
SPECIAL AREA FOR AGRICULTURAL DEVELOPMENT PROGRAM

# the Reality

Capacity to view things on Agriculture and Fishery in their true relations and relative importance to the SAAD Program

This book entitled, **The Reality: Capacity to view things on Agriculture and Fishery in their true relations and relative importance to the SAAD Program** is an annual publication of the Department of Agriculture.



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**FY 2019**

“The Special Area for Agricultural Development (SAAD) Program, an initiative that **focuses on marginalized rural communities,** aligned its strategies to the OneDA framework. Programs such as this are **important to the goal of inclusive development** and **performing redistribution strategies** towards opportunities.

**William D. Dar, PhD**
Secretary, Department of Agriculture

# *Foreword*

The Department of Agriculture (DA) accelerates targeted transformations in the agri-food sector with its OneDA Reform Agenda and in the years of execution, it has kept the agriculture sector afloat and resilient, amid the challenges for the past three years.

The Special Area for Agricultural Development (SAAD) Program, an initiative that focuses on marginalized rural communities, aligned its strategies to the OneDA framework. Programs such as this are important to the goal of inclusive development and performing redistribution strategies towards opportunities.

SAAD implemented actions in support of cooperative development, farm clustering and consolidation, province-led agriculture and fisheries extension system, mobilization and empowerment of partners, farm diversification and mechanization, processing and marketing, youth and women engagement, technical training, and strategic communications. These efforts led to the establishment of 257 Community-Based Enterprises (CBEs).

Today, I commend SAAD for publishing "The Reality: Capacity to view things on Agriculture and Fishery in their true relations and relative importance to the SAAD Program" that documents and reflects the program's pursuit in joining, expanding, and contributing to the discourse of development. Not only does it provide clarity to pressing issues, but it also serves as a reference document for the continuous crafting of policies for the marginalized sector.

Rest assured, our commitment is to serve our farmers and fishers with relevant programs, to continue to listen and study both the community and the policies, with utmost consideration for the people as the center of development.

*Mabuhay!*

William D. Dar, PhD
Secretary, Department of Agriculture

Engr. Ariel T. Cayanan
Undersecretary, Department of Agriculture

# Message

The agriculture and fishery sectors remained resilient despite peculiar challenges brought by the pandemic and natural hazards. In fact, the Department of Agriculture worked double-time to implement its various programs and has been transparent all throughout, using different communication channels.

As the chairperson of SAAD, one of the DA's key programs in reducing poverty in the country, I have witnessed how the program is responsive to food security, accelerating its efforts to adopt the OneDA Reform Agenda, and expand its covered areas following the whole-of-nation approach particularly the End Local Communist Armed Conflict and the Geographically Isolated and Disadvantaged Areas.

After 6 years, the program puts forward through the development of Community-Based Enterprises which will have the potential to be on a larger scale, generate more jobs, return benefits to the community, and help strengthen local economies. It has poured Php 6.8 billion total budget aiding 5,101 farmer groups and 143,229 individuals benefiting from 3,189 livelihood projects. Also, 257 enterprises were already established by 9,104 rising entrepreneurs.

Today, I would like to congratulate the program implementers for having this collaboration of studies and ideas encapsulated in one book. While the challenges have been substantial, you have made progress by maintaining positive growth as an enduring story of resilience.

Truly, SAAD has become an instrument for socio-economic transformation that centers on the well-being of the farmers and fisherfolk.

# Message

I have always valued communications as an integral part of development. As a scientist and a public servant, accurate information, complemented with an efficient communications approach is a way to attain participatory development, especially among the communities rarely reached by basic social services.

Since 2017, the SAAD Program has been dedicated to empower our farmers and fishers by providing support to improve their livelihoods, and also by providing an avenue to share their stories. While we document, craft informational materials, and report our progress, we in the program do not stop to perceive the contribution to poverty alleviation as an area of continuous study, revealing intersecting practices, strategies, and emerging trends in crafting policy and implementation towards strengthening the culture. And with these encounters, we form our stand and opinion about development in our country.

This Editorial Compendium covers issues deemed important, or urgent during the said course of time. At this point, the program ought to reveal its impact, on its perception of other agricultural issues such as the effects of the international political disputes on the food and agricultural supplies such as fertilizers, changing climate, and sectoral participation. Some articles are meant to shed light on the realities of the Philippines, and its position on the global scene, some reveal and explore SAAD's impact on its core mission of poverty alleviation, sustainability of livelihood, calling for continuous support and sectoral participation.

In a healthy discourse, a sphere must be fostered and supplemented with different relevant ideas, and concepts that the public can learn about, discuss with and base their opinions and beliefs. Hopefully, the collection of these documents can reveal the hurdles and triumphs of the time when the program is being implemented.

We expect that the readers can find these materials useful to further understand what the program is about, what it does, the challenges that the implementers face, and how it affects policy changes. Finally, I call on our readers to keep the arena of information healthy by considering multiple perspectives regarding the important issues we all face in the agriculture sector.

*Myer G. Mula, PhD*
Director, SAAD Program

Only with an **inclusive, multi-perspective,** and **informed sphere,** we may **create an opinion** that is worth contributing to the stream of information accessible to other participants in the development arena.

**Myer G. Mula, PhD**
Director, SAAD Program

# Message

Sustainability is a recurring topic in many development initiatives and discussions, whether on the local or international platforms. To me, it is important to lay down a good foundation in joining the discussions, and this foundation shall begin with knowing and exploring the right information, be it contradicting or complementing ideas, with consideration of a multiplicity of perspectives, the intersectionality of issues, as well as the urgency of concerns that need to be addressed.

As the program progresses, our mission remains steady - to uplift the lives of our marginalized farmers and fishers in the rural areas. However, with this progress, we are also expanding our calls and objectives to reach the consciousness of more people, not only to share our mission but also to recognize the role and the power of the people in the course of development. Collective consciousness is one of the building blocks for effective implementation, as well as continuous modification of policies and programs.

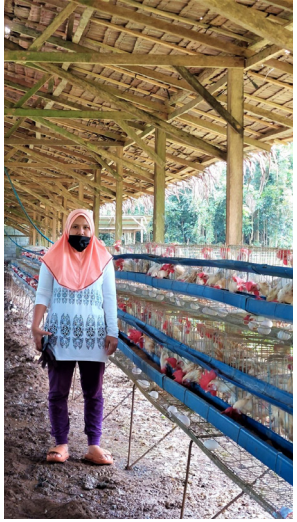
In the effort to collectively shape the consciousness of the concept of sustainability in the development arena, our duty requires perpetual examination of existing trends, positions, and progress vis-a-vis our existing understanding in the field.

This is why, SAAD compendiums exist, and with this installment, we hope to add to the pool of resources out there to be considered in shaping the understanding of the position of the program on the different issues surrounding its implementation. To me, listening to the opinions of the practitioners who work for and in the program is one essential step to creating progress in this collective understanding.

We thank everyone who contributed to the fulfillment of this material. Lastly, I would like to pose a challenge to all practitioners and our readers to continuously seek to understand and learn the language of the field, and to communicate this to the public to ensure the integrity of opinions circulating in the discourse platform.

Together, let us promote better communication, sharing of information, and discussion of ideas and experiences.


Ulysses J. Lustria Jr.
Deputy Director, SAAD Program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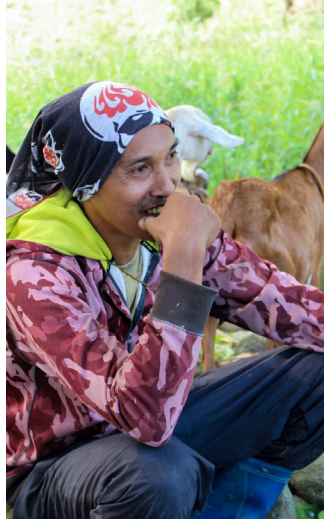



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*DA-SAAD Beneficiary*
*Sitio Kawayan, Pandanon, Don Salvador Benedicto, Negros Occidental*
**Lowland Vegetable Production**
**FY 2019**

# *Introduction*

## SAAD in the pandemic

The recent health crisis has changed the course of the global socio-economic business, primarily brought by the restrictions in movement that paralyzed different services from health, food, and other essential commodities worldwide.

In the dawn of the CoViD-19 in 2020, Philippine agriculture, then facing animal and crop diseases as well as international, and national free-market policy challenges were put into a more complicated and vulnerable position. The threat to food security and agricultural commodities efficiency has become more real, and urgent. With these factors about to bite especially the poor, Secretary William D. Dar launched and intensified independent food production through the Plant, Plant, Plant and Raise, Raise, Raise Program.

The SAAD Program then in its third year of implementation went through day-to-day hurdles to run the program, especially at the community level activities, adjusting necessary policies, and allocations, project refocusing, and securing deliveries despite mobility restrictions. As its major component, the social preparation and specialized training (extension services) were likewise halted due to its nature of gathering farmers and fishers for educational activities.

The program complied with the 3-6-9 strategy of its mother agency where project prioritization per quarter was implemented to address food access and sufficiency as community lockdowns are enforced. In this approach, easy yielding crops, and manageable small farm animals were provided to beneficiaries even to the associations whose projects lined-up were temporarily paused to prioritize production and crisis-responsive projects.

This action is to encourage independent food production, technically backyard gardening and farming for a more accessible source of food to community members, with less or without contact. This action is very critical for SAAD as it caters to far-flung or geographically isolated farmers and fishers. For the crops projects, the DA and SAAD secured provision of start-up inputs such as farm materials and fertilizers.

Following the resource and capacity building assistance to the beneficiaries, SAAD continued to intensify the establishment of community-based enterprises. This is the result of strengthening the production capacity of farmers.

By 2021, when restrictions persisted but somehow laxed, the program gradually resumed with its regular implementation, completing components, such as social preparation, extension services and technical assistance. Mechanization projects recommenced, as well as the provisions of large ruminants.

This was also the time when the whole department intensified the swine repopulation program where zones or areas for African Swine Fever (ASF) virus

have been identified. In support of this project, SAAD Program halted its swine provision to the areas tagged as ASF infected zones, however, consulted with community members for livelihood replacement.

In the same year, the program staff, headed by Dr. Myer G. Mula, braved uncertainties in health situations to physically reach out to the beneficiaries to perform monitoring, technical assistance, and dialogues which are fundamental toward sustainability.

**SAAD throughout the years**

In the 5-year run of SAAD, it served 143,229 individual farmers and fishers, and 4,852 groups consisting 138,121 members. These beneficiaries are distributed in 30 covered provinces (457 municipalities and 21 cities), who received 3,084 livelihood projects ranging from crops, livestock, poultry, machine, and aquaculture.

Working closely with the local government units in reaching different communities, one of the most important recognition of the program came from the House Committee on Rural Development (HCRD), who also pushed for the extension of SAAD's implementation to another 6 years (Phase 2). Further, the House of Representatives adopted the findings and recommendations of the House Committee on Poverty Alleviation (HCPA) to improve targeting of beneficiaries for the proposed Phase 2 implementation.

SAAD was cited to have contributed to the decrease in poverty incidence in the Eastern Visayas by the National Economic and Development Authority (NEDA) VIII (OIC Regional Director, Mylene C. Rosales in the Philippine Statistics Authority VIII conference).

The recently conducted third-party assessment revealed observed positive initial benefits particularly in improving farmers' household food consumption, other welfare gains and economic status.

# *Communication as the extension of the self*

There are many ways to utilize and explore emerging knowledge avenues complementing the development of technology, especially in the communications arena. This opens the audiences to multiple platforms and more accessible information resources across the globe. The recently called "global audience" is created as a result primarily but not exclusively of the bridges of communications surpassing geographic and cultural barriers.

These interactions can be read as putting oneself out there, through modern tools such as mobile phones and the like, as an extension of the self.

The past decades open multiple approaches to communicating all kinds of concepts. It is a double-edged sword as the **quality** of information open for consumption does not keep up with the continuous widening **capacity** to carry the former. This is because these communication platforms, while accessible to information producers and consumers alike, are operating in a capitalist setting, whose agenda leans more toward for-profit creation than education.

This means that the global audience or consumers are susceptible to irrelevant, and worse, false information infiltrating different media used by millions of consumers, usually operating for profit.

In communication studies, Marshall McLuhan underscores the vital role of the medium in content transmission. Discussing its capitalist tendency, the contemporary mediums are generally perceived as platforms operating for commerce, offering digital commodities and services, or using the digital arena to sell products. This works by saturating the digital world with information that will influence or encourage specific behaviors such as consumerism.

As technology develops, and the audience has to access more of this development to reflect digital behavior, more than ever, the recent communication setup creates a socially constructed idea of choice and power. The increasing mobility and portability of modern devices are believed to grant power of choice, and that producers follow this behavior to offer relevant products and services customized per user. How powerful is this illusion of choice?

If according to McLuhan, "the medium is the message," and the medium is also an extension of the self (of the global audience), both phenomena offer the "behavior" as an essential form of power. Whether this power is utilized by the consumer or the capitalist, the quality of the behavior will dictate.

It may be that the information consumers are made to believe that their community dictates the behavior of the market, or with all the issues about consumer privacy breaches, the overlooked fact is that the consumers' data and behavior in the digital arena is the main product, sold to media-reliant

companies that targets and may be manipulating the behavior of the consumer, and not the other way around.

In the process of creating social awareness, the right information plays a huge role in forming a collective and common consciousness. From this consciousness, the ability to form an opinion emerges. These opinions now go back to the stream of information, supporting parallel opinions, forming clout, and soon normalized in the common consciousness, and cause actions. In this process, we create the "behavior".

With this, the construction of the social behavior of the audience is vital to keep the dynamics of power within the communications arena.

One might think that the whole digital environment is composed of random content, carelessly popping out or appearing in the timeline per se, however, the content appearing before the eyes, are brought by calculated operations of the modern technology meant to observe patterns of consumption as a commodity for the huge business of consumer information marketing.

The existence of data-driven, science-based, articles from experts in certain fields or types of content helps in the adoption of desired behaviors, especially in the digital arena. This information, forming perceptions, and soon opinions may be used as tools to avoid subliminal manipulation. It is still a difficult challenge without the availability of a filtering system in the digital arena.

In this context, the power relies entirely upon the audience in consuming truthful, insightful, forming smart behaviors on the web and other media that can overpower the non-incidental algorithms of the new media. These algorithms are designed according to the information one shares in their devices.

Said information comes from the interaction in the platform, such as a simple click, or like, or share, and even accidental consumption of a material. Take for example searching certain subjects such as "mushrooms" in the search engine will affect your future online activities, where advertisements, videos, short clips, articles, photos and products related to mushrooms will appear.

If the audience chooses to feed their consumption habits with verified, quality, and truthful content, their consumption environment will offer the same materials in the future. This is also true for those who choose to consume fake and unverified materials. With this analogy, the behavior and the data market business can benefit where both can still be active agents with the advantage of being presented with a calculated, behavior-dependent set of choices.

Finally, the audience can do something about the filter of consumption to avoid low quality content (bringing low quality of behavior). The key concept which is another step to take before the comfort of mobility, accessibility, and portability - the verification of sources can prevent the trap of algorithms, and exposure to low quality materials. In addition, building up a smart behavior of consumption across media platforms can also bring ease and confidence to subject own information to the collective consciousness and behavior of a larger community.

**SAMAHAN KANG MANGUNGUMA KAG MAMUMUGON KANG AGRICULA**
*DA-SAAD Beneficiary*
*Barangay Agricula, San Remigio, Antique*
**Corn Production Project**
**FY 2019**

# EDITORIAL


# *DA-SAAD's contribution to Philippine's poverty reduction: An Analysis*

January 14, 2021
by Jhomai S. Canlas, Myer G. Mula

Usually, a person thinks of poverty as not having enough money to supply one's basic necessities. However, it is more than that as it is a complex societal issue.

The Word Bank organization holistically described poverty as:

***"Poverty is hunger… Poverty is lack of shelter… Poverty is being sick and not being able to see a doctor… Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time… Poverty is losing a child to illness brought about by unclean water… Poverty is powerlessness, lack of representation and freedom."***

Besides not having money, poverty includes issues of access to services such as health care and education, marginalization, and exclusion.

**Poverty in the Philippines**

The World Bank said that poor Filipinos live in large households with low educational attainment, headed by individuals who are self-employed or work in agriculture as laborers or smallholder producers. They rely mostly on income from agriculture (including subsistence farming, agricultural wages, and agriculture-related self-employment), domestic remittances, and government transfers. In the latest data of 2018 provided by the Philippine Statistics Authority (PSA), the recorded poverty incidence among population is peg at 16.6%. Although the figure is 10% lesser than the 2015 poverty incidence (26.6%), it still means that 17.6 million Filipinos live in extreme poverty.

Among the 11 basic sectors in the Philippines, **farmers and fisherfolk residing in rural areas still remain the poorest since 2006.** Farmers were recorded with 31.6% poverty incidence in 2018 while fishers with 26.2%. Basically, around 5.5 million farmers and 4.6 million fishers are poor.

The government and non-governmental organizations (NGOs) are working hard to lift the population out of poverty. The government aims to slash the poverty rate to 13-15% by 2022 as part of its 2017-2022 Development Plan. Meanwhile, the World Bank wants extreme poverty eliminated by 2030.

**Key programs in reducing poverty in the country**

The Philippine government is actively trying to speed up its poverty reduction plan. Some of the existing government key programs battling poverty are the Pantawid Pamilyang Pilipino Program (4Ps) of the Department of Social and Welfare Development (DSWD) and the Special Area for Agricultural Development (SAAD) Program of the Department of Agriculture (DA).

4Ps is a government cash-handout project implemented in 2008 to provide the nation's most impoverished families with education and healthcare assistance. This is "one of the best targeted social safety net programs in the world," said the World Bank, which credits the scheme for 1.5% of the country's poverty decline.


Although 4Ps was deemed successful, the Food and Agriculture Organization (FAO) said in a policy and programmatic review in 2019 that a synergy between social protection and agriculture should be strengthened by the Philippine government as an effort to combat hunger and development while promoting rural development.

Since social protection and smallholder agricultural interventions often cover the same geographic areas and target the same households, there are opportunities for synergies and complementarities that would strengthen the livelihoods of poor rural households.

In 2017, the DA-SAAD Program was implemented to aid marginalized farmers and fishers from the 30 poorest of the


# DA-SAAD contributes to poverty alleviation

poor provinces with agriculture and fishery livelihood interventions. With the help of the DSWD and the local government units (LGUs), eligible beneficiaries were identified. This means that SAAD's beneficiaries may also be 4Ps' members.

As of December 14, 2020, the SAAD Program implemented 2,370 projects for the production of various crops (food and industrial), animals (livestock and poultry), and fisheries (capture, aqua, and pond culture) to 133,381 farmers and fishers as well as 3,378 associations with 85,736 members.

The report by PSA on the performance of Philippine Agriculture for the 1st quarter of 2018 stated that the nation's agricultural production increased by 1.47% as the area harvested for rice increased with attributions from DA's programs such as the SAAD. But in the 4th quarter of 2019, Philippine agriculture only grew 0.4% implicating this to the declining production in corn (8.5%) and livestock (primarily in hog production due to African Swine Fever [ASF] at 9.8%).

However, the agriculture sector managed to grow by 0.5% in the second quarter of 2020 despite the problems brought about by coronavirus (COVID-19), ASF, the eruption of Taal Volcano, and typhoons. Moreover, even with the advent of the pandemic and the severe weather conditions, agriculture has again registered 0.7% growth of the country's agriculture and fishery sector during the 3rd quarter of 2020.

Agriculture Secretary William D. Dar acknowledged the positive impact of the SAAD Program during his visit to Leyte during the SAAD Saga in Region 8 on October 25, 2019.

"As SAAD means Promise in Cebuano, I promise you that we will continue to strengthen SAAD as a major program of the Department," Dar said to hundreds of farmers from the provinces of Eastern Samar, Northern Samar, Samar, Leyte, and Southern Leyte.

"We want to reach more beneficiaries through SAAD, which is designed to cater to poor households and groups," he added.

**National Economic and Development Authority (NEDA) VIII** – (Officer-in-Charge) Regional Director Meylene C. Rosales said that the **SAAD contributed to the decrease in poverty of the Eastern Visayas Region (Region 8) as published in a report on January 31, 2020.** The poverty incidence among families declined by 8.96%, from 32.95% in 2015 to 23.99% in 2018. Meanwhile, the poverty rate among the population decreased by 10.36%, from 41.22% in 2015 to 30.86% in 2018.

Dir. Rosales said that the reduction in poverty incidence in Eastern Visayas in 2018 can be largely attributed to the improved labor market conditions and other institutional reforms that increased the incomes of the households. Other contributory factors include sustained implementation, expansion, and enhancement of social protection programs such as the sustainable livelihood program, social pension program, and the institutionalization of the 4Ps.

Dir. Rosales added that poverty reduction could also be partly attributed to the implementation of labor-enhancing and income-enriching agricultural interventions through social preparation and livelihood interventions of the SAAD Program.

**2018 poverty rates in SAAD's 30 priority provinces**

Figure 1 shows that the 29 SAAD's covered provinces' poverty incidence among families was reduced (2015 vs. 2018) with a significant decrease in Siquijor (40.2%), Sorsogon (25.6%), Bukidnon (25.3%), Northern Samar (24.2%), Apayao (22.1%), Kalinga (21.3%), Samar (19.6%), Catanduanes (19.2%), Lanao del Norte (19.1%), and Misamis Occidental (17.3%).

However, the only province where poverty incidence recorded an increasing rate among the 30 provinces is in Sulu at 75.3% in 2018 from 40.2% in 2012 and 63.8% in 2015. The major contributing factor is peace and order situation of the province where Sulu has experienced terrorism leading to deteriorating peace and order situation affecting economic growth to all sectors of development.

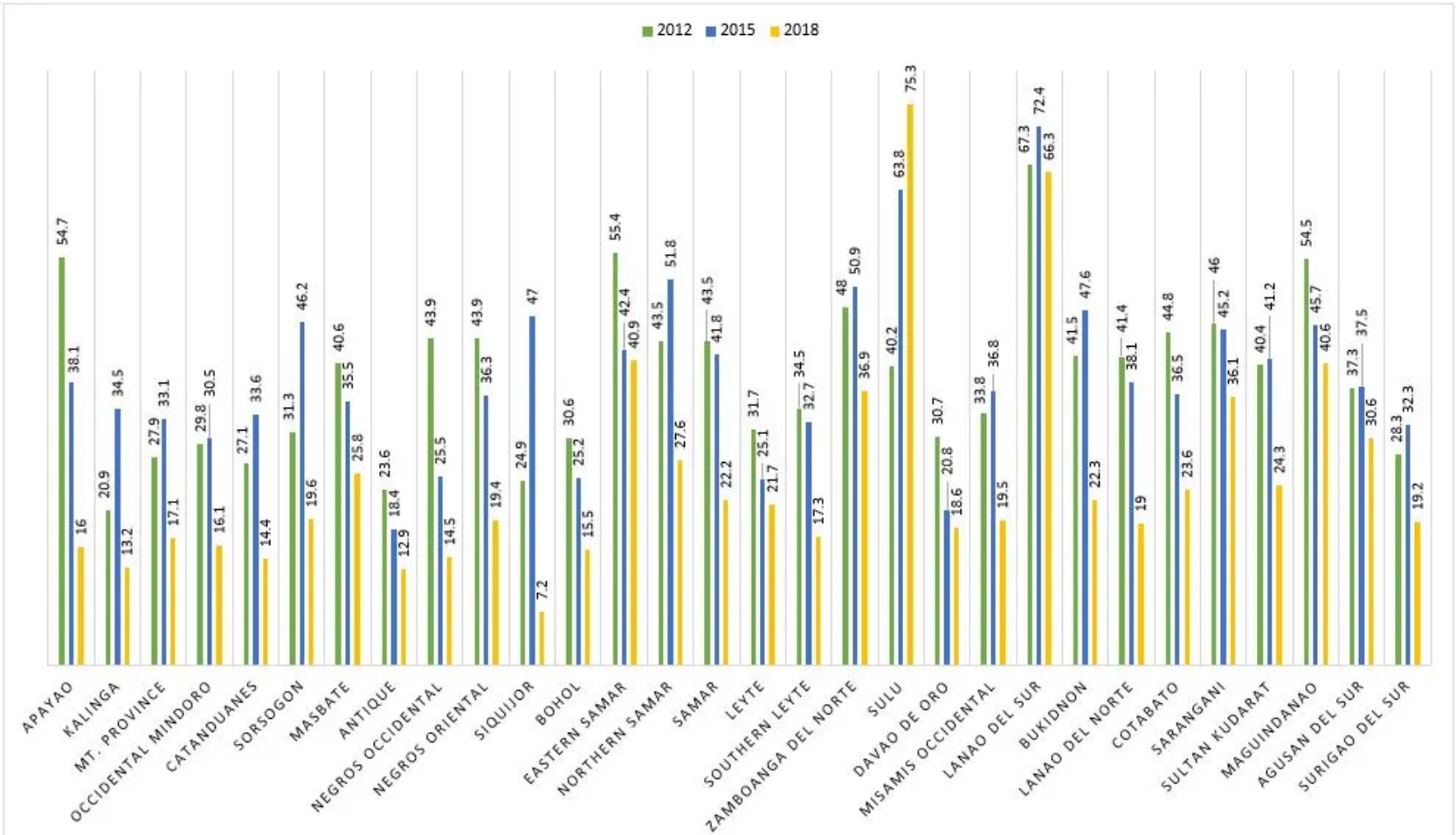


*Figure 1. 2012, 2015, 2018 SAAD Provinces Comparison in Poverty Incidence among Families*

Poverty is one form of structural violence that fosters inequality among people, reduces people's quality of life, and limits their ability to achieve their full potential. Thus, peace is intertwined with it. The reduction of poverty is an essential element of peacebuilding.

# Way forward

Even though the Philippines worked hard in reducing poverty through various programs, it still has a long way to keep up with neighboring countries in the ASEAN region like Vietnam and Indonesia.

To do that, FAO suggests greater coherence between social protection and agriculture. The DSWD, DA, Department of Agrarian Reform, NEDA, Department of Interior and Local Government, Department of Education, National Nutrition Council, and National Anti-Poverty Commission are the main actors that need to converge.

FAO believes that **synergy can generate a positive impact that can break inter-generational cycles of poverty.**

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# *FAO's Recommendations on DA-SAAD Program*

January 19, 2021
by Myer G. Mula, Natalianne Marie O. Delos Reyes

*"… stronger coherence between agriculture and social protection interventions can improve the welfare of poor small family farmers by facilitating productive inclusion, improving risk-management capacities, and increasing agricultural productivity – all of which enable rural-based families to gradually move out of poverty and hunger"* (Tirivayi, et al., 2013, as cited in FAO, 2019).

A project of the Department of Agriculture (DA) which demonstrates coherence between social protection (SP) and agriculture (AG) is the Special Area for Agricultural Development (SAAD) Program. This program is implemented for 6 years (2017-2022) with the mission to contribute in the reduction of poverty among the marginalized and poorest of the poor sectors of agriculture and fishery to the 30 priority provinces identified by the Philippine Statistics Authority (PSA) based on 2012 and 2015 data, and as well as areas covered by Executive Order No. 70, series of 2018 through increase food production for household consumption and the establishment of community enterprises.

**FAO´s recommendations and DA-SAAD's initiatives**

In 2019, the Food and Agriculture Organization of the United Nation (FAO-UN) published a policy and programmatic review which seeks for a greater coherence between social protection and agriculture in the Philippines. The study assessed various agency programs providing a set of proposals on the synergy

between development programs in government agencies such as the DA-SAAD Program through policy-level (Table 1) and program-level (Table 2) recommendations.

Following FAO's recommendations for greater coherence, here are the corresponding DA-SAAD initiatives:

**Table 1. Policy-level Recommendations**

| FAO´s Policy-Level Recommendations | DA-SAADs Initiatives |
|---|---|
| Build policy consensus on the importance of coherence between social protection, agriculture, and food security and nutrition. | This involves identifying mutual objectives and concrete incentives for coordination within the Department. The bureaus working together to identify common objectives and the specific contributions, both technical and financial, of each agency towards the main policy frameworks. This includes the establishment of a strong monitoring framework which allows periodic follow-ups and adjustments as needed. |
| Prepare joint investment plans that could ensure greater coherence between social protection and agriculture in the context of the 2017–2022 Public Investment Program (PIP). | In order to address among others, the challenges of inadequate irrigation and low farm mechanization of the agriculture and fishery sector, convergence at the program level are explored with existing programs of the various offices of DA. |
| Identify potential champions who can push forward the SP+AG coherence agenda. | Identification and capacity development of potential champions facilitate greater coherence. The participation of civil society organizations through established farming and fishing cooperatives/associations, as well as groups composed of program beneficiaries promotes empowerment in policymaking and program implementation. |
| Develop an advocacy strategy based on in-country evidence on the benefits of coherence between social protection and agriculture. | To ensure political commitment, the need to generate in-country evidence on the benefits of coherence between social protection and agriculture have been conducted by NEDA in 2019 wherein DA-SAAD has contributed to the reduction of poverty in Region 8. Within this context, the development of impact evaluations of DA-SAAD become instruments for improved advocacy. |
| Identify entry points in policy design processes to promote SP+AG coherence. | The constant review and evolving nature of sectoral plans provide strong opportunities for greater coherence. In particular, the continuous review of the DA-SAAD 6 year development plan (2017–2022) through national- and regional-level consultations, increase cross-sectoral linkages. |
| Stimulate and integrate the participation of civil society and non-state actors into the SP+AG coherence agenda. | Developing coalitions among non-government organizations (NGOs) and farmers, forest-dependent communities, and fisherfolk groups stimulate discussions and promote the coherence agenda. In addition, the concerns raised by some groups regarding issues of exclusion or eligibility are addressed and explored in a participatory manner. |

**cont. Table 1. Policy-level Recommendations**

| | |
|---|---|
| Ensure adequate representation within national coordination mechanisms for the SP+AG agenda. | Adequate representation of agriculture, food security and nutrition, and social protection in the inter-agency Sub-Committee on Social Protection and other coordination mechanisms enhances the coherence agenda. Adequate agency representation within the key coordination bodies is strengthened through capacity development interventions while encouraging participation of development partners, civil society organizations, academic institutions, and other relevant sectors. |
| Create a specific coherence coordination mechanism between social protection and agriculture for advantageous results. | The national government creates a cross-sectoral coordination mechanism led by NEDA and the Philippine Statistics Authority (PSA), which brings together government agencies mandated to work on the key thematic areas of social protection, agriculture and food security, and nutrition. |
| Use a territorial approach to inter-agency coordination to achieve greater coherence between social protection and agriculture. | With the decentralization of local government units (LGUs), SP+AG coherence is strengthened in the local planning and development councils at the provincial and municipal levels. Local chief executives, with the support of planning development officers, social welfare officers, and agriculture officers, find entry points in the local development policy and planning processes. This includes the identification of programs that complements existing social protection programs rolled out by national line agencies. |
| Develop the capacity of national government agents to move the SP+AG agenda forward. | Technical support and capacity development in understanding and operationalizing the coherence agenda is implemented at the national, regional, provincial, and municipal level. As representatives of national government agencies expressed an interest to pursue the SP+AG agenda, an increased understanding of the interconnection between social protection, agriculture and food security is considered a priority. |

**Table 2. Program-level Recommendations**

| FAO's Program-Level Recommendations | DA-SAAD Initiatives |
|---|---|
| Explore a territorial approach to targeting in SP+AG programs and interventions | The DA-SAAD Program, since its inception, has prioritized the 30 poorest provinces with the highest poverty incidence among families based on the Philippine Statistics Authority data of 2012 and 2015. |
| Promote greater data-sharing between the National Household Targeting System and the Registry System for Basic Sectors in Agriculture (RSBSA) | The SAAD field implementers coordinate with the local government units and national government agencies pertaining to the list of DA-SAAD beneficiary candidates, making use of the DSWD's 4Ps database and DA's RSBSA. National Commission on Indigenous Peoples also recommends eligible beneficiaries from the Indigenous Peoples communities. |
| Ensure and promote greater dialogue with representatives from civil society and local organizations concerning issues on eligibility and exclusion | The DA-SAAD field implementers also facilitate continuous consultations/dialogues and other activities that are important to mobilize the program. Part of these activities is the meetings with local field executives such as governors, congress representatives, and mayors; and DA bureaus and units. |
| Promote a convergence approach similar to EPAHP among other development programs | SAAD is an example of a convergence initiative at the program level, which combines social protection, agriculture, and food security, and nutrition interventions. This creates a direct platform for inter-sectoral collaboration between the Bureaus of DA and LGUs. |
| Stronger emphasis on cross-sectoral coordination is necessary to ensure programmatic coherence between SP and AG. | DA-SAAD already integrates elements of coherence between social protection and agriculture, deeper programmatic connections and stronger coordination efforts would maximize impacts and results. DA-SAAD connects the farmers to markets in which their farm and fish products were made accessible to the consumers. It varies per region (e.g. the Kadiwa ni Ani at Kita project by the DA, in partnership with the Department of Trade and Industry and established market outlets such as malls). |
| Impact evaluations and greater evidence-gathering efforts are indispensable for greater SP+AG coherence and rural poverty reduction. | The program is currently undergoing a third-party midterm impact evaluation assessment (CY 2017-2019) for policy direction that would improve program implementation. |

# **social protection:** the SAAD way

The Asian Development Bank (ADB) defined social protection as a "set of policies and programs designed to reduce poverty and vulnerability." This can be accomplished through "promoting efficient labor markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards/ loss of income" (ADB, 2001).

