Scaling S&T in the National Rice Program

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That the Philippines’ neighboring countries have far overtaken us in agricultural development remains to be a topic of public discussion. My experience working with our ASEAN neighbors, particularly Malaysia, Thailand, and Vietnam, has shown me where we massively lag behind: we fail to scale or commercialize many of our S&T outputs and innovations. We take for granted our societal responsibility.

Make no mistake: we have developed many ideas, tested numerous models and prototypes, conducted countless demonstrations and training programs, and published abundant materials. Yet many of these accomplishments come to naught.

An average Filipino would readily describe a scientist as somebody with a white lab coat, busy in a laboratory. This character may have now evolved into a more sophisticated fellow. The props of the pop-culture scientist may not be test tubes and colorful chemicals anymore but journal publications, bibliometric scores, and accolades. This tired imagery influences the relevance of the knowledge and technology we produce.

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We have blamed policies, regulations, and lack of incentives for our country’s stagnation of scientific impact. However, I find infinitely more fault in our mindset. We have not been taught to work for societal outcomes or impacts. We mistakenly believe that this is not our responsibility.

Should it not be our duty as S&T workers to ensure that our work transcends the boundaries of our respective fields to effect real change in people’s lives, societies, and the world? It should be.

**On scaling up**

Should we ourselves scale up and commercialize our work? We do not have to.

**Achieving societal outcomes necessitates identifying our “next users”—the individuals or entities that will use and disseminate our outputs on a broader scale.**

Our next users are typically our partners, government agencies, private sector entities, and NGOs. We aim to influence their knowledge, skills, and attitudes to shape more people to foster a sense of ownership of our outputs.

Another failure to scale our S&T outputs is sustaining and supporting medium- to long-term plans. Our plans are as transient as our leadership. We are constantly in a rush to solve problems, seeking immediate solutions. This approach has often resulted in quick fixes and band-aid solutions.

Yet there are simply issues that escape the palliative effects of a band-aid. The profound sense of hopelessness and demotivation afflicting our farmers is one such affliction.

**Refrining the rice industry development program**

In the nationwide consultations and workshops conducted by the DA National Rice Program, I consistently emphasize the difference between the old Masagana Rice Program and the new Masagana Rice Industry Development Program, or MRIDP.

Our objective is to produce rice and ensure a higher income for our farmers. The goal goes beyond palliative care.

President Ferdinand R. Marcos Jr. shares this vision. Hence, 100% rice self-sufficiency is a simple band-aid solution. But when the price of palay plummets, the farmers suffer, lose motivation to continue farming, and produce less rice.

We aim to fix the entire rice value chain so that our main actors—the farmers—assume a more significant role.

We have therefore refined our four core program strategies to resonate more deeply.

The first strategy, **Matatag**, or climate change adaptation, pertains to the production component. Five decades after the Masagana 99 Program in the 1970s, and despite years of seed and fertilizer subsidies, our national average yields still linger below 5 metric tons per hectare for inbred rice and 6 metric tons per hectare for hybrid rice.

In many areas, we are not planting rice at the optimal time. High-yield farmers will tell us that correct timing is key. Moreover, our soil fertility is declining. Monocropping cannot generate substantial income for farmers who till 2 hectares or less. We then promote diversification. Plant other crops and engage in livestock or poultry farming, akin to PhilRice’s Palayamanan model. Therefore, our first strategy is to fortify farmers’ income by bolstering their resilience and stability.

The second strategy, **Sama-sama**, revolves around farm clustering and consolidation. In clustering, an accountability group composed of technicians, private sector partners, and prosperous farmers assists individual farmers. **Matatag kapag Sama-sama**.

We will also link these clusters to millers and the NFA. Being part of a group enhances the bargaining power of
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The processors can declare the varieties they want farmers to plant, and the clusters can then request these seeds from the DA (PhilRice). This way, they can produce high-quality, consumer-preferred milled rice, not low-quality "rumble rice". This is the essence of the third strategy, **GAnado**—motivated and enthusiastic farmers in the rice value chain.

We also understand the importance of making interventions location-specific. We need timely and accurate information for decision-making. Hence, the fourth strategy is **NApapanahon**, or digital transformation—to improve our farms. We map out areas of concern regarding yield, soil fertility, risks, etc. Satellite technology gives us confidence in the accuracy of information as the basis for targeted intervention. Drones will soon be normalized for fertilizer application, and our farmers will manage their farms from their phones.

The latest technology transcends issues on the receptivity of our farmers. Some farmers may resist new methods, which could frustrate the efforts of our extension workers. Now, we have service providers who can do the work precisely and affordably. All these thrusts will be included in province-specific rice industry development plans.

We want farmers to use our technologies, but their mindset is not like ours. They see technologies as additional expense counter to their immediate concerns: higher prices for their palay, higher income. In other countries, they did not just improve production—they also transformed the market.

Thus, a bountiful harvest should mean rich profits. So, we need to incentivize our farmers to be more productive by connecting them to the market and ensuring they earn a good income. Better incomes leading to higher rice self-sufficiency will be the most beneficial outcome. That is the goal of MRIDP.

If and when we achieve 95%-97% rice self-sufficiency, we cannot tell farmers to stop producing more. When they are **GAnado** (motivated) because they see the profit, we cannot prevent them from increasing their production. This sets the stage for quality rice exportation.

Let us not aggrandize ourselves with self-satisfaction over our award-winning and lucrative careers. Let us think outside ourselves and ensure that our outputs result in societal outcomes for millions of farmers, fishers, stakeholders, and consumers. If our work supports societal outcomes and impacts on food security, attaining food security will not remain an uphill climb.

**In the words of a great social scientist of our time, National Scientist Gelia T. Castillo:** "Science should serve a human purpose."

References:


