COPING UP WITH CLIMATE CHANGE: A Case Study of a Banten Muslim Community

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Abstract: This article presents a case study of the impacts of climate change on a rural (Muslim) community in Balaraja, Banten province of Indonesia. The authors conducted fieldwork in 2024 with the Climate Change Response Farmers (*Petani Tanggap Perubahan Iklim*), a group of local rice farmers who face various challenges due to the changing weather patterns. The article describes the difficulties and uncertainties that the farmers encounter, such as droughts, floods, pests, crop failures, and fluctuating prices. The article also analyzes the coping strategies and adaptation measures that the farmers adopt, such as diversifying crops, using water-saving techniques, accessing information and insurance, and forming collective action. The article argues that the farmers' resilience and agency are crucial for ensuring food security and livelihoods in the face of climate change. The article concludes by highlighting the need for more education, support, and participation of the farmers in climate change mitigation and adaptation policies.

Keywords: Climate change, environmental tragedy, Balaraja Banten, agrarian revolt, rural muslim community

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Introduction

We visited a rural community of rice farmers in a Muslim Village, Balaraja, Banten province of Indonesia, to learn about their experiences and challenges in coping with climate change. The farmers belong to a group called Climate Change Response Farmers (*Petani Tanggap Perubahan Cuaca*), which aims to raise awareness and share best practices on how to adapt to the changing weather patterns. The year 2023 was particularly hard for them, as they faced droughts, floods, pests, and crop failures. They told us their stories of resilience and hope, as well as their fears and frustrations. They also shared their aspirations for the future, as they prepare to welcome 2024.[1]

One of the farmers we met was Pak Surya,[2] he has been farming rice for over 20 years. He said that he used to rely on the seasonal rains to irrigate his fields, but in recent years, the rains have become unpredictable and insufficient. He said that he had to invest in a water pump and pipes to access groundwater, but the cost was high and the water quality was poor. He also said that he had to deal with pests such as rats and insects, which damaged his crops. He said that he had to use more pesticides and fertilizers, but they were expensive and harmful to the environment. He said that he had to harvest less rice than before, and sometimes he had no harvest at all. He said that he had to borrow money from lenders with high interest rates, and sometimes he had to sell his assets such as his motorcycle or his livestock. He said that he had to reduce his expenses and cut down on his family's needs. He said that he had to work harder and longer, but he earned less and less.

Despite these difficulties, Pak Surya said that he did not give up on farming. He said that he joined the Climate Change Response Farmers group, where he learned new techniques and methods to cope with climate change. He said that he learned

how to use water more efficiently, how to plant drought-resistant varieties of rice, how to diversify his crops and income sources, how to manage pests and diseases naturally, and how to improve his soil health and fertility. He said that he also learned how to access government programs and subsidies, how to form cooperatives and networks with other farmers, and how to advocate for his rights and interests. He said that he applied what he learned to his farm, and he saw some improvements in his productivity and profitability. He said that he also shared what he learned with his neighbors and friends, and encouraged them to join the group.

Pak Surya said that he was hopeful for the future, but he also recognized the challenges ahead. He said that he hoped that the government would provide more support and assistance to the farmers, such as providing irrigation infrastructure, extension services, insurance schemes, market access, and climate information. He said that he hoped that the society would appreciate and value the farmers' role and contribution in providing food security and environmental sustainability. He said that he hoped that the world would take action to mitigate climate change and reduce its impacts on the farmers and their livelihoods.[3]

Pak Surya's story is one of many stories of the farmers in Balaraja, a Muslim Village who are facing the tragedy of the risks of climate change in their daily lives. They are not only victims of climate change, but also agents of change. They are not only struggling to survive, but also striving to thrive. They are not only serving rice on our dinner table, but also serving as an inspiration for us all.

