



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Back in the Soup: Now What?¹

C. Peter Timmer

Thomas D. Cabot Professor of Development Studies, Emeritus
Harvard University
Cambridge, Massachusetts, USA

INTRODUCTION

A year ago, the world was facing a severe food crisis. All the ingredients for significant shortages of food grains and vegetable oils were already boiling. An article in this journal at the time asked how to manage such a crisis (Timmer 2022). The answer was a series of steps designed to build confidence in the availability of supplies. Leadership was sought from Indonesia, chair of the G20 in 2022, and soon to be chair of ASEAN².

Indonesia had deep and long experience managing food crises facing its own economy. The hope was that this experience, plus President Joko Widodo's diplomatic skills, could deliver a G20³ consensus declaration at the Bali Summit in November 2022. If clear, substantive, and politically feasible steps were laid out in the declaration, the signatories could return home with some confidence that food prices would not spiral out of control. By stabilizing expectations about food prices, the need for panicked hoarding would be minimized. Somewhat higher prices were inevitable, but sharp spikes might be avoided.

1 This article for AJAD presents the outlook for the world rice market as of early September 2023. It builds on my AJAD article from a year ago (Timmer 2022) and on multiple articles in the East Asia Forum (see Editorial Board, ANU 2023a, b). Full references and links are contained in those editorials. I would like to thank David Dawe and Cielito F. Habito for helpful and timely comments.

2 Association of Southeast Asian Nations

3 The G20 members represent around 85 percent of the global GDP, over 75 percent of the global trade, and about two-thirds of the world population (<https://www.g20.org/en/about-g20/>). The permanent members of the G20 are now Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, South Korea, Mexico, Russia, Saudi Arabia, South Africa, Türkiye, the UK, and the US, along with the EU and the African Union (AU). The AU, which was previously an "invited international organization", was granted full member status at the G20's summit in Delhi, India at the start of September 2023 (<https://www.weforum.org/agenda/2023/09/african-union-g20-world-leaders/>).

Keywords: rice economy, rice shortage, rice price, rice policy, food crisis, food security, G20, ASEAN

JEL codes: Q11, Q17, Q18, Q02

Asian Journal of
Agriculture and
Development (AJAD)
Vol. 20 No. 2 December
2023 complete lineup

Back in the Soup: Now
What? | C.P. Timmer

Digital Technology
Adoption and Potential in
Southeast Asian Agriculture
J.M.L. Montesclaros
and P.S. Teng

Feeding the Future:
Knowledge and Perceptions
of the Filipino Youth Toward
Agriculture
K.M.P. Mercado and H. Osbahr

Transition from Agriculture
to Non-Agriculture
Occupations in West Bengal,
India: Causes and Way
Forward | A.K. Chattopadhyay
and R.K. Kundu

Economic and Profitability
Analysis of Walnut
Production in Kashmir
Valley, India | F.A. Lone,
M.I. Ganaie, S.A. Ganaie, J.A.
Rather, and M.S. Bhat

A Soil Analysis Approach
to Assessing Potential
Loss of Productive Lands
Under Agricultural Land
Conversion
J.G. Calura, R.B. Badayos,
J. Villanueva-Peyraube,
and J.D. Labios

Commentary:
Institutionalizing
Agricultural Ethics
R.L. Zimdahl

Indonesia delivered (Editorial Board, ANU 2023a). World food markets remained relatively calm, rice prices actually declined for several months, and the world's consumers breathed a bit easier. But the breathing space was short-lived. A combination of factors, especially the ramped-up attacks by Russia on Ukrainian food export infrastructure and the emergence of a vigorous El Niño in Asian rice bowls, has led to renewed concerns about an impending food crisis. This time the focus is on rice, rather than wheat, maize, and vegetable oils. But rice is increasingly the “food of the poor” in Asia and in Africa (Timmer 2013). A spike in rice prices will cause widespread hunger.

ANALYTICS

If consumers and traders have well-founded expectations that the price of rice is going to increase sharply, hoarding is rational economic behavior. In order to prevent hoarding by all participants in the rice marketing system, and the sharp spike in rice prices that it causes, governments must manage, that is stabilize, those expectations. Such management requires careful planning, especially about the level of public rice reserve stocks, and clear communications to all interested participants in the rice economy (Timmer 2014).

Historical experience with this process helps a great deal, but “current credibility” is crucial. A government caught deceiving the public about the reality of rice supplies, and its ability to ensure those supplies are delivered to urban markets, faces an extremely difficult path to recovering public trust. Many Asian governments have stumbled along this path; some have been thrown out of office. The price ceiling in the Philippines that went into effect on 5 September 2023 is likely to cause such a stumble unless it is implemented with nuance and flexibility.

The great paradox of food security is that only governments can ensure it, but markets must “do the heavy lifting” (Timmer 2015). Learning to manage this symbiotic relationship, on both sides, has been difficult for most countries. East Asia has leaders and laggards in this historical process. Japan

and Taiwan led the way after WWII. Malaysia and Singapore soon followed, after independence. Indonesia stumbled badly under Sukarno, but the “New Order” regime under Suharto, with its emphasis on economic stabilization and rural growth, learned how to balance the public-private interface reasonably well.

Much of the agricultural economics profession's understanding of the negative effects stemming from chaotic and badly administered interventions into private rice marketing activities was documented early in the Philippines (Umali 1990; Unnevehr 1985). The country has been badly conflicted for decades on how to manage this critical public-private interface. Cambodia and Laos have barely started the process. The military regime in Myanmar is actively destroying any trust between the government and the private sector.

Indonesia demonstrated the lessons learned when it steered the G20 Summit Meeting in Bali in November 2022, to a dramatic declaration that started with a basic primer on food security (Editorial Board, ANU 2023a). It remains to be seen if India, the current G20 chair, can provide similar leadership on calming an increasingly turbulent and troubled world food economy. Both rice and wheat supplies are facing serious shortages.

ANOTHER WORLD FOOD CRISIS?

The prospect of another world food crisis that would rival those in 2007/08, 1972/74, and 1966/68 has been front page news since early August (Raghu 2023; Charles 2023). Over the past three years, the whole world food economy has been severely stressed, for all the well-known reasons:

- Covid-19 supply chain disruptions
- Highly adverse weather in critical wheat- and rice-producing regions in Asia, Europe, and the US
- Disruptions caused by Russia's invasion of Ukraine and the recent escalation against Ukraine's grain shipping and storage facilities

- The rapid emergence of El Niño, with the threat of major droughts in Southeast Asian rice-producing countries

Regional conflicts in Africa that cut off food supplies to vulnerable populations now seem to be a constant.

India's restrictions on private sector milled rice exports, which were announced on 20 July 2023 and subsequently expanded to parboiled and basmati exports, need to be seen in the light of this ominous setting. Food security begins at home, and the general election scheduled for next spring has politicians' eyes focused on stabilizing staple food prices (including tomatoes!). That said, India has tried to manage the rice export restrictions, very carefully, to minimize the food security impact on their regular customers. First exempting parboiled rice, and then placing a 20 percent export duty on it, protects Bangladesh and a few African markets in terms of physical supplies, even though costs are higher. Contracts already being fulfilled in terms of physical loadings are being honored. As chair of the G20 this year, and with the memory of Indonesia's highly successful G20 Summit Meeting last November still fresh in mind, India seems to be trying to balance its domestic needs with maintenance of its reliability as a rice exporter (farmers will matter in the election).

