

Role of Organic Farming in Sri Lankan Economic Crisis: A Re-evaluation

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Abstract

The banning of the trade of chemical fertilizers and pesticides produced a severe economic crisis, since the population expects to remain without income and without food. In November 2021, Sri Lanka abandoned its plan to become the world's first organic farming nation following rising food prices and weeks of protests against the plan. The government cancelled some measures, but importing urea remains banned. Sri Lanka is seeking to introduce peacetime rationing of essential goods.

Keywords: *Chemical Fertilizers, Economic Crisis, Organic farming*

Introduction:

In April 2021, the Sri Lankan government, then under the presidency of Gotabaya Rajapaksa, banned the import of chemical fertilizers and pesticides. The stated intention of this policy was to steer the country's agricultural sector from conventional to organic production¹. For farmers, this ban was unexpected and lacked supporting measures such as financial support or extension services to build capacity for organic farming methods. In practice, the policy was economically disastrous and ultimately led to the collapse of Rajapaksa's presidency. Furthermore, only six months after the policy had been imposed, it was rescinded – and with it any ambition to turn Sri Lanka into an organic country².

Nevertheless, the effects of these six months were dramatic: yields of rice, the country's staple food, dropped by more than 30%, and other crops showed massive declines in the subsequent harvesting period. This situation aggravated an already dire food security crisis, as food prices and the cost of living in general were subject to hyperinflation. The underlying, additional macroeconomic causes included currency devaluation, a decline in tourism due to security issues, COVID-19-related travel restrictions, and a public spending crisis².

It is also important to consider the general economic situation in which Sri Lanka found itself directly before the ban, as this certainly influenced not only the policy formulation but also the fallout and push to reverse it. The import ban on agrochemicals was introduced at a time when the national economy was already extremely fragile. Sri

Lanka's government, then, initiate such a risky policy and could not foresee the impending failure of its organic strategy³.

The academic debate framed Sri Lanka's agrochemical import ban as an example of national policies supporting a transition to organic farming. Reporting in international media even made Sri Lanka a poster child for "ideological" organic transition agendas and their (allegedly inherent) failure to deliver on expectations of social, ecological, and economic sustainability⁴. Thus, the Sri Lankan case seemed to vindicate the arguments of those who view organic farming as a largely inefficient system of production that is unable to "feed the world".

This research paper assesses the ban's trajectories, including the conditioning factors behind its failure, to understand how and why this approach failed. Specifically, the study aims to understand the public debate in Sri Lanka preceding the ban on agrochemicals, and the subsequent political struggles that ultimately led to its reversal and to the abandonment of related plans for an organic transition⁵. Through a political ecology perspective, it explores the reasons for banning agrochemicals and the discourses, rationales, and political concepts on which the decision was based; the role of agrochemicals in Sri Lankan agricultural production and how farmers used and perceived them; how such perceptions influenced the government's decision to introduce the ban; and finally, why the policy failed⁶.

Causes of Agricultural crisis

1. Organic Farming

In April 2021, President Gotabaya Rajapaksa announced that Sri Lanka will only allow organic farming totally banning inorganic fertilizers and agrochemicals-based fertilizers. The drop in tea production as a result of the fertilizer ban alone resulted in economic losses of around \$425 million and created a 20% drop in rice production within the first six months alone reversing previously achieved self-sufficiency in rice production and the country was forced to import rice at a cost of \$450 million. The situation in the tea industry was described as critical, with farming under the organic program being described as ten times more expensive and producing half of the yield by the farmers⁷.

