







Collective of Agrarian Scholar-Activists from the South







Climate Change and Agrarian Justice

26 – 29 September 2022 Conference Report

Day One: Monday 26 September 2022

Plenary 1: Critical Agrarian Studies and the Politics of Climate Change Responses

The first plenary focused on how the climate crisis is intertwined with agrarian crisis, and is played out in landscapes, along class gender and racial lines. The four speakers are scholars and activists who spoke about climate and agrarian struggles.

lan Scoones, professorial fellow at IDS at University of Sussex, UK, and co-author of the JPS framing paper, argued that climate change and capitalism are deeply entwined, as capitalism underpins the production of 'cheap nature', extractivism and resource grabbing across rural areas. These relationships are barely understood whether by policymakers or by academics. Climate change arises from the accumulating tendency of capitalism. If the challenges of climate change are to be tackled, this requires mobilisations against the accumulating nature of capitalism. Even across the left, there are different views about eroding or dismantling capitalism. If climate change is to be confronted, a broad-based anti-capitalist movement must be formed to, in Erik Olin Wright's terms, 'erode capitalism'. Green capitalism interventions, like carbon offsetting, don't address the root problems of climate change rooted in growth dynamics of capitalism and historical use of fossil fuels mostly in the global north. They create spatial and technical fixes to try and solve capitalism's problems. They instead create green grabs that further separate humans and nature. Simultaneously, the question of climate justice is contested. We should not allow the 'leftist pontification' divide the desire for managing adverse impacts of climate change but rather seek a collaborative approach to address the key problem of capitalism. There is optimism and hope, though, for progressive alliances to shape future mobilisation: too often these connections aren't made, and too often we find environmentalists and other activists in tension. Key is to recognise common interests in confronting the inherent dynamics of capitalism.

Ruth Nyambura of the African Ecofeminist Collective, Kenya, argued that the climate crisis needs to be understood in the context of the rise of 'right-wing conservative, neoliberal, theocratic, fascist governments', often combined with religious evangelicism. African commons have been eroded through the onslaught of neoliberal policies over the past four decades, with privatisation and commodification: "solutions to everyday problems are being addressed from a market perspective". The UN space has become an insidious space in terms of rubber stamping green capitalism in general and a space to squash dissent.. Carbon markets and especially REDD+ have expanded in Kenya, Mozambique, Congo and elsewhere. These policies are coming out of the UNFCCC and COP space being funded by the World Bank and IMF. African people are evicted from land in the name of conservation and justice. "A lot of insidious stuff happens on the ground in communities, and when you track it, is stuff being okayed in the capitals of the world." Speaking of the upcoming COP27, "It is not an African COP simply because it is happening in Africa", as Nigerian author, poet and activist, Nnimo Bassey recently said, while Ruth added:. "This is a death making machine, literally, a space to quash dissent." Diverse movements across Africa are confronting climate struggles, think we've got quite to the heart of the narratives at the heart of the story. In terms of movement organizing, there are quite a number of movements in the continent. There is pontification amongst the left on how the world needs to be, but we are not seeing associated practical organising. The space has become very NGOised and professionalized. So we are losing to the other side, because they are able to speak the language

of the people "while we pontificate with each other." In the process, we are losing the radical battle around multiple forms of intersecting oppressions. "There should be more work on cross-movement, and trans-national movement building if we are to address climate justice, agrarian justice. Solidarity is the reflection of a people's tenderness! I hope we are tender to each other", Ruth said.

Myint Zaw, a writer and activist from Myanmar, focused on how large infrastructure projects in Southeast Asia bring into question the idea of a "green transition". False solutions and 'greenwashing' divide movements. Unifying responses to climate change should be both anticapitalist and trans-environmental. Humanitarian agencies' proclaimed neutrality undermines real struggles. Local organisations have little recognition but they are the ones risking their lives. Pursuing justice is not a neutral matter. Hydroelectric and other green energy projects displace people, as do railway and other projects. These projects are well marketed. These are land grabs that also involve "trying to grab the narrative" not just the control of resources. "We are having to fight back to counter this narrative grabbing with our own narratives", he emphasised.

Antolin Huascar Flores of the Confederación Nacional Agraria del Perú (CNA), and representing La Via Campesina, sketched Latin America's long history of struggle for land and territory. Social movements are responding to climate change by following up on the COPs and convening parallel events. The state is not actively implementing agreements and there are many neoliberal interests targeting the Amazon and its resources, to control vast territories for carbon capture. "That's what capitalism does. It wants to crush us", said Antolin. Yet there is a "climate justice" space, with provisions in law, and movements are still pushing for the right platform. Peruvian social movements are addressing green capitalism, contesting state deals in the Amazon which would see forests replaced with oil palm and other monoculture plantations. Yet the state carries political costs, for allowing predatory multinationals to create hunger in the country, especially as indigenous people struggle against climate change. A key entry point for countering the narratives of 'green capitalism' is critical work on food systems and food system crisis. "The backbone of this whole debate on climate change must be food sovereignty", said Antolin. We want to keep organic seeds organic fertilizer, we want seeds to be diverse. We need the right type of investment for farmers to use organic fertilizer, we must reforest our valleys, stop companies from entering the forest for carbon capture. "We need to make sure we are united to not lose to capitalism." Capitalism creates murder. They want to grab from our indigenous brothers and sisters", he said.

