DIVERSIFICATION, INTENSIFICATION, & INTEGRATION

Stories outstanding rice-based farmers tell

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Photo by: Jayson Berto

Director's Note

Over the years, PhilRice has been at the forefront of research and development (R&D) work on rice. We can confidently say that we have greatly contributed to the quest for agricultural solutions. A wide range of technologies – from varieties, to machines, to pest and disease control measures, to nutrient management – are now available and ready for use.

Our major concern is how to translate these technologies into development outcomes. As we all know, food security is a pressing issue in our country nowadays. While we have improved our capacity to produce rice, we have been continually hounded by issues such as high input cost. We produce a kilogram of paddy (unmilled) rice at a cost of roughly PhP12. This is relatively high knowing that our neighboring countries, such as Vietnam, only spend PhP7 to produce a kilogram of paddy rice. Our fear is that soon, when the country's quantitative restriction for rice will be lifted, cheaper imported rice will penetrate our local market, leaving our local farmers to the mercy of foreign competitors.

We at PhilRice will continue to strive harder to generate science-based strategies to safeguard and enhance our country's rice production as well as our labor force, the farmers. We acknowledge the fact that most of our farmers who produce our food have lived below the poverty threshold with an average annual income per hectare of measly PhP50,000 from rice.

Our current efforts look into how we can address this. This project particularly documents how some rice-based farmers have become successful in farming. We have closely studied their practices and seen how we could upscale them to create a bigger impact. We regard these farmers as our partners in this field. We have high respect for their hard work, innovativeness, and resilience. We hope that this material showcasing their stories will inspire and attract more people to engage in rice-based farming.

Sailila E. Abdula, PhD
Acting Executive Director
PhilRice

Photo by: Jayson Berto

Foreword

Our quest for food security calls not only for technology but also for inspiration from people who have achieved much success in pursuing it.

Farmers featured in this publication practice farming in a way that provides more food and income for their families. This book particularly demonstrates their diversified, intensified, and integrated farming system. Let us see how they have done it and how it has led them to achieving household food security. Let us also take heed of their struggles, how they have overcome them, and eventually how they have succeeded.

Some issues in agriculture are associated with behavioral rather than purely mechanical problems. Reports suggest that our farmers generally have declining interest in farming, to the extent of discouraging their children from following in their footsteps. This is a sad reality, knowing that we need more people to grow the food for our growing population.

We therefore hope that these stories will inspire and encourage more people, particularly the young, to engage in a farming career.

Along with stirring interest in farming, what we need is a total transformation especially of our farm labor force. Our aim is to change farmers' mindsets (from being mere crop producers to agri-preneurs), enhance their farming system (from monoculture to polyculture), advance their mode of operations (from mainly production to enterprise-oriented farming), and lastly equip them with the right values.

We believe that food security requires proper mindsets, attitudes, practices, and values to make it happen. And with these stories of rice-based farmers as inspiration, we surely will.

Emmanuel F. Piñol
Secretary
Department of Agriculture

Preface

Why are farmers poor? Is agriculture really a dead end? These ontological inquiries need a closer attention to understand and address their existence. The growing incidence of people, particularly the youth, losing interest in farming might have taken place as a consequence of these unanswered issues. The average age of rice farmers is 57. The need for a new generation of farming enthusiasts to continue their work is a pressing concern. If not addressed, this will threaten our country's future agricultural industry. Social issues, such as unemployment, malnutrition, and food insecurity also emerge as a result of such predicaments. Things have obviously become complicated. This intricate situation has to be addressed holistically rather than in a piecemeal manner.

Academes, research institutions, and other organizations have attempted to deal with this increasingly complex set of issues. Major investments have been made into research and development (R&D). Technologies are generated and extension programs are designed and rolled out. And yet the problems persist.

This initiative offers a different lens to understand and address the situation by looking at how agriculture is done on the ground, that is, how farmers carry out farming using the technologies and practices they either devised or acquired from various sources.

It is part of the knowledge sharing and learning (KSL) project of the PhilRice Development Communication Division, which aims to document, analyze, and share knowledge profiles of various actors in the agriculture innovation system.

In a form of photo essays and video interviews (DVD attached), we have featured outstanding rice-based farmers here who are recognized by *Gawad Saka*, an annual commendation given the Department of Agriculture to successful farmers and fisherfolks in various sectors. We have closely analyzed their practices, and packaged them

Photo by: Jayson Berto

in a way that would inspire other farmers, the youth, and other stakeholders. These farmers have started from humble beginnings but have strived hard to make it big in farming. Interestingly, they embrace a common set of practices, namely: diversification, intensification, and integration. Farm diversification involves the conduct of several farm enterprises such as crop production, livestock raising, and custom services. Intensification, on the other hand, is the productive use of time and space in their farming activities. Lastly, integration refers to creating a complementary relationship between and among the farm enterprises in a close-loop system fostering better resource-use efficiency. Moreover, by integration, it also means intergration of production with inputs production such as fertilizer, energy, and seeds (backward integration) as well as with processing, marketing, and byproduct utilization (forward integration). With this three-way approach, farmers achieve financial and food security at the household level. It has also enhanced their resilience because of the multiple sources of income offered.

At PhilRice, we have focused on the promotion of this diversified, intensified, and integrated rice-based farming system. Specifically, we encourage farmers to engage in various farm enterprises with rice as the resource base. For instance, farmers or their families can use rice straw as substrates in producing mushrooms, or as feeds for cattle and buffaloes. The rice bran, weeds, and kitchen wastes serve as rations for native pigs.

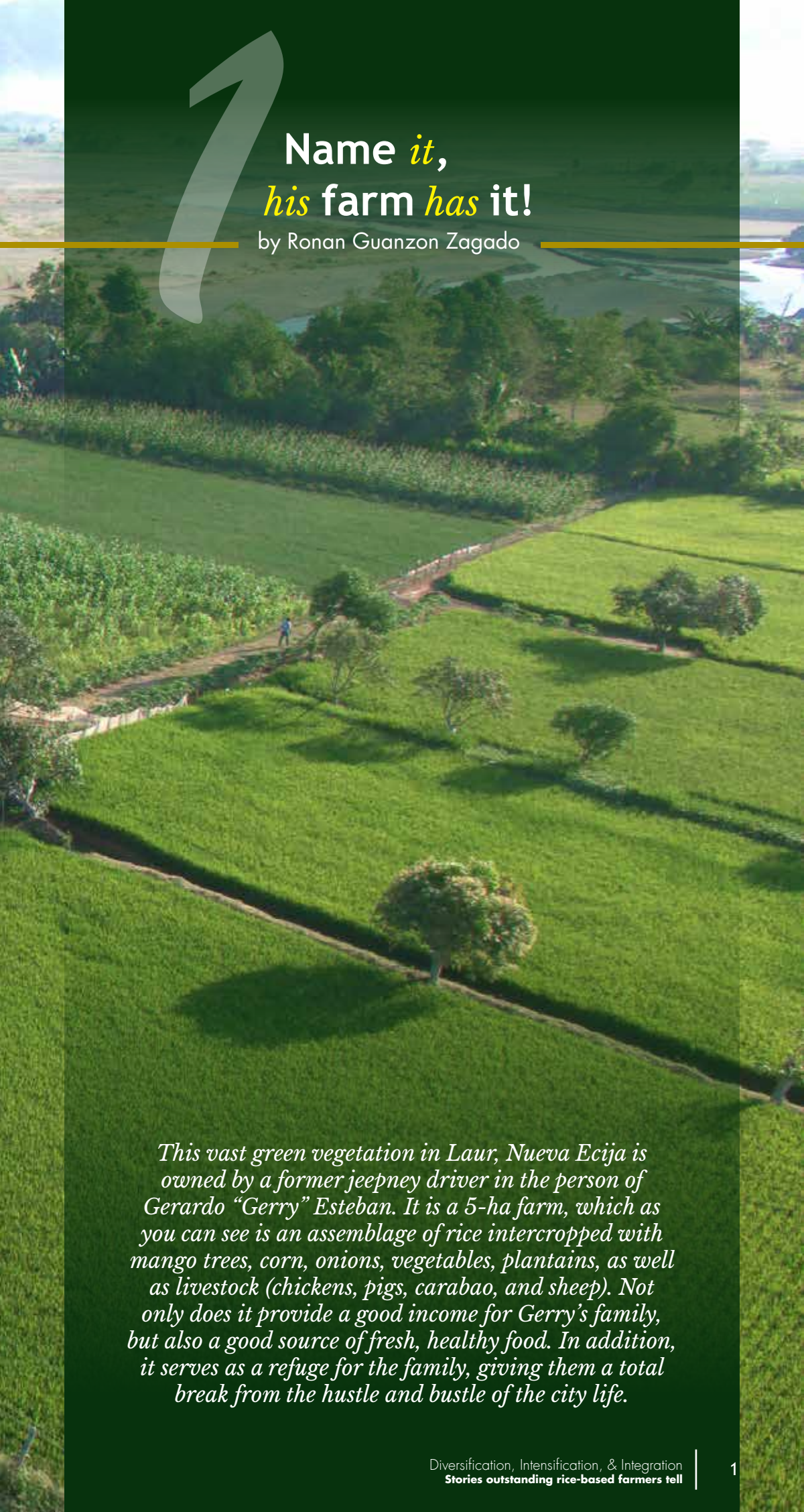
We hope that this piece of work will bring inspiration and drive action towards diversified, intensified, and integrated rice-based farming, which we believe is the key towards achieving food security in our country.