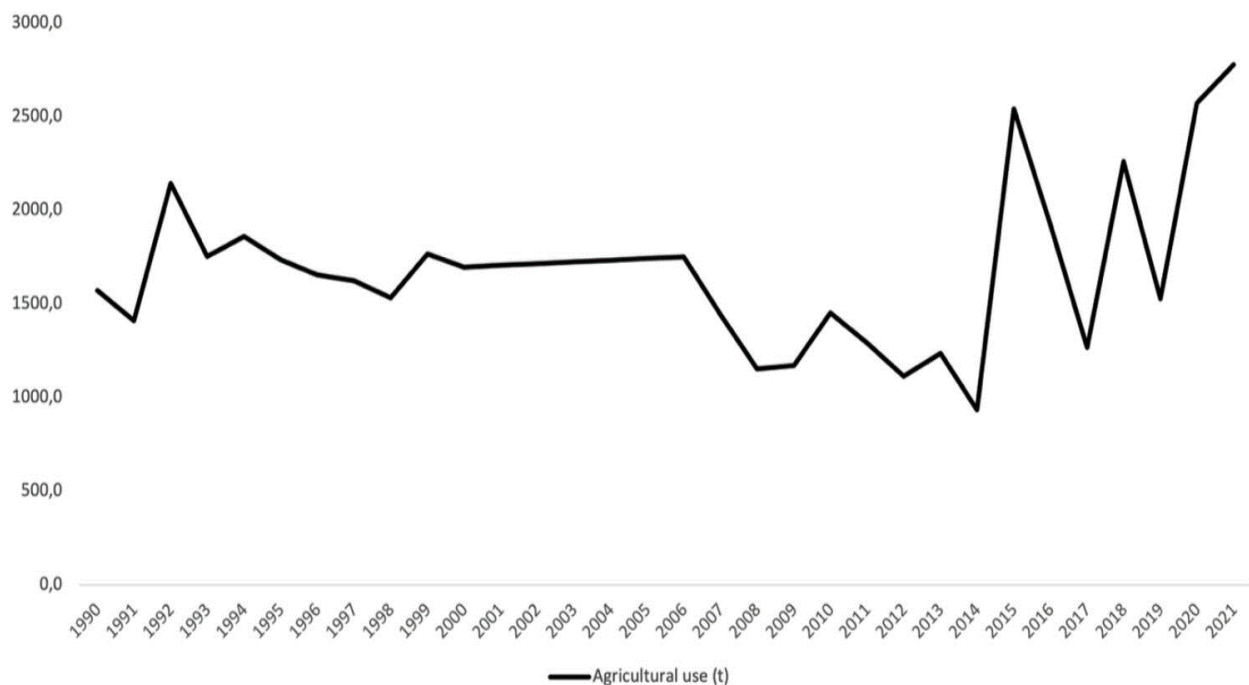
The program was welcomed by its advisor Vandana Shiva, but it ignored criticism from the scientific and farming communities who warned about the possible collapse of farming, including a financial crisis due to devaluation of national currency, which pivoted around the tea industry⁸.

The banning of the trade of chemical fertilizers and pesticides produced a severe economic crisis, since the population expects to remain without income and without food. In November 2021, Sri Lanka abandoned its plan to become the world's first organic farming nation following rising food prices and weeks of protests against the

plan⁹. The government cancelled some measures, but importing urea remains banned. Sri Lanka is seeking to introduce peacetime rationing of essential goods.

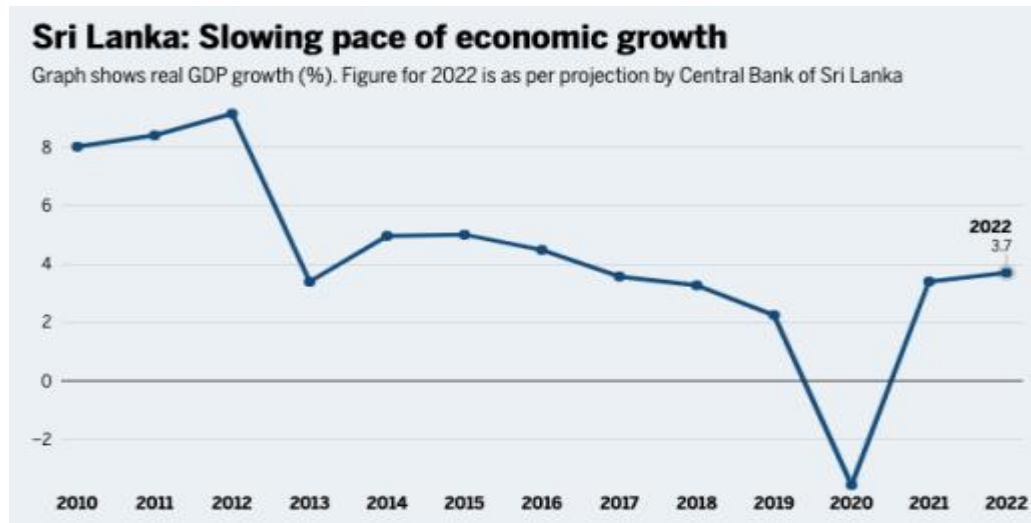
The general intention to transition Sri Lanka's agriculture toward organic farming was shaped in the scope of public debates in Sri Lankan media, society, and political circles over the course of a decade. However, this contribution argues that the ban, while claiming to deliver on the president's election promises for "toxic-free food," was instead an abrupt policy response to an economic crisis. Furthermore, Gotabaya Rajapaksa's authoritarian approach to policymaking contributed significantly to the policy's flawed design¹⁰. The study highlights the lack of planning, deliberation, and stakeholder engagement in the context of the import ban. It also points to the role of popular protests – and specifically, intense nationwide farmers' protests – in reversing the ban and, more broadly, in toppling Gotabaya Rajapaksa's government. The 2021 agrochemical ban has, so far, not been adequately contextualized within Sri Lanka's public discourse and the political economy of the past decade. More specifically, awareness of the history of relations between farmers and political elites has been absent from the debate. This study shows that the collapse of these relations was crucial to the failure of the government's portrayal of an organic transition policy¹¹.