Key points emerging:

- 1. Climate change is an urgent issue for agrarian and broader struggles, given global commitments to reduce emissions but the lack of action on it.
- 2. Dynamics of capitalism must be confronted, through struggle, and agrarian struggles are crucial in this.
- 3. This all the more urgent in the context of rising right-wing, conservative authoritarianism linked to economic policies designed to further serve elites.
- 4. "Narrative grabbing" has accompanied resource grabbing with notions of 'green growth' and green capitalism; a counter-strategy must centre on grabbing back the narrative.
- 5. Leftist pontification
- 6. Humanitarian resistance: are humanitarian organizations actually complicit?

Action points:

1. Counter-insurgent "narrative grabbing": what role for narrative-building in social and agrarian struggles?

- 2. There's an urgent need to reframe climate change so that environmental problems in the South are understood as the outcome of world-historical inequality and exploitation.
- 3. Focus on cross-movement, intersectional and trans-national movement building and alliances, including feminist, labour, peasant, pastoralist, fisher and others.

Session 1: The Politics of Resilience and Adaptation

Three papers formed the focus of this session. Zehra Yaţın et al presented on the environmentalisation of the agrarian question and the agrarianisation of the climate justice movement. Noemi Gonda et al presented on rethinking resilience through socio-environmental conflicts in Nicaragua. Mills-Novoa et al presented on resisting and remaking climate change adaptation in adaptation projects in Ecuador.

Areas of convergence

The authors in their different papers illustrate and agree that politics of resilience and adaptation show "fractious class politics". In the case of Nicaragua, there are conflicting interests between indigenous people and settlers moving into forest areas because of climate change in other parts of the country. In development practice, conflict is a risk to be mitigated, we should instead examine complex relations between state and people, characterized by both conflict and collusion, which creates grounds where real resilience can emerge. Resilience as a process produced within socio-environmental processes and contestations.

Areas of divergence

What about engaging with the literature on adaptation, a lot of good literature that deals with adaptation that helps us dig into some of the dynamics we are talking about. So how do we decide on what literature to engage and that some of that literature on adaptation might have helpful stuff to engage with. Although there is some agreement on using adaptation literature. Don't actually think though that adaptation scholars have taken agency seriously enough, and how people rework adaptation projects locally.

New ideas

Capital value relation links domination of nature and domination of indigenous people historically. Thus in order to understand climate change responses of rural populations, we must understand them within this larger historical context. Hence the 21st century agrarian question is one of nature, and distinct from many existing theories of the agrarian question. This lens shifts centrality of Agrarian question from commodification of farming and rural populations, to commodification and incorporation of nature into world economy as value producing, abstract nature, and rendering redundant these rural populations. Gender relations in constitution of resilience can co-constitute through conflict, but can also instrumentalise the role of women that is aimed at legitimising dominant interventions

World historical perspectives, such as starting with Jason Moore world ecological question. So rather than just say we're dealing with labour or capital, "we're dealing with labour, capital, nature together". There is a need to engage with settler colonial literature, such as Greg Coulthard and Fanon, different ways of bringing land and nature into agrarian question. Three different approaches to saying how to take nature seriously in relation to labour and capital. But concern raised by indigenous people is that their historical trajectories entail ongoing relationship with the

planet that goes before colonial capitalism and particular ways that colonial capitalism gets subsumed within world historical perspective.

Action points

What about situations where don't have explicit interventions that provoke resistance, but slow violence of historical marginalisation, which is much of the rural south. How to think about the potential for counter-hegemonic politics in these contexts?: These situations also require further understanding of local environmental politics and the specific forms of local organising that do occur.

Both the language and subjectivities have temporal and geographic specificities, so definitely there must be a way of thinking about these global connections and beyond capital-labour relations, to identify connections and forge alliances. Methodology question, and method of working: how indigenous people live their relationships to social movements. So ways in which resilience gets built through conflict, not just through confrontation with capitalism, but with other modalities like other indigenous groups etc. So how do you take colonial capitalism and subjectivity seriously, and in ways that don't bury longer historical subjectivities of indigenous people before colonialism and its enduring connections.

Session 2: Climate, Energy Transitions and Agrarian Change

Climate change mitigation, fossil fuels, mitigation policies are working against the marginalised, causing deforestation, land grabbing, green grabbing. Forge alliances over the regions.

Sergio Sauer presented on land and nature appropriation and social-environmental resistance in Brazil. Environmental and especially climate change issues have assumed growing urgency in recent years, becoming more acute with the pandemic and the increasing global hunger and inequality. However, the international commodities' demands and prices have been the driving force for the expansion of the agricultural frontier in Brazil, particularly with the increase in monocrops, but also livestock, and mineral extraction for export in the Amazon and Cerrado biomes. After 2016, against the necessary mitigation actions, the Brazilian government has given financial and legal support to expand unsustainable productive activities, promoting land and green grabbing. Despite the social and environmental impacts of the frontier's expansion. political support and credit incentives have been combined with legal changes, making environmental rules more flexible, and administrative actions, like cutting down the national budget and weakening state institutions for land and environmental inspection and control. The aim is to discuss the current environmental and agrarian (in)justice, agrarian inequality and practices from below in the context of climate change narratives in Brazil. Along with rising social and environmental conflict caused by disputes over land and nature for agriculture, there is mounting conflict related to mining. Indigenous territories are conservation units that are being invaded and it is related to the politics of the country. It used to be the national government's responsibility to control those territories. There are changes to diminish the control by the government, this is tantamount to violence against the local people. Issue of business people taking over lands meant for local people.