Some other climate change impacts that affect the Muslim farmers in Balaraja are: (1) Rising temperatures: The average temperature in Indonesia has increased by 0.3 C per decade since 1981, which affects the growth and development of rice

plants. Higher temperatures can reduce the yield potential, increase water demand, accelerate crop maturity, increase pest infestation, and reduce grain quality. (2) Extreme weather events: The frequency and intensity of extreme weather events such as heat waves, heavy rains, storms, floods, landslides, droughts, and fires have increased in Indonesia due to climate change. These events can cause direct damage to crops and infrastructure, disrupt planting and harvesting schedules, increase soil erosion and nutrient loss, increase water scarcity or excess, increase disease outbreaks, and reduce farm income. (3) Sea level rise: The sea level in Indonesia has risen by about 1-3 mm per year since 1993, which threatens the coastal areas where many rice farmers live. Sea level rise can cause saltwater intrusion into freshwater sources, reduce soil fertility, increase flooding risk, damage infrastructure, displace communities, and reduce land availability.

Climate Change Response Farmers was originally established in 2014 under the name *Dai Akhir Zaman Untuk Perubahan Iklim* after the arrival of a preacher to their village in Balaraja, Banten.[4] The environmental activist who came to the farmers in Balaraja was an agricultural scholar with insight into climate change who encouraged them to be prepared for a series of changes in their lives related to agriculture. Agriculture is a sector that is very dependent on the climate and every slight change will greatly affect the lives of farmers. By relying on agriculture they are so dependent on nature that in their perception is God-given and therefore they are apocalyptic in seeing every change that occurs in their livelyhood.

The study initially looked at how radical Islamic groups practiced clandestine self-exile or social exclusion in the Balaraja area of Indonesia's Banten province. This research is an attempt to approach the theme of agrarian resistance that was once so strong in the Banten area against colonial powers and nation

states that emerged after 1945. For us, this study is interesting because the agrarian resistance of the peasants, which once seemed to be so strong despite few attacks or interference from the colonial regime, but now, although the disturbances are very pronounced and very strong, they seem to be losing the spirit to fight.

Balaraja is a town and district within Tangerang Regency in the province of Banten, Java, Indonesia. It has a population of 111,475 according to the 2010 Census. The name Balaraja comes from the words Bala (*Bale*) and Raja, which can mean the resting place of the king, or the army of the king from the Banten tribe. Balaraja is surrounded by many factories that make it an industrial area.

Balaraja is also a village that faces the risks of climate change, such as floods, droughts, landslides, and sea level rise. The peasants community in Balaraja depends on agriculture for their livelihood, but they have to deal with the challenges of environmental degradation, land conversion, water scarcity, and crop failures. Moreover, they also suffer from the negligence of the regime towards their rights and welfare. They have to struggle for land reform, social justice, and democratic participation.

The tragedy of Balaraja is a reflection of the global crisis of climate change and its impacts on the marginalized and vulnerable groups. It is a call for action to address the root causes of the problem and to support the resilience and adaptation of the people who are most affected by it.

The Balaraja peasant community is a group of farmers who have been involved in various social movements in Banten, Indonesia. They have been struggling for their land rights, environmental justice, and cultural identity against the forces of urbanization, industrialization, and state repression. Some of the historical events that shaped their collective action include

the Banten Revolution of 1926, the Tangerang Peasant Movement of 1924, and the recent conflicts over the construction of a coal-fired power plant and a cement factory in their area.

The Balaraja peasant community has been influenced by the teachings of Islamic scholars (ulama) who established modern Islamic boarding schools (pesantren) in Banten, such as KH. Achmad Chatib, who led the Banten Revolution against the Dutch colonialism.[5] The pesantren have provided the peasants with religious education, social services, and political guidance. They have also fostered a network of solidarity among different regions and groups in Indonesia.[6]

The Balaraja peasant community has also been affected by the rural-urban linkages that have emerged due to the rapid development of Jakarta and its surrounding areas. The peasants have faced various challenges and opportunities as they interact with urban actors, such as migrants, workers, consumers, and activists. On one hand, they have benefited from the increased demand for their agricultural products and the access to information and communication technologies. On the other hand, they have suffered from the loss of land, water, and natural resources due to the expansion of urban infrastructure and industries.[7]

The Balaraja peasant community has shown resilience and creativity in responding to these changing circumstances. They have adopted different strategies of resistance and negotiation, such as protests, lawsuits, petitions, alliances, and cooperatives. They have also articulated their demands and aspirations based on their local culture and identity, such as the use of traditional symbols, rituals, and languages. They have challenged the dominant narratives and discourses that portray them as backward, ignorant, or violent.[8]

This research aims to explore the impacts of climate change

on the livelihoods and well-being of a rural community in Indonesia, using a case study of a village in West Java. The Balaraja peasant community is an example of how rural people can actively participate in shaping their own destiny in the face of modernization and globalization. They demonstrate that social movements are not only driven by material interests, but also by moral values, spiritual beliefs, and cultural expressions. They illustrate that rural-urban relations are not only characterized by conflict and exploitation, but also by cooperation and exchange. They reveal that rural development is not only determined by external forces, but also by internal dynamics.