**DA-SAAD provides social protection** through the food production and livelihood projects implemented in the areas with the highest poverty incidence among families. These interventions are **productive resources which can be used for the farmers and fisher's daily sustenance**.

Local production also results to opportunities for employment and additional income for their families. In 2018, the enterprise development component of the program was added to encourage small communal enterprises to thrive, resulting to the development of their communities.

Having increased economic activities will in turn increase their assets which will help them prepare for risks (Welle and Birkmann, 2015; World Risk Report, 2016) dictated by the exposure to natural hazards – e.g. earthquakes, Typhoons, flooding, drought; susceptibility – e.g. nutrition, living conditions, economic circumstances; coping capacities – e.g. healthcare access, social and material security; and adapting capacities – e.g. impending natural events, climate change, pandemic.


The importance of DA-SAAD interventions in providing food and as a source of income was appreciated by the beneficiaries especially amid the effects of CoViD-19 restrictions in the Philippines. The restrictions in transportation and movement of goods and services have primarily affected the market chain all over the country. Thus, the DA-SAAD assisted its beneficiaries in the marketing of their produce and by providing them projects for crops, livestock, poultry, and fishery production that are fast income-generating.

Based on the testimonies of the beneficiaries published through press releases and through SAADventures, farmers and fishers claim that DA-SAAD has provided great assistance towards food sufficiency.

Until 2022, and hopefully beyond, DA-SAAD will continuously promote social protection through livelihood projects (food production) and the establishment of community enterprises for farmers and fishers towards increase/improve purchasing power, which can lead to poverty reduction.


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**Photo:**

Sitio Sangitsangit Tahong Growers Association, Brgy. Tinocdogan, Leyte, Leyte

Culiram SAAD Abaca Farmers Association, Talacogon, Agusan del Sur.


# *DA-SAAD: The Epitome of Change*

February 16, 2021
by Myer G. Mula, PhD

Amidst the pandemic, the year 2020 strongly contributed to the food security of the 30 poorest of the poor provinces covered by the Department of Agriculture-Special Area for Agricultural Development (DA-SAAD) Program on the domestic food requirement and among others, through the participation of our beneficiaries (Agriculture and Fishery Sectors) in the Kadiwa ni Ani at Kita and from distinguished local markets. This strategy was strongly enforced by our Secretary in order to stabilize the prices of food (vegetables, fruits, meat, and its by-products).

**2020 Growth Trend on Philippine Agriculture**

The report by PSA on the performance of Philippine Agriculture managed to grow by 0.5% in the 2nd quarter despite the problems brought about by the enhanced community quarantine (ECQ) by a coronavirus (COVID-19) last March 2020; the African Swine Fever (ASF) outbreak which started in July 2019; and the eruption of Taal Volcano in January 2020 (due to massive ash fall). Nevertheless, the country´s agriculture and fishery sectors growth were sustained during the 3rd quarter at 0.7%.

However, the worst crises that stalled the Philippine economy was felt during the 4th quarter where production went down by 2.5% due to the advent of the pandemic (COVID 19 and ASF); and Typhoons caused by Quinta, Rolly, and Ulysses (which caused massive flooding) that hit major production areas of Luzon and parts of Visayas.

Even with this worse contraction recorded at 9.5% for CY 2020 since 1984 (-7%), when the Southeast Asian nation plunged into economic and political crises, the performance of Agriculture was recorded at -1.2% and still the best performer among other sectors of development (e.g. Services -9.9%; Industry -8.4%; Construction -25.3%; Other Services such as personal care services, salons, entertainment, casinos, and museums -45.2%; Transportation -21.3%; Accommodation and Food Service Activities -42.7%; Household Spending -7.2%; Exports -14.7%; and Imports -21.7%).

# How DA-SAAD Works

In line with the Department of Agriculture's mandate to uplift the socio-economic status of farmers and fishers through a food-secure and resilient Philippines, the SAAD Program, a six (6) year locally-funded project, was executed in 2017 to help alleviate poverty incidence among families in its covered 30 poorest provinces based on the Philippine Statistics Authority (PSA) of 2012 and 2015 data.

SAAD is operated by the Regional Offices of DA for the Agriculture Sector and BFAR for the Fishery Sector while being supervised by the DA-SAAD National Program Management Office (NPMO) under the Office of the Secretary (OSEC).

The program aims to complement the regular programs of DA (rice, corn, high-value crops, coconut, fiber, etc.) and the Bureau of Fisheries and Aquatic Resources (BFAR) in terms of beneficiary selection (focus on the poor); improve food production for household and commercial purposes; and assist its beneficiaries in the establishment of community-based agricultural and fishery-related enterprises.

The program will organize farmer/fisherfolk individuals into farmer/fisherfolk groups and provide production, processing, and marketing-related interventions. Such interventions are, but not limited to, postharvest equipment, seeds, planting materials, livestock, poultry, soil ameliorants, drugs and biologics, feeds and feed-related items, fingerlings, crustaceans, fishing gears, fishing paraphernalia, etc.

From 2017 to 2020, the DA-SAAD triumph by conducting **798 social preparations to 53,389 participants;** granting **2,424 projects** to **137,546 individual beneficiaries** and **3,645 farmers/ fishers association with 92,221 members**; provide **1,761 specialized training** to **88,137 farmers/fishers**; and established **159 agri-enterprise benefitting 5,172 members**.

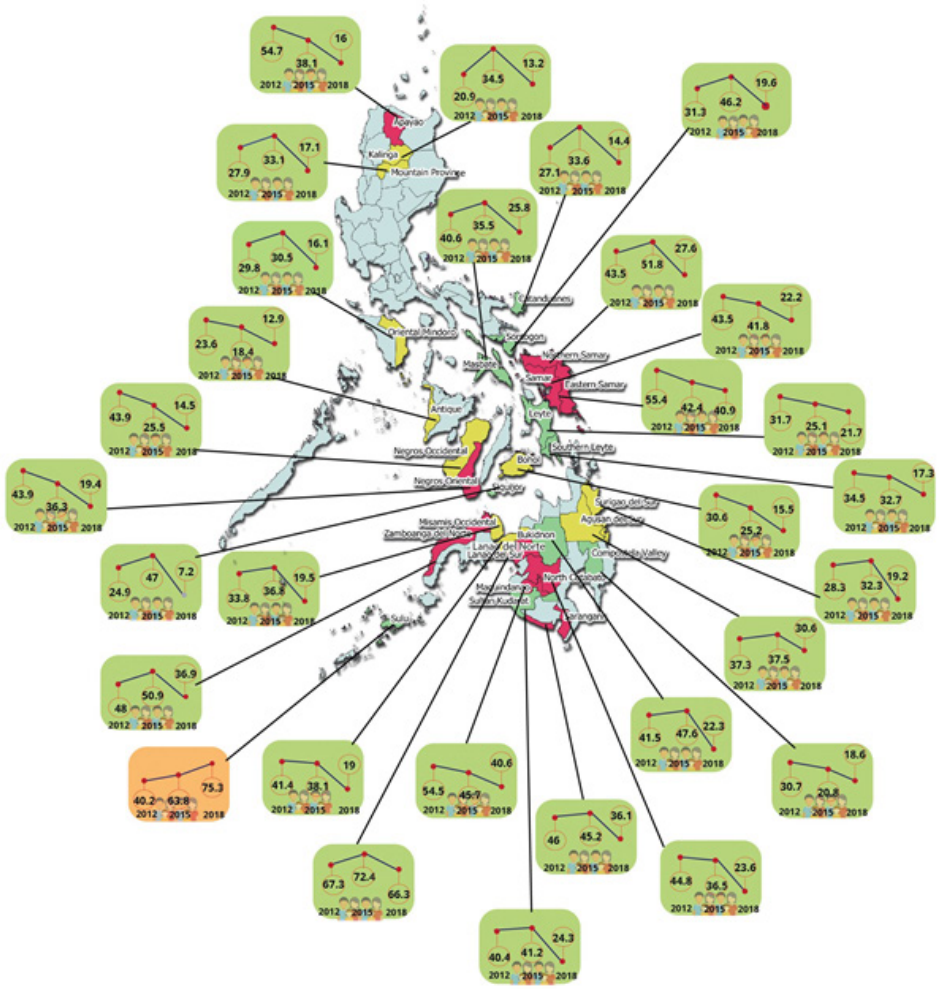
# DA-SAAD: A Contributor Towards Poverty Reduction

In the 2020 NEDA report, SAAD contributed to the decrease in poverty of the Eastern Visayas Region (Region 8). The poverty incidence among families declined by 8.96%, from 32.95% in 2015 to 23.99% in 2018. While, the poverty rate among the population decreased by 10.36%, from 41.22% in 2015 to 30.86% in 2018.

The reduction in poverty incidence in Eastern Visayas in 2018 can be largely attributed to the improved labor market conditions and other institutional reforms that increased incomes of the households through social preparation and livelihood interventions of the SAAD Program.

As shown in the Map Infographics, the 2018 PSA poverty data incidence in the SAAD's 30 priority provinces in comparison with 2015 data showed that 29 covered provinces poverty incidence among families was reduced with a significant decrease in Siquijor (40.2%), Sorsogon (25.6%), Bukidnon (25.3%). Northern Samar (24.2%), Apayao (22.1%), Kalinga (21.3%), Samar (19.6%), Catanduanes (19.2%), Lanao del Norte (19.1%), and Misamis Occidental (17.3%).

The only province where poverty incidence recorded an increasing rate among the 30 provinces was Sulu at 75.3% in 2018 from 63.8% in 2015 and 40.2% in 2012. The major contributing factor is the peace and order situation where Sulu has experienced terrorism affecting economic growth to all sectors of development.



Map Infographic
**2012, 2015, 2018** Provinces
**POVERTY INCIDENCE** AMONG FAMILIES(%)

# One DA Framework: A Convergence

Even though the Philippines worked hard in reducing poverty through various programs, it still has a long way to keep up with neighboring countries in the ASEAN region like Vietnam and Indonesia.

For the agriculture and fishery sectors, the framework, as mentioned by Secretary William D. Dar, is the `One DA´ holistic approach that will synergize to generate a positive impact that can break inter-generational cycles of poverty. The `One DA´ framework is the convergence of all developmental actors of the Department following the 12 key strategies namely: 1. Farm Clustering/ Bayanihan Agri Clusters (BACs); 2. Province-Led Agriculture and Fisheries Extension System (PAFES); 3. Agri-Industrial Business Corridors (ABCs); 4. Infrastructure Investments; 5. Post-Harvest Processing Logistics, and Marketing Support; 6. Digital Agriculture; 7. Climate Change Adaptation and Mitigation Measures; 8. Mobilization and Empowerment of Partners to Attain Scale; 9. Global Trade, Export Development, and Promotion; 10. Food Safety and Regulations; 11. Ease of Doing Business and Transparent Procurement; and 12. Strategic Communication Support.

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# *Farmers and Fishers: the stalwart sectors*

May 25, 2021
by James Brian R. Flaga

Farmers and fishers, our country's traditional backbone, should be given the most importance with or without this global pandemic.

Many have pointed out that these two sectors are overlooked, which is not really the case. In fact, the advances in agricultural science and technology have vastly improved our approaches and practices. These brought forward remarkable successes for the said two sectors, but among those inspirational stories, there are also of farmers and fishers on the trenches needing better systems, support, and training.

The fact of the matter is: A staggering majority of farmers and fishers remain impoverished. As per the Philippine Statistics Agency's (PSA) report on Poverty Incidence Among Basic Sectors in 2018, the farmers (31.6%) and fishers (26.2%) are the top two poorest sectors which are especially prevalent in Geographically Isolated and Disadvantaged Area (GIDA) and End Local Communist Armed Conflict (ELCAC) areas.

Alner Sebio embodies the Filipino farmer ethics: hands and feet on the ground, eyes to the stars. A farmer in Kibaguio, Langtud, Laak, he tills close to a hectare of rolling land in the highlands, where he grows corn and bananas. Kibaguio is a GIDA in the province of Davao de Oro.

In December 2020, he sold 1,200 kilograms of white corn for a little more than Php 14,000. His produce

formed part of the 69% production shared by Davao Region with two others (Northern Mindanao and BARMM) in the last quarter of 2020 based on the PSA.

In essence, Sebio produced a staple food for many Filipino families. He didn't get to reap the maximum monetary compensation for it. As per the PSA, the average farmgate price for white corn in 2020 was at Php 13.75/kilo, down by 7% from the previous year's prices at Php 16.20/ kilo. Sebio sold his at Php 12/kilo.

It should be said: amid the CoViD-19 pandemic, while our healthcare workers are in the spotlight and given due credits for the service done, we as a nation are overlooking other sectors that are arguably the most important in making sure we thrive in these difficult times. They are the farmers and fishers – specifically, those who are in GIDA as well as ELCAC areas.

**The CoViD-19 Pandemic**

At the onset of the pandemic, the national government mandated the Department of Agriculture (DA) to ensure that every Filipino is food-secure while we wrestle with the health crisis.

One year into the pandemic and our farmers and fishers have not only sustained us but have done so outstandingly without fanfare.

In the second and third quarter of 2020, when intensive lockdowns paved the way for economic downturns, agricultural production punched in positive growth percentages at 0.5 and 0.7, respectively. The annual contribution of the sector to the 2020 gross domestic product contracted at 9.5% was deemed "negligible" by the Agriculture Secretary – which was an upright statement.

As restrictions ease and vaccines become available, there is no way for the agriculture sector not to increase production. Trust and believe. In our nation's history, never has there been a major incident where our farmers and fishers have gravely failed us.

But the opposite is true. We have failed to reciprocate many times. What is felt by our GIDA and ELCAC farmers during this pandemic is a microcosm of what is happening to agriculture in our country. While the CoViD-19 pandemic rages on, our farmers must be given the right prices for their produce.

In hinterland areas, the problem is always the right buyers. More often than not, our farmers will opt for the buyer who's the most accessible, regardless of price. For some, the choice is inexistent.

I won't go into a tangent of leading people to what they should be doing, but there's a foolproof way of ensuring that you are doing your part of the solution. It's been used by numerous communities worldwide since time immemorial: when you can, buy directly from farmers; when you can't, insist on buying local.

# SAAD – a hope for farmers and fishers

Several sectors, even the national government, have expressed their gratitude to our farmers and fishers amid this pandemic. The SAAD Program, which is intended to alleviate poverty at the household level, has changed its 2020 and 2021 plans from the ground up to answer to the President's directive of ensuring there's food for every Filipino.

Alner Sebio's open-pollinated white corn variety was given by SAAD Region 11 in May 2020 through a masked up, socially distanced distribution. Though he opted not to replant, he used the money from his harvest to prepare his land for other crops. That's the ingenuity of the Filipino farmer. He knows the land he is tilling, and he is decisive when and where it is needed.

Teodolo Bueno Jr., President of the Simbuco Aqua-Marine Multi-Purpose Cooperative (SAMMPC) attested that they started as a Bantay Dagat group, but because of SAAD, the cooperative was born. Through the program's fish pen and seaweed projects, they made value-added products and achieved zero postharvest loss.

"Our cooperative is not affected by the pandemic because of the SAAD project. When CoViD-19 infiltrated the Philippines, this place was on lockdown but it seems like we are not because we got too busy with our SAAD project like installing our fish pens. We got a permit from the LGU and we even have our travel pass since we got our own truck. We travel to and from Cagayan De Oro to buy the materials for our fish pen," Bueno shared.

On the other hand, Crispin Baldonaldo, president of Lala Fishermen's Cooperative (LAFICO) shared that SAAD made it possible for them to acquire a beach resort and put up grocery stores.

"Because of SAAD, LAFICO really grows, we see how we transformed from being an OPAL association to a cooperative. Before, we will just wait for the right season to fish. But now, with the project provided to the cooperative, it is not just us members who benefit but almost all residents in the locality because our boneless bangus can be marketed in sidewalks," Baldonaldo tearfully added.

More than implements and livelihood programs—and although it feels trite and reductive—SAAD as a whole delivers hope to our beneficiaries.

For SAAD Region 11, the budget allocation this year all poured into one province, which is the biggest yet, is reflective of what's happening in other regions, with SAAD extending its areas of scope.

Of course, no program is perfect, because if there is, we would be living in a utopian society. But we don't need to aspire to be living in one, as we all know, all kinds of societies have a little bit of both utopian and dystopian characteristics in them. To which, I digress: what SAAD has been doing at the grassroots level is only a part of the equation. We are not a banner program. We are a special one. There are limits and jurisdictions. At best, we'll do what we are mandated to do. Possibly more. Hopefully more. And at worst, we've only done so little.

The African Swine Fever (ASF) that has threatened to wipe out a portion of our country's livestock has affected our country's production, caused pork prices to increase, and most especially, devastated the livelihood of our farmers. To a lot of backyard piggeries, those swine represented present plans, aspirations, even a glimpse of a better future. While repopulation is in the works, SAAD has done its due diligence by preparing relevant associations with social preparation activities and trainings through policies and guidelines.

On the similar side of the spectrum, fish fingerlings, chicken, goat, among others have been distributed all over the country amid the pandemic to increase production of other meat products. Simultaneously, harvests from projects distributed before the pandemic continue this year and the last, giving our beneficiaries reprieve in uncertain times.

Empowering ELCAC farmers is enabling the most vulnerable. Local communist rebellion targets these sectors to be part of their wider support network because they're the ones with no better options. I've been lucky to be privy to a special presentation of a local military study done in a multi-year timeline that emphasizes the value of agriculture support in preventing ELCAC farmers from entering leftist indoctrination. In that roundtable, my biggest takeaway was support to GIDA and ELCAC farmers should be wider-spanning. If possible, permanent.

## *May pandemya man o wala, Magsasaka't Mangingisda Maaasahan ng Bansa*

Poverty is wearying to unpack akin to its cousins – war and crime. It is a multi-layered beast I fear I lack the sophistication to take on. There are people better suited to discuss those things. But this I know: in the short while that I've been an information officer for SAAD Region 11, the farmers I've talked to share a universal experience: the crushing dread of not being able to provide for their families on the next day.

Suffice it to say, most of us know and relate to this either partially or to its full extent. We have been in this situation before. We've lived it. We've seen it rear its ugly head. And while most of us have the convenience of brushing off these experiences with internet humor and other modern escapist methods, with these sectors, it's a day-in-day-out lived experience.

It's not so much to ask then, in celebration of Farmers and Fishers Month, that more than acknowledging the work these sectors have done, let's give our farmers and fishers what they are due.

More, if we are able.

It is up to this generation to uplift our farmers and fishers. In a culture that asks people to be accountable, it's not a stretch for us to ask how to change the way our farmers and fisherfolk live.

The systems are already in place. In some, we may need to topple and build from the ground up. In others, we may only need to tweak and adapt.

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# *RISING FERTILIZER PRICES: A Reality*

November 11, 2021
by [1]Wilfredo C. Roldan, [2]Myer G. Mula, [3]Julieta Lansangan, [4]Rowena Reyes, [5]Ivan Layag

The Fertilizer and Pesticide Authority (FPA) recognizes the ongoing plight of local farmers relative to the hike in fertilizer prices. With increased farm production expenses (vis-à-vis increased fertilizer prices) comes reduction of profit margins.

*Why are the prices of fertilizers increasing? Can FPA control the prices?*

As an explanation, FPA attributes the current price hike to the following: 1) liberalization of fertilizers; 2) the country as a net importer of fertilizers; 3) strengthened global fertilizer demand; 4) increased prices of raw materials; and 5) increase transport and logistical costs.

**Price uptrend, current supply**

Fertilizer prices were stable until the uptrend started in March 2021 for the six (6) major fertilizer grades (Figure 1). As of October 2021, the increase in prices for 50kg/bag ranges from 18% to as high as 38% namely: Muriate of potash (MOP) at Php 1,412.98 from Php 1,195.43 (18% increase); Di-ammonium phosphate (DAP) at Php 1,927.57 from Php 1,602.86 (20% increase); Complete fertilizers (T14) at Php 1,378.17 from Php 1,112.70 (24% increase); Ammonium phosphate (Ammophos) at Php 1,275.60 from Php 976.34 (31% increase); Nitrogen (Urea) is at Php 1,540.17 from its Php 1,166.14 in January 2021 (32% increase); and Ammonium sulfate (Ammosul) at Php 842.86 from Php 612.44 (38% increase).

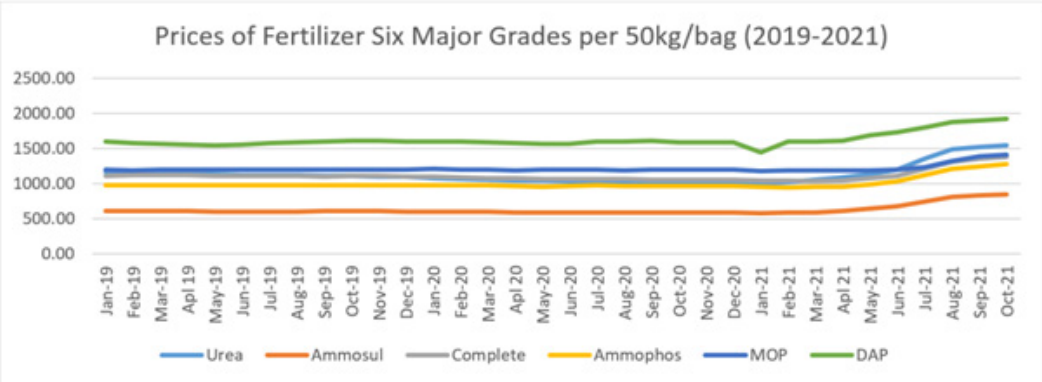


Figure 2. Trend of Fertilizer Prices for the Six Major Grades (2019-2021)

The regional average retail price of the six (6) major grades of fertilizers per 50kg/bag as of October 22, 2021 is shown in Table 3.

**Table 3. Average Retail Price per 50kg bag of Six Major Grades of Fertilizers (October 18-22, 2021)**

| Region | UREA (Prilled) 46-0-0 | Urea (Granular) 46-0-0 | AMMOSUL 21-0-0 | COMPLETE 14-14-14 | AMMOPHOS 16-20-0 | MOP 0-0-60 | DAP 18-46-0 |
|---|---|---|---|---|---|---|---|
| CAR | 1,924.08 | 1,901.71 | 890.44 | 1,593.72 | 1,448.55 | 1,509.71 | - |
| I | 1,971.00 | 1,950.36 | 916.31 | 1,572.98 | 1,411.94 | 1,597.71 | - |
| II | 1,842.56 | 1,799.68 | 833.76 | 1,541.52 | 1,349.05 | 1,381.93 | - |
| III | 1,812.91 | 1,793.10 | 897.74 | 1,586.10 | 1,387.66 | 1,466.44 | - |
| IV | 1,670.02 | 1,672.65 | 908.17 | 1,473.11 | 1,364.57 | 1,526.85 | 1,811.13 |
| V | 1,764.86 | 1,799.50 | 880.60 | 1,544.28 | 1,440.91 | 1,413.93 | - |
| VI | 1,744.09 | 1,759.89 | 855.60 | 1,357.21 | 1,285.18 | 1,404.69 | 1,945.81 |
| VII | 1,795.50 | - | 929.79 | 1,390.75 | 1,288.42 | 1,492.92 | 2,121.41 |
| VIII | 1,630.28 | 1,611.75 | 885.22 | 1,428.75 | 1,306.57 | 1,428.76 | 1,883.33 |
| IX | 1,676.14 | - | 879.14 | 1,466.20 | 1,440.67 | 1,454.06 | 1,964.17 |
| X | 1,827.44 | - | 867.37 | 1,417.71 | 1,358.53 | 1,468.12 | 2,045.70 |
| XI | 1,686.33 | 1,776.00 | 841.53 | 1,370.66 | 1,227.92 | 1,519.00 | 1,989.19 |
| XII | 1,811.25 | 1,872.25 | 848.50 | 1,335.25 | 1,256.25 | 1,529.00 | 2,079.25 |
| XIII | 1,504.09 | 1,421.33 | 817.78 | 1,261.91 | 1,214.11 | 1,410.13 | 2,020.00 |
| BARMM | - | - | - | - | - | - | - |
| **Total** | **1,761.47** | **1,759.84** | **875.14** | **1,452.87** | **1,341.45** | **1,471.66** | **1,984.46** |

Table 4 presents the available stock inventory of fertilizers from the different handlers nationwide. This presents the current supply of fertilizers (per bag) in each region and the total available stock nationwide.

**Table 4. Stock Inventory of the six Major Grades of Fertilizers per 50kg/bag (October 18-22, 2021)**

| Region | UREA 46-0-0 | AMMOSUL 21-0-0 | COMPLETE 14-14-14 | AMMOPHOS 16-20-0 | MOP 0-0-60 | DAP 18-46-0 | Total |
|---|---|---|---|---|---|---|---|
| CAR | 4,234 | 3,739 | 4,982 | 1,786 | 477 | - | 15,218 |
| I | 45,827 | 31,077 | 52,562 | 358,321 | 11,198 | - | 498,985 |
| II | 67,850 | 38,070 | 38,573 | 116,345 | 650 | - | 261,488 |
| III | 60,962 | 29,632 | 51,944 | 72,796 | 11,553 | - | 226,887 |
| IV | 30,142 | 149,912 | 22,910 | 6,886 | 7,861 | 320 | 218,031 |
| V | 60,164 | 9,358 | 40,288 | 20,639 | 1,412 | 160 | 132,021 |
| VI | 190,164 | 215,542 | 254,277 | 184,186 | 94,370 | 71,193 | 1,010,194 |
| VII | 22,802 | 14,023 | 81,180 | 20,274 | 6,561 | 6,249 | 151,089 |
| VIII | 17,977 | 5,752 | 15,628 | 6,523 | 5,622 | 1,233 | 52,735 |
| IX | 6,606 | 11,702 | 10,527 | 6,200 | 3,448 | 1,117 | 39,600 |
| X | 28,298 | 101,674 | 34,497 | 59,532 | 19,256 | 5,740 | 248,997 |
| XI | 243,754 | 142,549 | 457,127 | 41,221 | 92,903 | 30,911 | 1008,465 |
| XII | 36,217 | 22,684 | 18,795 | 12,271 | 11,431 | 7,176 | 108,574 |
| XIII | 4,909 | 6,162 | 4,797 | 2,865 | 2,629 | 323 | 21,685 |
| BARMM | - | - | - | - | - | - | - |
| **Total** | **820,418** | **781,876** | **1,088,037** | **909,845** | **269,371** | **124,422** | **3,993,969** |
| Add: Incoming Shipment | 153,576 | 3,366 | 69,285 | 228,953 | 119,951 | - | 575,131 |
| Total Available Stock (bag) | 973,994 | 785,242 | 1,157,322 | 1,138,798 | 389,323 | 124,422 | 4,569,100 |

**Liberalization of fertilizers impacts users**

Because of the implementation of the Tariff Reform and Import Liberalization Program in 1986 leading to the liberalization of fertilizer importation and other agricultural products, the government has since then stopped imposing import quotas for fertilizer and reduced the corresponding import duties and tariffs on fertilizer imports (Briones, 2020).

In response to the program, FPA issued a Memorandum Circular No. 1 series of 1986 which provides the decontrol guidelines for the fertilizer industry. This issuance relinquished the FPA of its control over procurement of fertilizers particularly on the determination of import requirements and allocation of import volume, and conducting tenders or canvasses for fertilizer importations.

Thus, the FPA lose its capacity to "assure the agricultural sector of adequate supply of fertilizer and pesticide at reasonable prices…" as stipulated under PD 1144.

**Philippines: Net importer of fertilizers**

The country has been for a long-time a net importer of fertilizers. About 90% of the country's needs for fertilizer are mostly imported from China, Indonesia, and Malaysia. Some are being imported from Qatar, Canada, Korea, and the Middle East, while local production accounts for only 10% of the country's fertilizer supply (Table 5).

There are two major local producers of fertilizer namely: Atlas Fertilizer Corporation and the Philippine Phosphate Fertilizer Corporation (Philphos). Small to medium-sized fertilizer manufacturers also contribute to the local production but in smaller quantities. According to Vice President Tomas Guibanni, Philphos capacity to operate is only at 20% (interviewed November 9, 2021). Raw materials being used are likewise imported and fertilizer production requires large amounts of fossil fuels. Much so, it would not be feasible for the country to produce its own fertilizers given that the Philippines is not an oil-producer.