Jun He presented his work with co-author Jiping Wang, on 'certificated exclusion' as is evident in forest carbon sequestration in Southwest China. Like many forms of green certification, it claims to achieve "triple-win" outcomes for livelihoods, biodiversity and climate change. Over the last 15 years, each household participating in the project has only received \$10-20 USD (about \$0.67 to \$1.33 USD annually), while requiring farmers to convert their agricultural land into tree plantations. This shows that contemporary capitalism engaged in climate change mitigation

efforts has effectively recast rural governance of land from a territorial arrangement to multiple actors exerting control of carbon credit certification, which creates a new form of climate injustice and social exclusion in agrarian change. We therefore need to look at certification scheme schemes and their aggravation of injustice in agrarian contexts. Ecological outcomes are perverse too, with an increase in mono-cropping. A further impact is the conversion of property rights, with the loss of a right to withdraw land from these new uses. Along with tenure change is that farmers "become labourers rather than actors". There is resistance and tree-stripping. Chinese gvt have a huge remuneration for carbon emission. We are creating more problems if we dont change the social structure. This does not benefit the whole society. We need to look at how capitalism is engaged (the relation) with climate change.

Caroline Upton presented joint interdisciplinary work on the consequences of the global energy crisis through 'just transitions' to renewable energy in pastoral areas. The rush to deliver on national climate-neutral and net-zero pledges made in the Paris Agreement and to meet global SDG goals by 2030 is leading to massive expansion of renewable-energy (RE) generation worldwide – foremost the generation of solar and wind power. In the transition away from fossil fuels, vast open dryland areas are becoming targets for large-scale "green" energy projects. National governments and energy companies – supported by both domestic and international investors, including development banks - have shown growing interest in previously neglected dryland areas traditionally used by pastoralists. Strategically cultivating discourses of "empty", "underutilised" or "degraded" wastelands, investors revive ideas that have historically underpinned conservation, development-related and colonial-era injustices across diverse pastoralist communities. The UN's recent designation of the International Year of Rangelands and Pastoralists (2026) further underscores both the central role of pastoralism in realising critical environmental goals, but also the injustices faced by these often-marginalised communities. At this vital juncture, and through critical deployment of political ecology and energy justice frameworks, actual and impending energy and agrarian injustices are shaped by relationships between capitalism and climate change in pastoral spaces, as seen in case studies in Kenya and Mongolia. Participation and Free, Prior and Informed Consent (FPIC) are critical for prospects for energy justice, and just energy transitions. More transdisciplinary research together with NGOs and key policy actors should centre on participation of pastoralists themselves, as an alternative to the top-down framing of techno-managerial interventions to the climate crisis.

Areas of convergence

- 1. The nature of appropriation under capitalism is not only via legal channels but also through illegal economies though equally, certification and legal green capitalism is often precisely the problem.
- 2. A climate justice perspective means centering questions of class relations and inequality: who is causing and who is being affected by the changes?
- 3. The struggle for land rights and territories are part of the solution.
- 4. Those at the margins continue to be subjugated by neo-liberal policies of the UN, COP 26 just as in the 1980s with structural adjustments programmes. Green energy is a form of violence against those from the Global South.
- 5. When we talk of injustice and climate we should not always think of the state and locals as enemies but also critically interrogate the roles of transnational organisations. The international green agenda has massive funding to facilitate the commodification of natural resources, and it is often transnational corporations that are intermediaries between government and locals; the terms of such deals, and who is profiting, is usually difficult or impossible to decipher.

- Alternatives to the marketisation of carbon is for civil society to get more engaged with governments about how to regulate - instead of privatising regulatory decisions via carbon markets.
- 7. Green energy solutions are needed to avoid catastrophes. We need to reach net-zero and deliver on national climate neutral pledges to meet global SDG goals.

Action points

- 1. There's an urgent need to show how agrarian struggles illustrate solutions, how ordinary people are contributing to agro-ecology. Research should document and analyse what is going on, on the ground.
- 2. Researchers should co-develop work with pastoralists and others affected by 'green energy' and define what constitutes 'energy justice' in diverse settings.
- 3. Research should address the diverse interests and actors shaping climate crisis responses, how INGOs are also capturing policy space and benefits, and offer more sophisticated analyses of multiple interests and complex politics.