Ronan G. Zagado
Project Leader

Photo by: Harry Layaoen

Name *it*, *his* farm *has* it!

by Ronan Guanzon Zagado



This vast green vegetation in Laur, Nueva Ecija is owned by a former jeepney driver in the person of Gerardo "Gerry" Esteban. It is a 5-ha farm, which as you can see is an assemblage of rice intercropped with mango trees, corn, onions, vegetables, plantains, as well as livestock (chickens, pigs, carabao, and sheep). Not only does it provide a good income for Gerry's family, but also a good source of fresh, healthy food. In addition, it serves as a refuge for the family, giving them a total break from the hustle and bustle of the city life.

From a jeepney driver to a farmer. Gerry used to live in Manila where he worked as a jeepney driver. When he got married and started to have kids, he struggled to make ends meet for his family on the meager income he earned. Hence, they decided to go back to his hometown in Laur, Nueva Ecija.

A journey back to farming. Gerry's family in the province worked on a farm for a living, so farming was not new to him. He recollected that when he was young he helped his parents with farm chores. He only went to Manila to study though failed to finish a degree, and ended up having a family of his own.

His father was instrumental to his re-integration into farming. He started working on a rented 1-ha rice farm that his father entrusted to him. He managed the farm with the guidance of his father. Through the help of their local municipal agriculturist, he was able to equip himself with some farming technologies by attending various agri-related seminars. He also acquired useful farming tips by listening to regular agricultural radio programs. Conversing with his fellow farmers likewise helped him gather some farm techniques.

Photos by:
(left & upper right circle) Marvin Lim
(lower right circle) Irish Duran

His strategies. Firstly, he never stops learning. He always keeps himself updated with the latest technologies in farming. Secondly, he grows what is in demand in the market. For example, he used to grow rice only, but when onions became a hit in the market he also ventured into them. There came a time when Gerry realized that growing several crops and raising some livestock was but a wise and profitable way to farm. Hence, his third strategy is diversification. With this, he utilizes every space on his farm productively.

Photos by: (upper left) Jayvee Masilang, (middle left and right) Irish Duran, & (lower left) Marvin Lim

However, with diversification applied to his farm, Gerry noticed a growing accumulation of farm biomass. To manage this, he applied technologies such as vermi composting. With this technology, he converts his crop stubbles and livestock manure into organic fertilizer, and then applies this fertilizer back to his farm. He calls this fourth strategy integration. With this, all agricultural activities on his farm are well intertwined with each other. For example, the rotten vegetables serve as feed for his pigs and free-range chickens. The farm animal manures, on the other hand, are processed into organic fertilizer. The forage for his sheep, which is the napier grass, is grown right on his farm. Almost all the necessary ingredients for their daily food, such as herbs, are also available on the farm.

Photos by: (leftmost & middle rightmost) Irish Duran, (lower circle, upper & lower rightmost) Marvin Lim, (upper circle) courtesy of FutureRice, & (middle circle) Jayvee Masilang

Photos by: Marvin Lim

His farming practices. Gerry practices two cycles of crop rotation on his farm per year. During the dry season (December to May), he grows rice, papaya and vegetables such as corn, onions, tomato, eggplant, and chili pepper. During the wet season (June to November), he grows rice (a different variety) and mung beans. He said crop rotation is important to avoid pest buildup.

50 KGS

Gerry admitted that he tried growing rice three times a year in the past. However, the yield was not good, so he went back to two. To further manage pest infestation, Gerry grows flowery and colorful ornamental plants as borders around his farm. He averred that colorful ornamental plants attract beneficial insects. "They are a good pest control because they feed on insect pests ravaging the crops on the farm," he added. Moreover, Gerry also used greenhouses for off-season vegetable production.

Time, hard work, and passion as vital in farming. Gerry wakes up before dawn. While tuning in to his favorite radio station for a dose of morning news, he prepares rations for his farm animals. You won't see him slacking around. He is always on the go and his hands are always busy. His morning is a routine of farm walks, monitoring his crops and farm animals. Farming is not easy, according to Gerry. It comes with a complex set of challenges such as fluctuating market prices and natural calamities. It can be daunting at times. Hence, it requires a lot of patience. It is important that you love what you do, Gerry advised.

Photos by: Irish Duran

All efforts paid off. Starting from a rented 1-hectare farm, Gerry is now managing his own 5-hectare farm plus another rented 3-hectares used to expand his rice production. He has also acquired a truck and farm machinery (hand tractor and solar dryer). He and his wife have been also able to send their children to better schools. Most importantly, they are food self-sufficient: they do not need to buy their food. Because of Gerry's successful venture in farming, he was named the 2014 National *Gawad Saka* Awardee for Integrated Rice-based Farming.

Maximizing farm *even to the* last square meter

by Jayvee Palor Masilang

Behind the majestic, breath-taking Mayon Volcano sits a beautiful, green, rice-based farm. The owner of the farm is Edgar Pesebre from Polangui, Albay. Edgar began his journey in farming in 2002 after being an employee for 15 years. Starting with a 0.44-hectare farm, he was able to expand it to 8 hectares. Now at 49, he continuously improves his farm by using modern and appropriate technologies.

Photo by: Jayvee Masilang

Rice as the main enterprise. Edgar utilizes his farm even to the last square meter. Of the 8 hectares, 6 are used for seed production while the remaining 2 are for commercial rice.

Maximizing land use. To get additional income, Edgar plants vegetables like *okra* (ladies fingers), chili, and *gabi* (taro) along the edges and corners of his rice field. He currently has 1,000 taros grown at the edges of each plot on his rice field. These taros when harvested can be sold for PhP5 each, giving him an additional income of PhP5,000.

Seeds as major source of income. "I earn more from seeds. What I do is sell seeds primarily and then those that fail to pass the seed requirement will be sold as dried *palay,* which gives more sales than fresh *palay*. Lastly, if there is still more I sell it to traders or mill it for rice," he elaborated.

Photos by: Jayvee Masilang & (circle) Marvin Lim

Harvesting more. Through the use of appropriate rice variety, Edgar is able to harvest more on his farm. The highest yield he got was 12 tons or 240 bags in one hectare using NSIC Rc18. As of now, he has 16 varieties (1kg per variety) grown under field trial condition. Based on his calculation, each variety could give him ten bags of rice. Not only will he have good harvest but he will also know what to plant for the next cropping on a larger scale.

Varietal trial. "To ensure that there will be a good harvest, I use varietal trial in which I try different varieties of rice to see which is most suitable to certain land form, conditions, and climate. It is better to lose in terms of a kilogram rather than a hectare that is why varietal trial is important," he shared.

