Does conflict influence the agriculture sector? Evidence from Myanmar's Civil War

Ali Maksum[1,*], *Risky* Fauzi Widodo[2], and *Nanang* Husni Mubarak[3]

[1]Department of International Relations, Faculty of Social and Political Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia
[2] International Development Studies, Wageningen University and Research, The Netherlands
[3]Department of International Relations, Faculty of Social and Political Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia

Abstract. This paper aims to investigate the complex impacts of the 2021 coup in Myanmar, notably the subsequent civil war, on food security. Through qualitative analysis, we delve into the extensive disruptions wrought upon Myanmar's social and economic landscape, with a specific emphasis on its agricultural sector. Using secondary data, we found a paradox where despite the bloody conflict, the country's agricultural exports, particularly rice and beans, have increased. This study addresses a significant gap in current literature by elucidating the often-overlooked relationship between civil conflict and agricultural sustainability in the Myanmar context.

1 Introduction

The Myanmar civil war, also known as the Burmese civil war, is a complex and protracted conflict that has plagued the country since its independence from British colonial rule in 1948. The roots of the civil war can be traced back to ethnic and political tensions that emerged during the colonial period and were exacerbated by the centralization policies of successive military governments [1]. One of the primary drivers of the civil war is the issue of ethnic autonomy and self-determination. Myanmar is home to a diverse array of ethnic groups, each with its own distinct language, culture, and identity. However, the central government's efforts to impose Burman dominance and suppress ethnic minority rights have fuelled grievances and resistance movements among ethnic communities [2]. The civil war in Myanmar is characterized by multiple armed conflicts involving various ethnic armed groups, the military (known as the Tatmadaw), and in some cases, non-state actors. These conflicts are primarily concentrated in the country's border regions, where ethnic minority populations reside [3]. The conflict dynamics are further complicated by competition over natural resources, including land, minerals, and timber, which are often located in ethnic minority territories [4].

The 2021 coup in Myanmar marked a pivotal and alarming turn of events with profound implications for regional security. The military seizure of power not only plunged Myanmar into political turmoil but also ignited widespread unrest and escalated tensions both

* Corresponding author : ali.maksum@fisipol.umy.ac.id

domestically and across the region. The coup, which resulted in the overthrow of the democratically elected government led by Aung San Suu Kyi, triggered a series of protests and civil disobedience movements across the country, met with harsh crackdowns by the military junta. As a consequence, Myanmar has seen a resurgence of armed conflicts between the Tatmadaw and various ethnic armed groups, exacerbating longstanding grievances and reigniting dormant hostilities [5]. These civil wars have unleashed a humanitarian crisis of staggering proportions, with reports of widespread displacement, human rights abuses, and escalating violence against civilians [6]. The fallout from the coup and ensuing conflicts has not only destabilized Myanmar but also raised grave concerns among neighbouring countries and the international community about the spillover effects on regional security, exacerbating existing geopolitical tensions and posing significant challenges to peace and stability in Southeast Asia [7].

The crisis in post-coup Myanmar has undeniably exacerbated the humanitarian crisis. However, there seems to be a notable absence of detailed discourse on the specific impacts on agricultural and food safety concerns, including aspects such as production and export trends. While several articles touch upon the intersection of the Myanmar crisis with agricultural issues, such as [8], [9], [10], [11], [12], the literature specifically addressing post-coup agricultural issues, such as production levels and export trends, remains limited in scope. While existing literature has addressed the broad impacts of conflict on agriculture, this study provides a novel contribution by exploring the paradoxical increase in agricultural exports, particularly rice and beans, despite the ongoing conflict. By examining this unique dynamic, this research addresses a significant gap in current literature and offers new insights into the relationship between civil conflict and agricultural sustainability in the Myanmar context. Thus, this study aims to investigate how the 2021 coup and ensuing civil war in Myanmar have impacted the agricultural sector, particularly focusing on food security and export trends. Hence, the significance of this article lies in several key aspects. Firstly, it aims to address the gap in existing literature by examining agricultural issues following the 2021 coup, an area largely overlooked by freelance studies. Secondly, it seeks to offer the latest insights into agricultural matters post-coup, filling a notable void in the current data landscape. Consequently, the subsequent section will delve into various theoretical aspects pertinent to agricultural issues, particularly focusing on food security during times of crisis.