Session 3: Interrogating Mitigation and Carbon Accounting

Land-based negative emissions technologies (NETs) and agrarian livelihoods in the global South-Pamela McElwee

Negative emissions technologies (NETs) for carbon dioxide removal (CDR) are an increasingly important element in integrated assessment models (IAMs) that show the world achieving the Paris agreement climate target. We are failing on carbon removal so we are going to miss the 1.5-2 degrees emission. NET differs from mitigation, NET focuses on removing what is already in the atmosphere. They;re used in modeling studies. Where we are meeting emission targets, you have to backcast and predict what we're doing now. The models need to remove something through NET. What does NET mean for rural areas? They don't tell us about land tenure problems. They are not able to model that. The paper talks about pros and cons. What we might learn from existing agrarian literature? Whether or not those nets have hidden problems, people who support direct air capture (high-tech) think it would have a co benefit on the land issue. Net tech literature mostly talks about how we can deploy in marginal lands. We know it is deployed to evict people. In agrarian studies elite capture, colonial history, can we model this? The answer is generally no. different types of funding. Labor unrest. Food access cannot be modeled. 1. We need to be more critical of the integrated assessment model, because they're unable to capture/model the problem. 2. We could make it more transparent, accountable, and procedural redistributive justice.

The political life of mitigation initiatives in agrarian relations: from carbon accounting to climate accountability—Shaila Seshia Galvin and Diego Silva Garzon

Part of a larger four year project studying the relation between accounting and climate mitigation strategies in Canada, Colombia, Argentina and India. The reason we are focusing on this, is the role of accounting in framing dominant responses to climate change. We concur with JPS authors that ways of understanding & perceiving equally needs to be historicized. Accounting knowledge and practices making visible, quantifiable, and manageable the work of plants and so on. Accounting is replete with tools and instruments to intervene in the rural world. Intertwined with

governance, we argue that accounting knowledge and practises plays a role in how capitalism works. Accounting really works to incorporate agrarian activities into mitigation. Several areas new modes of accounting will have important implications: land and labor, productive autonomy of agricultural producers and creating data and knowledge. The kinds of mitigation intervention will enable new intervention who act as expert intermediaries. To wrap up. Several questions: what forms of accounting and accounts are produced in the name of climate mitigation, by whom for whom and with what effect.

Up in the air: The challenge of conceptualizing and crafting a post-carbon planetary politics to confront climate change—Alistair Fraser

The author argues that confronting climate change requires conceptualizing and crafting a post-carbon planetary politics focused on removing carbon from the atmosphere. Civil society carbon sink waiting to be established. What if civil society uses their cooperative for a long term project of removing carbon? Civil society multiplier - Opens up for diversity. Carbon capture needs to capture diverse knowledge and rewrite the world geography. CSOs can achieve so much more than expected. Most of their resources are from funders thus are able to offer support at lower costs. Carbon removal requires diverse knowledge, opinion and ways of thoughts. This gives us the basis to think that CSOs are a better option in addressing carbon emission. Thinking about the threats to the environment, the problem of the global slums, systemic racism among others, there are prospects of engaging with decades of long struggles to create and expand the CSO spaces.

Session 4: The Allure and Consequences of False Solutions

Beyond COP: States, Accumulation Frontiers and Climate Change Politics in the Agriculture Dependent States—George Mudimu et al

The first paper gave insight into how states and capital collude and influence climate change politics, using the case of tobacco growing in Zimbabwe and Malawi to demonstrate. The state has radical policies to tackle climate change but in reality it does the opposite to support capital accumulation. The state and big corporations mobilise farmers to grow flue-cure tobacco which uses heat for curing (highly profitable) over burley tobacco which uses dry air and is not profitable. Evidence to demonstrate this is, there are 145 000 new emerging farmers growing tobacco (90 % small scale farmers), more than 60 000 hectares of land from 2010 to today.

Capitalism, Climate Change, and the Imperial Mode of Living: Confronting 'Ecological Imperialism' in the UK through Agroecological Transition— Mark Tilzey

The fourth paper develops a framework for understanding capitalism and climate change, particularly its differentiated causes and impacts. High consumption capitalism in the Global North (imperium) and China (sub-imperium) is premised on a world resource system hugely biased towards these accumulation centres. While the Global North and sub-imperium are overwhelmingly responsible for anthropogenic climate change, they externalize onto the Global South, through 'spatio-temporal fixes', the 'political' and 'ecological' costs of accumulation. The imperial mode of living explains the rise of 'authoritarian populist' politics both in the North, as citizens demand their 'right' to continue high consumption lifestyles in the face of burgeoning threats (immigration, climate change, etc.), and in the South, as the state-capital nexus enforces neo-extractive policies to supply the imperium/ sub-imperium.

Linking Climate Smart Agriculture to Farming as a Service: Mapping an Emergent Paradigm of Datafied Agrarian Dispossession in India—Ali Malik

An urgent question for critical agrarian scholars and social movements is how to develop an emancipatory mode of confronting climate change in agrarian and rural settings. In India that institutionalized approaches to such challenges in the form of Climate Smart Agriculture (CSA)/Climate Smart Villages (CSV) point in the opposite direction. The authour argues that CSA/CSV programs take the form of neoliberal technologies of government which intensify the disenfranchisement and dispossession of Indian farmers. By doing so, these technologies of government reduce farmers' ability and, perhaps, willingness towards the development of 'a sufficiently anti-capitalist, trans-environmental and agrarian approach to confront climate change'. The essay pursues an initial critical mapping of CSA activities in India while establishing CSA's linkages with an emergent, data-driven service-based farming model. In so doing, it argues that CSA must not be dismissed as simply a trojan horse for corporate agro-industrial interests. Rather, CSA and its associated programs should be investigated as mechanisms that produce and accumulate farmer/agricultural/ecological information while reconfiguring agrarian subjectivities towards digital, service-based agriculture in the form of Farming as a Service (FaaS)

