function
	additives, contaminants and other deleterious substances used or added in raw, primary- and secondary-processed agriculture and fishery products; 2.4 Conducts laboratory analysis or evaluation on SPS notifications where no international standards, guidelines or recommendations exist; 2.5 Collaborates with relevant agencies including those under the DTI, DOST and DOH on laboratory accreditation and certification of small and medium enterprises; 2.6 Provides inputs to the Standards Development Division with respect formulation or revision of national standards.
3. Technical Services Division	3.1 Implements programs that support consumer protection and safety and heightens awareness to quality assurance systems; 3.2 Conducts inspection and certification of handling and processing plants, storage facilities, abattoirs and public and private markets; 3.3 Enforces and disseminates information on standard requirements for preservation, packaging, labeling, importation, exportation, marketing distribution and advertising of agriculture and fisheries products; 3.4 Undertakes studies on areas not covered by the other divisions such as on non-food agriculture and fishery products, TBT issues, etc.

Organizational chart

As a relatively new bureau of the DA, the BAFP's organization is lean and simple and reporting relationships are clearly defined (**Figure 7**).

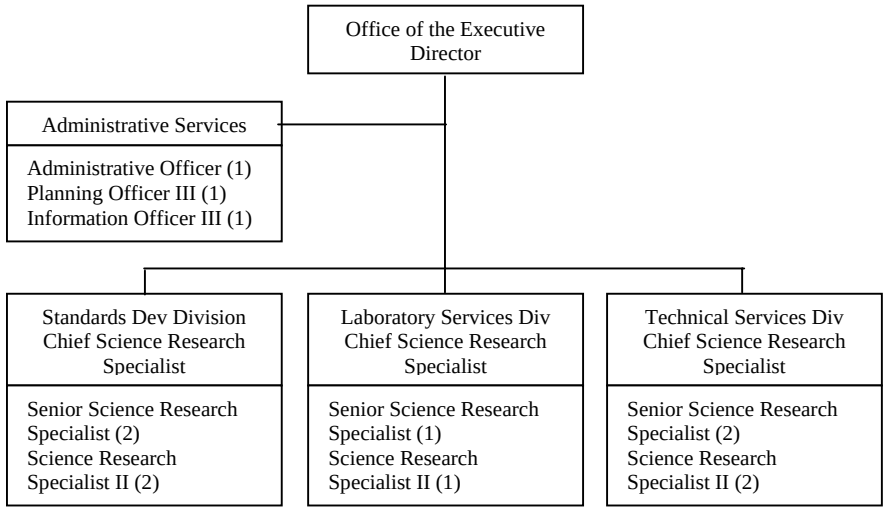


Figure 7. Organizational chart and plantilla personnel, BAFPS.

5.4.3 Human resource factors

The Bureau has 17 plantilla positions --- Executive Director (1), administrative positions (3) and technical positions (13). Three contractual employees --- one Legal Officer and two Medical Specialists --- complement the limited staff. The Bureau

maintains a pool of 22 experts on on-call basis, which means that their services are requested only when the need arises and for specific assignments. In addition, it works closely with other DA agencies and the private sector in the performance of its functions. All technical positions carry the science research specialist position title. Technical personnel have the appropriate educational background and training, some with post-graduate qualifications.

5.4.4 Technical resource factors

The BAFPS does not operate or maintain a laboratory. Rather, it utilizes the laboratory facilities of other DA agencies. However, it has put up a proposal to establish its own laboratory, a plan that needs careful study given the existing laboratory facilities of the agencies that it supports.

5.5 The Food Development Center

5.5.1 Legal basis

The Food Development Center (FDC) is the former Food Research Department (FRD) of the Food Terminal, Inc. (FTI) in charge of establishing grades and standards for fresh agricultural produce. Its involvement in food trade extended to cold storage, packing, food processing and quality assurance activities as the FTI expanded its business to the operation of Kadiwa centers. In 1987, the FDC was transferred to the National Food Authority (NFA) in compliance with commitments under a loan agreement between the Government and the Asian Development Bank, and under a grant agreement with the Japanese Government. The FDC building was constructed in 1987 using grant funds from the Japanese Government.

5.5.2 Functions

The FDC essentially functions as a provider of services for technology development and food safety as well as for quality evaluation. Specifically, the Center has the following functions:

a. Establishes food certification and testing systems that are based on internationally recognized principles and practices;
b. Provides handling, processing and testing technologies to industry;
c. Resolves quality and marketing problems through research; and
d. Upgrades the technical understanding of producers and processors.

The Center's activities are categorized into four groups --- product testing and evaluation, plant and product inspection and certification, produce and process development, and training of producers and processors. The scope of its operations is diverse --- from raw agricultural products to processed foods --- including the packaging and labeling of these products -- and from farm sources to market destinations. Its client base is broad and includes farmers, traders, processors and consumers in the domestic market, and those engaged in international trade such as importers and exporters. The NFA, the Center's mother agency, is also a recipient of the FDC's services. In line with RA 8976 (Act Establishing the Philippine Food Fortification Program), the Center provides the NFA with quality control technology and assistance for the initial introduction of iron fortified rice into the market.

5.5.3 SPS-related measures

FDC activities are demand-driven and are triggered by requests that emanate from both industry and government. Requests for services are mostly in the areas of laboratory examination and GMP and HACCP certification. Laboratory tests requested by clients are usually for chemical analysis, micro analytical (filth) analysis, microbiological analysis, package testing and physical and sensory evaluation. The type of service required and the purpose for which a service is required vary across groups of clients. Exporters normally would like their products tested before making any shipment to minimize the incidence of product recall or non-acceptance of buyer due to lower-than-required specifications.

5.5.4 Organizing arrangements

The FDC is governed by the NFA Council and is headed by a Director who is assisted by an Assistant Director. The five divisions that comprise the Center are responsible for discharging its assigned functions. The divisions are responsible for business process-specific concerns that include industry services, technology development, quality evaluation, support services and engineering operations (**Figure 8**).