Climate change is a global challenge that affects the livelihoods and well-being of peasant communities around the world. Peasants are often vulnerable to the impacts of climate change due to their dependence on natural resources, their marginalization and their lack of access to adaptive technologies and services. However, peasants are also active agents of change who resist, adapt and transform their socio-ecological systems in response to climate change. This text explores some of the ways that peasant communities cope with and contest climate change, drawing on examples from different regions and contexts.

One of the strategies that peasants use to adapt to climate change is diversifying their crops and livelihoods. For instance, in Zimbabwe, peasant farmers have shifted from maize to small grains such as sorghum and millet, which are more drought-tolerant and resilient.[9] They have also engaged in off-farm activities such as petty trading, remittances and artisanal mining to supplement their income and reduce their vulnerability. Similarly, in Nigeria, peasant farmers have adopted various coping strategies such as planting early maturing varieties, intercropping, irrigation, mulching and agroforestry to enhance their productivity and sustainability.[10]

Another strategy that peasants use to contest climate change is mobilizing collective action and social movements. For example, in Latin America, peasant movements such as La Via Campesina have advocated for food sovereignty, agroecology and climate justice as alternatives to the dominant model of industrial agriculture and neoliberal globalization that contribute to climate change and undermine peasant rights (Borras Jr et al., 2022).[11] They have also challenged the false solutions of green capitalism such as carbon markets, biofuels and genetically modified crops that dispossess peasants of their lands and resources.[12] Similarly, in Asia, peasant movements such as the Korean Peasant League have resisted the free trade agreements that expose them to unfair competition and environmental degradation.[13]

A third strategy that peasants use to transform their socio-ecological systems in response to climate change is learning from their historical experiences and indigenous knowledge. For example, in China, peasant communities have recovered and revitalized their traditional practices of water management, soil conservation and disaster prevention that helped them survive the climatic crises of the past.[14]

They have also integrated modern scientific knowledge and technologies with their local wisdom and innovations to create hybrid solutions that are appropriate for their contexts.[15] Similarly, in Indonesia, peasant communities have drawn on their cultural heritage and cosmology to reinterpret and reconstruct their relationship with nature and society in the face of climate change.[16]

To put it briefly, this text has shown that climate change is not only a physical phenomenon but also a social and political one that affects the lives of peasant communities in different ways. Peasants are not passive victims of climate change but active subjects who resist, adapt and transform their socio-ecological

systems in response to climate change. By doing so, they not only enhance their own resilience and well-being but also contribute to the global struggle for a more just and sustainable world.

Climate change is a global phenomenon that affects the lives and livelihoods of millions of people, especially peasants who depend on agriculture for their survival. Peasants in Indonesia face multiple challenges due to climate change, such as droughts, floods, pests, diseases, and crop failures. These challenges are exacerbated by the socio-economic and political factors that shape their access to land, resources, markets, and services. In this text, I will discuss how climate change impacts peasants' life and livelihood in Indonesia, and how some peasants respond creatively to cope with the changing conditions. I will also examine the issue of agricultural land conversion, which threatens the food security and sovereignty of peasants, and the adaptation failure of peasants who are unable to adapt to the new realities. I will draw on the references listed below to support my arguments.