**Table 5. Exporters of Six Major Grades of Fertilizer in 2020**

| Country | Volume (MT) | Value ($) | Percentage (%) |
|---|---|---|---|
| **A. Importation** | | | |
| China | 1,080,808.02 | 224,004,457.02 | 37 |
| Indonesia | 480,902.57 | 126,442,155.63 | 17 |
| Malaysia | 362,217.00 | 89,807,544.09 | 13 |
| Qatar | 199,099.98 | 55,463,589.81 | 7 |
| Canada | 139,214.55 | 36,189,023.26 | 5 |
| Japan | 117,000.00 | 13,149,550.00 | 4 |
| Korea | 103,780.30 | 27,401,712.30 | 4 |
| Others | 126,075.41 | 27,672,186.91 | 4 |
| **Total** | **2,609,097.83** | **600,130,219.02** | **90** |
| **B. Local Production** | 276,524.74 | 130,279,243.40 | 10 |
| **Total Supply** | **2,885,622.57** | **730,409,462** | **100** |

**Global Scenario: Increased fertilizer demand**

With the country's dependence on imported fertilizers, the current global demand greatly affects the entry of fertilizer imports in our country. This caused limited local fertilizer supply that influenced the escalation of local prices.

According to the World Bank (2021), fertilizer prices are expected to stay high over the remainder of 2021. Their report indicated that an increase in the importation demand of fertilizers were recorded, particularly urea, in countries like the US, Brazil, India, and Australia. These countries have increased production area for corn, soybeans, and wheat requiring large volumes of agricultural fertilizer inputs.

As such, some countries have also made an advanced booking of fertilizer particularly urea to meet their

domestic demand. India has already made an advance booking of fertilizer supply (1.8M MT) for them to meet their domestic demand of approximately $501/MT. In the US, prices of corn are fueling expectations of higher demand for urea, hence higher prices. In Australia, a forecast of a 2% yearly increase in fertilizer demand has been recorded, with crop areas expanding by almost 400,000 hectares yearly in New South Wales. In Brazil, corn production has been increased for livestock use (forage) whereby urea imports grew to 8 million MT until 2022.

Moreover, China, the highest origin of Philippine fertilizer imports, has allocated their local fertilizer production for their domestic use. This resulted in reduced fertilizer exports to the Philippines.

**Increased cost of raw materials**

The World Bank (2021) reported that the high price of fertilizers has been bolstered by increased prices of raw materials to produce fertilizers. For instance, the cost for phosphates raw material costs, particularly sulfur and ammonia, have increased sharply due to COVID-19 restrictions on transport that caused limited input supplies. In addition, urea feedstock costs have also risen, including natural gas prices (to produce urea) which jumped in early 2021 due to unusually cold weather.

**Increased transport and logistical expenses from importation to retail**

The increased transport expenses in the delivery of fertilizers from its country of origin to local dealer's level also affected local fertilizer prices. Among the overhead expenses include duties, arrastre, wharfage checkereage, stevedoring, weighing or bagging and trucking. This will be incurred upon the landing of fertilizers from port to its transport to the distributor's warehouse and to the different dealers nationwide. An increase in freight cost in ASEAN has been also recorded from $20 to $40 in recent months.

Table 5 illustrates the imputed costs across the supply chain – from the time fertilizer is unloaded in our ports to the point the dealers sell it to farmers. For instance, if the import price is $700 per metric ton, the computed price per bag (at a foreign exchange rate of Php 50.00 per $1) is Php 1,750. Add the duties, arastre and stevedoring (which is around 3% of import price according to industry standards), then you come up with the landed cost of

Php 1,803. The importer and distributor then shall impute their margins and costs at 7% and 10% respectively for logistics, labor, and local tax to come up with importer's price to distributors and distributor's price to dealer. Finally, the dealer's price to farmers shall now include all the imputed costs across the supply chain would be approximately Php 2,376.

**Table 6. Sample Computation of Fertilizer Price at Various Level (Php)**

| Import Price | % | 400USD | 450USD | 500USD | 550USD | 600USD | 700USD | 800USD | 1000USD |
|---|---|---|---|---|---|---|---|---|---|
| **Price per bag in Peso** | 1 USD = 50Php | **1000** | **1125** | **1250** | **1375** | **1500** | **1750** | **2000** | **2500** |
| Duties | 3% | 9.14 | 11.22 | 13.44 | 15.41 | 17.84 | 21.21 | 24.23 | 29.81 |
| Arastre | | 7.86 | 8.58 | 9.25 | 9.64 | 10.23 | 12.16 | 13.46 | 17.01 |
| Wharfage | | 1.88 | 2.05 | 2.21 | 2.30 | 2.44 | 2.90 | 3.45 | 4.61 |
| Checkerage | | 0.66 | 0.72 | 0.78 | 0.81 | 0.86 | 1.03 | 1.22 | 1.70 |
| Stevedoring | | 4.43 | 4.84 | 5.22 | 5.43 | 5.77 | 6.86 | 8.16 | 9.95 |
| Weighing | | 0.41 | 0.45 | 0.49 | 0.51 | 0.54 | 0.64 | 0.76 | 0.90 |
| Trucking | | 5.63 | 6.14 | 6.62 | 6.90 | 7.33 | 8.71 | 9.36 | 11.13 |
| **Landed Cost** | | **1,030** | **1,159** | **1,288** | **1,416** | **1,545** | **1,803** | **2,060** | **2,575** |
| profit/bag | 12% | 37.67 | 31.24 | 33.62 | 35.64 | 37.52 | 44.61 | 50.06 | 63.53 |
| Trucking | | 31.39 | 39.06 | 42.03 | 44.55 | 46.89 | 54.77 | 62.13 | 77.89 |
| Labor | | 10.05 | 7.81 | 8.41 | 8.91 | 9.38 | 10.15 | 12.07 | 16.86 |
| Warehousing | | 12.56 | 15.62 | 16.81 | 17.82 | 18.76 | 21.31 | 23.34 | 29.76 |
| Local Tax | | 32.33 | 45.27 | 54.13 | 63.08 | 72.45 | 85.16 | 99.28 | 121.06 |
| **Importer's Price to Distributor** | | **1,154** | **1,298** | **1,443** | **1,586** | **1,730** | **2,019** | **2,307** | **2,884** |
| profit/bag | 7% | 18.25 | 19.69 | 21.03 | 22.28 | 23.44 | 26.87 | 29.96 | 38.63 |
| Trucking | | 22.82 | 24.61 | 26.28 | 27.85 | 29.30 | 33.84 | 38.24 | 49.48 |
| Labor | | 4.56 | 4.92 | 5.26 | 5.57 | 5.86 | 6.97 | 8.29 | 10.85 |
| Warehousing | | 9.13 | 9.84 | 10.51 | 11.14 | 11.72 | 13.94 | 16.57 | 20.71 |
| Local Tax | | 26.33 | 31.94 | 37.92 | 44.17 | 50.69 | 59.28 | 68.49 | 82.45 |
| **Distributor's Price to Dealer** | | **1,235** | **1,389** | **1,544** | **1,697** | **1,851** | **2,160** | **2,469** | **3,086** |
| profit/bag | 10% | 20.52 | 32.81 | 36.84 | 36.79 | 40.54 | 47.21 | 54.14 | 69.38 |
| Trucking | | 61.55 | 41.02 | 36.84 | 45.98 | 40.54 | 47.21 | 54.14 | 69.38 |
| Labor | | 10.26 | 8.20 | 9.21 | 9.20 | 10.13 | 11.05 | 11.14 | 15.75 |
| Local Tax | | 31.67 | 56.97 | 71.11 | 78.03 | 93.79 | 110.54 | 127.46 | 154.57 |
| **Dealer's Price to Farmer** | | **1,359** | **1,528** | **1,698** | **1,867** | **2,036** | **2,376** | **2,716** | **3,394** |

To illustrate the 32% additional value (from the time the fertilizer is unloaded in Philippine ports by importers), if the import price is $1,000, price per bag in peso (50 kgs) would be Php 2,500. An additional Php 75 (3%), constituting import duties, arastre and stevedoring expenses, will be added to the import price. Successively, 12% or Php309 will be added by the importer upon selling to distributor. Another Php 202 (7%) will be added by distributor to dealers. Finally, Php 309 (10%) will be added by dealers upon selling to farmers. From the Php 2,500 landed cost of fertilizer, the farmer would now have to buy the fertilizer at Php3,394 with the addition of transport and logistical charges from various level (Figure 3).

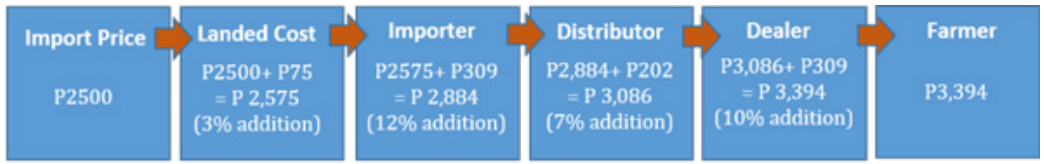


**Figure 3.** Schematic Diagram Showing the Increasing Fertilizer Price from the Landed Cost of Php 1,500 to Farmer's Level

**Proposed interventions to combat increase in fertilizer price: OneDA approach**

To address the concern of high fertilizer prices, FPA proposes nine strategic interventions:

- 1st, Government needs to increase farmers fertilizer subsidy by 25% from the initial grant of Php 1,000 (Table 5). The enhanced fertilizer subsidy would defray farm expenses of farmers and cover a higher target area of application for increased production.

**Table 7. Proposed 25% Increase from Traditional Fertilizer Subsidy of Php 1000**

| Region (a) | 2021 Total Target (bags) (b) | Proposed 25% (bags) (c) | Amount (Php) @1900/bag (d) | 2021 Total Target Area (ha) (e) | 2021 Total Target Beneficiaries (f) |
|---|---|---|---|---|---|
| CAR | 72,408 | 90,510 | 171,969,000 | 28,412 | 14,178 |
| I | 513,729 | 642,161 | 1,220,106,375 | 180,564 | 180,564 |
| II | 966,246 | 1,207,808 | 2,294,834,250 | 340,178 | 340,178 |
| III | 961,029 | 1,201,286 | 2,282,443,875 | 337,780 | 192,118 |
| IV | 19,222 | 24,028 | 45,652,250 | 6,986 | 6,287 |
| V | 473,470 | 591,838 | 1,124,491,250 | 168,236 | 35,318 |
| VI | 42,832 | 53,540 | 101,726,000 | 18,565 | 18,565 |
| VII | 348,824 | 436,030 | 828,456,000 | 123,798 | 123,798 |
| VIII | 256,262 | 320,328 | 608,622,250 | 90,571 | 88,500 |
| IX | 6,016 | 7,520 | 14,288,000 | 2,183 | 2,183 |
| X | 189,095 | 236,369 | 449,100,625 | 66,603 | 53,224 |
| XI | 191,400 | 239,250 | 454,575,000 | 66,017 | 21,386 |
| XII | 1,622 | 2,028 | 3,852,250 | 711 | 470 |
| XIII | 420,682 | 525,853 | 999,119,750 | 147,860 | 147,860 |
| BARMM | 21,524 | 26,906 | 51,119,500 | 7,812 | 5,794 |
| **Total** | **4,484,361** | **5,605,451** | **10,650,356,900** | **1,586,276** | **1,230,423** |

- 2nd, Government to provide a subsidy of at least 60-70% of the prevailing price on traditional and non-traditional fertilizers.
- 3rd, Government must encourage Farmers' Federations and Associations to import fertilizers. Subsidize cooperatives/associations by providing loan on zero interest. This would increase local fertilizer supply and promote market competition to balance local prices.
- 4th, Government to provide soft loan assistance, or in other forms, to Philphos to fully operate in order to increase local production by 20% or more in the market.
- 5th, Government should introduce a Price Guide Indicator at various import price levels. This will facilitate easier price monitoring of fertilizers to allow distributors and dealers to maintain reasonable fertilizer prices.
- 6th, FPA to constantly monitor and conduct surveillance on stock inventory and local pricing.
- 7th, FPA shall also strengthen its awareness campaign efforts to educate farmers to use cheaper FPA registered fertilizer brands in the market that has the same efficacy as the known brands.
- 8th, Efficient use of fertilizers through drip irrigation system.
- 9th, FPA will also promote the use of Balanced Fertilization Strategy to farmers to address problems on land degradation and decline in soil fertility through adjustments in the cropping and management of farming systems by means of cover cropping of short duration leguminous crops (i.e. mungbean) and introduce non-traditional fertilizer subsidies such as organic fertilizers, fortified organic fertilizers, and the microbial/biorational fertilizers.

The use of fortified organic fertilizers (organic + inorganic) is advantageous. Given that we have all the ingredients (i.e. dung – poultry and livestock, crop refuse) and producers to manufacture this, specific nutrient formulation that will suit crop requirement is vital.

These strategies will allow farmers to minimize the use of costly fertilizers through effective and efficient input application.

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# *DA, FPA connects with FIAP on increasing fertilizer prices*

December 1, 2021
by Wilfredo C. Roldan, Myer G. Mula

The Department of Agriculture (DA), the Fertilizer and Pesticide Authority (FPA) and the Fertilizer Industry Association of the Philippines (FIAP) convened via zoom virtual meeting on November 17, 2021 to tackle rising fertilizer prices. FIAP is an association composed of 19 fertilizer manufacturing and importing companies.

The meeting was led by DA Secretary William Dar with the assistance of FPA Executive Director Wilfredo Roldan. Also present from DA are Engr. Ariel Cayanan, Undersecretary for Operations and Agri-fisheries Mechanization; and Dr. Leocadio Sebastian, Chief of Staff.

Recent updates provided by the fertilizer industry highlights how situation in the European Region, China, and other producing countries drive global fertilizer prices.

**Factors influencing global fertilizer situation price trend**

***World fertilizer market situation***

Mr. Nilo Arteche Cabrera of FIAP presented the world fertilizer market situation. He cited that the **COVID 19 pandemic** brought significant impact to the price trend as each country tried to secure domestic food

production by increasing their crop areas. For instance, big countries like India, Australia, and Brazil have increased fertilizer demand than their pre-pandemic requirement.

He added that the recent **gas shortage in Europe** made domestic fertilizer manufacturers to cut production due to **hike in energy prices**. The region now has to compete in the global fertilizer demand. Fertilizer prices in North Africa (Egypt) and the Middle East prices have been also moving upward.

***China curtails fertilizer exports***

With the rise in energy prices, fertilizer manufacturers in China cut their energy use. The Chinese government also made the decision to reduce carbon emission in preparation to their hosting of 2022 Winter Olympic Games. **Reduced energy and carbon use** now mean reduced fertilizer production of the country.

Moreover, with the **implementation of the China Inspection and Quarantine (CIQ) policy**, fertilizer exports were curtailed due to complex procedures and strict measures for export cargoes. Urea, DAP, MOP, NPK and other fertilizer grades are among the items covered by the CIQ policy.In addition, China has to secure its domestic requirement first.

South Korea immediately felt the impact of said Chinese policy. Now, it has to source out its urea demand to other countries at higher prices. **Urea** is vital to the country for it is **being used as fuel to diesel cars and cargo trucks**.

***Price increase of fertilizer grades***

The FIAP explained the reason behind the price increase of various fertilizer grades, citing HeartyChem Corporation as their data source:

- **Urea (nitrogen)** – The hike in urea prices started from Europe and aggravated by the China restrictions for cargo exports until it was felt all over the world. For instance, Korea is buying it close to USD1,000/MT Cost FR FO in bulk. It was USD230-240/MT CFR at the beginning of 2021.

- **DAP (di-ammonium phosphate)** – Due to China CIQ policy, DAP prices started to soar with fixing price now moving close to USD1,000/MT in bulk from USD600/MT CFR in Korea last September 2021. For the fourth quarter, India recorded price of Phosphoric Acid at USD1,330/MT CFR in bulk from the USD170/MT in the third quarter.

- **MOP (muriate of potash)** – Large volumes of imports from Brazil and the increased demand in Belarus affected global MOP prices. At the beginning of 2021, it was USD230-240/MT CFR, but it is now close to USD700/MT CFR.

- **NP/NPK (nitrogen and phosphorous/complete)** – With the soar in raw material prices', NP/NPK prices are moving upward continuously. This increase has been propelled mainly by the Chinese export policy on legal inspection. With ceased China NP/NPK exports, other producers in the world are moving up the prices along with increasing feedstock prices.

Cabrera expressed that today's fertilizer crisis is different from the 2008 crisis which was more financial in context. The status quo is more complex which is interlinked to the problems brought by the pandemic, issues on food security, energy shortage, and monopoly and control of powerful countries when it comes to trading.

**Comparative import data from 2018-2021**

Michael Ardieta, FIAP President, presented (Table 8) the comparative import data from January 2018 to October 2021 in metric tons (MT). A notable increase in fertilizer imports can be observed in 2020 which was due to government's implementation of the fertilizer subsidy program. The 775,145 MT year-end forecast for 2021 was lesser compared to 2018 and 2019 data, but this could also be the spill over of supply from year 2020.

**Table 8. Comparative import data of the six-major fertilizer grades from January 2018 to October 2021 (MT)**

| Grades | 2018 | 2019 | 2020 | 2021 YEE | Jan to Oct 2021 | Jan to Oct 2020 | Deviation (2021 vs 2020) | % Deviation |
|---|---|---|---|---|---|---|---|---|
| Urea | 952,324 | 885,112 | 1,167,490 | 774,145 | 663,321 | 996,800 | -333,479 | -33% |
| 21-0-0 | 552,871 | 534,186 | 584,585 | 591,652 | 501,462 | 519,810 | -18,348 | -4% |
| 16-20-0 | 221,035 | 259,784 | 238,086 | 205,560 | 168,460 | 167,140 | 1,320 | 1% |
| DAP | 119,523 | 103,265 | 137,040 | 121,095 | 112,295 | 111,409 | 887 | 1% |
| 0-0-60 | 213,555 | 244,177 | 191,789 | 252,622 | 206,025 | 151,573 | 54,452 | 36% |
| 14-14-14 | 241,449 | 239,294 | 287,434 | 216,476 | 198,410 | 223,408 | -24,998 | -11% |
| **Total** | **2,302,775** | **2,267,837** | **2,608,444** | **2,161,550** | **1,849,973** | **2,170,140** | **-320,166** | **-10.66%** |

Further, Mr. Ardieta noted that the global fertilizer situation will be felt towards the end of 2021 which is the dry season for crops. Looking at Table 9, import forecasts for November 2021- January 2022 is lesser than what was recorded on the previous years.

**Table 9. Projected data comparison of November to January importation in 2018 to 2022 (MT)**

| Fertilizer | Nov 2018 to Jan 2019 | Nov 2019 to Jan 2020 | Nov 2020 to Jan 2021 | Nov 2021 to Jan 2022 |
|---|---|---|---|---|
| **Urea** | 186,582 | 209,185 | 264,400 | 110,824 |
| **21-0-0** | 136,907 | 154,717 | 132,267 | 100,189 |
| **16-20-0** | 57,653 | 68,338 | 102,566 | 31,100 |
| **DAP** | 28,011 | 32,025 | 25,631 | 8,800 |
| **0-60-0** | 47,693 | 39,945 | 67,642 | 55,397 |
| **14-14-14** | 95,857 | 60,430 | 89,726 | 12,065 |
| **Total** | **552,703** | **564,640** | **682,232** | **318,375** |

Clarifying the 2022 fertilizer supply forecasts, Mr. Ardieta said that the industry is currently trying to import, as much as possible, and bring in products to serve the market. However, he raised the questions as to 1) where will be their source; and 2) if farmers could still afford increased prices. FIAP added that available supply could still serve local demand for the dry season.

**Next steps**

Moving forward, Sec. Dar expressed that the country could utilize government to government relations with China and other countries to address prevailing issues. China serves as the major source of Philippines fertilizer imports due to lower cost than other producing countries such as Vietnam, Qatar, Indonesia, Malaysia.

The Secretary also shared that this could be just like what the Embassy of Iran did when they expressed willingness to a Mutual Agricultural Cooperation with the country, which includes exportation of fertilizers. He advised the FIAP to coordinate with FPA and present their proposed government actions. Agreements shall be endorsed by the FPA and DA to the Office of the President for him to have informed-decision on the matter.

# *Analysts expect global fertilizer price to remain high in 2022*

January 27, 2022
by Myer G. Mula, PhD

The hike in fertilizer prices is a global trend and not in the Philippines alone. Economic analysts and fertilizer companies in the United States (US) shared that the trend will continue until 2022.

Expecting that prices won't drop soon globally; farmers are now on the verge of considering decisions to catch-up with the crisis.

**World energy prices influences fertilizer prices**

Kreg Ruhl, Senior Market Manager at Growmark, an agricultural supply cooperative based in Illinois, USA, said that the world energy market primarily influences the price of fertilizer. Ruhl believes fertilizer will remain expensive until energy prices drop.

According to Purdue University researcher and Ag Economy Barometer author Michael Langemeier, prices on all inputs, not just fertilizer, are at record highs, climbing a historic average of at least 12% across commodities. He said that "nitrogen sources used in fertilizer are tied to oil prices, and the more volatile the oil market is, the more the price of fertilizer will fluctuate."

**Shifting cropping patterns in 2022**

A white paper published on farmdocdaily.illinois.edu titled '2022 Planting Decisions, Nitrogen Fertilizer Prices, and Corn and Soybean Prices', written by agricultural economists from the University of Illinois, suggests that farmers may change their cropping decisions for next year considering higher input costs.

Patrick Quaid, R.J. O'Brien & Associates commodities also said that production costs would influence the decision of farmers on what crop to raise. A decrease in corn production, which requires expensive nitrogen fertilizer requirements such as urea, would be reduced.

"If farmers decide to alter their usual rotation for 2022, they may switch to a crop that requires less nitrogen fertilizer, like soybeans," Mr. Quaid said.

Quaid further states that the automotive manufacturers struggling to produce pickup trucks because of supply-chain shortages, farmers may shift their spending, for tax reasons, to the higher priced fertilizer. "However, if fertilizer supply remains the main worry, farmers will have no choice but to switch to planting more soybeans," Quaid explained.

Brazil is also expected to plant more soybeans, which could add to world supply, according to Bryan Doherty, Vice President of brokerage solutions and senior market adviser at Total Farm Marketing by Stewart-Peterson. "From a marketing perspective, it may be a good year to defend soybean prices soon (now) through either put purchases for next fall's production, or forward sell and buy calls to re-own. This creates a balance of cash sales and the ability to participate in price rallies," Mr. Doherty stated.

**Alternatives**

The skyrocketing fertilizer market now made producers to either practice crop rotation next year or to lessen their acquisition of costly synthetic fertilizers to reduce farm expenses. Some of the suggestions include the use of chicken manure as an alternative nutrient source.

**Chicken manure as alternative**

Daniel Andersen, associate professor at Iowa State University, says that some manure will have more phosphate or excess nitrogen, when what the crop really needs is potassium. When deciding whether or not to spread manure, it's important to determine the type of manure necessary for the particular crop type and current soil nutrient makeup. For example, if a farmer has planted a crop that needs a lot of phosphorus, but has soil that is low in phosphorus, they should shop around for nitrogen-rich manure, like poultry.

Dan Luepkes, a farmer in Oregon, Illinois, supports the idea that chicken manure has been effective on their fields.

"Natural fertilizers have no added salt, so they're more usable for the plant. Chicken manure also contains some additional micronutrients and calcium that you won't get in synthetic fertilizers unless you buy all those additional micronutrients," Mr. Luepkes shared.

Mr. Luepkes further narrates that in the soil tests he runs after using manure on his fields, he is seeing an increase in microbiology and insect presence, which brings additional carbon to the soil and increases the overall soil health, something Andersen recommends before purchasing manure.

Meanwhile, Mr. Andersen recommended that farmers need to conduct soil testing in their farms to know exactly which nutrients it needs and what kind of manure to look for, noting that the nutritional value of manure can change from farm to farm and from season to season. From this, he recommends requesting a manure sample from the farm before farmers will buy.

**Use of technology**

Once a farmer has secured fertilizer, using it to its fullest potential is imperative to getting his money's worth. Variable-rate technology allows producers to optimize the spreading and application of fertilizer in specific zones, ensuring less is wasted, exclaimed Madelyn Ostendorf of the agriculture.com.

Matthew Lau, global product manager of scripting for The Climate Corporation, added that automatic zone creation gives growers a much higher level of flexibility and accuracy to optimize inputs. "It also allows growers to test different layers and different hypotheses and compare those to determine which one they feel will be the best choice to move into that next season. We know every year is different, and every year brings its own set of challenges," she said.

**The OneDA Approach**

Due to unprecedented increase in fertilizer prices, the Department of Agriculture (DA) through the OneDA approach pushes the Balanced Fertilization Strategy (BFS) Program to exploit the combined use of organic and inorganic inputs and other forms of strategy (i.e. cover cropping or green manuring, individual farmer soil fertility map, improve cropping systems, etc.) to attain the maximum potential of farmlands while maintaining soil fertility and structure.

The said strategy applies the concept of 4Rs in fertilization: Right Source, Right Placement, Right Amount, and Right Rate to help enhance soil health and productivity, prevent the decline in soil fertility, and improve fertilizer availability and costs.

The DA-BFS Technical Working Committee (TWC) will be created to provide policy guidance and directives in setting goals, objectives, targets and strategies for the specific projects/ activities on the implementation of BFS program for each concerned government agencies, State-Universities and Colleges, and stakeholder.

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# *SAAD Program, Achieving Results*

January 29, 2022
by Michael Dabuet

The Department of Agriculture – Special Area for Agricultural Development (DA-SAAD) Program paved a way in livelihood development of farmers and fisherfolk through various livelihood interventions provided in Region 8.

The program is driven by an overarching **goal of alleviating poverty among farmers in Eastern Visayas from 37.4% in 2012 to 22.7% in 2022.** This is closely aligned with the overall priority thrust of President Rodrigo Roa Duterte's administration of lifting people out of poverty.

The goal guides the work of the SAAD Region 8 program management and its provincial support offices in increasing sustainable production, reducing rural poverty, enabling more inclusive and efficient food and agricultural systems, and ultimately, eradicating hunger, malnutrition, and food insecurity. Cross-sectoral in nature, it ensures a coordinated action, greater synergy, and alignment across the program and its partnerships with local governments and key stakeholders.

The program supports small farmers' associations to increase and improve productivity and provides services to coordinate actions that are environmentally, economically, and socially

sustainable. It is currently in the process of mainstreaming strategies for climate change adaptation and mitigation in its diverse projects.

It employs an **integrated approach to rural development** that aims to improve rural income and livelihood through interventions to **strengthen and diversify the rural economy** at large, including capacity development for strengthened rural organizations, improved social protection systems, pro-poor approaches to access to technologies and knowledge, and better conditions to promote decent farm and off–farm employment (especially for women and youth).

Lastly, it builds on experience to provide technical and operational services to help farmers effectively prevent and cope with threats and disasters that impact agriculture, food security, and nutrition.

Before the African Swine Fever (ASF) intrusion in Region 8, field officers had already trained farmer associations on enhanced emergency preparedness, thus mitigating the effects of the animal disease. Also, disease surveillance and monitoring has long been in place since the time when Chronic Respiratory disease, Newcastle disease, and Fowl Pox infestation were experienced in SAAD project areas. Because of the proactive approach, all these were contained before they could cause extensive damage.

The latest poverty statistics released by the Philippine Statistics Authority revealed that Northern Samar province recorded a drop-in poverty incidence among the population from 51.8% in 2015 to 23.1% in the first quarter of 2021. Decreases in poverty incidence were also noted in Eastern Samar from 42.4% to 36.0%, Samar from 41.8% to 30.0%, and Southern Leyte from 32.7% to 25,5% during the same periods. However, Leyte saw an increase from 25.1% in 2015 to 29.6% in the first quarter of 2021 due to the prolonged effect of Typhoon Yolanda's destruction in the agricultural and fishery sectors, frequent natural calamities, and most recently, the pandemic.

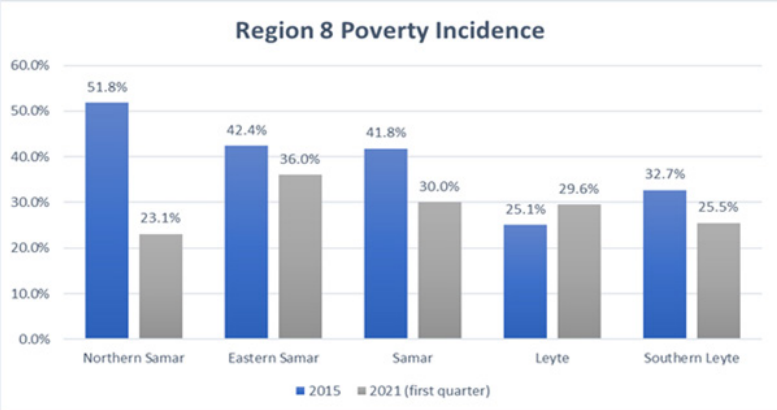



**Figure 4.** Region 8 Poverty Incidence among Families between 2015 vs first quarter of 2021

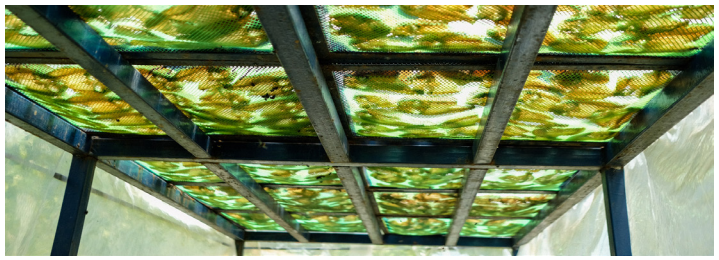
While it may be true that many factors have contributed to these improvements, it cannot be denied that the SAAD Program, along with other national government programs, like DA-Philippine Rural and Development Project's PAMANA Program, helped in the overall development of uplifting rural farmers and fisherfolk from poverty.

As the program inches closer to its final year, it never ceases to explore new ways of working for some positive effect. Flexibility in the assignment of projects and resources to meet demand is foremost, especially that it is working towards group clustering and consolidation, agri–entrepreneurship, and finding new markets for raw and processed products.

Improved communications at all levels leading to more focused purpose is another important ingredient in achieving results. This is aligned with OneDA Reform Agenda where the 18th key strategy – Strategic Communications – cuts across all pillars. It shows the importance of greater integration of technical knowledge generated by the DA with operational activities in the field.

Finally, it will expand partnerships with private sector, civil society, and other non–state actors to affect a more inclusive engagement with partners for food security, sufficiency, and stability.






# *“That shift!”: beyond food on the table to agripreneurship through CBEs*

March 03, 2022
by Jessamae Gabon

In the five-year run of the Special Area for Agricultural Development (SAAD) Program of the Department of Agriculture (DA), it offered significant actions towards the fulfillment of its ultimate goal – to reduce poverty in the most marginalized provinces of the country.

The program puts forward, especially during the latter implementation when it activated approaches to achieve said goal, the building of local or community-based enterprises (CBEs).

This is inspired by the motivation to go beyond providing opportunities for the marginalized through agricultural grants. From household sustenance to being a source of an extra livelihood, SAAD realizes the capacity of each beneficiary and takes it a step further by organizing them into farmer groups.

