CROSSROADS
ASIA PACIFIC

KUALA LUMPUR
MALAYSIA
20-22 OCTOBER 2015

THE AGRICULTURE SECTOR AND THE FERTILIZER INDUSTRY IN THE PHILIPPINES: UPDATES, TRENDS AND OUTLOOK

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International Fertilizer Industry Association

The Philippine economy today

The economy is more stable:

- Less exposure to troubled international securities
- Lower dependence on exports
- Relatively resilient domestic consumption
- Large remittances from overseas Filipino workers
- Rapidly expanding outsourcing industry
- Current account balance has recorded consecutive surpluses since 2003
- International reserves remain at comfortable levels
- Banking system is stable

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The Philippine economy: some statistics

GDP – $285 Billion (2014)

GDP – real growth rate: 6.1% (2014)

GDP – composition, by sector of origin (2014)

- Agriculture: 12.0%
- Industry: 32.88%
- Services: 54.62%

Labor force – by occupation: (2014)

- Agriculture: 30.0%
- Industry: 16.0%
- Services: 53.9%

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IMF, Philippine Gazette, Philippine Statistics Authority

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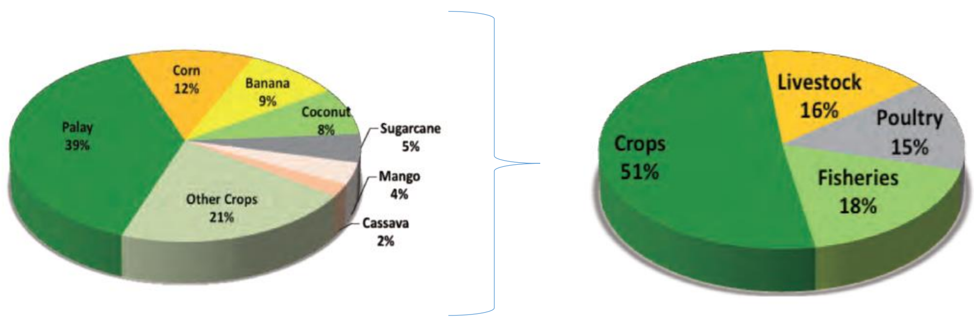
Figure 1 -Distribution of output in Agri-Fishery and Crops (2014)



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Philippine government's vision for the agriculture sector

"…COMPETITIVE, SUSTAINABLE, AND TECHNOLOGY BASED AGRICULTURAL SECTOR DRIVEN BY PRODUCTIVE AND PROGRESSIVE FARMERS SUPPORTED BY EFFICIENT VALUE CHAINS, AND WELL INTEGRATED IN THE DOMESTIC AND INTERNATIONAL MARKETS…"

SECTOR GOALS:

I) ENSURED FOOD SECURITY AND INCOME;
II) REDUCTION OF RISKS, INCLUDING CLIMATE CHANGE IMPACTS; AND
III) ENHANCED POLICY ENVIRONMENT AND GOVERNANCE

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Priority Strategies and Key Programs

Over-arching Framework – "AGRI-PINOY" Guided by four principles (food security and self-sufficiency, sustainable agriculture and fisheries, natural resource management, and local development)

- National Rice Program
- Corn and Cassava Intensification Program

Key initiatives/projects to enhance productivity, improve mobility and transport links, and lower costs and risks

- Farm Mechanization Program
- Post Harvest Development Program
- Philippine Rural Development Project
- Expanded Crop Insurance Scheme

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Table 1 – Palay: Food Staple Sufficiency Program

PARTICULARS	2010	2011	2012	2013	Growth (%) 2012-13
Palay production ('000 MT)	15,772	16,684	18,032	18,439	2.26
Harvest area ('000 Ha)	4,354	4,537	4,690	4,746	1.19
Yield / Ha (MT)	3.62	3.68	3.84	3.89	1.30

Year	Authorized Imports (MT)	Actual Imports (MT)
2008	2,679,801.50	2,390,748.14
2009	1,948,000.00	1,842,806.12
2010	2,633,946.34	2,369,403.43
2011	1,210,000.00	1,063,985.41
2012	850,000.00	692,220.74
2013	368,700.00	271,511.80

Bureau of Agricultural Statistics

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Agri-Pinoy Corn/Cassava Program