The world rice market has, so far, survived these severe shocks with heartening resilience and little panic. The major exception, the decision by President Ferdinand Marcos, Jr. in the Philippines to place a mandatory and highly restrictive price ceiling on rice throughout the country will be immediately tested by its hostile reception from the media and among many of the members of the experienced team of technocrats in and close to the cabinet. If the price ceiling is administered flexibly and with regional nuance, it will not threaten the credibility of the government or cause severe disruption to the Philippine rice economy. If the edict stands as issued, it will still be unenforceable. Either way, this is a remarkable opportunity to "learn from experience."

Vietnam, Thailand, Pakistan, and even India, are still actively exporting rice. The export prices are profitable, but not high by comparison with previous rice crises (see [Table 2](#)). As of early September, high-quality rice was available at prices ranging from about USD 600/mt (Pakistan) to USD 640/mt (Vietnam) ([The Star 2023](#)). The fact that Vietnam and Thailand are still active exporters, even sending sales agents to regular customers, should reassure both Indonesia and the Philippines.

Going forward, three countries need to be watched quite closely. First, will Indonesia receive the full one million tons of rice it contracted from India? If it does, which now seems likely, that will calm the whole world rice market (and India knows this). Second, is the Philippines in good shape in terms of stocks? The experienced economic technocrats in the cabinet seem to have planned ahead for this contingency, and the price ceiling announced by the president caught them by surprise. The Philippines might yet be a wild card in a scramble for additional rice imports. Third, will Vietnam continue to export normally? So far, the country has remained an active exporter, but there is always the danger of a domestic hoarding run that will force the government to restrict exports. Managing price expectations in Vietnam is now critical.

In a rice emergency, all eyes have now turned to China. Its rice production has suffered significantly from heat and floods. The level of stocks is a state secret, but rice stocks are by far the largest in the world. They are, however, highly dispersed geographically, which somewhat limits access by the central government. Food security in China is a very high priority, and with both wheat and rice prices rising internationally, it is hard to predict what the Chinese response will be. An effort to procure significantly more imports as a preemptive measure will surely spook the market. So far, the Chinese response has been careful and muted.

In a real rice panic, Japan might play a similar role as in 2007. Then, the mere announcement by the prime minister that Japan would start negotiations with the Philippines to sell some of

its surplus “WTO⁴ rice” was sufficient to “prick the speculative bubble,” reverse the widespread hoarding, and send world rice prices sliding (Slayton 2010). Japanese rice stocks are smaller now than in 2007, but even an offer of half a million tons to the neediest buyers in the region might calm any panicked buying.

IS THERE CAUSE FOR PANIC?

The rice experts at the US Department of Agriculture (USDA) are reasonably optimistic the world can get through the current and projected rice shortages with somewhat higher prices and minimum disruption in most local markets. In their August 2023 release of World Agriculture Supply and Demand Estimates, WASDE, world rice production for the 2023/24 marketing year (the timing varies from country to country) is forecast to be 8.1 million tons larger than in 2022/23. “World use is forecast down 1.0 million tons to 523.0 million, as fewer imports by many countries in Asia and Sub-Saharan Africa reduce consumption (USDA 2023).”

There will no doubt be some localized hunger where both wheat and rice supplies are reduced, but widespread rice shortages are not in USDA’s forecast. This is a world depicted by Amartya Sen in his analysis of the Bengal famine during WWII, where access to existing food supplies determines who goes hungry, not physical shortages. By contrast, in a “Malthusian world,” people starve for lack of food supplies.

The East- and Southeast Asia outlook is surprisingly reassuring in view of the challenge from El Niño and India’s partial but widening rice export restrictions. Table 1 provides some key

