

The **New Frontier!**

Agriculture is the new hot industry and technology serves as a backbone of every growth centric industry, says **Srinivas P Kamisetty**, Founder, Paama Agrico.

By Niranjan Mudholkar

Tell us about the origin of Paama Agrico. What was your key objective behind starting this organisation?

On the personal front, I was rearing a passion to do something that would add sheen to the agricultural landscape of the country. In terms of experience, having the opportunity to lead, globally acknowledged organizations like LAPP India Pvt. Ltd. and CLASS and playing decisive roles in Rittal India and Karnataka Telecom in the past, my knowledge about the manufacturing domain and in particular about the loopholes of the agri-equipment industry had grown very wise. Besides, from a business point of view, in an economy that is predominantly agrarian, it made immaculate sense to venture into an agri-equipment space. Thus, in the year 2015, I decided to culminate my passion, experience and business acumen to launch Paama Agrico, an innovative, agri-equipment research and development organization that would work tirelessly to revolutionizing traditional and time intensive farming processes with sustainable technology.

"In pursuit of reducing our carbon footprint we have taken several measures, we do not use servers, we are completely dependent on cloud, similar to global IT firms."

Today, Paama Agrico is one of India's fastest growing and innovative, agri-equipment research and development organization that bears the credentials of substantially elevating the standards of Made-in-India agri-equipment. Paama's research centric approach, cutting edge product features, direct communication and distribution touch-points with farmers, after sales services, dynamic leadership and ability to provide invincible quality and pricing has earned it the status of being best-in-class among the rotavators and cultivator industry.

Tell us about the manufacturing capabilities and capacities of Paama Agrico

In tune with Paama Agrico's founding objective of enabling every Indian farmer with best-in-class agri-equipment that will in-turn help cater to the huge 159.6 million hectares arable land resource of India (World Bank estimate in 2015), a high-end manufacturing apparatus structured on the philosophy of automation and empowered with most sophisticated technology was set-up in the year 2015. Quite aptly, it is also referred to as the 'Agri-Equipment Design House of India'. The revolutionary make in India brand with a state-of-art manufacturing facility is spread over 30,000 sq. feet of factory space on 100,000 sq. ft plot of land in the Dod-



24 THE MACHINIST - September 2018 www.themachinist.in



daballapur industrial area in Bengaluru of Karnataka.

Approximately 12,000 blades are manufactured on a daily basis in a single line in comparison to 4000-5000 blades which is the industry standard. An individual rotavator takes no more than 15 minutes to come off the line in Paama Agrico's premise. It is the only agri-equipment manufacturer to deploy robots in the facility for welding and handling purposes. Adamantly, batch processes are not followed at the organization; be it designing of the blade or the machine, the philosophy of doing one at a time is strictly followed.

How are you differentiating Paama Agrico in terms of its product and technology offerings? Tell us something about Paama's R&D activities.

The founding vision of Paama Agrico has been to transform the Indian agriculture scenario by 'sustainably increasing farm productivity'. Hence a scientific, R&D based approach is followed to increase the productive hours of the farmer by eliminating cumbersome and inefficient processes while augmenting the productivity of land which will in turn support the food and supply situation of Indian's growing population:

Product Innovation: Best quality materials are used in Paama Agrico rotavators that have a design life of over five years in comparison to three years of others available in the industry. 'Quality Sealing' defines the effective life of rotovators. Thus, while other rotavators require the seal to be replaced in every 100-150 hours, Paama rotavators have a zero market for seals. **Process Innovation:** We are the only blade manufacturer milling the blades to ensure consistency in every blade, irrespective of the temperature it is subjected to. Hence the wear and tear is bare minimum in our blades and they last 50 percent longer than others available in the market.

"Approximately 12,000 blades are manufactured on a daily basis in a single line in comparison to 4000-5000 blades which is the industry standard. An individual rotavator takes no more than 15 minutes to come off the line in Paama Agrico's premise."

Design Innovation: We lead the market in this; we have practically made it possible for the rotavators to be assembled with minimalistic fixtures. It's almost like a Lego. This methodology was adopted to post a drill down analysis of machines performance related to fixtures that were unnecessary and caused several maintenance inefficiencies.

Operational Innovation: We follow best industry practices at every level of the organization. At our shopfloor we engage robots to do welding and handling work which is hazardous to humans. In pursuit of reducing our carbon footprint we have taken several measures, we do not use servers, we are completely dependent on cloud, similar to global IT firms. We have one of the most sophisticated CRM in the industry



"A slew of agro-tech start-ups will be here to stir the agricultural revolution. If there are is any start-up that will help us serve the India farmers any better, Paama Agrico is more than happy to associate with them."

to connect with customers. The sales team works efficiently through mobiles to connect with out 4,000 plus retailers speared across three states.

Farm mechanization will play a key role in helping India meet its agricultural production requirements. Can you elaborate on the role of technology and machines in facilitating India's agriculture growth?