Farmer groups are supposed to function as a link for the community members to create a common understanding and achieve local economic goals, through activities such as community entrepreneurial ventures. According to Peredo and Chrisman (2006), the local knowledge and cultures of the community serve as a great advantage to the groups. Understanding of local ecology, economy, needs of the

community, and banking on their indigenous knowledge are significant aspects to be explored in community enterprise building.

Such activity can foster a spirit of collectivity to act and respond to the community's needs, considering that it is manned by the community members themselves. This approach is abreast with the Department's core reform agenda to encourage localized agricultural initiatives to work side by side with the local stakeholders to a more competitive and modernized mode of farming.

**What is a CBE and why do development initiatives such as the SAAD Program integrate this as a component of growth?**

In their review about CBEs, Peredo and Chrisman defined community enterprise as owned, manned, and operated by organized community members who collaborate to create market opportunities. This is aligned to the purpose of SAAD of establishing CBEs in its covered areas – to contribute to the community's social capital (as part of a network) and incremental learning (access to extension programs).

One core concept that CBEs address is sustainability – of the project, of participation, and resources. International non-government and state-sponsored programs have a common goal of contributing to building a better economic situation for communities, led by its members.

Peredo and Chrisman however noted that some programs for the marginalized poor are usually being reduced to charity primarily because of the failure to recognize strengths of the communities, stemming from insufficient community environmental, cultural, political, and economic studies. Another factor of failure is whether consciously or unconsciously, programs are led by implementing agencies, leading to a lack of ownership from the members of the community. This then results in limited collaboration, reinforced by rewards, and subtly preserving individualism.

It is imperative for the implementing agencies to be reminded that materially disadvantaged communities are facing a higher level of uncertainty when it comes to willingness to engage in entrepreneurship and other economic ventures because of the long-term sociological effects of poverty from the individual to the community level. These uncertainties however are not innate, rather, are resulting from the unfavorable economic and political climates, and historical/cultural qualities of different communities (p. 313).

In the community's realization of their group potential, there is hope that they will also be organized not just in enterprising activity but also in realizing and taking action to collectively demand rights and access to other social services among the community members, and their needs as a group, such as environmental welfare and cultural preservation.

As of the 2021 record, SAAD Program activated 245 community-based enterprises in its 30 covered provinces. These CBEs are manned and owned by 245 farmer-groups, translating to 9,223 members in total. Most enterprises were established in 2021 despite the pandemic, a development attributed to years of social preparation (intersperse with capacity building) and policy strengthening by the program among the groups aimed at increasing production and productivity, leadership development, and enterprise management.

The conceptualization of marketing in the SAAD Program began in 2018, which was a huge leap from the program's initial focus on providing food on the table. In 2019, policy strengthening and dissemination through promotion in all channels regarding enterprise building were made under the leadership of the current SAAD chief, Dr. Myer G. Mula. Capacity building through extension services is geared towards institutional convergence, farmers' consolidation, enterprise establishment, marketing, value-adding, sustainability initiatives, and leadership. Likewise, information campaign shifted in the same context.

**Table 10. SAAD Established Community-Based Enterprise (CBE) from 2017-2022**

| Particulars | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|---|---|---|---|---|---|---|
| **Established CBEs** | **1** | **13** | **34** | **64** | **133** | **245** |
| **Groups** | **1** | **13** | **34** | **64** | **133** | **245** |
| **Members** | **40** | **600** | **1,233** | **2,614** | **4,736** | **9,223** |
| **Agriculture** | | | | | | |
| Established CBEs | 1 | 11 | 23 | 43 | 132 | 210 |
| Groups | 1 | 11 | 23 | 43 | 132 | 210 |
| Members | 40 | 354 | 501 | 1,383 | 4,723 | 7,001 |
| **Fisheries** | | | | | | |
| Established CBEs | - | 2 | 11 | 21 | 1 | 35 |
| Groups | - | 2 | 11 | 21 | 1 | 35 |
| Members | - | 246 | 732 | 1.231 | 13 | 2,222 |

**SAAD CBE Guideline**

SAAD's approach to CBE establishment calls for a program-wide effort from the field to the national implementing body. We have to come from the context that SAAD provides agricultural inputs to the identified areas for free under the basis of community assessments and preparations done with the actual beneficiaries.

Projects range from crops (food and industrial); livestock (sheep, goat, cow, carabao, horse, swine); poultry (chicken, duck, quail); machineries (farm and post-harvest equipment); irrigation facilities (i.e. solar irrigation); and fishery (aquaculture and hatchery). It also provides training and extension programs for capacity building and technical support to the beneficiaries through national and local attached agencies. To do this, the program has appointed regional and provincial staff to physically oversee the implementation. This seems to be the logical approach, but we emphasize capitalizing on the sociological and geographical edge of strengthening the networks of the community. Who else can initiate dialogues and identify or understand entrepreneurial activities of the grassroots but the people who live with or near them?

SAAD CBE's are built based on the projects granted to the organized groups. These projects are then supported to maturate or develop until they can be considered profitable at least at the association level. Included in the development is its engagement with other agencies such as the labor department for legitimization and labor protection of the group. Members also receive extension services to augment skills in enterprise management, marketing and leadership (organizational and entrepreneurial), and conflict management. The groups are also keeping financial records, and by this time have open up a savings account.

The SAAD partially established CBEs may still receive physical support (agricultural inputs), technical and extension training in terms of association development, and market linkages. Also at this point, the partially established CBEs can be considered relatively independent in operations. While transitioning, enterprise monitoring, evaluation, market conditions, and preferences are continuously being observed by the field implementers.

A SAAD-established CBE on the other hand, aside from its independent operations, have to be consistent with the financial flow, gaining profit, and probability of expansion. It no longer receives physical support and is on the level of expansion and branding activities. These SAAD enterprises are unique for each group, which means that it comprises 245 farmers' and fishers' associations with a total of 9,223 members. From the said record, we are referring to 7,001 farmers and 2,222 fishers involved in the operations of the CBEs (Table 1).

The DA beneficiaries are involved in selling live and by-products of chicken, mushroom, processed meat, live weight pigs, peanut, corn, and fresh vegetables. Meanwhile, the BFAR beneficiaries sell live aquatic products and by-products such as finfish, bangus, kitang, seaweed, tilapia, and processed tilapia goods including longganisa and embotido tilapia, lamayo, tilanggit, and even tilapia ice cream, fingerlings, street food (fish, squid balls, and quekiam), and vannamei.

**Why does SAAD promote CBEs among beneficiaries?**

Value creation and innovation through local business development are essential means to alleviate poverty and preserve the natural environment. But the employment of business development as a means to overcome poverty requires an understanding of the specific socioeconomic environment in which that development is to take place," (Peterson, 1988, as cited in Peredo and Chrisman, 2006).

Some beneficiaries are landed farmers who remain poor, and because of intersecting community positioning, layers of disadvantage lead to a lack of access to basic rights and necessities to be capable.

Director Myer G. Mula in an interview emphasized the importance of providing well-rounded projects for the marginalized beneficiaries as well as capacitating them towards more competitive production and enterprise activities.

"More than food, SAAD values nutrition and sustainability of projects of the communities. Even our fisherfolk are encouraged to expand their production, from aquaculture to vegetable, and poultry production. We also introduced abaca production which is an industrial crop. Continuous specialized training is provided such as food safety and handling, as well as continued provision of inputs, value-adding activities, and introduction to machinery, aiming to improve production and quality of produce.

SAAD's framework aims for two desired impacts; food security, and economic relief to stability. The program operates through its regional arms who physically monitor the projects on the field, and lead the study of potential and feasible activities of the farmers and fishers. We would like to foster the native potentials and traditions and are actually helping to rejuvenate lands, and other traditional practices, only that we are trying to improve the practices that can be improved for faster and safer production," he said.

Looking forward to the program extension, SAAD plans to execute close monitoring and evaluation dedicated to the established enterprises as part of the continued study on the stability of the CBEs under the program's set criteria. An essential aspect of this action plan is the collaboration of the SAAD national and regional support units, other state agencies concerned, provincial and regional government units, state universities and colleges (SUCs), and most of all, the farming and fishing communities.

The continued partnerships (including international organizations) are seen to be essential to the local economic development through (but not limited to) value creation in local business establishments, alternatively as Chrisman and Pedero introduced as essential means towards poverty alleviation and natural resources protection. The SAAD Program agrees and takes actions to achieve economic development, however, sees other aspects of development (not just economic) as essential to the impactful progress of the communities.

The CBEs are also expected to establish social networks, fostering involvement and confidence among the community members to confront community issues that lead to a better understanding of the socio-economic conditions, cultural orientation, and needs of the disadvantaged population.

With these as guiding concepts, SAAD wishes to strengthen and explore community networks and potentials through continuous agripreneurial activities and gain a better understanding of the unique processes of each community towards economic development and sustainability.

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# *DA-SAAD's contribution to climate change adaptation: thriving seaweed culture projects*

April 13, 2022
by Al Jun Barbon Magamano, Jessamae Gabon

The Department of Agriculture-Special Area for Agricultural Development (DA-SAAD) seaweed projects adapt to changing climate.

The Philippines being archipelagic in nature is known for its vast and diverse aquatic resources. The majority of the coastal community rely mainly on capture fishing for centuries. In the previous years, harvesting fish only requires throwing a cast net or set nets in the nearshore area and then capturing enough fish to peddle around the local market to support the fisher's family needs.

## *Iba na ang panahon.*

Climate change has both direct and indirect effects on agricultural productivity including changing rainfall patterns, drought, flooding, and the geographical redistribution of pests and diseases. The vast amounts of $CO_2$ absorbed by the oceans cause acidification, influencing the health of our oceans and those whose livelihoods and nutrition depend on them (FAO-UN).

For example, in response to the climatic changes evoked and the devastation left by Super Typhoon

Yolanda (international name Haiyan), a multi-agency initiative led by the Department of Science and Technology (DOST) was launched. This project called Iba na ang Panahon in 2014 aimed to equip the local government units (LGU) all over the country with science and technology knowledge and tools to help prepare against natural calamities and the changing weather.

In a more comprehensive look, these changes in the global climatic conditions have a trickling effect that is **more real to and felt by the sectors and people than how it reflects in statistics.**

There is an imminent threat to physical, economic, food, and nutritional security among the farmers and fishers primarily for inhabiting the areas vulnerable to natural calamities, and for relying their livelihood on crops cultivation and fishing activities that can be impeded without warning, not to mention putting lives at risk at any time while on the job.

The emphasis on the microscale perspective is needed to call for more efficient adaptation strategies more than providing responsive actions. Crops are susceptible to flooding and typhoon destruction, while the changes in the ocean alter species routine, as well as capturing patterns. Those living near the coastal areas, economic-wise, abandon their conventional means of livelihood to look for alternative sources for family needs' sustenance. This is due to fishing grounds becoming farther and farther away from the coast that it required more effort to catch fish, compelling the fisherfolk to shell out bigger financial inputs.

## More adaptive than responsive.

The core response of the Food and Agriculture Organization of the United Nation to countries facing climate change does not focus on reactive but revolves around transformative actions focused on mitigation and adaptation. Synergy across institutions is a prime concern, alongside climate-smart agricultural projects and approaches. In the Special Area for Agricultural Development (SAAD) Program, for example, there is a need to reiterate the integration of adaptation and mitigation-focused projects while still prioritizing response.

Serving the geographically isolated areas, and the rural poor, the pressure is greater on the implementers as the program prioritizes sustainability in the latter years under the leadership of Dr. Myer G. Mula. What is being demonstrated here is that, in responsive orientation, the program provides replenishment assistance to the covered areas affected by a calamity or disaster. While in adaptive orientation, in the Cordilleras, for example, erosion-resilient farming is being practiced among farmers considering their geographic vulnerability. This prioritization is possible with effective synergy (of institutions, communities, and the local government) and policy-making, strengthening, and implementation.

SAAD is just one of the DA programs that prioritize far-flung and marginalized groups who are more vulnerable to the effects of climate change and who obviously need more assistance on the matter. While focused more on the agricultural sector than the fisheries, the program takes pride in its attempt to implement projects that are sustainable, for climate change adaptation, and contribute to its mitigation.

## What about the fisheries sector: **a closer look at seaweed farming**

In the early 1970s seaweed farming was introduced to Sulu and later on adopted in the entire country. Unlike capture fishing, where most men are involved in the activity; seaweed aquaculture is a family affair where women and children can participate in the production.

Economic-wise, for the majority of fisherfolk, seaweed farming is a viable, sustainable, and easy alternative source of livelihood. In Northern Mindanao, the province of Lanao del Norte is a major contributor of seaweed, comprising 78% of the total production in the region (PSA, 2016). The growers adopt the floating lone-line method of seaweed cultivation which is commonly used in commercial farms because it offers lower labor cost and materials, is easy to manage with higher net income and return of investment, and has a shorter payback period as compared to other culture methods.

Adhering to the adaptive quality of projects, Duarte et al., (2017) in their published study (Can Seaweed Farming Play a Role in Climate Change Mitigation and Adaptation) mentioned that seaweed farming contributes to climate change adaptation by damping wave energy and protecting shorelines, elevating pH levels, and supplying oxygen to waters, thereby locally reducing the effects of ocean acidification and de-oxygenation. Moreover, seaweed aquaculture can help prevent coastal eutrophication (caused by the increase of water nutrients due to runoff, use of fertilizers, and/or excessive organic load composition) by absorbing large quantities of nitrogen, phosphorus, and carbon dioxide thereby preventing algal blooms such as red tides that may affect and place heavy economic losses on coastal aquaculture.

However, from the annual production of 44,279.10mt in 2010, seaweed production decreased to 32,179.84mt in 2018. Due to anthropogenic and environmental factors such as poor farming practices, abuse of resources, adulteration, use of chemicals, the occurrence of diseases, in addition to global warming which resulted in unfavorable weather conditions, the industry is facing a threat that forces the fisherfolk to venture into the land-based source of income.

With this dilemma, most seaweed farmers stopped their production and engaged again in capture fishing despite the minimal catch, while others turned to other land-based casual labor such as driving habal-habal and construction to provide food on their table. As a result, their seaweed lines were left to rot and inoperable due to the high cost of farm implements that prevent them from continuing seaweed farming.

## Revitalizing seaweed farming.

Seeing this as an opportunity to not just aid the farmers but also help the coasts, in 2019, the DA-SAAD through the Bureau of Fisheries and Aquatic Resources (BFAR) tapped local seaweed growers with the aim to revitalize the local production of seaweed in the community.

Prior to the project, a series of social preparation activities such as local consultations, coordination meetings, livelihood assessments, and training assessments conducted led to the identification of two coastal municipalities, Tubod and Kolambugan as the program beneficiary.

The Tangueguiron Seaweed Growers and Fishermen Cooperative (TUSEGFICO) of Tubod and the Simbuco Aqua Marine Multi-Purpose Cooperative (SAMMPC) of Kolambugan composed of 273 seaweed growers each received a Php 1,208,050 worth of Seaweed Project which included propagules, farm implements, and Training on Seaweed Farming Technology, Disease Identification, Mitigation and Management, Good Aquaculture Practices, Seaweed nursery management.

Both groups recorded a gross income of Php 900,000 each from dried and fresh seaweed for their 2019 production.

However, in the course of project implementation, these cooperatives were discouraged again from the activity due to the occurrence of diseases such as ice-ice and epiphyte infestation. Adding to the challenge is the lack of seaweed propagules to source out for the next production cycle.

Again, classified as a response-oriented action, the BFAR-SAAD 10 provided support to the cooperatives (same inputs in 2019) for the next cropping (2021).

**Establishment of seaweed propagation center**

Moving forward, SAAD, aiming for a more adaptation-oriented action, provided the cooperatives with a seaweed nursery to aid in the increasing need for seedlings. Funded under the FY 2021 budget, the propagation center secures a whole year-round production with a projected seaweed propagule production of 30,000 kilograms per year. Included in this project are initial stocks and training on nursery management to capacitate the fisherfolk.

Aside from the aquaculture assistance, each group also received one unit of postharvest processing equipment and utensils to minimize postharvest losses; one unit of community-based mini-processing shed with 5x6m dimensions, and training on postharvest technology for the production of seaweed value-adding products such as ice cream, crackers, chips, maja, noodles, and pickles were implemented. Their products are promoted and displayed by BFAR 10 during trade fairs and market-linking activities.

Committed and grateful for the opportunity, the seaweed growers enthusiastically responded by ensuring that there are enough seedlings to supply each members' farm, and initiated to expand their seaweed farms from less than 5 hectares (ha) in 2019 to 20ha in 2021 for grow-out production to sustain the project.

**The pursuit to establish a seaweed laboratory and land-based seaweed nursery establishment**

The conventional method of seaweed propagation is usually obtained through vegetative reproduction such as direct fragmentation and thallus cutting. However, the repetitive multiplication of seaweeds through this method affects the quality of seaweeds being produced such as the degradation of genetic variation, growth, carrageenan quality, and lower protection against diseases.

Taking the project to another level, TUSEGFICO and SAMMPC in partnership with BFAR, LGUs, and academic institutions planned to establish seaweed laboratories and land-based seaweed nurseries in Lanao del Norte. These laboratories target to produce seaweed propagules using tissue culture.

## Rallying for support.

Despite the limited budget poured into the fishery sector, SAAD continues to provide opportunities to the fishers while advocating seaweed farming to mitigate the effects of climate change.

The seaweed aquaculture in Lanao del Norte has big potential and more than 500 hectares are underutilized due to the lack of financial capability of the farmers and low financial support from the government. However, prioritization is devised with limited resources, the program can only directly support 363 growers of more than 2,000 seaweed farmers in the province.

Believing in the potential of the industry, SAAD provides assistance for seaweed culture projects in Magsaysay, MIMAROPA Region, Antique in Region 6, and Negros Oriental in Region 7.

The fulfillment of the seaweed lab and land-based nursery is seen as a device not only to sustain but also to expand the coverage of the program. Clearly, SAAD is fixed with its objective and has a solid vision of who to target, evident in the policy strengthening, continued facilitation of synergistic efforts involving most of all the community, and continuously seeking for science-based facts through research and development coordinated with the rightful institutions.

With the program's conclusion, the implementers' rally for an extension to continue what has been started. The community's role in this undertaking is to use their collective action raised in proper media and channels to help call for the same cause. Not only that, while traditionally, the smallholders equate to a small voice in policy and leadership choices, they can seek ways to assert their needs at the local community level. What is meant by this is to maintain close coordination and dialogue with the local leaders to prioritize sound agricultural investments, especially the projects that are research-based. They should also help themselves to be more self-sufficient by continuous collaboration – with or without SAAD, and adoption of modern modes and tools of farming.

Lastly, this collective, **synergized effort should always be guided and focused on the benefit of more fisherfolk, their community, and sustainability while increasing the seaweed production of the region.** The more seaweed culture projects that operate in the coastal areas, the more that the local communities drive their future by contributing to climate change adaptation.


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# *1st qtr National Program Assessment: How SAAD is felt on ground?*

May 13, 2022
by Jessamae Gabon

The most essential contribution of the current direction of the Department of Agriculture – Special Area for Agricultural Development (DA-SAAD) Program is the achievement of gradually transforming the marginalized sector by engaging the communities to turn to agricultural activities, mechanizing agriculture and fisheries sector, and opening income-generating opportunities while strengthening food security – one community at a time.

Remaining proactive while waiting for its proposed extension, the SAAD Program convened for the first time in the new normal setting to report on the progress of the program operations nationwide as its First Quarter Physical and Financial Assessment was held last April 25-29, 2022.

Attended by 110 participants, the SAAD National Program Management Office (NPMO) and the Regional Program Management Support Offices (RPMSOs) presented the status of their project implementation and the progress of accountabilities for each region and province. Non-SAAD regions namely, Ilocos Region (Region I), Cagayan Valley (Region II), Central Luzon (Region III), and CALABARZON (Region IV-A) were also invited to be acquainted with the operations.

Members of the SAAD Program Steering Committee (PSC) from the Agricultural Training Institute (ATI), Bureaus of Plant Industry (BPI), and Bureau of Animal Industry (BAI), also participated to polish and provide guidance on the issues raised by the regional implementers.

**Issues and concerns**

- Committed to its purpose as a developmental program dedicated to the marginalized communities, affected SAAD regions reported utilizing its continuing funds for relief assistance to the farmers severely affected by Typhoon Odette last December 2021.
- BAI representative accommodated and offered recommendations on the issues of animal acquisition processes such as suppliers' permits.
- Areas with armed conflict or with identified End Local Communist Armed Conflict (ELCAC) operations remained difficult to penetrate for the purpose of reinforced monitoring of the projects.
- Enhanced monitoring in achieving beneficiaries' and communities' preparedness to establish an enterprise that will sustain their projects and income in the long run.
- Projects were delayed due to the limitation of the anticipated nationwide elections.
- While recurring issues on profiling bred in the discussions for quite some time now, the regional arms and the Central Office, led by the Information and Technology (IT) Sub-unit are determined and agreed to settle the accountabilities as part of strengthening the unified database which contains the profile details of the beneficiaries. This profiling activity shall construct the baseline data upon which the delivery system of programs/projects will be strengthened.

## Staying on track with the goal, as SAAD's promise: Midterm program assessment

Agricultural development initiatives are imperative as these actions address rural development. Communities in the rural area are most often engaged in agriculture as their main livelihood, however, different policy structures, priorities, socio-cultural factors, and topographic qualities play different roles in the development or underdevelopment of the communities living in the rural areas. Hence, advancement in the agricultural disposition of communities is seen to translate to the strengthened material and social welfare of its members.

During the assessment meeting, SAAD Deputy Director Ulysses J. Lustria, Jr discussed the results and recommendations of the Midterm Impact Assessment conducted by the Don Mariano Marcos Memorial State University (DMMMSU). This assessment provided consolidated backing to the proposed extension of the program.

The SAAD Midterm Assessment study seeks to evaluate the effectiveness of the program's four major components to identify the gaps in implementation and fill said gaps to achieve and maximize the potential impact of the projects on the beneficiaries. Dedicated to poverty alleviation and agricultural stakeholders' empowerment, SAAD is a part of the redistribution mechanism with the aim to alleviate poverty incidence in the priority areas. This is made possible by filling these gaps with access to food production and economic capacity-building mechanisms.

Given its 5-year implementation, this study utilized a desktop analysis of the available materials/literature (secondary data) from the program and its partners. It also provided the basis for understanding the framework of the program upon which all operations are built upon. Data from this analysis was used to determine the samples and design for the survey.

An impact pathway was then mapped, which went through enhancement and validation while the study progresses that specifies how outcomes manifest from the conceptual framework of the program (mapping impacts from the 4 major components: [1] program management, [2] social preparation, [3] production and livelihood assistance, and [4] marketing assistance and enterprise) from which surveys and group discussions with the respondents were cultivated.

The study led by the DMMMSU commenced in January 2021 that targeted 20 provinces initially covered by SAAD during the 2017-2018 implementation. This was participated by 1,590 farmers and fisherfolk, and 57 associations.

This study is specifically geared towards exploring the impact of the program on poverty, food security, and agricultural productivity, as well as the projects' adoption and non-adoption status (how likely the projects are continued or discontinued by the beneficiaries). It aims to explain and measure the impact felt by the farmer-beneficiaries.

Utilizing the Theory of Change as a lens to read the findings, the study ultimately aims to provide and define the purpose and the prevailing thinking that guide the implementation of the program. This is important as said theory, if well-articulated, can be a tool to establish a common understanding within the institution and reveal the needs for change, and a guide for collective thinking in addressing these needs, be it adaptive, iterative or linear and non-linear approaches to maximize the desired impacts.

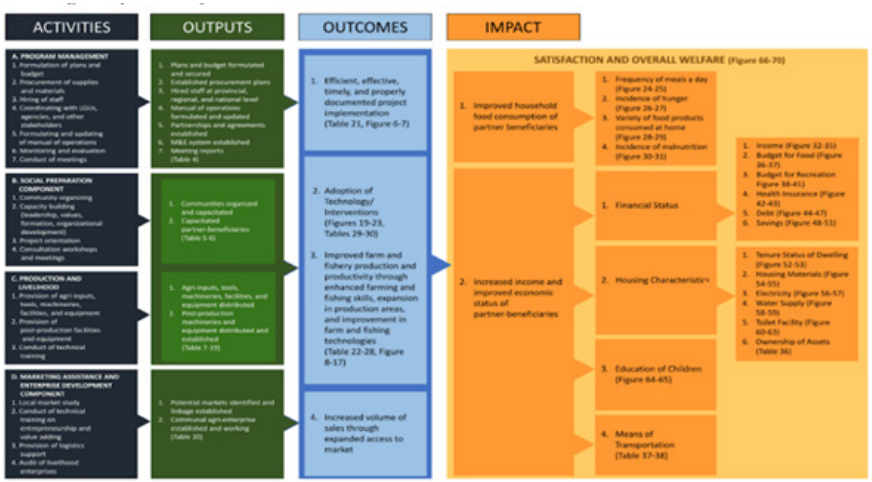


**Figure 5.** Impact Pathway of SAAD (DMMMSU, 2021)

# Major Findings

Overall, the **SAAD program resulted in observed positive initial benefits for the targeted farmers and fisherfolk,** particularly with respect to improving their household food consumption and other indicators of welfare gains and economic status.

The study revealed that 56.98% of the respondents agreed that their holistic welfare (considering financial status, housing characteristics, acquired assets, and education for children, either increased, improved, and/or attained) has improved with the presence of the SAAD projects. Likewise, 41.13% said they felt no change, while 1.89% claimed that their welfare deteriorated.

It is noteworthy however that the economy suffered from a backlash caused by the pandemic in 2020, and the country's susceptibility to natural calamities every year, as a result of climate change. Another factor to be considered here is the amount of support (continued/one-time assistance) received by the farmers from SAAD.

Fundamentally, the program provides agricultural assistance, and livelihood projects to select farmers and fishers. This assessment revealed the beneficiaries' reasons for adoption or non-adoption of the projects provided to them. Addressing food security, the highest rate is for home consumption as a reason to adopt the project that garnered the most response. Responding to agricultural productivity and poverty, lower production costs, increased income, increased harvest, and improved farming efficiency were among the top 5 reasons for project adoption. Meanwhile, inadequate interventions, low quality of seeds, the presence of pests, the pandemic, and the project-area misfit top the reasons for non-adoption of crops interventions. For livestock and poultry, the non-adoption emerges from mortality, inputs are not for a daily stream of income, production cost, and animal maintenance were top considerations. stream of income, production cost, and animal maintenance were top considerations.

Adoption trend is essential to understanding the pursuit of imparting positive changes in the quality of life of the farmers and fishers, as well as the sustainability of their projects turned to livelihood. The results may be used as a tool to craft better policies and implementation procedures, especially at the field level.

In addressing **food security,** following the impact pathway, the frequency of meals for farmers (at least three times a day) was recorded at 99.1% in 2016, went up to 99.8% in 2020, and increased from 94.7% to 97.4% for fisherfolk beneficiaries. Most importantly, farmers' overall hunger incidence decreased from 7.8% to 5.0% from the 2016 to 2020 period after engaging in the program, while fisherfolk registered an average of 3.1% decrease per year from 14.1% in 2016 to 1.6% in 2020. Food variety consumed by both groups is also 94-98% after 4 years. Meanwhile, cases of malnutrition were relatively higher before the program began, with fluctuating records throughout the implementation; however, indicators of malnutrition include many factors that the program is not equipped to address such as the variety, quality, and quantity that could contribute to the nutritional requirement of the body.

In improving **farmers' income,** the midterm report showed that from Php 10,600 average annual on-farm income, the farmer-beneficiaries generate around Php 18,400 under the 4-year program coverage, bringing about a 74% increase. Some agri-aqua farmers earned more than Php 72,000.00. For fishermen, the increase was from an average annual on-farm income of Php 26,340 to Php 48,940, an 86% increase. Some fishermen earned more than Php 100,000.

Increasing income means an increase in the budget for food that is reported to have 50-70% allocation per household. Included in the holistic welfare, the percentage of respondents who engage in debt agreements declined in the first three years of coverage; however, numbers increased in the fourth year while in the pandemic. This may connote financial difficulty; however, it is worth mentioning that debts are made for the purpose of investments and capital for succeeding production cycles.

The study further reveals an **increase or improvement** in terms of farmers' and fishers' **savings, housing characteristics** and other household logistics, and **education of household members.**

*(Access the full assessment study at https://saad.da.gov.ph/saad-program-midterm-impact-assessment-report-2).*

Further, the data gathered imply that the program has a real and felt impact on the welfare of the beneficiaries on the ground. It is imperative to mention that this success is not possible without the regional and provincial partners in implementation, as well as the cooperation of the local government units. Just as important as sharing these positive results, the points of improvement also call for a more intensive effort and collaboration between institutions to avoid hindrances.

While some of the recommendations in the study are perpetually aimed and conducted, as the program progresses, the most immediate response will be the grant for an extension, as well as the continued full support of the mother agency and its attached agencies for a more cohesive, science-based, transformative program especially for the marginalized, and vulnerable (physical or socio-cultural) communities.

This is a challenge to the incoming administration, to continue the legacy left by the previous leaders of the Department, from establishing a program that prioritizes the untouched and unheard communities, up to the science-based, community-led approach to bring forth systematic changes, and a transformation to a modernized and strong production for the farmers and fishers in the most marginalized areas in the country.

The program and its beneficiaries hope that the policy and lawmakers can see how from the original intent of just providing food on the table, the **SAAD transforms the rural communities (women, indigenous people, youth, and seniors, all of whom are deprived of basic services) into independent food producers and agri-preneurs** banking from the existing strength of their communities.

## Moving **Forward**

Meanwhile, SAAD Program Director Dr. Myer G. Mula led the discussion on the directions of the program implementation in two different scenarios, considering the approval or disapproval of the proposed extension.

Regardless of the decision, whether the program will be granted another cycle to implement and expand, the whole SAAD team continues to enhance its operations and plans to properly usher the beneficiaries to the transition or conclusion of the program, which would mean the discontinuation of agricultural assistance targeted to the marginalized and isolated communities.



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# *Acknowledging the perseverance of the youth: NegOcc 4H club benefit from DA-SAAD goat project*

May 25, 2022
by CJ Gamarcha

**Young farmers and fishers, a plight in agriculture**

It is rare to encounter nowadays a member of the youth who has a passion for agriculture. Many young adults consider farming unprofitable, favoring jobs and livelihood in the city. This perception is inevitable given the situation of farmers and fisherfolk in the country.

The 2017 Philippines Statistics Authority (PSA) data reported a consistent poverty incidence among the 14 basic sectors in the Philippines.

Republic Act 8425, or the Social Reform and Poverty Alleviation Act, defines the basic sectors as the disadvantaged sectors of Philippine society, namely farmer-peasant, artisanal fisherfolk, workers in the formal sector and migrant workers, workers in the informal sector, indigenous peoples and cultural communities, women, differently-abled persons, senior citizens, victims of calamities and disasters, youth and students, children, urban poor, cooperatives, and non-government organizations.