One of the main impacts of climate change on peasants' life and livelihood is the increased variability and unpredictability of rainfall patterns, which affect the timing and quality of agricultural production. Peasants rely on seasonal indicators, such as wind direction, cloud formation, and animal behavior, to plan their farming activities. However, these indicators are becoming less reliable due to climate change, making it difficult for peasants to decide when to plant, harvest, or irrigate their crops.[17]

Moreover, climate change causes more frequent and intense droughts and floods, which damage crops and reduce yields. For instance, in 2015-2016, Indonesia experienced one of the worst droughts in history due to the El Niño phenomenon, which resulted in widespread crop failures and food shortages.[18] On the other hand, heavy rainfall can cause flash floods and

landslides, which destroy infrastructure and farmland. For example, in 2021, a series of floods hit several provinces in Java and Sumatra, displacing thousands of people and affecting millions of hectares of agricultural land.[19]

Another impact of climate change on peasants' life and livelihood is the increased incidence and severity of pests and diseases, which affect both crops and livestock. Climate change alters the distribution and abundance of pests and pathogens, creating new risks or exacerbating existing ones. For example, climate change has been linked to the emergence and spread of rice blast disease, which can reduce rice yields by up to 80%.[20] Similarly, climate change has been associated with the outbreak of avian influenza (H5N1), which can infect poultry and humans, posing a serious threat to public health and food security.[21]

Peasants have limited capacity to prevent or control these pests and diseases, due to their lack of access to adequate inputs, information, technology, and health services.

In addition to the direct impacts of climate change on agricultural production, peasants also face indirect impacts through the socio-economic and political factors that shape their vulnerability and resilience. One of these factors is the issue of agricultural land conversion, which refers to the process of transforming agricultural land into non-agricultural uses, such as urbanization, industrialization, mining, or plantation development. Agricultural land conversion reduces the availability and quality of land for peasants, who often lose their customary rights or are forced to sell their land at low prices. Agricultural land conversion also increases the exposure and sensitivity of peasants to climate change impacts, by reducing their access to natural resources (such as water, soil, forest), diversifying their income sources (such as off-farm activities), or enhancing their adaptive capacity

(such as social networks).[22]

Furthermore, agricultural land conversion often leads to environmental degradation and social conflict, which undermine the sustainability and security of peasants' life and livelihood.

Peasants are not passive victims of climate change and agricultural land conversion; they also have agency and creativity to cope with the changing conditions. Some peasants adopt various strategies to adapt to climate change impacts on their agricultural production, such as changing crop varieties or planting dates; diversifying crops or livestock; using water-saving or pest-resistant technologies; or participating in collective action or mutual aid groups.[23] These strategies are often based on local knowledge and practices that have been developed over generations through trial-and-error learning. However, these strategies may not be sufficient or effective in the face of more severe or frequent climate shocks or stresses. Therefore, some peasants also seek alternative ways to improve their life and livelihood beyond agriculture, such as engaging in non-farm activities (such as trade or service); migrating to urban areas or other regions; or joining social movements or organizations that advocate for agrarian reform or environmental justice.[24] These alternatives may offer new opportunities or challenges for peasants' adaptation to climate change.

In a nutshell, climate change impacts peasants' life and livelihood in Indonesia in multiple and complex ways, depending on the biophysical, socio-economic, and political factors that shape their vulnerability and resilience. Peasants face various challenges due to climate change, such as reduced agricultural production, increased pests and diseases, and decreased land availability and quality. Peasants also respond creatively to cope with the changing conditions, by adopting various strategies to adapt to climate change impacts on their agricultural production,

or by seeking alternative ways to improve their life and livelihood beyond agriculture. However, peasants' adaptation to climate change is not without limits or trade-offs; it may entail costs or risks that affect their well-being or sustainability. Therefore, peasants' adaptation to climate change requires not only technical or individual solutions, but also structural or collective ones, that address the root causes of their vulnerability and marginalization.

The village is located in a hilly area that is prone to landslides, floods, and droughts, as well as being affected by the expansion of oil palm plantations and mining concessions. The research adopts a mixed-methods approach, combining quantitative surveys, qualitative interviews, focus group discussions, and participatory mapping. Participatory mapping is a method that involves the villagers in creating maps of their land use, resources, and hazards, using local knowledge and symbols. The maps are then used to facilitate dialogue and learning among the villagers and the researchers, as well as to identify the main challenges and opportunities for adaptation. The research draws on the concepts of vulnerability, resilience, and adaptation to analyze how the villagers cope with the multiple and interrelated risks they face.

