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Scoping Study on Reducing Unnecessary Regulatory Burdens in the Philippine Food Manufacturing Industry

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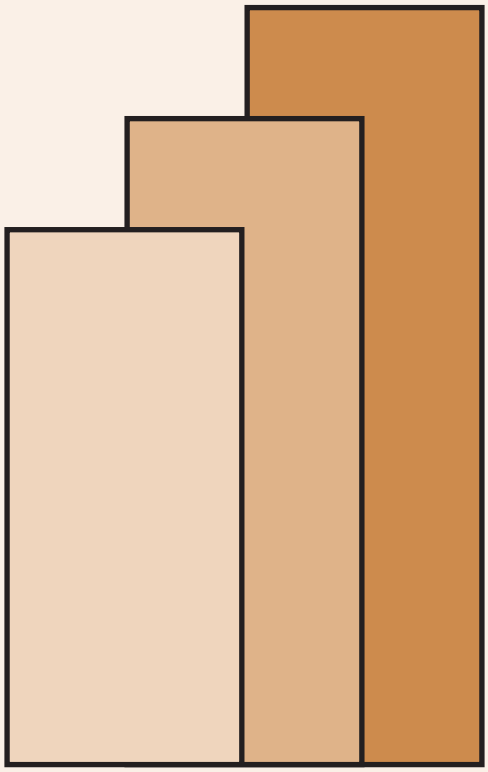

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SCOPING STUDY ON "REDUCING UNNECESSARY REGULATORY BURDENS IN THE PHILIPPINE FOOD MANUFACTURING INDUSTRY"

NEXUS Agribusiness Solutions

Abstract

The food manufacturing industry (FMI) is a major contributor to the country's total manufacturing output. However, despite the industry's performance in terms of job creation and income generation, it is constrained by existing regulatory procedures and processes. A scoping study providing an assessment of the Philippine FMI subsectors and the regulatory system governing it is reported here. Specifically, this study aims to map out the existing regulatory procedures and processes in the sector, determine key bottlenecks in the regulatory process chain, and prepare an estimation of the regulatory burden of the bottlenecks. Literature review and consultations were conducted for various food manufacturing subsectors (FMS) and concerned government agencies. This scoping study revealed that regulatory bottlenecks are related to four major concerns, namely (1) organizational matters, which are related to both administrative and human resource requirements of Food Safety Regulatory Agencies (FSRAs); 2) regulation, which refers to the compliance requirements, regulatory, associated fees; 3) trade and market access; and 4) consumer-related concern especially the low consumer rights awareness and movements. Thus, industry wide plans covering both development tracks and the needed regulatory enhancements covering the above-mentioned areas would be beneficial to all the FMS. An in-depth study of the sectors, particularly that of the other food products, dairy sector, and grain mill and starch products, should also be given due consideration.

Keywords: food manufacturing industry, regulatory policies, regulatory burden, Food Safety Regulatory Agencies, Regulatory Management System

List of Acronyms

ADB	Asian Development Bank
AMAS	Agribusiness and Marketing Assistance Service
ANP	Association of Negros Producers
BAFPS	Bureau of Agriculture and Fishery Product Standards
BAI	Bureau of Animal Industry
BAMS	Bureau of Agricultural Material Standards
BFAR	Bureau of Fisheries and Aquatic Resources
BFAR	Bureau of Fisheries and Aquatic Resources
BMMC	Baldomero Maria Muscovado Milling Corporation
BOC	Bureau of Customs
BOQ	Bureau of Quarantine
BPI	Bureau of Plant Industry
BPS	Bureau of Philippine Standards
BSMED	Bureau of Small and Medium Enterprise Development
CDA	Cooperative Development Authority
CFRR	Center for Food Regulation and Research
CHAMFLOUR	Chamber of Philippine Flour Millers
CPAB	Consumer Protection Advocacy Bureau
CPR	Certificate of Product Registration
CPRS	Client Profile Registration System
CUP	Consumers Union of the Philippines
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
DFSCO	Dairy Food Safety Compliance Officer
DILG	Department of Interior and Local Government
DOH	Department of Health
DOST	Department of Science and Technology
DTI	Department of Trade and Industry
ECC	Environmental Compliance Certificate
EMB	Export Marketing Bureau
EU	European Union
F&B	Food and Beverage
FAR	Fishery and Aquatic Resources
FBO	Food Business Operators
FDA	Food and Drug Administration
FMI	Food Manufacturing Industry
FMS	Food Manufacturing Subsectors
FNRI	Food and Nutrition Institute
FPA	Fertilizer and Pesticide Authority
FSCO	Food Safety Compliance Officer
FSRA	Food Safety Regulatory Agencies
GAA	General Appropriation Act
GAS	General Administration and Support
GDP	Gross Domestic Product
GRI	General Rate Increase
KII	Key Informant Interview
KKMI	Katipunan ng mga Kooperatibang Manggagatas Integrated Cooperative
LGU	Local Government Unit
LLDA	Laguna Lake Development Authority

LTO	License to Operate
MFO	Major Final Output
MinDA	Mindanao Development Authority
MRP	Manufacturing Resurgence Program
MSMEs	Micro Small and Medium Enterprises
NDA	National Dairy Authority
NFA	National Food Authority
NGA	National Grain Authority
NMIS	National Meat Inspection Service
NSW	National Single Window
NTC	National Telecommunications Commission
OECD	Organization for Economic Cooperation and Development
OSEC	Office of the Secretary
PAB	Philippine Accreditation Bureau
PAFMI	Philippine Association of Flour Millers, Inc
PAMPI	Philippine Association of Meat Processors Inc
PCA	Philippine Coconut Authority
PDEA	Philippine Drug Enforcement Agency
PhilFoodex	Philippine Food Exporters
PMCI	Philippine Morinda Citrofolia Inc
PNP	Philippine National Police
PPSD	Plant Product Safety Service Division
PQSD	Plant Quarantine Services Division
RIL	Regulated Import List
RFM	Republic Flour Mill Foods Corporation
RFO	Regional Field Office
RIA	Regulatory Impact Assessment
RMS	Regulatory Management System
SME	Small and Medium Enterprise
SRA	Sugar Regulatory Administration
USAID	United States Agency for International Development

Executive Summary

The food manufacturing industry (FMI) is a major contributor to the country's total manufacturing output. Despite the industry's performance in terms of job creation and income generation, the industry is constrained by existing regulatory procedures and processes. It is in this context that the research team conducted a study to assess the Philippine FMI subsectors and the regulatory system governing it. Specifically, the objectives of the study are the following: (1)describe the regulatory environment of the food manufacturing sector in the Philippines; (2) map out the existing procedures and processes to meet regulations on the sector; (3) determine key bottlenecks in the regulatory process chain for reducing unnecessary regulatory burden in the sector; (4) prepare an estimation of the regulatory burden of the bottlenecks; (5) recommend policy reforms and strategies to address the regulatory burden; and (6) recommend food manufacturing sub-sectors that will be prioritized for in-depth studies on their regulations.

In order to conduct the study, literature review and consultations were made for each of the eight (8) food manufacturing subsectors (FMS), namely, (1) processed and preserved meat; (2) processed and preserved fish crustaceans and mollusks; (3) processed and preserved fruits and vegetables; (4) manufacture of vegetables and animal oils; (5) manufacture of dairy products; (6) manufacture of grain mill products, starches and starch products; (7) manufacture of other food products; and (8) manufacture of beverages. Consultations were conducted across various scale of business, type of product, and geographical location.

Results of the study indicate the regulatory bottlenecks vary among the stakeholders. The government sector, represented by the Food Safety Regulatory Agencies (FSRAs), raised the inadequacy of both financial and human resources as the main hindering factor affecting their ability to enforce regulatory processes and verify compliance in a timely manner. In the case of the FMIs, compliance costs associated to regulatory policies were observed to be not much of a concern of the industries because of its minimal share to the industry's operational cost. As such, delays in the processing time as well as the multi-agency requirement for individual certifications have associated impacts in terms of delayed product marketing and opportunity losses. On the other hand, the seeming disinterest of the consumer sector in lieu to regulatory procedures is a challenge for FSRAs on how to enhance consumer awareness and education.

Overall, this scoping study revealed that regulatory bottlenecks are related to four major concerns, namely (1) organizational matters - administrative and human resources 2) regulation - compliance requirements, regulatory, associated fees; 3) trade and market access and 4) consumer related. Thus, industry wide plans covering both development tracks and the needed regulatory enhancements covering the above-mentioned areas would be beneficial to all the FMS. An in-depth study of the sectors, particularly that of the other food products, dairy sector, and grain mill and starch products, should also be given due consideration.

SCOPING STUDY ON "REDUCING UNNECESSARY REGULATORY BURDENS IN THE PHILIPPINE FOOD MANUFACTURING INDUSTRY"

Nerlita M. Manalili, Suzette Simondac, Imelda V. Valenton, Mara Michelle Q. Pangilinan

I. Introduction

The processed food and beverage (F&B) industry subsector is a key economic sector of the Philippines. With a gross value added of US$ 27 billion as of 2013, it comprises 50 percent of the country's total manufacturing output, which in turn comprises more than half of the country's industrial sector (USDA, 2014). The processed F&B is also the only sector (together with electronics) that is rapidly expanding, at times when the total manufacturing sector's growth is on the decline, 10.5 percent in 2013 to 8.1 percent in 2014 (PSA, 2015).

Though on a recent declining growth level, the outlook for the manufacturing sector is still high and the government is doing all it can to help the sector post sustained growth. One such government initiative, through the Department of Trade and Industry (DTI) is the Manufacturing Resurgence Program (MRP). The MRP aims to rebuild the existing capacity of industries, strengthen new ones, and maintain the competitiveness of those with comparative advantage so they can be integrated in higher value-added, ASEAN-based production networks and global value chains (DTI, 2015).

However, building capacities of industries is just one side of the competitiveness enhancing agenda, the other side, is the improvement of the quality of regulation and reduction of regulatory burdens to enable the industries to grow and prosper on a sustained basis. Enhancing competitiveness seems to be the call of the times particularly in the region with the recent ASEAN economic integration. In the emerging ASEAN Economic Community, regulatory quality and coherence will be critical in stimulating investments and improving the overall business and investment climate (Llanto, 2015). Regulatory policy has supported a) the rule of law through initiatives to simplify the law and improve access to it, as well as improvements to appeal systems, and b) the quality of life and social cohesion, through enhanced transparency, which seeks out the views of the regulated, and programs to reduce red tape for citizens (OECD, 2010).

In the case of the Philippines, while its global competitiveness' rank has improved in recent years, from 75th out of 142 in 2011 to 52nd out of 144 in 2014, it still ranks relatively low on international comparison due to the following: a) high business compliance costs in the regulatory environment, b) prevalence of anti-competitive regulation, c) high cost logistics, d) underinvestment in infrastructure and e) weak governance (ADB, 2013). As part of enhancing competitiveness efforts, the government's initiatives will be given a boost, if done more in an in-depth and on an industry-specific basis. That is, regulatory enhancements are undertaken after a thorough process documentation/assessment of current processes, complemented with sub sector consultations and multi-sector analysis, and where results and impacts of planned interventions, are measured as well.

This is the very basis for the Philippine Institute for Development Studies (PIDS) call for "Technical Assistance to the Study on Reducing Unnecessary Regulatory Burdens in the Philippine Food Manufacturing Industry (FMI)" which aims to assess the Philippine food manufacturing sub-sector and the regulatory system governing it.

II. Objectives of the Study

This study on Reducing Unnecessary Regulatory Burdens in the Philippine Food Manufacturing Industry aims to:

1. Describe/document the regulatory environment of the food manufacturing sector in the Philippines;
2. Map out the existing procedures and processes to meet regulations on the sector with due emphasis on the gaps and limitations of prevailing processes/procedures;
1. Determine key bottlenecks in the regulatory process chain for reducing unnecessary regulatory burden in the sector;
2. Prepare an estimation of the regulatory burden of the bottlenecks, evaluate options for improvement in the regulations and/or processes and/or toward reducing unnecessary regulatory burden, and setting out the key areas for reducing unnecessary regulatory burden including the possible options to address the regulatory concerns in the subsector, based on analysis and discussion with few stakeholders during the pre-testing period;
3. Recommend policy reforms and strategies to address the regulatory burden; and
4. Recommend food manufacturing sub-sectors that will be prioritized for in-depth studies on their regulations, based on both the value-added contribution to GDP and revealed comparative advantage.

III. Methodology

The study's approach is a combination of desk review and consultations which include key informant interviews (KII) and focus group discussions (FGD) as well as Regulatory Impact Assessment (RIA). Consultations were done to validate the result of the desk review and gain better understanding of each of the food manufacturing subsector.

As a guide, the framework on Regulatory Management System (RMS) was used as basis not only in the design of methodology but also in the identification of possible entry points for enhancement of the FMI (Figure 1). Four elements comprised the RMS, namely: regulatory policies, regulatory institutions, regulatory procedures and regulatory tools. This RMS tool was likewise used not only on a national level analysis, but on an industry level one, as well, such as in assessing regulatory burdens and regulatory quality of the food manufacturing sector.

3.1 Coverage of the Study

Food manufacturing is the commercial production and packaging of foods that are fabricated by processing, by combining various ingredients, or both.
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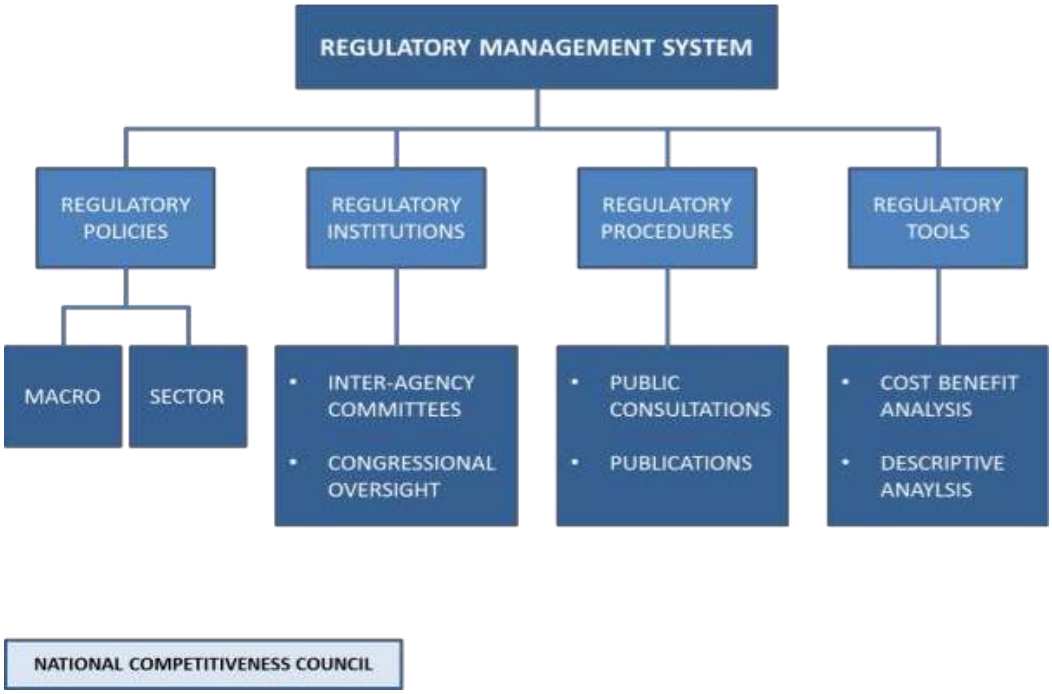
It is a series of processes that transform raw products (livestock, fisheries and plant products) from farmers/fisher folks to food products for intermediate or final consumption of consumers. It involves preservation processes such as cooking, canning, freezing with or without added ingredients. Only those that fall within this definition shall be the subject of this study.

Specifically, this study will cover the eight Food Manufacturing Subsectors (FMS), namely; the (a) processed and preserved meat; (b) processed and preserved fish crustaceans and mollusks; (c) processed and preserved fruits and vegetables; (d) manufacture of vegetables and animal oils; (e) manufacture of dairy products; (f) manufacture of grain mill products, starches and starch products; (g) manufacture of other food products; and (h) manufacture of beverages.

Figure 1. Elements of a Regulatory Management System in the Philippines

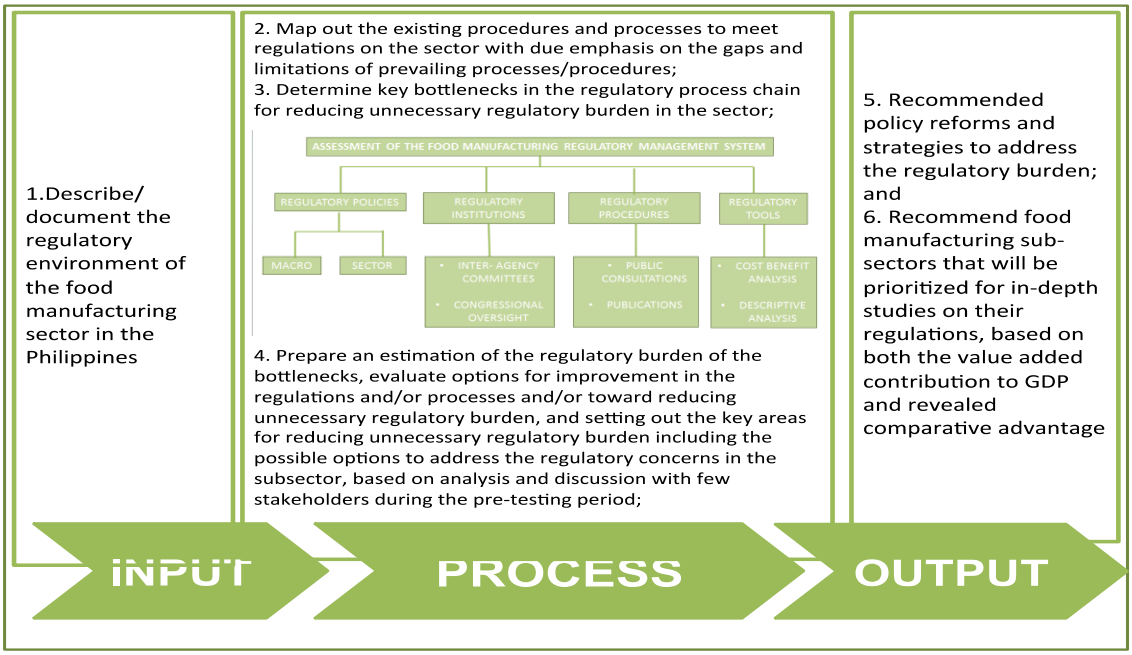


Source: Llanto (2015)

3.2 General Analytical Framework

The "input – process – output" framework was used to carry out the deliverables of the project (Figure 2). The procedure started with the documentation of the regulatory environment of the Philippine FMS as part of the input. On the other hand, the process component includes the mapping out of the existing regulatory procedures and processes of each sector, putting much needed emphasis on the gaps and limitations of the procedure. In this process, the above-mentioned four elements of the regulatory management system of the (as cited by Llanto, 2015) was used in assessing the FMS regulatory process. Under the regulatory tool element, an estimation of the regulatory burden of the bottlenecks was initially undertaken. The results will be used as part of the bases for evaluating options for improvement in the regulations, processes towards reducing unnecessary regulatory burdens and identification of possible options to address the concerns. Anticipated outputs of the process are recommended policy reforms and strategies to address the regulatory burdens as well as the identification of sub-sectors for in-depth studies on their regulations.

Figure 2. General Analytical Framework



3.3 Key Informant Interviews

The KII was initially scheduled for 4 days based on clustering of institutions by location for time and cost efficiency, namely August 25 to 26 and September 1-2, 2016. However, for reasons of non-matching of schedules, an additional day was added, August 30 for the Bureau of Fisheries and Aquatic Resources (BFAR) KII while another was undertaken in between two FGDs and at lunch break in September 8, 2016, at the Department of Trade and Industry (DTI)'s Consumer Protection Advocacy Bureau (CPAB). Thus, the KII was undertaken for a total of 6 days within the period August 25 to September 8, 2016.

Guide questions were prepared for both the KII and FGD (Attachment 1 and 2) in consideration of the needed information based on the study's objectives. Pre-identified institutions, with either regulatory or developmental/facilitating functions were visited and key representatives were interviewed primarily to gain better understanding of their mandates and activities. The same institutional classification was used in the FGD to ensure balanced representations of institutions/stakeholders invited to participate in the FGD.

3.4 Focus Group Discussion

In the process of the KII, respondents were likewise asked who may be the relevant stakeholders to invite for the FGDs. This is to add or validate the initial list prepared by the team on its initial literature review of the Philippine FMI.

A total of eight (8) FGDs were conducted, one each for the following subsectors: a) processed and preserved meat; b) processed and preserved fish crustaceans and mollusks; c) processed and preserved fruits and vegetables; d) vegetables and animal oils; e) dairy products; f) grain mill products, starches and starch products; g) manufacture of other food products; and (h) beverages. The FGD was conducted for the period September 8 to 21, 2016 (Attachment 4).

As designed, at least an FGD in each of the country's major island groupings were conducted to account for variation in industry performance that are attributed to geographical and related factors (if any). The FGD for the fishery subsector was done in General Santos City, South Cotabato in Mindanao, the "other food" subsector in Bacolod City in the Visayas and the remaining 6 subsectors in Luzon.

3.5 Regulatory Impact Assessment

Cost Benefit Analysis (CBA) was conducted in order to identify regulatory requirements and its corresponding impacts to food manufacturing industry. However, given the short project duration, wide scope of the study (covering eight FMS) and the limited time to quantify all impacts, only partial CBA was done. While some of the impacts have not been quantified, a discussion in qualitative terms was made to provide an overview of the impacts of the current regulatory process to each sub sector. Nonetheless, the project team adopted the checklist of common types of regulatory costs and benefits from the Organization for Economic Cooperation and Development (OECD) to ensure that all relevant costs and benefits are considered in the study (Table 1). Likewise, participants were asked to check if the said indicators were appropriate and applicable to their sector or cross out if not. Other suggested measures were solicited in case they have any, in mind.

As the KII and FGD were unable to generate specific costs on a per regulatory activity basis, an in-depth study of a specific sector (dairy sector) was conducted in order to obtain a detailed costing on a per regulatory requirement, and identify points for easing regulatory burdens and the cost entailed. Representatives from both small and large scale milk processing industries in the country as well as concerned regulatory agencies were interviewed.

Table 1. Examples of common regulatory costs and benefits

Affected group	Example of costs	Example of benefits
1. Business	Costs of familiarizing with the regulations and planning how to comply (may include purchase of external advice)	Reductions in workplace accidents and injuries; associated productivity gains
	Higher input costs due to regulatory impacts on the costs of materials	Improved availability of market information, hence efficiency gains in production or distribution.
	Higher production costs due to changes to production, transport or marketing processes required by the regulations	Increased productivity/ efficiency due to regulatory prohibitions on anti-competitive behaviors
	Costs of lost sales due to restricted access to market	
	License fees or other charges imposed by the regulations	

	Cost of meeting reporting or record-keeping requirements imposed by the regulations	
	Cost of internal inspections, audit fees, etc. to ensure compliance is being achieved	
2. Consumers	Increased prices for products or services	Reduced prices for products or services (e.g. through regulatory restrictions on anti-competitive behaviors)
	Reduced range of products available	Improved safety of goods and services
	Delays in the introduction of new products (e.g. due to the need for producers to meet regulated product testing requirements)	Provision of better information about goods and services, leading to better choices being made
		Increased minimum quality standards for goods or services
3. Government	Cost of administering the regulations: includes providing information to business, recruiting and training government staff, processing license or product approval applications.	Improved public health, resulting in reduced health care costs
	Cost of verifying compliance: includes conducting inspections and audits, monitoring outputs (e.g. air quality).	Improved availability of information to government, allowing for better decision making.
	Cost of enforcement: includes investigating possible non-compliance, conducting prosecutions.	
4. Others	Costs of reduced competition – e.g. by favoring existing producers and making entry to a market more difficult (leads to both efficiency losses and transfers from producers to consumers due to higher prices)	Benefits of improved competition (e.g. by regulating to restrict or prohibit anticompetitive behavior)
	Distributional costs – e.g. if some of the above costs are disproportionately borne by the poor, or some vulnerable group	Distributional benefits – if regulation benefits poorer groups or groups in regional/rural areas disproportionately
	Restrictions on innovation & the ability to develop and market new products and services	

Source: OECD (2008)

IV. Overview of the Food Manufacturing Industry

The Philippine food manufacturers and beverage industry comprised almost half of the total manufacturing gross value added in 2014 (DTI Export Marketing Bureau). The processed food industry accounts for 53 percent of the US $2.9 B size Philippine export as of 2015. The said value excludes still the processed fish and beverage sectors. About 80 percent of the local food industry is accounted for by the big players and only 20 percent by small and medium enterprises (DTI).