Among the fourteen basic sectors, farmers, fishermen, and children belonging to families with income below the official poverty threshold or poor families posted the highest poverty incidences in 2015 at 34.3%, 34.0%, and 31.4%, respectively.

These three sectors were record-consistent in 2006, 2009, and 2012. Also, 5 of the 14 basic sectors consisting of farmers, fishermen, children, self-employed and unpaid family workers, and women, belonging to poor families, had higher poverty incidence than the general population estimated at 21.6% in 2015.

This prevalent condition leads to a lack of interest among the next-in-line practitioners that would want to be involved in the field, especially since economic opportunities that expand outside agriculture are considered one of the factors in the decline of the overall poverty rate in the Philippines as reported by the World Bank (2018).

This reality discourages engagement in the agriculture workforce. The continued trend of the aging rural population that threatens food security is not a unique circumstance in the Philippines, as this is also a trend in many farming countries where agricultural holders, meaning those who control and manage agricultural holdings are over the age of 55, recording a 27.5% average globally (Ottosen, 2014).

While many others choose urban life, some emerging practitioners give hope to the aging workforce in the Philippine agricultural scene.

## **Aging** farmers and fishers

Barely a senior citizen, 53 is the average age of the country's 11 million farmers and fishermen according to a 2021 study conducted by Florencia Palis of the University of the Philippines (UP) in Los Baños.

The findings in the study "Aging Filipino Rice Farmers and Their Aspirations for Their Children," showed that **Filipino farmers are aging fast and more than 65% of interviewed farmers do not wish for their children to follow in their footsteps.** This implies that there might come a time when the country will not have enough farmers and fishermen to produce food, which poses a threat to the country's food security (Palis, 2020).

Encouraging the younger generation to view agriculture and fisheries as viable business ventures requires information dissemination, training, and empowerment.

The Department of Agriculture (DA) in Western Visayas has a program called Kapital Access for Young Agripreneurs or KAYA. Under the program, through the Agricultural Credit Policy Council (ACPC), DA will provide up to Php 500,000 capital access to fresh agriculture graduates (Tayona, 2021).

The DA is also offering **scholarship programs,** especially to the children of farmers and fisherfolk, through its **Agricultural Competitiveness Enhancement Fund (ACEF), Agricultural Training Institute (ATI), and the Bureau of Fisheries and Aquatic Resources (BFAR).**

Under these scholarship programs, the beneficiaries have to take up Agriculture as a college course or any agriculture-related courses.

The ATI, an attached agency of the DA, has qualified three children of farmers from Western Visayas, particularly from Barangay Agusipan, Badiangan, Iloilo; Oton, Iloilo; and Negros Occidental as scholars to be sent to Taiwan to undergo technical training on farming.

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Recently, out of 198 applicants in Western Visayas, 16 have qualified. The MAYA program, conceptualized by the DA in 2020, will provide experiential learning and mentoring to agriculture graduates aged 20 to 30 years old.

"After the one-week basic orientation and expectation setting, they will have the leeway to choose between employment track or entrepreneurship track as their internship pathways," as stipulated in Memorandum Circular No. 14 series of 2020 by Agriculture Secretary William Dar.

The DA, through the Bureau of Agricultural Research (BAR), listed 808 qualified MAYA interns nationwide who applied online. Of these, 4 were from Aklan, 1 from Capiz, 5 from Iloilo, and 6 from Negros Occidental.

## Attracting **youth** to **modern agriculture**

Capturing the interest of the youth in farming remains a major challenge to the agriculture sector. Their contribution could serve as an imperative foundation to sustain the food demand-and-supply cycle and ensure responsible resource management in the future.

Among the major impediments to engagement is the lack of resources or access to land, capital, skills, and technology. Youth perceive farming as a "not financially rewarding" occupation and they are not involved in making decisions for the farming activities of their families. These stereotypes need to be changed (Pedrosa, 2014).

In the educational system, according to the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), outdated curricula, outmoded research, and inadequate academic facilities are among the significant issues hindering the involvement of the youth in agriculture that affects the agricultural human resources in Asia.

However, there are a number of ways to attract the youth to the agricultural sector, which remains one of the most vulnerable segments in the country.

Modernized training and practical skills must be provided including access to information through the internet, as well as repackaging agriculture course curriculum attuned to the current challenges in the sector. Support services such as the provision of incentives to engage in agriculture, and more specifically, agribusiness – for example, through an internship, apprenticeship, and training programs to prepare the youth to lead and manage agribusinesses – are also crucial in this regard and it is where the government can help.

Originally founded in the United States in 1901, the 4H (Health-Heart-Head-Hand) Club is an organization of rural youth, primarily out of school youth, involved in agricultural and other income-generating projects.

Since its establishment, the 4H Club has been adopted by many countries, including the Philippines, further expanding its network of rural-based organizations (RBOs). Republic Act 680 created the Bureau of Agricultural Extension which marked the start of 4H Club work in the entire country.

# The Beginning: DA-SAAD experience

In Negros Occidental, a group of youth in the far-flung village of Lalong in Calatrava, Negros Occidental is making a buzz in the agricultural labor landscape in the province. Lalong has 2,615 residents with the highest population from the age group of 15 to 19 years old. Most youths in the area opt not to pursue tertiary education as they are more inclined to till the lands owned by their parents.

Due to its remote location, the community also seldom receives agricultural assistance programs from the government.

These challenges prompted the young populace in the community to form an organization aimed to provide a space that fosters collaboration as well as empowerment to young people through agriculture ensuring their recognition and visibility.

They have 35 active members mostly aged 13 to18 years old who are all into rural farming. Based on the policies of the group, membership is open and voluntary and is available to anyone 13 to 30 years old.

The said group is a youth development component of its provincial forerunner, 4H Club Negros Occidental Chapter.

To encourage active participation of RBOs, the DA Regional Field Office (RFO) Western Visayas is actively implementing the DA Central Office's mandate under Administrative Order No. 17, Series of 2019 which is aimed at the attainment of a participatory and sustainable agriculture sector through the provision of extension-related activities on work-oriented values, leadership skills development, and entrepreneurship.

With that, in 2021, the group received **three bucks, 19 does, and a set of drugs and biologics** from the Department of Agriculture – Special Area for Agricultural Development (DA-SAAD) Program's Goat Production Project.

Twenty-year-old James Manayon, president of the group, said they pursued goat raising because of its simplicity, requiring a low production cost that a young adult can get involved in. In their community, goats are multi-purpose animals and are used in meat and milk production. They are easy to breed and manage and may be raised together with other livestock.

According to Mr. Manayon, goats are smaller-sized animals, and they require lesser space as compared to other domestic livestock. Aside from having lesser housing demands, he cited that goats multiply faster in a short period as they are capable of giving birth to as many as five kids, which is in line with the group's goal to establish a multiplier farm and eventually sell the ruminants for breeding and meat consumption.

Most of the 4H Club Lalong members allowed their goats to graze in the field using a few meters of rope (tethering system). Since goats are prone to pneumonia and other illnesses, each caretaker built a simple shed to provide shelter.

Mr. Manayon emphasized that proper feeding and clean water are important for the goats' health since it affects the growth and breeding performance of the animals. Their goats also get most of the nutrients they need from grazing and browsing six to eight hours a day which also helps clear weeds and encroaching bushes. Meanwhile, each of the caretakers also practices regular provision of supplementary feed and monitoring to prevent diseases.

On top of their tasks for goat production, these youths also maintain backyard gardens planted with vegetable crops such as tomato, okra, and eggplant. Ten members who are full-time high school students are also juggling their studies and farm work. Since schools across the town are still closed indefinitely, the Lalong youth would wake up early in the morning to manage their plants, graze their goats, and feed their chickens before working on their modules.

Even though goats are valuable livestock as a source of meat, the group acknowledged there are major obstacles to its production.

They reported mortality among their goat stock due to an illness in October 2021. The caretaker observed that the milk duct of the parent stock got clogged and infected due to the movement of milk through the mammary glands.

The group sought assistance from the para-veterinary worker in their village as well as the Municipal Agriculture Office (MAO). Though the affected doe and its two offspring died, no further mortality was recorded.

According to Manayon, the training provided by SAAD greatly helped to properly manage their stocks. They implement good animal husbandry practices such as regular cleaning and disinfection.

Through their hard work and labor, the 4H Lalong Club was able to increase its stocks to 46 from 22 head. Currently, their livestock project has yet to generate income but they are all hopeful they could earn extra money from trading goats.

*"Sa pagkakaron, naa pa kami sa proseso sa pagpalambo sa among mga kanding aron mas modaghan pa ang among stock. Pag-abot sa panahon nga moabot ug kapin sa 100 ka ulo, ibaligya namo sa mga interested buyers,"* (Right now, we are still in the process of breeding our goats so we could further increase our stock. When the time comes that our stock reaches more than 100 head, we will sell it to interested buyers,) said Manayon.

Mr. Manayon also shared some of the aspirations of the club members. He acknowledged that even though life might be challenging for most of the rural youths in their barangay, they are still aiming to finish their studies until college in a bid to uplift their families from poverty.

***"Kadaghanan sa mga pamatan-on dinhi wala makatapos sa ila nga degree sa kolehiyo ug gusto namong untaton kini nga cycle. Bisag lisod ang among kinabuhi dinhi, wala mi mohunong sa pagpangandoy ug pagkab-ot sa imong mga goals sa kabuhi pinaagi sa edukasyon."***

(Most of the youth here were not able to finish college and we want to stop this cycle. Although our life here is hard, we don't stop dreaming and achieving our goals through education.)

**Profit-sharing policy**

To sustain the project, the association formulated a profit-sharing policy where each of the 14 members is required to pay a Php 500 fee every year as well as share 50% of their eventual profit to the association once their goat project becomes an income-generating livelihood. Once the parent stock gives birth, they are also required to give back one offspring to the association. To date, 11 goats have already been returned to the association for the planned communal multiplier farm.

# A Chance to Make a Difference

Despite the decline in interest in agriculture as a career path, there are still young adults engaged in farming and fishing. These sectors offer the young generation a chance to make a difference by growing enough food to feed the growing population. To encourage others to join the agriculture and fishery sectors, it is vital that they are given a voice, and that government implementers take note of what they have to say.

Digital technology and digital financial services have the potential to bring youth closer to the said sectors. Agencies, such as the DA and its affiliated organizations and other players in the ecosystem focused on promoting agriculture needs to deliberately create an attractive and enabling environment for youth through the following activities or programs (Njeru, 2019):

1. Sustainable market linkages between rural young farmers and urban markets through e-commerce or m-commerce platforms;
2. Adoption of digital platforms that offer an opportunity for embedded social services that could compensate for the lack of financial and non-financial services and provide social protection, such as platforms that offer embedded unemployment insurance or health insurance;
3. Specialization in service provision—information, data, and value chain linkages;
4. Special support to build value addition, capacity-building, and idea incubations;
5. Efficiency in agriculture value chains that will spur growth in the trade margins and returns and thus encourage youth to engage fully in the sector;
6. Working with financial service providers to develop financial tools and products that facilitate access to finance for agriculture-related activities by youth; and
7. Positioning the youth in risk management mechanisms among smallholder farmers and agri-businesses, along with selected agriculture value chains.

Particularly, this impels decision-makers to give the youth a chance to offer their opinion and experiences in the policy creation and discourse for rural development. In this way, they can show other young people that farming and fishing can be a rewarding career as well as highlight the important role of agriculture in nation-building and on a global scale.

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# SCIENTIFIC ARTICLE

# *Philippine fertilizer price outlook: A reality for farmers and fishers*

July 04, 2022

by Myer G. Mula[1*] and Kimberly Coronado[2]

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## Abstract

The Philippines, as a net importer of fertilizer, is vulnerable to the rising fertilizer prices due to Covid 19 pandemic causing fertilizer shortages around the globe, higher input costs and fuel prices, disruption of production and trade, including geopolitical disputes (Russia and Ukraine). The study was aimed to analyze fertilizer import prices and dealer prices to provide proposals for importation, marketing, pricing, and other policy recommendations.

Results reveal that import prices vary from country to country and started to increase in early 2021. From February to April 2022, the lowest average import price of Prilled Urea is from Uzbekistan ($648.00/MT), Granular Urea from China ($602.00/MT), Ammosul from Japan ($296.58/MT), Complete fertilizer from Korea ($608/MT), Ammophos from Korea ($490/MT), MOP from Jordan ($570.37/MT), and DAP from China ($900/MT), thus automatically affecting regional dealers prices due to archipelagic situation that entails additional logistical cost. Prilled Urea had the highest price in Region VI (Php 2,814.83) and the lowest in Region XIII (Php 2,536.11); Granular Urea was high in Region V (Php 2,826.33) and low in Region VII (Php 2,430.00); Ammosul was high in CAR (Php 1,533.65) and low in Region XI (Php 1,302.31); Complete fertilizer was high in CAR (Php 2,220.37) and low in Region XII (Php 1,793.50); Ammophos was high in Region V (Php 1,948.55) and low in Region XII (Php 1,583.54); MOP was highest in Region IX (Php 2,054.51) and lowest in Region II (Php 1,749.20); and DAP was highest in Region VII (Php 2,944.30) and lowest in Region VIII (Php 1,883.33). This indicates that average prices of different fertilizer grades are generally lower in nearby seaports (i.e. Regions III, XI, XII, and XIII).

Likewise, variation in dealer's prices is influenced more by the company, brand and logistical cost hence, the incorporation of Suggested Retail Price (SRP) and Maximum Retail Price (MRP) should be calculated based on the source of origin and be institutionalized by the Department of Agriculture (DA) and Department of Trade and Industry (DTI) centered on the location where the fertilizers are locally sold, and the government should open up bilateral agreement with countries (G2G) producing fertilizers for lesser acquisition cost.

# Introduction

In recent months we witnessed a sharp increase in fertilizer prices worldwide. International prices of urea rose from $216/MT in June 2020 to $393.25/MT in June 2021, while prices of diammonium phosphate (DAP) soared from $263/MT in June 2020 to $604.75/MT during the same period of 2021 (Baffes and Koh, 2021). Global fertilizer prices increased during 2021 with limited supply brought about by the disruption of production and transportation due to the COVID-19 pandemic, higher input costs, hike in fuel prices, trade disputes and geopolitics, and the recent Russia invading Ukraine (Roldan et. al. 2021).

Countries (i.e., Australia, Brazil, India) also increased their fertilizer demand to stimulate local agricultural production, China even banned export of their fertilizer products (Mula, 2022). The situation was further aggravated by the conflict in Ukraine and the sanctions imposed by Western countries on Russia and Belarus.

Import prices remained volatile but are generally increasing, regardless of country of origin. The trend of average local dealers' prices per month from 2019 to 2021 (Month 1 to 36), covering the pre-pandemic period to the height of global lockdowns to the gradual easing of quarantine restrictions is shown in Figure 6. Fertilizer prices in the Philippines started to increase during the mid-year (Month 19) of 2021 and further surged towards the end of the year (Month 24). While fertilizer prices are volatile, a relatively steady trend is observed until mid of 2021 (Month 1 to 18). During the stringent lockdown in the country in 2020 (Month 15), local prices of fertilizers remained close to the 2019 prices (Month 1 to 12); the price of urea even declined. Around May-June 2021 (Months 29 & 30), prices for all fertilizer grades started to increase and further surged towards December (Month 36).

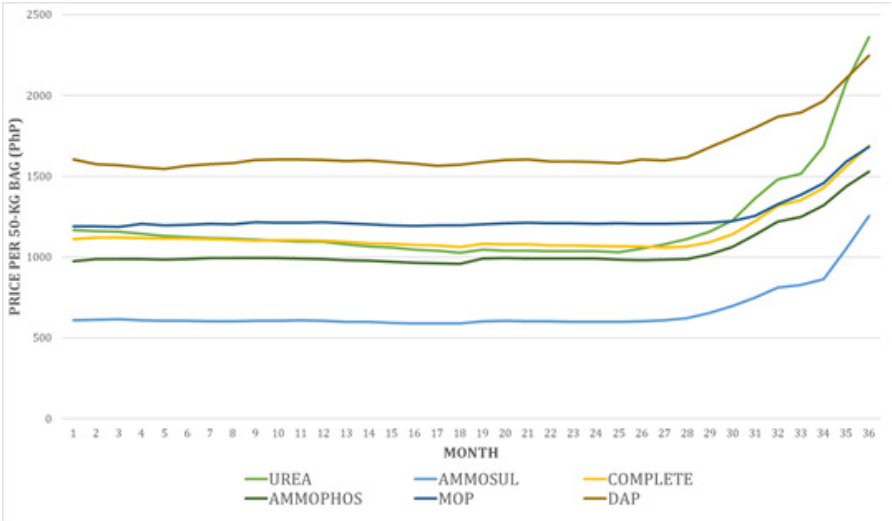



**Figure 6.** Trend of average monthly dealer's prices of the six major fertilizer grades, 2019-2021.

The price of urea during November 2020 (Month 23) recorded an average of Php 1,037.83 per 50-kg bag as compared to the November 2021 (Month 35) record of Php 2,082.14, indicating a hundred percent increase in a year. This was further increased in the following month (Month 36), reporting a 128% increase in price compared to December 2020 price (Month 24).

Ammonium sulfate price also increased by 109% in December 2021 (Month 36), compared to the same period of the previous year (Month 24). Ammonium phosphate and complete fertilizer posted more than 50% increase in price, while muriate of potash and diammonium phosphate prices have increased at around 40%.

Ultimately, this could initiate changes in cropping patterns and affect the country's overall crop production. Farmers would likewise lessen fertilizer application, or decline their area planted. Challenges such as diminishing farm size, population growth, and climate change also adversely affect productivity.

The Philippines, being a net importer of fertilizer, is vulnerable to the shifts in the global market. Different chemical fertilizer grades are imported into the country from various countries. The primary sources of our fertilizer imports from 2018 to 2021 are China (40.66%), Indonesia (16.70%), Malaysia (12.20%), Qatar (7.37%), Canada (6.18%), and Japan (5.88%), according to the FPA 2021 data. Fertilizer imports from various countries also come with varying import prices.

However, the fertilizer peg at dealer prices is computed at the average notwithstanding where the origin of fertilizer comes from. Local fertilizer prices are only monitored at the dealer level and there is no data on fertilizer prices at the distributor level. Hence, comparison of fertilizer dealer prices per country of origin should be analyzed to determine if the trend of import prices is reflected in the local market. This study tends to analyze the import prices and dealer prices of the six major fertilizer grades from the month of February to April 2022, also provide proposals for fertilizer importation, a system of retailing monitoring, and other policy recommendations.

# Methodology

The fertilizer importation data by country of origin and regional fertilizer dealer prices were analyzed to provide decision-making and policy direction of the Department of Agriculture (DA).

Data on regional dealer prices of the seven major fertilizer grades: prilled and granular urea (46-0-0), ammonium sulfate (21-0-0), complete fertilizer (14-14-14), ammonium phosphate (16-20-0), muriate of potash (0-0-60), and diammonium phosphate (18-46-0), and fertilizer importation data are obtained through the Fertilizer and Pesticide Authority (FPA) database on weekly bases. The data on fertilizer importation are taken from the VAT exemption invoices issued to the importers by the FPA.

These data are analyzed to investigate price trends, compare fertilizer import prices per country of origin, and compare dealer prices per region, country of origin, and brand.

Since local fertilizer price is only monitored at the dealer's level, there is no data on the fertilizer prices at the distributor or wholesale level. A profit margin matrix was used to approximate fertilizer prices along the supply chain (Appendix 1 – Computation of fertilizer price matrix at various cost levels). The estimations in this matrix came from the fertilizer industry stakeholders.

Import prices are in US$ per unit MT (CFR values) of fertilizer. Payments for duties and other port costs are added to the import price to give the landed cost upon disport. These costs are estimated to be Php 90.00 per 50-kg bag of fertilizer. Importers then add imputed costs for trucking, warehousing, labor, tax (2.5%), and profit per bag (8%). The distributor's price to the dealer adds to the price by following the same margin estimates as the importers. Lastly, the dealer's price covers an additional cost for only trucking and labor, plus the tax (2.5%) and profit per bag (8%) (Appendix 1 and Figure 7).

Figure 7 presents the imputed costs of fertilizer prices along the supply chain. From the import price, costs are added to the fertilizer price in every market channel (Figure 8) and eventually come up with the dealer's price – the retail price of fertilizer availed by the farmer end-users.


**Figure 7.** Diagram showing the imputed costs of fertilizer price along the supply chain

The price of urea during November 2020 (Month 23) recorded an average of Php 1,037.83 per 50-kg bag as compared to the November 2021 (Month 35) record of Php 2,082.14, indicating a hundred percent increase in a year. This was further increased in the following month (Month 36), reporting a 128% increase in price compared to December 2020 price (Month 24).

Ammonium sulfate price also increased by 109% in December 2021 (Month 36), compared to the same period of the previous year (Month 24). Ammonium phosphate and complete fertilizer posted more than 50% increase in price, while muriate of potash and diammonium phosphate prices have increased at around 40%.

Ultimately, this could initiate changes in cropping patterns and affect the country's overall crop production. Farmers would likewise lessen fertilizer application, or decline their area planted. Challenges such as diminishing farm size, population growth, and climate change also adversely affect productivity.

The Philippines, being a net importer of fertilizer, is vulnerable to the shifts in the global market. Different chemical fertilizer grades are imported into the country from various countries. The primary sources of our fertilizer imports from 2018 to 2021 are China (40.66%), Indonesia (16.70%), Malaysia (12.20%), Qatar (7.37%), Canada (6.18%), and Japan (5.88%), according to the FPA 2021 data. Fertilizer imports from various countries also come with varying import prices.

However, the fertilizer peg at dealer prices is computed at the average notwithstanding where the origin of fertilizer comes from. Local fertilizer prices are only monitored at the dealer level and there is no data on fertilizer prices at the distributor level. Hence, comparison of fertilizer dealer prices per country of origin should be analyzed to determine if the trend of import prices is reflected in the local market. This study tends to analyze the import prices and dealer prices of the six major fertilizer grades from the month of February to April 2022, also provide proposals for fertilizer importation, a system of retailing monitoring, and other policy recommendations.

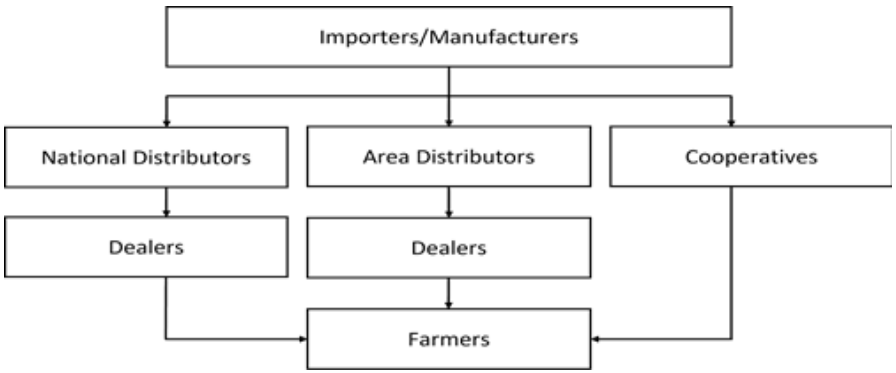
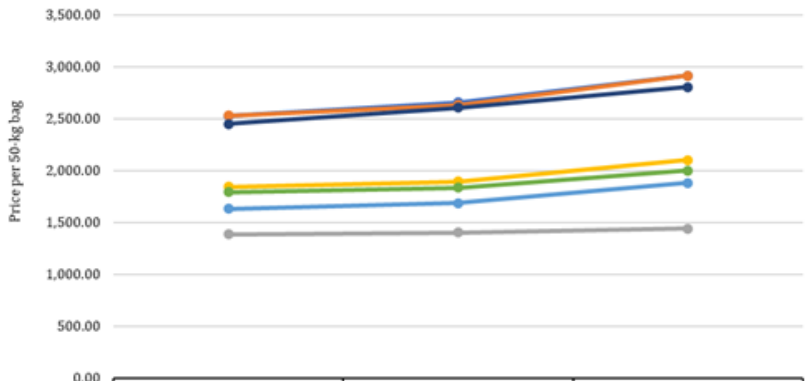



**Figure 8.** Diagram of the fertilizer supply chain showing the handlers/ stakeholders in the market.




| | February | March | April |
|---|---|---|---|
| Prilled urea | 2,523.61 | 2,657.71 | 2,915.23 |
| Granular urea | 2,529.67 | 2,629.32 | 2,914.74 |
| Ammosul | 1,387.57 | 1,403.49 | 1,439.89 |
| Complete | 1,845.11 | 1,894.02 | 2,103.21 |
| Ammophos | 1,631.03 | 1,684.92 | 1,880.47 |
| MOP | 1,792.00 | 1,832.91 | 1,999.63 |
| DAP | 2,448.63 | 2,606.84 | 2,806.66 |

**Figure 9.** Trend of average dealer prices of the six major fertilizer grades, February to April 2022.

Import prices will be compared depending on the country of origin to determine the source country with the lowest prices of fertilizer imports. On the other hand, comparison of dealer prices is to be assessed by country of origin, region of sale, and brand.

**Results and Discussions**

**Price status of 7 major traditional fertilizer (February-April 2022)**

Prices of fertilizer had been increasing since mid-2021 and soared especially at the end of the year. From February to April of 2022, import prices remained volatile and in upward trend regardless of country of origin. On the local retail level, average prices are observed to be increasing over the months (Figure 9). However, the movement of prices from the retail or dealer's level does not directly reflect the movement of import prices (Appendices 2-8).

*The effect of Origin and Branding*

Assessing the fertilizer prices per brand at the regional level can be inferred the differences in prices (Appendices 9-20). The same fertilizer grade with the same brand could have varying prices in the same month, depending on the country of origin and the region of sale.

For example, in Region VII, complete fertilizer Atlas from China has a dealer price of Php 1,946.28 in April. The same brand sold in the same region but is from Korea has a dealer price of Php 1,960.63. In Region XI, the same Atlas complete fertilizer from China posted Php 1,820.00 per bag. One brand of fertilizer could also appear to be more expensive than other brands but could still be cheaper at some point due to varying prices depending on its country of origin and region. In April prices of MOP from Canada in Region IV, brand Amigo (Php 2,026.34) is more expensive than Atlas (Php 1,912.50). However, in Region XI, Amigo (Php 1,917.50) is cheaper than Atlas (Php 1,966.82).

The country of origin depends on the import price of the fertilizer, while region of sale could be attributed to the far proximity from ports, distance from ports and large distributors, and the number of handlers.

## Import Price

The highest volume of prilled urea imported was from Indonesia with 22,445.03 MT or 42.82%, followed by Qatar (21,999 MT or 41.98%) (Table 11). Meanwhile, import prices from Uzbekistan are the lowest at $648.00 per MT, followed by Indonesia ($690.71/MT). Prilled urea from Vietnam has the most expensive price per metric ton at $942.50.

**Table 11. Import price and volume of prilled urea, February to April 2022.**

| Country | Total Volume (MT) | Volume (%) | Ave. Price per MT ($) |
|---|---|---|---|
| Indonesia | 22,445.03 | 42.83 | 690.71 |
| Qatar | 21,999.99 | 41.98 | 854.85 |
| Uzbekistan | 1,584.00 | 3.02 | 648.00 |
| Vietnam | 6,373.95 | 12.16 | 942.50 |
| **Total** | **52,402.98** | **100.00** | |

## Dealers Price

On the regional average dealer prices of prilled urea, the highest price in February was noted in Region V (Php 2,673.523), Region VI in March and April at Php 2906.15 and Php 3,118.19, respectively. While the lowest prices were recorded in Region I (February - Php 2,380.00) and REGION XIII (March - Php 2,474.31 and April - Php 2,646.24) (Table 12).

**Table 12. Regional dealer prices of prilled urea, February to April 2022.**

| Region | Monitored Dealer 's Price (Php/50-kg bag) | | |
|---|---|---|---|
| | *Feb-22* | *Mar-22* | *Apr-22* |
| CAR | 2,546.53 | 2,771.28 | 3,037.23 |
| Region I | 2,380.00 | 2,694.38 | 3,066.00 |
| Region II | 2,532.79 | 2,659.47 | 3,037.18 |
| Region III | 2,522.31 | 2,640.27 | 3,060.78 |
| Region IV | 2,670.71 | 2,683.32 | 2,823.25 |
| Region V | 2,673.53 | 2,752.71 | 2,937.31 |
| Region VI | 2,420.17 | 2,906.15 | 3,118.19 |
| Region VII | 2,585.59 | 2,809.63 | 2,999.76 |
| Region VIII | 2,611.03 | 2,641.84 | 2,765.77 |
| Region IX | 2,545.46 | 2,556.91 | 2,757.14 |
| Region X | 2,522.93 | 2,615.52 | 2,898.67 |
| Region XI | 2,435.34 | 2,520.11 | 2,842.45 |
| Region XII | 2,396.31 | 2,482.06 | 2,823.31 |
| Region XIII | 2,487.79 | 2,474.31 | 2,646.24 |
| BARMM | - | - | - |
| **Average Price** | **2,523.61** | **2,657.71** | **2,915.23** |

## Import Price

Granular urea imports' highest volume is Indonesia, with 39,104.60 MT or 42.92%, followed by Qatar with 22,000.00 MT or 24.15%. Regarding import prices, the highest price is Qatar with an average of $882.43/MT, while the lowest is from China at $602.00/MT (Table 13).

**Table 13. Import price and volume of granular urea, February to April 2022.**

| Country | Total Volume (MT) | Volume (%) | Ave. Price per MT ($) |
|---|---|---|---|
| China | 18210 | 19.99 | 602 |
| Indonesia | 39,104.60 | 42.92 | 766.18 |
| Malaysia | 10,989.25 | 12.06 | 689.45 |
| Qatar | 22,000.00 | 24.15 | 882.43 |
| Vietnam | 800.00 | 0.88 | 832.00 |
| **Total** | **91,103.85** | **100.00** | |

## Dealers Price

The highest average dealer prices of granular urea were observed in Region IV (February - Php 2,723.00), in Region XIII (March – Php 2,847.29), and in CAR (April – Php 3,100.39). Region XI posted the lowest dealer price in January with Php 2,394.33/bag, while in March it was Region VII (Php 2,430.00/bag). Region XIII had the lowest in April at Php 2,728.01/bag (Table 14).