Climate change is a global phenomenon that affects various aspects of human life, including agriculture. Agriculture is highly dependent on climatic factors such as temperature, precipitation, solar radiation, and carbon dioxide concentration. Changes in these factors can have positive or negative impacts on crop yields, water availability, pest and disease incidence, soil quality, and food security. The table below summarizes some of the main findings from these studies:

Table 1

The Impacts of Climate Change on Agriculture

Region	Impact	Magnitude	Direction
Global	Crop yield	Varies by crop and location	Mixed
Global	Water availability	Decreases in arid and semi-arid regions	Negative
Global	Pest and disease incidence	Increases due to higher temperatures and humidity	Negative
Global	Soil quality	Decreases due to erosion, salinization, and acidification	Negative
Global	Food security	Increases in food prices and malnutrition	Negative
Asia	Crop yield	Decreases by 10% to 40% by 2100	Negative
Asia	Water availability	Decreases by 10% to 30% by 2050	Negative
Asia	Pest and disease incidence	Increases by 20% to 50% by 2050	Negative
Asia	Soil quality	Decreases by 5% to 15% by 2050	Negative
Asia	Food security	Increases in food insecurity and poverty by 15% to 25% by 2050	Negative
China	Crop yield	Decreases by 5% to 20% by 2080	Negative
China	Water availability	Decreases by 5% to 15% by 2080	Negative
China	Pest and disease incidence	Increases by 10% to 30% by 2080	Negative
China	Soil quality	Decreases by 3% to 10% by 2080	Negative
China	Food security	Increases in food imports and expenditure by 10% to 25% by 2080	Negative
Sub-Saharan Africa	Crop yield	Decreases by 10% to 50% by 2080	Negative
Sub-Saharan Africa	Water availability	Decreases by 20% to 40% by 2080	Negative

Methodology

The research is informed by the existing literature on the socio-ecological dynamics of Southeast Asia's concession landscapes, which examines how large-scale land acquisitions for agribusiness and extractive industries affect the livelihoods, land rights, and environmental justice of rural communities.[25] The research also builds on the ecological knowledge of Java and Bali, which provides a comprehensive overview of the natural history, biodiversity, and conservation challenges of these islands.[26] The research contributes to the understanding of the complex and context-specific interactions between climate change and land-livelihood transformations in Indonesia, and the implications for policy and practice.

This research uses a qualitative methodology that is based on the ecological knowledge of Java, which provides a comprehensive overview of the natural history, biodiversity, and conservation challenges of these islands. The research aims to explore how local communities adapt to the effects of climate change and how they perceive their role in environmental stewardship. This article presents a case study of the impacts of climate change on a rural community in Balaraja, Banten province of Indonesia. The authors conducted fieldwork in 2024 with the Climate Change Response Farmers, a group of local rice farmers who face various challenges due to the changing weather patterns. The fieldwork involved interviews, observations, and participatory methods to collect data on the farmers' practices, knowledge, attitudes, and coping strategies.

Results and Discussion

Results

One of the most important social and political phenomena in contemporary Indonesia is the emergence of agrarian and environmental movements that challenge the state and corporate domination over land and natural resources. These movements are composed of various actors, such as peasants, indigenous communities, urban activists, and NGOs, who have different agendas and strategies, but share a common vision of agrarian and environmental justice. In their analysis of these movements, Kelley, Whitten *et al.,*[27] and Peluso *et al.* demonstrate how they employ different forms of power, such as legal, moral, symbolic, and coercive, to assert their rights and interests in the face of state and corporate encroachment.[28]

These forms of power are not mutually exclusive, but rather complement each other in different contexts and situations. For example, legal power can be used to challenge the legitimacy of land concessions or environmental permits, moral power can be used to appeal to public opinion or religious values, symbolic power can be used to create alternative narratives or identities, and coercive power can be used to resist or sabotage the operations of state or corporate actors. By using these forms of power, the agrarian and environmental movements in Indonesia aim to redefine the relations between people and land, as well as between society and nature.