5.5.5 Human and technical resources

Central to the Center's continuing success in operations is the 115 strong work force, two-thirds of which is technical personnel, and the remaining one-third is shared equally by non-technical and skilled personnel (**Annex B**). Technical personnel include food scientists and technologists, chemists, microbiologists, nutritionists and engineers. As part of the Center's human resource development program, its staff attend donor-sponsored training courses to update their knowledge on new technologies. Attendance to international fora is another avenue for Center staff to upgrade their technical skills.

The Center's laboratories are fully equipped and capable of chemical analysis (for nutritional components, food additives, food colors, minerals and heavy metals, lipids and related groups, mycotoxins, etc), assay tests, microanalytical analysis, microbiological analysis, and physical and sensory evaluation. The Center also houses a pilot plant, which consists of a wash room, processing rooms, cold room, dehydration room and packaging room. It is also capable of testing various package types and carrying out label evaluation.

5.5.6 Revenue generation and utilization

Income from operations has been growing at quite a rapid pace over a 14-year period, from Php6.7 million in 1987 to Php15.2 million, with the peak at Php17.8 million in 1998. Receipts are able to cover up to 55 percent of the Center's expenses.

5.5.7 Affiliations

The FDC is the:

a. accredited testing laboratory for food, food additives, food processing equipment and packing by the Ministry of Health and Welfare of Japan since May 1986;
b. selective product certification by the US Food and Drug Administration since September 1986;
c. accredited certifying organization for imported food products from the Philippines by the Australian Quarantine and Inpection Service since August 1997;
d. DTI-assigned certifying organization for GMP and HACCP for the Philippine Export Development Council.

6. Organizational Models in SPS Administration

Both the organizational aspect of (see Section 7), and systems for SPS administration, have weaknesses that need to be addressed for the DA to become more efficient and effective in carrying out its SPS regulatory functions. The DA can draw from the organizational arrangements and systems adopted by recognized leaders in the field of SPS administration such as Singapore and New Zealand.

6.1 Singapore Model

Singapore produces a small proportion of its total fresh food consumption, while a few countries supply its fresh food requirements. Livestock, poultry and eggs are supplied by accredited farms in Malaysia, Indonesia, Thailand, Australia and other countries. Accredited establishments in over 20 countries supply frozen and chilled meat. Vegetables and fruits come mostly from neighboring countries as well as Europe, China and Australia. Local fishermen and marine fish farm operators as well as foreign suppliers supply fresh fish. Such high dependence on food imports makes Singapore vulnerable to any disruption in food supplies from traditional sources. It is therefore a policy of its government to continuously identify new sources of food while maintaining its quality and safety for the population.

The Government of Singapore adopts a three-pronged approach to safety and adequacy of quality fresh food. These are: (a) an integrated system of accreditation, inspection and testing; (b) diversification in external sources of farm products; and (c) achieving some degree of self-sufficiency by promoting the adoption of modern and intensive farming systems. To ensure food safety, it adopts a comprehensive and internationally recognized veterinary public health system that involves:

a. review of production system and practices at source;
b. inspection and accreditation of source farms, abattoirs and food establishments;
c. identification of consignments of primary produce to trace sources;
d. inspection of primary product at the points of entry;
e. pre- and post-slaughter inspection at local abattoirs;
f. laboratory tests on livestock, fresh and chilled meat and fish, vegetables, fruits and eggs; and
g. surveillance of high-risk products based on history of violation of safety standards.

Plant and animal health are assured through the inspection and approval of all imports of animals, fish and plants into Singapore. Monitoring and surveillance programs are implemented to ensure that zoonotic diseases are not introduced into the country.