Program Components

- PRODUCTION SUPPORT SERVICES
- POST HARVEST DEVELOPMENT SERVICES
- MARKETING DEVELOPMENT SERVICES
- EXTENSION SUPPORT, EDUCATION AND TRAINING SERVICES
- RESEARCH AND DEVELOPMENT SERVICES

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Department of Agriculture

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UNIVERSAL HARVESTER INCORPORATED is a Philippine Economic Zone Authority (PEZA) – registered Ecozone Export Enterprise established in 2002. Using state-of-the-art technology, our company is engaged in the importation and distribution of Muriate of Potash (MOP),Urea (46-0-0), NPK, Ammonium Sulfate (21-0-0), Ammonium Phosphate (16-20-0), Diammonium Phosphate (18-46-0), and Granular Organic Fertilizer; direct manufacturing, local distribution and exportation of Sulfate of Potash (SOP); and direct manufacturing and local distribution of Hydrochloric Acid (HCL) and Sodium Hypochlorite (NaOCL).

Mission:

- To safeguard the interest and welfare of our primary consumers (the farmers) by offering the best quality fertilizers at the most reasonable price
- To help make farming a noble and profitable endeavor
- To assist farmers in keeping abreast with the latest technology for maximum yield

Vision:

UNIVERSAL HARVESTER INCORPORATED devotes its human and technological resources to the recovery and development of Philippine agriculture as it partners with its primary consumer, the farmers.

It is our commitment to help make the Philippines emerge as a major player in the field of agriculture in the world market.

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UHI technical assistance program and support services to rice, corn, sugarcane, vegetable farmers and displaced farmers

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Partnership with other stakeholders in the industry

UHI, together with the International Plant Nutrition Institute (IPNI), Uralkali Company and the University of the Philippines launched and implemented the following programs:

- Nutrient Expert Cassava: Sustainable Yield Intensification in Philippine Cassava Systems

  Objectives:
  - Generate a fertilizer recommendation model for cassava to improve knowledge on crop nutrition for sustainable intensification of cassava production
  - Educate key project participants in the use of Nutrient Expert® Cassava so that they can train further potential users of the model;
  - Propagate the use of Nutrient Expert® Cassava for nutrient management to ensure maximum yields.

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Partnership with other stakeholders in the industry (cont.)

- Special Cacao Project

  Objectives:
  - Direct livelihood improvements for participating farmers
  - Knowledge generation for crop intensification
  - Fertilizer market development for this commodity

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Figure 2 – Major users of fertilizers

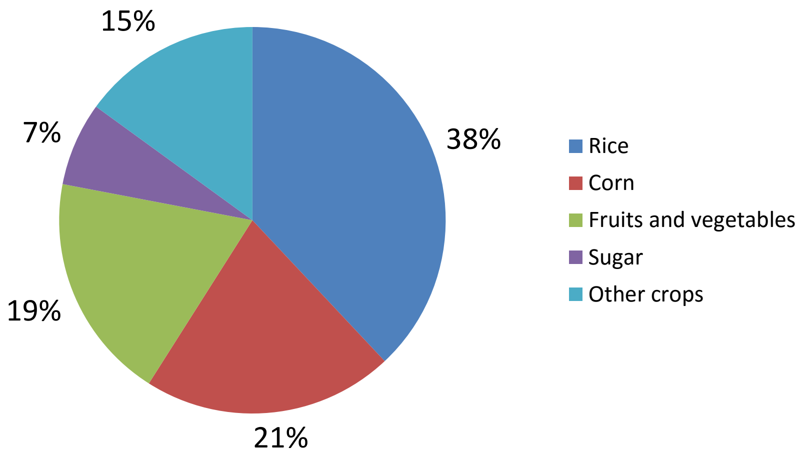

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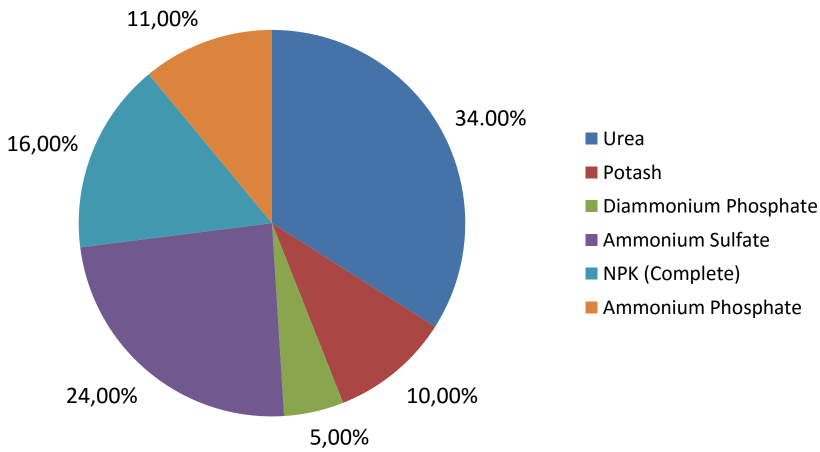
Figure 3 – Average Share of Fertilizers, Major Grades, 2012-2014, %