In terms of trade, the processed foods accounted for 57 percent of the US$3.55 billion worth of Philippine food products exported in 2012, with the remaining 28 and 15 percent accounted for by fresh and marine products, respectively (Philippine Food Exporters (Philfoodex), 2015). The total food exports, in turn accounts for 6.8 percent of the country's US$51.99 billion total exports for 2012. Philfoodex President, Mr. Amores, however, said that the country's US$3.55 billion food exports are way below the US$ 20 billion food exports of Thailand for the same year.

This low export value partly stems from the fact that only about 10 percent of the total food processing output is exported, as roughly 90% of the Philippine food and beverage processing industry's output is consumed domestically, with excellent growth prospects stemming from the country's resilient economy and strong consumer base. In addition, as quality and efficiency continue to improve, the Philippines will be in a position to exploit export opportunities due to its strategic location and membership in various free trade agreements (USDA, 2014). Thus, the prospects for the FMS is bright both at the domestic and export markets.

In 2014, the Export Management Bureau of the Department of Trade and Industry published a Directory of Philippine Exporters covering both products and services industry. Details on FMS exporters are listed under products, specifically that of the "food & food preparations" category. The number of processed food exporters per category were as follows: a) Beverages (16); b) Biscuits/Waffle/Wafer (17); c) Canned, Bottled, and Pouched Fish Products (14); d) Processed Fish Products/Dried/Smoked (7); e) Coconut Products (19); f) Coffee/Cacao (12); g) Confectionary and Other Snack Food (26); h) Dried fruits (22); i) Juices/Concentrates/Puree (19); j) Other Prepared/Preserved Fruits (6); k) Nuts (15); l) Pasta/Noodles (7); m) Sauces/Spreads/Seasoning/Condiments (18); and n) Sugar Products. On the other hand, dairy (5 exporters) and meat products (8 exporters) fall under the other products category.

The food manufacturing sub-sector is the largest under the consumer goods segment of the country's manufacturing sector (intermediate and consumer goods are the 2 other segments). As shown in Table 2, the food manufacturing industry accounts for 36.7 percent in total value added contribution in 2011-2014 and posted an annual growth rate of 4.8 percent for the same period. Given the manufacturing sector's clustering by level of technology (low, medium and high) though, the food manufacturing falls under the low technology cluster, "low technology subsectors have less entry-barriers, require less skills, and provide huge employment opportunities, but subject to strong competition from lower cost countries especially when they're highly globalized with low trade barrier" (Batungbacal 2014).

Table 2. FMI value added contribution to GDP

Industry	Year						
	1991-00	2001-10	2011	2012	2013	2014	2011-14
Manufacturing	24.3	23.7	22.4	22.1	24.6	23.2	23
Consumer Goods	50	50	47.4	49.4	47.8	48.4	48.4
Food Manufacturers	36.0	40.0	37.0	38.0	36.1	35.6	36.7
Beverage Industries	4.0	4.0	4.0	4.0	3.8	4.4	4.1
Tobacco Manufacturers	3.0	1.0	0.4	0.4	0.3	0.3	0.4
Footwear, wearing apparel	6.0	4.0	3.0	3.0	2.6	2.3	2.7
Furniture and Fixtures	1.0	1.0	3.0	4.0	5.0	5.8	4.5
Intermediate Goods	35.0	27.0	20.0	20.0	22.9	22.7	21.4
Capital Goods	13.0	19.0	29.0	27.0	26.7	26.5	27.3
Miscellaneous Manufacturers	2.0	3.0	4.0	3.0	2.6	2.4	3.0

Source of basic data: National Accounts of the Philippines, Philippine Statistics Authority, and DTI-EMB

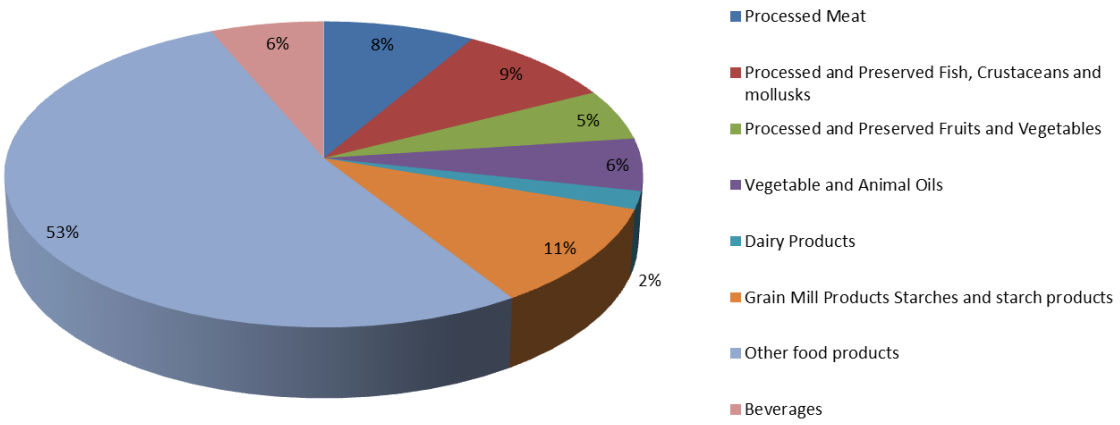
Comprised of eight sub sectors, the FMS has a total of 1,537 establishments (2percent lower than previous year) or about 24 percent of the total manufacturing establishments as of 2013 (Table 3). It likewise accounts for 21 percent of the almost one million employed by the manufacturing sector.

Table 3. Number of establishments, employees, and income, by FMI subsector

Food Manufacturing Subsector	# of Establishments		Paid Employees		Total Income (Php 000)	
	2013	2012	2013	2012	2013	2012
Processing and preserving of meat	131	137	25,052	21,213	74,534,245	51,489,912
Processing and preserving of fish, crustaceans and molluscs	138	162	20,395	24,772	54,124,389	44,515,245
Processing and preserving of fruits and vegetables	83	93	29,187	29,648	82,454,853	84,224,989
Manufacture of vegetable and animal oils	85	101	11,597	10,576	84,444,104	130,731,268
Manufacture of dairy products	29	37	9,290	10,440	182,192,359	175,756,063
Manufacture of grain mill products, starches and starch products	163	197	9,169	10,991	77,713,859	122,960,716
Manufacture of other food products	810	887	85,961	75,645	232,943,912	204,253,213
Manufacture of beverages	98	113	15,178	18,699	184,389,749	196,970,036
Total Food Manufacturing	**1537 (23.96%)**	**1727 (23.74%)**	**205,829 (21.12%)**	**201,984 (19.32%)**	**972,797,370 (23.94%)**	**1,010,901,442 (22.76%)**
Total Manufacturing	**6,416**	**7,275**	**974,381**	**1,045,677**	**4,063,468 126**	**4,441,281,960**

Of the eight subsectors, other food products top the list in terms of number of establishments (53%) as well as in the number of paid employees and total income. However, the dairy sector has the least share in terms of the number of establishments (2%), followed by processed and preserved fruits and vegetables (5 %); and the sectors of beverages as well as the vegetable and animal oils both with 6% share (Figure 3).

Figure 3. Number of establishments per FMS



However, the country's food manufacturing industry is confronted with concerns on industry, regulations, and processes. An ADB (2005) study of the country's 800 business establishments (mostly of food processing sector) provided empirical evidences on the major concerns of the FMIs, which are as follows:

1. Around 62% of the firms rate public infrastructure and services as "somewhat inefficient to very inefficient." This is borne by the poor shipping services, which lead to a 4.7% loss in production, compared with 2.2% in Indonesia and around 1% in Bangladesh and People's Republic of China.
2. Firms experience delays 5.6% of the time, on the average, when picking up goods for delivery to, or delivering supplies from the domestic market. Firms in the National Capital Region (NCR) experience longer delays than those in CALABARZON (Cavite, Laguna, Batangas, Rizal, Quezon) and Cebu/Davao areas in picking up goods for the local market, attributed to the greater traffic congestion NCR and inadequate transport network linking NCR to other regional domestic markets. Public works in the Philippines (54%), just like in India (69%) and Bangladesh (49%), appears to be one of the most unsatisfactory.
3. Power outages hurt small and medium-size firms most, costing them an equivalent of about 8% and 11% of production respectively, compared with 6% for large firms.
4. Bottlenecks in water supply impose a heavy cost especially in the food and food processing industry, averaging at 7% of production. In NCR, water supply related losses are equivalent to about 10% of production, though 36% of them have their own or shared sources.
5. Food and food processing industries appear to experience the longest customs clearing Period, 14 to 22 days for imports, and 8 to 15 days for exports. Overall, customs clearing

period seems longer in the Philippines than in the PRC and Indonesia.

6. The food and food processing industry appears to be particularly burdened by the tax system, with 48% of the firms in Cebu and Davao provinces complaining about tax rates. By evading payment of more taxes, firms within the same industry undermine competition. On the other hand, the slow and overburdened courts work in the favor of noncompliance as even if the government pursues cases against them, settlements are normally made at a compromise that could, in fact, result in savings for the firm.
7. To domestic firms, the cost of financing appears to be the more serious constraint than access to financing. The average loan rate for domestic firms is about 11%, compared with 6% for foreign firms. The large differential could be because foreign firms, including those located at the SEZs, have access to foreign loans or foreign-denominated loans and if exporting also have a natural hedge against foreign exchange risk. Moreover, domestic firms are less able to access loans owing to collateral requirements. Overdraft facility or credit line benefits only about 28% of local firms

A World Bank study in 2013 also pointed out that, among the business regulations, the most problematic issues are in starting, operating, and closing a business, paying taxes, and accessing finance. Moreover, the study states that the Philippine business regulations are complex and are among the costliest in the East Asia region. Such statement is attributed to the following concerns: (1) cumbersome regulations and procedures in starting and operating a business which deter new firm entry and business expansion; (2) complying with tax regulations is costly given their complexity; and (3) Firm entry and expansion are also constrained by limited access to finance and this weighs heavily for Micro Small and Medium Enterprises (MSMEs).

Furthermore, Lizada (2007) cited the need to upgrade legislation in order to strengthen the food safety program in the Philippines. Specifically, this will entail a review of all existing instruments and other related issuances to ensure a clear delineation of agency responsibilities as well as to eliminate gaps and duplications. Also, Lizada (2007) mentioned that regulatory agencies were given respective food safety mandates, including risk assessment. For example, the Bureau of Animal Industry (BAI) has developed competence in risk analysis, not only in animal health but in food borne zoonotic diseases as well. On the other hand, the Bureau of Plant Industry (BPI) has the capacity to undertake plant pest risk analysis while the Fertilizer and Pesticide Authority (FPA) operates in a risk analysis framework, commissioning external experts to undertake risk assessments. Unfortunately, Lizada said that the appreciation of the requirement that management measures have to be risk-based is lacking in a number of implementing agencies.

V. Food Safety Regulatory Policies

Food safety is a critical concern when it comes to food manufacturing and as such, is the core of industry regulation. The legal basis for the establishment of food regulatory system in the Philippines is embedded in the 1987 Philippine Constitution. Specifically, Section 12, Article XIII of the constitution mandates the state "to establish and maintain an effective food and drug regulatory system and undertake appropriate health manpower development and research, responsive to the country's health needs and problems." Furthermore, Section 9, Article XVI stressed the need for the state "to protect consumers from trade malpractices and from substandard or hazardous products." Such provision paved the way for the enactment of various

regulatory policies in support of the food manufacturing industry. Regulatory policies and processes that are applicable to the eight FMS and are recognized both at the national and local levels are presented below.

5.1 Food Safety Act of 2013

A major milestone in the food regulatory system is the enactment of Republic Act 10611 "An Act to Strengthen the Food Safety Regulatory System in the Country to Protect Consumer Health and Facilitate Market Access of Local Foods and Food Products, and For Other Purposes" otherwise known as the Food Safety Act of 2013. The act was put into law in order to achieve the following objectives: (1) protect the public from food-borne and water-borne illnesses and unsanitary, unwholesome, misbranded or unadulterated foods; (2) enhance industry and consumer confidence in the food regulatory system; and (3) achieve economic growth and development by promoting fair trade practices and sound regulatory foundation for domestic and international trade.

RA 10611 also specifically defined "Food Regulatory Safety System" as the combination of regulations, food safety standards, inspection, testing, data collection, monitoring, and other activities carried out by food safety regulatory agencies (FSRAs) and by the LGUs in the implementation of their responsibilities for the control of safety risks in the food supply chain. The act strategizes to implement the food regulatory system and meet the above-mentioned objectives through the identification and provision of mechanism for coordination and accountability of FSRAs in the implementation of their respective regulatory function as well as in the development of policies and programs for addressing food safety hazards.

On February 20, 2015, the Department of Agriculture (DA) and the Department of Health (DOH) issued a Joint Administrative Order 2015-007 for the Implementing Rules and Regulation (IRR) of the Food Safety Act of 2013. Aside from DA and DOH, the Department of Interior and Local Government (DILG) was also identified as a principal government agency with key roles in the implementation of this administrative order. The corresponding roles of these FSRAs are the following:

a. Section 16 of the IRR mandates the DA to develop and enforce food safety standards and regulations in the primary production as well as in the enforcement of food safety standards in the postharvest stages of the food supply chain. The IRR also states the specific responsibilities of concerned bureaus and offices under the DA in the implementation of such mandate, to wit:

    - Bureau of Animal Industry (BAI) for food derived from animals including eggs and honey production;
    - National Dairy Authority (NDA) for milk;
    - National Meat Inspection Service (NMIS), for meats;
    - Bureau of Fisheries and Aquatic Resources (BFAR), for fresh fish and other seafoods including those grown by agriculture;
    - Bureau of Plant Industry (BPI) for plant foods;
    - Fertilizer and Pesticide Authority (FPA), for pesticides and fertilizers used in the production of plant and animal food;

- Philippine Coconut Authority (PCA), for fresh coconuts
- Sugar Regulatory Administration (SRA), for sugar cane production and marketing; and
- National Food Authority (NFA), for rice, corn, and other grains.

Moreover, Section 16 mandates the Bureau of Agriculture and Fisheries Standards (BAFS) of the DA to take the lead in the development, adoption, and/or amendment/revision of food safety standards and codes of practice for primary and postharvest foods (including those for organic agriculture) for the use of DA FSRAs in developing/implementing food safety regulations.

b. The DOH, as per Section 16 of the IRR, shall be responsible in ensuring the food processing and product packaging activities. Key FSRAs identified under DOH include the Food and Drug Administration (FDA), the Center for Food Regulation and Research (CFRR) and the Bureau of Quarantine (BOQ). The role of these DOH-FRAs, as stated in Section 18 of the IRR, are the following:
    - FDA being the responsible agency in the overall regulation of all activities pertaining to processed food (prepackaged or not prepackaged) including, but not limited to, inspection, licensing, registration, post-market monitoring, and laboratory analysis. Moreover, the FDA is tasked to regulate activities concerned with the manufacturing, importation, exportation, distribution, sale, offer for sale, transfer, promotion, advertisement, sponsorship of, and/or, where appropriate, the use and testing of all processed and prepackaged food products and food supplements/dietary supplements. Furthermore, the CFRR of the FDA is tasked to implement official controls for verifying if processed and prepackaged foods meet regulatory requirements for consumer health, consumer protection, and trade. At the local level, the FDAs Regional Field Offices (RFOs) performs the primary function of inspecting establishments and monitoring compliance to risk-based control measures.
    - BOQ is tasked to provide sanitation and ensure food safety in area of responsibility in both domestic and international ports and airports of entry, including in-flight catering, food service establishments as provided in the IRR of RA 9271 and Presidential Decree 856 "Code on Sanitation of the Philippines."

c. While DA and DOH serve as the main food regulatory agencies, the DILG and the Local Government Units (LGUs) provide assistance to FSRAs in the implementation of the Food Safety Act. Section 15 of the IRR mandates the DILG to collaborate with DA, DOH, and other government agencies in supervising the enforcement of food safety rules and regulations as well as the inspection and compliance of business establishments and facilities within its territorial jurisdiction. Furthermore, LGUs are held responsible for the implementation of food safety requirements in their jurisdiction.

The DA-DOH Administrative Order also specifies the roles of Food Business Operators (FBOs). FBOs as defined by the Joint Administrative Order refer to any person engaged in the food business engaged in the food business including one's agents and is responsible for ensuring that the requirements of the act are met by the food business under one's control. These FBOs, being the key stakeholder in ensuring product safety and compliance of their production and

distribution/trading systems to the requirements of RA 10611, are mandated by Section 14 of the IRR to perform the following:

1. FBOs shall be knowledgeable of the specific requirements of food law relevant to their activities in the food supply chain and the producers adopted by relevant government agencies who implement the law. This entails the designation of a Food Safety Compliance Officer (FSCO) who has passed a prescribed FSCO training course recognized by DA and DOH. Likewise, FSCO is held responsible in overseeing the implementation of food safety regulation in accordance to the IRR.

2. FBOs has the primary responsibility not only in initiating immediate procedures in withdrawing food in the market and informing the regulatory authority in cases wherein the FBOs determine that the food which they produced, processed, distributed or imported is not safe or not in compliance with food safety requirements.

3. FBOs shall allow FSRAs to inspect their establishment. FBOs are also mandated to collaborate with FSRAs to avoid risks posed by the food products which they supplied.

4. In case unsafe or non-compliant food product may have reached the consumer, the operator shall effectively and accurately inform the consumers of the reason for the withdrawal, and if necessary, recall the same from the market.

5.2 Halal Certification

Furthermore, on 16 May 2016, Republic Act No. 10817 "An Act Instituting the Philippine Halal Export Development and Promotion Program, creating for the Purpose the Philippine Halal Export Development and Promotion Board, and for Other Purposes" was signed by President Benigno Aquino. Among the major highlights of the act is the creation of the Philippine Export and Promotion Board (Halal Board), attached to the Department of Trade and Industry, which shall serve as the policy-making body on Halal export development and shall set the overall direction of the implementation of the Philippine Halal Export Development and Promotion Program. The board shall be composed of the DTI as the chairperson, the National Commission on Muslim Filipinos as the Vice Chairperson, and with the following member agencies: DA, DOH, DOST, DFA, DOT, BSP and the Mindanao Development Authority (MinDA). Two (2) Muslim professionals from the academe, law, industry, or food science who have experience in Halal industry development will also serve the board for a term of three (3) years.

RA 10817 also mandates the Philippine Accreditation Bureau (PAB) to handle the accreditation of certification bodies, inspection bodies, and testing and calibration laboratories. PAB is given the power to formulate accreditation policies and guidelines which shall govern the accreditation of Halal certification bodies and suspend or withdraw such accreditation in accordance with established policies and guidelines. The agencies responsible in the development of the country's national Halal standards are the following: (1) DA-BAFS for primary and post-harvest foods; (2) DOH-FDA for processed and prepackaged foods, drugs and cosmetics; and (3) DTI – Bureau of Philippine Standards (BPS) for non-food products aside from drugs and cosmetics.

5.3 Consumer Act of the Philippines

In lieu of the protection of the consumers, Republic Act 7394 otherwise known as the Consumer Act of Philippines was put into law last 13 April 1992. The objective of such act is to protect the interest and promote the general welfare of the consumers through the establishment of standards of conduct for various related businesses and industries. Food is one of the products mentioned in the act and is defined as any substance, whether processed, semi-processed or raw, intended for human consumption and includes chewing gum, drinks and beverages and any substance which has been used as an ingredient or a component the manufacture, preparation or treatment of food.

With regard to consumer product quality and safety, implementing agencies identified are as follows: (1) the DOH with respect to food, drugs, cosmetics, devices and substances; (2) the DA with respect to products related to agriculture; and (3) the DTI with respect to other consumer products not specified above. RA 7349 also provides for the creation of a National Consumer Affairs Council comprising of DTI, DepEd, DoH, DA, four (4) representatives from consumer organizations of nationwide base; and two (2) representatives from business/industry sector. The council, with DTI as the Secretariat, was established to improve the management, coordination and effectiveness of the act. More importantly, Chapter III of the act, provides the authority to concerned agencies to conduct investigation upon petition or upon letter-complaint from any consumer.

5.4Regulatory Policies Implemented by FDA

The Food Safety Act mandates the DOH through the FDA to a ensure the safety of all food processing and product packaging activities as well as develop and issue appropriate authorizations in the form of a license and certificate or registration that covers establishments; and facilities engaged in production and distribution of products. All establishments are mandated to comply with the existing guidelines, such as but not limited to:

a. <u>For Licensing:</u>

   a.1 DOH Administrative Order No. 2016-0003 “Guidelines on the Unified Licensing Requirements and Procedures of the FDA.”

   a.2 FDA Circular No. 2016-004 “Procedure on the Use of the New Application Form for License to Operate (LTO) thru the FDA Electronic Portal (e-portal)”

b. <u>For Registration</u>:

   b.1 DOH Administrative Order No. 2014-0029 “Rules and Regulations on the Licensing of Establishment and Registration of Processed Food, and Other Food Products, and for Other Purposes”

   b.2 FDA Circular No. 2014-029 “Procedure for the Use of Electronic Registration (e-registration) for Raw Materials or Ingredients and Low Risk Pre-packaged Processed Food Products

c. <u>For Labelling:</u>

c.1 DOH Administrative Order No. 2014-0030 "Revised Rules and Regulations Governing the Labelling of Prepackaged Food Products.

In addition to the above policies on licensing and registration, FDA issued Administrative Order 2014-0029 "Rules and Regulations on the Licensing of Food Establishments and Registration of Processed Food and other Food Products, and For Other Purposes" which was signed on September 2014. Legal bases of the said AO are the following:

a. Republic Act 9711 (Food and Drug Administration Act of 2009)
   - The manufacturing, importation, exportation, sale, offer for sale, and distribution of processed products (including food supplements) should be licensed by DFA.
b. Administrative Order 37, Series of 1979
   - Registration of food and food products intended for import/export.
c. Bureau Order No. 163, Series of 1997
   - Provides specific requirements for the registration of imported food and food products.

With regard to coverage, AO 2014-0029, requires any establishment, whether a sole proprietorship, a partnership, a corporation, institution, association or an organization engaged in any of the activities, as in indicated in the following categories, to secure license from the FDA. Specifically, the AO covers the following stakeholders:

1. Distributor/importer/exporters – any establishments that imports or exports raw materials, ingredients and/or finished products for its own use or for wholesale distribution to other establishments or outlets. Nonetheless, if the distributor/importer/exporter sells to the general public, it shall be considered as a retailer;
2. Distributor/wholesaler – any establishment that procures raw materials and/or finished products from local establishments for local distribution on wholesale basis;
3. Manufacturer – establishment engaged in any and all operations involved in the production of health products including preparation, processing, compounding, formulating, filling, packaging, repacking, altering, ornamenting, finishing and labelling with the end view of its storage, sale or distribution;
4. Repacker – any establishment engaged in the process of packaging or changing of container, wrapper (that may include or not changing a label) from a bulk material to retail packaging sizes in furtherance of distribution of food;
5. Traders – a registered owner of food and food products and/or procure the raw materials and packing components, quality control standards, and procedures, but subcontracts the manufacture to a licensed manufacturer. In addition, a trader may also engage in the distribution and/or marketing of its products.

