

# THE BOUNTY OF BT:

## STORIES OF SUCCESS FROM BT CORN GROWERS

### FROM OVERSEAS WORKER TO FARMER AND BIOTECH CHAMPION

Known in the Philippine agri-biotech community as the “Queen of Bt Corn,” Rosalie Ellasus shares her journey from working overseas to being a successful genetically modified (GM) corn farmer, and using her influence as a biotech advocate to inspire other farmers to plant GM crops.

Seated against a background of her lush corn fields, near a brand-new farm tractor, Rosalie fondly recalls how she initially had no background or interest in farming. Things changed when her husband died in 1995 and she decided to come home from working overseas to be with her three children. She invested her savings in a small farm, but the results were far from rosy. Her corn farm was riddled with pests and weeds; mere farm income was not enough to send her children to college. Selling the farm was not a lucrative option either.

In 2002, Rosalie attended a 16-week Integrated Pest Management-Farmer Field School (IPM-FFS) for corn in her municipality. She notes that this was a defining moment since she learned about *Bacillus thuringiensis* (Bt) corn, a GM corn variety that is resistant to the Asiatic corn borer. “We had a field trial and I volunteered to have a demo trial of Bt and non-Bt corn on my farm. We saw that Bt corn produced better yield than the conventional variety,” she adds. When the Philippine government approved the commercialization of Bt corn in 2003, Rosalie became one of the pioneer adaptors of the GM crop in the country. From just over one hectare of land in 2011, she now harvests corn from more than 10 hectares of farmland. Apart from Rosalie, other farmers in San Jacinto, Pangasinan have also found success in planting Bt corn.





Rosalie has enjoyed a multifaceted career over the years. On top of being a farmer, she also became a municipal councilor for nine years. She's currently the Municipal Risk Reduction and Management Officer of her town. "I did not give up farming because I still wanted to provide livelihood to the farm workers that tend to my field," she says.

She has also become one of the champions of biotech crops in the country. "Because of the positive outcome of the demo trial, I got invited to different gatherings in other towns to share my experience with the crop. That's where my advocacy started. I want other farmers, big or small, to know that they, too, can have a better life with Bt corn," Rosalie states. She admits that it's rare for a farmer like her to be given the opportunity to travel, so it was a pleasure sharing her biotech experience with farmers in other countries such as Mexico, Peru, and Bangladesh.

In 2016, the Department of Agriculture-Biotechnology Program Office named her as one of the "Filipino Faces of Biotechnology" for her contributions to the country's agri-biotech sector.

Over the years, Rosalie has received numerous awards and recognitions for her accomplishments and contributions to the Philippine agri-biotech community. She was named one of the Faces of Biotechnology in 2016. *Photo credit: DA-Biotechnology Program Office*

## SHIFTING TO BT FOR GOOD

It has been 15 years since Zosimo Gonzales started planting Bt corn and he has no plans of turning back. Now 70 years old, he first knew of Bt corn when Rosalie introduced it in their area during the demo trial. "When we tried planting it ourselves, we were convinced that Bt corn was better since it was high yielding. The corn borers were also gone so we did not have to spend much on insecticides, unlike the conventional varieties where we had to apply large amounts of insecticides but still had less yield compared to Bt corn," he explains.

With this additional income from Bt corn and a small rice field, he was able to build a house and

buy farm equipment such as a tractor and water pump. Both his children were also able to finish their studies. "Recently, we harvested 15 tons of corn on my 1.7-hectare farm," he adds.

Husband and wife Trinidad and Saturnino Velasco, Sr., are also long-time Bt corn farmers from the area. Similar to Zosimo, the couple shifted to Bt corn after seeing its benefits. "We noticed an improvement in our farming methods. We used to spend a lot on insecticides, but now, we only spray it when needed." Trinidad further clarifies, "there is no corn borer infestation anymore but sometimes, we still need to apply insecticides to eliminate

other insects such as armyworms, fruit flies, and leafhoppers.”

“There are times that we are able to harvest 9.6 tons of corn per hectare. We will never get tired of planting Bt corn,” she happily shares. Saturnino continues, “we were able to send our five children to school and now, they all have good careers. We bought land and farm equipment. We were also able to buy a car with our income.”

Now in their sixties, the couple is still actively involved in managing their farm and they’ve hired other farmers to tend to their corn field. “We are glad to see fellow farmers such as Rosalie succeed because we are also encouraged to produce better crops. It’s like a friendly competition,” says Trinidad.

Another farmer in the area, Romeo Velasco, echoes similar sentiments. “Aside from higher income and improved farming practices, I can confidently say that Bt corn is safe for humans. I’ve been planting it for almost 10 years, and I haven’t experienced any negative side effects. It’s also safer than the conventional varieties since we use fewer insecticides,” he shares. With 25 hectares of land dedicated to Bt corn, Romeo shares that he has been able to help a lot of his fellow farmers in the area. “They have regular jobs because of farming, and they use this to pay for their children’s schooling and to support the other needs of their families.” His farm income also goes into the expansion of his agriculture supplies business.



Husband and wife Trinidad and Saturnino Velasco, Sr.



Romeo Velasco

“Corn farming used to be labor-intensive,” Rosalie recalls. Before, there were many activities involved during the planting season (i.e., plowing, fertilization, weeding, de-tasseling, watering, insecticide spraying, etc.) which were also costly. With Bt corn, this tedious process has been simplified. “The farmer just needs to focus on fertilization, watering, and manpower. We spray Glyphosate to get rid of the weeds, but the overall production cost has been reduced. Now, we can easily sell our corn to feed millers and traders since it’s not infested by corn borers,” she elaborates. Rosalie also attests to the safety of Bt corn. “We have been feeding Bt corn to our livestock for years and there have been no adverse effects.”

“More importantly, my children were able to finish university, which was my main concern when I became a single parent. I am now helping with the education of my grandchildren. I was also able to establish other businesses and buy farm equipment. Our life has certainly improved because of Bt corn,” she beams.

## AGTECH IS THE FUTURE

Zosimo recalls that he was not frightened to try the technology when it was first introduced. “I have no regrets with planting Bt corn. Why would I be afraid of it? Farmers need to open their minds to modern technologies. These won’t be introduced to us if it will just cause more damage to our crops.” He also hopes that their experience will help convince farmers to plant Bt corn.

Meanwhile, Trinidad and Saturnino feel fortunate that they discovered Bt corn and enjoy its benefits. “If given the chance, we will still choose to plant Bt corn. It’s more profitable than the conventional ones,” they add.

Romeo shared his aspirations and hopes that the GM corn variety in the country will be further improved so that more farmers will be encouraged

to plant it. “I also plan to expand my farm so I can employ more corn farmers in my area. That way, I can help them provide for their families,” he says.

Similarly, Rosalie expressed the need to advance technologies and biotech products in the country. She mentioned that farmers also need climate-resilient crops to cope with agricultural challenges. She expounds, “we need to invest in smart agriculture and biotechnology, otherwise, the Philippines will be left behind. Agriculture and technology should go hand in hand.”

For such an accomplished farming career, Rosalie plans to carry on with her biotech advocacy. “I still want to inspire other farmers especially the younger ones, to venture into agriculture, particularly GM crops. I can also explore other opportunities so that I can continue being of service to the people of San Jacinto and perhaps even beyond!”



Zosimo Gonzales



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