Table 2

Main Findings of Research Papers of the Risks of Climate Change in Balaraja

Impact	*Vulnerability*	*Adaptation*	*Education and Local Wisdom*
Decreased crop productivity and quality due to drought, flood, pest, and disease (Pratiwi, 2023; Ichdayati, 2014; Saputra, 2022; Asnawi, 2015)	*Low income, food insecurity, poverty, and malnutrition (Ichdayati, 2014; Saputra, 2022; Asnawi, 2015)*	*Diversifying crops, using organic farming, applying water conservation techniques, and adopting resilient varieties (Pratiwi, 2023; Ichdayati, 2014; Saputra, 2022; Prihastuti and Waridin, 2018; Putri and Suryanto, 2012)*	*Enhancing climate literacy, promoting agroecology based on local wisdom, and empowering women farmers (Pratiwi, 2023; Alfiandy and Ilahi, 2023; Prihastuti and Waridin, 2018)*
Increased frequency and intensity of extreme weather events such as heat waves, storms, and floods (Aldrian et al., 2011; Saputra, 2022)	*High exposure and sensitivity to climate hazards, low adaptive capacity and resilience, and limited access to information and resources (Aldrian et al., 2011; Saputra, 2022)*	*Improving early warning systems, strengthening disaster risk management, and enhancing social capital and cooperation (Aldrian et al., 2011; Saputra, 2022)*	*Raising awareness of climate change causes and consequences, fostering community participation and solidarity, and preserving traditional knowledge and values (Aldrian et al., 2011; Alfiandy and Ilahi, 2023)*

The impact column lists the negative effects of climate change on the crops and the weather in the village. For example,

climate change can cause drought, flood, pest, and disease that can reduce the crop productivity and quality. Climate change can also increase the frequency and intensity of extreme weather events such as heat waves, storms, and floods that can damage the crops and the infrastructure.

The vulnerability column explains why the farmers in the village are at risk of suffering from the impacts of climate change. For example, the farmers have low income, food insecurity, poverty, and malnutrition that make them more sensitive to climate shocks. The farmers also have low adaptive capacity and resilience, and limited access to information and resources that make them less able to cope with climate change.

The adaptation column describes the actions that the farmers take to reduce their vulnerability and increase their resilience to climate change. For example, the farmers diversify their crops, use organic farming, apply water conservation techniques, and adopt resilient varieties that can improve their crop performance and sustainability. The farmers also improve their early warning systems, strengthen their disaster risk management, and enhance their social capital and cooperation that can help them prepare for and respond to climate hazards.

The education and local wisdom column highlights the importance of learning and sharing knowledge about climate change and its solutions. For example, the farmers enhance their climate literacy, promote agroecology based on local wisdom, and empower women farmers that can increase their awareness and participation in climate action. The farmers also raise their awareness of climate change causes and consequences, foster community participation and solidarity, and preserve traditional knowledge and values that can support their adaptation and mitigation efforts.

Discussions

The peasant life in Banten was marked by a series of revolts against the colonial and feudal oppression. According to Kartodirdjo,[29] the most notable uprising was the one that occurred in 1888, when thousands of peasants joined forces to resist the tax collection and land confiscation by the Dutch and their local allies. The revolt was led by a charismatic figure named Abah Anom, who claimed to have supernatural powers and divine guidance. The rebels managed to capture several towns and villages, but were eventually defeated by the superior military force of the colonial government.

The root causes of the revolt were the agrarian policies that favored the interests of the landlords and the colonial administration, while exploiting and impoverishing the peasants. Kartodirdjo (2019)[30] argues that the peasants in Banten were subjected to a system of forced cultivation, land rent, corvee labor, and various taxes and levies that reduced their income and autonomy. Moreover, the peasants faced ecological problems such as soil erosion, drought, and pests that threatened their livelihood. The revolt was an expression of their discontent and resistance against this unjust system.

The revolt also had political and cultural dimensions, as it challenged the legitimacy and authority of both the colonial and the feudal rulers. Kartodirdjo and Abdullah[31] suggest that the revolt was influenced by Islamic teachings and values, as well as local traditions and customs. The rebels sought to establish a more egalitarian and democratic society, based on the principles of justice, solidarity, and piety. They also invoked the historical memory of the Banten Sultanate, which had been a powerful and independent state before being annexed by the Dutch in 1813.