2 Food Security in Times of Conflict

Research regarding food security is nothing new as this concept was coined in the early 1970', a time characterized by global food crises [13]. In the context of conflict, food security refers to the presence, accessibility, and effective utilization of food among regions or communities impacted by armed conflict or political turbulence [14]. It encompasses both physical and economic access to sufficient, safe, and nutritious food to meet dietary needs and preferences for an active and healthy life. During times of conflict and war, societies often face a myriad of interconnected problems that exacerbate human suffering on multiple fronts. One of the foremost concerns is the deterioration of food security, resulting from disrupted agricultural systems, compromised supply chains, and the widespread displacement of populations [15]. In areas of conflict, agricultural fields frequently experience the devastation of crops, loss of livestock through death or theft, and the destruction of vital infrastructure like irrigation networks and storage facilities [16]. Consequently, this results in reduced food production and accessibility. Additionally, the displacement of communities results in food shortages as people are forced to flee their homes, leaving behind their livelihoods and access to essential resources [17]. The combination of these factors creates a dire situation where food becomes scarce, leading to

malnutrition, hunger, and heightened vulnerability among already marginalized populations.

The works on food security are available through different lenses such as political ecology, resilience, adoption of new technology, resilience or even from gender perspectives. Indeed, studies in Africa, for instance, provide a comprehensive understanding on the complexity of conflict and food security [18]. Studies also provide analysis of the vulnerability of food systems in conflict-affected regions, highlighting the need for nuanced interventions to address food insecurity amidst political turmoil, like in Africa, and the Middle East, as well as in Ukraine [19,20]. Additionally, some countries faced specific challenges ahead of agricultural sustainability in conflict-ridden contexts like in South Sudan [16], Somalia [21], and Syria [22]. In this context, it is critical to employ adaptive strategies and institutional support in mitigating the adverse effects of conflict on agricultural productivity and food security [23–25].

The closest research in addressing and contextualizing the issue of food security in the context of conflict is presented by Delgado and Tschunkert where their research offers a comprehensive perspective on the state of food security and conflict worldwide, examining the interplay between violent conflict and food security [26]. Delgado and Tschunkert argue that there is a pressing necessity to integrate a perspective of peace and conflict into the understanding of food security [26]. This integration is crucial for fostering a comprehensive approach that spans humanitarian, developmental, and peace-building realms to address the escalating levels of food insecurity more effectively [26].

Research on food security in the context of the Myanmar conflict presents several notable gaps that warrant further investigation. While existing literature acknowledges the impact of conflict on food security, there is limited research specifically focusing on the Myanmar conflict and its implications for food access and availability. Understanding the unique dynamics of food insecurity in conflict-affected regions of Myanmar is crucial for developing targeted interventions to address ravaged livelihoods and agricultural productivity. Additionally, research gaps persist regarding the long-term impacts of conflict on food security in Myanmar, including the intergenerational effects specifically on socio-economic well-being. Longitudinal studies are needed to assess the lasting consequences of food insecurity stemming from the Myanmar conflict and to inform sustainable recovery and development efforts. Closing these research gaps is essential for developing evidence-based policies and interventions to mitigate the adverse effects of conflict on food security and promote sustainable peace and development in Myanmar.

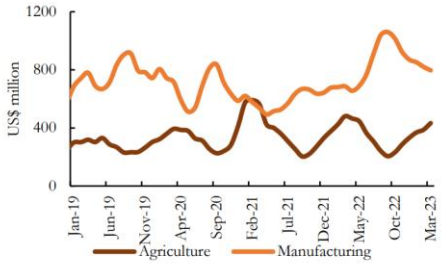
3 Method

This paper employs a descriptive qualitative approach to explore the implications of the 2021 coup and ensuing civil war on food security issues in Myanmar. Qualitative methods are particularly well-suited for this study as they allow for an in-depth examination of complex social phenomena and provide rich, nuanced insights that quantitative data may not capture. Data were gathered from a variety of sources, including government reports, media quotes, and credible secondary sources. The selection criteria for these sources included relevance to the topic, credibility, and the comprehensiveness of the information provided. By focusing on qualitative insights and narratives, this study aims to provide a more holistic understanding of the impact of conflict on agricultural productivity, food access, and livelihoods. The qualitative approach was chosen to capture the intricate dynamics between conflict, agricultural resilience, and food security outcomes in Myanmar. Unlike quantitative methods, which may overlook contextual factors and individual experiences, qualitative methods enable us to delve deeper into the lived experiences of those affected by the conflict. This approach ensures that the voices and perspectives of