His profession helps. As an Accountancy graduate, Edgar was able to use his profession in managing his farm. He is adept at analyzing cost and return as well as managing his inputs. After each cropping, he keeps record of all his expenses and looks for different ways to lessen his costs while increasing his income. He acknowledges the fact that record keeping is a key to sustaining a business.

The fruits of his labor. Edgar's success can now be seen on and off the field. He attributes this to hard work and strong determination, not to mention a lot of research work. He now owns five hand tractors, three carrier trucks, three carabaos, a storage facility, and a cleaning facility. Recently, he was recognized by the Department of Agriculture as one of the National Agri-Pinoy Rice Achievers in 2015, an award which he also received two years ago.

Agriculture as a moneymaker. We can certainly make money in agriculture just like other businesses. We just need to have a plan of what we want to achieve and put our hearts into it. "We should remember that we cannot buy all things. It would be good if we plant as well so that we will just get them on our farm if we want to eat," Edgar advised.

Photos by: (all left) Marvin Lim & (right) Jayvee Masilang

OTTER CREEK

Time planting *with the* market

by Perry Irish Hufana Duran

His interest in farming was aroused one day while he was on the road working as a tricycle driver. He saw a woman peddling a bundle of bitter gourd. He asked her how much was it and found out that it was around PhP28 per kilogram. He realized that farming might be a good moneymaker.

Fifty-five year old Bernardino "Dino" Villalobos of San Juan, Batangas was the eldest of a brood of 12 children of a carpenter and a housewife. He started working right after he finished elementary school to aid his family. For years, he persevered in labor jobs: harvester for hire, crab hunter, and tricycle driver, to name a few.

Photo by: Jeson Candole

Photos by: Jeson Candole and Reg Ronquillo

Learning the craft of farming. Following his encounter with the bitter gourd vendor, the then curious tricycle driver looked around the marketplace for bitter gourd seeds in trash bins. He didn't have anywhere to grow the seeds he found, so he borrowed money to rent out a piece of land where he would plant the vegetable. His first attempt was a failure. He expected this as he didn't have enough knowledge and experience in farming, but that didn't stop him. Dino attended various training sessions and seminars offered by the local government unit and other agencies to farmers. It is through this that he learnt and over the years mastered the craft of farming.

HELP THE
FARMERS.

Timing and market. It is not enough that you know how to plant. The Batangueño-tricycle-driver-turned-into-farmer emphasized that you have to time planting with the market. Otherwise, your produce will end up being sold for a cheaper price. He added: "I don't have to chase my clients; they come to me and buy my farm produce."

Photos by: Jeson Candole and Reg Ronquillo

Farm system and techniques. During the dry season, Dino grows fruits and vegetable crops (alternates of chili, papaya, stringed beans, tomato, eggplant, cucumber, or gourds like *patola*, *upo*, and *ampalaya*) on his farm. He also plants climbing plants (such as upo) through an improvised '*balag*' (trelling system) using wooden/bamboo sticks with wire.

Photos by: Jeson Candole and Reg Ronquillo

Underneath his climbing plants, he grows chili to maximize the land space. Chili, according to him, doesn't require much sunlight to grow. You will likewise find a number of fruit trees like coconut trees scattered across his farm. He uses two water pumps to irrigate his 2.5-ha plantation. He also uses black plastic mats, which he said, are very effective in controlling weeds.

Aside from improvising his *balag* to reduce farm expenses, Dino also cuts some labor costs by re-using his *balag* and by leaving his first crop *(patola)* to decompose along with the *balag* of his rich and healthy upo. He leaves the *patola* to decompose naturally and fall back to the ground to nourish the soil because according to him *patola* is rich in nitrogen.

During wet season, Dino replaces his vegetable plantation with rice production using *Tubigan* rice variety. Such crop rotation is Dino's practice of preventing bacterial wilt and soil depletion of the land he tills while also maintaining its soil fertility. Rice, according to him, is bacterial wilt-resistant.

There is money in farming. Venturing into farming has lifted Dino and his family's standard of living. For example, from his 5,000 square meters of upo plantation alone, Dino harvests and sells 400 pieces of *upo*, which he could sell for PhP8 per piece in every two days for a duration of 2.5 months. That's about an income of PhP120,000 from *upo* alone in 2.5 months!

Dino also earns PhP550-750 from every kilogram of chili. Imagine all the chili plants under Dino's *balag* of *upo,* stringed beans, and other crops in his 2.5 ha of vegetable plantation alone. Usually his harvest gets sold out by buyers from Batangas, Manila, and Palawan even before Dino brings them to the marketplace.

Photos by: Jeson Candole and Reg Ronquillo

Aside from his vegetable plantation, Dino plants rice and renders milling services through his mini rice-mill. Recently, he planted hybrid rice on his 1.4-ha land, which gave him higher yield of 220 sacks (45kg/sack). To adapt to climate change, Dino uses drought-resistant varieties during the very hot season.

Photos by: Jeson Candole and Reg Ronquillo

Farming to Dino is a family affair; his whole family is involved in it. His wife and three children together with their respective families look after their vegetables and rice mill, while he oversees the overall operation of their farm. Aside from planting vegetable and rice, Dino also raises chicken, pig, and carabao.

Through the profits he and his family earned from farming, they were able to buy land, a jeep, a motorbike, and two tricycles. They were also able to build a small rice mill and solar dryer. They are currently completing another house. Their house is being occupied by one of his children.

Secret to success. Dino has come a long way. From his humble beginnings without a land and any knowledge on agriculture, he is now a big-time farmer owning 1.8-ha farmland plus an additional of 8.1 ha of lands, which he has rented to expand his rice and vegetable production. He believes in dreaming, hard work, and saving to become successful in any endeavor. "I always make it sure that I save some amount from my earnings and use or invest them wisely," the clever farmer emphasized. Most importantly, Dino said timing is critical. "Make sure that you plant to earn in that you have to plan your planting schedules to suit the market." Because of his success in farming, he was recognized as an Outstanding Farmer by the provincial government of Batangas and one of the 30 Regional Champs of East-West Seed.

Passion *as his* greatest capital

by Charlemagne Kierra Morada Rubillos

In a world where all endeavors have both winning and losing aspects, the only thing that holds true for Nicasio "Nick" Engallado, 57, an organic rice farmer and agripreneur from Tongan-tongan, Valencia City, Bukidnon, is his passion in achieving his aspirations.

Photos by: Myriam Layaoen

A good start. Nick, equipped with his goal of championing sustainable agriculture, ventured into organic farming in 1985. He was already into organic gardening through duck manure and rice hull fertilizer production. It was in 1997 when he, together with his family, decided to fully practice organic agriculture. He and his wife (Fatima) co-founded and pioneered the Tongan-tongan Organic Farmers Society for Sustainable Agriculture (TOFSSA). They implemented the Integrated Diversified Organic Farming System in the area in 1999. Currently, they are practicing organic rice, vegetable, fish, poultry and livestock production on 2.8 ha of land.

Photos by: (upper left & lower right) Kierra Rubillos, (lower left) Christina Frediles, & (upper right) Myriam Layaoen

Adding value to farming. Being a sole farmer with a relatively small piece of land is not that promising, according to Nick. "If farming is your only source of living, you really would not earn that much," he stressed. This is what propelled him to engage in creating natural rice-based food products. Having acquired knowledge from his relatives in Bacolod, he started producing *barquillos* (biscuit rolls) made from organic rice and named it 'Barquirice'. Equipped with determination, he produced more rice-based products such as rice piaya, rice coffee, rice biscocho, rice cookies, rice bread, and rice chips. Starting from consigning his products to hospitals and eateries around Valencia City, they are now selling across Northern Mindanao and other nearby regions.

Photos by: Christina Frediles

An escalating success. Since then, more doors of opportunity opened for Nick. He was invited to speak for local and national seminar-workshops on value adding and organic agriculture. His farm was also chosen as one of the learning sites of the DA-Agricultural Training Institute (DA-ATI) X. He also became a partner-farmer of different agencies such as the Department of Science and Technology (DOST) X, PhilRice, Department of Trade and Industry (DTI) X, and the Provincial and City Agriculture Offices of Bukidnon and Valencia respectively. Moreover, Nick received several awards such as the Small and Medium-sized Enterprises (SME) Rising Star Award (2011) and *Gawad Saka* Outstanding Diversified Organic Farmer 2013 (City Level). He was also featured in several local and national television programs. Along with his achievements, he was able to receive different equipment and machine grants to further develop his farm and enterprises such as a stainless table, oven, three mixers, and a tent.