After Coal: Climate Forest Governance and the Agrarian Politics of Appalachia—Gabe Schwartzman

The authouthor examines climate change mitigation in the former coal industry in Appalachia which has collapsed. Landlords have found new rent by marketing themselves in forest recreation carbon offsets worth at least 800 million US dollars, new solar installations and conservation. A new kind of rentierism has emerged , the result of part of a broader trend toward rentierisation of the economy driven by neoliberalisation. A new enclosure which Renders coalfield communities irrelevant to accumulation, communities become surplus population. Renterism drives economies of abandonment: the hollowing out of rural america Rural resentment in the US

Conclusion

The consequences of false solutions: Capital presents governance problems, on paper the state signs these good solutions but in practice it's something else. "False solutions divert our attention from the real problems, so that capital can continue with spatial accumulation" (Mudimu, 2022).

Day Two: Tuesday 27 September 2022

Plenary 2: Diverse Impacts and Responses to Climate Change in the Rural World

Natacha Bruna, director of Observatório do Meio Rural, Mozambique, arqued that climate change impacts can be interpreted in two broad ways. First is through its biophysical manifestations. These impacts are more intensified in global South countries, especially in the rural areas, but not uniformly so, and are further differentiated along gender, race, and class lines. "What we see is the reproduction of underdevelopment, poverty, displacement of people and increased asymmetries in the center and peripheries." The second articulation is through global policies to address climate change. These false solutions to address climate change are shaping rural livelihoods and development. Land- and resources-based policies like the promotion of tree plantations, biofuels and REDD+ comprise new forms of accumulation, intensifying restrictions to forests, promoting resource grabbing and extractivism. These solutions are "new frontiers of accumulations and expropriations" that intensify processes of restrictions to forests, resources grabbing, and extractivism. The focus on a 'climate smart world' has produced a green resources rush that intensifies such ruptures in the rural areas. Her notion of "green extractivism" denotes the response of capital and states 'from above to climate change. Natacha also shared cases of "climate actions from below", based on joint research with Boaventura Monjane which show localized responses, like Justicia Ambiental's collaboration with the affected communities of REDD+ in the reserve area of Central Mozambique to protect biodiversity and implement agroecological practices aligned with the needs and demands of the communities. She outlined three major differences between these climate actions 'from below' and top-down solutions: (i) participation of local actors from planning design and implementation of projects; (ii) horizontal relations and equal access to information; and (iii) non-extractivist initiatives that retain benefits within communities for local consumption, without extractions and expropriations.

Amita Baviskar, a professor of Environmental Studies at Ashoka University, opened with the farmers' protests in India which exposed the intensity of the agrarian crisis. The impacts of climate change include amplified agriculture and rural livelihoods uncertainties, underscoring risks for small farmers and workers in dryland regions, those who work under a continuing legacy of dispossession and exclusion of Scheduled Castes and Tribes, Dalits and Adivasis. Now they are even more vulnerable. "This is what is new: no one, not even the richest farmers, the most prosperous regions, are secure anymore". Access to water has been the chief constraint on agriculture, resolved through building large dams and mining underground aguifers, at huge financial and ecological cost. Climate change has changed rainfall and recharge, droughts and floods. Rural livelihoods also depend on complex, carefully-timed interactions in plant and animal ecologies. Fishers off the coast of western India can't find mackerel where they used to because ocean temperatures have changed. Changes in temperature mean that apple growers in the hills can no longer rely on punctual flowering and pollination. In regards to responses to climate change, drawing from events in India: (1) For us who work on ecological justice farmers appear silent about ecological crisis amplified by climate change. Farmers in north India have been taught chemical intensive agriculture so their demands are for the state to subsidize the same. Farmers elsewhere in India, not exposed to subsidies, have different demands. "The responses are shaped by class and caste but also by histories of place and space". (2) The language of the 'anthropocene' conjures a global "we" that diffuses responsibility. The language of climate change has focused on COP and climate change negotiations, in which the state has occupied a moral high ground and fails to recognize the disparities in fossil fuel production and its own ecologically

devastating policies. Climate change discourse has focused on international negotiations where the Indian government, as a post-colonial nation exercising its "right to develop", has occupied the moral high ground on "differentiated responsibilities and respective capabilities". This assumption of national virtue fails to acknowledge the huge class-based disparities in emissions within the country and, even more glaring, the government's determined commitment to fossilfuel driven production in partnership with its favored corporations, especially the Adani group. The present government's policies around land, water, minerals have become even more destructive of the environment and of the people who directly depend on it for sustenance. A discourse of 'national development' is drummed up to suppress all critiques and challenges. This doublespeak is very similar to what Natacha has described for Mozambique.