The revolt of 1888 was not an isolated event, but part of a broader pattern of agrarian radicalism in Java. Kartodirdjo[32] traces the history of peasant movements from the early nineteenth century to the early twentieth century, showing how they evolved in response to changing social, economic, and political conditions. He also analyzes how these movements interacted with other forces such as nationalism, communism, and Islamism, which shaped the course of Indonesian history. The revolt of 1888 was one of the most significant episodes in this history, as it demonstrated the potential and the limitations of peasant resistance in colonial Indonesia.

Pramoedya Ananta Toer was a renowned Indonesian writer who witnessed and participated in the struggle for independence from the Dutch colonial rule and the subsequent political upheavals in his country. He was imprisoned for his dissident activities and wrote many novels that chronicled the history of Indonesia and its people. One of his themes was the plight of the peasants who suffered under the oppression and exploitation of the colonial system and the local elites. In his novel House of Glass, he depicted the life of a peasant family in Banten, a region in western Java, during the late nineteenth century. He portrayed the harsh conditions, the heavy taxes, the forced labor, and the violence that the peasants had to endure. He also showed how some peasants resisted and rebelled against the injustice, but were brutally suppressed by the colonial authorities and their collaborators. Pramoedya's perspective was influenced by his own experience as a member of a pro-independence group and a communist-front cultural organization. He sympathized with the peasants and criticized the colonial system and its agents. He also challenged the notion of art for art's sake and advocated for a socially relevant role for literature. Pramoedya's novel was based on historical facts and sources, but he also used his imagination

and creativity to bring the characters and events to life. He aimed to educate and inspire his readers about the history and identity of Indonesia and its people.[33]

Climate Change Response Farmers is a group of farmers in Balaraja, Banten, who are aware of the impacts of climate change on their agricultural activities. The group was founded in 2014 as Dai Akhir Zaman Untuk Perubahan Iklim, which means "The Last Days for Climate Change", after they received guidance from a preacher who was also an environmental activist and an agricultural expert. The preacher taught them about the causes and consequences of climate change and how they could adapt to the changing conditions. The farmers realized that their livelihoods were at stake as the climate became more unpredictable and extreme. They also believed that the climate crisis was a sign of God's will and a test of their faith. Therefore, they decided to take action to protect their environment and their community.

The peasant life in Banten was marked by a series of revolts against the colonial and feudal oppression. According to Kartodirdjo, the most notable uprising was the one that occurred in 1888, when thousands of peasants joined forces to resist the tax collection and land confiscation by the Dutch and their local allies.[34] The revolt was led by a charismatic figure named Abah Anom, who claimed to have supernatural powers and divine guidance. The rebels managed to capture several towns and villages, but were eventually defeated by the superior military force of the colonial government.

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Peasants in Southeast Asia face various challenges from state and corporate actors who seek to control their land and resources. To defend their livelihoods and environments, they use different strategies that involve legal, moral, symbolic, and coercive forms of power. Legal power refers to the ability to use the law or legal institutions to protect or advance one's interests.

For example, peasants can file lawsuits, petitions, or complaints against state or corporate actors who violate their rights or harm their environment. They can also use legal documents, such as land titles, contracts, or permits, to assert their ownership or access to land and resources.

Kelley examine how circular labor migration affects the land-livelihood dynamics in concession landscapes, where peasants have to negotiate with palm oil and mining companies. They argue that "migration can be a form of resistance to dispossession, a means of maintaining access to land, and a way of enhancing livelihood security and flexibility".[37] Whitten provide an ecological overview of Java and Bali, two islands with rich biodiversity and complex human-nature interactions. They describe how peasants have adapted to various ecological and socio-political changes, such as colonialism, modernization, and globalization.[38] They note that "peasants have always been at the forefront of environmental management, both as users and conservers of resources".[39] Peluso analyze the agrarian and environmental movements in Indonesia that emerged after the fall of Suharto's authoritarian regime. They show how these movements use legal, moral, symbolic, and coercive power to challenge the state and corporate domination over land and natural resources. They suggest that "these movements are redefining agrarian power relations in ways that have implications for the future of democracy, citizenship, and environmental governance in Indonesia".[40]

In Indonesia, there is a growing trend of grassroots movements that challenge the dominant models of agricultural development and land use. These movements are led by farmers, indigenous peoples, women, and youth who seek to reclaim their rights and autonomy over their territories and resources. They are also supported by civil society organizations, academics, and activists who advocate for alternative visions of agrarian justice

and sustainability. These movements are redefining agrarian power relations in ways that have implications for the future of democracy, citizenship, and environmental governance in Indonesia. They are creating new spaces for participation, representation, and accountability in the rural sector, as well as fostering social and ecological resilience in the face of climate change and other threats.