Impact of Organic Farming on Sri Lankan Economy



2. Russo-Ukrainian War

The repercussions of the ongoing tense situation between Ukraine and Russia due to the Russo-Ukrainian War is felt in the already sluggish economic conditions of Sri Lanka. The 2022 Russian invasion of Ukraine has further exacerbated the economic calamity of the country as Russia is the second biggest market to Sri Lanka in tea exports and Sri Lanka's tourism sector is heavily reliant upon these two nations as most of the tourist arrivals are from Russia and Ukraine. As a result, the Ukrainian crisis has put a halt to the path of economic recovery of Sri Lanka with both tea and tourism sector have been hit hard¹².



Conclusion

1. Green Revolution

Sri Lanka has a large rural population, with more than a quarter of the workforce employed in agriculture. Structurally, land ownership is highly fragmented, and most farming households cultivate up to three hectares. Further, it is common for several household members to be employed outside the agricultural sector. Agricultural policy in the country has traditionally aimed to ensure food security by achieving self-sufficiency, mainly in rice, but later diversified to include other crops. Meanwhile, an export-oriented estate sector has persisted since colonial times, especially for tea, rubber, and coconut products¹³. Over a long and slow process since the 1960s, the agricultural production system has been modernized through the application of “Green Revolution” technologies such as chemical fertilizers, pesticides, and monocropping of high-yielding varieties or “improved seeds”. By the start of the twenty-first century, the application of non-organic fertilizers and pesticides had become widespread in paddy farming and vegetable cultivation. Small-scale farmers were targeted by agribusiness companies that marketed these compounds upstream, mainly by sourcing them from outside the country or importing them in bulk.

2. Political ecology

The theoretical perspective of political ecology serves as a heuristic framework for analyzing the Sri Lankan case. Focusing on the influence of historical, remote, and complex causalities on environmental change, political ecology examines the impact of power relations on social-ecological processes across a broad range of empirical topics. This article focuses heuristically on a strand within political ecology scholarship that investigates the power relations that manifest in environmental issues – particularly power asymmetries between small-scale producers, the state, and other economic factors. Political ecology asks who wins and who loses across all dimensions of environmental change, whether through natural resource exploitation, conservation, or natural disasters. Those who are burdened by the negative impacts of environmental change are mostly small-scale producers – farmers, fisherfolk, semi-nomadic pastoralists, or indigenous or marginalized people. They are also faced with the complexity of land use under capitalism, where economic structures often create dilemmas for actors. As will be elaborated below, the Sri Lankan model of agricultural development hinges on extensive state intervention. Both long-standing government fertilizer subsidies and the rigorous regulation of agrochemicals discussed here are evidence of this situation. Nevertheless, agricultural production in Sri Lanka remains primarily dependent on market forces, and macroeconomic conditions – such as foreign exchange rates, inflation, taxation, and so forth – strongly influence agricultural markets.

A critical political ecology literature on agrochemical use and health impacts has emerged over the last few decades. It points toward the presence of dilemmas associated with agrochemical application, the uneven distribution of risks and costs of agricultural practices dependent on these (often imported) chemical commodities, and the politico-economic logics behind the production, trade, and application of potentially hazardous chemical materials¹⁴.