Engallado's Nature Farms &
Natural Food Products

Living the dream altogether. Achieving a healthy, profitable, and sustainable way of living through organic agriculture and value-adding is not easy. However, since it is not just Nick's individual aim but a shared goal of the Engallado family, they were able to succeed in it. His wife manages their value-adding enterprise with the help of their daughter Novabelle. Nick Jay Arr, their son, also assists in the enterprise and manages their snackhouse and catering business. Their youngest son, Nikko, is taking up Hotel and Restaurant Management and aims to soon establish an organic restaurant.

Establishing connections. According to Nick, being part of farming organizations also greatly helped him and his family in improving the quality of their farming practices and enterprises. Aside from being one of the co-founders of TOFSSA, Nick is also the current operations manager of Valencia Organic Producers, Processors, Traders and Trainers Association (VOPPTTA), a member of Araneta Farmers Agrarian Reform Beneficiaries Multipurpose Cooperative (AFARBMCO), and Farmers Cooperative Marketing Association (FACOMA). "We can apply for loans. It's easy for us to attend workshops. Also, we have a secured market for our products," he added.

What keeps him going. When asked about his driving force, Nick said it was his passion towards his craft that pushed and is still pushing him to achieve his goals. According to him, others see farming as a workload while he sees it as his passion. Surely, downfalls and losses are expected when venturing into agriculture, but these did not discourage Nick. "For me, there isn't a losing aspect in agriculture especially if it is organic. You can earn money and you can even help the environment," Nick said. With an outpouring of enthusiasm and optimism, Nick is set to reach greater heights as a farmer and an agripreneur.

Photos by: Myriam Layaoen

Photo by: Jayvee Masilang

Adding color *to the* field of green

by Jayvee Palor Masilang

The daughter of a farmer-couple, Anna Cagulada learned the ropes of farming at a young age by helping her parents on the farm during weekends. Now at 51, she is the one looking after their 4-ha farm along with her two daughters. Creativity, perseverance, and determination passed on by her parents are the key weapons that made Anna thrive in farming.

Photo by: Jayson Berto

Gaining from rice. Anna's stint in farming began with rice. To her, to succeed in rice farming is to use modern varieties that are high yielding and in demand in the market. "One of my relatives is in the *palay* (rice) trading business, and so we plant varieties that she recommends," she stressed. For instance, last year's wet season, Anna grew for the first time NSIC Rc160 on her farm, as advised by her relative. With this variety, she was able to harvest 90 bags per hectare where each bag weighed 70 kilograms. This is reasonably high enough compared to her usual rice harvest, which was 70 bags. The following cropping season she got 85 bags per hectare using another new variety demanded by the market called NSIC Rc300. "The varieties we grow vary depending on the demand in the market. Our other consideration is that that variety has to yield more, otherwise we will not grow it."

Photos by: (left circle) Jayson Berto & (top & right circle) Jayvee Masilang

From monocropping to intercropping. Through educational tours to successful farms and entrepreneurs, she learnt the great advantages of farm diversification. Slowly, she applied it to her farm and her farm is now home to different crops like kangkong, *marang,* coconut and animals like hogs, ducks, *tilapia*, and other fingerlings. "It doesn't have to be just rice. You can use some space on your farm for other stuff. You can even use the dikes to plant fruit trees. They can be an added income," Anna emphasized.

Farm integration. Not only does she cultivate different crops and raise some farm animals, Anna also assures that these enterprises are well interrelated to each other. For instance with kangkong, the fresh ones can be sold in the market or consumed by her family, and those rejects can be fed to their livestock. Furthermore, the animal manure can be used as organic fertilizer for her rice field and vegetables. With this strategy, she cuts her input cost and makes her crops more nutritious owing to organic farming practice.

Photos by: Jayvee Masilang

A greener and more colorful environment. Anna's eldest daughter, Mary Grace, is fond of ornamental plants and she makes a living out of them. "Our ornaments business is going stronger and quicker as we get more frequent buyers from different places. We use social media to market them, and it is effective as we get more buyers online. "As of today, we are managing different kinds of ornamentals such as bougainvillea, krong, fern, and pherobian," Mary Grace said. Currently, their family grows more than 100 different kinds of ornamental plants sold for PhP350-500 per plant. According to them, the bougainvillea itself has already given them an income of PhP100,000-150,000. "We also offer landscaping service, which costs a minimum of 20,000 per landscape," Mary Grace added.

More value. According to Anna, ornamental plants are not only a moneymaker, but also serve as pest control as they attract beneficial insects. By planting them near the rice fields, they deflect pests like worms and snails, making the crops less prone to damage.

Creative connection. Anna uses rice hull as fertilizer on their ornamental plants. She said it hastens the growth of the plant and lessens the need for water. "This way, we reduce cost as we do not have to buy commercial fertilizer," she pointed out. She also utilizes rice hull on her piggery. She spreads the rice hull on the floor to prevent foul odor and reduce water usage for cleaning.

Photos by: (top left and bottom 2 on the left) Jayvee Masilang and (2nd from left top and 2 on the right) Jayson Berto

Success through hard work. Through determination, use of appropriate technologies, and with the help of her family, the Department of Agriculture recognized her efforts in 2011 by awarding Anna *Gawad Saka* National Outstanding Farmer practicing Integrated Rice-based farming systems. "What the farmers need is dedication. We should be in agriculture because it is what feeds us. All things in the market come from the farm," Anna concluded.

Photos by: (all left) Jayvee Masilang & (right) Jayson Berto

1993
BASKETBALL
1993

It takes ingenuity *to* thrive *in* farming

by Perry Irish Hufana Duran

Dressed in worn-out working clothes, one might mistake him to be poor, but as they say, one should not judge the book by its cover. This modest yet progressive farmer is Reynaldo "Rey" Diaz, 2015 National Gawad Saka Outstanding Integrated Rice Farmer from Barangay Mulawin, Orani, Bataan.

Photos by: Marvin Lim

Photos by: Marvin Lim

Avoiding loss. Light strings, almost invisible to the naked eye, hang horizontally above his healthy *Bigante* hybrid rice field. According to Rey, he devised this *tanse* (strings) system to catch naughty birds feeding on his rice field, teaching them a lesson about trespassing the area the next time they feed. After a vast swarm of *Mayang Bukid* (tree sparrows) wiped out his yield a week before his scheduled harvest long time ago, Rey learnt the valuable lesson of always laying down preventive measures in managing his farm.

Common pests and diseases in his area are *tungro*, birds, and rats. However, Rey believes that a healthy rice plant that is well taken care of will not be susceptible to these pests. One control measure he employs is synchronous planting with the neighboring farms, which usually is from February to May, June to September, and October to January. He kept his notes from the pest management training he attended and uses them as references to manage farm pests and their natural enemies.

Becoming self-sustaining. Even during his apprenticeship at the US Naval Base, Rey thought of venturing into agriculture. This dream was fulfilled when his father lent him a hectare of land. Rice farming was his starting point. He gradually improved on it and added vegetable crops, fruiting trees, and livestock. Later on, he acquired the farm and additional lands that now total 2.5 ha with 2 ha allotted to rice and 0.5 ha to his mini rice mill, livestock, fruit trees, fish pond, vegetables, and housing.