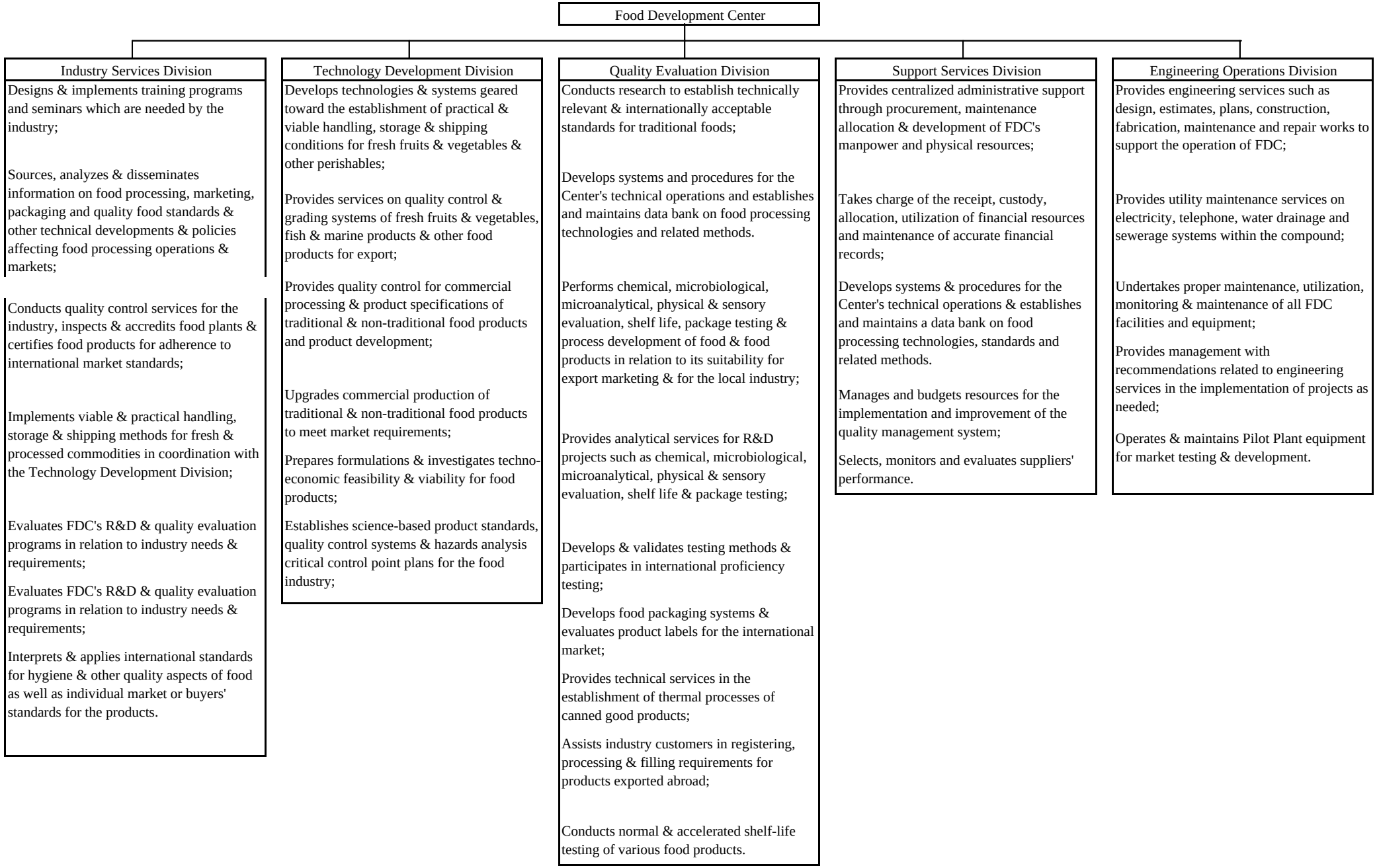


Figure 8. Internal organizational structure, FDC.

The Ministry of National Development is responsible for maintaining the high standard of primary food safety and animal and plant health in Singapore. Under the Ministry and directly responsible for ensuring safe and adequate supply of fresh food and protecting the health of animals and plants is the Agri-food and Veterinary Authority (AVA). The AVA regulates the safety of food from production and import to just prior to retail. It has specific responsibility for the following:

a. setting and enforcement of food safety standards as well as overseeing food labeling;
b. accrediting foreign establishments that export meat, meat products, livestock and eggs;
c. licensing of local poultry dressing plants, pig slaughterhouses, food processing establishments, cold stores and farms and regular inspection of these premises;
d. issuing export health certificates for products exported by local food processing establishments;
e. regulating trade in wildlife, wildlife parts and related products by enforcing the provisions under the Convention of International Trade in Endangered Species of Wild Fauna and Flora;
f. undertaking food safety education and awareness among consumers; and
g. undertaking research and development on agro-technology in cooperation with the private sector, institutes and other government agencies.

The AVA works closely with the ISO17025-accredited Veterinary Public Health Laboratory (VPHL), which offers a comprehensive range of analytical services covering a wide spectrum of chemical and microbiological hazards. The VPHL undertakes laboratory analysis of primary produce and monitors food quality. It is capable of undertaking tests for diseases, food poisoning and spoilage organisms, harmful chemicals and toxins and uses internationally recognized procedures and standards as well as state-of-the-art technology for multidisciplinary laboratory testing services. It is, in fact, the national reference laboratory for pesticide residues.

6.2 New Zealand Model

Unlike Singapore, which is a major importer of food products, New Zealand is a major exporter. More than 80 percent of the food it produces is exported, accounting for almost half of the country's export earnings. Meat products are its second largest export earner, which is about 17 percent of total exports. Its lamb, mutton and beef are mostly exported, while almost 100 percent of its pig and poultry production are sold in the domestic market. Its major markets for meat products are the United Kingdom for lamb, the United States and South Korea for mutton and beef and a host of other countries in Europe and Asia for a mix of meat products. Food safety is therefore a priority of the government not only to protect the country's trade but the health of its population as well.

New Zealand's Ministry of Agriculture and Forestry (MAF) is divided into nine business units, three of which are concerned with food safety and plant and animal health. These are the New Zealand Food Safety Authority, the Biosecurity New Zealand and the MAF Quarantine Service. Established in 2002, the New Zealand Food Safety Authority (NZFSA) is a semi-autonomous body with two key functions, namely, to protect and promote public health and safety and to facilitate market access for New Zealand's food and food-related products. It implements the Food Act and administers legislation covering food for sale in the New Zealand market, primary processing of animal products

and assurances related to their exports, exports of plant products and controls the surrounding registration and use of agricultural compounds and veterinary medicines.

The NZFSA operates to achieve three strategic outcomes --- healthy population, enhanced economic growth and prosperity and safe, freer and rules-based trade. To achieve these, the Authority is organized into nine business groups under the leadership of an Executive Director. The division of tasks among the nine groups is shown in **Figure 9**.