**Table 14. Regional dealer prices of granular urea, February to April 2022.**

| Region | Monitored Dealer 's Price (Php/50-kg bag) | | |
|---|---|---|---|
| | *Feb-22* | *Mar-22* | *Apr-22* |
| CAR | 2,502.56 | 2,646.90 | 3,100.39 |
| Region I | 2,483.93 | 2,673.21 | 3,014.85 |
| Region II | 2,498.58 | 2,609.69 | 3,033.85 |
| Region III | 2,448.77 | 2,511.06 | 2,957.98 |
| Region IV | 2,723.00 | 2,744.70 | 2,890.33 |
| Region V | 2,718.51 | 2,779.91 | 2,980.58 |
| Region VI | 2,564.22 | 2,606.12 | 2,775.74 |
| Region VII | 2,430.00 | 2,430.00 | - |
| Region VIII | 2,583.19 | 2,847.29 | 2,935.00 |
| Region IX | - | - | - |
| Region X | - | - | - |
| Region XI | 2,394.33 | 2,530.31 | 2,840.71 |
| Region XII | 2,432.06 | 2,500.38 | 2,804.69 |
| Region XIII | 2,494.70 | 2,495.98 | 2,728.01 |
| BARMM | - | - | - |
| **Average Price** | **2,529.67** | **2,629.32** | **2,914.74** |

## Import Price

Ammonium sulfate or ammosul has been sourced from only three countries over the past months, namely: China, Japan, and Taiwan. The highest volume of imports from February to April were China (37.36% or 1,067.27 MT). Both imports from Japan and Taiwan had substantial amounts of volume, each with around 31% of the total imported volume (Table 15).

In terms of price, ammosul from Japan are priced the lowest at $296.00/MT. Price of imports from Taiwan are slightly expensive at $300.00/MT, while the most expensive are from China ($355.76/MT).

**Table 15. Import price and volume of ammonium sulfate, February to April 2022.**

| Country | Total Volume (MT) | Volume (%) | Ave. Price per MT ($) |
|---|---|---|---|
| China | 1,067.27 | 37.36 | 355.76 |
| Japan | 889.75 | 31.14 | 296.58 |
| Taiwan | 900.00 | 31.50 | 300.00 |
| **Total** | **2,857.02** | **100.00** | |

## Dealers Price

On the local side, ammosul average dealer prices are averaged at Php 1,387.57/bag in February, Php 1,403.49/bag in March, and Php 1,439.89/bag in April. The highest dealer prices were recorded in Region V (February - Php 1,506.47), and CAR (March - Php 1,526.24 and April - Php 1,591.87) (Table 16). Lowest prices, on the other hand, were in Regions VIII and XI. In February, ammosul price in Region VIII averaged at Php 1,300.08/bag, while in March, Region XI average dealer price was only at PHP 1,292.32/bag and Php 1,302.22 in April.

**Table 16. Regional dealer prices of ammonium sulfate, February to April 2022.**

| Region | Monitored Dealer 's Price (Php/50-kg bag) | | |
|---|---|---|---|
| | *Feb-22* | *Mar-22* | *Apr-22* |
| CAR | 1,482.84 | 1,526.24 | 1,591.87 |
| Region I | 1,373.39 | 1,361.94 | 1,370.67 |
| Region II | 1,454.73 | 1,455.68 | 1,534.04 |
| Region III | 1,394.14 | 1,376.21 | 1,398.64 |
| Region IV | 1,473.01 | 1,465.40 | 1,498.33 |
| Region V | 1,506.47 | 1,504.67 | 1,509.40 |
| Region VI | 1,310.33 | 1,325.96 | 1,388.01 |
| Region VII | 1,347.91 | 1,453.54 | 1,582.02 |
| Region VIII | 1,300.08 | 1,447.24 | 1,516.70 |
| Region IX | 1,400.75 | 1,394.62 | 1,423.45 |
| Region X | 1,390.83 | 1,390.82 | 1,378.39 |
| Region XI | 1,312.40 | 1,292.32 | 1,302.22 |
| Region XII | 1,319.69 | 1,303.67 | 1,307.38 |
| Region XIII | 1,359.40 | 1,350.50 | 1,357.27 |
| BARMM | - | - | - |
| **Average Price** | **1,387.57** | **1,403.49** | **1,439.89** |

## Complete fertilizer (14-14-14)

### Import Price

Majority of complete fertilizer imports are from China (9,640.00 MT or 75.79%). The other is from Korea at 24.21% or 3,080.00 MT. Import price per MT is cheaper in Korea ($608.00/MT) than in China ($632.75/MT) (Table 17).

**Table 17. Import price and volume of complete fertilizer, February to April 2022.**

| Country | Total Volume (MT) | Volume (%) | Ave. Price per MT ($) |
|---|---|---|---|
| China | 9,640.00 | 75.79 | 632.75 |
| Korea | 3,080.00 | 24.21 | 608.00 |
| **Total** | **12,720.00** | **100.00** | |

### Dealers Price

National average prices of complete fertilizer increased within the three months, reaching Php 1,854.11 in February, Php 1,894.02 in March, and Php 2,103.21 in April (Table 18). However, complete fertilizer has been most expensive in Region V in February and March (Php 1,993.56 and Php 2,037.44, respectively). In the same months, the lowest prices of said fertilizer were recorded in Region XII (Php 1,715.38/bag in February and Php 1,740.50/bag in March). In April, the highest price was recorded in CAR (Php 2,706.80/bag), while Region XIII had the lowest at Php 1,896.06/bag.

**Table 18 . Regional dealer prices of complete fertilizer, February to April 2022.**

| Region | Monitored Dealer 's Price (Php/50-kg bag) | | |
|---|---|---|---|
| | *Feb-22* | *Mar-22* | *Apr-22* |
| CAR | 1,918.78 | 2,035.52 | 2,706.80 |
| Region I | 1,868.54 | 1,897.85 | 2,017.89 |
| Region II | 1,887.33 | 1,940.62 | 2,473.14 |
| Region III | 1,943.02 | 1,998.01 | 2,273.78 |
| Region IV | 1,983.44 | 2,008.36 | 2,123.93 |
| Region V | 1,993.56 | 2,037.44 | 2,206.26 |
| Region VI | 1,785.86 | 1,838.09 | 1,971.72 |
| Region VII | 1,792.04 | 1,890.39 | 2,011.59 |
| Region VIII | 1,813.84 | 1,921.57 | 2,023.06 |
| Region IX | 1,835.97 | 1,831.78 | 1,962.79 |
| Region X | 1,773.93 | 1,813.37 | 1,973.60 |
| Region XI | 1,731.15 | 1,758.64 | 1,906.68 |
| Region XII | 1,715.38 | 1,740.50 | 1,924.62 |
| Region XIII | 1,788.72 | 1,804.07 | 1,869.06 |
| BARMM | - | - | - |
| **Average Price** | **1,845.11** | **1,894.02** | **2,103.21** |

## Import Price

Ammonium phosphate or ammophos are imported from China (9,516 MT or 74.25%) and Korea (3,300.00 MT or 25.27%) during the months of February to April totaling to 12,816.00 MT (Table 19). However, the price in Korea ($490.00/MT) is much lower than China ($612/MT).

**Table 19. Import price and volume of ammonium phosphate, February to April 2022.**

| Country | Total Volume (MT) | Volume (%) | Ave. Price per MT ($) |
|---|---|---|---|
| China | 9,516.00 | 74.25 | 612.00 |
| Korea | 3,300.00 | 25.75 | 490.00 |
| **Total** | **12,816.00** | **100.00** | |

## Dealers Price

Local dealer prices of national ammophos are averaged at Php 1,631.03 (February), Php 1,684.92 (March), and Php 1,880.47 (April). The lowest prices were observed in Region XII (February - Php 1,464.19 and March - Php 1,496.17), and in REGION XIII in April at Php 1,644.18. On the other hand, Region V (from Php 1,879.05 in February to Php 1,913.04 in March) and CAR (Php 2,363.50 in Apri) posted the highest dealer prices of ammophos (Table 20).

**Table 20. Regional dealer prices of ammonium phosphate, February to April 2022.**

| Region | Monitored Dealer 's Price (Php/50-kg bag) | | |
|---|---|---|---|
| | *Feb-22* | *Mar-22* | *Apr-22* |
| CAR | 1,667.11 | 1,769.52 | 2,363.50 |
| Region I | 1,715.44 | 1,755.94 | 1,818.40 |
| Region II | 1,598.58 | 1,713.22 | 2,336.62 |
| Region III | 1,641.27 | 1,746.49 | 1,779.68 |
| Region IV | 1,840.94 | 1,867.46 | 1,908.04 |
| Region V | 1,879.05 | 1,913.04 | 2,053.57 |
| Region VI | 1,523.33 | 1,572.79 | 1,710.02 |
| Region VII | 1,605.71 | 1,693.36 | 1,833.39 |
| Region VIII | 1,509.20 | 1,628.42 | 1,710.12 |
| Region IX | 1,703.79 | 1,682.47 | 1,840.69 |
| Region X | 1,600.48 | 1,640.09 | 1,840.64 |
| Region XI | 1,535.46 | 1,547.34 | 1,697.51 |
| Region XII | 1,464.19 | 1,496.17 | 1,790.25 |
| Region XIII | 1,549.82 | 1,562.56 | 1,644.18 |
| BARMM | - | - | - |
| **Average Price** | **1,631.03** | **1,684.92** | **1,880.47** |

## Import Price

During February to April, muriate of potash (MOP) was imported from six countries, namely, Belarus, Canada, Jordan, Laos, Russia, and Uzbekistan (Table 21). The highest volume of imports came from Canada at 19,001.00 MT (55.76%) while the least is from Russia (1,000 MT) and Belarus (500 MT). Moreover, prices of MOP imports are the lowest in Jordan ($570.37/MT), followed by Canada ($583.33/MT).

**Table 21. Import price and volume of muriate of potash, February to April 2022.**

| Country | Total Volume (MT) | Volume (%) | Ave. Price per MT ($) |
|---|---|---|---|
| Belarus | 500.00 | 1.47 | 650.00 |
| Canada | 19,001.00 | 55.76 | 583.83 |
| Jordan | 6,433.72 | 18.88 | 570.37 |
| Laos | 4,308.10 | 12.64 | 703.50 |
| Russia | 1,000.00 | 2.93 | 695.00 |
| Uzbekistan | 2,835.50 | 8.32 | 602.33 |
| **Total** | **34,078.32** | **100.00** | |

## Dealers Price

Regarding national average dealers prices, MOP posted an average price of Php 1,792.00/bag (February), Php 1,832.91 (March), and Php 1,999.63 in April (Table 22).

The regional average dealers' lowest price of MOP was observed in Region II (February - Php 1,634.54 and March - Php 1,699.89), and in Region VIII (April - Php 1,853.63). In contrast, the highest dealer prices were noted in Region IX for the three-month period at Php 1,944.27 (February), Php 2,040.48 (March), and Php 2,178.78 in April.

**Table 22. Regional dealer prices of muriate of potash, February to April 2022.**

| Region | Monitored Dealer 's Price (Php/50-kg bag) | | |
|---|---|---|---|
| | *Feb-22* | *Mar-22* | *Apr-22* |
| CAR | 1,747.72 | 1,847.04 | 1,979.44 |
| Region I | 1,811.95 | 1,837.66 | 1,870.16 |
| Region II | 1,634.54 | 1,699.89 | 1,913.18 |
| Region III | 1,769.35 | 1,813.62 | 1,934.81 |
| Region IV | 1,928.29 | 1,937.56 | 1,998.22 |
| Region V | 1,781.17 | 1,871.10 | 1,995.21 |
| Region VI | 1,732.87 | 1,764.89 | 1,942.82 |
| Region VII | 1,806.67 | 1,838.38 | 2,037.60 |
| Region VIII | 1,745.79 | 1,793.25 | 1,853.63 |
| Region IX | 1,944.27 | 2,040.48 | 2,178.78 |
| Region X | 1,750.48 | 1,807.05 | 2,087.11 |
| Region XI | 1,797.46 | 1,798.32 | 2,123.10 |
| Region XII | 1,762.56 | 1,780.17 | 2,091.44 |
| Region XIII | 1,874.92 | 1,831.31 | 1,989.27 |
| BARMM | - | - | - |
| **Average Price** | **1,792.00** | **1,832.91** | **1,999.63** |

## Import Price

Imports of diammonium phosphate (DAP) were sourced from China (68.60% or 14,420 MT) and Vietnam (6,600 MT) from February to April (Table 23). Import prices from the two countries are lowest in China ($900/MT), while Vietnam is at $990/MT.

**Table 23. Import price and volume of diammonium phosphate, February to April 2022.**

| Country | Total Volume (MT) | Volume (%) | Ave. Price per MT ($) |
|---|---|---|---|
| China | 14,420.00 | 68.60 | 900.00 |
| Vietnam | 6,600.00 | 31.40 | 990.00 |
| **Total** | **21,020.00** | **100.00** | |

## Dealers Price

The national average dealer prices from February to April covers regions IV, VI, VII, VIII, IX, X, XI, XII, and XIII due to non-availability of this fertilizers in other regions (Table 24).

The lowest average dealer prices of DAP were obtained from Region VIII (February - Php 1,883.33); and in Region XIII (March - Php 2,405.81 and April - Php 2,430.00). Highest dealer prices were observed in Region VII (February - Php 2,788.30 and March - Php 2,980.74); and Region XI (April - Php 3,078.26).

**Table 24. Regional dealer prices of diammonium phosphate, February to April 2022.**

| Region | Monitored Dealer 's Price (Php/50-kg bag) | | |
|---|---|---|---|
| | *Feb-22* | *Mar-22* | *Apr-22* |
| CAR | - | - | - |
| Region I | - | - | - |
| Region II | - | - | - |
| Region III | - | - | - |
| Region IV | 2,408.75 | 2,600.83 | 2,906.25 |
| Region V | - | - | - |
| Region VI | 2,406.50 | 2,470.87 | 2,649.17 |
| Region VII | 2,788.30 | 2,980.74 | 3,063.85 |
| Region VIII | 1,883.33 | - | - |
| Region IX | 2,520.62 | 2,578.61 | 2,656.25 |
| Region X | 2,622.55 | 2,665.16 | 2,832.12 |
| Region XI | 2,498.31 | 2,571.11 | 3,078.26 |
| Region XII | 2,539.19 | 2,581.58 | 2,837.38 |
| Region XIII | 2,370.14 | 2,405.81 | 2,430.00 |
| BARMM | - | - | - |
| **Average Price** | **2,448.63** | **2,606.84** | **2,806.66** |

# Conclusions

This data shows that prices of each brand is influenced more by the fertilizer's country of origin and region. The same fertilizer grade with the same brand could have varying prices in the same month, depending on the country of origin and the region of sale. Variation in dealer's price due to branding is also affected by other factors, such as retail price history, competition, and product cost (Li and Volpe, 2013). Farmers also have a preference for fertilizer brands. According to a study by Briones (2021), the more vital driver of monthly price is the international market rather than local variations in demand.

## Import Price

While there are various sources of different fertilizers, cheaper fertilizers can be sourced from certain countries. Lowest prices of prilled urea comes from Uzbekistan ($648.00/MT), granular urea from China ($602.00/MT), ammosul from Japan ($296.58/MT), complete fertilizer from Korea ($608/MT), ammophos from Korea ($490/MT), MOP from Jordan ($570.37/MT), and DAP from China ($900/MT).

## Dealers Price

***Prilled Urea.*** On the regional dealer prices of prilled urea, the highest price in February was recorded in Region V (Php 2,673.523), Region VI in March (Php 2906.15), and April (Php 3,118.19). While the lowest prices were recorded in Region I in February (Php 2,380.00) and in Region XIII in March (Php 2,474.31) and April (Php 2,646.24).

Within the 3-month period, the highest average dealer price of prilled urea from Region VI at Php 2,814.83, while the lowest is from Region XIII at Php 2,536.11.

***Granular Urea.*** The highest dealer prices of granular urea were observed in Region IV in February (Php 2,723.00), in Region XIII in March (Php 2,847.29), and in CAR in April (Php 3,100.39). Region XI posted the lowest dealer price in January with Php 2,394.33 per bag, while in March it was Region VII with Php 2,430.00 per bag. Region XIII had the lowest dealer price in April at Php 2,728.01 per bag.

Granular urea average dealer prices in February to April was the highest in Region V with Php 2,826.33 and the lowest in Region VII with Php 2,430.00 (Table 25).

***Ammonium Sulfate.*** Meanwhile, ammosul dealer prices averaged at Php 1,387.57/bag in January, Php 1,403.49/bag in March, and Php 1,439.89/bag in April. The highest dealer prices of ammosul were recorded in Region V in February (Php 1,506.47) and in CAR in March (Php 1,526.24) and April (Php 1,591.87). Lowest prices, on the other hand, were in Regions VIII and XI. In January, ammosul price in Region VIII averaged at Php 1,300.08/bag, while in March, Region XI average dealer price was only at Php 1,292.32/bag and Php 1,302.22 in April.

CAR had the highest average ammosul dealer prices during the 3 months (Php 1,533.65), while Region XI had the lowest (Php 1,302.31) (Table 25).

***Complete.*** Complete fertilizer has been most expensive in Region V in February and March, with average prices of Php 1,993.56 and Php 2,037.44 respectively. In the same months, the lowest prices of complete fertilizer were recorded in Region XII, with Php 1,715.38/bag in February and Php 1,740.50/bag in March. In April, the highest price was recorded in CAR with Php 2,706.80, while Region XIII had the lowest with Php 1,896.06.

Average dealer price of complete fertilizer in CAR is the highest from February to April at Php 2,220.37, while in Region XII is the lowest at Php 1,793.50 (Table 25).

***Ammonium Phosphate.*** Local dealer prices of ammophos averaged at Php 1,631.03 in February, Php 1,684.92 in March, and PHP 1,880.47 in April. Lowest prices were observed in Region XII in February (Php 1,464.19) and March (Php 1,496.17), and in Region XIII in April at Php 1,644.18. On the other hand, Region V and CAR posted the highest dealer prices for ammophos. Prices in Region V averaged to PHP 1,879.05 in February and increased to Php 1,913.04 in March; in CAR, it posted Php 2,363.50 in April.

Ammophos in Region V has the highest average dealer price of ammophos during the three-month period, at Php 1,948.55. Region XII, on the other hand, had the lowest average at Php 1,583.54 (Table 25).

***Muriate of Potash.*** Regarding MOP dealer prices, it posted an average price of Php 1,792.00/bag in February, Php 1,832.91 in March, and PHP 1,999.63 in April. Lowest price of MOP was observed in Region II during February (Php 1,634.54) and March (Php 1,699.89), and in Region VIII in April (Php 1,853.63). In contrast, the highest dealer prices of MOP were recorded in Region IX for the entire three-month period. MOP dealer prices at Region IX were at Php 1,944.27 in February, Php 2,040.48 in March, and rose further to Php 2,178.78 in April.

Region IX recorded the highest average dealer price of MOP with Php 2,054.51, while Region II had the lowest with Php 1,749.20 (Table 25).

***Diammonium Phosphate.*** Comparison of DAP local dealer prices from February to April excludes regions I, II, III, V, and CAR from the analysis due to lack of data. With the data available, it shows that the lowest dealer prices of MOP were obtained from Region VIII in February, at Php 1,883.33; and in Region XIII in March (Php 2,405.81) and April (Php 2,430.00). Highest dealer prices of DAP, on the other hand, were observed in Region VII in February with Php 2,788.30, and March with Php 2,980.74; in Region XI in April with Php 3,078.26.

From February to March, the lowest average dealer price of DAP is from Region VIII at Php 1,883.33, while the highest is from Region VII at Php 2,944.30 (Table 25).

**Table 25. Average dealers' prices of the six major fertilizer grades per region, February to April 2022.**

| Region | Average Dealers Price Per Grade (Php) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Prilled urea | Granular urea | Ammosul | Complete | Ammophos | MOP | DAP |
| CAR | 2,785.01 | 2,749.95 | 1,533.65 | 2,220.37 | 1,933.38 | 1,858.07 | - |
| Region I | 2,713.46 | 2,723.99 | 1,368.67 | 1,928.09 | 1,763.26 | 1,839.92 | - |
| Region II | 2,743.15 | 2,714.04 | 1,481.48 | 2,100.36 | 1,882.81 | 1,749.20 | - |
| Region III | 2,741.12 | 2,639.27 | 1,389.66 | 2,071.60 | 1,722.48 | 1,839.26 | - |
| Region IV | 2,725.76 | 2,786.01 | 1,478.91 | 2,038.58 | 1,872.15 | 1,954.69 | 2,638.61 |
| Region V | 2,787.85 | 2,826.33 | 1,506.85 | 2,079.09 | 1,948.55 | 1,882.49 | - |
| Region VI | 2,814.83 | 2,648.70 | 1,341.43 | 1,865.22 | 1,602.05 | 1,813.53 | 2,508.85 |
| Region VII | 2,798.32 | 2,430.00 | 1,461.16 | 1,898.01 | 1,710.82 | 1,894.22 | 2,944.30 |
| Region VIII | 2,672.88 | 2,788.50 | 1,421.34 | 1,919.49 | 1,615.91 | 1,797.56 | 1,883.33 |
| Region IX | 2,619.84 | - | 1,406.27 | 1,876.85 | 1,742.32 | 2,054.51 | 2,585.16 |
| Region X | 2,679.04 | - | 1,386.68 | 1,853.63 | 1,693.74 | 1,881.55 | 2,706.61 |
| Region XI | 2,599.30 | 2,588.45 | 1,302.31 | 1,798.82 | 1,593.44 | 1,906.29 | 2,715.89 |
| Region XII | 2,567.23 | 2,579.04 | 1,310.25 | 1,793.50 | 1,583.54 | 1,878.06 | 2,652.72 |
| Region XIII | 2,536.11 | 2,572.90 | 1,355.72 | 1,820.62 | 1,585.52 | 1,898.50 | 2,401.98 |
| BARMM | - | - | - | - | - | - | - |

Average prices of different fertilizer grades show that fertilizers are generally more expensive in Region V and CAR, as the region are far from ports. On the contrary, fertilizer prices are generally lower in Regions XI, XII, and XIII due to close proximity to ports.

# Recommendations

Given that the country is import dependent, including that of the local manufacturers raw materials 90% imported, notwithstanding the archipelagic situation of our regions which entails high logistical cost, the following recommendations based on this assessment are as follows:

- The government should open up bilateral agreement with countries (G2G) producing fertilizers for lesser acquisition cost.
- Regional dealer's prices should be based on the source of origin of the fertilizer sold and logistical cost following calculated price matrix approved (Appendix 1).
- The incorporation of Suggested Retail Price (SRP) and Maximum Retail Price (MRP), as per PD 1144 S 1977, on the packs and bags should be institutionalized with the agreement between the Department of Agriculture (DA) and Department of Trade and Industry (DTI). However, the said retail prices should be computed based on the location where the fertilizers are locally sold.
- The adaption of the Calculation of Fertilizer Price Matrix at Various Cost Levels (Appendix 1) should be the basis for DA and DTI impose the SRP and MRP for every import entry.
- The inclusion of Batch and Lot Number in the packs and Bags to determine the entry of this fertilizer, its origin and landed cost.

**Other Important Consideration in Mitigating Higher Fertilizer Prices**

- Improve monitoring of fertilizer prices from imports to recording or dealer's prices. The improvement of monitoring of fertilizer imports should require more information from the importers to aid in better record-keeping and estimation of actual prices. This will result in more accurate data and help improve price studies in the future. Moreover, reporting of price values in averages only might not be an accurate representation of the dealer's prices given the differences in prices per region.
- To further improve the inventory monitoring through the fertilizer, watch system, batch number of importers and local producers should cover source of origin, manufacturing date, date of arrival, and landed cost (for imports).
- Importing companies be urged to coordinate and order bulk imports from certain countries, if possible, to avail of lower prices and discounts and save freight costs. Fertilizers imported at lower prices and less cost will result in cheaper fertilizers available for farmers in the market.
- Provide market assistance in regions where fertilizer is expensive to ensure supply and lower fertilizer prices by reducing additional transportation costs. Further market study should also be conducted at the regional level to assess the possibility of providing the same market intervention while conducting consultations with the stakeholders.
- The practice of balanced fertilization strategy should be introduced to lessen the impact of high fertilizer prices. The use of alternatives like organic, microbial, and biorational fertilizers, will also be explored to lessen dependence on chemical fertilizers.

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# APPENDICES

## Appendix 1. Average dealers' prices of the six major fertilizer grades per region, February to April 2022.

| | Calculation of Fertilizer Price Matrix at Various Cost Levels | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Import Price ($/MT)** | 100.00 | 150.00 | 200.00 | 250.00 | 300.00 | 350.00 | 400.00 | 450.00 | 500.00 | 550.00 | 600.00 | 650.00 | 700.00 | 750.00 | 800.00 | 900.00 | 1,000.00 |
| **Price/50 kg bag (Php)** | **250** | **375** | **500** | **625** | **750** | **875** | **1000** | **1125** | **1250** | **1375** | **1500** | **1625** | **1750** | **1875** | **2000** | **2250** | **2500** |
| Duties, Arastre, Wharfage, Checkerage, Stevedoring, Weighing, Trucking, and Port cost | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| **Landed Cost (Php)** | 340 | 465 | 590 | 715 | 840 | 965 | 1090 | 1215 | 1340 | 1465 | 1,590 | 1,715 | 1,840 | 1,965 | 2,090 | 2,340 | 2,590 |
| Profit/bag (8%) | 27 | 37 | 47 | 57 | 67 | 77 | 87 | 97 | 107 | 117 | 127 | 137 | 147 | 157 | 167 | 187 | 207 |
| Trucking | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Labor (loading/unloading) | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Warehousing | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Local tax | 8.50 | 11.63 | 14.75 | 17.88 | 21.00 | 24.13 | 27.25 | 30.38 | 33.50 | 36.63 | 39.75 | 42.88 | 46.00 | 49.13 | 52.25 | 58.50 | 64.75 |
| **Importer's price to distributor (Php)** | 412 | 550 | 688 | 826 | 964 | 1,102 | 1,240 | 1,379 | 1,517 | 1,655 | 1,793 | 1,931 | 2,069 | 2,207 | 2,345 | 2,622 | 2,898 |
| Profit/bag (8%) | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 | 143 | 154 | 166 | 177 | 188 | 210 | 232 |
| Trucking | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Labor (loading/unloading) | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Warehousing | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Local tax | 10.29 | 13.75 | 17.20 | 20.65 | 24.11 | 27.56 | 31.01 | 34.46 | 37.92 | 41.37 | 44.82 | 48.28 | 51.73 | 55.18 | 58.64 | 65.54 | 72.45 |
| **Distributors' price to dealer (Php)** | 491 | 644 | 796 | 949 | 1,101 | 1,254 | 1,407 | 1,559 | 1,712 | 1,865 | 2,017 | 2,170 | 2,322 | 2,475 | 2,628 | 2,933 | 3,238 |
| Profit/bag (8%) | 39 | 51 | 64 | 76 | 88 | 100 | 113 | 125 | 137 | 149 | 161 | 174 | 186 | 198 | 210 | 235 | 259 |
| Trucking | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Labor (loading/unloading) | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Local tax | 12.27 | 16.09 | 19.90 | 23.72 | 27.54 | 31.35 | 35.17 | 38.98 | 42.80 | 46.61 | 50.43 | 54.25 | 58.06 | 61.88 | 65.69 | 73.32 | 80.96 |
| **Dealer's price to farmers** | 568 | 737 | 906 | 1074 | 1243 | 1412 | 1580 | 1749 | 1918 | 2086 | 2,255 | 2,424 | 2,592 | 2,761 | 2,930 | 3,267 | 3,604 |
| Note: Exchange rate = Php 50.00 | | | | | | | | | | | | | | | | | |

## Appendix 2. Import prices per country of origin and dealer's prices per brand of prilled urea, February to April 2022.

| Month (Exchange Rate) | Country of Origin | Import Price ($/MT) | Estimated Price from Industry Matrix (Php) | | | Monitored Dealer's Price (Php) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Landed Cost | Importers' Price | Distributors' Price | | | | | |
| February 2022 (FX:51.2807) | Qatar | 739.53 | 1,986.18 | 2,230.73 | 2,500.96 | *Amigo* | *Bacphil* | *Viking* | | |
| | | | | | | 2,533.33 | 2,387.50 | 2,531.80 | | |
| | Uzbekistan | 648.00 | 1,751.49 | 1,971.40 | 2,214.40 | | | | | |
| | Vietnam | 942.50 | 2,506.60 | 2,805.80 | 3,136.40 | *Amigo* | *Harvester* | *Philphos* | | |
| | | | | | | 2,525.00 | 2,560.84 | 2,672.50 | | |
| March 2022 (FX:52.0740) | Indonesia | 778.43 | 2,116.79 | 2,375.06 | 2,660.44 | *Agro Planters* | *Amigo* | *Harvester* | *Philphos* | *Sunrise* |
| | | | | | | 2,800.00 | 2,638.81 | 2,677.66 | 2,773.75 | 2,450.00 |
| April 2022 (FX: 51.9760) | Indonesia | 603.00 | 1,657.08 | 1,867.07 | 2,099.11 | *Agro Planters* | *Amigo* | *Atlas* | *Harvester* | *Masagana* |
| | | | | | | 2,760.00 | 2,986.88 | 2,769.38 | 2,947.64 | 2,573.33 |
| | Qatar | 970.17 | 2,611.28 | 2,921.46 | 3,264.22 | *Amigo* | *Viking* | | | |
| | | | | | | 2,644.17 | 2,911.77 | | | |

## Appendix 3. Import prices per country of origin and dealer's prices per brand of granular urea, February to April 2022.

| Month (Exchange Rate) | Country of Origin | Import Price ($/MT) | Estimated Price from Industry Matrix (Php) | | | Monitored Dealers' Price (Php) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Landed Cost | Importers' Price | Distributors' Price | | | | | | | | |
| February 2022 (FX:51.2807) | China | 350.00 | 1,531.99 | 1,728.84 | 1,946.37 | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *DDDD Planters* | *Harvester* | *Swire* | |
| | | | | | | 2,405.00 | 2,558.89 | 2,400.00 | 2,610.42 | 2,510.00 | 2,466.67 | 2,347.03 | |
| | Malaysia | 677.13 | 2,663.67 | 2,979.35 | 3,328.19 | *Amigo* | *Harvester* | *Swire* | *Viking* | *Viking* | | | |
| | | | | | | 2,550.78 | 2,418.75 | 2,530.74 | 2,642.53 | 2,577.00 | | | |
| | Qatar | 734.02 | 2,860.50 | 3,196.85 | 3,568.52 | *Viking* | | | | | | | |
| | | | | | | 2,583.98 | | | | | | | |
| March 2022 (FX:52.0740) | Malaysia | 701.77 | 2,786.47 | 3,115.05 | 3,478.12 | *Amigo* | *Harvester* | *Swire* | *Viking* | | | | |
| | | | | | | 2,832.40 | 2,564.00 | 2,696.79 | 2,797.28 | | | | |
| April 2022 (FX: 51.9760) | China | 854.00 | 2,309.38 | 2,587.86 | 2,895.58 | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *DDD* | *Harvester* | *Planter's Gold* | *Swire* |
| | | | | | | 2,950.00 | 2,903.68 | 2,675.00 | 3,060.00 | 3,250.00 | 2,775.00 | 3,100.00 | 2,978.39 |
| | Indonesia | 766.18 | 2,081.16 | 2,335.68 | 2,616.93 | *Agro Planters* | *Amigo* | *Atlas* | *Harvester* | *Masagana* | | | |
| | | | | | | 2,760.00 | 2,986.88 | 2,769.38 | 2,947.64 | 2,573.33 | | | |
| | Qatar | 1,030.83 | 2,768.92 | 3,095.66 | 3,456.70 | *Amigo* | *Viking* | | | | | | |
| | | | | | | 2,644.17 | 2,911.77 | | | | | | |
| | Vietnam | 832.00 | 2,252.20 | 2,524.68 | 2,825.77 | | | | | | | | |