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Fertilizer and Pesticide Authority

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Table 2 – Average consumption of major fertilizer grades, '000 MT 2012-2014

Major Grade Fertilizer	Average	N	P2O5	K2O
Urea	650 MT	299 MT	0	0
Ammonium Sulfate	450 MT	95 MT	0	0
NPK (Complete)	300 MT	42 MT	42 MT	42 MT
Ammonium Phosphate	200 MT	32 MT	40 MT	0
Diammonium Phosphate	100 MT	18 MT	46 MT	0
Potash	180 MT	0	0	108 MT
TOTAL	**1,800 MT**	**486 MT**	**128 MT**	**150 MT**

Source: Fertilizer and Pesticide Authority

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Table 3 – Extent and rate of fertilizer application for rice and corn as major crop, by type of nutrient, KG/Hectare, 2012-2014

	2012	2013	2014	Average
		RICE		
Area Harvested, Ha	4,689,960.00	4,746,082.00	4,739,672.16	**4,725,238.05**
Area Applied, Ha	4,572,108.10	4,430,514.93	4,348,391.06	**4,450,338.03**
Extent of Application	97%	93%	92%	**94%**
N (kg/Ha)	67.30	68.58	74.12	**70.00**
P2O5 (kg/Ha)	16.46	16.09	17.34	**16.63**
K2O (kg/Ha)	11.06	10.99	12.04	**11.36**
		CORN		
Area Harvested, Ha	2,593,824.50	2,563,635.00	2,611,431.80	**2,589,630.43**
Area Applied, Ha	2,570,338.90	2,563,306.00	2,049,743.52	**2,394,462.81**
Extent of Application	99%	100%	78%	**93%**
N (kg/Ha)	68.99	62.32	73.65	**68.32**
P2O5 (kg/Ha)	16.07	15.24	16.95	**16.09**
K2O (kg/Ha)	**9.17**	**8.54**	**8.75**	**8.82**

Source: Philippine Statistics Authority

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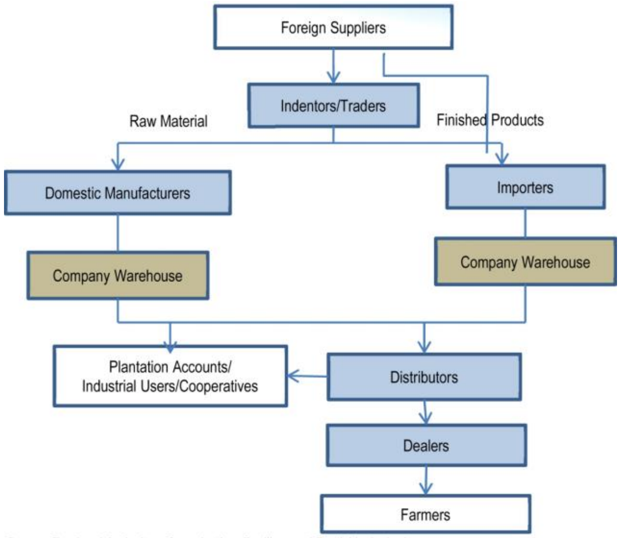
Figure 4 – Distribution channels for fertilizers in the Philippines



Source: Food and Agriculture Organization, Fertilizer and Pesticide Authority

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Figure 5 – Imports of fertilizers, 2001 – 2012 (in $US)