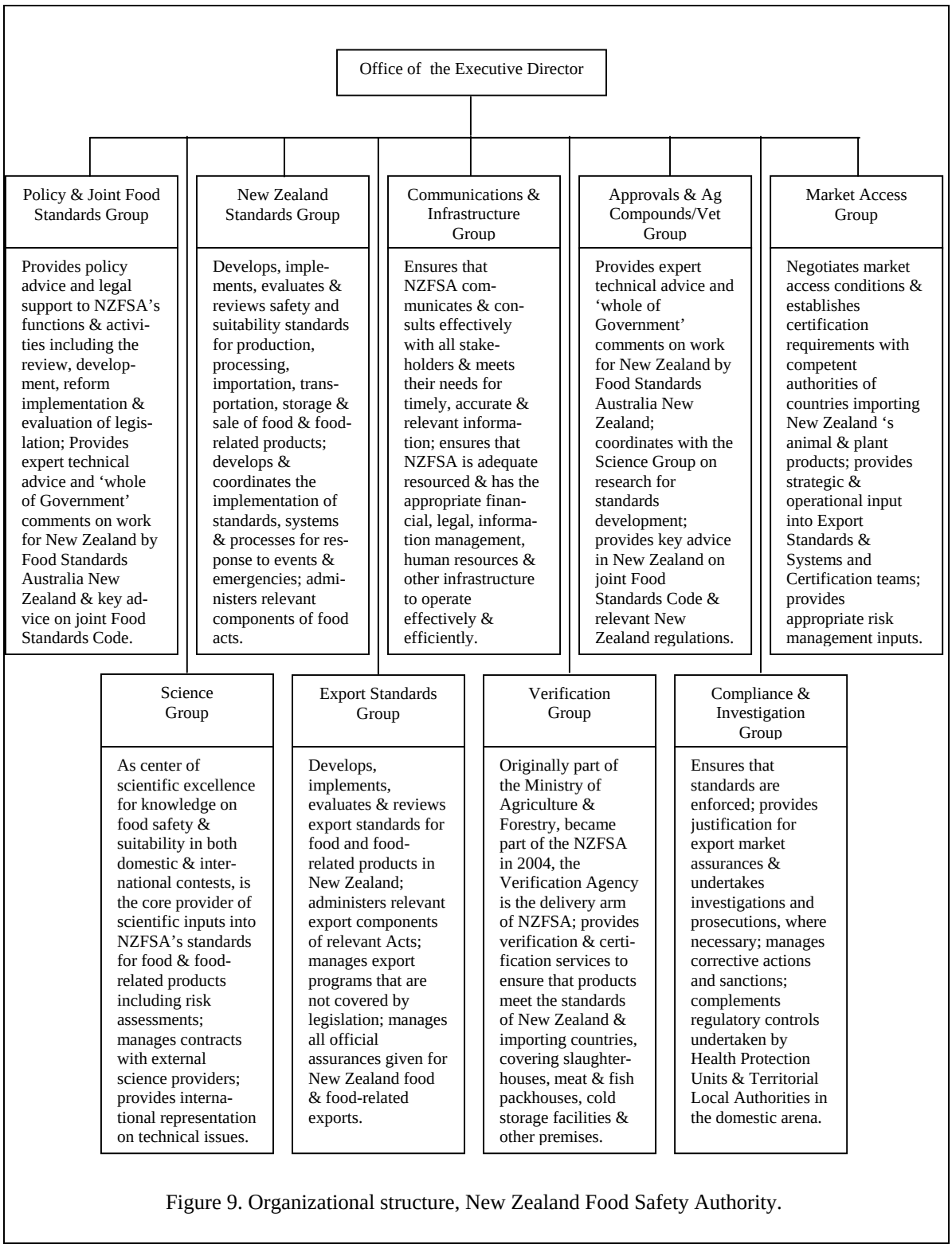


Figure 9. Organizational structure, New Zealand Food Safety Authority.

The structure of the NZFSA-Verification Agency is lean with two main groups under the leadership of a Director --- Operations Group and Agency Technical Group. Headed by a Manager, the Operations Group consists of three teams --- training team, live animal and germplasm import and export team and a team for finance, human resource management and administration. The Agency Technical Group consists of nine teams that are geographically based, with each team being composed of a Team Leader and accredited persons involved in verification and certification activities. The manager of the Group is supported by a Technical Coordination Team that is also responsible for quality assurance functions (**Figure 10**). Altogether, the NZFSA-VA has a work force of 280 including 200 veterinarians who oversee the production operations in about 800 locations.

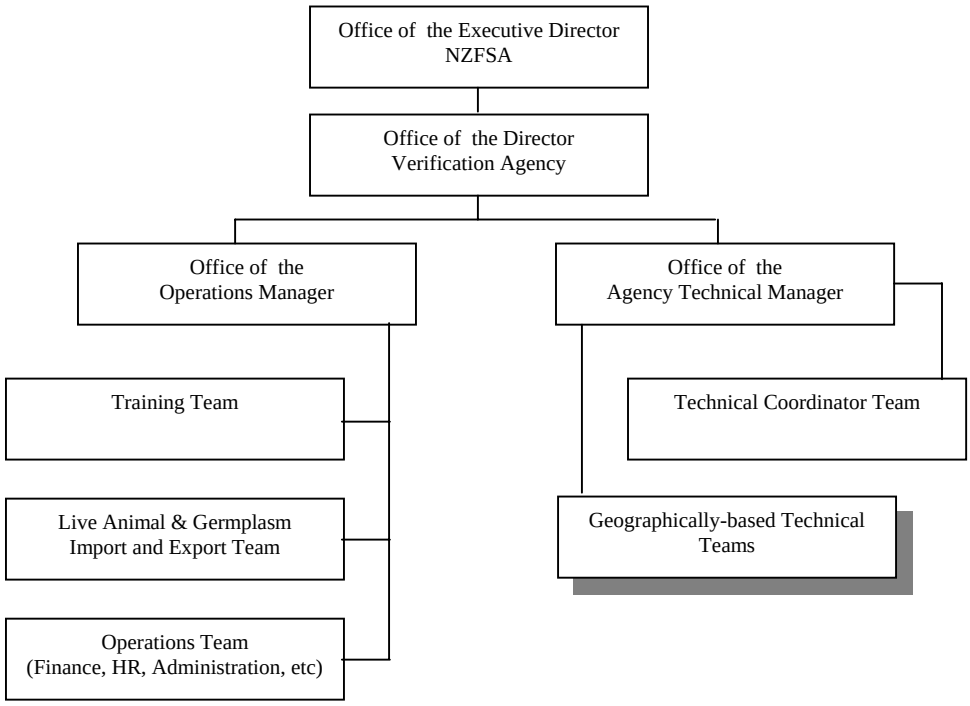


Figure 10. Organizational chart, NZFSA Verification Agency.

New Zealand's border protection system, a joint responsibility of MAF Biosecurity New Zealand and MAF Quarantine Service, is one of the best in the world. Established in 2004, the Biosecurity New Zealand as lead agency in New Zealand's biosecurity is tasked with a 'whole-of-system' leadership role encompassing economic, environmental, social and cultural concerns. It develops standards for bringing in risk goods and spells out the conditions that must be met through the entire journey from country of origin to New Zealand shores.