Photos by: Marvin Lim

Aside from *Bigante* rice (NSIC Rc124), Rey plants inbred *Tubigan* varieties (NSIC Rc130 and Rc160). His average yield from rice (both inbred and hybrid) is 180 cavans per hectare. Each cavan of rice weighs not less than 50 kilograms, which he could sell for as low as PhP2,000 with an additional 25% profit through value adding rendered by his own rice milling facilities. Thanks to his membership in the Tapulao Cooperative, he was able to obtain a loan and build his own rice mill. Rice farming is the number one source of Rey's income, although this is seasonal. It is through his *Itikan* (rice duck-raising enterprise) that he generates income on a daily basis. He has approximately 195 female rice ducks that give him an average of 150 eggs everyday, which he sells for PhP6.6 per piece. His only production expense is the feeds used in taking care of the animals, so he has a potential income of PhP900 per day from eggs alone. Aside from rice ducks, Rey also raises a cow, ten goats, six pigs, and a few white ducks and free-range chickens. He uses the wastes of his livestock for vermiculture.

Photos by: Marvin Lim

Chili, eggplant, *okra*, beans, taro, and *kamansi* (seeded breadfruit) are some of the few vegetables found on Rey's farm. Along with these are fruit trees like dragonfruit, banana, pomelo, mango, and coconut. It is his priority to provide for his family so they are the first consumers of their produce before selling the excess to the market. Near their house, special crops like lettuce, spinach, parsley, basil, oregano, and *lagundi* (shrub or five-leaved tree) are also grown for their household consumption. They almost have no need to go buy their food in the market. They can be considered a food self-sufficient household.

Photos by: Marvin Lim

His farm technologies. Almost nine years after Rey started his farming venture, he made one of his best decisions when he installed a free-flowing water system for his whole farm. He spent PhP50,000 for the installation of 15 pipes. Since then, he spends almost nothing irrigating his farm except during an El Niño when he is forced to use the water pumps. Nevertheless, Rey has long gotten his return of investment and much more on the free-flow as it has been serving him for years now. Aside from adopting the new irrigation system for his farm, Rey uses farming technologies like reduced tillage, combined harvester, rice reaper, thresher, tractor, and floating tiller.

Photos by: Marvin Lim

Having a progressive farmer's mindset. Rey experiments on his farm, trying out different methods. He doesn't simply rely on information handed to him. For example, instead of spraying fermented plant juice-solutions for seed and soil treatments and plant nutrition, he mixes them with the flowing water from his pump. He also experiments in making his own *bokashi* or fermented solid matter with effective microorganisms (EM) technology for hastening and reconditioning the soil. He also makes his own formulation that uses 50 kg of poultry dung, 10 kg carbonized rice hull (CRH), 20 kg rice bran, and 20 kg coco rice dust/rice straw.

Photos by: Marvin Lim

Being an action-driven farmer. Rey's passion for farming has always brought a sense of self-fulfillment to him. He is hands-on in managing his farm. He only takes in laborers occasionally, and he almost never stops planting despite tiredness due to the heavy tasks in farming. Working even on weekends and holidays, Rey's farm routine starts as early as five o'clock in the morning everyday. His wife Divina helps him in taking care of their crops and animals and their youngest son sometimes assists. First, they visit the rice ducks and harvest the eggs. After this, Rey cleans up the rice ducks' cage and drinking area, shepherds his cow and goats to the grass field, and feeds the other animals. He then attends to his crops, taking breaks only during meals.

Photos by: Marvin Lim

When doing land preparation, Rey makes sure he has amply watered his field to make the land soft and ready for planting. He recommends other farmers to plant only on the fields that their available irrigation can support in order to sufficiently till the land, thereby avoiding *tungro* and weeds. Rey advises that understanding farming concepts and operating within one's means are keys to become effective farm managers.

"I don't stop planting. When my crops get damaged, instead of stopping, I plant even more than the ones that were damaged," Rey said with conviction. He works at least eight hours on his farm everyday.

Wealth *on a* different perspective

by Charlemagne Kierra Morada Rubillos

The idea of success for Dante Pajaron, 46, a farmer from Brgy. Kahapunan, Valencia City, Bukidnon and his family, is not just measured on how much money you have in your wallet. They see wealth in every single corner of their farmland.

Photo by: Jayvee Masilang

It comes by paces. Dante, together with his wife Armeda ventured into farming gradually, cultivating the 1.3 ha of land awarded to them by the Department of Agrarian Reform (DAR). "At first, we made a farm plan, and then identified what we should do," Armeda shared. Making a farm plan helped them pool and choose the best options for a good farm structure. Little by little, changes are being made on the farm based on learning obtained from training. After four years of lowland rice monocropping, they ventured into diversified and organic farming in 2002.

Planting it the organic way. The shift from conventional to organic agriculture was not easy for the Pajarons. Their production rate significantly dropped at one point, but this did not discourage or stop them. "We believe that the farming system we practice is the right thing to do to help mitigate global warming. Hence, we never lose hope," Dante said. Presently, they are engaged in rice-duck farming, vermicomposting, agroforestry, manure fertilizing, and using rice bran as feeds. Dante elaborated that the integration of ducks in rice serves as a pest control, not to mention giving them an additional income. Among the vegetables they cultivate are string beans, eggplants, bitter gourds, and fruit trees like jack fruits and miracle fruits. They also raise pigs, ducks, chickens, and fish alongside the crops.

Photo by: Jayvee Masilang

Pajarons in action. The couple commences their day at 5 AM. Dante jogs around the farm as a form of physical exercise while Armeda prepares their breakfast. After having breakfast and feeding their animals, Armeda goes to work at an agricultural non-government organization in a nearby town, while Dante manages their farm. Their children also help out by doing household chores during vacation and managing specific areas of their farm assigned to them. Oftentimes, they are given rewards by their parents for their hard work.

Partners in development. Being the President of the Araneta Farmers Agrarian Reform Beneficiaries Multipurpose Cooperative (AFARBMCO) for 11 years, Dante could attest the benefits of being a member of a farmers' cooperative. Coop members are able to attend seminars, borrow equipment, and sell their produce for a higher rate compared to the market. Dante and his wife were members of AFARBMCO even before they got married so the cooperative is like a family for them. "Through the Coop, we are also able to meet people whom we can get initiatives from in order to improve our livelihood," Armeda explained.

Fruits of hard work. "In terms of income, we can see that there is a huge improvement because we were able to buy a piece of land at Cagayan," she said. "We were also able to buy a tiller, thresher, and a motorcycle," she added. According to Dante, they only had a bicycle before as their mode of transportation. They were also able to buy mortgaged lands, build a two-storey house, and have another under construction at Cagayan de Oro City.

Profit isn't just about money. The Pajarons believe that their wealth isn't just measured by how much money they have in their pockets or bank accounts, but also in other vital aspects, such as health. "We can't remember a time when we were confined in the hospital because of an illness," Armeda said. Having practiced organic farming has lessened their vulnerability to illnesses caused by pesticides and other chemicals. They believe they are also rich in terms food security. Having ventured into diversified farming, they do not need to buy food from other sources for they grow and raise their own. "We always have food and we don't need to buy fruits," Armeda cited.

Photos by: Jayvee Masilang

Putting it all together. Cooperation, thrift, and optimism are the keys to become successful in farming according to the Pajarons. "In a family, if the father is the only one working, it's hard," Armeda said. They make sure that all the members of the family are involved in farming, even during the planning process. The Pajaron family still has more goals and plans ahead of them but they are hopeful that a better future is waiting for them.

TOPHARVEST
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From farm wastes *to* smart ways

by Jennylene Maloles-Layaoen

They say that every man has a dream but not everyone has the will to turn it into a reality. Romeo Ganiron from Batac, Ilocos Norte definitely has both – a dream and a strong will to fulfill it. A former tenant, Romeo now owns a 4-ha farm where he practices organic farming. Not only that, he also runs an agro-enterprise, the Romaine Organics, which supplies organic vegetables to nearby restaurants and hotels.

Photo by: Jayvee Masilang

Photos by: (all left) Harry Layaoen & (all rightmost) Jayvee Masilang

Finding prosperity in diversity. The practice of diversified farming is one of Romeo's keys to prosperity. From a bird's-eye view, his farm can be seen teeming with life. Various crops planted in straight rows, a spring turned into a fishpond, and trees providing shade to his livestock and poultry are the main highlights of his farm. At a closer look, you see a bunch of healthy high-value crops such as tomato, pepper, beans, eggplant, *okra*, cucumber, lettuce, *papaya*, honeydew, watermelon, and other high-value crops. Herbs like basil are planted along the pathways to maximize the space. He also has wild and native pigs, peking ducks, chickens, and turkeys – all housed and taking refuge under the fruit trees. Adding to his sources of income are african hito and tilapia thriving in the fishponds.