In order to secure an LTO, a food establishment needs to submit general requirements which include the following: notarized Integrated Application form, proof of registration, proof of occupancy, location plan, floor plan, list of food products to be manufactured/repacked/distributed, facsimile of proposed label, and secretary's certificate,

among others. Additionally, there are specific requirements that vary depending on the type of the food establishment.

Furthermore, Administrative Order No. 50 series of 2001 "Revised 2001 Schedule of Fees and Charges for the Corresponding Services by the Bureau of Food and Drugs" provides the schedule of fees as shown in Tables 4, 5, and 6. In the case of distributor/ importer/exporter/wholesaler, the fees will be paid upon initial application, renewal, and if there are any changes in the business activities. However, basis for the licensing fees for the manufacturer/repacker/trader varies depending on their income. Additionally, corresponding fees are imposed by FDA should there be changes in the business activities of the manufacturers/repacker/trader. Validity for LTO will be for two years (initial application) and 5 years for renewal.

Table 4: Schedule of fees for securing LTO (for distributor/importer/exporter/wholesaler)

Circumstances	Fee (Php)
Initial	4,040
Renewal	8,080
Add/Delete source	60
Change owner/Business Name	510
Add activity/reclassification	510
Change address	510
Change/add warehouse	510
Change name/address of source	510

Table 5. Schedule of fees for securing LTO (manufacturer/repacker/trader)

Circumstances	Initial Php (1 year) *	Renewal Php (2 years) *
250 k and below	500	1,000
Over 250k but below 500 k	750	1,500
500k but below 1M	1,000	2,000
1M but 5M	2,000	4,000
5M but below 10M	3,000	6,000
10M but below 20M	5,000	10,000
20M but below 50M	10,000	20,000
50M and above	15,000	30,000
*Fee + Legal Research Fund (LRF)		

Table 6. Schedule of fees for LTO (manufacturer/repacker/trader)

Circumstances	Fee (Php)
Add/Delete Source	60
Change owner/Business name	510
Add activity/reclassification	510
Change address	510
Change/add warehouse	510
Change name/address of source	310

On the other hand, Administrative Order No: 2014-0029 provides the legal basis for the FDA's function to issue Certificate of Product Registration (CPR) to all processed food products, including food additives, food supplements, and bottled water. These products require registration to FDA before these are distributed, supplied, sold or offered for sale or use and advertised, among other marketing or promotional activities. Accordingly, the said AO categorized food products into two categories which are as follows:

1. Category I includes: bakery & bakery related products; non-alcoholic beverages & beverage mixes; candies & confectionery products; cocoa & cocoa related products; coffee, tea & non-dairy creamer; condiments, sauces & seasonings; culinary products; gelatin, dessert preparation & mixes; dairy products; dressings & spreads; flour/flour mixes & starch; fish & other marine products; fruits, vegetable & edible fungi (prepared); meat and poultry products (prepared); noodles, pastas & pastry wrapper; nut & nut products; native delicacies; oils, fats & shortening; snack foods & breakfast cereals and; sugar & other related products.

2. Category II includes: alcoholic beverages; food supplements; tea (herbal); bottled drinking water; food for infants and children; foods for special dietary use; transgenic food products (use of genetic engineering/biotechnology) and; ethnic food products with indigenous ingredient(s) not common in the Philippines.

In the previous scheme, registration requirements differ based on the food category. However, the new FDA system issues the same set of requirements regardless of the category. Such requirements include the integrated application form; proof of payment of fees; clear and complete loose labels or artworks; pictures of the product; a sample in actual commercial presentation (for food supplement); and justification of label claims (e.g. nutrition facts; Halal logo, nutrition and health claims). With regard to registration fees, this varies depending on the categories which are as follows:

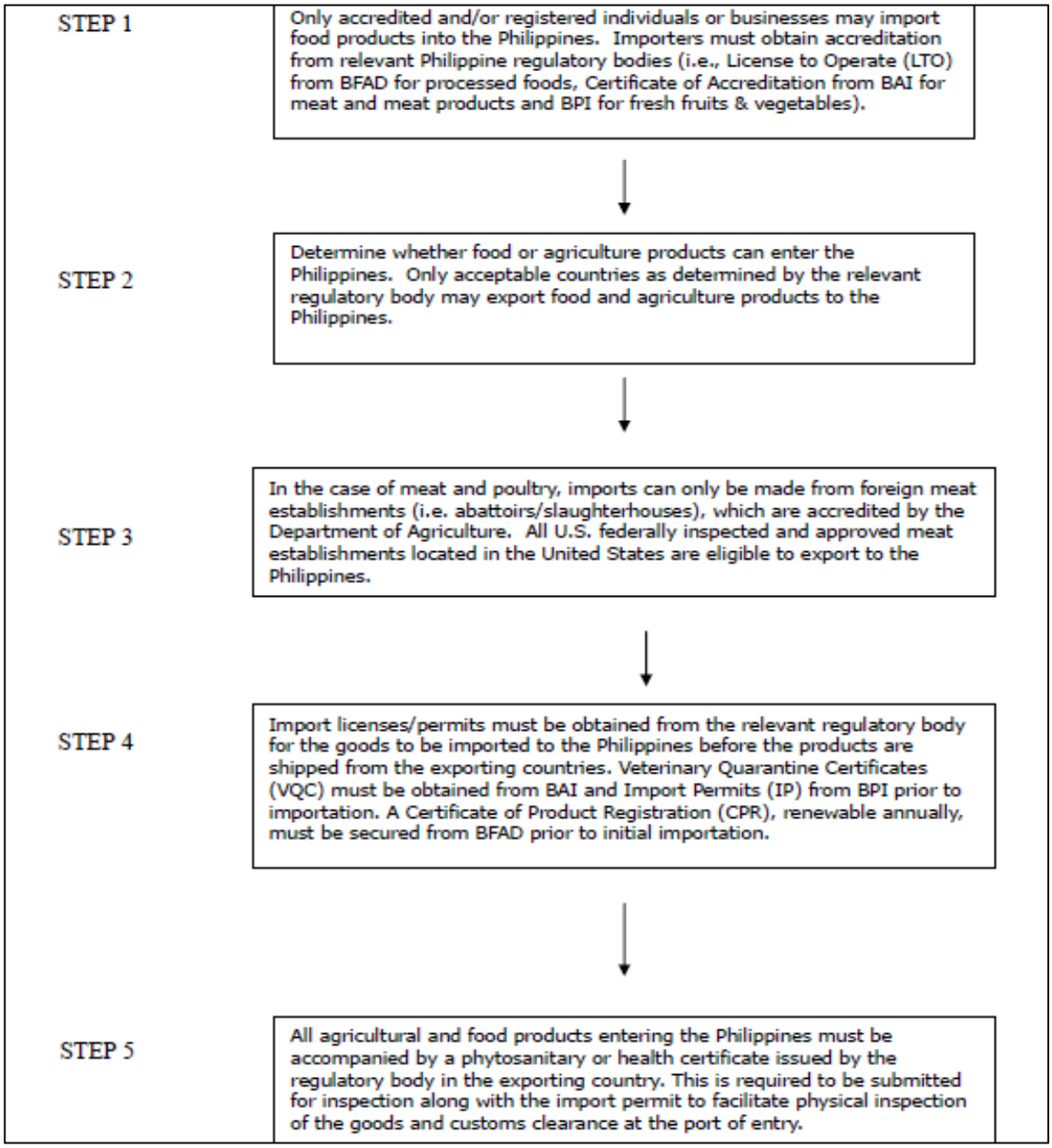
1. Category I (Php 200/year + 1% LRF)
2. Category II (Php 250/year + 1% LRF)
3. Food Supplements & Bottled Water (Php 1,000/year +1% LRF)

The AO provides for the validity of the CPR will be 2 years' minimum to 5 years maximum initial and 5 years for renewal, provided that upon renewal, its holder conforms with the pertinent standards and requirements including labelling regulations.

5.5 Import Procedure for Food and Agricultural Products

Importers of food and agricultural products have the responsibility to ensure that all products entering the Philippines are in compliance with country's food health and pytosanitary laws. With regard to health and phytosanitary rules and regulations, the procedure are almost similar for all types of products. Food products are also required to pass through procedures designed to check if food and agricultural products are fit for human consumption. Regulatory agencies may require imported goods to be treated before they may be released in the Philippine premise. The generic procedural flow for importing food and agricultural products to the Philippines is depicted in Figure 4.

Figure 4. Process flow for importing food and agricultural products to the Philippines

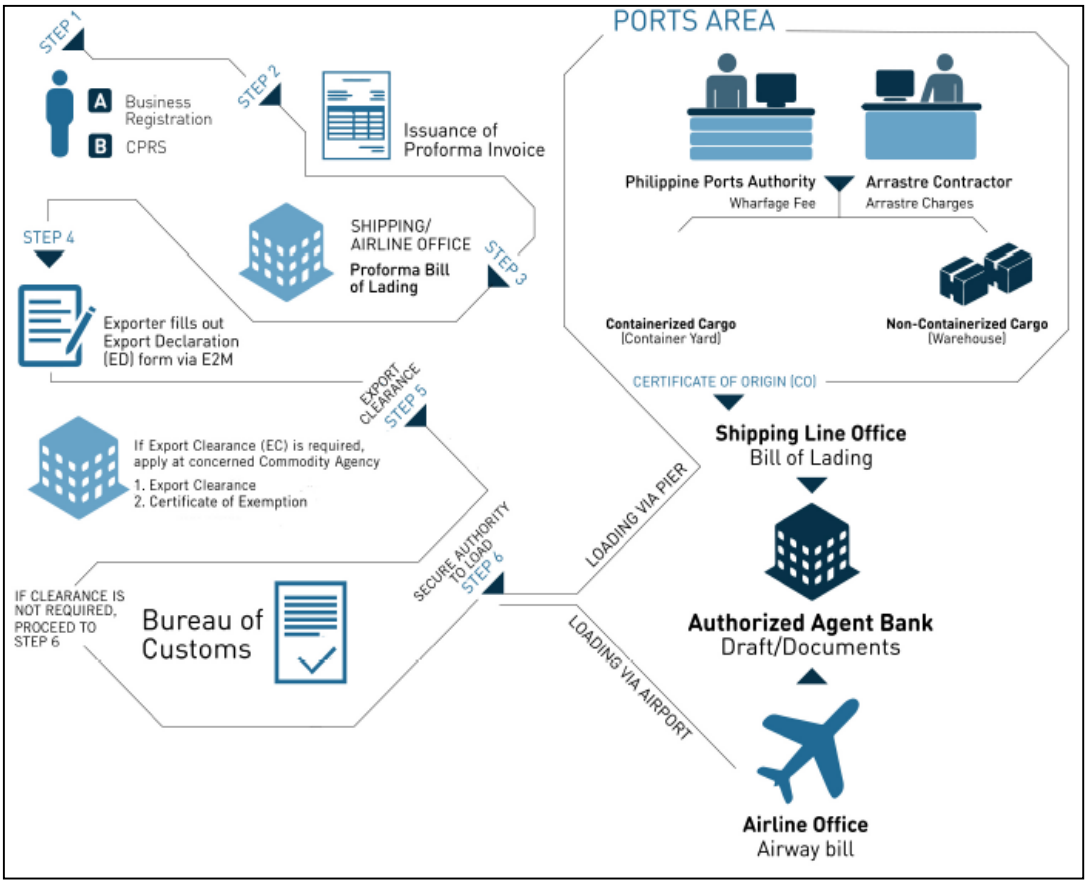


Source: Philippines GAIN Report (2014)

5.6 Export Procedure for Food Products

The Export Management Bureau (EMB) of the Department of Trade and Industry published a Philippine Export Guidebook to provide information on various export procedures. A graphic representation of the export procedure, common to all exported products, is shown in Figure 5. The process would only differ in Step 5 wherein export clearance needs to be secured from concerned commodity agency. For example, an exporter of dairy products has to secure a Veterinary Health Commodity Certificate/Export Permit from the BAI. On the other hand, exporter of fish and fishery products has to secure an Export Commodity Clearance from BFAR. A more detailed discussion on export procedure is presented in each sub-sector discussion.

Figure 5. Export Procedure Flowchart



Source: Philippine Export Guidebook (2015)

VI. Results and Discussion

6.1. Key Informant Interviews

A total of 14 institutions were visited for the 6 day KII undertaken within the August 25 to Sept 8, 2016 period (Attachment 3). In some cases, representatives from three to five divisions under a single institution were interviewed for a deeper understanding of their individual units' roles in support of the FMI. This is true for the Departments of Agriculture (DA), Trade and Industry (DTI) and Science and Technology (DOST). It needs emphasizing at this point that the timing of the KII is not as ideal, given that most offices are in transition with the recent change in administration and consequent key officials

6.1.1. FMI's performance over the past three years

When representatives from various government agencies and a consumer group were asked of their views of the FMI's performance the past 3 years, the common initial reply of KII respondents are "have no idea". However, when requested to use as reference point the changes in volume of services/activities they have undertaken in support of FMIs, most cited the experienced increases in volume handled the past years: more LTO applications (FDA), more product standards

developed (DA BAFPS) and more grain businesess like milling, etc (NFA). This enhanced volume of businesses translates to jobs generated (CUP) and economic contribution (as more and more of SMES (97%) are into food manufacturing). The responses are also indicative of the situation where most industry stakeholders interviewed are familiar only of the development of their industry subsectors and not of the whole manufacturing sector.

The private sector counterpart, however, were quick in saying the food manufacturing and beverage sector is growing (PILMICO, Pampanga's Best, Coca Cola bottlers and Alaska Milk Corp). Most, however, added that the sector is growing despite the regulatory challenges such as compliance with protocol (Pampanga's best) policies pertaining to carbonated products (coca cola) and much needed policy streamlining (Alaska Milk Corp). The private sector representatives, who were interviewed, cited that there's no problem for them complying with regulations as they will also do good for their businesses, but not, however, when they are proving to be cumbersome (unnecessary, non-streamlined, among others). Thus, regulation is really a non-issue as long as they are for and in the service of the food manufacturing sector and are being implemented smoothly.

6.1.2 Agency Oversight Function is Support of the FMI

The roles, mandates and policies implemented by the 14 interviewed institutions for the KII are in Table 7. Only FDA and NFA undertakes regulatory functions, the rest which includes department or attached units of line agencies as well as industry/consumer organizations performing facilitating functions. Food security and food safety are the overarching mandates of the institution that were included in the KII (in the cases of FDA, DA and its attached agencies). Add to these, the mandate to help stabilize food supply and prices (in the case of NFA), protect rights and giving preferential access to Filipinos and local communities in the use of natural resources and ensure development of the FMI's subsector (dairy industry, livestock and meat processing industry, etc.).

The said institutions' vision and mission centered on being a center of excellence supporting the respective FMI subsectors (dairy, meat, fishery, etc.) realized through the promotion of appropriate technologies, practices as well as information gathering and sharing

6.1.3 Contribution to GDP and Employment

While most cannot approximate the sector's contribution to gross domestic product (GDP), respondents from DTI cited the observed declining contribution to GDP of the agriculture sector, including the agri-based food manufacturing (in contrast to the increasing share of automotive and electronics). They further cited that FMIs contribute more in employment than in value. Representative from the Consumers Union of the Philippines (CUP), added that the employment generated by the FMI sector substantially help individuals and the economy as a whole.

Table 7. Summary of Mandates, Vision, Mission and Regulations of Regulatory Institutions

	DOH-FDA	NFA	DA BFAR	DA NMIS	DA BAFPS	DA AMAS
Mandates	Ensure safety, efficacy or quality of health products RA No.97111 which include food, drugs, cosmetics, devices, biologicals, vaccines, in-vitro diagnostic reagents, radiation-emitting devices or equipment, and household/urban hazardous substances, including pesticides and toys, or consumer products that may have an effect on health which require regulations as determined by the FDA.	Ensure food security and stabilize supply and prices of staple cereals both in the farm and consumer levels"	Food security as overriding consideration in utilization, mgt, dev't, conservation &protection of fishery resources. *Limit access to Phil fishery &aquatic resources (FAR) for Filipinos. *Ensure rational & sustainable dev't, mgt & conservation of FAR in Phil waters; *Protect fisherfolk (FF) rights-priority in use of municipal waters. * Provide support to fishery sector thru appropriate technology & research, adequate financial, production construction of post-harvest facilities, marketing assistance & other services. *Manage FAR-integrt'd coastal area mgt*Grant private sector privilege to utilize fishery resources (grantee, licensee or permittee) as privileged State beneficiary & active govt partner in sustainable dev't, mgt, conservation & protection of the FAR	*Promulgate & implement policies, procedures, rules guidelines &regulations governing post production flow of livestock & meat & meat products (local & imported) through various stages of marketing & proper handling, storage inspection, processing & preservation of such products. *protect the interest, health and general welfare of meat consuming public and shall endeavor for the development of the livestock and meat industry.	competent standard setting agency	*Inquiries on Buyers & Suppliers of agricultural fishery products *Information on agricultural commodity buyers & producers/ sellers (Directory) *Feasibility Studies Trade and Production Data
Vision	FDA be an internationally recognized center of regulatory excellence safeguarding the health of the Filipinos.	Achieve a nationwide sustainable mechanism, ensuring stabilization of prices/supply of rice &corn while increasing Filipino farmers' income	A modernized fishery that is technologically-advanced and globally competitive.	A dynamic regulatory Agency with sustained excellent service that is responsive to consumers' welfare & to a globally competitive meat industry.	Ensuring the safety, quality and global competitiveness of Philippine agriculture and fishery products.	
Mission		Ensure reasonable rate of return to Filipino farmers, provide adequate supply & affordable rice & corn & promote the integrated growth &modernization of rice & corn marketing industry to enable it to compete globally	To improve fisheries productivity within ecological limits and empower stakeholders towards food security, inclusive growth global competitiveness and climate change adaptation.	*Consumers' protection thru relevant technologies in meat inspection (food safety) Support sustainable development of livestock, poultry & meat industry. *Implement HRD Program thru competency building& career growth opportunities	Develop standards and regulations that are science-based, globally harmonized & consistent with international commitments.	
Regulations	1. Licensing (Rep.Act9711 /RA 3720) as amended by Executive Order 175 series of 1987 (Pres C. Aquino); 2. GMP3. Codex 4. Milk Code Infant Formula5. Food Fortification	1.Licensing of grains; 2. Licensing of transport facilities	1. Food Safety Act 10611; 2. RA 8550-As amended; 3. Traceability Regulation-BFAR Adm251, Series of 2014; 4. FSA; 5. Licensing NTC; 5. RA 550; 6. Rule 65.2 IRR of Fishing Coastal	1. RA 10536(9296 Meat Inspection of the Phil; 2. Food Safety Act of 2013; 3. BAMS-Standard Mandatory accreditation of cold storage	1. Between DA and DOH particularly on Food Regulatory; 2. GAP; 3. Certification with BAI; 4. Accreditation from ISO	1. EO 116 of August 26 by C. Aquino; 2. DTI, DOST, FDA; 3. Certification of HACCP, GMP certified

	DOST FNRI	NDA	DTI BSMED	DTI EMB	DTI Consumer Protection
Mandates	*Undertake researches that define citizenry's nutritional status, with reference to malnutrition problem, its causes & effects *Develop & recommend policy options, strategies, programs/ project for implementation by appropriate agencies. *Diffuse knowledge & technologies-food/nutrition *provide S&T services to relevant stakeholders (as per E.O. 366, November 13, 2009	National Dairy Development Act of 1995 (Republic Act #7884), Ensure accelerated dev't of Phil dairy industry thru policy direction& program implementation. (attached to the Dept of Agriculture)	*Initiate & implement programs and projects addressing the specific needs of MSMEs (technology development & transfer, financing, marketing, & training. *promote &develop MSMEs *review & formulate policies & strategies towards MSMEs advancement in (entrepreneurship dev't, institutional strengthening & productivity improvement	Delivers timely/relevant information and assistance to exporters and would-be exporters to enhance their capabilities and global competitiveness as suppliers of quality goods and services to international markets.	Functions as a policy-making body & oversees the advocacy of trade and consumer protection laws.
Vision	*Optimum nutrition for all socially & economically empowered thru scientifically sound, environment- friendly & globally competitive technology. *provide products/services in food & nutrition-govt/private sectors &stakeholders with highest standards-quality & reliability within capabilities & resources *continually improve Quality Management System's (QMS) effectiveness at all times, to meet customer's satisfaction.	A profitable, competitive & sustainable growing dairy industry built on financially viable buss performance throughout the value chain, providing good quality of life for farmers &ensuring consumers safe & quality milk/milk products by 2020.			
Mission	Provision of accurate data, correct information, and innovative technologies to fight malnutrition.	provide leadership to Phil dairy industry in with private sector thru well-crafted policy, science-based tech expertise, sound business support& effective management of dairy programs			
Regulation	1. Food Fortification; 2. Recommendation for nutrition and labelling; 3. Ongoing RA 10081-Breastfeed marketing code	1. Food Safety Act of 2014 but IRR is still in process	1. GMP Compliance 2. Magna Carta-Main charter of all MSME; 3 Magna Carta Amm 4. Go Negosyo Act; 5. FDA (testing facilities)	1.On accreditation; 2. Application for BOM for zero vat (7 %t total sales); 3. Accreditation needed for Bureau of Customs; 4. FDA	1. Phil Price Act of 7581/Amendment 10623; 2. Consumer Protection RA 73984;

6.1.4 Revealed Comparative Advantage

The FMI can readily take advantage of an abundance of domestic raw materials. Interviews with BFAR and DA-NMIS indicate that the country is producing safe meat and meat products that has the scale potential to satisfy the industry. The CUP avers that "each province has its own industry project" that can be further developed. However, domestic supply cannot readily meet the FMI demand during the lean months. In this case, importation of raw materials fills the gap. The imported raw materials are priced competitively, which may encourage the FMI to depend on foreign sources to the disadvantage of domestic raw materials suppliers. This indicates the need to make the domestic raw material industry competitive to sustain local production and supply to FMI. At present, the dairy products sector is highly dependent on imports while other FMI subsectors use both domestic and foreign supplies of frozen meat and meat products.

6.1.5 Accomplishments of the Food Manufacturing Industry

At the local scene, the FMI is able to sustainably provide the requirements of the local market as shared by the DTI's Bureau of Small and Medium Enterprise Development (BSMED) respondent. The processed food requirement in the country, according to him, is purely met by local production.

Accessing and increasing presence in the export market with globally competitive products is the cited accomplishment by almost half of the KII respondents. Cited product examples already with presence in the export market are *Pampanga's Best C2, URC, Rebisco and Liwayway*. The presence of Filipinos abroad, who crave for home-country products particularly in the United Stated and Canada, aided the FMI's performance in the export market.

Improvement in packaging (though to most respondents, it is still wanting) is FNRI's cited industry highlight. It was underscored by FNRI, however, that even with the improvement in packaging, food safety remains a challenge. This is true given that, there are other requirements, other than packaging, that FMS needs to comply with FDA in order to ensure food safety.

According to FDA, meeting increasing market demand highly contributed to the FMIs performance. The entries of imported products have made domestic producers to be aware of the need to improve their products to be competitive according to FNRI. Other respondents, however, provided no comment.

6.1.6 Factors that Hinder FMI to Perform and Compete in the Market

Two of the most cited hindrances to a performing FMI is the seasonality or the non-availability of raw materials on a year-round basis, as cited by FDA, DA NMIS and DTI EMB as well as industry regulation according to BSMED and EMB of DTI and Philfoodex. Industry regulation is a hindrance in terms of a) compliance requirements - domestic and export marketing, mobility or the transport of goods and labeling (US and EU countries), b) high costs - in testing products to meet market specification and in fees paid to regulatory bodies like the Bureau of Customs (BOC) and c) lack of regulatory sanction to non-licensed food manufacturers who are able to get away with paying licensed fees and thus, post unfair competition as they can afford to sell their products at much lower costs.