Jason Moore, professor of sociology and an environmental historian at Binghamton University, United States, affirmed Natacha and Amita's views. He argued that the fight for world history must confront the 'end of history' and 'clash of civilizations' history which are neo-Malthusian forms of narrative grabbing. The shift to climate and class recognises that climate change is not something that is external but internal and fundamental to the dynamics of capitalism. Yet history shows that "unfavorable moments of climate change are unfavorable to the ruling class", such as in the Bronze Age and 6th and 7th century and the short Ice Age. As a result of capitalogenic new world genocides, we have the most intense period of ice age that resulted in mobilizations and revolt. In the present moment we have a capitalogenic crisis of class divide, birthed in the 15th to 17th century. Jason emphasised that climate change is bad for ruling classes. Cheap nature is always a 'double nuisance': it is about a cultural cheapening of nature while also commodifying it to render it a site of appropriation and accumulation. On responses on the climate crisis at the macro level, he argued that the first thing is unity in diversity, the dialectics as Marx says. "Yes, some capitalists are making a killing out of the pandemic and crisis. But for capitalism overall, it's the end of the road for cheap nature". We now have entered a zero-sum scenario and need to respond with practical solutions. The way forward, according to Jason, is to build political movements that can democratize capital accumulation, arrest state power, socialise key strategic economic sectors and discipline capital.

Convergence:

- "Biophysical manifestations of climate change" put enormous stress on agrarian production systems, exacerbating a wider crisis of social reproduction, pushing more people into deep poverty and worsening power asymmetries between different agrarian classes.
- The intersections of climate change and responses from above (green extractivism and the creation of new frontiers of accumulation, entrench the cheapening of nature, and constitute what Jason calls the "capitalocene" in the web of life
- The political imperative is to turn crises into opportunities for cross-movement alliance building, joint struggles and amplify co-creation of responses and solutions from below.
- The nature of engagement between the state and citizens needs to be improved to counter external influences promoting what Natacha refers to as "false solutions" to the climate change crisis.

Divergence:

Jason's view that "the unfavorable moments of climate change are bad for the ruling class" is in tension with Natacha's view that top-down mitigation is creating a new frontier for accumulation, and ruling classes are actually benefiting from the current climate crisis. Natacha from a political economy perspective while Jason is approaching the subject from a "long history" perspective. Jason clarifies that climate crisis is bad for capitalism (ultimately) but good for (some) capitalists.

- Natacha argues that the absence of the state in the elaboration of the mitigation policies for climate change has opened up space for multinational institutions such as the world bank and some philanthropic organizations that imposes policies that are not conducive for the local contexts where the impact of climate change are mostly experienced. In this light she advocates in her presentation of "home-grown mitigatory policies to address climate induced effects in the local communities. Amita shows that state intervention in India via input subsidies has actually contributed to the ecological crisis by promoting capital intensive agricultural production.
- Amita and Natacha identify grassroots initiatives that present efficient alternatives to the top-down responses imposed on the local communities. Jason, proposes a rather different approach of going back to the 1970s and drawing some lessons that can be used to "democratise local political institutions" and make them more "socialist" in nature and mindful of the current climate and ecological crisis (European perspective?)
- Where can change happen? Differing points of view, and the potential of local struggle, has to do with the positionalities of the speakers—Jason as a scholar from the global North, doing more macro analysis, Amita and Natacha as scholar-activists doing embedded research in the global South.

New ideas

- Moving beyond the neo-Malthusian approach to human-nature relation and adopting a "long history" approach to climate change.
- Climate change is just one of a multiple crises experienced in agrarian communities therefore there is a need for a holistic approach to climate change that takes into account the interconnection between multiple crises experienced in the agrarian communities in the global south.

Action points:

- It is important to build joint agenda between climate and agrarian justice movements
- Challenge the external influences of global actors such as the World Bank and states in shaping climate solutions that adversely impacts local rural livelihoods, people and the environment
- Bridge the abstract/ideal and concrete/feasible distinction how to bring the ideal and abstract ideas of agrarian and climate justice and make them concrete/feasible given the different contexts and conditions.

Session 5: Climate change as an agent of capitalist expansion and dispossession

James Boafo and co-authors presented on 'Understanding non-economic loss and damage due to climate change in Ghana'. This concept of non-economic loss and damage (NELD) has emerged in the international policy arena in the past few years to counteract the focus on climate-induced losses in terms of their economic value, and to draw attention to those aspects of loss and damage that cannot be quantified monetarily. Focusing on southern Ghana, they explore how farmers understand climate change, and corroborate this with rainfall data, as a basis for exploring non-materialist effects. They identified three non-economic losses. First, a loss of social cohesion, with farmers reporting that, as they cannot predict the rainy season, the practice of organising communal labour has been disintegrating. Second, a loss of local knowledge, as farmers are forced to adopt climate resistant seeds because their traditional seeds cannot cope with the current climate change. Third, farmers reported psychological distress and mental health

unwellness because of crop losses. These losses need to be understood through a political economy lens: the concept of climate smart agriculture has been imposed on African countries as a way of adapting to climate change, driven by the Alliance for a Green Revolution in Africa (AGRA) and USAID.