Good relationships matter, even for crops. Just like humans, crops need to be in good relationship with other crops too to justify their existence. This is Romeo's concept of diversification. "I carefully experiment with different crops. That is why you could see crops mixed with other crops. I also tried growing crops not endemic in the area, such as strawberries," Romeo averred. In areas planted with tomato or eggplant, he grows beans afterwards so that the nitrogen-fixing bacteria will be incorporated back into the soil.

Creating pathways for the farm wastes. As an advocate of organic farming, Romeo aims to achieve zero waste on his farm. Hence, he puts farm wastes into use by converting them into fertilizers or foliar. He calls this process 'farm cycle'. Moreover, Romeo shared that after planting rice, some of the crop's stubbles are being fed to cows and goats. Others go to his vermiculture. The animal manures are being incorporated into the vermi bed as feeds. The vermicast produced is used as a fertilizer for rice and other crops. "I also make fish amino acid (FAA) from my fishpond's wastes. FAA when applied as foliar for vegetables can enhance production. For the healthy vegetables, I prepare and apply fermented plant juice, which I produced from fruits. All the enterprises on my farm are inter-related to each other."

Photos by: (all on left page and middle on right page) Jayvee Masilang, (top right) Harry Layaoen, and (bottom right) Ashlee Canilang

Farm wastes reduce input cost. Practicing farm cycle or zero waste has immensely helped Romeo reduce his cost in farming. With wastes properly converted into fertilizers on his farm, his only expenses are seeds, planting materials, and labor. "Most of my capital goes to rice production, but as for my other crops, it's almost free. This means that as my income increases, my expenses decrease," Romeo recalled.

Photos by: (circle and top left) Harry Layaoen & (bottom left and right) Jayvee Masilang

Even time should be zero waste. Romeo humbly admitted that time management was very hard for him at first but his strong will to succeed helps him get through. Now he ensures that every minute of his day is allotted to specific farm activities. His day starts at dawn and stays at the farm until evening; the latest would be 8 PM. He sees to it that all farm activities scheduled for the day are accomplished before heading back home. He values his time as much he values the farm wastes.

Photos by: Jayvee Masilang and (circle) Ashlee Canilang

It's not all about the money. At the onset of his career in farming, Romeo already realized that having the capacity to finance farm expenses was not enough to succeed. Acquiring knowledge on farming and up-to-date technologies is crucial too. "Even if you have the capital, but you lack knowledge on technology, it still won't work. These two things must always go hand in hand," he quoted. "Earning comes when you start learning."

Passing on the fighting spirit. Beyond the awards and recognition he has received, Romeo still finds it more fulfilling to help other farmers succeed in farming. He shared, "I don't want to keep secrets from other farmers. I've been in their situations. I've experienced the hardships in farming. Now, it is my desire to share all the information I know with fellow farmers." Likewise, he tries to influence other farmers to have the same attitude that he has when it comes to farming. He believes that farmers must have a fighting spirit that will not easily succumb to life's great challenges. A farmer must never give up on any battle without a fight, just like he did.

Photos by: Jayvee Masilang

The hybrid rice champ *and* how *he* maximizes his earnings

by Maritha Chan Manubay

For Franklin G. Cortez, 47, nothing is more contagious than setting a good example. "Kap", as his constituents would call him, has been a role model not only for his public leadership skills but also for his farming innovations. Aside from being an active barangay official for decades, he was the first to introduce the planting of hybrid rice in the community. Today, about 98% of farmers in the barangay plant hybrid rice.

Photo by: Marvin Lim

BUFFALO
SABRES
The Rural Transformation Mov
Towards a
RICE
SECUR
Philippines

Photos by: Marvin Lim

Growing up farming. Born to a family of farmers, Kap has tilled the land since childhood. However, it was only after he started to build his own family in 1993 that he took full control of the 0.5 ha rice and 1.5 ha corn areas he inherited from his parents. "We grew up farming. Actually, even when I got married and had my own family, farming is still where we get our living with the use of traditional technologies," he shared.

Leadership by example. As a public servant, he has gone a long way from being a *Sangguniang Kabataan* (SK) Chairman to being a Barangay *Kagawad*; and now he is on his second term as Barangay Captain of Cabisera 14-16, City of Ilagan, Isabela. Over the years, he was able to use his leadership skills to influence other farmers in the community. Notably in 2006, he was the first to plant hybrid rice seed in their area.

Photos by: (top) Marvin Lim & (circle) Jayson Berto

"I tried using hybrid seeds and I saw my harvest increase from only 5t/ha using inbred. I even got as high as 12.3t/ha using hybrid seeds," Kap bragged. The crop stand of hybrid rice, including its yield and income, has made his neighbor-farmers curious about planting it. "Our farmers have that certain attitude that is to see is to believe. When they saw that my yield was better with hybrid, they started inquiring about how to plant it," Kap said.

In his eagerness to help the farmers in their community, he offered them a plant-now-pay-later scheme. "In the earlier days, most of the houses here are made of cogon. Nowadays, almost all houses are semi-concrete, if not concrete. It just means yield and income is better with the use of hybrid rice,"

Finding better ways. The change was not abrupt. It took five years of constant perseverance for Kap and his family to recognize the little changes in their everyday living. "When I felt that I am earning a little more than before, I started looking for other options where I can maximize my earnings," Kap stressed.

Investment in farm machinery and equipment is on top of his priorities instead of spending his hard earned money on leisure for food or other material possessions. No doubt, he now owns a rice and corn miller. The sari-sari store he and his wife put up when they were starting is now a general merchandise. "Every cropping, we gain some income. That being said, there will be possibilities for farmers to acquire assets", he said.

Photos by: Marvin Lim

I HELP THE
RICE FARMERS.

EXPERT

Photos by: Marvin Lim

Farming innovations. If you have perseverance, you always look for ways to get the job done. For Kap, saving money for capital is a must so he can further invest in other agricultural ventures. From backyard gardening, he grows various vegetable crops and fruits. He also produces his own organic fertilizer through vermicomposting. His swine production has upgraded from merely home consumption to 50-sow level and 80 head for fattening. Moreover, he also raises ducks, geese, and native chickens. The feed for his poultry comes from his corn plots and rice by-products like *darak* (rice bran) and *binlid* (pounded rice). "Being a leader of our barangay, I should be a role model to my fellow residents," Kap stated.

Kap hopes that other farmers will soon see the great things farming can do. "Not everybody can do it, but there are many who can and may be able to do it. It means, if many can do it, there will also be more lives that will be transformed for the better," he ended.

No idle land, no farm waste left *on his* farm

by Jayvee Palor Masilang

Teodoro "Ted" Lomod, 54, from Carmen Bohol began farming in 1987 using the 0.5-ha piece of land he inherited from his parents. Later on, he managed to increase his farm to 3 hectares. Hard work and the right techniques are the ingredients of Ted's success in farming.

Photo by: Carlo Dacumos

Photo by: Carlo Dacumos

More farm activities, more income. Polyculture or diversified farming has been his farming practice ever since in that he grows various crops and raises livestock on his farm. With this practice, Ted makes sure that there's no idle land left on his farm. He grows rice, cacao, banana, corn, cassava, high-value crops, and flowering plants. He also raises animals such as chickens, rice ducks, goats, pig, carabao, and upland fish.

Photos by: (top) Carlo Dacumos and (circles) Jayvee Masilang

Efficient use of farm resources. "I tried practicing zero waste management on my farm. It does not only reduce farm wastes, but it (if farm wastes are converted into organic fertilizers) also makes our crops productive. Not only that, it can reduce the cost of fertilizer and enhances the crop yield," Ted shared.

In his farming practice, Ted makes sure that his farm enterprises are well integrated, promoting efficient use of farm resources. For instance, he uses rice hull and rice straw as fertilizer on his vegetables. The excess or overripe fruits and vegetables are cooked as feeds for his animals. Lastly, he utilizes animal waste as fertilizer on his rice field.