It was further added that most small and medium enterprises (SMEs) are lacking in economies of scale which consequently leads to higher prices as cited by FDA. The DA Agribusiness and Marketing Assistance Service (AMAS), for its part, cited that regulation and lack of appropriate packaging delimit the FMI's performance. Regulation restricts trade as it promotes science more than trade; lack of packaging delimits export potentials even when importers claim that the country offers the best tasting products. For instance, during trade exhibits in other countries, foreign participants would cite the delicious taste of Philippine products; however, the packaging are usually inadequate and not at par with other countries' product packaging.

It is the lack of food standards as cited by FNRI and if ever there are standards at all, the lack of awareness of existing ones (said DA BAFPS) are the identified hindering factors to better industry performance. Such statement is complemented by the 2016 report of the USDA Food and Agricultural Import Regulations and Standards (FAIRS) stating that national microbiological standards for food have yet been established in the Philippines and that the country's food regulations are generally patterned after CODEX Alimentarius Commission guidelines as well as regulations established by the Food and Drug Administration of the United States and other similar regulatory bodies. Aside from issues on the need to update regulatory processes and protocols (in the Philippine context and/or based on current technology/developments), there were also concerns on how to increase awareness of the FMS and consumers with regard to food safety.

Additionally, DA-BAFPS mentioned that even if they have developed product standards, not all are being followed. The standards are supposedly mandatory, but enforcement is not that strict, for example, there are standards for dried fish packaging but these are not being followed.

6.1.7 Insights as to the future of the FMI sector

The 46 percent (of the 14 institutions) who provided answers are one in saying that the FMI's prospect is bright. Proofs are 1) the manufacturing MSMEs exist because there are opportunities for processed food products, which is mostly driven by increasing population and consequently increasing demand for food and 2) the sector is among the key sectors being prioritized, in terms of industry enhancement (programs and regulations) and trade fair participation shows our products our well liked. The future will even be brighter if quality consciousness is instilled among food manufacturers, compliance requirements are readily understood, innovation is pursued to meet demand of current market and SME's who are at the forefront of the sector are financially capacitated to adopt improvement and innovations.

These wishlist for the betterment of the food manufacturing sector are reflective of the fact that the respondents are very much aware of the state the sector is currently in, that much still need be done for the promise of brighter manufacturing sector to materialize.

6.1.8 Identification of FGD Participants and factors for FGD Consideration

In the process of the KII, respondents were likewise asked who may be the relevant stakeholders to invite to the FGDs. This is to add to or validate the initial list prepared by the team based on its initial literature review of Philippine FMI.

The most common identified invitees for the FGD are DOH FDA, DA, local government units (LGUs) and commodity associations (Table 8). As to suggested factors to consider in FGD, 70 percent or 5 out of 7 issues was the need to review current policies and regulation, specifically those of FDA in terms of clarity, the need for them and the resultant burdens they posed to the industry. The rest were on a) ensuring that new market developments (change in market requirements, development in packaging and other information are immediately disseminate; b) wealth creation for fisher folks more than just production be made a major concern. This is suggested to be achieved by equipping them as entrepreneurs and introducing them to smart business.

Table 8. KII generated insights by type of institution/respondent for consideration in FGD

	Who key players are/to invite	Factors to consider in FGD	Usual regulation bottlenecks
DOH_FDA	DA, BPI, BAI, NMIS, NDA, BFAR, DOH-BOC	What are their concerns/problems with FDA, what are not clear, Why the burden? why need for inspection,	Volume of application vs available manpower Not commodity supply as can be addressed by proper planning
NFA	Industry services department		-lack investigation and enforcement officer -submission of ITR for the small retailers causing them to have additional costs
DA BFAR	LGUs, FDA, DOH Tuna canners association Bangus/tilapia processors Phil Shrimp Association Group of exporters	Wealth creation for fishermen *Equip them as entrepreneurs *Smart business, not at traders' mercy *Assist them in a) organizing themselves b) market linking	*Insufficient competent manpower, civil service need overhauling to attract the brightest *budget is not a problem
DA NMIS	AA-Poultry–Mr. Sabellano R3 3A Universal Robina LGU Bataan, Dr. P. Foronda	Regulatory Bodies' Service Provision NMIS relevance as a regulatory body	None as far as NMIS is concerned, they are able to manage, with regional offices, best performing
DA AMAS	Philfoodex -Mr. Amores EMB -Rory Castillo DOST -Daisy Tanafranca BAFPs -Karen Bautista DA Policy -USEC Serrano FDA – Pesticide	New Development –packaging, storage, market requirement, required certification, changes in Codex Alimentarius	Incomplete documents (participants are all HACCP compliant
DA BAFPS	Office for Policy planning Food Security regulatory body, NMIS FDA	Review of current policy implementation	*Current awareness not properly institutionalized *Organizational management assessments; *administrative bottlenecks (accounting, procurement) * turnover of developed staff * number of people & number of technical services (validation of standards) 43 standards given 5 staff, no permanent engineer
DTI BSMED	*DA *DTI -export marketing bureau -processed food regulation for marketability of product concerns)	-	*Resources- people and funds *Problems in the govt, no govt support. *The government is always to blame with the very limited resources-focus on the critical view *lack of facilities
DTI EMB	*meat production canned tuna for processed food - *Philfoodex -umbrella organization	-	promotion tail end, production and licensing, exporting of products and certification

	*Philexport -export oriented products		
DTIConsumer Protection	Phil Baking – Mr. Umali PAFMI - Rick Denke,NormanUy	-	-
Philfoodex	Philfoodex	-	Higher costing
CPU	LGU Regulatory bodies	Production support Regulation/enforcement IRR needs amendments, etc	People's disinterest Food are expensive Need to educate consumers
DOST FNRI	Phil Chamber of food manufacturers Phil export SME groups	Regulatory Chamber have specific groups per industry	*Multiple interpretation of regulation Based on scientific evidence, very few hardliners, not agreeing, so hampering status *Child malnutrition, a bigger problem than drugs
NDA	Farmers Dairy Confederation of the Philippines FDA	Implementation of regulatory policies	*number of dairy animals inadequate * Poor stakeholders' acceptance of new regulatory functions *expecting subsidy –animals -loans not dole-outs

6.1.9 Bottlenecks in Regulation

The limited available and qualified manpower relative to the volume of transactions processed (applications, investigation, enforcement, etc.) top the list of cited bottlenecks in regulation and is usually accompanied with a lack of funds issue. In the case of BFAR, however, fund is not the problem but the quality of human resources and the need to attract the brightest in the government service.

Furthermore, FNRI raised the concern on the openness of some policies to multiple interpretations resulting to confusion. For example, Executive Order 51 or the Milk Code aims to contribute to the provision of safe and adequate nutrition for infants through the protection and promotion of breastfeeding and by ensuring the proper use of breastmilk substitutes and breastmilk supplements when these are necessary, on the basis of adequate information and through appropriate marketing and distribution. On the other hand, infant formula is defined as a breastmilk substitute formulated in accordance with applicable Codex Alimentarius standards to satisfy the normal nutritional requirements of infants between four to six months of age, and adapted to their physiological characteristics. Infant formula may also be prepared at home in which case it is described as "home-prepared". According to FNRI, the Supreme Court promulgation is exclusive on breast feeding and that concerned agencies are very strict on with the interpretation of the law. However, as to the views of the industries producing infant formula, they are not violating anything.

Incomplete documents in applications (DA AMAS), the seeming disinterest of consumers and the need to educate them on consumer issues (CUP), non-institutionalization of awareness on standards, and wanting organizational management assessments and even administrative procedures (DA BAFPS), high costs (Philfoodex), poor acceptance of the stakeholders on the recent regulatory process change (National Dairy Authority (NDA) and the lack of facilities and governments support (DTI BSMED) and the requirement to submit income tax return (ITR) for small retailers which is an added cost to them (NFA).

The DA NMIS was alone in saying "no bottlenecks encountered" owing to smooth coordination with regional offices and functional systems. Proof is the fact that they were several times awardee as best performing DA unit. It is also the reason why they are at a loss as to why the

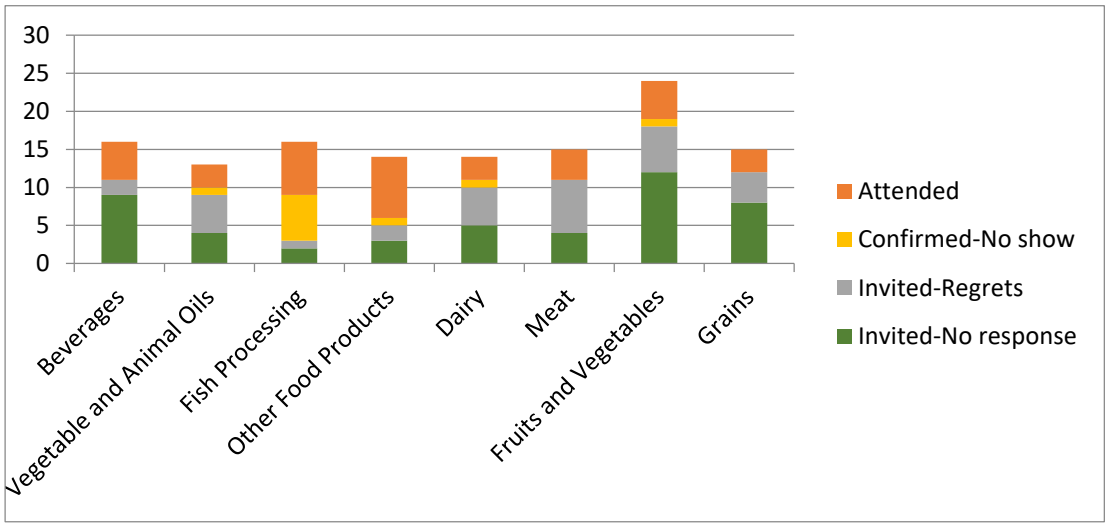
regulatory functions were transferred from them to FDA, more so when problems are being encountered in the new system, as feedback to them by stakeholders.

6.2 Focus Group Discussion

While an ideal 8 to 12 invitees per FGD was targeted, those issued invitation were as high as 25 per subsector to account for anticipated regrets due to conflict in schedule given shortness of notice (limited time of the study). A total of 127 companies, regulatory and facilitating institutions as well as commodity and consumer associations were issued invitations but only 37 or 29% participated in the FGD. The ideal FGD number of at least 8 participants were not always realized as there are some "no shows" (8%) or last minute cancellation of confirmed participants, regrets 25% and no response at all (37%).

The most attended FGD is for "other foods" which was done in Bacolod (Figure 6). The good turnout was due to the joint effort of the Association of Negros Producers (ANP), a longtime collaborator of the study leader and that of the provincial office of DTI. The 2nd most attended FGD is that of the fishery subsector held in General Santos (in spite of the large number of "no show" or those who confirmed but did not attend). The beverage sector held at the DTI EMB office in Makati was the 3rd most attended FGD.

Figure 6. FGD list of Invitees and participation per sector



6.2.1 Policies affecting the FMI

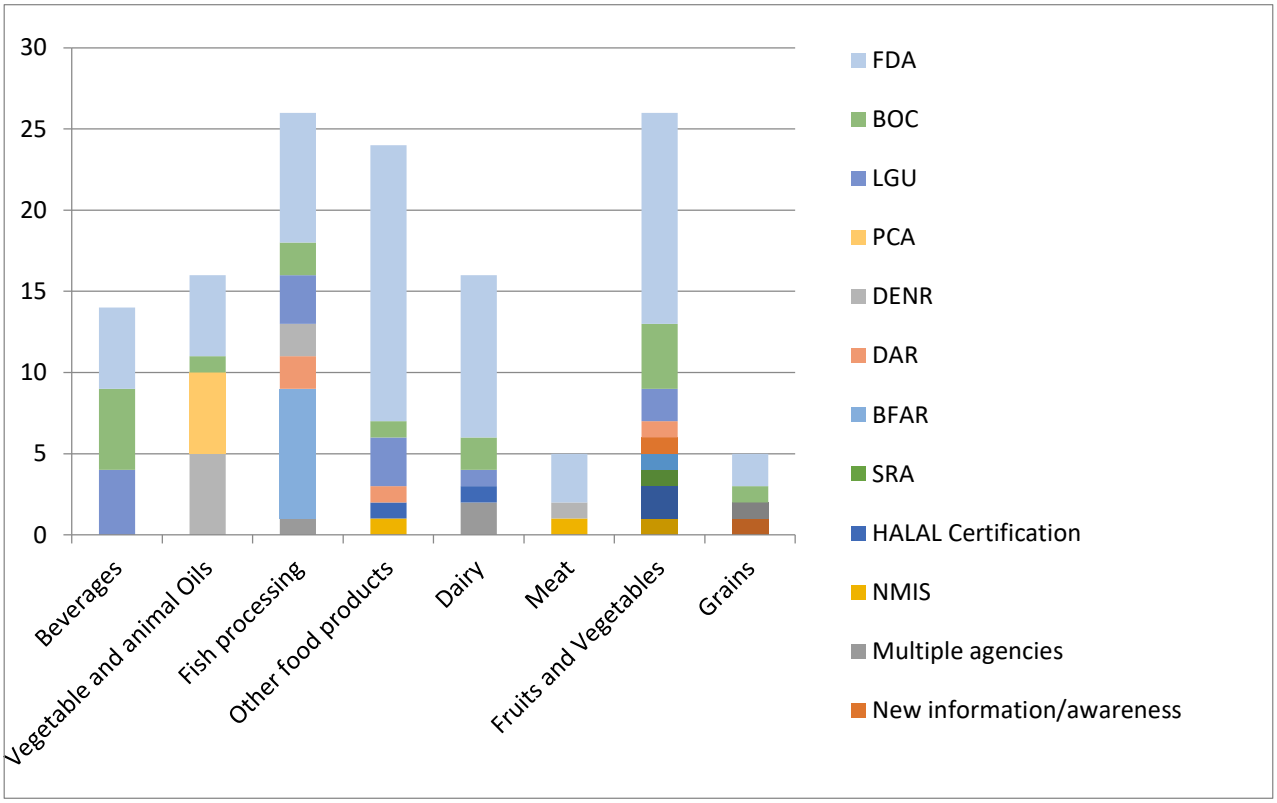
When asked of the policies affecting the FMI, the FGD participants cited only specific provisions and or thematic coverage of the policies. They are not so specific about the title of the policy, only that part that concerns them. With the exception, however, of the FGD participants of the processed fishery and the vegetable and animal oils sectors, who are both conversant and updated on the policies including titles and provisions as well as their impacts.

As to the number of institutions whose policies affect them (Figure 7), on one hand, the fruits and vegetables sector has the most number (9), followed by the fishery sector (7) and the "other foods" (6). The beverage sector and the processed meat sector, on the other hand, has the least

with only three institutions in their list, followed by the grains sector (4). One way or the other, there are interagency groups or technical working groups established for policy related concerns.

When cited policies that affect the subsectors were grouped by implementing institutions, the FDA top the list with BOC, SRA and the LGU as 2nd, 3rd and 4th, respectively. As expected most subsectors are affected by the respective commodity institutions that has jurisdiction over them (by virtue of major raw materials used) like BFAR, for the fishery subsector, PCA for the coconut-dominated vegetable oil sector, and NMIS for the processed meat and NDA for the dairy sector (Figure 7).

Figure 7. Policy Institutions affecting FMI industry sectors



All sectors cited the fact that there is no difference in requirements based on firm size, same regulatory policies applied to all. In terms of geographical advantage/disadvantage, none has been cited, except that most regulatory agencies main offices are in Manila, as cited by the participants in the Visayas and Mindanao. This entails additional time and costs (especially transportation cost) for FMIs in Visayas and Mindanao to comply with the requirements of FSRAs

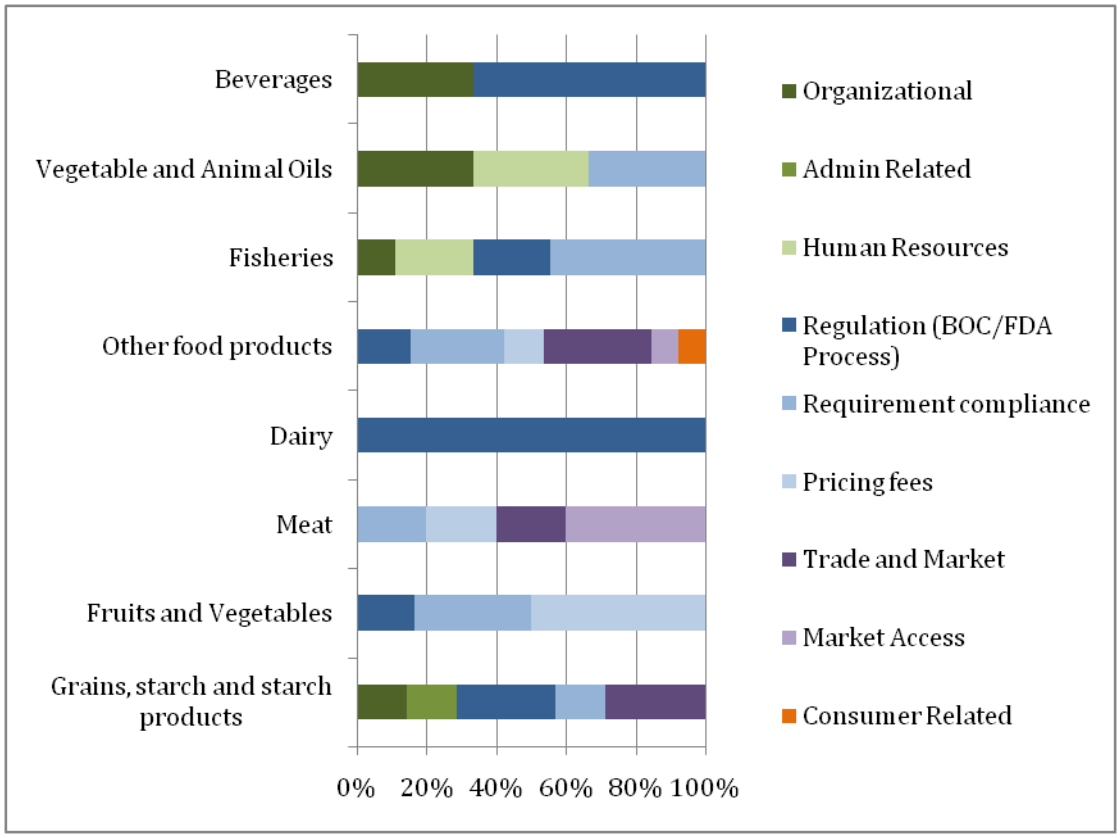
A big revelation in the FGD is the requirement of the Philippine Drug Enforcement Agency (PDEA) on a number of industry sectors. This is in relation to required permits in the purchase and even transport of chemicals used in processing, such as in the fishery, fruits and vegetable and the grains sectors. The Dangerous Drugs Act or Republic Act No. 9165 of June 7 2002, requires an importer to secure permit when filing import entries at the BOC, who in turn requires to secure a permit from PDEA prior to release of shipments in the regulated import list (RIL). The fees range from 500 to 5,000 depending upon type of operation such as retail distributors, prescribers,

wholesale distributors, importers, manufacturers, exporters of dangerous drugs and even storage of chemicals in bulk. A separate permit to transport dangerous drugs is also required with a police officer needed to escort from origin to final destination. These is not a simple escort arrangement when transport involves a multi area police jurisdiction, as the initial escorting police officer needs to turn over the escorting role to his counterpart in the succeeding area of jurisdiction. The fee for the police escort in the transport of dangerous drugs within a single police jurisdiction is about Php 15,000, which correspondingly increases for a multi police jurisdiction destinations. Moreover, there are delays in requesting permit to transport from the Philippine National Police (PNP) as well as in the assignment of police escorts.

With regard to dairy sector, milk processing industries have to secure license to handle precursor chemicals from PDEA. Particularly, the industry need to secure P3 and P6 type of license and pay corresponding fees. An annual fee of Php 2,500 is paid to get P3 license intended for end user of specified controlled chemicals. On the other hand, Php 500.00 is paid to secure P6 license for handlers of chemicals intended for research, analysis, and instructional program.

The cited regulations (specific provisions/thematic areas) and implementing institutions by sector are in Table 8 and will be discussed in detail in the succeeding sections by sector. When these cited policy issues were clustered into related areas, 4 major groupings emerged, namely 1) organizational matters - administrative and human resources 2) regulation - compliance requirements, regulatory, associated fees; 3) trade and market access and 4) consumer related (Figure 8).

Figure 8. FGD participant's identified bottlenecks in the regulatory process



The dairy and the F&V sectors are affected only with regulatory concerns, while –the fishery and beverage sectors were affected both primarily by regulation with some administrative issues to consider as well, while the vegetable and animal oils sector's concern is predominantly administrative in nature but also with some regulatory concerns. The rest of the sectors have both administrative and regulatory concerns with the inclusion of trade/market issues and consumer issues in the case of other food products.

When asked of the relevance of the policies, the eight subsectors are one in saying that the policies are relevant, specifically in ensuring food safety, except that the issues are in the carrying out and implementation. That is: varying government agencies involved in the permit process requires

Box 1. Agri-food and Veterinary Authority of Singapore (AVA)

Inspection & Sampling at Food Establishments

All licensed food processing establishments, cold stores and slaughter-houses are subjected to regular inspections to ensure that the food produced is safe and fit for human consumption.

The frequency of inspections depends on the grade of the food establishments as well as the previous compliance history of the establishments. These inspections are generally unannounced to obtain a more accurate assessment of the normal operating practices and conditions of the inspected establishments. Various aspects of food safety and hygiene will be checked which would include general conditions of the premises, storage practices, food preparation steps, food processing equipment used, pest status in the premises, food handling practices and personal hygiene practices of the food handlers, labelling details of prepacked food, delivery vehicles, in-house quality control programs, staff training in food safety and hygiene, documentation and records, etc.

The purpose of the inspection is to ensure that licensees and their food production personnel adhere to Good Manufacturing Practices (GMPs) and implement food safety programs such as HACCP (Hazard Analysis and Critical Control Point) to ensure safe production of food. Inspections could also allow procedures and practices which may be hazardous or pose contamination risk to food to be detected and ensure licensees take prompt action to correct the deficiencies. Any areas found to need improvement could also be highlighted during the inspections. After an inspection is completed, a report detailing the inspection findings will be sent to the licensee for timely follow-up and subsequent verification by AVA. In addition, AVA may collect food samples from the licensed establishments for laboratory analysis to monitor if these samples comply with the standards stipulated in Food Regulations.

Under the Wholesome Meat and Fish Act and the Sale of Food Act, AVA has the legal power to take enforcement action against any licensee who is found in breach of the licensing conditions or has contravened any provision of the Acts. These enforcement actions can range from issuance of a stern written warning to collection of composition sum as stipulated under the Acts. For cases of severe violations which infringed food safety. AVA may suspend or revoke the license that was issued to the licensee until rectification works have been completed satisfactorily.

Annual Grading Assessment

All licensed food establishments (including cold stores, slaughter-houses and food processing) in Singapore are categorized into 4 grades: ***A (Excellent), B (Good), C (Average) and D (Pass).***

Each food establishment will be graded annually based on its food hygiene and food safety standards before its license expires. The grade awarded will encourage the establishment to strive for better grades and seek improvement in food hygiene and safety standards. The grades of food establishments allow buyers from supermarkets and food retailers to identify good and reliable manufacturers when they source for food product supplies. Consumers can enjoy safer food knowing that buyers from supermarkets and food retailers source their food product supplies from food establishments with better grades.

same documents, (when can just specify that at certain permit processing stage that the same has been complied with); some requirements (of FDA in particular) are too rigid to comply with and permits have short validity periods (every 2-3 years instead of annual renewal) that add to the cost of the firm as well as the cost of monitoring to the concerned agencies.