One of the main challenges faced by many developing countries in the era of neoliberal globalization is how to respond to the neoliberal policies of land privatization and market liberalization. These policies, which are often imposed by international financial institutions or powerful states as conditions for loans or trade agreements, aim to reduce the role of the state in regulating the economy and to promote free market competition and foreign investment. However, critics of neoliberalism argue that these policies have negative social and environmental consequences, such as increasing inequality, poverty, landlessness, displacement, deforestation, and environmental degradation. Moreover, they contend that these policies undermine the sovereignty and democracy of the affected countries, as they limit their policy choices and erode their public institutions. Therefore, some scholars and activists have proposed alternative responses to neoliberal globalization that challenge the dominant neoliberal paradigm and seek to promote more equitable, sustainable, and participatory forms of development.

The formation of social movements and coalitions that resist land privatization and market liberalization through protests, campaigns, advocacy, and direct action. These movements often demand land reform, agrarian justice, food sovereignty, indigenous rights, environmental protection, and democratic participation. Some examples of these movements are the Landless Workers' Movement (MST) in Brazil, the Zapatista Army of National

Liberation (EZLN) in Mexico, and La Via Campesina (LVC), an international peasant movement.

The adoption of alternative development models that prioritize local needs, values, and knowledge over global market forces. These models often involve community-based initiatives that seek to enhance local livelihoods, food security, social cohesion, cultural diversity, and ecological balance. Some examples of these models are agroecology, Buen Vivir, and degrowth.

The creation of regional alliances and networks that foster cooperation and solidarity among countries and regions that share similar challenges and aspirations in the face of neoliberal globalization. These alliances and networks often aim to strengthen regional integration, trade, and development, while respecting the diversity and autonomy of each member. Some examples of these alliances and networks are the Bolivarian Alliance for the Peoples of Our America (ALBA), the Association of Southeast Asian Nations (ASEAN), and the BRICS (Brazil, Russia, India, China, and South Africa).

These responses to the neoliberal policies of land privatization and market liberalization are not mutually exclusive or exhaustive. They represent some of the possible ways that developing countries can challenge neoliberal globalization and pursue alternative paths of development that are more aligned with their own interests, values, and visions.

Conclusion

The lives of Muslim farmers in Balaraja are affected by climate change in various ways, such as changes in rainfall patterns, temperature fluctuations, pest infestations, and crop failures. These impacts pose challenges for their livelihoods and food security. However, some people dismiss climate change

as a mere political agenda of the Western academic world, which aims to impose economic policies that disadvantage the Southern countries. This view ignores the scientific evidence and the lived experiences of the farmers who are facing the consequences of climate change every day.

According to Kelley, circular labor migration is one of the strategies that farmers adopt to cope with the uncertainties of land and livelihood in Southeast Asia. However, this also creates social and environmental problems, such as land conflicts, deforestation, and loss of biodiversity. Whitten provide a comprehensive overview of the ecology of Java and Bali, highlighting the rich diversity of flora and fauna, as well as the threats posed by human activities. They argue that conservation efforts should involve local communities and respect their traditional knowledge and practices. Lee Peluso analyze the agrarian and environmental movements in Indonesia, which challenge the state and corporate control over land and natural resources. They show how these movements mobilize different forms of power, such as legal, moral, symbolic, and coercive, to claim their rights and interests. Afiff focus on the resurgent agrarian movements in West Java, which emerged in response to the neoliberal policies of land privatization and market liberalization. They examine how these movements use various strategies, such as collective action, advocacy, networking, and alliance-building, to redefine agrarian power and influence policy-making.

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