Fathun Karib presented on **Agrarian Questions in the Capitalocene**, looking at the 'mudflow disaster' and the long extermination of the peasantry in Java's Porong frontier after a catastrophic geological event. In May 2006, Lapindo Brantas Inc, an Indonesian oil and gas company, triggered an underground blowout during its drilling activity in Porong subdistrict, Sidoarjo, East Java, Indonesia and the resulting mudflow inundated villages, destroying vast areas of rice and sugarcane fields. Methane produced by the mudflow hole further contributes to climate change. Climatology is one aspect of history and climate change may be a concept of the powerful class. Drawing on the Borras et al. (2021) framing paper, he proposed an additional narrative of the 'agrarian question of climate change from below'. which is constituted by the lived experiences of local communities. It has three tiers: environmental crisis and climate change; capitalist incorporation and site of struggles; and objective position of rural and indigenous people in modern capitalism. In this sense, the deepening and widening earth destruction is part of the agrarian question in the Capitalocene.

In their paper on 'Agribusiness moving through the Capitalocene', Alexander Panez Pinto and Jorge Olea Peñaloza examined how agribusiness adapts, the 'slow violence' it inflicts through its strategies and the legitimising narratives it deploys. Focusing on Chile and agribusiness expansion over several decades, they traced the neoliberal agricultural strategy from the dictatorship in the 1970s, showing how the main actors claimed to be exemplary producers of 'non-conventional' agricultural exports which grew by 252% between 1975 and 2016. Accompanying narratives emphasise the need for water allocations, mobility of capital, and water infrastructure to support export-oriented production. Those opposing agribusiness expansion contest these strategies. Capitalist agriculture is adapting within the Capitalocene through i) technical innovations in productive systems; ii) certified organic production; iii) renewed agribusiness narratives; iv) new crops that are more profitable and adaptable; v) territorial advance towards the south of the country to secure more water and climate advantages and vi) increase in infrastructure scale. These strategies contribute to legitimizing the current agricultural model without questioning its principles.

Convergence:

- Scientific knowledge tends to attribute ecological disasters to human action and ignores
 the role of systems in shaping the impact of climate change and how it is felt at the local
 level hence the critique of the Anthropocene
- Non-economic losses and damages are an important corrective to the narrow conceptualisation of climate change impacts in agrarian contexts which are overly 'productionist'.
- Social networks are key to adaptation strategies yet climate change undermines these very networks and the social relations on which they rest.
- Analysis of agribusiness expansion and corporate interests in climate policies tends to under-state the role and interests of governments to facilitate agribusiness expansion.
- Earlier neoliberal concessions have magnified exclusionary impacts now, under conditions of heightened water scarcity. This suggests that enclosure and commodification have magnified impacts over time, which needs to be further understood - for instance, as Chile's water problem is worse than it was 20 years ago and allocations to agribusiness under conditions of climate change therefore have compounding effects. The dispossession and ecological crisis are accumulating and the consequences are

increasing and the government is not adequately responding to mitigate these negative consequences.

Divergences:

- The concept of Capitolocene was debated: it may be useful for providing the common language or vocabulary to use for engagement with scientists and social movements, but there was also a view that 'this concept is foreign to us' and 'it originates from the West'.
- We need to distinguish between 'systems denialism' versus 'climate denialism'. The
 concept of the Capitalocene is flawed and fails to capture the role of the systems in the
 current multiple natural disasters.
- There was debate about science. How does the impact of climate change and capitalism play out on the ground? The notion of climate and ecological crisis are socially constructed. The geological assessments for natural disasters are not value free. Natural disasters are socially constructed. Science alone can not alone provide a solution. It can only provide scientific measures for natural disasters. Political institutions make decisions about the management of natural disasters.
- There are reservoirs of knowledge among indigenous communities that help understand
 the multiple crises that we are facing in the global south. We don't have to always rely on
 the concepts imported from the west to conceptualise the crises experienced in the global
 south.

New insights:

 Responses from below: there is resistance coming from women from the affected communities who are organizing and protesting against these processes driven from above. Fatib formulated that "climate change is not something outside human but is within human bodies themselves".

Action points

- Academics and NGOs are acknowledging the importance of indigenous knowledge in climate change. There was a call for governments to follow suit and take seriously the role of the indigenous knowledge in combating (or responding to) climate change.
- Always investigate political reactions from below as capital re-strategises, and identify the political economic interests driving false solutions like 'climate-smart agriculture'.

Session 6: Political ecologies of climate impacts

Four presentations focused on the nexus of political ecology and climate change - addressing historical political ecologies of indigenous crops in Senegal, Bt cotton and livelihoods, political ecology of agrarian transformation in Jordan, and crop residue burning and agrarian distress in India.

Anna Porcuna-Ferrer and co-authors presented on **the decline of drought-tolerant indigenous crops in a climate change context**, giving a historical political agroecology account of the Bassari, south-eastern Senegal. African drought-tolerant indigenous crops are on the verge of disappearing from the local landscape despite their potential fit in the predicted drier climate in the area. Drought-tolerant indigenous crops have been abandoned due to the interaction of household-level factors with government and international policies that push their replacement by peanuts, rice and cotton. Whereas indigenous crops are well adapted to extreme environments exacerbated by climate change, interventions tend to place crops - rather than humans - at the

centre. Farmers adopt exotic crops pushed by capitalist logic, creating dependency. Vulnerabilities to climate change are made visible by the case, as historical agrarian injustices brought to the fore by capitalist dynamics cannot be ignored.