The Quarantine Service is an operational unit of the MAF whose primary role is to prevent the entry of unwanted pests and diseases. It provides inspection and clearance services for incoming passengers, cargo, vessels or aircraft, identifies and protects against potential biosecurity risk. It operates systems and implements a diverse range of procedures to effectively prevent the entry of risk material, in accordance with standards set by Biosecurity New Zealand. Targeted risk management inspections aim to identify

and seize risk material as it comes across the border. Imported goods that fail to meet quarantine requirements are treated, re-exported, or destroyed.

For the Service, post-entry quarantine is an extension of control at the border. It provides safe holding facilities to ensure imported plant or animal materials can be observed and tested for pests and diseases by suitably qualified people working to MAF Biosecurity standards. Ships and aircraft may only enter through registered ports and airports, which have approved facilities for border clearance work. A Quarantine Officer's role is to check that risk goods entering New Zealand comply with biosecurity requirements and to identify possible pest and disease entry pathways.

To fulfill all these tasks, the Service has more than 500 staff in 24 locations that cover main air and seaports.

In 1995, New Zealand and Australia entered into a partnership to develop joint food standards to protect public health and safety under the Food Standards Australia-New Zealand (FSANZ). The FSANZ's functions are: (a) to develop and review food standards; (b) to coordinate food surveillance and recalls; (c) to conduct research; (d) to assess policies about imported food; and (e) to develop code of practice.

7. Organizational Issues

Dominance of regulatory activities over research and development and extension and training activities

Three types of functions and activities are common in the agencies under study, namely: (a) regulatory; (b) research and development; and (c) training and extension. Among the three, it appears that regulatory functions are relatively more dominant based on: (a) the proportion of the budget for regulations to the total budget which, based on BAI figures is roughly at 28 percent; and (b) the proportion of actual physical accomplishments to physical targets which, in many cases, is more than ten-fold. The private sector perceives the degree of regulation applied in the industry to be restrictive rather than facilitative or developmental. Lesser attention given to research and development and training and extension also negates the development objectives of agencies especially those that target the vulnerable groups.

Spread of regulatory functions across divisions

Except for laboratory services, which are supportive of rules and regulations issued by agencies, regulatory functions for the same group of businesses are spread across at least two divisions in an agency. For example --- to move animals from a farm to a livestock auction market and later, to a slaughterhouse, a shipping permit has to be secured from the BAI or RFU**.** The transport carrier has to secure a license, and the meat handler, an accreditation, from the Marketing Development Division of the BAI**.** A realignment of regulatory functions could be more private sector-friendly and could be facilitative in terms of monitoring of business transactions.

Imbalance in the distribution of division functions

Except for laboratory-related functions, the distribution of functions across divisions seems to be lop-sided with some divisions being over burdened with daily

routines. This is probably due to the compartmentalization of agency functions across divisions, some by thematic area, some by product or service, while others are by mix of thematic area and product or service.

Technical and administrative supervision over field offices exercised by separate units

The reporting arrangement for supervising the field staff of agencies in the DA is either for technical concerns only or for both technical and administrative concerns. The field PQS stations of the BPI outside Metro Manila, for example, are under the technical supervision of the PQS Central Office, but are under the administrative supervision of the regional heads. The PAL field staff, also of the BPI, is technically and administratively accountable to the NPAL. It is not clear under what circumstances or for what reasons these two reporting arrangements were decided on. According to key informants at the BPI and the BAI, technical activities are adversely affected when the administrative supervision is maintained with the RFUs especially in cases where region-led activities are given priority in the provision of funds and other logistical support. Quarantine officers prepare two reports that are not necessarily in the same format. Double counting of accomplishments is not a remote possibility as the Central Office receives reports from both the Quarantine Officer and the Regional Director. There have been reported cases of decisions made or information released by the RFUs that could not have been authorized by Central Office.

Duplicative or overlapping implementation of procedures

The Study Team did not encounter any case of overlap or duplication in procedures to implement regulatory activities. Overlap or duplication of work, however, reportedly takes place where there is a change in responsibility center for successive steps in implementing regulatory procedures. A typical example is the transfer of responsibility when meat stocks are cleared by the BAI for release to, and receipt of, the NMIS for inspection at cold storage. It seems that there is some kind of mistrust in each other's technical capability, or the motivation to protect turf.

Lack of uniformity in incentive scheme for provision of inspection services results in redirection of priorities in assigned tasks

Present BPI guidelines for the fumigation of wood packaging materials allow requesting private sector-clients to cover the cost of transportation and/or food of BPI-assigned officer to supervise the fumigation, but the rates are not fixed. For one officer who is faced with fulfilling a range of jobs in a day, priority would be given to activities that provide 'incentives,' which fumigation inspection clearly is.

None to weak feedback mechanism on results of regulatory activities to trigger change in systems and procedures for implementing regulatory measures

A wealth of data has been accumulated over years of implementing a wide range of regulatory measures. If analyzed, these data could provide management with useful feedback information on the results of regulations as well as on procedures that require enhancement, or on specific regulations that are no longer necessary. Unfortunately, no agency has attempted to evaluate the implementation of regulatory measures.

Weak planning, monitoring and evaluation of agency programs and projects

Planning seems to be a weakness in most of the agencies under study. Objectives are unclear and measurements for indicators at the objective level are absent, which do not allow for the evaluation of effects on target beneficiaries. Performance indicators are focused on physical outputs, which is probably due to the DBM planning and budgeting structure. While effectiveness of agency services on target clients is one of the evaluation parameters in the conduct of this organizational study, deficiencies in planning and monitoring of outputs and results and virtual lack of evaluation activities do not allow analysis of effects of regulatory measures.

8. Summary of Findings

7.1 Functionality

7.1.1 Tasking and planning

The pattern of task groupings in the five DA agencies as shown in the respective organizational structures is summarized in **Table 18** below.

Table 18. Pattern of task groupings by agency, DA.

Item	BPI	BAI	NMIS	BAFPS	FDC
Project development objectives and measurable indicators	Well defined objectives, but lacks indicators	Well defined	Well defined	Well defined	Well defined
Activities and measurable indicators	Present	Present	Present	Present	Present

7.1.2 Organizing arrangements and reporting relationships

The functionality of agencies defined in terms of organizing arrangements and reporting relationships is summarized in the table below. The grouping of tasks is compartmentalized based on thematic area in all agencies, except in the BAI where the product and service scope of its regulatory functions is relatively wider.