CARMEN
SAMAHANG NAYON
MULTI-PURPOSE COOPERATIVE
CARMEN, BOHOL

VISION
MISSION
GOAL

Coop as his ally. He is an active member of the Carmen Samahang Nayon Multipurpose Cooperative. The Coop provides low interest loans, and buys farmers' produce at an additional one peso per kilogram above the market rate. Aside from this, members can also buy fertilizer, pesticide, and other farm inputs at a lower cost.

"I could sell my rice produce for a higher price through the Coop. In the market, the *palay* price is usually sold for PhP20. But since our rice produce is organic, we get higher price at PhP27 per kilogram, not to mention the additional one pesos per kilogram we get being a Coop member," Ted said.

Photos by: Jayvee Masilang

Farming as major source of household income. Through farming, Ted was able to send his children to school and three of them now have college degrees. He admitted that most of their income goes to education for their children and the rest is used for everyday needs. He was also able to buy farm equipment including a rototiller, leveler, weeder, thresher, and water pump.

Table 1. Ted's Farm Productivity

Farm Component	Area Covered	Period Covered	Net Income (PhP)
Rice	2.0 ha	2015	284,200.00
Squash	2,500 sq. m	2014	22,120.00
Vegetables	1,000 sq. m	2014	10,521.23
Banana	500 sq. m	2014	1,600.00
Root crops (ube)	100 sq. m	2014	5,450.00

Source: Local Government Unit of Carmen, Bohol

His daily routine. "I want to be hands-on at my farm. You see me working on the farm even before the sun rises and after the sun sets," Ted said.

Ted commences his day as early as 4 AM, doing some household chores such as preparing breakfast for his family and cooking rations for their animals. He runs a regular radio program at 6 AM in the town radio station where he shares his agricultural knowledge and provides some farm tips for his community.

After the radio program, he goes straight to his farm and stays there until dawn to monitor events on his farm and address any emerging problem (such as weed infestation).

Photos by: (top left and right) Carlo Dacumos and (bottom left) Jayvee Masilang

Perseverance is important! Like other farmers, Ted faces some challenges in farming. Perseverance is what keeps him in the business. He always finds ways to adapt to the problems and uses appropriate technologies to address them. The radio program he runs everyday allows him to share his successful practices. He maintains a constant dialogue with his fellow farmers in the neighborhood, sharing his knowledge and practices. It is his joy to see fellow farmers replicating and benefiting from his farming practices.

Planning is the key. "What is critical in farming is conscious planning. If you need to run a small trial to test if a particular technology or practice works best for you, then do so. If you eat what you grow, then you must adopt good, healthy practices in farming," Ted concluded.

Sowing seeds *of* faith *in a* futile land

by Jennylene Maloles-Layaoen

All she had at the onset was a "sundang" (dagger) and a small piece of land to till, but with her exceptional faith, positive attitude, and progressive mindset she became one of the country's Gawad Saka outstanding rice farmers. She is Susan Cabataña from Talacogon, Agusan del Sur – a loving mother, a devoted preacher, and an accomplished farmer.

Photos by:
(left) Ashlee Canilang
(right) Marvin Lim

From futile to fertile. Susan's farm could be a haven of rest for those who would like to take a break from the city life and experience serene living in the countryside. The floating hut in her fishpond is a perfect spot to relax and enjoy the fresh air and ambience of the almost 9-ha farm flourishing with fruit trees, coconuts, and various crops such as rice. The floating hut also serves as a restaurant where food served comes right from the

farm. One can order their organically grown *tilapia* (fish) cooked according to the dish requested. Susan's farm also raises pigs, chickens, and ducks. With all these precious things present on her farm, no one would think that her situation was once futile. But with Susan's diligence, patience, and unwavering faith in God, she managed to turn a barren land into a prolific one.

Photo by: Ashlee Canilang

Photos by:
(top 2 circles) Irish Duran
(bottom 2 circles and right) Marvin Lim

Diversification is not the only key. Though Susan's farm evidently shows the practice of diversification, she said it was not the only key to their success in farming. It was actually how they were able to lessen their expenses on inputs through the practice of integration. Wastes from rice such as rice straw and rice hull are incorporated back into the rice field as additional fertilizers. Pig manure is also precious to them as they feed it to their vermi, along with banana leaves and other wastes to produce compost. Aside from the compost, they produce fermented plant juice (FPJ). They also see to it that intercropping is properly done so that crops would greatly benefit from each other while maximizing the area as well. Coconuts are planted five meters apart, which means you can still use the middle parts to grow other crops.

Photos by: Marvin Lim

Embracing the practice of organic farming. Even when Susan and her husband were just starting at farming, they did not use a lot of synthetic fertilizers for their crops. Instead, they just followed the traditional practices of her father, who used to be an agriculturist in their municipality. Later on, they realized that what they had been practicing was the Integrated Diversified Organic Farming System (IDOFS). This realization encouraged them to learn more about IDOFS through seminars, training, and workshops conducted by the Department of Agriculture (DA). With the technologies they learnt and applied, they observed that the quality of their harvest improved. Hence, they were able to market their produce at a higher price.

Farming as a way of life. Farming for Susan and her family is their way of life. They wake up at 4 AM for their devotional time by reading the Bible and praying together. For them, putting God first in everything they do is the main ingredient of their success. After a cup of coffee, they go around their farm to check what needs to be done for the day. They feed the pigs, chickens, ducks, and fish. They also check whether their crops need to be fertilized or watered. However, if it's a planting or harvesting season, they spend most of their mornings in the rice field. "Whatever needs to be done on the farm, we do it ourselves," Susan stressed.

Food secured family. Aside from the income they generate from selling their farm produce, Susan believes that their farm provides their greatest everyday need: food. *"Walang limit"* (no limit) is how Susan describes their abundance in food. This status in life confirms her belief that as long as they have a small piece of land to till, her family will never go hungry. As long as they know how to plant, they will always have food on their table. With this, she is more confident that farming is a very noble job and hopes that other farmers would realize it too.

Failing is one of the steps to winning. Just like other successful stories, Susan shared that her journey was not all smooth sailing; rather it was a faith-stretching one. She encountered hurdles, challenges, and failures. Yet she remained positive and grateful as she took those experiences as opportunities to learn more about farming and life as well. "We wouldn't succeed if not for those failures," she averred.

Photos by: Marvin Lim

Farming is about proper mind-setting. "There's a saying that the poorest man is not someone who has only a peso in his pocket, but a man without a vision". This was Susan's simple answer when asked how she started in farming. Her statement simply suggests that farming is not all about working hard, but must be accompanied by a proper mindset. Though she lacked money at the beginning of her career in farming, it was her vision to succeed that kept her moving forward.

Giving back through sharing. Susan deeply appreciates all the knowledge she has acquired from different agencies and organizations as they helped increase her yield and improve her family's standard of living. In return, she freely shares her knowledge and technologies with other farmers and interested groups that visit her farm. Moreover, she shares how her faith in God has truly helped her succeed not just in farming but in life as well. She firmly believes that everyone could achieve or even surpass her accomplishments as long as they apply what she shared. "If farmers would apply what they have learned from me, then it is really possible for them to achieve what I have achieved. If you're a farmer, diligence and patience should be your main capital."

Photo by: Marvin Lim

Optimism

by Mary Grace Manipon Nidoy

An enormous display of certificates and awards is evident at her farmhouse. This is not to flaunt her achievements, but to remind the 55-year-old lady farmer of her journey since the day she decided to go into farming.

Violeta "Violly" Alegado was a housewife in Cebu for 18 years while her husband worked as an overseas Filipino worker in Jeddah, Saudi Arabia. In 2004, the couple decided to go back to her hometown in Buenavista, Agusan del Norte and start anew. Since they had a piece of agricultural land there, they thought that farming would be a good starting point. "I told the tenants of our farm that we had decided to go back and till the land. When we arrived, the only crops being planted were munggo and kalabasa," she recalled.