Also in terms of other policies seen in other countries worth trying in the Philippines, most cited are a) one stop shop for LTOs,2) coordination among regulatory agencies for a unified/standard requirement and 3) looking into the system of Singapore and Malaysia where certificate of product registration (CPR) is not required and that post marketing surveillance is undertaken.

Box 2. Malaysian Food Regulations

The Food Act 1983 and the Food Regulations 1985 are the Malaysian food legislations that form the backbone of the food safety programme. Their objective is to ensure that the public is protected from health hazards and fraud in the preparation, sale and use of foods and for matters connected therewith. It is enforced by the Ministry of Health and the Local Authorities. The legislation, applicable to all foods sold in the country either locally produced or imported, covers a broad spectrum from compositional standards to food additives, nutrient supplements, contaminants, packages and containers, food labeling, procedure for taking samples, food irradiation, provision for food not specified in the regulations and penalty.

Since food safety is addressed throughout the food chain, legislations pertaining to food safety under the jurisdiction of other agencies are also enforced by the relevant agencies. At the primary production level, the Pesticide Act 1974, the Fisheries Act 1983, the Veterinary Surgeon Act 1974 and the Animal Ordinance 1953, all under the Ministry of Agriculture and Agro Based Industry are implemented. At the processing and retail levels, apart from the Food Act 1983 and the Food Regulations 1985, other legislations that were mentioned earlier are also applicable to a certain extent. The Trade Description Act under the Ministry of Domestic Trade and Consumer Affairs also play an important role in terms of protecting consumers from misleading and false labelling of food product.

The continuous revision and updating of the Food Regulations 1985 is conducted by the Technical Advisory Committee on the Food Regulations 1985 chaired by the Director of the FQCD, Ministry of Health. It is an inter-agency committee consisting of relevant government agencies involved in food safety from farm-to-table, the food industry, professional bodies and the consumers. Request for updating the food safety legislations is mainly made by the food industries (especially on the use of new ingredients and additives) and consumers (who demanded to be informed of new technology and new processes so as to be able to make an informed choice of the food they buy).

As required by SIRIM and the Ministry of Health Malaysia food industries and food manufacturers are encouraged to voluntarily use the international standards as well as additional standards to the halal standards requirement in processing food According to SIRIM (2005), they are three main standards that are needed to be carried out by food manufacturers in Malaysia to fulfill the requirements and these are; HACCP, GHP and Halal Standards.

Other relevant standards that are familiar to Malaysian food manufacturers and other multinational food companies are: The Hazard Analysis Critical Control Point (HACCP), Good Hygiene Practices (GHP)/Good Manufacturing Practices (GMP), Halal Food Standard and ISO. Food processing industry is encouraged to implement hygiene practices in plants whatsoever, but in Malaysia, they are not stated as mandatory regulations but their implementation will able to gain a positive result in the market.

6.2.2 Measures of Costs and Benefits

Majority of the participants from the business sector, except for the participant from the Dinalupihan LGU (processed meat sector), agreed on the following cost measures:

1. Higher input costs due to regulatory impacts on costs of materials
2. Higher production costs due to changes in production, transport or marketing processes required by the regulations
3. Costs of reduced competitions and
4. Costs of lost sales due to restricted access to markets

In the case of the last entry, costs of lost sales, in addition to the Dinalupihan LGU, participants from Association of Negros Producers (ANP), Herbanext, Altertrade and DTI are not agreeable

Table 9. Summary of Regulations Per Sector (based on FGD)

	Beverages		Vegetable and Animal Oils		Fish Processing		Other Food Products	
	RA*	**RR***	**RA**	**RR**	**RA**	**RR**	**RA**	**RR**
Regulations	FDA	application and approval of certificate of product registration (CPR)/license to operate (LTO)	PCA	no clear policy or regulation on imported raw materials i.e copra, etc	FDA	FDA Regulations	FDA	Product certification
		labelling/shared labels (harmonization)		lack of communication and training on the farmer group		LTO Renewal FDA		requirements to comply with the license to operate
		old policy 1 CPR per product but now its 1 CPR per manufacturing site		No clear governemnt policy on coco food products -PNS(Passed), PCA(Lack of knowledge)		LTO-For cold storage; FDA-requirement should be DOH-ISO Certified		FDA Requirements
		licensing of facilities (factories and warehouses)	DENR	RA 8749 (Clean Air Act)		Sanitary Phyto Sanitary checked by NMIS, BPI, BFAR, DA		Cost of Laboratory analysis
		food labelling (local, import, export)		RA 9275 (Clean water act)		HACCP		FDA-LTO Requirements
		to readily check the clearances attached to export documents BOC		PD 1586 (EIS System)		FDA-LTO		License/ Training requirements for key technical personnel
		list of commodity clearances by the exporters (update		RA 6969 (Toxic substances: Hazardous and nuclear waste)	LGU	LGU-business permit, ECC		Few personel from FDA to assist local food processor
	BOC	sugar import allocations for manufacturers of sugar based products for export (regulate/prevent smuggling)		Conversion of land	BFAR	Processing of PNG-EUC is too slow		Unconsolidated information for CPR Processing of Food (FDA)
		export/import clearances on sugar, muscovado, premixes		Proliferation of recycled vegetable oil in the market		BFAR-Fishing boat license, Marina accredited, Catch validation		Problem is not the FDA regulation but the process to pass the LTO
		export - phytosanitary; export license; certificate country of origin	FDA	FDA's subjective approval		Updated Technology-BFAR		Slow processing of FDA
	DTI	business name/pricing (SRP)/promotions		FDA's inability to check other brands/products non-compliance		Certificate of compliance for fishing boats		Fragmented requirements (between DA, FDA, DOH)
	LGU	application for mayor's permit, business permits		FDA's constant charge, guidelines		Marina-Fishing vessel,fishing		HACCP Training (FDA)
		sanitation permit/fire safety/BIR certified		FDA regulations on labelling -Lax on foreign; stringent on local		BFAR-HACCP Certificate		Attendance of FDA Trainings (AlterTrade)
		sweetened beverage tax (in progress)		Labelling restriction	DOH	Sanitary Permit		GMP
			BOC	regulation on imported raw materials i. e copra	BOC	CPRS Processing		HACCP Licenses
				lack of training and communication to farmers' groups		Co-verification, slow communication		LTO Requirements
				no clear government policy on coco food products	DA	Mandatory accreditation of CS Facility		Food Safety Certification
			DENR	RA 8749		Agrarian Reform-Land Ownership	DA	Location of agricultural site
				RA 9275 Clean water act	BOC	Importation BOC	LGU	LGU Business permits and licenses
				PD 1586	DENR	ECC	BOC	Export and Import documentary requirement
				RA 6969 (Toxic substances	LGU	Business Permit	OTHERS	Policy on sugar allocation among CBD Food processes
					EU	Accreditation of cold storage (DA/EU)		Price (Indirectly)
						Non-sense/ Unnecessary request for verification in the EU-BIP		BMBE Law
						Farm subsidy-Aqua		

Table 9. continued....

	Dairy		Meat		Fruits and Vegetables		Grains	
	RA	**RR**	**RA**	**RR**	**RA**	**RR**	**RA**	**RR**
Regulations	FDA	FDA Registration Process	NMIS	NMIS	FDA	Licensing e.g. FDA, LGU, BIR	PDEA	PDEA Licensing
		Sanitary and Phyto sanitary Permit	FDA	RA 10611-Food Safety Act of 2013		HACCP Certification	BOC	Communications between BOC
		License to operate as a manufacturer and a distributor		Meat processing- handled by the FDA		Food Safety	FDA	Requirements on the FDA
		Accreditations	DENR			Labelling -new information needed/awareness	NFA	Grain standards
		Alignment of Customs, BAI and FDA (Nestle)				Manufacturing Certificates-costs	CODEX	
		Food Safety Law				CPRS of the Philexport		
		Different agency roles of FDA, DA, BAI				Certification of FDA		
		SPS Permit/ SPS Import permit				License from the FDA		
		Improvement with the CPR and Authorization requirements				Food Safety Act		
		GDA Logo				Quality/ Standards Certification		
		Process of the CPR and label amendments				HACCP Certification(Castillejos)		
	HALAL	HALAL Certifications (Nestle)				Product classification		
		HALAL Certifications and FDA (Alaska)				CPRS		
	DTI	DTI Problem in accreditation with the Middle East			HALAL	GMP, HALAL, GAP		
					BOC	Tariff to other countries		
						Export Documentation		
						Accreditation of Exporters -Packing facilities, forms		
						Customs Issues		
					DOST	DOST Group on food preserves		
						DOST Standards		
					DA	Good Agricultural Practices		
						Certification as organic product		
					SSS			

*RA- Regulatory Agency, **RR – Regulatory Regulations

with the cited measure. The same group including Baldomero Maria Muscovado Milling Corporation (BMMC) are not agreeable as well with the cost measure "cost of familiarizing with the regulations and planning how to comply (may include purchase of external advice). Such response can be explained by the fact that some FGD participants do not see these items as a cost basically because they taught that these requirements are part of doing business.

However, no alternative measures were suggested by these participants, in the light of their non-agreement with some cost measures. Other FGD participants who post no disagreement with sample cost measure, however, provided alternative measures such as:

1. Consider the use of compliance requirements of other countries (Alaska)
2. Setting of target date by FDA to evaluate the product (to reduce cost of waiting)
3. Undertake audits by auditors (Philfoodex) – for the cost of familiarizing with regulations

On the other hand, representatives from the consumer sector provided the following alternative options: (a) Increased prices of products/services which involves measures to estimate the General Rate Increase (GRI), Freight Inflation (as suggested by the GenTuna Corporation), as well as the cost of promotional campaigns; and (b) Delays in the introduction of new products brought about by restrictions in labelling and/or non-compliance (Consumer Union).

Nonetheless, the presented cost measures were seen to be acceptable to most of the participants from the government sector. It was only the LGU of Dinalupihan that disagreed with the cost of reduced competition as one of the measures for evaluating the cost of regulation.

VII. Impacts of Food Regulatory Policies

This section of the study provides an overview of the impacts of regulatory policies at three levels; namely the government, food manufacturing industry, and the consumer sector. Assessment of the impacts to the government sector were done by looking into the FSRA's respective cost of implementation as well as the revenue generated from regulatory policies. On the other hand, data on the regulatory impacts to both FMIs and consumer sector were obtained through literature review, KIIs and FGDs. A discussion on the regulatory requirements, concerned FSRAs, and key bottlenecks were presented for each of the food manufacturing subsector.

a. Impacts of Food Regulatory Policies to the Government Sector

7.1.1 Cost of Implementing Regulatory Policies

Implementation of regulatory policies entails cost to the government. Specifically, this pertains to the costs associated with the conduct of the following activities: (a) administering the regulation including provision of information to business, recruiting and training government staff, and processing, licensing or product approval applications; (b) verifying compliance including conduct of inspections and audits; and (c) enforcement such as investigation of possible non-compliance and conducting prosecution (OECD, 2008).

In order to estimate the regulatory cost to the government, budget allocation of all the key FSRAs mentioned in the Food Safety Act of 2013 were evaluated. All agency budget attributed to the implementation of regulatory policies were obtained from the FY 2016 General Appropriation Act (GAA, published by the Department of Budget and Management. Generally, there are four major categories/agencies wherein these FSRAs fall into, namely, the (1) Department of Agriculture- Office of the Secretary (DA-OSEC); (2) Budgetary Support to the Government Corporations under DA; (3) Other Executive Offices; and (4) Department of Health.

The DA Office of the Secretary has six (6) Major Final Output (MFOs) and one of which is intended solely for the plant and animal regulation services (MFO 6). It is under the said MFO wherein the regulation activities (quality control and inspection, quarantine services, and registration and licensing) of both BAI and BPI are included. On the other hand, the NMIS and BPI budget allocation are presented separately from the DA-OSEC.

In the case of NDA and SRA, these agencies fall under the Budgetary Support to DA government corporations. With regard to other executive offices, this includes the agencies of NFA, PCA, and FPA. Majority of the MFOs of these agencies under the latter categories, aside from FPA, are not directly reflected as regulatory services but rather on the provision of product research and technical assistance. Nonetheless, these activities are necessary inputs for the agencies in order to provide regulatory services. Moreover, these agencies have other major functions wherein these regulatory services are incorporated.

Among the FSRAs evaluated under DA, it was only the NMIS and FPA that were found to have lone MFO intended solely for the provision of regulation services. As such, its entire budget both for operation and general administration and support (GAS) were accounted in the analysis. The rest of the figures quoted under DA-FSRAs only cover those of the operations activities as the expenses for salaries of government officials involved in the provision of regulatory services are not reflected in the GAA.

With regard to the Department of Health, the agency has one major final output intended for health sector regulation services (MFO 4). One of the activities under this MFO is the Regulation of Food and Drugs including regulation of food fortification and salt iodization. It is in such activity where the budget appropriation for the FDA is included. Moreover, the budget for the Bureau of Quarantine is reflected under the activity of quarantine services and international health surveillance.

Overall, the Philippine government spends around Php 2.2 Billion to facilitate the regulatory service for the food manufacturing industry (Table 10). However, such figure is only a conservative estimate of the total expenses incurred for regulatory purposes as this only covers the key FSRAs stipulated under the Food Safety Act. Furthermore, there are also other agencies, that was not included in the analysis, that have indirect contribution in the facilitation and enforcement of regulatory policies. For instance, the Department of Trade and Industry has budget for MFO 4: Consumer Protection Services and MFO 5: Business and Trade Regulatory Services amounting to about Php 145 million. Nonetheless, for the purpose of this study, only budget of those FSRAs mentioned under the Food Safety Act were included in the study.

Table 10. FY 2016 Budget Allocation for FSRAs

Programs/Projects	FY 2016 Appropriation (Php)			
	Personal Services	Maintenance and Other Operating Expenses	Capital Outlays	Total Cost
I. Department of Agriculture				
1. Office of the Secretary				
MFO 6: Plant and Animal Regulation Services				
1.1. Bureau of Animal Industry (BAI)				
a. Quality control and inspection		46,384,000	62,290,000	108,674,000
b. Quarantine services	51,490,000	56,500,000	20,000,000	127,990,000
c. Registration and licensing		2,700,000		2,700,000
Subtotal	**51,490,000**	**105,584,000**	**82,290,000**	**239,364,000**
1.2 Bureau of Plant Industry (BPI)				
a. Quality control and inspection	37,426,000	172,127,000	78,550,000	288,103,000
b. Quarantine services	51,490,000	56,500,000	20,000,000	127,990,000
c. Registration and licensing	13,861,000	37,183,000		51,044,000
Subtotal	**102,777,000**	**265,810,000**	**98,550,000**	**467,137,000**
2. National Meat Inspection Services (NMIS)				
a. General Administration and Support (GAS)	10,780,000	30,679,000	4,189,000	45,648,000
b. Operations				
MFO 1: Meat Regulation Services	124,015,000	97,773,000		221,788,000
Subtotal	**134,795,000**	**128,452,000**	**4,189,000**	**267,436,000**
3. Bureau of Fisheries and Aquatic Resources				
a.Operations				
MFO 5: Fisheries and Aquatic Resources Regulation Services	72,960,000	832,169,000	19,800,000	924,929,000
Subtotal	72,960,000	832,169,000	19,800,000	924,929,000
II. Budgetary Support to Government Corporations under the Department of Agriculture				
1. National Dairy Authority (NDA)				
a. Operations				
MFO 2: Technical Advisory Services		39,868,000		39,868,000
Subtotal		**39,868,000**		**39,868,000**
2. Sugar Regulatory Administration				
a. Projects				
Research and Development Program		56,192,250		56,192,250
Subtotal		**56,192,250**		**56,192,250**
III. Other Executive Offices				
1. National Food Authority (NFA)				
a. Operations				
MFO 2: Research and Technical Assistance on Public Sector Productivity		53,700,000		53,700,000
Subtotal		**53,700,000**		**53,700,000**
2. Philippine Ccconut Authority (PCA)				
a. Support to Operations (STO)				
Product Research and Development		25,800,000		25,800,000
Subtotal (STO)		**25,800,000**		**25,800,000**
3. Fertilizer and Pesticide Authority (FPA)				
a. General Administration and Support Operations	14,125,000	13,050,000	1,703,000	28,878,000
MFO 1: Fertilizer and Pesticide Regulation	21,415,000	25,026,000	620,000	47,061,000
Subtotal	**35,540,000**	**38,076,000**	**2,323,000**	**75,939,000**
IV. Department of Health				
1. Office of the Secretary				
MFO 4: Health Sector Regulation Services				
a. Regulation of Food and Drugs including Regulation of Food Fortification and Salt Iodization				
1.1 Food and Drug Administration		50,550,500		50,550,500
Subtotal (Operations)		**50,550,500**		**50,550,500**
b. Quarantine Services and International Health Surveillance				
1.2 Bureau of Quarantine		**95,077,000**		**95,077,000**
Subtotal		**95,077,000**		**95,077,000**
Total Appropriation	**397,562,000**	**1,691,278,750**	**207,152,000**	**2,295,992,750**

Source: FY 2016 General Appropriations Act, Department of Budget and Management

7.1.2 Revenue Generated from the Implementation of Regulatory Policies

FSRAs also earned income from the implementation of regulatory policies particularly through permit fees, registration fees, clearance and certification, inspection fees, processing fees, as well as fines and penalties. The sources of regulatory revenues and corresponding income for some of the FSRAs are shown in Table 11. All information was gathered by looking at the financial documents of each agency website. However, one of the limitations is that not all agencies have readily available information on the income derived from regulatory policies. Period of coverage also varies from 2013-2015 as most of the data are not yet updated. Descriptions of each sources of revenue were also not available. As such, it would be difficult to attribute these revenues solely for the implementation of regulatory policies intended for food manufacturing industry.

Table 11. Revenue Generated from the Implementation of Regulatory Policies

Sources of Revenue	Amount
Bureau of Animal Industry (FY 2013)	
Permit Fees	12,112,255
Registration Fees	7,039,562
Other Permits and Licenses	459,619
Clearance and Certification	20,705
Inspection Fees	110,788,099
Processing Fees	173,045
Total	**130,593,285**
Bureau of Plant Industry (FY 2014)	
Certification Fees	1,540,040
Inspection Fees	2,758,532
Other Service Income	3,023,810
Other Business Income	14,510,672
Permit Fees	664,560
Inspection Fees	62,871,978
Total	**85,369,591**
National Meat Inspection Service (FY 2014)	
Inspection Fees	118,131,946
Accreditation	3,549,500
Clearance and Certification	2,659,692
Total	**124,341,138**
Fertilizer and Pesticide Authority (FY 2015)	
Permit Fees	3,335,590
Registration Fees	27,743,310
License Fees on Fertilizers and Pesticides	17,646,080
Fines and Penalties	2,906,109
Total	**51,631,089**
Food and Drugs Authority (FY 2014)	
Registration Fees	167,693,056
Licensing Fees	7,963,084,587
Fines and Penalties	48,409,577
Other Service Income	76,609,510
Total	**8,255,796,730**

Source: FSRA websites

Nonetheless, these revenues play significant role in augmenting funds not only for the operation of the FSRAs but also in the improvement of their respective sectors. As a general procedure, FSRAs need to remit first all income from fees to the Bureau of Treasury. FSRAs can then request this income to be utilized for their operations, subject to approval of the Department of Budget and Management (DBM) and other legislative bodies.

7.2 Impacts of Regulatory Policies to the Food Manufacturing Industry

This section provides discussion for each of the eight food manufacturing subsectors. Specifically, each FMS was provided information on the overview of the sector's industry performance, current regulatory processes, and key bottlenecks. With regard to regulatory processes, only activities intended for securing major permits and licenses at the national level listed for each sector. Other prerequisites for regulatory compliance (e.g. barangay clearance, business permit, among others) were not included in the list. Nonetheless, concerns raised on the entire FMS regulatory process where documented in each sector FGD results. Moreover, an in-depth study covering regulatory processes at the local and national levels is presented in the discussion of the dairy sector.

7.2.1 Processed and Preserved Meat Industry Sector

The processed meat industry revenue in the year 2010 reached a PhP 44 Billion with the employment of 10,000 direct jobs. In the year 2012, a gross value added of PhP 7.257 Billion was contributed from the meat sector. Also with a total of 175 establishments in the country for the meat sector (Angeles, 2015).

The food sector, as an important contributor to the Philippine economy, was underscored by the director of DTI's Export Marketing Board, Senen Perlada. Using the meat sector as an example, he said that the food sector has a multiplier effect of 14 and that for every R1 million increase in the processed meat sector, it translates to an employment multiplier of 11.3 (*Manila Bulletin 2016"* (Magkilat, B., 2016).

7.2.1.1 Overview of the Sector's Industry Performance

The country is a net exporter of meat processed products generating US $47.3 M from exporting to United Arab Emirates, Qatar, Saudi Arabia, Kuwait, Japan, United States, Canada, Guam and Taiwan in 2013.*The local industry imports around 85% of its raw material inputs. In terms of finished processed meat, majority of its output meets domestic demand (DTI, nd).*

The meat processing industry generates over PhP70 billion a year. While Philippine Association of Meat Processors Inc. (PAMPI) is a PhP200 billion sector with 48 companies in the business. San Miguel Pure Foods and its conglomerate, a pioneer in the industry, stretches from the production to manufacturing namely B-MEG, Monterey Foods Corporation, Magnolia Chicken, and The Purefoods- Hormel Company, Inc (San Miguel Purefoods Company Inc., 2016).

According to the Business World from the presentation of the processed meat industry of Ms. Judith Angeles, the top meat processing companies are the following: Purefoods Hormel Company Inc, CDO Foodsphere, Inc., RFM Corporation, Pacific Meat Co. Inc., Meatworld and Pampanga's Best, Inc. The major export markets of processes meat are in UAE, Qatar, Japan, Saudi Arabia, USA, Kuwait, ASEAN Countries, Canada, Guam and Taiwan.

With regard to industry prospects, insights were also solicited from the FGD participants. From the consumer side, it was pointed out that there is an increasing demand for the sector due to the changing lifestyle and increasing number of fast food establishments. The growing livestock production in both urban and pre-urban setting as well as the importance of new technology in

odorless livestock production (to address zoning ordinance in livestock production) was also emphasized by the participant from the consumer sector. On the other hand, participants from the supplier side stressed the growth of new brands and fast pace of living as one of the factors affecting the future of the processed meat industry sector.

Based on the data of DTI, there are a total of 131 establishments under the processing and preserving of meat subsector for 2013.

7.2.1.2 Regulatory Requirements

Republic Act 9296 or the Meat Inspection Code of the Philippines provides the sole authority to NMIS to implement policies, programs, guidelines, and rules and regulations pertaining to meat inspection and meat hygiene. Specifically, Section 13 of the said RA states that the scope meat inspection shall apply to "all meat establishments such as slaughterhouses, poultry dressing plants, meat processing plants, cold storages, meat shops, meat markets and other outlets engaged in domestic and international trade where food animals are slaughtered, and/or their meat are prepared, processed, handled, packed, stored or sold for human food." As such, all establishments along the above-mentioned activities needs to secure accreditation and certification from NMIS.

However, in 14 January 2016, a joint DOH-FDA and DA-NMIS Circular No. 1 Series of 2016 "Clarification on the Transfer of Regulatory Functions from the National Meat Inspection Service to the Food and Drug Administration Over Processed Meat Products" was issued delineating the functions and shared responsibilities of DA-NMIS and DOH-FDA in the regulation of meat products. Specifically, Section 15(b), Article V of the IRR of the Food Safety Act of 2013, mandates FDA to be responsible in the assurance of safety of processed and pre-packaged of food products, whether locally produced or imported, including meat products. As per the said circular, official transfer of functions over processed meat products from NMIS to FDA should take effect by July 2016.

Accordingly, the FDA issued Circular 2016-013 "Guidelines on the Implementation of the Joint FDA-NMIS Administrative Circular No. 2 on the Transfer of Functions in the Regulation of Processed Meat" to provide directives with regard to the transfer of functions in the regulation of processed meat. With the new guidelines, meat establishments (comprised of meat processors, distributors, importer, and exporter) are directed to comply with existing FDA requirements and procedure on licensing, registration, and labelling. The FDA shall recognize the validity of LTO including Good Manufacturing Practice and Hazard Analysis Critical Control Points (HACCP) certifications issued by NMIS until their respective expiration date.

Furthermore, importer/distributor of processed meat shall present their LTO and CPR to the Bureau of Customs prior to the release of products from the port. Certificate of meat inspection (COMI) will no longer be required by FDA to importers of processed meat. With regard to exportation, companies need to secure export commodity clearance (ECC) from FDA prior to exportation of processed meat, as required by the country of destination. Through the ECC, both FDA and exporting countries can track product details as well as the source and destination of products. Based on the general procedure of FDA, Processing time for ECC would take about 30 minutes to 1 hour. Any significant delay can be attributed to the inadequacy of information and document. Nonetheless, FDA will still avail the services of NMIS laboratory for testing prior to

issuance of ECC. Major regulatory requirements for the sector and corresponding fees are summarized in Table 12.

The FDA cited that they are undermanned and as a result, delays in permit processing already occur due to this. That being the case, the transfer of regulation of processed meat to FDA from NMIS will the more add to FDA's work and consequently to delays on the part of the processing firms applying for permits. While streamlining of roles and responsibilities are understood (processed meat to FDA and fresh meat to NMIS), to do so without accompanying support in terms of human resources and clarity of purpose undermines the streamlining process. Clients and NMIS, themselves are not so clear on the transfer issue (other than for streamlining purposes) when NMIS has been said to be performing the job well and for consecutive years had been cited for efficient delivery of services among DA attached agencies. Why the need to transfer

Table 12. Major Regulatory Requirements for the Processed and Preserved Meat Subsector

Requirements	Regulatory Agency	Fees (Php)	Processing time
A. Meat Manufacturer/ Processor			
1. License to Operate*	FDA		30 days
2. Product Registration*	FDA		
3. GMP Certification	NMIS	2,000	3 days
4. HACCP Certification	NMIS	5,000	
B. Meat Importer			
1. License to Operate	FDA	8,080	30 days
2. License for Meat Importers (for meat importer traders/ processors, except processed/ canned meat products)	NMIS	4,000	3 days
3. License to Operate for Cold Storage Warehouse (CSW)	NMIS	1,300 (Class AA)	
		1,800 (Class AAA)	
4. GOP Certification	NMIS	2,000	
5. HACCP Certification	NMIS	5,000	
C. Meat Exporters			
1. License to Operate	FDA	8,080	30 days
2. Laboratory analysis	NMIS	Depending on the type of analysis	
3.. Export Commodity Clearance	FDA	1,500	

** Please see Section 5 for the fees imposed by FDA for LTO and CPR. Fees vary depending on the capitalization.*

In terms of consumer protection, the Meat Standard Development and Consumer Protection of the NMIS provides services on the following: a) issuance of sales promotion permit; b) redress of consumer complaints; c) and regulatory investigation. With regard to regulatory investigation, NMIS conducts regular meat market surveillance and enforce meat inspection rules and regulations to prevent adultered or misbranded meat from being sold to consumers. Legal basis for such activity is the Meat Inspection Code of the Philippines which gave the authority to NMIS to create task forces, when necessary, who will then be responsible in planning out and conducting strike operations for the confiscation and properly disposal of confiscated hot meat (NMIS Citizen Charter). However, with the issuance of Circular 2016-013, all consumer complaints on processed meat are directed to be filed at FDA.

1. Key Bottlenecks

Key informant from Pampanga's best raised the concern on the subjective approval of applications. The participant cited that they have new supplier from Thailand who were able to get CPR and LTO in one week, unlike that of their local suppliers who waited for four months for their CPR to be released. Though during the KII with FDA, there was no mention (of course) of such preferential treatment, when asked if there are differences in the application of foreign companies and local companies. Other responses raised during the FGD with the participants from processed meat sector, are mostly production related, slaughtering capacities and marketing, organic standards and waste utilization.

1.Production

a. Meat demand is high but production has been limited to Tarlac, Laguna and Batangas. Even if meat from these production areas are chilled, supply and distribution problems still cannot be addressed as there are no economies of scale to speak of to make such mode viable.

b. While there are opportunities in the metropolis for backyard livestock production to directly supply Metro Manila's meat requirements, some LGUs (i.e. Marikina and Las Pinas) zoning policies are still delimiting what could have been urban and peri urban backyard livestock production in their municipalities. Even if producers explained of their odorless hogs and poultry production technology, their pleas are falling on LGU's deaf ears.

c. In terms of production structure, there are lots of small producers but they are not organized, thus limiting potentials for collective activities that will afford cost reduction (collective purchase of inputs, etc.) or even better prices through better market access.

d. Lack of incentives to produce, cost is increasing without accompanying increase in selling price and yet further confronted with competition in the market.

2.Slaughtering and Marketing

a. A meat company don't have their own slaughter house but they have to comply with requirements and have to deal with NMIS accredited slaughterhouses. The challenge is more on identifying nearest accredited slaughterhouses and on the capability of NMIS to monitor compliance.

b. *Class AAA or Triple A slaughterhouses are – those with facilities and operational procedures appropriate to slaughter food animals, or premises to cut and pack carcasses or primal parts, or establishments to process and manufacture meat and meat products for distribution and sale for domestic and international meat trade. The NMIS shall certify the fitness for human consumption of meat and meat products for export and for distribution outside of the province or of the independent city. The application of Hazard Analysis Critical Control Point (HACCP) program shall be required.*

   As such triple A cannot service wet market demands in their province of operation, even if there is huge meat demand.

c. Food mile are advantageous, but the problem is additional costs are incurred when products are delivered and market is not ready/willing to shoulder it in terms of increase in product price; Also, there is lack of encouragement for the local community to increase contribution to growth of the local economy.

3.Organic

The need to fine tune organic and natural food standards to help differentiate organically produce meat and for it to command a premium price over non-organic.

4.Waste product utilization

Biogas from livestock can help maintain odorless farms by utilizing animal wastes to fuel. However, there is no incentive for putting up bio gas in the country and as such the technology is not that much taking off the ground. In Vietnam, farms are provided incentives when they produce and use biogas.

7.2.2 Processed and Preserved Fish, Crustaceans, and Mollusks

7.2.2.1 Overview of the Sector's Industry Performance

The Philippines' top three fishery products in terms of production are tuna, shrimp and seaweeds. The tuna sub sector's contribution to the country's GDP is 1.7% at current prices (2013). Primarily dominated by commercial players, the sector engages about 1.6 million Filipinos for the same year. In terms of processed tuna, the total canned tuna manufactured was 50.5 million kilos amounting to PhP8.6 billion in 2014.General Santos City in Mindanao, is the country's "Tuna Capital" as it tops the manufacturing industry's production for the fishery subsector (Tuna Canners Association of the Philippines, 2015).

Total export volume of tuna was 165,757 MT amounting to US $681.618 million. While major fish imports are tuna, mackerel and sardines. About 30% of the imported products are tuna. As to key industry players, the Tuna Canners Association is an active stakeholder. It is composed of Alliance Select Foods, Celebes Canning Corporation, GenTuna Corporation, Ocean Canning Corporation, Philbest Canning Corporation and Seatrade Canning Corporation in General Santos City. There are also members in Zamboanga.Milkfish is another product known to be manufactured into various products. A major player for this commodity is the Sarangani Bay who is an active exporter (TunaCannersAssociation of the Philippines, 2015).

Based on the data of DTI, a total of 138 establishments are operating in line with the processing and preserving of fish, crustaceans, and mollusks.

7.2.2.2 Regulatory Requirements

Republic Act No 8550 or the Philippine Fisheries Code of 1998 mandates the Bureau of Fisheries and Aquatic Resources (BFAR) as the government agency responsible for the development, improvement, management and conservation of the country's fisheries and aquatic resources. In order to deliver such mandate, BFAR provides five major services, namely, fishery policy;

technical advisory; supply services for fishery productivity; supply of infrastructure facilities and equipment for fishery products; and the fisheries and aquatic resources regulation services.

The scope of regulatory function of BFAR mainly covers activities related to commercial fishing; exportation of fish and fishery/aquatic products; and importation of fish and fishery/aquatic products. Moreover, BFAR also provides regulatory services on activities related to fishpond lease agreement; submission of marine products sample for red tide toxin (PSP toxins) analysis; submission of fish samples for cyanide analysis; as well as the monitoring, control and surveillance on law enforcement.

Moreover, with the issuance of BFAR Administrative Circular No. 251 Series of 2014 "Traceability System for Fish and Fishery Products", a traceability system was then established for wild-caught, farmed fish and other aquatic products. Specifically, the circular covers the following business operations: fishing boats or vessels; boat or vessel landing at ports, buying stations and auction markets; pre-processing, cold storage and processing plants; transporters and dry warehouses; and traders, shippers, wholesalers, distributors and retailers. In order to ensure traceability, data are also requested from business operators engaged in various stages of the supply chain from pre-production to post-harvest, to wit:

1.Wild-Caught Fish

1. For regular catch certification (catching, trainshipment, unloading/landing, transport, blast freezing, storage, processing, storage dry warehouse, transport, and shipment)
2. For simplified catch certification (catching, unloading/buying station, local transport, processing, cold storage, trans port and shipment)

2.Farmed Fish

1. Feed procurement and distribution, drug/biological/chemical distribution, pre-production (hatchery, wild-caught fry, nursery), production (grow-out), post-harvest (transport, auction market, processing) cold storage, transport, and shipment.

Section 4 of the circular mandates all Fishery and Aquatic Business Operators (FABOs) engaged in the above-mentioned supply chain activities to register their facilities, operate traceability procedures, and cooperate with BFAR in line with the implementation of the said circular.

As a summary, Table 13 presents the regulatory requirements and corresponding fees needed by the sector at various stages of the supply chain

Table 13. Regulatory for processed and preserved fish, crustaceans, and mollusks.

Requirements	Regulatory Agency	Fees (Php)	Processing time
A. Fish Processing Plants			
1. License to Operate	FDA		30 days
2. Product Registration	FDA		
2. Certification of Hazard Analysis for Critical Control Points (HACCP) Recognition/Accreditation	BFAR	No Fees Required	20 days
3. Issuance of Certificate of HACCP Approval, Certificate of Recognition for HACCP Implementation and Certificate of Inspection	BFAR	No Fees Required	
4. Chemical and Microbiological Testing	BFAR	Depends on the type of analysis	7 - 10 days
B. Ice Plant and Cold Storage (IPCS) Fishing and Freezer Vessels (FV)			
1. License to Operate/ Sanitary Permit issued by LGU	FDA		
2. Certification of Hazard Analysis for Critical Control Points (HACCP)	BFAR	No Fees Required	2 days
3. Issuance of Certificate of HACCP Approval, Certificate of Recognition for HACCP Implementation and Certificate of Inspection	BFAR	No Fees Required	2 days
C. Importer of Frozen/Chilled Fishery Products			
1. License to Operate	FDA		
2. Issuance of Sanitary and Phyto Sanitary (SPS) Clearance to Import Frozen/Chilled and Fishery Products	BFAR	Application Fee- Php 150 Importation Fee - Php 1,500	1 hour
3. Issuance of Sanitary and Phyto Sanitary (SPS) Clearance of Fishery/Aquatic Products	BFAR	150	1hour
4. Inspection and Clearance of Imported/Incoming Fish and Fishery Products via the MDA/NAIA	BFAR	No Fees Required	1hour
D. Exporters of Fishery Products			
1. License to Operate	FDA		
2. Issuance of Sanitary/Health Certificate for accredited exporters to international markets	BFAR	No Fees Required	2 Working Days
3. Chemical and Microbiological Testing	BFAR	Depends on the type of analysis	
4. Issuance of Export Permit for Fresh/Frozen/Chilled Fishery Products	BFAR	No Fees Required	30 minutes

5. Export Commodity Clearance	BFAR	No Fees Required	20 min to 1 hour
6. Issuance of Clearance for Outgoing Fish and Fishery	BFAR	No Fees Required	1 hour

The FDA regulations that affect the sector are on LTO (length of validity and renewal issues raised), HACCP, DOH –ISO certification for cold storage. This is in addition to the DA (and EU) mandatory certification requirements for cold storage accreditation. The SPS are all checked by DA agencies like NMIS, BPI and BFAR. As the commodity, regulatory agency of the sector, BFAR requires certificate of compliance for fishing boats, which is in addition to the MARINA requirements of certification for fishing vessels.

The DOH usually at the LGU level requires sanitation permit in addition the business permit. In some cases, where the land involved is covered by agrarian reform, land ownership certificate is also required. Environmental compliance certificate (ECC), on the other hand, is required by the DENR.

7.2.2.3 Key Bottlenecks

The key bottlenecks identified by the FGD participants from the private sector are the following:

1.Lack of manpower of the regulatory agencies leading to delays in processing
2. BFAR-USAID already has an online catch verification for the issuance of the health certificate. In the case of EU another certification is required (case of Gen Tuna) they do not believe on the validity.
3. Lack of updated technologies (from BFAR) that will help improve their operations

4. For their part, the regulatory agencies, cited that the lack of proper requirements by the applying establishments, is the one delaying the process (ex: for the document of the CAT certificate, there is a portion that says please see attached. But there is no attached requirement).

Furthermore, the study of Llanto et al (2016) shows the regulatory policies affecting the tuna were mainly focused on the following: a) acquiring business permit; b) acquiring registration and licenses for all types of fishing vessels, from MARINA, BFAR, and the LGU; c) acquiring License to Operate from the FDA and the possible case of duplication of inspection process by the BFAR and FDA; d) acquiring Certificate of Product Registration from the FDA; e) the Qualified Person in Industry Regulatory Affairs of FDA; f) and presence BFAR signatories for the regulatory instruments. Although the results of the study indicated that regulations, especially that of concerning food safety standards, are necessary, there are still improvements to be done especially in the areas of registration, licensing, and inspection.

7.2.3 Processed and Preserved Fruits and Vegetables

7.2.3.1 Overview of the Sector

The fruit and vegetable (F&V) sector includes a broad range of products such as jams, jellies, marmalades, juices, purees and concentrates, dried or dehydrated, drained glazed and

crystallized fruits, processed vegetables, processed nuts and coconut products, sauces, condiments, spices and mixes. There is abundant raw material supply for manufactured or processed F&V. Fruits such as pineapple, mango, banana, sour sop, papaya, guava, *calamansi*, *dalandan*, jackfruit, tamarind, strawberry, raspberry, palm fruit and coconut are processed to be exported. Vegetables and root crops such as ginger, onion, potato, cassava, ube (yam), cucumber, chick peas, soy beans, sweet corn, mushrooms, tomatoes, *ampalaya* and carrots are processed. These are canned, pickled, quick frozen and are made into purees, sauces, pastes, soups and condiments such as ketchup and broth. Export market for processed F&V includes the United States, Japan, Canada, South Korea, Netherlands, China, Hong Kong, United Kingdom, Vietnam and Australia (Arcansalin, N.P., 2015).

As per 2012 census, there are 195 fruit and vegetable manufacturing establishments employing about 30,670 people with a gross value added of PhP18.95 billion (invest Philippines). Del Monte Philippines remains to be the market leader in the sub-sector with other key players such as Dole, T'boliAgro Industrial Development Corporation, Ram Food Products, California Manufacturing Corporation and Sysu International Incorporated.

Retail sales of processed F&V in the Philippines registered 5% current value growth and 3% volume growth in 2015, rates which are both slightly slower than in 2014. Partly accounting for the marginal slowdown in 2015 is the competition posed by fresh fruit and vegetables which are extensively distributed. Del Monte Philippines Inc, the industry leader led the sector in 2014 with a value share of 44% and is able to through its presence in numerous areas such as shelf stable tomatoes, shelf stable beans, shelf stable vegetables and shelf stable fruit. Its strength, however, is in shelf stable fruit which contributed 75% of its total value sales of processed fruit and vegetables in 2015 ((Euromonitor, 2015).

With the industry of the Philippine Processed foods, fruits and extracts share 38% of the total major processed food exports from a 46% composition of the Philippine food exports. The major processed food exports other than fruits and extracts are dairy, sugar/sweeteners, coconut and others (BOI, 2015).

For the processed vegetables industry, the Philippines export mixed vegetables to China, also the country exports frozen mixed vegetables to Singapore and lastly imports chilled asparagus and mushroom from China (BOI, 2015).

Processed fruit and vegetables is expected to post a value CAGR of 3% at constant 2015 prices. The volume growth of processed fruit and vegetables is expected to be slightly slower since affordable fresh fruit and vegetables are likely to be continuously preferred when available. As such, it is likely that consumers will be willing to purchase hard-to-find produce such as cherries even if a little pricier causing value growth to register slight improvements. Another factor to explain the value growth trend over the forecast period is the preference among consumers for small pack sizes which are more expensive per unit. This will not be favorable to volume growth but will help push value growth up. This shopping habit will be further encouraged by the introduction of shelf stable fruit in pouches by key players to cater to the low-income sector, (Euromonitor 2015).

7.2.3.2 Regulatory Requirements

The Bureau of Plant Industry (BPI) is mandated to serve and support the Philippine plant industry sector through the provision of services in the areas of crop research, protection and production, analytical services, seed quality assurance, plant quarantine, agricultural engineering services and food safety, as well as comply and implement existing regulations and support/advocate the formulate of new regulations (www.bpi.da.gov.ph).

With regard to regulatory function, BPI has two major divisions which perform regulatory function, namely, the Plant Product Safety Service Division (PPSD) and the National Plant Quarantine Services Division (PQSD). The PPSD is mandated to provide and develop monitoring protocols and efficient analytical methods to ensure safety of plant food from production to post harvest stage of the food supply chain. PPSD accredits packinghouses and establishments involved in the distribution of fresh and minimally processed fruits and vegetables. Moreover, the division inspects packinghouses of fresh agri-produce intended for export and domestic markets for compliance to food safety protocols. Among the other services of the division include the provision of chemical and microbiological test as well as pesticide residue level analysis in locally produced and imported agricultural commodities. On the other hand, the National Plant Quarantine Services Division (PQSD) provides certification/clearance to the following: Certificate of Registration; Phytosanitary Certificate, Domestic permit, sanitary and phytosanitary import clearance, certification of accreditation as exporter, certificate of accreditation of package facility, and the certificate of accreditation of farmers/growers. The above-mentioned requirements of BPI are prerequisite for any establishment engaged in fruit and vegetable processing to apply and /or renew LTO and CPR from FDA.

As of 2013, there are 83 establishments involved in vegetable and fruits processing. The different requirements for each stakeholder in the supply chain of the vegetable and fruit processing industry is shown in Table 14.

Table 14. Regulatory requirements for vegetable and fruits processing industry

A. Fruits and Vegetables Processors			
Requirements	**Regulatory Agency**	**Fees (Php)**	**Processing time**
1. License to Operate	FDA		30 days
2. Certificate Product Registration	FDA		
B. Exporter of Plant Products			
Requirements	**Regulatory Agency**	**Fees (Php)**	**Processing time**
1. License to Operate	FDA		
2. Application and issuance of phytosanitary certificate	BPI	Free	30 minutes to 5 days (if treatment is required)

C. Importer of Plant Products			
Requirements	**Regulatory Agency**	**Fees (Php)**	**Processing time**
1. License to Operate	FDA		
2. Application and issuance of BPI-PQS certificate of accreditation/registration	BPI	30 per clearance	30 minutes
3. Application and issuance of sanitary and phytosanitary import clearance	BPI	30 per clearance	30 minutes

7.2.3.4 Key Bottlenecks

The key bottlenecks in processed fruits and vegetables are either production related or compliance related. Under production, a firm is confronted with high cost of production given the high cost of maintaining a farm to produce raw material for processed products, resulting mainly from high tax payment (based on farm revenues alone and not based on income after costs). Economies of scale of smallholder farms is also an issue given their non-ability to meet volume demanded and high costs, to which collective activities are being initiated by BPI through groupings and organized farm activities.

The cost of compliance that involves mere change on label information, the cost of coming up with cost of manufacturing and the fees themselves are proving to be a burden to the food manufacturing sector. The non-awareness/understanding on non-tariff measure/SPS together with the new CPRS are likewise added burdens to the sector.

1. Production related
   a. Whole processing operation (that includes a farm producing the fruit as raw material) is not viewed as an integrated operation and as such is subject to different taxation. Cost of processed product include Registration at LGU (of both the farm and the processing plant level) which are subject to 2 different tax payments. The farms are taxed based on revenues arising mostly on harvest period and exclusive of costs during non-harvest and consequently no-income period (in Zambales LGU). The farm is paying tax of almost 36,000 in a year. This increases the cost of raw materials (produced from the farm). Add to this the tax of the plant/office in the metropolis where the raw materials are processed into finished product.
   b. Farmers unable to meet volume required of importers and there is no distribution system. Example is Okra already exported to Japan, also Asparagus and Shallops. Exporters need to assist farmers.

   c. The smallness of size and non-organized structure of farms delimits the potential for collective activities such as joint raw material purchase which could afford cost reductions. The BPI started farm groups/clusters (just like in Indonesia) to organize

the farms' activities for purposes of meeting clients' required volume, enhanced distribution and consequently bargaining power.

4. Regulation Compliance

   a. Most cannot see the essence or purpose of the client profile registration system (CPRS). It is a module of the BOC Electronic-to-Mobile System (e2m) which builds up its database of stakeholders transacting with customs. It determines the access rights of an e2m user in the BOC system.
   b. A small change in information in labels results to added cost to manufacturers. Putting into waste labels still on stock.
   c. Certificate of manufacturing costs is an added burden
   d. Fees payment are consuming
   e. Non-tariff measures, SPS are likewise proving to be a burden

7.2.4 Manufacture of Vegetable and Animal Oils

7.2.4.1 Overview of the Sector

Palm oil, coconut oil and palm kernel oil are the major vegetable oil types in the country. The Philippines is the biggest importer from Malaysia of palm oil, the cheapest and most commonly used cooking oil in households and fast foods. In 2011, imported palm oil volume reached 543,000MT level amounting to Php 28.03 billion and an average annual 11% growth is expected in the next ten years. This translates to an annual import of PhP45 billion worth of palm oil (Philippine Star, 2012). Malaysia being the second palm oil producer and exporter put pressure on the vegetable oil prices (Asian Development Bank, 2015).

The industry to the most labor productive industries for all the manufacturing establishments, in 2010 an amount of 5,826.3 (in PHP1000) value added per total employment was measured (PSA, 2013). Coconut oil, on the other hand, is abundant in the country. However, the demand is not as high as other edible oils and a greater production percentage is exported. Export for coconut oil, however decreased from 856,973MT in 2014 to 843,710 in 2015. It is priced at US$1,580 per MT.

Coconut oil, in crude and refined form, also became one of the top agricultural exports together with fresh banana with a combined average share of 35.82% from 2004-2010. With that year, also, the major destination for the coconut oil was the US where in one of the biggest trading partner for the Philippine agricultural exports (SEPO, 2012).

The other kind of oil available in the country is the palm kernel oil. This commands a US $1,298 price per MT (Simeon, L.M., 2016). The major players are Minola Cooking Oil and the Coconut Industry Investment Fund Oil Mills Groups with its conglomerate (Baguio Oil, Inc).