diverse stakeholders, including farmers, policymakers, and community members, are represented in the analysis. The gathered data presented in quotes, tables, and figures [27–30], we aim to uncover the complex dynamics between conflict, agricultural resilience, and food security outcomes in Myanmar. This qualitative approach will yield rich insights [31,32] that can inform policy decisions and guide future research endeavours in related fields.

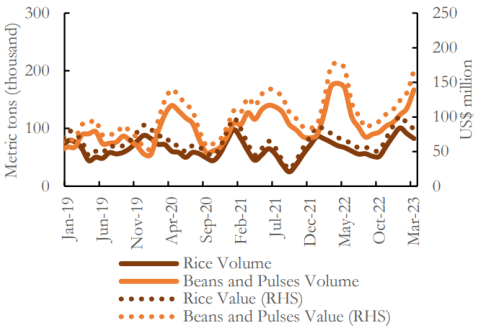
4 Result and Discussion

In this section, drawing from government reports, media quotes, and credible sources, we aim to provide a nuanced understanding of the complex dynamics shaping food security outcomes in the context of Myanmar's ongoing conflict.



Source: CEIC and Ministry of Commerce
Note: Data reflects a 3-month moving average.

Fig. 1. Manufacturing & Agriculture export trends [33]



Source: Central Statistical Organization, Ministry of Commerce, and Myanmar Rice Federation.
Note: Data reflects a 3-month moving average.

Fig. 2. Myanmar's rice & beans exports [33]

In Figure 1, it is evident that Myanmar exhibits an interesting dynamic wherein the trend of conflict has not significantly dampened agricultural product export activities. Conversely, the manufacturing sector in Myanmar has experienced a decline in export trends. The rise in the export value of Myanmar's agricultural products, particularly in the rice and soybean sectors, demonstrates an upward trajectory, especially following the events of 2021, notably the military coup and ensuing civil war. Mung bean exports play a pivotal role in Myanmar's agricultural exports, serving as a cornerstone of the economy. In fact, approximately 90% of Myanmar's mung bean production is sold on international markets, including to China, Vietnam, and Europe [34].

Similarly, as shown in Figure 2, rice stands as a cornerstone of Myanmar's exports, exhibiting an increasing upward trend. Remarkably, despite the challenges posed by conflict, the Myanmar government displays a strong commitment to the management of the rice production sector, characterized by extensive land utilization. Nearly 70% of Myanmar's rural population engages in rice cultivation, a significant proportion bolstered by the introduction of various high-quality seed varieties [35]. The resilience in sustaining Myanmar's rice exports appears to stem from the steadfast maintenance of the supply chain by relevant stakeholders, including traders and security forces. Nevertheless, price hikes appear inevitable in light of the violent conflict following the 2021 coup [36].

It is indisputable that the increase in Myanmar's rice exports is also driven by strong demand in the global market. Data provided by the Myanmar Rice Federation indicates that Myanmar exported approximately 2.2 million tons of rice in the fiscal year 2023, surpassing the initial target of 2 million tons. The sustained elevation in global rice prices notably bolstered Myanmar's rice export achievements during fiscal year 2023 and the six-

month period ending in March 2023. This surge contributed to a broader uptick in agricultural exports and led to a 15 percent rise in the value of rice exports compared to the preceding year [33].

Despite the country's increasing export value, it appears disconnected from the plight of farmers in Myanmar. Behind the surge in agricultural exports lies the hardship endured by farmers amidst the crisis under the military junta government. For instance, farmers encounter challenges in accessing capital, particularly from microfinance institutions, due to imposed restrictions, including cessation of government funding [37]. Conversely, the military regime mandates an exceptionally low selling price for farmers' rice, set at 540,000 Myanmar Kyats (equivalent to 258 USD) for 100 baskets of paddy [38]. Strikingly, the market price of rice has skyrocketed uncontrollably, as illustrated in the Figure 3. Consequently, many farmers in Myanmar have been compelled to resort to alternative means, such as maximizing opium cultivation and smuggling, particularly to Thailand, for sale in the global market [39].

