WHICH HOUSEHOLD GROUPS SUFFERED THE MOST FROM THE 2008 RICE CRISIS IN THE PHILIPPINES?

CONTEXT

Responding to crises is a challenge for policymakers because resources for an adequate response tend to be insufficient, and clear information on who needs to be helped first is not always available. Studying past crises can therefore provide valuable lessons. Our analysis looks at the distributional consequences of the 2008 rice crisis in the Philippines in order to identify which household groups were hit hardest by the spikes in rice prices.

The Asia-Pacific region had already started to feel pressure from the volatility of the prices in the food, fuel and financial markets in 2007. Although left largely unscathed by the financial turmoil that ensued, the Philippine economy was exposed to the dramatic spikes in international rice prices in 2008. This is a major issue because rice is a staple for the majority of Filipinos, accounting for about a third of total household food consumption. At the same time, despite programmes to improve agricultural productivity, the country continues...
to be a major rice importer. Stabilizing rice prices in the domestic market therefore ranks as one of the government’s priority policy objectives.

Concerned about the potential impact of the increase in international prices on domestic prices of rice, Philippine policymakers faced difficult policy trade-offs in 2008. Given the weight of the Philippines in the world rice market, a decision to import rice may have led to the tightening of the world rice supply and increases in international prices, which in turn, through the pass-through mechanism, would be passed onto local prices of rice. On the other hand, a decision not to import would have increased the probability of a rice shortage in the domestic market, also an undesirable scenario.

Faced with this dilemma, policymakers opted to import. However, this decision had a cost in the form of price hikes. While it may not be clear to what extent Philippine imports may have contributed to the rise in world prices, the world rice market indeed felt pressure, considering that the Philippines was the world’s biggest importer at the time. World rice prices rose from an average monthly price of $360 per ton in January 2008 to $770 per ton in May 2008. Between March and September 2008, local retail prices jumped by close to 40 per cent. This had profound consequences for the welfare of the people, especially poor households that spend as much as 40 per cent of their income on food staples.

When prices in an economy begin to spike, governments need to respond immediately. As resources will always be limited, priority attention should be directed towards the segments of society that are most affected and therefore most in need of assistance. In this context, the analysis on the groups of households that were most severely affected by the 2008 rice crisis in the Philippines may help identify the household groups that need to be targeted for assistance in the event of future food crises.

**METHODOLOGY AND DATA**

In general, an increase in the price of any commodity has different effects on household welfare depending on whether the household is a producer or a consumer of that commodity. An increase in the price of rice thus improves the income of rice farmers – particularly those who derive a higher share of their total income from rice production – and makes them better off. However, consumers who need to pay higher prices for rice are naturally worse off. Poorer households, which usually spend a greater proportion of their income on rice, suffer more than richer ones. Overall, the short-term impact of the uptick in rice prices on a specific household depends on the difference between a possible gain the household can obtain through higher income from rice production (the share of rice income in total income) and a possible loss from higher expenditure on rice consumption (the share of rice expenditure in total expenditure). As our analysis focuses on the short-term impact of the rice crisis, it does not consider its longer-term effects, such as the potential impact on labour markets (i.e. on employment and wages).

To assess the impact of the rice crisis on different groups of households, we carried out a simulation of the welfare consequences of increases in rice prices during the crisis months of 2008. First, we calculated the net income of rice for each household using the 2009 Family Income and Expenditures Survey of the Philippines, in accordance with the methodology of Deaton (1989). Second, we assessed how vulnerable various household groups are to increases in rice prices. Third, as farm gate and retail prices are not identical and react differently to external shocks, we simulated the differentiated impact of changes in international rice prices on producers and consumers. To this end, we computed an indicator of the net change in welfare of a household – called the benefits/costs (BC) variable – during the crisis period in 2008. This indicator is calculated using the relative importance of rice in household income and expenditure. However, in addition to the above methodology of Deaton, it also distinguishes between relative increases in farm gate and retail prices of rice. A negative BC implies that the household suffers a net welfare loss during the crisis, while a positive BC indicates a welfare gain. Lastly, we employed statistical techniques to investigate the relationship between the BC and per capita expenditure. We analysed this relationship using various household characteristics: urban/rural households, gender of the household head, agricultural/non-agricultural households, levels of income, and geographical regions.
FINDINGS

The analysis shows that 91 per cent of households in the Philippines were negatively affected by the rice crisis, while 8.4 per cent gained from it and 0.6 per cent remained unaffected. However, the impact of the crisis varied considerably among different groups of households. First, female-headed households suffered a greater loss of welfare from the crisis, since they are more likely to be net consumers of rice. Second, urban households were more affected by the crisis than rural households, which is not surprising given that urban households are more likely to be net consumers of rice than rural ones. Third, agricultural households suffered less than non-agricultural households. This is because agricultural households include rice producers, while non-agricultural households also include the urban poor who have very little potential for gains from rice production. The profile of gainers and losers from the rice crisis is thus not entirely unexpected, as most urban and non-agricultural households tend to be net consumers of rice, while households in rural areas and those involved in agricultural activities tend to be net producers of rice.

The analysis of the impact of the crisis on different income groups finds that, on average, lower-income households tended to suffer more than higher-income ones. With regard to the regional effects, households in Caraga, Eastern Visayas, and Northern Mindanao were hit worst by the crisis.

POLICY RECOMMENDATIONS

In the event a rice crisis occurs again, policymakers will be confronted with the challenge of designing an appropriate poverty-alleviating response. While it is desirable that all affected households have access to assistance programmes, such as subsidized rice or conditional cash transfers, the government’s resource constraints dictate that there ought to be strategic targeting of beneficiaries. Those who suffer most from the crisis should be given priority by assistance programmes. Information about vulnerable household groups emanating from our analysis of the 2008 rice crisis in the Philippines may help identify those segments of the population that warrant higher priority in the delivery of assistance, and thus assist the government in targeting relief and safety net programmes during such crises.

However, social safety net and rice subsidy programmes are only short-term measures that, in addition, imply a high cost to society. Therefore, policymakers should also be looking into longer-term solutions to prevent similar crises from recurring. Solving the problem at its core would require improving rice productivity to offset the productivity decline observed in the sector and to increase the level of self-sufficiency in rice production. That would demand investments in infrastructure and research, as well as agricultural extension services. Because instituting reforms in these areas takes time, Philippine policymakers should also aim to enhance international cooperation to stabilize the supply of internationally traded rice.
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