Table 19. Organizing arrangements and reporting relationships by agency, DA.

Characteristic	BPI	BAI	NMIS	BAFPS	FDC
Division of labor	By thematic area	By thematic area and by product or service	By thematic area	By thematic area	By thematic area
Span of management	Too wide	Wide	Wide	Narrow	Wide
Chain of command	Clear	Clear	Clear	Clear	Clear
Rules and procedures	Clear according to the private sector	Clear according to the private sector	Clear according to the private sector	Clear according to the private sector	Clear according to the private sector
Delegation of authority	Practiced at higher level of hierarchy, but its	Practiced at higher level of hierarchy	Practiced at higher level of hierarchy	Practiced at higher level of hierarchy	Practiced at all levels of hierarchy

Characteristic	BPI	BAI	NMIS	BAFPS	FDC
	practice at lower level of hierarchy result in perceived low quality of service				
Specification of authority	Present, but not in use	Present, but not consolidated	Present, but not consolidated	Present, but not consolidated	Present, consolidated and in use
Informal organizational arrangements	Present	Present	Present	Present	Present
Internal coordination	Relatively weak	Relatively weak	Moderate	Relatively strong	Strong
External coordination	Moderate	Moderate	Moderate	Moderate	Moderate
Management manual	Present, but not in use & not updated	None	None	None	Present and in use and updated

As shown in the organizational charts, the span of command of the head of office varies from narrow to very wide. A relatively wide span of command could be overcome by delegating authority to other key officials.

According to private sector participants to the consultations convened by the Study Team, the chain of command is clear. Delegation of authority is commonly practiced at the higher level of the organizational hierarchy. It is also practiced at the lower level, but this poses problems that are associated with low quality of service. Specification of authority is present in all cases, but these are either not in use or not updated. The creation of informal organizations such as ad hoc groups, committees, task forces is also a common practice especially in activities that require inter-agency collaboration. Only the BPI and the FDC are ISO-certified. The BPI, however, was unable to make follow up work and pledges on the level of quality management were not achieved.

7.2 Effectiveness

The logical framework approach is a powerful tool in designing programs and projects as well as in formulating and implementing monitoring and evaluation systems. Unfortunately, this approach is not applied in government planning and budgeting exercises. The present system focuses on the identification of targets and monitoring of accomplishments for physical outputs. The absence of clear program and project objectives does not allow monitoring and evaluation for results. The study therefore is unable to measure the effectiveness of regulatory functions performed by the agencies.

7.3 Networking and alliance building

All agencies are able to build alliance with local and international partner organizations in government and the private sector, and use the network of contacts in the exchange of information. Reported alliances established by agencies are with partners in countries that are also major trading partners such as the USA, Canada, Japan and Australia.

7.4 Sustainability

Most of the time, it is the budget for O&M particularly for laboratory facilities that is the first to suffer from budget cutbacks. In the RFUs where most of these facilities are located, O&M of laboratories is often part of the least priority expenditure items. Funds accumulated by the BPI from quarantine fees and charges had not been utilized for O&M of its laboratories. The NMIS will start utilizing its retained funds only in 2006. Only the FDC is able to retain income receipts, and this is because of its attachment to a government corporation. Meanwhile, units and offices are unable to maintain the operation of equipment due to present policies on the treatment of fund receipts.

Table 20. Sustainability of SPS-related operations by agency, DA.

Item	BPI	BAI	NMIS	BAFPS	FDC
Charging of fees for services	Yes	Yes	Yes	No	Yes
Cost recovery	Partial	Partial	Partial	n/a	Partial
Range of annual collection	For PQS, Php6.0 million to Php8.0 million; For NPAL, Php1.0 million to Php2.0 million	At least Php60 million	Php 62 million in 2004; 20% increase expected in 2005	n/a	Php14.0 million to Php18.0 million
Utilization or disposition of revenue	For PQS, retained by BPI, but had not been used for O&M; For NPAL and PAL, reverted to National Treasury	Reverted to National Treasury	To be retained for O&M starting 2006	n/a	To finance O&M

9. Recommendations

Organizational development in the context of this study is defined as the process of making changes in organizations in order to properly respond to the demands of their operating environments as well as to meet the demands for efficiency and effectiveness in public service. Except for the FDC, which is not a regulatory body and is part of a government corporation, the change in task groupings in the BPI, BAI, NMIS and BAFPS could be zero or no change, partial or full, but combined with improvements in the SPS system and procedures. This study considers three options as shown in **Figure 11**.

