EDITOR'S PREFACE

AJAD's First Twenty Years

Evolving Knowledge and Practice in Asian Agriculture and Rural Development

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Agriculture has been variously described as the backbone, pillar, or foundation of the economy, but in many countries in Asia, also as its laggard or weakest link. Whichever way it is viewed, there is wide agreement that the agriculture sector, including the closely affiliated fishery and forestry sectors, is vital to the economy, especially in Asia, where a dominant portion of both the global population and agricultural production can be found.

In late 1965, when the education ministers of Laos, Malaysia, the Philippines, Singapore, Thailand, and Vietnam came together to pursue regional cooperation in education, science, and culture, creation of a center for graduate study and research in agriculture was among their first agreed initiatives. This gathering of education ministers paved the way for establishment of the Southeast Asian Ministers of Education Secretariat (SEAMES), later formalized into an organization now known as SEAMEO. The Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) formally came into being as a SEAMEO institution in late 1966. In 1968, SEARCA commenced its graduate scholarship program that has helped develop a corps of agriculture experts who have since become key exponents of agriculture modernization and advancement in the region.

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In 1969, SEARCA formulated the first of its five-year plans (FYP) that have since embodied the overall strategic theme that guides the center's operations through its core programs.

The thrust of the First and Second FYPs (1969–1974 and 1974–1979) was the generation and transfer of productivity-enhancing agricultural technologies. Subsequent FYPs reflected the evolution of the challenges to the agriculture sector and rural development in the subcontinent, with the FYP thrusts moving on to management of agricultural systems; technology generation, verification, packaging, dissemination, and utilization; agro-industrialization and agricultural information management; coastal agriculture; biofertilizer research; natural resource management and agro-industrial development; agricultural competitiveness; social inclusion and environmental sustainability; food and nutrition security, gender and youth engagement, climate resilience, and the agriculture-health nexus.

In 2004, SEARCA, under its ninth Director Dr. Arsenio M. Balisacan, began producing and publishing the semi-annual Asian Journal of Agriculture and Development (AJAD) as vehicle for wider dissemination of knowledge in agriculture and rural development generated through research. Balisacan, himself a respected agricultural economics research authority and academician, served as AJAD's first editor-in chief, and continued to do so well beyond his tenure as Director. Under his intellectual leadership and skilled editorial guidance, AJAD gained recognition as a credible and major contributor to the knowledge base in support of agricultural and rural development well beyond the focus region of SEARCA, but through the rest of Asia and beyond. This special issue commemorates AJAD's 20th year of publication and comes at a time when the journal has begun to welcome articles on basic technological research toward modernization and higher productivity in agriculture and food systems. This comes after many years of almost exclusive focus on research with direct developmental and policy relevance, usually through an economics or social science lens. Noting that the corps of SEARCA scholars trained and the body of research that emerged out of SEARCA over the years included those focused on technical scientific studies in agriculture, so should SEARCA's journal encompass such studies as well. This makes for a more comprehensive range of knowledge dissemination consistent with SEARCA's range of contributions in research and graduate study in the field of agriculture over nearly six decades of its existence.

This special 20th Anniversary Issue, with the theme **"Asian Agriculture and Development in a Dynamic and Volatile Landscape of Demands, Peoples, and Risks,"** features articles from three senior members of our Editorial Board, namely C. Peter Timmer, James Roumasset, and David Dawe, who take both a retrospective and forward-looking view at agriculture in Asia.