In coconut industry, the country is coping with the demands of the international markets, according to the DTI EMB FGD participant. She added that the Philippines is leading in some product sectors like virgin coconut oil, coco sugar, coco water, but is lagging behind in coconut, crude and refined oils. This is attributed to the very strong competition coming from palm oil and soybean as well as other vegetable oils. The virgin coconut oil (VCO) industry is growing while

the rest of the oil is down, and this is due to the health (anti-cancer) and wellness benefits of the VCO that was articulated in the market.

The FGD participant from the San Pablo Manufacturing Inc. cited the low supply of coconut and the entry of palm oil has big effect in the industry. Proper communication and campaign to use coconut as compared to canola which is a bad oil and is imported.

A multisector prepared roadmap of the coconut industry initiated by the Philippine Presidential Task force in 2011 and approved by the was approved by the Human Development and Poverty Reduction Cabinet Cluster and the Economic Development Cabinet Cluster in 2013, recognizes that the weakness of the industry lies in the ability of the farmers to add value. "Though the Philippines has entered emerging coconut industries that promise higher economic returns, the role of the farmers as producers predominantly remains unchanged. Whether the end product will be the traditional coconut oil or emerging products such as coconut water or virgin coconut oil, the coconut farmers supply the same copra or mature whole nut to its buyers without any significant value added. Thus, farmers receive the same price for the coconuts regardless of the end product. The Philippine coconut water value chain confirms this. The farm gate price for mature whole nuts is coupled with the prevailing market price for copra (Oxfam, 2013). The coupling of price to copra is not surprising given that the farmers take little or no part in adding value to the coconut. In contrast, the desiccating plants add value and thus reap the most from the current value chain.

7.2.4.2 Regulatory Policies

Presidential Decree 1468 "Revised Coconut Industry Code of the Philippines" establishes the legal basis for the Philippine Coconut Industry's (PCA) sole responsibility over coconut and other palm oil industries in the country. Additionally, PD 1468, as amended by PD 1644, mandates PCA to regulate the marketing and export of coconut products and by-products for purposes, among others, of ensuring the quality of such products based on adopted standards. In lieu of such function, Section 2 of PD 1468 provides the full authority for the PCA to initiate and implement measures as may be necessary to attain the rationalization of the coconut oil milling industry, including, but not limited to the following measures: (a) imposition of floor and/or ceiling prices for all exports of copra, coconut oil, and other by-products; (b) prescription of quality standards; (c) establishment of maximum quantities for particular periods and particular markets; and (d) inspection and survey of export shipment through an independent international superintendent or surveyor.

PCA also conducts programs on research and extension works on farm productivity and process quality and diversification. Furthermore, the PCA establishes quality standards for coconut, palm products, and other by-products. Specifically, such functions were carried out through the provision of quality standard for high value coconut by-products for export and referential and the registration of coconut products/by products traders/dealers and manufacturers.

With regard to regulatory requirements for the business sector, Administrative No. 01 Series of 2005 "Implementing Rules and Regulations to Enforce Standards in the Production and Marketing of Virgin Coconut Oil (VCO)" states that all coconut oil products described, labelled, claimed or represented as VCO produced or sold domestically or for export shall be processed in

conformity with the mandatory standards as adopted by PCA and registered with the Philippine National Standards as PNS/BAFPS 22:2004, ICS. 67.200.10/Amendment 1:2005. This standard, which is applied to VCO in a state for human consumption, lays the ground for a common understanding on the definition of VCO, essential composition and quality factors, labelling and methods of analysis and sampling (AO 1, s. 2005).

Moreover, the said AO includes provision on the need to secure registration and clearance of all types of businesses dealing with the virgin coconut oil. Firms found to violate quality standards shall be subject to the administrative sanctions for cancellation, revocation or suspension of the CPR and non-issuance of necessary export commodity clearance, including the institution of other legal and administrative action with the FDA, DTI, or the National Consumer Council under existing laws and regulations (Section IX of the AO No. 1). Table 15 summarizes the regulatory requirements for businesses on the processing of virgin coconut oil.

As per the data of DTI, there are around 85 establishments along the manufacturing of vegetable and animal oils in 2013. This figure comprises not only of virgin coconut processing but also industries producing palm kernel oil as well as other vegetable oils. Standards for other vegetable and animal oil are based on the following: Codex Alimentarius Commission, Recommended International Code of Practice General Principles of Food Hygiene; Codex Standard for Olive Oil, Virgin and Refined, and for Refined Olive-Pomace Oil, Codex Stan 33-1981; Codex Standard for Edible Fats and Oils Not Covered by Individual Standards; and Codex Standard for Named Vegetable Oils.

Table 15. Regulatory requirements for business dealing with virgin coconut oil processing.

Requirements	Regulatory Agency	Fees (Php)	Processing time
A. Virgin Coconut Oil Producers, Processors, and Traders			
1. License to Operate	FDA		30 days
2. Certificate Product Registration	FDA		
3. Annual registration	PCA		
B. Exporters of Virgin Coconut Oil			
1. License to Operate	FDA		
2. Commodity Clearance	PCA		
2. Application and issuance of phytosanitary certificate	BPI	Free	30 minutes to 5 days (if treatment is required)

7.2.4.3 Key Bottlenecks

According to the FGD participants, the government or the Philippine Coconut Authority (PCA) has no clear policy on regulation, specifically on imported raw materials (i.e. copra) and on coco food products. The PCA also lacks knowledge on the industry (i.e. Philippine National Standards (PNS).

The FGD participants lamented that a series of issues affects the industry but what is being done by PCA

- "*it has always been said that a Filipino coconut farmer earns P10,000/ha/year, seems just fine for the farmers, that's what they earn, but we should be ashamed of this, what is being done by PCA in terms of educating the farmers to improve their situation, capacity building of farmers is part of their mandate. We cannot even get a Fair trade certification for our product, and that is not a good sign for our government, as it means we are not fair with our farmers.*
- *There was a case that the Philippine refined oil was banned in Taiwan because of food scandal, The Philippines sell the crude oil and then Taiwan recycled it. The FDA Taiwan has to approach the DTI not the FDA Philippines or PCA as nobody knows about coconut oil.*
- *After typhoons damaged coconut farms, what assistance are provided to the farmers. Then they are just recovering from calamities, here comes the entry of palm oil in the country, which is far inferior than our high quality coconut oil. "No cholesterol" labeling strategy is allowed when it goes without saying that all vegetable oils are without cholesterol.*
- *Even our consumers are not educated preferring palm oil than vegetable oil.*
- Technology is not a problem, we housed the biggest coconut processing in the world, RANex Port in Iligan. Yet we are importing vegetable oil, specifically low quality palm oil

These collective sentiments made the participants question what PCA is doing to address all these issues. In fact, as earlier stated the Philippine Coconut Industry Road Map was not even initiated by PCA as it was initiated by a Presidential Task Force in 2011.

As for the FDA, the FGD participants raised the issue subjective approval of applications. It was even cited that FDA is lax on foreign applicants but strict on their local counterparts (i.e. labeling restrictions). The same sentiment was cited by Pampanga's Best wherein their supplier from Thailand was able to get their application approved in about a week, while their local supplier took more than a month to have the same application processed. There is likewise constant change in guidelines. And the government's inability to check non-compliant products/brands, the same way that the proliferation of recycled vegetable oil in the market remains unchecked.

The slow processing and action of the Department of Environment and Natural Resources (DENR) was also cited. The specifically cited policies affecting the sector are as follows: RA 8749 (Clean Air Act), RA 9275 (Clean Water Act), PD 1586 (EIS System), and RA 6969 (Toxic substances: Hazardous and Nuclear wastes)

From the point of view of DENR, as far as registration of industries specifically oil industry, the industries are compliant except for the wastes generated which are considered hazardous so the DENR Hazardous Management Section is focused on managing the disposal of oil wastes.

Other regulatory and facilitating agencies affecting the industry are the Bureau of Plant Industry (BPI), the DTI and the LGUs. As to the Bureau of Plant Industry (BPI) the required certifications include sanitary phytosanitary (SPS), export license and country of origin; the DTI – the business name, pricing and promotions and for the LGU –sanitation fire and business permits.

In summary, key bottlenecks for the manufacturer of vegetable and animal oils are the following: (a) slow DENR releases of permits; (b) no clear-cut policies; (c) proliferation of recycled vegetable oil in the market; and (d) the need for farmers to be educated particularly on product handling/processing.

7.2.5 Manufacture of Grain Mill Products, Starches and Starch Products

7.2.5.1 Overview of the Sector

The Philippine Grain industry revolves mainly on rice and corn. Wheat and soy requirement in the country is met by importation. The Grain sub-sector imports 5.6 million tons in 2015 as well as 5 million tons of wheat which feed into the commercial production of wheat and small grain based products.

There are about 17 flour mills with a total capacity of more than 4 million tons while, 12 companies are into manufacturing of wheat flour. The Republic Flour Mill Foods Corporation (RFM), was the first milling company in the country and is still growing. Others are Liberty Flour Mills, Wellington Flour Mills, Pilmico Foods Corp., General Milling Corp., Universal Robina Corp., and Chamber of Philippine Flour Millers (CHAMFLOUR)- San Miguel Mills, Phil. Foremost Milling Corp., Morning Star Milling Corp. and Delta Milling Corp. Monde Nissin, on the other hand produces flour for its own products (Lyddon, C., 2011).

Wheat and soy requirement in the country is met by importation. The Grain sub-sector imports 5.6 million tons of corn in 2015 as well as 5 million tons of wheat which feed into the commercial production of wheat and small grain based products.

7.2.5.2 Regulatory Policies

On September 26, 1972, the Philippine government issued Presidential Decree (PD) No. 4 on 26 September 1972 in lieu of the need to develop the rice and corn industry and creating for such purpose the National Grain Authority (NGA). However, on 14 January 1981, PD 1770 renamed the NGA to National Food Authority (NFA) as the sole state trading enterprise operating in the country mandated to ensure food security and price stabilization of rice at any given time. Aside from this mandate, the NFA has the power to regulate post-harvest facilities and relevant activities that service rice and corn sectors.

Specifically, Section 6 of Presidential Decree. No. 4, gives the authority to NFA to register, license and supervise grains businessman. This mandate also includes the power to prescribe, impose, and collect fees, charges and/or surcharges in licensing and regulating the operations of grains businessman. Such provision applies to businessmen who are involved in the following activities: (1) production, processing, transporting, marketing, and trading of grains; (2) wholesale and/or retail business of grains; (3) processing or manufacturing where grains are used as ingredients in the manufacture of starch, oil, and animal feeds. With regard to importation, the NFA has the authority to establish rules and regulations impose and collect fees and charges for said importation for the purpose of equalizing selling price of such imported rice with normal prevailing domestic prices.

There are about 163 registered manufacturers of grain mill products, starches, and starch products. All of these establishments are required to secure license to operate and certificate of

product registration from FDA. Example of regulatory requirements for manufacturer of grain products are shown in Table 16.

Table 16. Regulatory requirement for grain and starch product manufacturers.

Requirements	Regulatory Agency	Fees (Php)	Processing time
A. Manufacturer of grain mill products, starches, and starch products			
1. License to Operate	FDA		30 days
2. Certificate Product Registration	FDA		30 days
B. Importer of Grain mill and starch products			
1. License to Operate	FDA		30 days
C. Exporter of grain mill and starch products			
1. License to operate	FDA		30 days
2. License as importer	NFA		
3. Phytosanitary certificate	BPI		

7.2.5.3 Key Bottlenecks

The following are the responses of the participants with regard to regulatory issues confronting the sector:

1. Impacts like the PDEA licensing, we need furic acids, those classified as dangerous chemicals, though not that much in quantity, the hassle of processing is cumbersome both for user and importer, should both be licensed, we are complying to both requirements and a delay in this will delay our processing
2. as importer, the usual issue is with BIR, our ITR as well as environmental compliance

If you are new in importation/exportation the usual documents looked for is ITR, particularly the BOC and it's usually the problem on communication (requirements, etc.) as major concern

3. For the Customs, if it is delayed, it can delay mostly thousands of bags of flour. One shipment depends on 300,000 bags for the month.
4. It depends upon the amount of the "Bigas" there are ways on how they enhance the machine on the warehouse they have, more on the machine's life then later auctioned.

5. Potential of the local millers, the origin. For example, the Turkish flour of having a cheap price, the quality is not at par with the US flour. Imported flour has a large impact for the local flour millers and the large flour millers in the country.

6. Regulation side must stay for the products; there is a need for regulation to be established. We have to stabilize the food security.

7.2.6 Manufacture of Other Food Products

The top performing subsector in the food manufacturing industry is the "Other Food Products", even though its product constitution remains unclear. Food classification under this classification needs further polishing (FDA). While the subsector has the greatest market share, the base line figure is undetermined due to lack of concrete boundaries.

For the purpose of the study, manufactured foods which do not fall under eight specified sectors such as confectionaries, baked products, and sugar based snack goods as well as herbal food supplements were considered under this "other food" classification.

7.2.6.1 Overview of the Sector's Industry Performance

The industry is dominated by few companies like: Unilever and Nestle, when it comes to servicing the external market and few small players locally (Our Food Representative). For Herbanext, when attending trade shows, there are only few Filipino products and the levels of technology are low (basic processing), as compared to Thailand, Vietnam and Indonesia.

From the point of view of DTI, the food processing industry in their province is divided into four, namely: processed fish, meat, F&V and flour based, with the latter as the most dominant sector comprising more than 50% of the industry. However, past year performance posted not much contribution in terms of employment as it is not generating so much jobs and investments of MSMEs are also minimal with not so much equipment investment undertaken as they still use the same equipment.

FGD participants also cited some hindrances for the sector to perform well in the market, which are as follows:

1.Minimal visibility in the international market. Herbanext commented that the problem is in competitiveness, both technology and production wise. Imported products are 20% cheaper than the local products.

2.AlterTrade mentioned also the problem on low investment and technology. While small enterprises have lots of potentials, there are no recent development of enterprises especially entrepreneurs, no added value

3.Our food processors are not connected with the primary production, they lack technology, value chain support, low compliance to standards both in the local and foreign markets

4.Major problem is the manufacturing of ingredients (companies in the middle) needed by the manufacturers. This is the "missing middle" added the representative for Herbanext, though the example he gave is on fruit processing. "Knorr sinigang mix' tamarind extract comes from Thailand as no firm are doing tamarind extract in the Philippines.

5.Strict FDA requirements, increasing labor costs and the need to use appropriate technology to compete with the ASEAN counterparts

7.2.6.2 Current Regulatory Policies

The current policy environment revolves around the FDA's requirement on license to operate (LTO) and CPR. The problem according to the FGD participants is not the regulation itself but the process to pass the LTO. Most MSMEs need assistance not only in terms of compliance costs but also in terms of licensing and training requirements for key technical personnel. If ever requirements are met, the slow processing of FDA adds to the burden.

Required laboratory analysis (export and import requirements) aside from costly is not readily accessible. There are no laboratories in Negros, has to be done in Metro Manila which adds to costs (monetary and time). Also, policy on sugar allocation for central business district (CBD) food processes is affecting the industry.

The regulatory bodies' inability to apprehend and sanction those operating without business permit to operate is hurting the industry. In the same manner, the consumers are unable to differentiate firms and corresponding products that are regulatory complying or not. There is proliferation of fake certificates and permits and have to hear yet action taken by regulatory bodies are to these unscrupulous players.

With regard to regulatory benefits, participants mentioned that the current regulatory policies increase confidence on product quality, competitiveness, compliance, traceability, and product integrity.

7.2.6.3 Key Bottlenecks

Key bottlenecks on the existing regulatory procedure raised by the sector are the following: (a) unconsolidated FDA information on CPR processing; (b) small enterprises lack necessary support, lack of opportunities to enhance potentials; (c) the country has raw materials and manufacturers but few companies in the middle, those ingredients needed to manufacture i.e. *Knorr sinigang* mix, tamarind extract comes from Thailand because nobody did tamarind extract in the Philippines; (d) food processors are not connected with the production (lack of technology; lack of value chain support; low compliance to standard both at the local and foreign markets). Nonetheless, participants have recognized the benefits of regulatory procedures particularly on increasing confidence on product quality, competitiveness, compliance, traceability, and product integrity.

With regard to suggestions to enhance the current regulatory processes, Alter Trade and Herbanext suggested the need to enhance ease of compliance and reduce regulatory burden. For instance, processors have to attend FDA trainings in Manila (which will cost Php 6,000 + airfare and accommodations), the best alternative is to accredit private groups to conduct trainings locally.

7.2.7 Manufacture of Beverages

The beverage industry's products are classified either as sweetened or unsweetened. Sweetened beverages are soft drinks, soda and soda pop, fruit drinks and punch, sports drinks, sweetened tea, coffee, drinks energy drinks and non-alcoholic ready-to-drink beverages. While unsweetened are the fruit purees, natural juices, natural vegetable juices, yogurt, milk products, meal replacement beverages or medical food and weight loss products.

The multinational companies such as Coca-Cola Export Corporation and Pepsi-Cola product Philippines dominate the country's soft drink industry, while local players dominate the non-cola sector. In terms of export, the Philippine beverage sector accounts for one percent of the US$ 2.9 B export value (2015). The major issue confronting the sector is the impending tax on sweetened drinks. In terms of consumer behavior, Filipinos are price sensitive, thus in response, manufacturer's product offerings come in smaller and affordable sizes.

7.2.7.1 Overview of the Sector's Industry Performance

The beverage sector is a growing industry in the Philippines, though there are challenges especially on the carbonated products, while distils like water, milk and juices are growing in the domestic market as cited by Coca Cola representative. An FGD participant, however, experiences the opposite as their "noni" juice products are performing well in the export market but very poorly locally. Non-alcoholic beverages are slowly growing as far as export market is concerned (DTI EMB).

There is total revenue of $3,107.6m in 2013 for the softdrinks market in the Philippines, which represents a compound annual growth rate (CAGR) of 3.1% between 2009 and 2013 (Research and Markets, 2014).

One of the major players in the beverage industry, San Miguel Pure Foods which is a subsidiary food, beverage and packing conglomerate of San Miguel Corporation reported an increase of 34% in year on year income having earnings of P 1.21B ($25.9 M) within the first three months of the year (Oxford Business Group, 2016)

The Department of Trade and Industry reported an estimate of the processed foods and non-alcoholic beverages to have reached $2.4 billion in 2014, also DTI reported that an average rate of 14.5 percent increase in 2006 to 2014 (DTI, 2015)

Beverages as one of the major sectors, also contributed to the increase in value of production with a 15.1% increase in November 2016, but with the value of net sales, a decrease of 11.9% also in the same month (PSA, 2017).

Sugar consumption wise, the beverage industry is growing according to the SRA FGD participant. Sugar consumption of industrial users increase in percentage share of total sugar consumption in the country from their 2009 level of 50% (UAAP study) to 70 percent in 2015 (UP School of Statistics). The beverage industry is reported to be the largest industrial consumer of sugar and accounted for 40% and 57% of the 2009 and 2015 industrial sugar consumption, added the SRA representative.

According to FGD participants, the industry is not that competitive. The Philippines is geographically "handicapped" given that the country is separated from other ASEAN countries by bodies of water. Only two ways to transport products either by air and sea unlike other countries where cross-country land transport is possible. The only solution is to put up a plant in the targeted country as a market.

7.2.7.2 Current Regulatory Policies

On product labeling, there are different label requirements by different countries, FDA wants to put up all requirements in the label, but the smallness of the label makes it impossible to accommodate all. The suggestion is to have label harmonization. Also, there is a new policy requiring one CPR per manufacturing site (unlike previously only one per company regardless of manufacturing site). If this is for the purpose of traceability, the production lot and batch size will already serve the purpose. This is only an added cost to the firm.

In terms of export requirements, the Bureau of Customs (BOC) checks the export documents (i.e. commodity clearances) but BOC itself not sure of their authenticity. The BOC provides list of commodities requiring clearances, but companies are not provided updated lists. Also, there is no standard policies, like the "buko" juice manufacturers are required to get clearance from PCA while mango juice manufacturers are not required of any clearances.

Sugar import allocations for manufacturers of sugar based products for export from SRA. This is to regulate importation as well as prevent smuggling. To the FGD participants, this is very relevant; it concerns bonded warehouses for exporters who are allowed to import (sugar vat free and duty free). However, there is danger of technical smuggling, which sugars are not diverted to the local market but is used solely for the production of products intended for the export market, so the need to regulate. If there is over importation, it will kill the industry and greatly affect sugar farmers.

The impending sweetened beverage tax not only includes soda and soft drinks but also 3-in 1 coffee, fruit juices and powdered (including non-caloric sweetener and artificial sweeteners). This will have a great impact on the industry, in terms of added cost and consequently on employment, though this is a tax gap measure of the government. On the consumer side, this will be additional taxes, so will affect choice of products and actual purchases.

The same thing is true for export and import clearances on sugar, muscovado and premixes. That is to validate issued clearances if sugar is not smuggled by indicating in the clearance nature of sugar and its uses (raw or premixes), market destination (world market, local market or reserved) as well as validating with sugar production levels.

In terms of the impact of regulatory policy to prices of commodities, it was cited by Philippine Morinda Citrofolia, Inc. (PMCI) that regulation does not affect their product pricing, as they do not increase the price with costs increase in regulation compliance. Their added costs are in terms of the length of time of application releases that translates into delayed marketing and at times opportunity losses, i.e. the product already for delivery cannot be delivered or has already expired due to delayed release of CPR. Other FGD participants affirmed that no price increases resulting from problems of regulation, only cost increases. The CUP representative in the FGD said that as

long as the regulations are being complied with, there is no problem with the consumers, no issue at all, no problems on the prices.

7.2.7.3 Key Bottlenecks

In summary, key bottlenecks for the industry are the following: (a) Lack of awareness of requirements for new importers; (b) FDA Procedures entail lots of steps to undertake; and (c) Cabotage system and the concentration of the shipping business in the hands of few known families; and (d) Distribution in the country is handicapped owing to its geographical situation.

In response to these bottlenecks, FGD participants suggested the following reforms to ease compliance and reduce regulatory burden:

1. Customs Modernization - review tariff rates, obsolete laws and regulatory requirements that are repetitive (already in progress, according to BOC)

2. Provision of a "National single window" (NSW) where data can be accessed by any regulatory agencies (i.e. BOC) to check authenticity of submitted data)

3. Amend Competition Law – i.e. in shipping, address monopolies of known families

Other country practices that aim to address regulatory burden were also cited by the participants. For example, In Singapore and Malaysia, CPR is not required but post marketing surveillance is undertaken. If a firm is found to be violating regulations, then they are pulled out of the market. It is the firm's responsibility to be compliant or face the consequences.

7.2.8 Manufacture of Dairy Product

7.2.8.1 Overview of the Sector's Industry Performance

Dairy industry is currently the country's third largest agricultural import (Ang, P.A., 2013). The Philippines is a net importer of dairy products. It relies heavily on importation which increased by 3.06% in 2015 (from a 1,740.08 MT level in 2014 (Table 12). As to animal source, the dairy cattle, dairy carabao and the dairy goat are the major sources of milk in the country. In 2015, milk production increased from 19.73 million litters to 20.39 million litters, a 3.34% increment.

The Philippines is a major importer of dairy products especially milk powder with New Zealand (46%), United States (29%), and Australia (8%) being the main suppliers (Ang, P.A., 2013). Despite being a huge importer, the country manages to export dairy products such as milk and cream, butter, cheese and curd to USA, Malaysia, Thailand, Indonesia, Bangladesh, Vietnam, Iraq and others, (Table 17). The farm gate price per liter of raw milk is at PhP24.00 for cattle and PhP47.00 for carabao (PSA. 2016).

For the dairy export, there was a decline of about 53% with exports of milk and cream including about 98% of the total volume. The countries of the destination of exports are Malaysia (43%), Thailand (23%) and Bangladesh (12%). But with the stronger peso, the exports in 2013 are expected to drop also with the increasing prices of the Philippine dairy products (Ang, P.A., 2013).