Table 1. Selected rice production, import, export, and ending stock data

Marketing Year	Production	Imports	Exports	Ending Stocks
(in million metric tons)				
World				
2021/22	513.88	54.42	56.90	182.46
2022/23 Est.	512.82	53.56	54.56	173.79
2023/24 Proj.	520.94	54.15	56.43	171.78
China				
2021/22	148.99	5.95	2.08	113.00
2022/23 Est.	145.95	4.38	1.74	106.60
2023/24 Proj.	149.00	4.00	2.00	105.60
India				
2021/22	129.47	0	22.03	34.00
2022/23 Est.	136.00	0	21.00	36.00
2023/24 Proj.	134.00	0	19.00	36.00
Indonesia				
2021/22	34.40	0.74	0	2.90
2022/23 Est.	34.00	1.85	0	3.45
2023/24 Proj.	34.45	0.70	0	3.40
Philippines				
2021/22	12.54	3.60	0	3.10
2022/23 Est.	12.63	3.75	0	3.48
2023/24 Proj.	12.60	3.80	0	3.48

Source: USDA (2023)

details of the USDA data. The decline in China’s rice imports in 2022/23 and subsequent large drawdown in domestic rice stocks are especially noteworthy. USDA also expects Indonesia and the Philippines to come through the global rice shortages in good shape. It seems that crucial lessons have been learned since the 2007/08 world rice crisis.

HISTORICAL PERSPECTIVE

Previous world food/rice crises provide very useful comparisons with what is happening now. Table 2 reports the peak rice prices for Thai 5 percent broken/Thai 100bs in nominal and deflated US dollars for six earlier episodes of spikes

Table 2. Nominal and real rice prices during the peak month in previous rice crises

Date	Nominal Price in USD/mt	Price in 2023 USD/mt
Oct 1967	245	2,110
Mar 1973	205	1,370
May 1974	625	3,735
Apr 1978	411	1,865
Jun 1981	535	1,715
May 2008	649	1,270

in world rice prices. The US GDP deflator is used to convert from nominal to 2023 prices.

Thailand banned rice exports from April 1973 to January 1974. There was very little rice available from other sources, as Indonesia discovered when it tried to replace its regular imports from Thailand (Timmer 1975).

What followed was a long period of low and stable rice prices, except for a short-lived shortage in Indonesia in 1995. At that time, emergency rice imports procured “on the water” prevented an actual rice crisis.

The peak daily price in May 2008 was well over USD 1,500/mt, which would be USD 2,900/mt in 2023 prices.

PROGNOSIS

Rice is a scarcer and more valuable commodity than before El Niño returned and Russia escalated its attacks on Ukraine’s wheat and corn exports. Accordingly, rice prices are likely to go higher over the next 6 to 12 months. How much higher? Perhaps another USD 100/mt for Thai or Viet 25 percent broken is likely. The big question is whether the price rise will be gradual, giving consumers time to adjust without panic, or whether there will be a rapid spike to USD 1,000/mt or higher. The fact that there has been little panic in local markets since the Indian announcement in late July gives hope that the increase in rice prices will be gradual and contained (Editorial Board, ANU 2023b).

CURRENT ISSUES

It should be clear that even a price for high-quality rice of USD 1,000/mt is not unprecedented. Most of Asia long ago left behind a world where “the economy depends on the price of rice” (as was claimed for Indonesia in 1966). The concern should be over the impact of higher rice prices on food security of the poor, not aggregate inflation. That said, a new bout of food-driven inflation, just as the world is bringing the pandemic-induced macro inflation under control by sharply raising interest rates, would be quite unfortunate, especially for the poor.

Press reports suggest that “food protection” is a serious and growing problem. The fears seem overblown. Although “food security begins at home,” most major rice exporters are acutely aware they need to retain their reputation as reliable suppliers and avoid having their customers ramp up domestic (but high cost) rice production to eliminate imports. For example, on August 8, Malaysia’s prime minister, facing state elections in the following week, increased the Padi Price Subsidy Scheme from MYR⁵ 360 to 500 per ton, at an annual cost to the government of MYR 1 billion. The subsidy had not been changed for more than two decades.⁶ It is no surprise that India, even with its rice export restrictions, has tried to reassure its regular customers that it will meet their most urgent needs.

5 Malaysian Ringgit

6 See <https://www.malaysiakini.com/news/674914>

I thank Richard Leete, Director of the Economic History of Malaysia (EHM) project, for providing this information. Apparently, the prime minister just barely retained his parliamentary majority.