## Appendix 4. Import prices per country of origin and dealer's prices per brand of ammonium sulfate, February to April 2022.

| Month (Exchange Rate) | Country of Origin | Import Price ($/MT) | Estimated Price from Industry Matrix (Php) | | | Monitored Dealers' Price (Php) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Landed Cost | Importers' Price | Distributors' Price | | | | | | | | | | | | | | |
| February 2022 (FX:51.2807) | China | 395.00 | 1,102.79 | 1,254.59 | 1,422.32 | *Agro Planters* | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *DDDD* | *Harvester* | *Philphos* | *Planters* | *Planters Gold* | *Primera Planters* | *Sakura* | *Sunrise Planters* | *Swire* |
| | | | | | | 1,296.16 | 1,360.04 | 1,351.05 | 1,413.75 | 1,365.85 | 1,310.56 | 1,381.00 | 1,400.06 | 1,338.40 | 1,240.00 | 1,150.00 | 1,350.00 | 1,500.00 | 1,371.74 |
| | Japan | 330.00 | 936.13 | 1,070.43 | 1,218.82 | *Atlas* | *Amigo* | *Harvester* | *Marca Bulaklak* | *Swire* | | | | | | | | | |
| | | | | | | 1,355.59 | 1,449.06 | 1,305.83 | 1,462.58 | 1,390.00 | | | | | | | | | |
| | Taiwan | 315.00 | 897.67 | 1,027.93 | 1,171.86 | *Atlas* | *DDDD* | | | | | | | | | | | | |
| | | | | | | 1,341.33 | 1,315.00 | | | | | | | | | | | | |
| March 2022 (FX:52.0740) | China | 306.48 | 887.99 | 1,017.23 | 1,160.04 | *Agro Planters* | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *DDDD* | *Harvester* | *King Planters* | *Philphos* | *Planters* | *QGCF* | *Sakura* | *Sunrise* | *Swire* |
| | | | | | | 1,340.86 | 1,369.70 | 1,448.18 | 1,331.25 | 1,374.17 | 1,270.00 | 1,391.72 | 1,450.00 | 1,388.00 | 1,311.88 | 1,310.00 | 1,350.00 | 1,500.00 | 1,390.10 |
| | Japan | 247.50 | 734.42 | 847.53 | 972.52 | *Atlas* | *Marca* | | | | | | | | | | | | |
| | | | | | | 1,384.86 | 1,450.36 | | | | | | | | | | | | |
| | Taiwan | 250.00 | 740.93 | 854.72 | 980.47 | *Atlas* | *DDD* | *Harvester* | *Marca* | *Planters* | | | | | | | | | |
| | | | | | | 1,328.15 | 1,316.67 | 1,280.00 | 1,400.00 | 1,300.00 | | | | | | | | | |
| April 2022 (FX: 51.9760) | China | 365.79 | 1,040.63 | 1,185.89 | 1,346.41 | *Agro Planters* | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *DDDD* | *Harvester* | *Philphos* | *Planters* | *Sakura* | *Sunrise* | *Swire* | | |
| | | | | | | 1,301.34 | 1,420.11 | 1,439.37 | 1,337.50 | 1,370.14 | 1,325.00 | 1,384.02 | 1,525.08 | 1,326.25 | 1,365.00 | 1,670.00 | 1,379.63 | | |
| | Japan | 312.25 | 901.48 | 1,032.13 | 1,176.50 | *Amigo* | *Atlas* | *Marca* | | | | | | | | | | | |
| | | | | | | 1,554.27 | 1,380.87 | 1,469.44 | | | | | | | | | | | |
| | Taiwan | 335.00 | 960.60 | 1,097.46 | 1,248.69 | *Atlas* | *DDDD* | *Harvester* | *Marca* | *Planter's Choice* | | | | | | | | | |
| | | | | | | 1,382.88 | 1,320.00 | 1,370.00 | 1,418.33 | 1,305.42 | | | | | | | | | |

## Appendix 5. Import prices per country of origin and dealer's prices per brand of complete fertilizer, February to April 2022.

| Month (Exchange Rate) | Country of Origin | Import Price ($/MT) | Estimated Price from Industry Matrix (Php) | | | Monitored Dealers' Price (Php) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Landed Cost | Importers' Price | Distributors' Price | | | | | | | | | | | | | |
| Feb 2022 (FX:51.2807) | Korea | 608.00 | 1,648.93 | 1,858.07 | 2,089.17 | *Amigo* | *Atlas* | *Bacphil* | *Harvester* | *PhilAsia* | *Philphos* | | | | | | | |
| | | | | | | 1,841.72 | 1,901.67 | 1,826.00 | 1,891.79 | 1,926.20 | 1,830.00 | | | | | | | |
| Mar 2022 (FX:52.0740) | China | 576.50 | 1,568.17 | 1,768.82 | 1,990.55 | *Agro Planters* | *Amigo* | *Atlas* | *Danat* | *DDD* | *First Planters* | *Harvester* | *Philasia* | *Planter's Choice* | *Sunrise* | *Swire* | | |
| | | | | | | 1,702.50 | 2,050.00 | 1,996.67 | 1,973.33 | 1,833.33 | 2,000.00 | 1,866.07 | 1,925.00 | 1,723.75 | 1,913.33 | 1,917.08 | | |
| Apr 2022 (FX: 51.9760) | China | 689.00 | 1,880.57 | 2,114.03 | 2,372.01 | *Agro Planters* | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *DDD* | *First Planters* | *Harvester* | *Philphos* | *Planter's Choice* | *Sunrise* | *Swire* | *Turbo Prime* |
| | | | | | | 1,770.00 | 1,980.18 | 1,996.26 | 1,890.00 | 1,971.40 | 1,906.04 | 2,000.00 | 2,058.29 | 1,975.00 | 1,782.22 | 2,499.17 | 1,886.86 | 2,180.00 |

## Appendix 6. Import prices per country of origin and dealer's prices per brand of ammonium sulfate, February to April 2022.

| Month (Exchange Rate) | Country of Origin | Import Price ($/MT) | Estimated Price from Industry Matrix (Php) | | | Monitored Dealers' Price (Php) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Landed Cost | Importers' Price | Distributors' Price | | | | | | | | | | | | | | | |
| February 2022 (FX:51.2807) | China | 593.00 | 1,346.38 | 1,523.75 | 1,719.74 | *Agro Planters* | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *Danat Hi-Yield* | *DDDD* | *First Planters* | *Harvester* | *Marca Bulaklak* | *PhilAsia* | *Philphos* | *Planters* | *Primera Planters* | *Sunrise Planters* | *Swire* |
| | | | | | | 1,516.25 | 1,627.75 | 1,628.23 | 1,518.75 | 1,444.80 | 1,675.94 | 1,459.92 | 1,780.00 | 1,638.23 | 1,790.00 | 1,680.72 | 1,790.14 | 1,615.00 | 1,554.17 | 1,508.16 | 1,590.61 |
| | Korea | 490.00 | 1,610.47 | 1,815.57 | 2,042.21 | *Amigo* | *Bacphil* | *PhilAsia* | | | | | | | | | | | | | |
| | | | | | | 1,646.16 | 1,480.00 | 1,675.00 | | | | | | | | | | | | | |
| March 2022 (FX:52.0740) | No Data | | | | | | | | | | | | | | | | | | | |
| April 2022 (FX: 51.9760) | China | 631.00 | 1,729.84 | 1,947.48 | 2,187.96 | *Agro* | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *DDD* | *First Planters* | *Harvester* | *Marca* | *Philasia* | *Philphos* | *Planters* | *Primera* | *Sunrise* | *Swire* | |
| | | | | | | 1,607.50 | 1,805.93 | 1,787.24 | 1,730.92 | 1,719.66 | 1,674.17 | 1,860.00 | 1,866.67 | 2,061.67 | 1,796.88 | 1,898.20 | 1,710.00 | 1,895.00 | 2,325.02 | 1,801.88 | |

## Appendix 7. Import prices per country of origin and dealer's prices per brand of muriate of potash, February to April 2022.

| Month (Exchange Rate) | Country of Origin | Import Price ($/MT) | Estimated Price from Industry Matrix (Php) | | | Monitored Dealers' Price (Php) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Landed Cost | Importers' Price | Distributors' Price | | | | | | | |
| February 2022 (FX:51.2807) | Jordan | 627.50 | 2,491.99 | 2,789.65 | 3,118.56 | | | | | | | |
| | Lao PDR | 581.00 | 2,331.13 | 2,611.89 | 2,922.14 | *Amigo* | *Atlas* | *DDDD* | *Swire* | | | |
| | | | | | | 1,835.75 | 1,725.00 | 1,900.00 | 1,883.33 | | | |
| | Uzbekistan | 607.00 | 2,421.07 | 2,711.28 | 3,031.97 | | | | | | | |
| March 2022 (FX:52.0740) | Belarus | 650.00 | 2,604.62 | 2,914.10 | 3,256.08 | *Harvester* | | | | | | |
| | | | | | | 1,975.00 | | | | | | |
| | Canada | 567.65 | 2,315.32 | 2,594.43 | 2,902.84 | *Agro Planters* | *Amigo* | *Atlas* | *Bacphil* | *Marca* | *Planters* | *Primera* |
| | | | | | | 1,900.00 | 1,894.65 | 1,911.10 | 2,027.50 | 1,900.00 | 1,775.00 | 1,860.00 |
| | Jordan | 492.50 | 2,051.32 | 2,302.71 | 2,580.49 | *Swire* | | | | | | |
| | | | | | | 1,778.50 | | | | | | |
| | Uzbekistan | 580.00 | 2,358.71 | 2,642.37 | 2,955.82 | *DDDD* | | | | | | |
| | | | | | | 2,200.00 | | | | | | |
| April 2022 (FX: 51.9760) | Canada | 600.00 | 1,649.28 | 1,858.45 | 2,089.59 | *Amigo* | *Atlas* | *Bacphil* | | | | |
| | | | | | | 2,023.63 | 2,036.90 | 2,238.13 | | | | |
| | Jordan | 591.11 | 1,626.18 | 1,832.93 | 2,061.39 | *Swire* | | | | | | |
| | | | | | | 1,813.13 | | | | | | |
| | Laos | 826.00 | 2,236.61 | 2,507.45 | 2,806.74 | *Amigo* | *DDDD* | *Swire* | | | | |
| | | | | | | 1,961.13 | 2,150.00 | 2,100.00 | | | | |
| | Russia | 695.00 | 1,896.17 | 2,131.26 | 2,391.05 | *Harvester* | | | | | | |
| | | | | | | 2,045.54 | | | | | | |
| | Uzbekistan | 620.00 | 1,701.26 | 1,915.89 | 2,153.06 | *Agro Planters* | | | | | | |
| | | | | | | 1,950.00 | | | | | | |

## Appendix 8. Import prices per country of origin and dealer's prices per brand of diammonium phosphate, February to April 2022.

| Month (Exchange Rate) | Country of Origin | Import Price ($/MT) | Estimated Price from Industry Matrix (Php) | | | Monitored Dealers' Price (Php) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Landed Cost | Importers' Price | Distributors' Price | | | | | | | | | |
| **February 2022** (FX:51.2807) | No Data | | | | | | | | | | | | | |
| **March 2022** (FX:52.0740) | China | 900.00 | 2,433.33 | 2,724.83 | 3,046.94 | *Amigo* | *Atlas* | *Bacphil* | *DDDD* | *Harvester* | *Philphos* | *Planters* | | |
| | | | | | | 2,690.63 | 2,593.82 | 2,815.33 | 2,950.00 | 3,000.00 | 3,185.00 | 2,500.00 | | |
| **April 2022** (FX: 51.9760) | China | 900.00 | 2,428.92 | 2,719.96 | 3,041.55 | *Agro Planters* | *Amigo* | *Atlas* | *Bacphil* | *Danat* | *DDDD* | *Harvester* | *Philphos* | *Planters* |
| | | | | | | 3,334.03 | 2,786.42 | 2,688.63 | 2,384.00 | 2,230.00 | 2,706.25 | 2,818.19 | 3,263.33 | 2,525.63 |
| | Vietnam | 990.00 | 2,662.81 | 2,978.41 | 3,327.14 | *Harvester* | | | | | | | | |
| | | | | | | 3,160.00 | | | | | | | | |

## Appendix 9. Dealer's prices per brand of the six major fertilizer grades in Region I, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | Malaysia | Viking | | 2,965.00 | |
| | Qatar | Viking | | 2,970.00 | |
| Granular urea | China | Amigo | 2,200.00 | | |
| | | Atlas | 2,480.00 | | |
| | | Danat | 2,546.27 | 3,095.64 | |
| | | Harvester | 2,560.00 | 2,500.00 | |
| | | Swire | | 2,891.25 | |
| | Malaysia | Swire | | 2,970.75 | |
| | Qatar | Viking | | 3,147.00 | |
| Ammosul | China | Amigo | 1,300.00 | | |
| | | Atlas | 1,350.00 | | |
| | | Danat | 1,333.33 | 1,390.00 | |
| | | Harvester | 1,442.50 | | |
| | | Planter's Choice | 1,437.50 | | |
| | | Swire | | 1,360.19 | |
| | Indonesia | Harvester | | 1,288.50 | |
| | Japan | Atlas | | | |
| | | Marca Bulaklak | | 1,357.25 | |
| Complete | China | Atlas | | 1,950.00 | |
| | | Danat | | 2,050.00 | |
| | | Harvester | | 1,825.00 | |
| | | Swire | | 1,978.00 | |
| | Japan | Atlas | | 2,100.00 | |
| | Malaysia | Harvester | | 2,085.50 | |
| | | Swire | | 2,170.00 | |
| | Philippines | Philphos | | 2,111.00 | |
| | | Turbo Prime | | 1,792.50 | |
| Ammophos | China | Atlas | 1,571.00 | | |
| | | Danat | 1,900.00 | | |
| | | Harvester | 1,850.00 | | |
| | | Philphos | 1,900.00 | | |
| | | Swire | 1,782.54 | | |
| MOP | Canada | Marca Bulaklak | | 1,900.00 | |
| | China | Amigo | | 1,596.67 | |
| | Germany | Atlas | 1,808.34 | | |
| | | Harvester | 1,866.67 | | |
| | | Marca Bulaklak | 1,933.33 | | |
| | Japan | Atlas | | 1,777.50 | |

## Appendix 10. Dealer's prices per brand of the six major fertilizer grades in Region II, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | Japan | Sunrise Planters | | | |
| | Qatar | Viking | 2,528.56 | 2,570.56 | 3,031.97 |
| | Vietnam | Amigo | 2,525.00 | 2,800.00 | |
| | | Harvester | 2,560.84 | 2,631.67 | 2,983.33 |
| Granular urea | Canada | Amigo | 2,530.00 | 2,530.00 | 2,900.00 |
| | China | Atlas | 2,580.00 | 2,642.50 | 2,950.00 |
| | | Danat | 2,635.00 | 2,550.00 | 2,900.00 |
| | | Harvester | 2,460.00 | | |
| | Indonesia | Harvester | 2,500.00 | 2,850.00 | 3,078.06 |
| | Malaysia | Harvester | 2,460.00 | 2,528.00 | |
| | | Sunrise Planters | | | |
| | | Swire | 2,501.15 | 2,506.64 | 3,020.86 |
| | Qatar | Viking | 2,551.13 | 2,587.50 | 3,020.86 |
| Ammosul | China | Agro Planters | | 1,447.50 | |
| | | Amigo | 1,483.26 | 1,450.00 | 1,495.00 |
| | | Bacphil | 1,750.00 | | |
| | | Danat | 1,460.00 | 1,435.00 | 1,500.00 |
| | | Harvester | 1,474.82 | 1,476.67 | 1,530.95 |
| | | Marca Bulaklak | | | |
| | | Sunrise Planters | 1,500.00 | 1,500.00 | 1,670.00 |
| | | Swire | 1,446.94 | 1,472.10 | 1,547.86 |
| | Japan | Atlas | 1,372.50 | 1,650.00 | 1,670.83 |
| | | Marca Bulaklak | 1,485.00 | 1,425.00 | 1,475.00 |
| Complete | China | Danat | 1,888.75 | 1,896.67 | 2,190.00 |
| | | Harvester | 1,925.00 | | 2,690.00 |
| | | PhilAsia | | 1,925.00 | |
| | | Planter's Choice | 1,913.33 | | |
| | | Sunrise Planters | 1,875.00 | 1,913.33 | 2,499.17 |
| | | Swire | 1,880.00 | 1,925.00 | |
| | Korea | Amigo | 1,900.00 | 2,430.00 | |
| | | Harvester | 1,855.00 | 1,850.00 | |
| | | PhilAsia | 1,826.67 | 1,960.00 | 2,335.25 |
| | | Swire | | | 2,483.33 |
| | Malaysia | Harvester | 1,950.00 | 1,910.00 | |
| | Philippines | Atlas | 1,800.00 | 1,975.00 | |
| | | Philphos | 1,908.51 | 2,078.61 | |
| | | Takada | 1,383.33 | 1,395.00 | |
| | | Turbo Prime | 1,650.00 | 1,800.00 | |
| Ammophos | China | Amigo | 1,536.00 | | |
| | | Atlas | | 2,200.00 | |
| | | Danat | 1,600.00 | | |
| | | Harvester | | 1,680.00 | |
| | | Philphos | | | |
| | | Sunrise Planters | 1,596.32 | 1,907.86 | 2,325.02 |
| | | Swire | 1,498.00 | 1,510.00 | 2,125.00 |
| | Indonesia | Marca Bulaklak | | | |
| | | PhilAsia | | 2,177.50 | |
| | Japan | Marca Bulaklak | | | 1,800.00 |
| | Korea | PhilAsia | 1,600.00 | 2,200.00 | 2,200.00 |
| | Malaysia | Harvester | 1,545.00 | 1,782.50 | 2,516.39 |
| | Philippines | Atlas | | | 2,386.67 |
| | | Philphos | 1,635.00 | 1,767.22 | 2,235.56 |
| | Vietnam | Amigo | | 2,375.00 | 2,412.50 |
| MOP | Canada | Amigo | 1,716.67 | 1,808.33 | 1,960.00 |
| | | Atlas | 1,740.00 | 2,050.00 | 1,987.50 |
| | China | Atlas | 1,500.00 | 1,500.00 | 1,885.00 |
| | | Sunrise Planters | 1,500.00 | 1,500.00 | 1,800.00 |
| | Germany | Atlas | 1,500.00 | | |
| | | Marca Bulaklak | | 1,500.00 | 1,800.00 |
| | Japan | Swire | | 1,857.00 | |
| | Jordan | Sunrise Planters | 1,520.00 | | |
| | | Swire | 1,691.67 | | 1,976.25 |

## Appendix 11. Dealer's prices per brand of the six major fertilizer grades in Region III, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | China | Atlas | | | 3,200.00 |
| | | Swire | | | 3,200.00 |
| | Indonesia | Atlas | 2,050.00 | | |
| | Japan | Atlas | | 2,950.00 | 3,031.25 |
| | Norway | Viking | | 3,140.00 | 3,120.00 |
| | Qatar | Viking | 2,534.79 | 3,019.72 | 3,041.86 |
| Granular urea | China | Atlas | | 2,550.00 | 3,000.00 |
| | | Harvester | | 2,800.00 | 2,920.00 |
| | | Swire | 2,347.03 | 2,952.22 | 2,978.39 |
| | Indonesia | Harvester | 2,433.57 | 2,780.00 | |
| | Japan | Marca Bulaklak | 1,271.00 | | |
| | Malaysia | Amigo | 2,426.67 | | |
| | | Harvester | 2,400.00 | | 3,050.00 |
| | | Swire | 2,538.00 | 2,855.24 | 2,914.58 |
| | | Viking | 2,550.00 | | |
| | Qatar | Viking | 2,506.12 | 2,887.56 | 3,040.56 |
| Ammosul | China | Harvester | 1,359.75 | 1,340.67 | 1,311.50 |
| | | Swire | 1,437.24 | 1,402.39 | 1,391.20 |
| | | Amigo | 1,300.00 | | |
| | Japan | Atlas | 1,405.29 | 1,306.67 | 1,300.00 |
| | | Marca Bulaklak | 1,414.44 | 1,438.80 | 1,416.76 |
| | Philippines | Philphos | 1,636.67 | | |
| | Taiwan | Marca Bulaklak | | 1,400.00 | 1,418.33 |
| Complete | China | Atlas | 2014.285 | 2,350.00 | 2,350.00 |
| | | Danat | 1966.665 | - | - |
| | | Harvester | 1775 | 1,947.78 | 1,947.78 |
| | | Swire | 2,061.83 | 2,208.20 | - |
| | Japan | Atlas | 1,773.75 | 2,193.92 | 2,193.92 |
| | Korea | PhilAsia | 1,870.00 | 2,250.00 | 2,300.00 |
| | | Swire | - | - | 2,183.67 |
| | Malaysia | Swire | - | 2,205.56 | 2,205.56 |
| | Philippines | Atlas | 2,100.00 | 2,326.67 | 2,475.00 |
| | | Philphos | 1,907.11 | 2,133.64 | 2,254.15 |
| | | Turbo Prime | - | 1,835.00 | 2,093.33 |
| Ammophos | China | Amigo | 1,690.00 | | |
| | | Atlas | 1,687.97 | 1,762.50 | 1,887.50 |
| | | Danat | 1,800.00 | | |
| | | Harvester | | 1,730.00 | |
| | | Marca Bulaklak | 1,680.00 | | |
| | | PhilAsia | 1,461.43 | 1,618.75 | 1,618.75 |
| | | Philphos | 1,923.33 | 2,000.00 | 1,838.75 |
| | | Planter's Choice | 1,680.00 | | |
| | | Swire | 1,800.00 | 1,780.50 | 1,724.17 |
| | Japan | Atlas | 1,800.00 | | |
| | | Marca Bulaklak | | 1,800.00 | |
| | Korea | Amigo | 1,630.00 | 1,765.00 | 1,875.00 |
| | Philippines | Philphos | 1,750.00 | | |
| MOP | Canada | Amigo | | | 1,931.00 |
| | | Atlas | | | 2,100.00 |
| | | Marca Bulaklak | | | |
| | China | Planter's Choice | 1,450.00 | | |
| | | Swire | 1,625.00 | 1,794.44 | |
| | Germany | Atlas | 1,958.96 | | |
| | | Marca Bulaklak | | 2,008.33 | 2,091.50 |
| | Japan | Atlas | 1,600.00 | 1,700.00 | 1,958.00 |
| | | Marca Bulaklak | 1,693.75 | 1,708.33 | 1,864.00 |
| | | Swire | | 1,700.00 | |
| | Jordan | Amigo | | | 1,650.00 |

## Appendix 12. Dealer's prices per brand of the six major fertilizer grades in Region IV, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | Malaysia | Amigo | 2,500.00 | | |
| | Qatar | Viking | 2669.367 | 2,713.24 | 2,782.54 |
| Granular urea | China | Danat | 2,650.00 | 2,675.00 | 3,060.00 |
| | Indonesia | Harvester | 2,586.25 | 2,640.00 | 2,634.95 |
| | Korea | Amigo | 2,793.75 | 2,762.50 | 2,928.75 |
| | Malaysia | Amigo | 2,646.39 | | 2,741.35 |
| | | Swire | 2,645.79 | 2,697.32 | 2,743.39 |
| | | Viking | 2,577.00 | 2,797.28 | 2,884.87 |
| | Qatar | Viking | 2,738.50 | 2,775.00 | 2,930.00 |
| Ammosul | China | Amigo | 1,484.78 | 1,450.93 | 1,464.90 |
| | | Harvester | 1,575.00 | 1,600.00 | 1,600.00 |
| | | Sakura | 1,350.00 | 1,350.00 | 1,353.75 |
| | Indonesia | Harvester | 1,362.50 | 1,416.67 | 1,416.67 |
| | Japan | Atlas | 1,362.92 | 1,408.89 | 1,412.08 |
| | | Marca Bulaklak | 1,424.25 | 1,455.52 | 1,454.54 |
| | Malaysia | Swire | | | 1,575.00 |
| Complete | China | Danat | 1,870.00 | | |
| | | First Planters | 2,000.00 | 2,000.00 | |
| | | Harvester | 1,885.00 | | |
| | Japan | Atlas | 1,922.09 | 2,075.00 | 2,090.00 |
| | | Katana | 1,950.00 | 1,950.00 | 1,950.00 |
| | Korea | Amigo | 1,925.88 | 2,075.00 | 2,126.52 |
| | | Atlas | 1,901.67 | 1,950.00 | 2,091.86 |
| | | Harvester | 1,928.57 | | |
| | | PhilAsia | 1,995.00 | 2,230.00 | 2,234.17 |
| | Philippines | Atlas | 1,946.25 | 2,000.00 | 2,358.33 |
| | | Philphos | 2,187.50 | | |
| | | Turbo Prime | 1,858.33 | 1,848.61 | 1,957.08 |
| Ammophos | China | Amigo | 1,833.33 | 1,833.33 | 1,843.75 |
| | | Atlas | 1,784.17 | 1,850.00 | 1,885.00 |
| | | Danat | 1,703.75 | | |
| | | First Planter | 1,780.00 | 1,780.00 | 1,820.00 |
| | | Marca Bulaklak | 1,900.00 | 1,900.00 | 1,900.00 |
| | | Swire | 1,762.00 | 1,791.67 | 1,812.92 |
| | Japan | Atlas | 1,643.34 | | |
| | | Marca Bulaklak | | 2,000.00 | 2,000.00 |
| | Korea | Amigo | 1,788.75 | 1,857.98 | 1,865.93 |
| | | PhilAsia | 1,750.00 | 1,890.00 | 1,903.13 |
| | Philippines | Philphos | 2,000.00 | 1,800.00 | 1,800.00 |
| MOP | Canada | Amigo | 1,874.68 | 1,921.88 | 2,026.34 |
| | | Atlas | 1,879.17 | 1,875.00 | 1,912.50 |
| | China | Amigo | 1,950.00 | | |
| | Germany | Atlas | 1,868.75 | | |
| | | Marca Bulaklak | | 1,891.25 | 1,891.25 |
| | Japan | Atlas | 2,100.00 | 2,060.00 | 2,038.75 |
| | | Marca Bulaklak | 1,979.86 | 2,075.00 | 2,075.00 |
| | Laos | Amigo | 1,836.99 | 1,890.56 | 1,943.56 |
| | | Swire | 1,883.33 | 1,925.00 | 2,081.25 |
| DAP | China | Amigo | | 2,650.00 | |

## Appendix 13. Dealer's prices per brand of the six major fertilizer grades in Region V, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | Indonesia | Amigo | 2,700.00 | 2,820.00 | 2,878.75 |
| | | Philphos | | 2,992.50 | 2,992.50 |
| | Malaysia | Amigo | 2,680.00 | | 2,680.00 |
| | Qatar | Viking | 2,622.19 | 2,806.77 | 2,942.32 |
| | Vietnam | Amigo | | 2,680.00 | |
| Granular Urea | Indonesia | Amigo | 2,982.50 | 2,795.00 | 2,918.75 |
| | | Harvester | 2,598.89 | 2,791.67 | 2,903.75 |
| | Malaysia | Amigo | | 2,955.00 | 3,138.75 |
| | Qatar | Viking | 2,732.15 | 2,866.39 | 2,970.03 |
| Ammosul | Japan | Amigo | 1,598.13 | 1,486.67 | 1,554.27 |
| | | Atlas | 1,450.00 | | 1,470.83 |
| | | Marca Bulaklak | 1,526.65 | 1,575.22 | 1,525.82 |
| Complete | China | Amigo | | | 2,206.08 |
| | | Harvester | 1,870.00 | | |
| | Japan | Atlas | 1,980.00 | 2,246.25 | 2,342.84 |
| | Korea | Amigo | | 2,179.42 | |
| | | PhilAsia | 2,013.13 | 2,049.00 | 2,105.56 |
| | Philippines | Atlas | | 2,218.21 | 2,279.92 |
| | | Philphos | 2,000.00 | 2,025.00 | 2,025.00 |
| | | Turbo Prime | 1,658.34 | 1,830.00 | 1,951.25 |
| Ammophos | China | Amigo | 1,831.66 | 1,962.50 | 2,086.14 |
| | | Atlas | 1,898.96 | 1,960.00 | 1,965.83 |
| | | Marca Bulaklak | | | 2,223.33 |
| | | PhilAsia | 1,900.00 | | 1,975.00 |
| | | Philphos | 1,880.00 | | |
| | Japan | Amigo | | 1,853.33 | |
| | | Atlas | 1,856.75 | | 2,250.00 |
| | Korea | Amigo | 1,885.00 | | 1,856.67 |
| | Philippines | Marca Bulaklak | | | 2,227.78 |
| | | Philphos | 1,862.50 | 1,920.00 | 1,922.50 |
| MOP | Canada | Amigo | 1,670.56 | 1,920.00 | 1,862.50 |
| | | Atlas | 1,945.83 | | 2,051.11 |
| | Indonesia | Philphos | | | 2,430.00 |
| | Japan | Atlas | 2,057.50 | 2,030.00 | 2,065.42 |
| | Jordan | Swire | | | |
| | Russia | Harvester | | | 2,050.00 |
| DAP | China | Amigo | 2,428.08 | | |
| | | Atlas | 2,496.04 | | |
| | | Bacphil | 2,500.00 | | |
| | | Philphos | 2,925.00 | | |