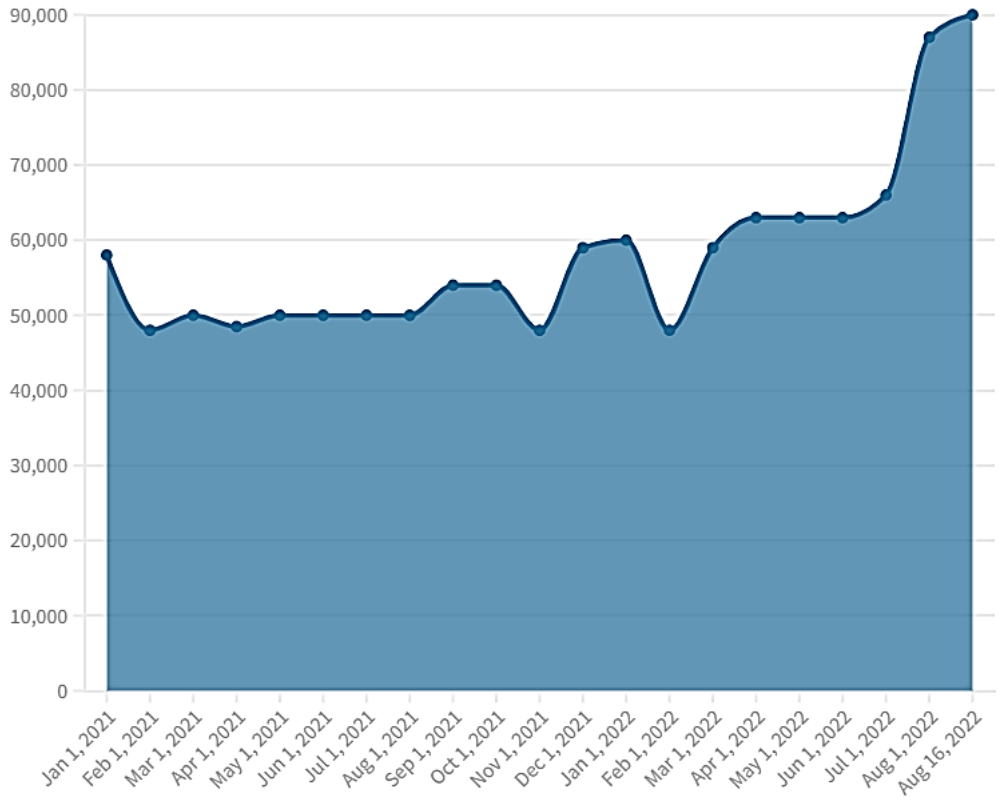


Fig. 3. Rice prices, by month, since military coup [40]

5 Conclusion

In conclusion, the disparity between Myanmar's increasing export value and the dire circumstances faced by its farmers underscores the deep-rooted challenges plaguing the country's agricultural sector. Despite the surge in agricultural exports, farmers continue to grapple with restricted access to capital and oppressive pricing policies imposed by the military junta government. The disconnect between the mandated selling price for rice and the soaring market prices further exacerbates the plight of farmers, compelling many to

resort to illicit activities such as opium cultivation and smuggling to make ends meet. This alarming situation not only highlights the urgent need for policy reforms to support farmers and promote sustainable agricultural practices but also underscores the broader socioeconomic ramifications of political instability and authoritarian rule in Myanmar. Efforts to address these systemic issues must prioritize the well-being of farmers and foster an environment conducive to inclusive and equitable economic development in the country.

Indeed, this study provides significant original work by highlighting the paradox of increased agricultural exports in Myanmar amidst a bloody civil conflict. Our findings reveal that, despite severe disruptions caused by the 2021 coup and subsequent civil war, the country's agricultural sector, particularly rice and bean exports, has shown remarkable resilience. This research offers a new perspective on the relationship between conflict and agricultural achievements, challenging the conventional understanding that conflict inevitably leads to agricultural decline. The novel insights presented here contribute to the broader discourse on food security in conflict-affected regions and underscore the importance of considering both economic and socio-political factors in understanding agricultural outcomes during times of crisis.

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