



Lolo Natomo's *Metal Touch* is DOST's *Touch*

What could make a 33 year-old thresher business in a distant barangay unstopably boom through generations? Or was it *Midas' touch* alive in the metal crafts of a family of artisans?

Natomo is the name. It is *Renato* and *Mosuela* combined, the son of the Natomo Manufacturing, Inc. patriarch – an award-winning *lolo inventor* who hadn't even finished high school but would embarrass any engineer with the ingenuity of his creations. He is Lolo Narciso Mosuela, the mind and hands behind the esteemed thresher and *Superkalan* in Luzon.

It wasn't an easy start for *Natomo* as a business, especially in an off-town place where farming was the main livelihood. The problem was always capital, facilities and equipment to start.

Borne and raised by a family of farmers, Lolo Ciso had to put up with the ways of the field. Long years of tough work gave rise to a business that would earn his name great esteem in the metal world.

It was in 1978 that his first invention came about: rice thresher. Motorized, it consumed about 1.5 gallons of gasoline for a hectare of *palay* they needed to thresh in one day. This opened an entirely new horizon for Lolo Ciso and his family. His neighbors started to take notice and patronize *Natomo's* newly-discovered machine. It was the answer to the farmers' prayer of a faster way to thresh their harvests.

And so a business was born. It started as *Natomo Light Metal Craft* with the thresher as main product. He and a friend pooled an amount to build additional units. The little business was going well until the time when gasoline prices rose. Then production stopped.

Superkalan

But the ingenious mind of Lolo Ciso did not. It was working all the while. "*Simple lang naman akong tao eh. May kanya-kanya tayong hilig, pangarap... Ako eh nasuot sa iisang hilig... ang pagtuklas ng mga di pangkarinawang gamit na kinakailangan sa buhay,*" said the Lolo inventor.

The oil price hike resulted in two things: manufacture of metal threshers and the creation of the *Superkalan*. The latter was a stove that uses anything as fuel. It was conceived out of the rising oil price at that time. The fact that it does not emit smoke or carbon, which primarily causes stains in pots, is a sure come-on for customers. He initially sold it for P80 and had to compete with the five peso-clay stoves in the market. He and his sons went as far as holding demos of the *Superkalan* in barangays and schools. Kids called it *Super*, Lolo Ciso said, after witnessing his demo. Then teachers started branding it *Superkalan*.

The stove improved in features, especially when the iron Lolo Ciso used as material began developing rust. The *Superkalan* turned into a pun with everyone calling it *Superkalawang*. So the Natomo team set to work. Aluminum alloy replaced iron as raw material. A heat regulator, a chimney for the smoke, and a hollowed bottom to contain ashes for easy disposal were all added to enhance the *Superkalan*. Soon people began to recognize its practicality. Before long, orders for the stove overwhelmed Natomo Manufacturing. Production was costly and they knew to accommodate all orders would mean a huge capital.



Thresher



Superkalan

Comes DOST

With the impending abeyance of the thresher and *Superkalan's* production, Lolo Ciso knocked on the doors of the Department of Science and Technology (DOST) through La Union Provincial Director Dr. Ismael Gurtiza.

When it rains, it pours; so they say. For DOST's hand in the business signaled the start of a full-blast business for Natomo Manufacturing. The DOST was all willing to spill out its resources to deserving individuals. DOST financial grants were made available for *Natomo* to sustain its flourishing business. Grants-in-Aid (GIA), a program of DOST which provides financial grants to S&T projects. He was granted a total of P232 thousand which was used to acquire tools and equipment such as aluminum forging machine, spot welding machine, air compressor, bar cutter, hand drills, disk sander, etc.

The Development Bank of the Philippines (DBP) also lent an amount of P1.2 million, for the construction of their manufacturing plant at Barangay Ubbog, Bangar, La Union, all payable in three years without interest.

Also, Lolo Ciso was able to avail, P 497T, through the Small Enterprise Upgrading Program (SET-UP) of the DOST which provides upgrading assistance to Small and Medium Enterprises (SMEs) for increased productivity. The amount was used to acquire sheet metal roller, table lathe machine, box bender, low pressure high density spray gun and construction of painting booth.

Natomo Manufacturing further availed a P 490,020 raw material assistance from the Venture Financing Program of the Technology Application and Promotion Institute of DOST for the production of the Thresher and Superkalan payable in 3 years without interest. Not long, *Natomo Light Metal Craft* became *Natomo Manufacturing, Inc.*

"Malaki ang nagbago sa buhay," Lolo Ciso declared. "Dati, mahirap ang trabaho dahil mano-mano; ngayon, maganda na ang takbo ng negosyo at tinanggap na rin sa market ang produkto. Kung hindi sa tulong ng DOST, wala lahat ito."

Lolo Ciso also praised how DOST has ensured the stability of their business through the years. The agency's assistance did not stop in the financial grants. It also offered shop-based trainings and seminars and consultancy services to make sure Lolo Ciso and his men have the knowledge and skills to sustain *Natomo*. They all have undergone *Manufacturing for Productivity Extension (MPEx)*, *Cleaner Production Technology Assessment (CPT)*, *Industrious*, *Systematic*, *Time-bound*, *Innovative*, *value for Work (ISTIV)*, *Electroplating Technology*, and the *5S (Sort, Sweep, Systematize, Sanitize, and Self-Discipline)* seminars and trainings.

DOST Touched

Although sale of the thresher and the *Superkalan* is seasonal, the entire business is now selling millions after DOST's "touch". Its annual gross sales have reached P8 million compared with the P3.5 million minus DOST's interventions. The business was also able to create more jobs starting with 17 employees to as many as 55 now. For this, *Natomo* became a household name in award-giving bodies. Among the most prominent recognitions he claimed were the *Globe Masigasig Award*, *National Outstanding MSME* and *Outstanding MSME for Luzon*.

With DOST beside *Natomo Manufacturing Inc.*'s enterprise, it has expanded its market from Luzon to as far as the National Capital Region (NCR), and even abroad. Twenty four units of the *Natomo Superkalan* were exported to East Timor through the Philippine Rice, Food and Agricultural Organization of the United Nations in 2006. The product was evaluated in Japan along with other brands and was chosen the most durable and efficient.

His shop has also become a training ground for Science and Technology students, some of whom even won in the International Exhibit for Young Inventors at the Japan Institute of Invention and Innovation in 2004.

Lolo Ciso's brains plus DOST's hand have resulted in immeasurable gains for the *Natomo* family and for the community. What else could this multi-awarded Superlolo ask for?

"Gusto ko lang tapusin ang lahat ng mga nasa ulo kong gusto ko pang gawin... tulad ng Rotary Palay Dryer...," beamed Lolo Ciso. With DOST always on the shadow of *Natomo Manufacturing, Inc.*, there is no doubt whatever creation is lurking in the inventor's mind is sure to spawn bigger profits and more employment opportunities for the community.

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