## Appendix 14. Dealer's prices per brand of the six major fertilizer grades in Region VI, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | China | Atlas | 2,435.00 | | |
| | | Harvester | | 3,020.00 | |
| | | Philphos | 2,580.00 | | |
| | | Planter's Choice | 2,400.00 | | |
| | Indonesia | Harvester | 2,370.00 | | |
| | Qatar | Viking | 2,424.17 | 3,310.00 | |
| Granular | China | Amigo | 2,610.00 | | |
| | | Atlas | 2,616.67 | | |
| | | Planter's Choice | | | 3,100.00 |
| | Indonesia | Amigo | | | 3,055.00 |
| | | Harvester | | | 3,070.00 |
| | Japan | Atlas | | 2,950.00 | 2,950.00 |
| | Malaysia | Amigo | 2,579.29 | 2,709.80 | 2,748.42 |
| | | Swire | | 2,650.00 | 2,650.00 |
| | Philippines | Viking | 2,650.00 | | |
| | Qatar | Amigo | | 2,600.00 | 2,716.67 |
| | | Viking | | 2,600.00 | 3,160.00 |
| Ammosul | China | Amigo | 1,318.39 | 1,391.42 | 1,364.97 |
| | | Atlas | 1,330.00 | 1,422.50 | 1,435.00 |
| | | Bacphil | 1,220.00 | 1,350.00 | 1,350.00 |
| | | Harvester | 1,300.00 | | 1,520.00 |
| | | Philphos | 1,330.00 | | |
| | | Planter's Choice | 1,240.00 | | |
| | | Primera Planters | 1,150.00 | | |
| | Japan | Atlas | 1,295.97 | 1,406.67 | 1,337.78 |
| Complete | China | Amigo | 1,845.38 | | 1,935.08 |
| | | Bacphil | | | 1,890.00 |
| | | Harvester | 1,710.00 | | |
| | | Philphos | 2,000.00 | | |
| | | Swire | | 1,850.00 | |
| | Japan | Atlas | | 1,875.00 | 2,007.50 |
| | Korea | Amigo | 1,794.75 | 1,891.80 | |
| | Malaysia | Harvester | 1,757.50 | 1,800.00 | 1,818.75 |
| | Philippines | Atlas | 1,777.57 | 1,920.09 | 1,865.93 |
| | Vietnam | Amigo | | 2,395.00 | 2,395.00 |

| | | | | | |
|---|---|---|---|---|---|
| | Canada | Amigo | | 1,600.00 | 1,600.00 |
| | China | Amigo | 1,483.00 | 1,661.11 | 1,632.81 |
| | | Atlas | 1,535.63 | 1,582.50 | 1,637.94 |
| | | Bacphil | 1,550.00 | | 1,700.00 |
| | | Philphos | 1,730.00 | | |
| | | Primera Planters | 1,500.00 | | 1,895.00 |
| | Korea | Amigo | 1,486.00 | 1,646.83 | 1,677.30 |
| | | Bacphil | | 1,700.00 | 1,750.00 |
| MOP | Canada | Amigo | 1,849.00 | 1,853.50 | 1,903.01 |
| | | Atlas | 1,713.03 | 1,852.50 | 1,942.50 |
| | | Bacphil | 1,700.00 | | |
| | | Primera | 1,780.00 | 1,860.00 | |
| | China | Amigo | 1,716.03 | 1,882.00 | 1,882.00 |
| | | Bacphil | | | |
| | | Primera | | | 1,885.00 |
| DAP | China | Amigo | 2,737.92 | 2,414.17 | 2,358.89 |
| | | Atlas | 2,794.17 | 2,630.21 | 2,593.23 |
| | | Bacphil | | | 1,875.00 |
| | | Philphos | | 3,470.00 | 3,510.00 |

## Appendix 15. Dealer's prices per brand of the six major fertilizer grades in Region VII, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | China | Agro | 2,430.00 | | |
| | | Amigo | 2,635.00 | 2,791.67 | 2,858.85 |
| | | Atlas | | 3,100.00 | 3,150.00 |
| | | Philphos | 2,596.67 | 3,100.00 | 2,926.88 |
| | | Primera | 2,452.50 | | |
| | Indonesia | Amigo | 2,591.54 | 2,840.00 | 2,980.00 |
| | | Harvester | 2,575.00 | 2,950.00 | 2,927.08 |
| | | Philphos | | | 3,008.00 |
| | Korea | Philphos | | 2,725.00 | |
| | Qatar | Viking | | 3,075.00 | 2,765.28 |
| | Saudi Arabia | Bacphil | 2,500.00 | 2,600.00 | |
| | | Amigo | | | 2,987.50 |
| | Vietnam | Philphos | 2,672.50 | | |
| Ammosul | China | Amigo | 1,362.50 | | 1,635.00 |
| | | Atlas | 1,287.50 | 1,423.75 | 1,572.03 |
| | | Philphos | 1,400.00 | | 1,700.00 |
| | Indonesia | Harvester | 1,286.67 | | |
| | Japan | Atlas | 1,336.50 | | |
| Complete | China | Amigo | 1,725.00 | 2,200.00 | 1,901.25 |
| | | Atlas | 1,802.29 | 1,867.00 | 1,946.28 |
| | | Philphos | | | 1,825.00 |
| | | Primera | 1,850.00 | | |
| | Indonesia | Harvester | 1,825.00 | | 2,350.00 |
| | Japan | Atlas | 1,783.33 | | |
| | Korea | Amigo | 1,790.00 | 1,840.00 | 1,998.00 |
| | | Atlas | | 1,930.00 | 1,960.63 |
| | | Philphos | 1,830.00 | 2,150.00 | 2,350.00 |
| | Taiwan | Atlas | 1,770.00 | | |
| | Vietnam | Philphos | 2,010.00 | 1,850.00 | 2,050.00 |
| Ammophos | China | Amigo | 1,578.34 | | 1,822.50 |
| | | Atlas | 1,617.36 | | 1,691.50 |
| | | Philphos | 1,750.00 | | 2,250.00 |
| | Korea | Amigo | | | |
| | | Primera Planters | 1,608.33 | | |
| | Malaysia | Philphos | 1,500.00 | | |
| | Vietnam | Atlas | 1,542.50 | | |
| MOP | Canada | Amigo | 1,738.34 | 1,900.00 | 2,057.29 |
| | | Atlas | 1,791.25 | | 2,127.29 |
| | China | Amigo | 1,450.00 | | |
| | | Atlas | 1,900.00 | 1,850.00 | 1,950.00 |
| | Laos | Atlas | 1,725.00 | | |
| | Philippines | Philphos | | | 2,187.50 |
| DAP | China | Amigo | | 3,000.00 | 3,231.25 |
| | | Atlas | | | 3,300.00 |
| | | Philphos | | 2,900.00 | 3,016.67 |

## Appendix 16. Dealer's prices per brand of the six major fertilizer grades in Region IX, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | China | Amigo | 2,350.00 | | |
| | | Atlas | 2,480.56 | 2,462.22 | 2,410.21 |
| | | Philphos | 2,581.13 | 2,651.39 | 2,786.82 |
| | | Planters | | | 2,980.00 |
| | Indonesia | Amigo | 2,470.00 | 2,470.00 | 2,510.00 |
| | | Atlas | | | |
| | | Harvester | 2,496.81 | 2,504.17 | 2,680.63 |
| | | Philphos | | 2,555.00 | 2,753.13 |
| | Japan | Atlas | | | |
| | Philippines | Amigo | 2,500.00 | | |
| | | Atlas | 2,610.00 | | |
| | | Planters | 2,100.00 | | |
| Granular urea | Indonesia | Philphos | | 2,750.00 | |
| Ammosul | China | Atlas | 1,373.33 | 1,340.00 | 1,421.67 |
| | | Harvester | 1,380.00 | 1,360.00 | 1,345.83 |
| | | Philphos | 1,435.30 | 1,388.00 | 1,425.25 |
| | | Planters | 1,250.00 | 1,310.00 | 1,330.00 |
| | | QGFC | | 1,310.00 | |
| | Indonesia | Harvester | 1,400.00 | 1,340.00 | 1,390.00 |
| | | Philphos | | | |
| | Japan | Atlas | 1,245.00 | 1,200.00 | 1,200.00 |
| | | Harvester | | | |
| | Philippines | Atlas | 1,269.17 | 1,340.00 | 1,400.42 |
| | | Philphos | 1,458.10 | 1,444.45 | 1,437.78 |
| | | Swire | 1,500.00 | | |
| | Qatar | Bacphil | | | 1,340.00 |
| | Taiwan | Atlas | | | 1,450.00 |
| Complete | China | Atlas | 1,680.00 | | 2,000.00 |
| | | Harvester | | 1,805.00 | 1,805.00 |
| | | Philphos | 1,900.00 | | 2,100.00 |
| | Philippines | Amigo | | | 1,750.00 |
| | | Atlas | 1,776.57 | 1,831.25 | 1,869.99 |
| | | Philphos | 1,922.33 | 1,915.77 | 1,986.41 |
| Ammophos | China | Atlas | 1,607.50 | | 1,855.00 |
| | | Danat | 1,460.00 | | |
| | | Harvester | | | 1,866.67 |
| | | Philphos | 1,682.50 | 1,700.00 | 1,834.06 |
| | | Planters | | | 1,850.00 |
| | Indonesia | Harvester | | 1,565.00 | 1,707.50 |
| | Philippines | Atlas | 1,648.06 | 1,590.50 | 1,712.75 |
| | | Philphos | 1,772.85 | 1,754.31 | 1,832.46 |
| | Taiwan | Philphos | | | |
| MOP | Belarus | Harvester | 1,996.67 | | 1,981.25 |
| | Canada | Atlas | 1,887.50 | 2,015.00 | 2,314.17 |
| | | Harvester | | | |
| | | Planters | 1,650.00 | | |
| | China | Atlas | 1,990.00 | 1,961.25 | 1,961.25 |
| | | Harvester | 1,917.92 | 2,007.50 | 2,472.50 |
| | Indonesia | Harvester | 1,987.50 | | |
| | | Philphos | 2,750.00 | 2,430.00 | |
| | Philippines | Atlas | 1,945.00 | | |
| | | Philphos | 2,003.34 | 2,260.00 | 2,140.00 |
| | Russia | Harvester | 1,950.00 | 2,050.00 | |
| DAP | China | Amigo | 2,577.12 | | |
| | | Atlas | 2,558.75 | | |
| | | Danat | 2,670.00 | | |
| | | Harvester | 2,699.17 | 2,650.00 | 2,675.00 |
| | Philippines | Atlas | | 2,700.00 | 2,700.00 |
| | | Planters | | 2,615.00 | 2,615.00 |
| | Russia | Planters | | 2,600.00 | 2,600.00 |

## Appendix 17. Dealer's prices per brand of the six major fertilizer grades in Region X, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | China | Atlas | 2,507.86 | | 2,792.67 |
| | | Danat | 2,399.38 | | 2,622.50 |
| | | Philphos | 2,605.00 | | |
| | | Swire | 2,542.25 | | |
| | Indonesia | Agro Planters | 2,470.00 | | |
| | | Amigo | 2,407.00 | | 2,774.17 |
| | | Atlas | 2,520.00 | | |
| | | Bacphil | 2,260.00 | | |
| | | Harvester | 2,543.93 | | |
| | Norway | Viking | 2,482.50 | | 2,520.00 |
| | Qatar | Bacphil | | | 2,813.33 |
| | | Viking | | | |
| | Vietnam | Agro Planters | | | 3,181.67 |
| | | Harvester | | | 2,839.67 |
| Ammosul | China | Agro Planters | 1,270.00 | | 1,240.00 |
| | | Amigo | 1,275.72 | | 1,300.00 |
| | | Atlas | 1,401.82 | | 1,367.56 |
| | | Danat | 1,370.00 | | 1,311.67 |
| | | Harvester | 1,339.81 | | 1,343.33 |
| | | Philphos | 1,460.00 | | 1,450.00 |
| | | Swire | 1,300.00 | | 1,260.00 |
| | Taiwan | Atlas | | | 1,339.29 |
| | | Harvester | | | 1,370.00 |
| Complete | China | Agro Planters | 1,645.00 | | 1,800.00 |
| | | Amigo | 1,677.50 | | 1,915.56 |
| | | Atlas | | | |
| | | Danat | | | 1,810.00 |
| | | Harvester | 1,847.50 | | 1,950.00 |
| | Philippines | Atlas | 1,767.88 | | 1,974.93 |
| | | Philphos | 1,912.50 | | 2,040.00 |
| Ammophos | China | Agro Planters | | | 1,690.00 |
| | | Amigo | 1,498.00 | | 1,788.18 |
| | | Atlas | 1,536.08 | | 1,803.39 |
| | | Danat | 1,480.83 | | 1,630.00 |
| | | Harvester | 1,697.50 | | |
| | | Philphos | 1,775.00 | | 1,670.00 |
| | Korea | Amigo | 1,493.33 | | 1,788.18 |
| | | Atlas | | | 1,831.78 |
| | Philippines | Atlas | 1,525.00 | | |
| | | Philphos | 1,713.33 | | 1,886.67 |
| MOP | Belarus | Harvester | 1,658.33 | | 2,020.00 |
| | Canada | Amigo | 1,709.14 | | 2,209.44 |
| | | Atlas | 1,751.54 | | 1,933.96 |
| | China | Bacphil | 1,760.00 | | |
| | | Atlas | | | |
| DAP | Canada | Atlas | 2,450.00 | | |
| | China | Agro Planters | 2,584.50 | | |
| | | Amigo | 2,583.89 | | 2,816.86 |
| | | Atlas | 2,460.00 | | 2,520.00 |
| | | Bacphil | 2,796.25 | | |
| | | Danat | | | 2,230.00 |
| | | DDDD Planters | 2,654.17 | | |
| | | Harvester | 2,544.30 | | 2,765.00 |
| | Indonesia | Agro Planters | 2,535.00 | | |
| | | Harvester | 2,700.00 | | |
| | | Atlas | 2,425.00 | | |
| | Philippines | Agro Planters | 2,075.00 | | |
| | Uzbekistan | DDDD | 2,800.00 | | |

## Appendix 18. Dealer's prices per brand of the six major fertilizer grades in Region XI, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | Canada | Atlas | 2,435.00 | 2,680.00 | 2,790.00 |
| | China | Agro Planters | 2,500.00 | | 2,850.00 |
| | | Amigo | 2,460.24 | 2,700.00 | 2,549.17 |
| | | Atlas | 2,469.17 | | |
| | | Danat | 2,400.00 | 2,700.00 | |
| | | DDDD Planters | 2,519.44 | 2,675.00 | 2,853.75 |
| | | Harvester | 2,440.64 | 2,670.00 | 2,586.67 |
| | | Philphos | 2,420.00 | | |
| | | Swire | | | 2,775.00 |
| | | Viking | | 2,900.00 | 3,000.00 |
| | Indonesia | Agro Planters | 2,455.14 | 2,800.00 | 2,833.33 |
| | | Amigo | 2,455.00 | 2,600.00 | 2,658.33 |
| | | Harvester | 2,313.33 | 2,475.00 | 2,682.50 |
| | Japan | Atlas | 2,500.00 | | |
| | | Swire | 2,450.00 | | |
| | Malaysia | Amigo | 2,444.00 | | |
| | | Harvester | | 2,650.00 | 2,610.00 |
| | | Swire | 2,450.00 | 2,610.00 | |
| | Qatar | Bacphil | 2,387.50 | 2,600.00 | |
| | | Viking | 2,470.67 | 2,658.05 | |
| | Philippines | Agro Planters | | | |
| | | Amigo | | | 2,600.00 |
| | Qatar | Amigo | | | 2,675.00 |
| | | Bacphil | | | 2,761.67 |
| | | Harvester | | | 2,545.00 |
| | | Viking | | | 2,831.88 |
| | Uzbekistan | Amigo | | | 2,480.00 |
| Granular urea | Canada | Amigo | | 2,560.00 | |
| | China | Bacphil | 2,400.00 | 2,700.00 | 2,675.00 |
| | | DDDD Planters | 2,510.00 | | 3,250.00 |
| | | Harvester | 2,380.00 | 2,800.00 | 2,625.00 |
| | Indonesia | Agro | 2,380.00 | 2,600.00 | 2,760.00 |
| | Japan | Swire | 2,450.00 | | |
| | Malaysia | Harvester | 2,396.25 | 2,600.00 | 2,780.00 |
| | | Swire | | | |
| | | Viking | | | |
| | Philippines | Harvester | 2,520.00 | | |
| | Qatar | Viking | 2,495.00 | 2,500.00 | 2,787.50 |
| | Uzbekistan | Agro Planters | | | 2,290.00 |
| Ammosul | Canada | Atlas | 1,322.86 | 1,270.00 | 1,281.67 |
| | China | Agro Planters | 1,308.81 | 1,300.00 | 1,320.27 |
| | | Amigo | 1,374.89 | 1,275.00 | 1,312.50 |
| | | Atlas | 1,357.50 | 1,700.00 | 1,312.00 |
| | | Bacphil | 1,335.00 | 1,320.00 | 1,330.00 |
| | | Danat | | | |
| | | DDDD Planters | 1,310.56 | 1,270.00 | 1,325.00 |
| | | Harvester | 1,339.77 | 1,268.00 | 1,305.31 |
| | | King Planters | | 1,450.00 | |
| | | Philphos | 1,375.00 | | |
| | | Swire | 1,347.50 | | |
| | Indonesia | Agro | 1,308.67 | 1,300.00 | 1,280.00 |
| | | Amigo | | | |
| | | Harvester | 1,365.00 | | |
| | Japan | Atlas | 1,349.59 | 1,350.00 | 1,336.67 |
| | | Swire | 1,390.00 | | |
| | Korea | Amigo | | 1,650.00 | |
| | | Bacphil | | | 1,260.00 |
| | Malaysia | Atlas | 1,220.00 | 1,250.00 | 1,250.00 |
| | | Swire | 1,350.00 | | |
| | Philippines | Agro | 1,280.00 | | |
| | Qatar | Bacphil | 1,350.00 | 1,350.00 | |
| | Taiwan | Atlas | 1,341.67 | | |
| | | DDDD | 1,315.00 | 1,346.67 | 1,320.00 |
| | | Harvester | | 1,280.00 | |
| Complete | Canada | Atlas | 1,523.34 | | 1,950.00 |
| | | Amigo | | | |
| | China | Agro Planters | 1,620.00 | 1,700.00 | |
| | | Amigo | 1,761.39 | 1,900.00 | 1,843.75 |
| | | Atlas | 1,675.64 | | 1,820.00 |
| | | Bacphil | 1,370.00 | | |
| | | Danat | 1,777.64 | | 1,936.59 |
| | | DDDD Planters | 1,713.89 | 1,833.33 | 1,906.04 |
| | | Harvester | 1,695.33 | 1,917.00 | 1,896.53 |
| | | Philphos | | | 2,000.00 |
| | | Swire | 1,710.00 | 1,860.00 | 1,856.88 |
| | | Turbo Prime | | | 2,180.00 |
| | Indonesia | Agro | 1,596.67 | | |
| | | Amigo | | | 1,850.00 |
| | | Harvester | 1,820.00 | | |
| | Japan | Atlas | 1,778.33 | 1,900.00 | |
| | | Swire | 1,750.00 | | |
| | Korea | Amigo | 1,788.33 | 1,865.00 | 2,000.00 |
| | | Bacphil | 1,802.00 | 1,868.00 | 1,971.00 |
| | | Harvester | | | 1,875.00 |

**cont. Appendix 18.**

| | | | | | |
|---|---|---|---|---|---|
| Complete | Malaysia | Atlas | 1,640.00 | 1,920.00 | 1,920.00 |
| | | Swire | 1,737.22 | | |
| | Philippines | Agro | 1,612.78 | 1,766.67 | 1,780.13 |
| | | Amigo | 1,780.00 | | |
| | | Atlas | 1,750.00 | 1,950.00 | |
| | Taiwan | Atlas | 1,700.00 | | |
| | Vietnam | Harvester | 1,670.00 | 1,950.00 | 1,950.00 |
| Ammophos | Canada | Atlas | 1,653.33 | 1,650.00 | |
| | | Amigo | 1,850.00 | | |
| | | Swire | 1,490.00 | | |
| | China | Agro Planters | 1,516.25 | | 1,525.00 |
| | | Amigo | 1,571.67 | | 1,700.00 |
| | | Atlas | 1,596.67 | | 1,628.75 |
| | | Bacphil | 1,487.50 | 1,757.00 | 1,761.83 |
| | | Danat | 1,404.13 | | 1,823.66 |
| | | DDDD Planters | 1,459.92 | 1,595.00 | 1,674.17 |
| | | Harvester | 1,578.96 | 1,300.00 | |
| | | Philphos | | | |
| | | Swire | 1,452.57 | 1,685.00 | 1,641.67 |
| | Indonesia | Agro | 1,510.00 | | |
| | Japan | Atlas | 1,477.50 | 1,300.00 | 1,460.00 |
| | | Swire | 1,470.00 | | |
| | Korea | Amigo | | 1,750.00 | 1,661.25 |
| | | Bacphil | 1,480.00 | | |
| | Malaysia | Atlas | 1,420.00 | 1,420.00 | 1,520.00 |
| | | Swire | 1,453.75 | | |
| | Philippines | Agro | 1,527.29 | 1,563.33 | 1,585.42 |
| | | Amigo | 1,400.00 | | 1,750.00 |
| | Vietnam | Harvester | 1,670.00 | 1,600.00 | 1,700.00 |
| MOP | Belarus | Harvester | 1,880.00 | | 1,900.00 |
| | Canada | Agro | | 1,900.00 | 1,917.50 |
| | | Amigo | 1,759.17 | 2,045.00 | |
| | | Atlas | 1,766.83 | 1,968.50 | 1,966.82 |
| | | Bacphil | 1,847.50 | 2,250.00 | 2,450.00 |
| | China | Agro | 1,817.50 | | 1,812.50 |
| | | Amigo | 1,878.54 | 1,580.00 | 2,180.83 |
| | | Atlas | 1,787.49 | 2,200.00 | 2,225.00 |
| | | Bacphil | 1,850.00 | | |
| | | Danat | 1,800.00 | | 1,900.00 |
| | | DDDD Planters | 1,795.00 | 1,780.00 | 2,090.83 |
| | | Harvester | 1,776.67 | | 1,987.50 |
| | Indonesia | Agro | 1,850.84 | | |
| | | Amigo | | | 2,000.00 |
| | Japan | Atlas | 1,825.00 | 1,895.00 | 2,032.18 |
| | Jordan | DDDD | 1,900.00 | | |
| | Korea | Amigo | | 1,830.00 | 1,850.00 |

| | | | | | |
|---|---|---|---|---|---|
| MOP | Laos | DDDD | | 1,925.00 | 2,150.00 |
| | Philippines | Agro | 1,720.00 | | |
| | | Amigo | | | 1,830.00 |
| | | Bacphil | | | 2,400.00 |
| | | Danat | 1,750.00 | | |
| | Qatar | Amigo | | | |
| | | Viking | | | 1,850.00 |
| | Russia | Agro | | | |
| | | Harvester | 1,786.67 | | |
| | Taiwan | Atlas | | 1,860.00 | |
| | Usbekistan | Agro | 1,870.00 | | 1,950.00 |
| | | DDDD | | 2,200.00 | |
| | Vietnam | Atlas | | | 1,790.00 |
| DAP | Canada | Amigo | | | 4,300.00 |
| | China | Agro Planters | | | 3,334.03 |
| | | Amigo | 2,621.25 | 2,800.00 | 2,895.00 |
| | | Atlas | 2,583.33 | | 2,460.00 |
| | | Bacphil | | 2,815.33 | 2,893.00 |
| | | DDDD | | 2,950.00 | 2,706.25 |
| | | Harvester | | 3,350.00 | 3,014.58 |
| | Japan | Amigo | 2,489.44 | | |
| | | Atlas | | 2,650.00 | 2,775.00 |
| | Laos | DDDD | | 2,800.00 | |
| | Philippines | Agro | 2,518.15 | 2,950.00 | 3,025.00 |
| | | Atlas | | | |
| | Qatar | Bacphil | 2,601.11 | | |
| | Vietnam | Harvester | | 3,390.00 | 3,160.00 |

## Appendix 19. Dealer's prices per brand of the six major fertilizer grades in Region XII, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | Canada | Amigo | 2,410.11 | | |
| | China | Agro Planters | | | 2,901.11 |
| | | Atlas | 2,432.48 | 2,465.83 | 2,770.83 |
| | | Danat | 2,363.67 | 2,478.47 | 2,780.06 |
| | Indonesia | Agro | 2,419.96 | | |
| | | Amigo | | 2,549.13 | 2,807.22 |
| | | Danat | 2,363.58 | | |
| | | Harvester | 2,378.89 | 2,439.11 | 2,839.73 |
| | | Sunrise | | 2,450.00 | |
| | Qatar | Bacphil | | 2,473.33 | 2,666.67 |
| | | Viking | 2,404.67 | 2,527.99 | 2,818.60 |
| Granular urea | Malaysia | Harvester | | | 2,818.16 |
| | | Swire | 2,438.03 | 2,500.81 | |
| | | Viking | | | |
| | Philippines | Viking | 2,447.50 | | 2,821.04 |
| | Qatar | Viking | 2,525.00 | 2,546.67 | |
| Ammosul | China | Agro Planters | 1,309.67 | 1,272.19 | |
| | | Amigo | 1,290.83 | 1,305.00 | |
| | | Atlas | 1,338.46 | | |
| | | Bacphil | | 1,305.00 | 1,320.00 |
| | | Danat | 1,300.07 | 1,297.50 | 1,298.75 |
| | | Harvester | 1,298.33 | | 1,298.53 |
| | | Swire | 1,327.01 | 1,325.71 | 1,319.44 |
| | Japan | Harvester | 1,305.83 | | |
| | Philippines | Agro Planters | 1,308.31 | | |
| | Taiwan | Atlas | 1,324.98 | 1,294.79 | |
| | | DDDD | | 1,286.67 | |
| | | Planters Choice | | | 1,290.83 |
| Complete | China | Danat | 1,743.23 | | 1,949.03 |
| | | Harvester | | 1,880.00 | 1,965.00 |
| | | Swire | 1,712.46 | 1,767.14 | 1,916.84 |
| | Korea | Amigo | 1,759.17 | 1,742.92 | 1,939.05 |
| | | Bacphil | 1,850.00 | 1,876.67 | 2,016.88 |
| | Philippines | Agro Planters | 1,661.67 | 1,712.45 | 1,868.40 |
| | | Atlas | 1,720.76 | 1,806.95 | 1,928.66 |
| Ammophos | China | Atlas | 1,479.44 | 1,511.67 | 1,799.58 |
| | | Danat | 1,434.26 | 1,521.56 | 1,794.99 |
| | | Swire | 1,452.67 | 1,527.15 | 1,763.81 |
| | Korea | Amigo | | 1,655.00 | 1,809.67 |
| | Philippines | Agro Planters | 1,480.63 | 1,541.19 | 1,754.43 |
| MOP | Canada | Amigo | 1,769.58 | 1,789.97 | 2,100.99 |
| | | Atlas | 1,759.51 | 1,785.20 | 2,034.32 |
| | | Bacphil | 1,739.75 | 1,805.00 | 2,026.25 |
| | Japan | Harvester | 1,755.21 | | |
| | Russia | Harvester | 1,766.25 | 1,768.33 | 2,041.08 |
| DAP | China | Agro Planters | | | |
| | | Amigo | 2,600.00 | 2,635.83 | 2,728.13 |
| | | Atlas | 2,108.33 | 2,725.00 | 2,833.53 |
| | | Planters Choice | 2,625.00 | | |
| | Japan | Atlas | 2,620.00 | | |
| | Philippines | Agro Planters | | 2,658.33 | 2,906.58 |
| | Qatar | Bacphil | | 2,611.67 | 2,802.08 |

## Appendix 20. Dealer's prices per brand of the six major fertilizer grades in Region XIII, February to April 2022.

| Grade | Country of Origin | Brand | Monitored Dealers' Price (Php) | | |
|---|---|---|---|---|---|
| | | | Feb-22 | Mar-22 | Apr-22 |
| Prilled urea | China | Atlas | 2,366.80 | 2,455.62 | 2,668.35 |
| | | Danat | 2,580.00 | | |
| | | Planters | | 2,452.50 | 2,260.00 |
| | Indonesia | Agro Planters | 2,400.00 | | |
| | | Amigo | 2,583.33 | 2,553.75 | 2,722.50 |
| | | Atlas | 2,366.80 | | |
| | | Harvester | | | 2,980.00 |
| | | Masagana | 2,450.00 | | |
| | Japan | Atlas | 2,366.80 | | |
| | Philippines | Amigo | 2,533.33 | | |
| | Qatar | Viking | 2,600.00 | 2,543.33 | 2,571.00 |
| Granular urea | China | Atlas | | 2,522.50 | 2,811.04 |
| | | Harvester | | 2,461.67 | 2,780.00 |
| | Indonesia | Atlas | 2,650.00 | 2,523.13 | 2,769.38 |
| | | Masagana | | 2,447.50 | 2,573.33 |
| | | Planters | 2,510.00 | | |
| | Malaysia | Swire | | | |
| | | Viking | | | |
| | Qatar | Amigo | | 2,447.29 | 2,571.67 |
| | | Viking | 2,540.00 | 2,458.33 | 2,491.67 |
| Ammosul | China | Agro Planters | | 1,343.75 | 1,343.75 |
| | | Amigo | 1,350.00 | 1,345.83 | 1,353.33 |
| | | Atlas | 1,369.75 | 1,354.65 | 1,527.94 |
| | | Bacphil | 1,350.00 | 1,350.00 | 1,350.00 |
| | | Harvester | 1,300.00 | 1,305.00 | 1,416.67 |
| | | Planters | 1,333.19 | 1,313.75 | 1,322.50 |
| | Indonesia | Amigo | 1,362.50 | 1,345.00 | 1,353.33 |
| | | Bacphil | | | |
| | | Masagana | | 1,400.00 | 1,285.00 |
| | Japan | Atlas | 1,385.82 | | |
| | Taiwan | Atlas | 1,366.75 | 1,361.51 | 1,359.35 |
| | | DDDD | | | |
| | | Planters Choice | | 1,300.00 | 1,320.00 |
| Complete | China | Agro Planters | | 1,705.00 | 1,740.00 |
| | | Amigo | | | 1,959.58 |
| | | Atlas | 1,797.50 | 1,819.69 | 1,865.02 |
| | | Harvester | | 1,821.67 | |
| | | Planters | 1,712.50 | | |
| | | Planters Choice | | 1,723.75 | 1,782.22 |
| | | Swire | 1,725.00 | 1,831.25 | |
| | | Xian Bee | | | |
| | Japan | Atlas | 1,779.65 | | |
| | Korea | Amigo | 1,770.70 | 1,818.13 | |
| | | Planters Choice | | 1,805.00 | |
| | | Swire | | | 1,881.25 |
| | | Xian Bee | | | 1,600.00 |
| Ammophos | China | Atlas | 1,538.54 | 1,570.04 | 1,666.24 |
| | | Agro Planters | | 1,550.00 | |
| | | Danat Hi-Yield | 1,600.00 | 1,622.50 | 1,630.00 |
| | | Planters | 1,550.00 | 1,554.38 | 1,570.00 |
| | | Swire | | 1,496.88 | 1,675.00 |
| | Japan | Atlas | 1,521.16 | | |
| | Korea | Amigo | 1,593.89 | 1,662.97 | 1,759.44 |
| | Taiwan | Atlas | 1,650.00 | | |
| MOP | Canada | Amigo | 1,832.78 | 1,918.54 | 2,226.06 |
| | | Atlas | 1,823.79 | 1,831.47 | 1,973.24 |
| | | Planters | 1,750.00 | 1,775.00 | |
| | China | Atlas | | | |
| | | Harvester | 1,900.00 | 1,900.00 | 1,900.00 |
| | | Planters Choice | 1,823.33 | 1,820.00 | 1,863.13 |
| | Japan | Atlas | 1,837.38 | | |
| DAP | China | Amigo | | 2,643.75 | 2,688.38 |
| | | Atlas | | 2,426.25 | 2,425.00 |
| | | Planters Choice | | 2,500.00 | 2,525.63 |


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