While the population of the world is projected to touch 10 billion that of India alone is expected to reach 1.7 billion by 2050. Besides this population is projecting a constantly growing pattern with land, one of the most crucial resources remains fixed. Unlike few other countries that are predicting food shortage and acquiring land in Africa, and parts of Asia to secure their future food provision Indian is not doing that at the moment. From being a country dependent on imported food-grains to one that exports its surplus production we have done well. Had we not adapted to green revolution and technological advancements food deficit situations would have prevailed.

In tandem with this thought of adopting to progressive thinking, in a situation where land is a constant factor catering to population that is consistently growing; the simple solution is to optimize the capacity of land to increase production to meet the growth proponent. This is where technology, mechanization or automation of process comes into picture. For example, Paama Agrico blades lasts 50 percent longer than the average blade available in India. If any other common blade lasts 80 hours, our blades function seamlessly for 120 hours. Thus, the farmer only has to spend one day replacing the blade saving him time and avoids resource wastage.



"Adamantly, batch processes are not followed at the organization; be it designing of the blade or the machine, the philosophy of doing one at a time is strictly followed."

How would you analyse the socio-economic impact of increased mechanisation in the view of abundant farm labour supply available in India?

To begin with, I would like to bust the myth that farm labour availability is abundant in India. Migration from villages to

towns is so high that automation has become the need of the day to replace the missing labour. For instance, 15 people are required to transplant a paddy field of about an acre and it is extremely difficult to find them during the Kharif and Rabi season as they are either occupied in their own fields or working for those who pay them highest; creating a dearth of labour. Whereas, paddy transplanters are able to do the same work in 1.5-two hours and most importantly make the farmer self-sufficient.

An example in this framework is that of a farmer who would traditionally use bullocks to till the soil, that would take days together just to level the soil while a rotavator is able to do so in about 1/10th of the time. So, it is important that we view mechanization

as the means of enabling a person to work more efficiently as opposed to the thought where it is perceived to replace humans. China is doing this very effectively, though the area of paddy harvest alone if lesser than India, it posts an annual requirement of 75,000 paddy transplanters.

Indian agriculture is dominated by small farmers, whose weaker economic status is a big hurdle to ownership of high-value agricultural equipment. How can this issue be comprehensively addressed?

The small farmers are really the lifeblood of Indian agricultural landscape and I am delighted to let you know that increased automation and farmer-friendly government and corporate efforts have changed the liquidity and ownership status of even small-time farmers at least a tad-bit. Also, initiatives such as cooperative farming, custom hiring centres with the provision to hire smallest machines and tools, well developed network of contract farming are not only being encouraged but operating successfully based on the on the buy-in received from the farmers. Paama Agrico has established its network that supplies the most high-end rotavators to basic yet essential spares across geographies present.

There is a strong need to develop an agricultural-technology ecosystem in the country. In this light, do you also see more agro-tech start-ups joining the fray? Will you collaborate with them, if required?

Yes, you are correct; there is a strong need to develop an agricultural-technology ecosystem in the country. The diversity of soil, the crop, the seasons and even cultivation methods itself makes agriculture one of most dynamic industries of our nation. Having a sophisticated agricultural-technology ecosystem with aerial satellite imagery, greenness sensors, soil maps and millions of weather data points will go hand-in-hand in garnering its progress.

Agriculture is the new hot industry and technology serves as a backbone of every growth centric industry. Though smart farming technologies to check soil nutrient levels or detect crop damage are present, Indian agricultural industry is still quite naive to them. This is primarily because of awareness, accessibility and availability issues. The need to bridge these gaps rather 'market demand' is evident. Therefore, it can be safely said that a slew of agro-tech start-ups will be here to stir the agricultural revolution

If there are is any start-up that will help us serve the India farmers any better, Paama Agrico is more than happy to associate with them.



What is your vision for Paama Agrico?

Paama Agrico is inspired by the ambitious mission of making every farmer of India self-sufficient within the next five years. We aim to do so by supplying them with efficient, durable and reliable farm equipment that are 'Made in India and Best for India'. This will enable super-efficient farming process -- that will save labour, time and material resources and most importantly have no 'downtime', one of the most important terminologies in the book of automation.

Having a strong foothold in Karnataka, Andhra Pradesh and Tamil Nadu and keeping in pace with its mission Paama Agrico will expand its presence to the rest of the nation; now that is a huge task on hand.

According to India Brand Equity foundation, "Agriculture being the primary source of livelihood for about 58 per cent of India's population and the total area in India, sown with rabi crops reached 64.29 million hectares in February 2018." To meet such numbers, Paama Agrico has to quintuple its capacity and we are working meticulously to pump our production and capabilities to cater to the market.

Given our market response we are quite positive to lead the nation's agri-equipment market by 2023!

28 THE MACHINIST - September 2018