REFERENCES

- Editorial Board, ANU (Australian National University). 2023a. "Global Diplomacy Breaks the Hard Nexus Between War and Famine." *East Asia Forum*, 6 March 2023. <https://www.eastasiaforum.org/2023/03/06/global-diplomacy-breaks-the-hard-nexus-between-war-and-famine/>
- . 2023b. "Avoiding Populism and Panic to Stabilize World Rice Markets." *East Asia Forum*, 21 August 2023. <https://www.eastasiaforum.org/2023/08/21/avoiding-populism-and-panic-to-stabilise-world-rice-markets/>
- Raghu, Anuradha. 2023. "Soaring Rice Prices Stretch Budgets for Billions in Asia, Africa." *Bloomberg*, 10 August 2023. <https://www.bloomberg.com/news/articles/2023-08-10/soaring-rice-prices-rekindle-inflation-risk-for-world-s-poorest>
- Charles, Ben, and Anuradha Raghu. 2023. "Rice Market Shows Strain After India's Campaign of Curbs." *Bloomberg*, 3 September 2023. <https://www.bloomberg.com/news/articles/2023-09-03/rice-market-shows-strain-after-india-s-6-week-campaign-of-curbs>
- Slayton, Tom. 2010. "The 'Diplomatic Crop,' or How the US Provided Critical Leadership in Ending the World Food Crisis." In David Dawe, ed., *The World Food Crisis: Markets, Policies and Food Security*. Washington, DC and London, UK: Earthscan Press. 313–344.
- The Star. 2023. "Price of Vietnam's Exported Rice Highest in the World; Country Still Expected to Export More Than Seven Tonnes This Year." *Vietnam, ASEAN+*, 2 September 2023. <https://www.thestar.com.my/aseanplus/aseanplus-news>
- Timmer, C. Peter. 1975. "The Political Economy of Rice in Asia: A Methodological Introduction." *Food Research Institute Studies* 14(3) 191–196. DOI: 10.22004/ag.econ.135508
- . 2013. "Food Security in Asia and the Pacific: The Rapidly Changing Role of Rice." *Asia & the Pacific Policy Studies* 1:(1) 73–90. Australia: Wiley Publishing Asia Pty Ltd and the Crawford School of Public Policy, Australian National University. <https://doi.org/10.1002/app5.6>
- . 2014. "What are Grain Reserves Worth? A Generalized Political Economy Framework." In Prema-chandra Athukorala, Arianto A. Patunru, and Budy P. Resosudarno, eds., *Trade, Development, and Political Economy in East Asia: Essays in Honour of Hal Hill*. Singapore: Institute of Southeast Asian Studies (ISEAS). 235–248. DOI:10.1355/9789814620062-019
- . 2015. *Food Security and Scarcity: Why Ending Hunger Is So Hard*. USA: University of Pennsylvania Press and the Center for Global Development.
- . 2022. "How to Manage a Food Crisis: A Viewpoint." *Asian Journal of Agriculture and Development* 19:(2) 1–9. <https://doi.org/10.37801/ajad2022.19.2.p1>
- Umali, Dina. 1990. "The Structure and Price Performance of the Philippine Rice Marketing System." Dissertation submitted to the Food Research Institute and the Committee on Graduate Studies of Stanford University in partial fulfillment of the requirements for the Degree of Doctor of Philosophy. 355 pp.
- Unnevehr, Laurian. 1985. "The Costs of Squeezing Marketing Margins: Philippine Government Intervention in Rice Markets." *The Developing Economies* 23(2): 159–172. <https://doi.org/10.1111/j.1746-1049.1985.tb00054.x>
- USDA (United States Department of Agriculture). 2023. *World Agricultural Supply and Demand Estimates*, 11 August 2023. <https://www.usda.gov/oce/commodity/wasde/wasde0823.pdf>