Dr. Timmer reflects on his wealth of learnings gained throughout his professional career, especially through decades of advising Southeast Asian governments on rice policies. He recounts three distinct stages of professional focus in the evolution of his career, beginning with examination of agriculture's role in the structural transformation of Asian economies, on to the pursuit of inclusive or pro-poor economic growth as propelled by dynamic agricultural development, and eventually, on the whys and hows of stabilizing the price of rice—arguably the most important commodity in the region, and indeed for most of Asia. As for the last, he notes the "substantial practical value in this expertise, as Asian countries often equate food security with stable rice prices." He has taken on a somewhat maverick stance against the seeming conventional wisdom that government intervention has no place in addressing instabilities in the food system. Rather, he argues that "government interventions to stabilize rice prices in domestic markets should be considered good economic policy if they are done right"—noting that "academics and donors mostly denied this possibility, thus cutting government officials off from helpful dialogue, technical assistance, and funding to make these interventions more transparent, cost-effective, and supportive of market development." What does "doing it right" mean, then? Timmer sums up his advice in two words: "don't panic!"—and points to how vulnerable importing countries in ASEAN rightly built up rice stocks to avoid getting caught in a rising price spiral, while talking through the food security issues as a region, at the regular Association of Southeast Asian Nations (ASEAN) summit meetings.

In another retrospective piece, Dr. James Roumasset looks back to decades of policy prescriptions for the agriculture sector, lamenting how the agricultural development literature is "replete with false narratives that have led to misleading policy recommendations." He cites the traditional arguments for subsidizing crop insurance based on the RAUI (risk aversion causes underinvestment) hypothesis, pointing out that most attempts to verify the RAUI hypothesis are fraught with highly restrictive and unwarranted assumptions. This leads him to conclude that "subsidized crop insurance is likely to have high costs and negative benefits," and for such policies that have no rational basis in economic theory, political economy provides the only explanation why they persist. He also examines agricultural contracts and the long-standing disagreements on relative efficiencies of share tenancy, fixed lease and owner farming that have been the basis for agrarian reform policies and programs in Asia. He concludes that trying to determine the relative efficiencies of the three is a pointless exercise, given that there are variations within each of the three arrangements, particularly regarding the degree of specialization on the functions of labor and management. Thus, the three-way classification could misrepresent the nature of the agricultural firm, and past policy prescriptions based on unwarranted conclusions about their relative efficiencies have turned out to be misguided. There is a similar fallacy in the conclusion that large farms are inefficient relative to small ones, based on inverse correlations derived between farm

size and efficiency in the literature. But such analyses fail to consider that farm size can be endogenously determined by other farm attributes that are erroneously ignored but related to efficiency as well. Land reform has been justified on the basis of the alleged inefficiency both of share tenancy and of large farms, and yet both explanations have not stood up to closer scrutiny. Dr. Roumasset concludes that "the key to avoiding these fallacies lies in the use of fundamental explanations," based on "behavioral postulates of the smallest units in the theory and characteristics of the solution," not "ad hoc assumptions about the behavior or nature of higher-level units."

Meanwhile, Dr. David Dawe looks back at six decades of data to examine the world rice market in relation to the other major cereals of wheat and maize, and infers several significant observations: (1) world rice prices have been more stable than world wheat and maize prices since the dawn of the new century, reversing the situation in the last four decades of the 20th century; (2) for all three major cereals, there is a high concentration of exporters but low concentration among importers, implying that importing countries are vulnerable when any of the exporters decide to restrict exports; (3) the world rice market has always been relatively thin compared to world wheat and maize markets, but is much thicker than it had been in 1990; (4) world rice production is less volatile than world wheat and maize production, despite greater spatial concentration than the latter two, both of which are more spread out across continents and hemispheres; (5) the world rice market has weaker linkages with other cereal markets and energy markets; and (6) the world rice market has much smaller futures markets than wheat and maize, which could lead to lower rice price volatility. Looking forward, he points out that destabilizing export restrictions by major exporting countries inflict heavy domestic costs on their own rice farmers while benefiting their competitors in the global market. They could also negatively affect all exporters in the long term as importers are led to rely less on the world market. Dawe sees the common policy response among importing countries of liberalizing rice imports subject to import tariffs as a positive move toward stabilizing rice markets and prices. The world rice market can be used as a key element of a food security strategy, both to reduce rice retail prices (especially in countries with high domestic rice prices) and to stabilize price fluctuations.