A major industry player is Alaska Milk Corporation, which recently partnered with Royal Friesland Campina, the fifth largest dairy company in the world. Government owned Philippine Carabao Center contributes to the research and development. Likewise, cooperatives greatly contribute the country's total production (Alaska Milk Corporation, 2016).

Table 17. Volume and Value of Imports by Type of Dairy Products, Philippines 2013-2015

Particulars	2013		2014		2015		% Change	
	Volume ('000 mt)	Value (MUS$-CIF)	Volume ('000 mt)	Value (MUS$-CIF)	Volume ('000 mt)	Value (MUS$-CIF)	Volume 2015/14	Value 2015/14
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Import	**1,945.69**	**857.19**	**1,740.08**	**876.02**	**1,793.29**	**694.51**	**3.06**	**(20.72)**
1. Milk and Cream	1,752.51	728.75	1,533.61	728.99	1,540.82	529.78	0.47	(27.33)
Skim Milk Powder	887.38	423.85	746.30	399.04	787.40	270.85	5.51	(32.12)
Wholemilk Powder	205.65	74.14	154.00	79.19	134.10	45.82	(12.92)	(42.14)
Buttermilk	175.31	82.80	146.76	79.22	142.50	45.91	(2.90)	(42.05)
Whey Powder	338.18	69.52	380.41	80.56	375.71	68.89	(1.24)	(14.49)
Liquid (RTD) Milk	47.51	49.83	43.66	51.34	42.66	44.71	(2.29)	(12.91)
Evaporated	0.31	0.19	0.48	0.15	0.30	0.64	(37.50)	326.67
Others*	98.17	28.42	62.00	39.49	58.15	52.96	(6.21)	34.11
2. Butter	125.43	69.94	129.63	79.40	148.50	82.39	14.56	3.77
3. Cheese	64.21	55.12	68.86	59.55	95.05	72.96	38.03	22.52
4. Curd	3.54	3.38	7.98	8.08	8.92	9.38	11.78	16.09

Source: National Dairy Authority (NDA) and Philippine Statistics Authority (PSA)
* - includes Cream and Condensed Milk

Table 18. Volume and Value of Exports by Type of Dairy Products, Philippines 2013-2015 (in Liquid Milk Equivalent)

Particulars	2013		2014		2015		% Change	
	Volume ('000 M.T.)	Value ('000) US$)	Volume ('000 M.T.)	Value ('000) US$)	Volume ('000 M.T.)	Value ('000) US$)	Volume 13/12	Value 13/12
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Exports	**48.52**	**55.11**	**69.40**	**46.40**	**168.32**	**85.80**	**142.54**	**84.91**
Milk and Cream	43.97	48.88	65.53	43.66	165.64	84.08	152.77	92.58
Butter	0.05	0.17	1.10	0.59	0.96	0.20	(12.73)	(66.10)
Cheese	4.33	5.88	2.74	2.14	1.71	1.51	(37.59)	(29.44)
Curd	0.17	0.18	0.03	0.01	0.01	0.01	(66.67)	-

Source: National Dairy Authority (NDA)
Philippine Statistics Authority (PSA)

7.2.8.2 Regulatory Policies

Republic Act No. 7884 otherwise known as the National Dairy Development Act of 1995 mandates the NDA, an agency attached to the Department of Agriculture, to ensure the accelerated development of the Philippine dairy industry through policy direction and program implementation. The agency has four major services; namely, breeding services, market assistance, animal health services, and research development. With regard to the provision of regulatory services, the NDA implements the Milk Quality Assurance Program which focuses on

the installation of quality based mil test and payment system to all NDA assisted cooperatives. The NDA conducts farm and plant audit to ensure compliance with appropriate quality protocols. Moreover, the NDA has initiated the installation of in-house laboratory capacity to conduct regular milk tests and generate reports to concerned farmers and processing facilities. As of June 2016, almost 70% (248 farms) out of the 359 dairy farms assisted by NDA were pre-assessed to readiness/compliance with good farming practices, milk handling practices and the like (1st Semester FY 2016, NDA Accomplishment Report).

In compliance to the Food Safety Act, mandating the NDA as the Food Safety Regulatory Agency for pasteurized liquid milk products as well as with the milk production and postharvest handling (Section 16 of the IRR), the NDA prepared its Dairy Food Regulations and Standards. Such proposed protocol covers various stakeholders including the dairy farms, milk collection centers, milk processing plants, and other dairy enterprises including service and input providers along the dairy value chain. Moreover, this regulation covers the development of code of practice, risk management plan, and audited checklist to three major activities of the dairy industry: dairy production chain, raw milk collection chain, and milk pasteurization chain. In general, proposed regulation for dairy production chain includes the assessment of the suitability of location, design, construction, facility and operation of the dairy farm. Additionally, this entails the conformity of the dairy farm operator as the FBO and an appointment of a dairy food safety compliance officer (DFSCO). With regard to raw milk collection and milk pasteurization chains, the proposed dairy food regulation includes the development of appropriate protocols and procedures.

In 2013, a total of 29 establishments or manufacturers of dairy products were registered under DTI. Major regulatory requirements for each stakeholder in the dairy manufacturing industry are shown in Table 19.

Table 19. Regulatory requirements for manufacturer of dairy products.

Requirements	Regulatory Agency	Fees (Php)	Processing time
A. Dairy Industry Manufacturer			
1. License to Operate*	FDA		30 days
2. Certificate Product Registration*	FDA		30 days
B. Wholesaler			
1. License to Operate*	FDA		30 days
2. Certificate Product Registration*	FDA		30 days
B. Importer of Dairy Products			
1. License to Operate*	FDA		30 days
2. Issuance of SPS Import Clearance	BAI	150	2 days
C. Exporter of Dairy Products			
1. License to Operate*	FDA		30 days
2. Veterinary Health Commodity Clearance/Export Permit	BAI	Free	20 mins
3. Veterinary Health Certificate (for infant formula and milk powder)	BAI	Free	20 mins
4. Export Commodity Clearance	FDA		

**would depend on capitalization*

According to the FGD participants, major policies covering the dairy industry are Food safety law, the FDA's LTO, CPR, SPS and labeling application processes and the varying regulations of FDA, DA and DA BAI. It was suggested (by Nestle) to align all requirements of these regulatory/facilitating bodies. Moreover, both the DTI and a private firm (Alaska) cited the halal accreditation process for the Middle East Market as one of the regulatory policies affecting the industry.

7.2.8.3 Key Bottlenecks

1. Common problems of exporters are the processing with the FDA

2. Delay of raw materials, having sourced out the materials from abroad, traffic congestion and the transport of materials is a problem

3. Halal exports

4. Exporting to other countries who are HALAL certified is a problem. Local HALAL certification is not mutually accepted in other countries

5. Example: The Philippine HALAL certification is not approved in Indonesia, having a sister company in Indonesia, if you have to introduce a new processing line it must be HALAL certified also in Indonesia, wasted time and resources

6. HALAL development in the Philippines is taking long; If exporting to the middle east none of the certified HALAL certifiers are accredited by the Middle East SMA

7. Food safety law was transferred to the FDA, but then the agency cannot handle everything

8. The DTI also has a problem in dealing with the accreditation in the Middle East so it is also difficult for the businesses

7.2.8.4 Impacts of Regulatory Policies to Milk Processing Industry

The dairy sector, with focus on processed milk, was selected by the project team for the conduct of an in-depth study for the estimation of regulatory costs and benefits. The sector was selected due to the following reasons: (1) Based on data from DTI, as shown in Table 3, the sector has the least number of establishments but shows significant contribution in terms of income generation; (2) Despite the high dependence on raw materials, the sector was able to cater both the domestic and international markets; and (3) The current transition in the regulatory agency, that is from FDA to NDA, is an opportune time to evaluate the policy and provide needed recommendations.

Recognizing that impacts of regulatory policy may vary depending on the size of the business, insights both from large and small scale milk processing industries were solicited. Likewise, representatives from concerned agencies such as NDA and BAI were also interviewed.

1. Small Scale Milk Processing Industries

1. Description of the Industry

Small scale milk processing industries in the Philippines are mostly in the form of cooperatives. Dairy farmers bring their fresh milk into collection centers operated by the cooperatives where they belong to. A mother cooperative with processing facilities collects the fresh milk every day and processed it into other products. Furthermore, it is the said cooperative who pays the farmers but such payment may also vary depending on the quality of milk (e.g. fat content, density, protein content, etc.).

The same set up applies to the case of the Katipunan ng mga Kooperatibang Manggagatas Integrated Cooperative (KKMI) in Calauan, Laguna. KKMI daily collects milk from collection centers operated by four cooperatives, namely; (1) Salva Dairy Cooperative; (2) Falcon Multipurpose Cooperative; (3) San Pablo Dairy Cooperative; and the Pagsanjan Dairy Cooperatives. Suppliers of raw milk are the farmer-member of each cooperative. The KKMI has in-house milk analyzer which serves as basis for KKMI in the payment of raw milk. KKMI processed the raw milk into other milk products such as whole milk, low fat/non-fat milk, chocolate milk, yoghurt, and white cheese.

2. Current Regulatory Requirement

In order for the KKMI to operate as a milk processor it has to submit documents and pay corresponding fees both at the local level (barangay and municipal levels) and that of mandated by national government agencies. The list of regulatory requirements mandated by the government is shown in Table 20. The quoted fees are actual payments made by the cooperative to regulatory agencies. The first four requirements are prerequisite in order to obtain a business permit. With regard to sanitary permit, the permit itself does not have a fee but the cooperative needs to shoulder expenses for the laboratory examination of all its employees which are needed to get the sanitary permit. Upon compliance to the sanitary permit, a health certificate card, which costs Php 15.00 each, is issued by the LGU to all the cooperative employees. Furthermore, the cooperative also needs to comply with the requirements of the Cooperative Development Authority (CDA) particularly that of the Certificate of Good Standing. Although there is no fee, the cooperative needs to submit both annual narrative and financial reports to CDA.

Table 20. List of Complied Regulatory Requirements by KKMI

Regulatory Requirements	Concerned Agency	Fees (Php)	Processing Time
1. Barangay Permit	LGU - Barangay level	500	1 hour
2. Fire Safety Inspection Certificate	LGU - Municipality level	1, 402	1 week
3. Sanitary Permit	LGU - Municipality level	No fee	1 week
4. Certificate of Annual Inspection	LGU - Municipality level	3,800	1 week
5. Business Permit/ Mayor's Permit	LGU - Municipality level	15,000	2 weeks
6. Certificate of Good Standing	CDA	No fee	
7. License to Operate	FDA	13,000	1 month
8. Certificate of Product Registration	FDA		2-3 months
9. LLDA Clearance	LLDA	8,597.44	3-4 months

With regard to food safety requirement, the cooperative complies with the requirements mandated both by their clients (mostly coffee shops such as Starbucks), and to that of the FDA. According to respondents, requirements of private companies sourcing raw materials from them are much stricter than that of the FDA. On the positive note, the rigid requirements of these private companies allowed them to easily comply with that of the government requirements. Nonetheless, the LTO and BFAR are initial documents which they have to comply with FDA, in order for them to transact with their clients.

On top of these requirements, the cooperative also needs to secure clearance from the Laguna Lake Development Authority (LLDA) since it is operating along the Laguna de bay region. This includes payment for the processing fee and clearance fee which is computed based on the size of the area and the zonal value of the area to be utilized. Based on the respondents, it took them 3-4 months to comply with the said requirements.

Aside from the above-mentioned fees and requirements, the cooperative needs to conduct activities in order to comply with the existing regulatory procedures (Table 20). For instance, there is one person personnel in the cooperative who is tasked to process all the regulatory requirements. However, these personnel have other tasks to accomplish aside from the regulatory requirements. Moreover, the cooperative also conforms to the recommendations of the FDA. For example, the FDA recommended to the cooperative to enclose the entire structure and change the location of the washing area. This renovation amounted to over Php 500,000. The cooperative also needs to conduct monthly pest control which costs Php 6,000 per month. As part of the reporting to FDA, the cooperative also spends for milk quality analysis wherein they need to pay DOST laboratory or any private laboratories for every analysis (Table 21).

Table 21. Other activities conducted by KKMI to comply with regulatory policies.

Activities conducted to comply with government regulatory policies	Estimated Cost (Php/year)
1. Salary of regulatory personnel	120,000
3. Compliance with FDA recommendations	
Renovation of structure	500,000
Pest Control	72,000
Milk quality analysis	14,000

It is important to note that items in Table 21 are those that are directly attributed to mandatory activities prescribed by FDA and other regulatory bodies. Costs of familiarizing with regulatory protocols are solely associated with the mandatory trainings prescribed by their clients. Usually, their big company clients will ask them to undergo trainings which the cooperative itself needs to pay. The cooperative attends the training in order to sustain business with their clients. Moreover, purchased equipment is also those that were prescribed by their clients.

According to the respondents, regulatory costs are already embedded in the existing pricing scheme. However, these regulatory costs have very minimal impact on prices such that it cannot vary the prices. It is the changes in the prices in the raw materials that could

significantly contribute to changes in the prices. Also, it was stressed by the participant that regulatory cost only entails minimal expenses relative to other operational costs.

When asked on the role of NDA in the cooperative, KKMI representative that NDA provided assistance mostly to the farmers. Moreover, the representative mentioned that, with regard to government regulatory policies, it is solely the FDA wherein they need to comply. During the interview with NDA, it was explained that, NDA provides assistance to cooperatives only in terms of making them aware of the regulatory requirements, but it is the cooperative itself that needs to secure licenses and comply with needed requirements.

3. Key Bottlenecks

KKMI representative said that regulatory requirements are needed not only to ensure food safety but also to allow them to continue business with their clients. When asked if there are suggestions to improve the regulatory procedure, the participants mentioned that there is really a need for these requirements but the problem is the number of days it takes to secure and permits. For example, processing of their CPR took longer than what is prescribed in the FDA procedural guidelines.

7.2.4.8.4 Large Scale Milk Processing Industry

1. Description of the Industry

There are two types of large scale milk processing companies that were considered in this study. The first one focuses solely in the production of dairy products while the other caters to many commodities, aside from processed milk, along its production line. The latter is represented by Nestle while the former pertains to Alaska.

2. Current Regulatory Requirement

Aside from the above-mentioned requirements mandated at the local level, large scale milk processing industries need to secure various permits and licenses pertaining to its activities. Alaska, being the largest milk manufacturer in the Philippines, has a mother LTO as a food manufacturer but with additional activities as a distributor/wholesaler, importer, exporter, and a trader. As such, the company needs to comply with all licenses and permits for each of these added activities. In addition to LTO, Alaska being an importer of raw material also needs to secure import permit from BAI for each shipment. On the other hand, as an exporter, the company needs to get Veterinary Commodity Clearance from BAI and Export Commodity Clearance from FDA. With regard to CPR, the company needs to secure a CPR for each of its product with different brand name and for each type of packaging. Another CPR also needs to be obtained should there be changes in the location where the product is produced.

Other requirements for the company include the following: (1) Certificate of Trademark for its products from DTI; (2) Clearance from PNP and PDEA for precursor chemicals used as raw materials for milk processing; and (3) Halal Certification.

In terms of activities conducted to comply with regulatory policies, Alaska has one unit consisting of four personnel whose work is mainly on regulatory processes. The company spends around Php 400,000/month for the salaries. On the other hand, Nestle has regulatory

personnel, under the supervision of one manager, for each of their seven major products. As such, with regard to milk products, only one personnel is designated to focus on the regulatory procedure. Both companies also pay for custom broker who will facilitate transaction in the BOC. According to Alaska, payment to the broker is about 2% of the total cost of the shipment.

Alaska also sends 2-3 of its staff to trainings of FDA and BAI in order to familiarize the company with government regulatory processes. The company also spends for the purchase of needed equipment not because it is mandated by FDA but for compliance to international standards.

Compliance costs to regulatory requirements are seen to be not a significant constraint for these multi-national corporations since they have sufficient funds to cover it. Regulatory requirements mandated either by both local and international bodies are strictly followed by these companies in order to protect both their brand and the welfare of its consumers. As such, a regulatory cost was not much of an issue for these companies. Regulatory costs, relative to other expenses of the companies, entail only minimal impact to the operation cost and will not pose significant effect on the prices of milk products. Representative from Alaska mentioned that they have not increased prices of milk for the last two years. Furthermore, milk being one of the basic commodities, is being regulated by DTI and thus, any proposed changes in the prices has to be approved by the DTI as well.

3. Key Bottlenecks

The cancellation of all agricultural import permits by the Department of Agriculture pose in response to smuggling is a major constraint to the milk processing industry. Representative from Alaska estimated that around 12 million USD worth of raw materials cannot enter the country's premise because of the cancellation of permits. This amount can be directly translated as cost of delayed marketing opportunity and opportunity losses. It is good that Alaska has stock of raw materials for the succeeding 1 to 2 months, but without the approval of import permits, this will surely affect the availability of milk products in the country. The same situation applies to other milk processing industries in the country. According to BAI, they cannot act on any import permits as they are waiting for instructions from Office of the Secretary of DA. BAI also explained that that there are plans for all DA-regulatory agencies to perform recommendatory function only while the DA-OSEC being accountable in the issuance or import permits.

Milk processing industries also stressed the need to review regulations and update it with current standards. For example, some of the bases for product standards (e.g. sodium content, additives, etc.) were created in the 1980's and 1970's. It would also be of great help if the government can publish a compilation of the regulatory policies per subsector. The milk subsector has a compendium of regulatory policies but this was initiated by the industries itself and needs to be updated as well.

With regard to the implementation of the Food Safety Act, there is still no clear delineation between the regulatory function of NDA and FDA. According to NDA representative, NDA covers activities from milk production to post-handling activities. However, there are still grey areas particularly on the regulatory functions that the NDA and FDA need to provide in

the post-handling activities of milk. Although there are already initiatives from the NDA to develop dairy regulations and standards, the latter issue has not been resolved and is still in need of consultations not only with the stakeholders but, more importantly, with FDA.

VIII. Key Findings and Recommendations

Regulations matters only on aspects that directly affect the stakeholders involved. Moreover, the extent of regulatory impact as well as the corresponding policy reforms and strategies would vary in each stage of the supply chain as well as the sectors and stakeholders involved. Nonetheless, impacts of regulatory policies generally affect three major stakeholders, namely the government sector, food manufacturing industry and consumer group. A summary of the key bottlenecks and options for improvements for each of this stakeholder is presented below.

1. Government Sector

The government institution' raised policies and issues more on the organizational matters which are related to both administrative and human resource requirements. A major determinant of the capacity of the FSRAs to perform its functions is the adequacy of agency funds for administering regulations, verifying compliance, and regulation enforcement. Analysis of the agency budget indicates that the government allocates budget for regulatory services and that FSRAs were able to generate income from these services. However, results of the KII and FGDs both with government agencies and private firms revealed the inadequacy of funds and human resources which causes delays in processing.

The above concerns should be raised with the Food Safety Coordination Board (FSRCB), being an oversight body responsible in establishing policies and procedures for coordinating food safety regulatory and enforcement functions. As regulatory concerns affect all the FSRAs, it is crucial for these agencies to convene and discuss among themselves plans to improve the current regulatory system.

As most of the regulatory concerns are associated with that of the FDA, it is important for policy makers to revisit the agency capacity and put due consideration to its needs particularly in increasing its human resources and upgrading its facilities. Improvement in the FDA system will surely result to positive impact in the entire regulatory system. Nonetheless, the FDA being the lead FSRA for food manufacturing industry, must also take steps to coordinate with other regulatory bodies. It is alarming, that even if the Food Safety Act mandates NDA to be the FSRA for milk, the delineation between the regulatory functions of FDA and NDA is still unclear.

In some cases, initiatives have already been undertaken to self-evaluate and act by identifying where the bottlenecks are and accordingly streamline operations. Regulating and facilitating institutions likewise call on their clients' cooperation in ensuring that required documents are accomplished so as to expedite processing.

2. Food Manufacturing Industry

The private firms, however, while recognizing government initiatives already undertaken to enhance systems and processes, are clamoring for more improvements particularly on the review of the rationale of existing and new regulations as well as the process involved (multi agency

requirements, delayed processing, etc.). Business sector also emphasized concerns on the subjective approval of applications and the inadequacy of updated technologies for the FSRAs.

In terms of regulatory burden, compliance costs are not much of a concern of the industries merely because of its minimal share in the company's operational cost. Business firms would take all necessary steps to comply with regulatory policies both at the national and international levels. There are also instances wherein private firms have a more updated regulatory technology as compared to FSRAs. It is also mentioned in the report that some clients of FMIs have more rigid and sophisticated requirements as compared to FSRAs. The point is firms have enough funds to cover the compliance cost and the burden really is on the delayed marketing and opportunity loses. The same explanation applies to both small and large scale industries.

A major suggestion from the food manufacturing industry is to have a one stop processing venue wherein one certification fits all requirements of government agencies and not a multi-agency and individual certification requirements. Business firms also pointed out the non-requirement of CPR for all products as one of the entry points to lessen the regulatory requirements. However, such recommendation needs to be evaluated as CPR is an important tool in ensuring food safety and traceability of food products.

It is also worthy to note that there is no specific reference for each food manufacturing subsector that would guide business players on the needed regulatory requirements and their legal basis. Each FSRA has a list of requirements in their website but not sector specific. There is no available reference material that compiles all the sector regulatory requirements. Moreover, some of the standards and/or protocols are already outdated. These protocols need to be updated to current and internationally recognized standards and technologies.

More importantly, industry wide plans covering both the development tracks and the needed regulatory enhancement would be beneficial to each FMS. Plans to strengthen FMI through the provision of assistance in terms of value adding activities as well as trade and market access should also be laid out in the industry plans.

3. Consumer Group

On the part of the consumer group, disinterest and non-action pervade the sector. The country's consumer rights awareness and movements are not as high as could be desired. As long as products are compliant and serves intended purpose, consumers pay the price out of seeming indifference and or lack of choice.

The Food Safety Act provides legal basis for the conduct of trainings and consumer education (Article IX). FSRAs as well as the DTI clearly stipulated in their websites the responsible agencies and processes to follow should there be any complaints with processed food.

Overall, the country's food regulatory system protects the consumer both in terms of food safety and price fluctuation. Private firms explained that regulatory cost itself is insignificant to affect prices. This statement is verified by representative from the consumer group. Additionally, prices of commodities are regulated by government agencies and no sudden changes in food prices can be done without securing authorization from these agencies.

IX. Recommended food manufacturing sub-sectors to prioritize for in-depth studies

The food manufacturing sector tops the list in terms of GVA, about 49.98 percent of total manufacturing's Php 872.5M as of 4th quarter of 2015. However, the figure is not broken down by industry subsector. On one hand, based on the most labor productive Philippine Industries for all manufacturing establishments by industry group (value added per total employment) as of 2012, included in the top 12 list are a) Dairy products (4th), beverages (5th), vegetable and animal oils and fats (7th) and grain mill products, starches and starch products. On the basis of most number of establishments, total income and total employment as of 2013, topping the list is the **other food products sub sector**. The next in rank, though varies, its grain, mill starch and starch products(2nd) and fish, crustaceans and mollusks (3rd) for number of establishments; beverages (2nd) and dairy products (3rd) for total income; then fruits and vegetables (2nd) and meat (3rd) in terms of total employment.

Given that the **other food products are** consistently topping the list in terms of number, generated income and employment, it is suggested for the sector to be included for the next phase of a more in depth industry assessment. As it has been cited that this is the most unclear sector in terms of product category composition, subjecting it to an in-depth industry assessment will once and for all will help clarify this. The **dairy sector** and **grains mill starch and starch products**, both having been on the list of most labor productive and in number of establishments and income generated, respectively are suggested to be included in the next phase of in depth study.

While it may be said, that the country has no competitive advantage yet, on these industry sub sectors, this will all the more serve as the basis for selecting them, so that they will not pushed farther for development and will not be lagging behind other subsectors on their regulations, based on both the value-added contribution to GDP and revealed comparative advantage.

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