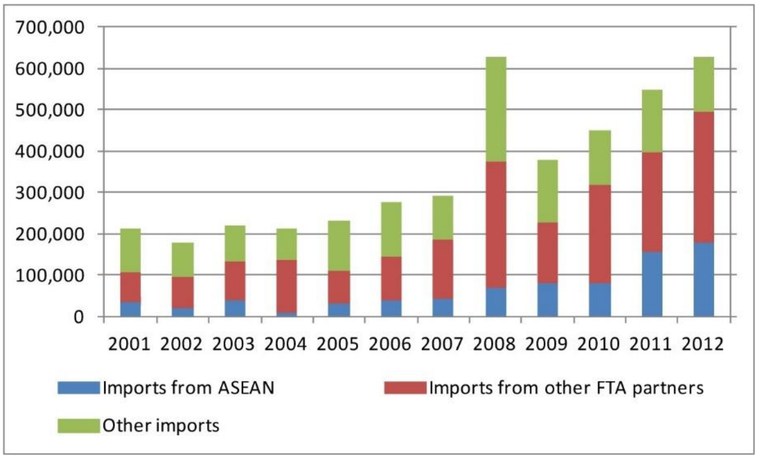

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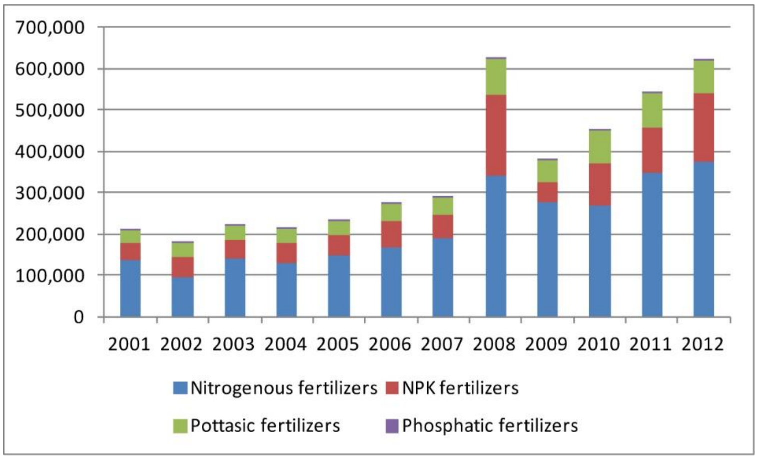
Figure 6 – Fertilizer imports by product type, 2001 – 2012 (in $US)



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MARKET AND INDUSTRY OUTLOOK

Short-Term to Medium Term Forecasts: Demand for fertilizers will continue to grow at constant pace in the next 3 to 5 years

- **Philippine farming sector is under fertilized (there is a growing advocacy for the promotion of the correct usage of fertilizers)**
- **Consistent with the goal to attain food security and rice self-sufficiency, target for crop production will increase (for 2016, the target for palay production is 20 M MT and 12 M MT for corn production)**
- **The FPA projects that fertilizer usage/consumption will increase between 10% to 30%**

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Table 4 – Estimated fertilizer requirements for major grades '000 MT in the next 3 to 5 years

Nutrient	Average Consumption Year 2012-2014	Mid-Term Forecast (3-5 years)	
		Projected 10% Increment	Projected 30% Increment
N	486 MT	535 MT	632 MT
P2O5	128 MT	141 MT	166 MT
K2O	150 MT	165 MT	195 MT

Source : Fertilizer and Pesticide Authority

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MARKET AND INDUSTRY OUTLOOK (cont.)

Long-Term Forecast: There will be greater potential for the continuing growth and expansion of the fertilizer industry as gains are felt from the adoption of reform measures (policy, governance and program levels)

- **The Philippine population has reached the 100 million mark and the population growth averages at 1.8%.**
- **Government has kept its commitment to prioritize the agriculture sector and continues to infuse investments for agriculture infrastructure and support services to improve productivity and increase farmers' income.**
- **Land conversion will be rationalized and regulated and while rapid urbanization is a fact, this will be offset by enhanced productivity per hectare of farm land.**
- **Disaster preparedness and expanded crop insurance scheme will mitigate loses in crop production.**
- **There is a growing trend towards the cultivation of high value crops, such as legumes, vegetables, fruits, oil palm, cacao, cassava.**
- **Efforts are being pursued to rehabilitate the coconut and sugar industries.**

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RECAP AND WAY FORWARD

- **Crop production is expected to dramatically grow to meet the domestic demand and the requirements of the foreign market.**
- **Resource limitations and climate change present significant, yet surmountable challenge.**
- **There is a strong potential for the growth and expansion of the fertilizer industry and a prerequisite to this is staying the course on the market-oriented regime.**

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