Still on rice, the unusually slower response of poverty reduction to economic growth in the Philippines is traced by Drs. Majah Ravago, Arsenio Balisacan, and Enrico Trinidad to misplaced food self-sufficiency policies that kept domestic food prices high, especially for rice. This was the result of protective rice trade restrictions that were the chosen instrument to pursue self-sufficiency, rather than a productivity-focused approach to keep domestic food production costs competitive. The undesired longer-term impact has been on the nutrition of the population, especially young children. The effect of high incidence of severe malnutrition and stunting in the country spills over to education

outcomes, thereby threatening the quality of the country's future work force and future economic prospects as a whole.

Meanwhile, increasing pressures on agricultural land area alongside urbanizing populations makes urban agriculture a growing trend and imperative not only in Asia but in the rest of the globe. SEARCA Senior Fellow Dr. Paul Teng, a long-respected scholar and expert in food systems in the region, makes a strong case for including promotion and development of urban agriculture in national planning. He points to rapid major development of digital, physical, and biotechnological technologies that increase food production capabilities in urban areas while providing economic opportunities for entrepreneurship. Sizable private investments are being made in sophisticated food production facilities like indoor vertical vegetable and fish farms and precision fermentation factories. Urban agriculture is projected to figure prominently in the pursuit of food security, especially for the urban poor, who are at a disadvantage relative to their rural counterparts who tend to have better access to land for food production in the countryside.

The role of youth in sustaining the agriculture and food systems is receiving wider and stronger attention in the face of wide perception of diminished interest by the younger generation in agriculture as an occupation. International Food Policy Research Institute veteran Dr. Howarth Bouis and associates Cristina Sison and John Carlo Navasero examine three related questions surrounding youth in agriculture: (1) How can the youth be encouraged to devote their careers to agriculture? (2) How do poor quality diets compromise the cognitive abilities of young people? and (3) How can nutrition concerns be incorporated into agricultural policies? On the first question, they see the importance of early exposure to agricultural concepts to inspire young people to pursue careers in that field. On the second, malnutrition outcomes are interlinked with the Philippines' worrisome education outcomes due to the effect of malnutrition and stunting on the cognitive and learning abilities of children in school. On the third, there are various interventions spanning the range from closer care and attention to pregnant and lactating mothers to aggressive and effective productivity programs in agriculture that need to form part of development planning in the years ahead.

Raising agricultural productivity requires that farmers themselves accept and adopt new technologies and practices that will increase their yields and improve their resilience to environmental hazards including climate change-related threats. Dr. Evangeline Alocilja presents a customer-oriented technology readiness level (COTRL) tool that will re-engineer agricultural innovation by systematically assessing new agricultural technologies with customer input. This would help ensure that the design of scientific research from its earliest stages already keeps the end-users in mind. The COTRL methodology permits integration of research, prototyping, and commercialization efforts and facilitates a disciplined innovation process that maximizes impacts.

Finally, flood damage is one of the foremost climate-related threats to agricultural production, affecting not only livelihoods of the farmers, but overall food production, food prices and ultimately, food security. Dr. Alfredo Mahar Lagmay has been at the forefront of developing disaster resiliency tools, including a flood forecasting system that could help reduce flood damage through adequate preparedness and mitigation measures. Developed by the University of the Philippines Resilience Institute, the National Operational Assessment of Hazards (NOAH) Center, and the Institute of Environmental Science and Meteorology, the system advances disaster resilience efforts, leveraging science-based forecasts to prioritize vulnerable villages. Unlike traditional early warning systems, the design of the automated system predicts flooding one day in advance and assesses exposure levels based on population distribution. The tool would be an important part of the toolkit for promoting climate-resilient agriculture, and overall disaster readiness, especially for vulnerable areas.

All together, these eight articles are hoped to provide our readers and subscribers an engaging variety of relevant, useful and even practical knowledge to students, educators, researchers, practitioners, advocates, and policymakers alike. As AJAD looks to its next 20 years, we aim to cast an even wider net across the region to gather and share broader and deeper perspectives toward building a stronger knowledge base to propel agriculture and rural development in Asia and beyond, for the benefit of all.