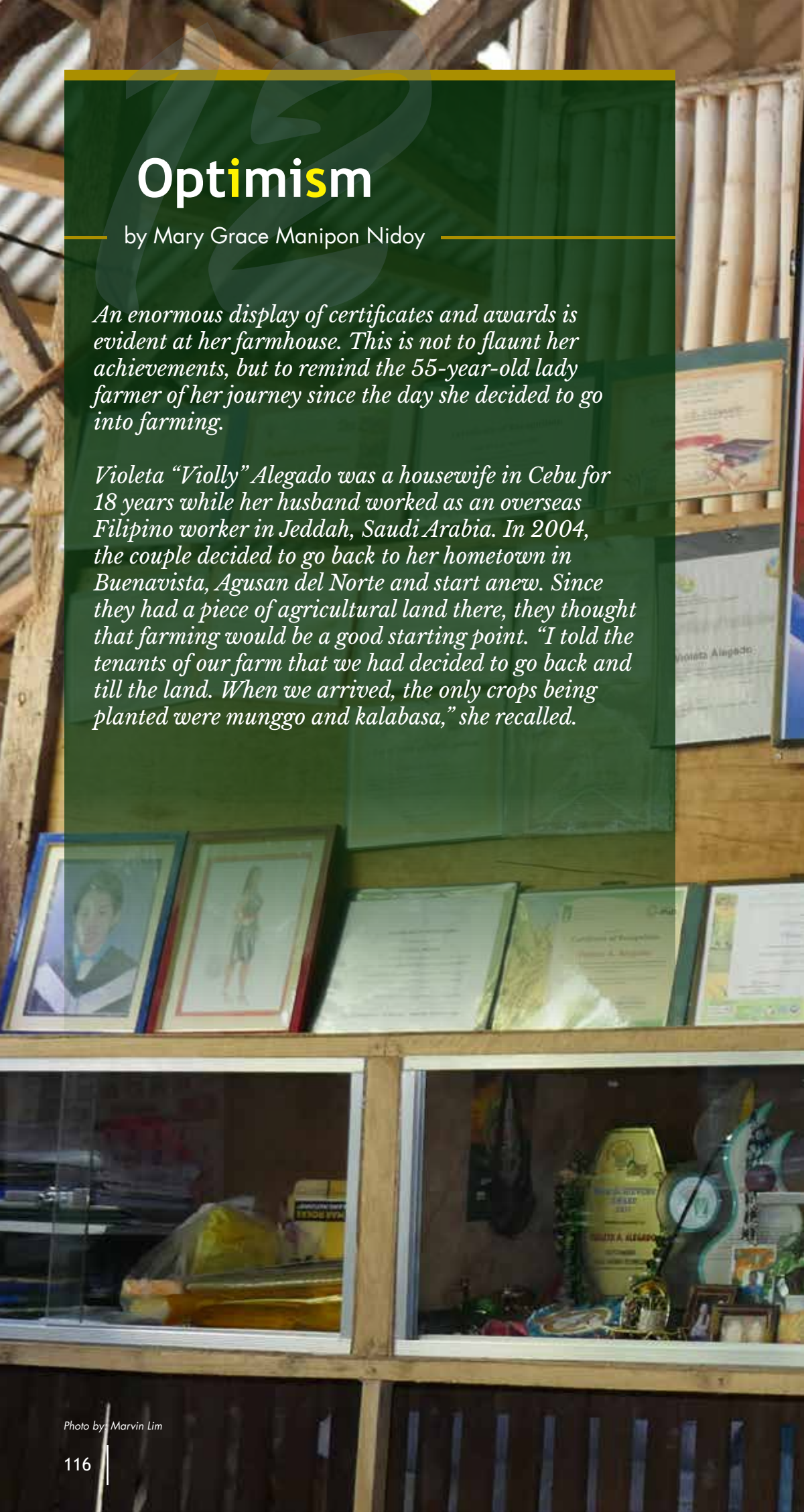

Photo by: Marvin Lim

DEPARTMENT OF AGRICULTURE
1898
Certificate of Training
Violeta A. Alegado
Ms. Violeta Audey - Alegado

Photos by: Marvin Lim

Starting from zero. Violly had no idea where and how to start as she had limited knowledge on rice farming. She then sought help from the Buenavista Municipal Agriculturist office. "I told our Municipal Agriculturist that if they have a seminar, I would be willing to attend even if it would cost me," Violly recalled.

She hit the ground running and in November 2005, her farm was used for hybrid technology demonstration. At the same time, she started organic farming with inputs bought from PhilRice.

Violly then enrolled herself in training programs on vermicomposting. She made sure that the techniques she learned were being applied to her own farm.

VERMICAST
PRODUCTION
AREA

Photos by: Marvin Lim

More stuff, more money. More than a decade later, after a sling of seminars and training programs, Violly's 2.3-ha farm is now a model for integrated, diversified, and intensified farming. Rice as her main crop occupies 1.5 ha, while the rest is dedicated to high-value crops, herbs, ornamental plants, poultry, vermicomposting, and duck raising.

The majority of Violly's income comes from rice and she has obtained her highest net income of P120,000 from her 1.5-ha rice farm. While waiting for rice harvest, she gets income from fruit trees such as jackfruit, *rambutan*, bananas, coconuts, and vegetables.

She has also dedicated 1.5 ha for organic farming. "We use vermitea and fermented juice instead of synthetic inputs. We found that vermitea was effective in fighting rodents in the rice field," Violly said.

For vermicomposting, she uses another ingredient called madre de agua. The plants are scattered along the dikes of the farm.

In Violly's rice-duck production, the house was constructed in such a way that the waste would go directly to the irrigation and act as fertilizer for rice.

Innovations. Soon the Department of Agriculture Caraga and LGU took notice of her farm and she was being nominated for various agriculture-related awards. What makes her farm special? "I think it's because she was able to maximize every space of her farm. It's a small farm in terms of size but she was able to make innovations," the local farmer technician (LFT) confessed.

Photo by: Marvin Lim

There is no excuse for Violly when some areas are not covered with soil as she uses old cement sacks for backyard gardening.

Aside from using vermitea as fertilizer, she mentioned her other innovation in hog raising. "When the DA officials visited my farm, they saw that my poultry house has a bathing area. I had it constructed to make the pigs get cleaned all the time. The conventional poultry houses don't have specific area for bathing."

Photos by: Marvin Lim

Photos by: Marvin Lim

A wall getting bigger.
The DA-RFO Caraga recognized Violly as the Outstanding Rural Woman in 2013. She then represented her region in the national level of the competition. She was also recognized as the region's Outstanding Local Farmer Technician in 2014. In the following year, she was Caraga's *Gawad Saka* awardee for organic farming.

To those who want to follow her footsteps, Violly's piece of advice is to utilize the space of the farm strategically. "Dikes are good for planting vegetables. The backyard can also be used for gardening. Most of the farmers enjoy waiting for harvest season but they don't realize that they can do something productive in between," Violly suggested.

Photo by: Marvin Lim

"There are a lot of farmers out there who have been farming for more than 30 years but their knowledge is already obsolete. Local farmer technicians (LFTs) like us handle Farmer Field Schools and I hope they join and open their eyes to new technologies," she added. This is a tall challenge for her as it is hard to convince older farmers to adopt new technologies. But as Violly's wall of success is getting bigger, so does her is optimism for her fellow farmers.

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ABOUT THE PUBLISHER

We are a chartered government corporate entity under the Department of Agriculture. We were created through Executive Order 1061 on 5 November 1985 (as amended) to help develop high-yielding, cost-reducing, and environment- friendly technologies so farmers can produce enough rice for all Filipinos. We accomplish this mission through research and development work in our central and seven branch stations, coordinating with a network that comprises 58 agencies and 70 seed centers strategically located nationwide. To help farmers achieve holistic development, we will pursue the following goals in 2010-2020: attaining and sustaining rice self-sufficiency; reducing poverty and malnutrition; and achieving competitiveness through agricultural science and technology. We have the following certifications: ISO 9001:2008 (Quality Management), ISO 14001:2004 (Environmental Management), and OHSAS 18001:2007 (Occupational Health and Safety Assessment Series).

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