Further, an overarching theme within political ecology is the explicitly political content of agricultural development, investigating how powerful actors such as government agencies and agribusiness lobbyists shape policies, attempt to reorganize agrifood systems through systemic interventions, and redistribute environmental risks and financial profits in the agricultural sector. While neoliberal, market-oriented modes of agricultural development prevail in many national contexts, several countries pursue national developmentalist models; in these countries, state interventions on behalf of parts of the farming community are designed to boost productivity and modernize farming systems. Sri Lanka is one such country, as will be shown by the high degree of state intervention in the agrarian sphere. The developmentalist impetus in Sri Lankan agricultural policy overlaps with a similar momentum in infrastructure development, adding to the image of an authoritarian developmentalist approach pursued by the government of Gotabaya Rajapaksa and his brother, Mahinda Rajapaksa (president of Sri Lanka, 2006–2014) before him. I will argue that such authoritarian developmentalist approaches informed the fertilizer ban and related organic transition policies.

3. Agronomic and socio-economic consequences of the fertilizer ban

In the absence of agrochemical inputs, the Ministry of Agriculture (MoA) recommended that small-scale farmers use organic fertilizers and nano-urea imported from India as substitutes for synthetic fertilizers. An anticipated shipment of organic fertilizer from China was also earmarked for delivery to farmers, but was found to be contaminated by harmful bacteria. In general, organic fertilizers provided by state agencies appeared to be of low quality and farmers had to produce their own, which was very time-intensive. Paddy farmers who produced organic fertilizer domestically could claim a one-time government incentive payment of 12,500 Sri Lankan Rupees (LKR) per hectare (at that time, around US\$34), which was limited to one hectare per household.

While the import ban came into effect almost immediately, it became relevant at the start of the main growing season (*Maha*, which in Sri Lanka lasts from September to February/March during the Northeast Monsoon), when fertilizers were usually applied. Neither inorganic nor organic fertilizers were sufficiently available at this time. Since Sri Lanka does not have a large cattle-based livestock sector, sustained provision of nitrogen-based organic material would have been a challenge in any case (Swiss agronomist, personal communication, October 2023). Hence, given the lack of nitrogen availability, substituting chemical fertilizers with organic fertilizers was not technically feasible. Farmers' attitudes to the agrochemical ban were initially ambiguous. A survey conducted by the agency Verité Research in June 2021 held that while most farmers at the time supported the decision to promote organic agriculture, they also expected significantly reduced yields in the subsequent harvest. Another major finding of the study was that farmers felt they lacked sufficient knowledge to handle the conversion to organic fertilizers on their own. The authors of the survey concluded that "farmers need more time and government assistance to transition".

Over time, the absence of synthetic and organic fertilizers was felt more acutely, with the reliance of farming systems on chemical fertilizers becoming more obvious throughout 2021. Vastly reduced yields led to declining household incomes and food insecurity. This particularly affected cash crops such as bananas, as well as tea, paddy (rice), maize, potatoes, and sugarcane. The paddy harvest from the *Yala* (lesser) growing season of 2021 had been excellent, 59), and so the economic damage of the fertilizer ban only became apparent after a certain time lag. Although the ban was lifted in November 2021, the ongoing *Maha* growing season was marked by a slump in agricultural production that continued into 2022. For many rural households, farming had become economically unfeasible. Farmers received compensation for harvest losses in 2022, but the payments were considered far too low by most of them. Larger tea estates had stockpiled fertilizers (personal communication, tea estate manager, March 2024) and so were initially less affected than small-scale producers, who grow a greater proportion of Sri Lanka's overall tea production. Ultimately, however, tea production was also heavily impacted by the lack of affordable fertilizers, and yields decreased by 16% from 2021 to 2022, marking the lowest harvest since 1995. This shortfall resulted not only in heavy losses for the tea industry but also in a lack of employment opportunities, negatively affecting the predominantly female landless laborers working in tea gardens.

The fertilizer ban and its adverse impacts on agricultural production, combined with hyperinflation, an extremely weak currency, loss of tax revenues, and austerity measures, sent the Sri Lankan economy into shock by early 2022 according to World Bank. The national economy contracted by at least 7.8% in 2022, and the Central Bank's annual report called it "the most onerous year in its post-independence history" in terms of economic crisis. A further result of the fertilizer ban was to exacerbate food insecurity amid worsening food-price inflation. Food-specific inflation peaked at 94.9% in September 2022. Furthermore, although the government permitted fertilizer imports once again

from late 2021, world-market prices remained high following Russia's full-scale invasion of Ukraine in February 2022. These developments hit Sri Lanka especially hard, since the import ban had depleted the country's stored supplies.

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