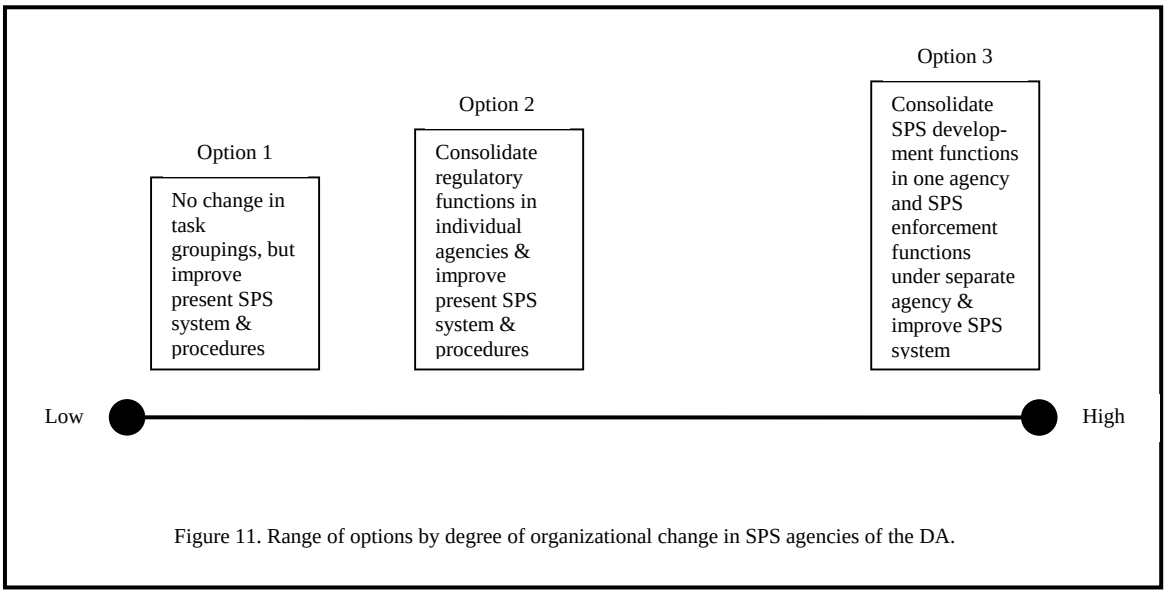


Figure 11. Range of options by degree of organizational change in SPS agencies of the DA.

<u>Option 1</u>: ***No change in task groupings in individual agencies, but improve the present SPS system and procedures***

Under this option, the task groupings as defined in the organizational structures shall remain the same. Changes shall be limited to improvements in SPS procedures as recommended in a separate activity under this TA. Such changes shall be accompanied by capability building measures to ensure that concerned technical and support staff properly implement the revised procedures. The degree of organizational change under this option is the lowest among the three.

<u>Option 2</u>: ***Merge and/or realign the regulatory functions in individual agencies, realign the positions and improve the present SPS system and procedures***

The proposed organizational change in the BPI entails the realignment of the PQS from a staff division to a line division under the Office of the Director/Assistant Director, rationalization of PQS and laboratory services staffing pattern at all operating levels, updating of the Quality Management System Manual and initiation of work to professionalize the plant quarantine service in the Bureau.

At the BAI, the proposed merging specifically refers to the transfer of the functions of the NVQS to the Animal Health Division under a new section, and the functions of the PAHC to the Laboratory Services Division also under a new section. The merging shall be anchored on the process flow under an improved SPS system, and shall be based on a human resource evaluation study to determine the appropriate staffing pattern for the expanded divisions. The study shall utilize historical data and projections on the volume of transactions for specific SPS measures.

The NMIS is yet to design a suitable organizational structure and to develop rules, regulations and procedures for most of the provisions under RA 9296. For its structure, the proposal is to rename the Accreditation, Registration and Enforcement Division to the Regulatory Division, and to transfer the regulatory functions of the Meat Import/Export Assistance Division to the renamed division. This would require redesigning of the

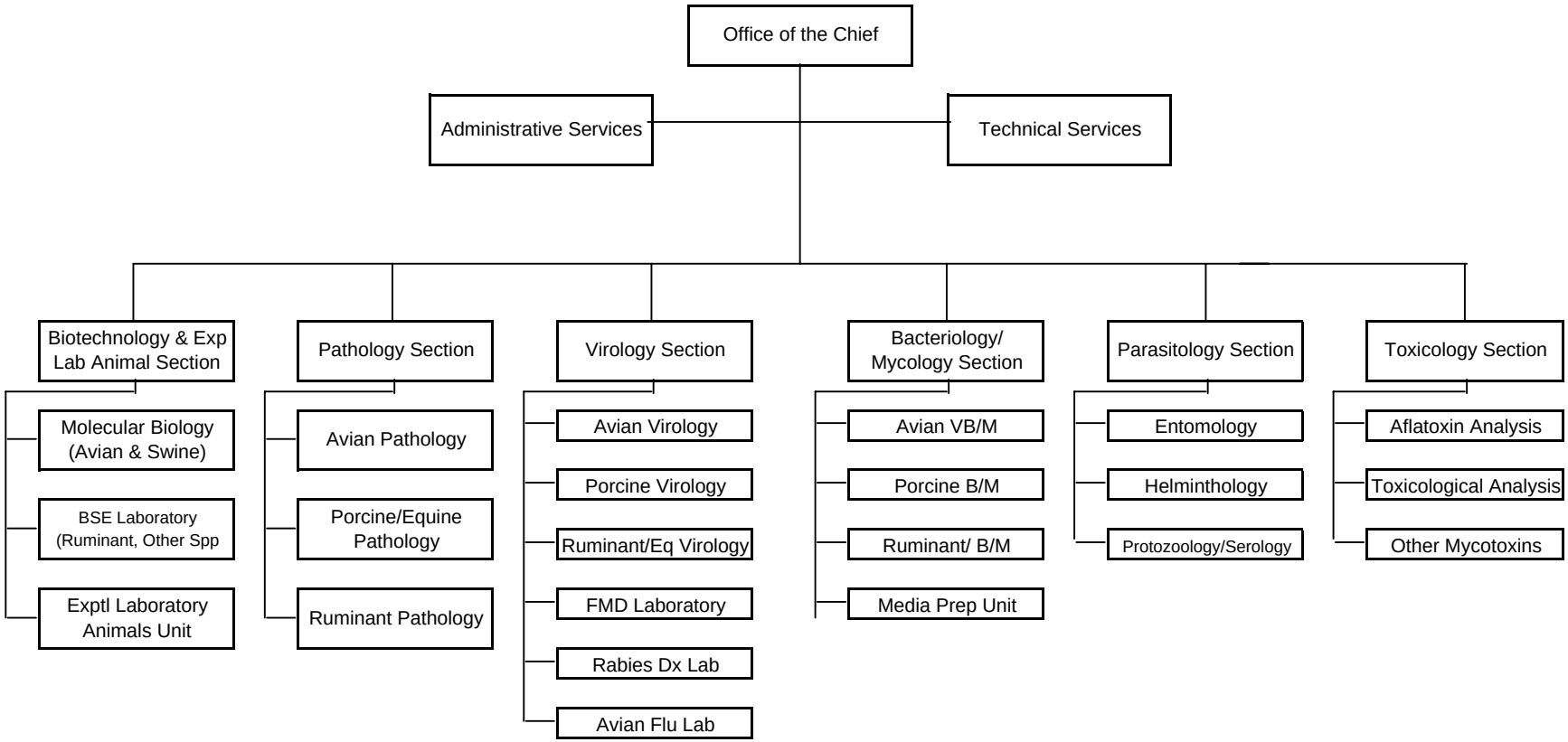
staffing pattern and realignment of positions. SPS-related procedures shall also be improved paying particular attention to avoid the overlap or duplication of functions with the BAI.

Option 3: Consolidate SPS development functions in a single agency and SPs enforcement functions in another agency, rationalize all laboratory services and improve the SPS system and procedures

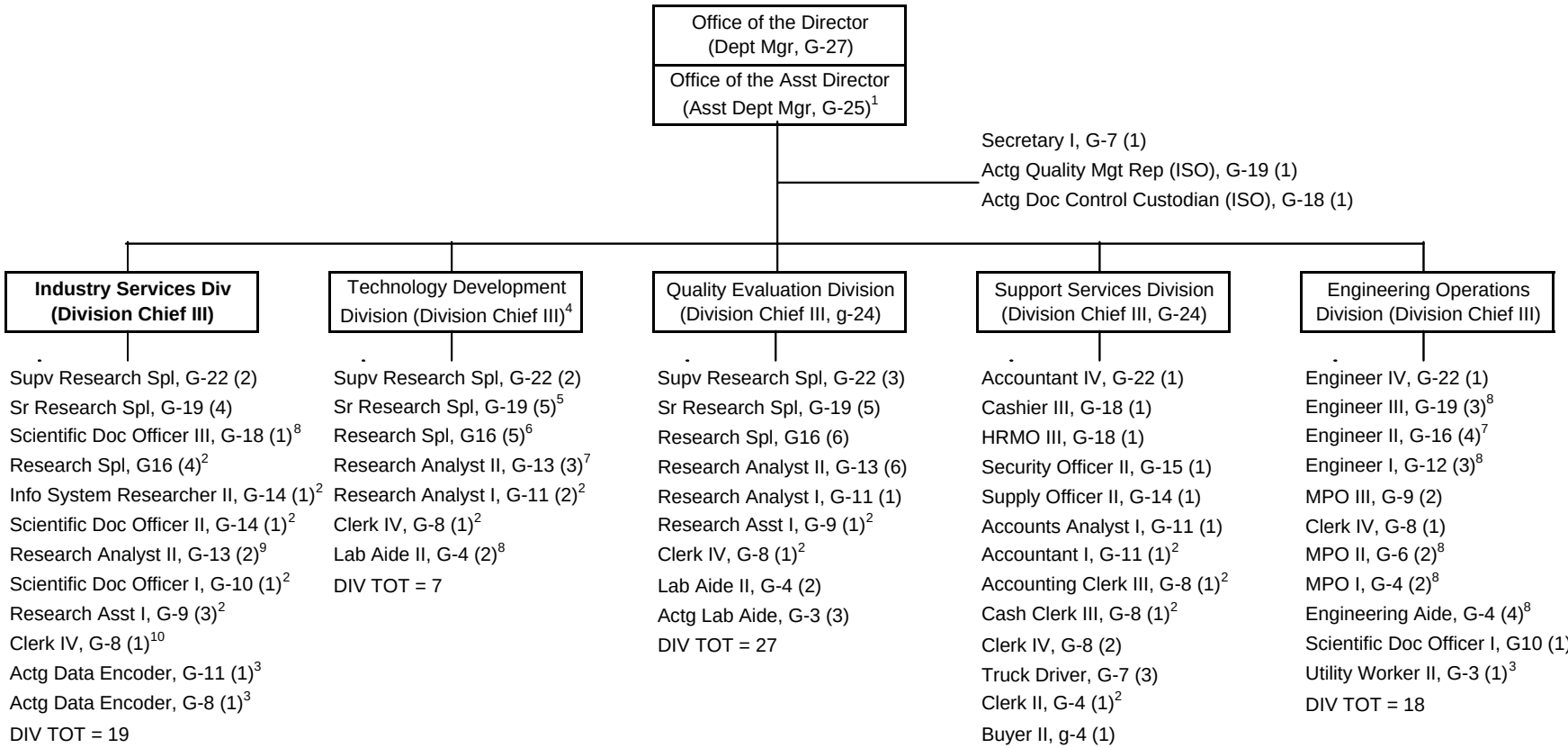
Some overlap in the commodity scope and client base of the BAI, NMIS and BPI makes integration of the SPS functions of these agencies a logical option in the medium and long term. Following the principle of check and balance, there remains a need to separate the development functions from the enforcement functions. The third option is to consolidate these functions of the three agencies under two separate agencies --- an SPS development agency and an SPS enforcement agency. The SPS development agency could build on the present structure and functions of the BAFPS. The new SPS enforcement agency shall be a regulatory body that would be supported by a rationalized laboratory services within the DA. This option involves extensive changes, but the benefits are extensive as well in terms of better service to private sector clients and cost-efficiency in operations.

Table 21. Comparison of proposed options for organizational change.

Item	Option 1	Option 2	Option 3
Extent of change	Minimal	Less than average	High
Required time to carry out changes	Up to 6 months	Up to 12 months	At least 3 years
Perceived effects on:			
Clients			
Time	Fairly reduced	Moderately reduced	Highly reduced
Cost	Fairly reduced	Moderately reduced	Highly reduced
Accessibility to services	Fairly accessible	Fairly accessible	Highly accessible
Agency			
Efficiency	Low	Moderate	High
Effectiveness	Low	Moderate	High
Instrument for change	None	DA AO	RA



Organizational chart, PAHC, BAI.



[1] Division Chief III, Support Services Division, on acting capacity
[2] Vacant position
[3] Additional position
[4] One Supervising Research Specialist on acting capacity
[5] Three vacant positions
[6] Four vacant positions
[7] Two vacant positions
[8] One vacant position
[9] Four additional positions
[10] One additional position

Actual staffing pattern, FDC