Ambarish Karamchedu presented on **Dried up Bt cotton narratives: climate, debt and distressed livelihoods in semi-arid smallholder India.** Proponents of this 'technical fix' position GMO crops as a triple win. India has semi-arid and arid areas where rural poverty is concentrated, with an intense monsoon season (3-4 months), making farming a challenge. BT cotton introduced around 1995, thrives here. India is the biggest cotton cultivator and Bt cotton is grown by 7 million smallholder farmers, 66 percent in semi-arid areas with poor soils and low rainfall prone to monsoon. In Telangana, 65% of farmers across all classes produce BT cotton, with good harvests for 5 years, after which they decline. Failure of farmers who face increased input prices have to resort to non-farm incomes. The triple win technological fix narrative perpetuates and exacerbates the problems it seeks to solve, and benefits farmer institutions rather than enriching farmer knowledge and practice.

Livia Perosino presented a political ecology perspective on **Agrarian transformation and climate crisis in Jordan** calling for Marxist analysis of agrarian questions together with a political ecology of climate change. Different classes of producers have different access capital, with consequences for social relations and the environment. Agriculture and producers are part of a dialectic relation with their environment (mostly water and soil), and impact it both positively or negatively. The countries of the Levant, with their dependence on food imports, are almost entirely overlooked by critical agrarian studies. Yet dynamics of capital in their economies have rapidly evolved towards a commercial and export-oriented model. The penetration of capital in the rural economy has accelerated agrarian transformation and degraded resources. Two classes of capitalist producers have emerged from a process of differentiation. They access capital in different ways: direct access to capital, and increasing levels of indebtedness. The collapse of vegetable and fruit prices on the market is central to the polarization between these two classes, underscored by the absence of financial constraints or regulation.

Ishan Anand and Anjana Thampi addressed **Crop Residual Burning and Agrarian Distress in North India:** A **Trial by Fire.** Every year in October and November, large parts of North India, including New Delhi, are covered with toxic smog. This is attributed to several factors, including industrial and vehicular pollution, but also to crop residue burning by farmers in Punjab, Haryana and neighbouring regions. The dominant discourse in media and policy has been to blame farmers for the environmental hazard. Efforts to curb crop residue burning have taken the form of criminalising the activity and providing technology-driven solutions. Neither have achieved the desired results. Neoclassical economists have proposed an incentive in the form of conditional cash transfers. The environmental and public health crisis is inextricably linked to the deepening of capitalism in Indian agriculture, from the New Agricultural Strategy (NAS), or 'green revolution', through trade liberalisation and declining public support in the 1990s. Crop residue burning is a product of India's resulting agrarian and livelihood crisis. The twin problems of crop residue burning and agrarian distress require reversing the neoliberal regime and re-imagining models of agricultural development to address sustainability and agrarian justice.

Convergence:

- All the four papers use different case studies from different contexts to highlight the dynamics that are brought on by capital intrusion in rural contexts and climate change.
- In the case of Bt cotton, farmers are seen as continuing to produce cotton based on past experiences despite the crises they face. They need to have crops suited for regions

- (argument for indegenous crops), incentivisation of agriculturally suitable crops, need for crop diversification rather than commercially oriented crops.
- Farmer trust to be gained as exemplified by the North Indian case before technical fixes are introduced.
- Farmer vulnerability is increased by emphasis on capitalist production in a climate change context due to market relations and the use of money to ensure production.

New insights

- One cannot address the problem of crop burning without addressing the challenges of agrarian distress. Even if incentives are given for farmers to change production, this does not work.
- A crop like maize can be classified as both a commodity and non-commodity crop.
- Historically India one needs to understand the dynamics of class biases which can influence investments (machinery) and there are subsistence farmers on the other hand with the different classes being affected differently especially in the residue burning context
- In Jordan, authoritarianism, disappearance of peasantry have influenced the landscape. In Senegal movements are mostly urban based, and farmers not politically organised.

Action points

• To increase smallholder farmers climate change resilience, intersectional processes and multiple power dimensions that shape agrobiodiversity dynamics need to be considered.

Session 7: Adapting to a changed rural world

Edwige Marty presented a co-authored paper on Adapting to climate change among transitioning Maasai pastoralists in southern Kenya. Pastoralists have differentiated abilities to benefit from diversification. With increasingly fragmented rangelands, restricted mobility and climatic stress, diversification has accelerated among East African pastoralists. Diversification is promoted as a climate change adaptation strategy to reduce climatic exposure. In Maasai communal land in southern Kenya, pastoralists navigate changing access to productive resources amid social differentiation and changing livelihood practices. By integrating an intersectional approach in access theory, the paper provides a corrective to the tendency to focus on household dynamics, and unpacks patterns of inclusion and exclusion embedded within evolving production relations. Adaptation is creating investments that also help some pastoralists. Changing rules and norms of access: accessing through authority and knowledge relations, moral economy or social relations. The way different people access it varies by age, gender and education. Yet labour fragmentation and commodification of resources, especially water timings during drought, add work for women.

Jackson Wachira presented a co-authored paper on Implications of community-based conservation on pastoralists' climate change adaptation in northern Kenya. Under the Northern Rangeland Trust (NRT), a conservation NGO, community-based conservation (CBC) imperatives prioritize pastoralists' climate change adaptation as part of their overall stated goal of building resilient communities. In Samburu County, pastoralists are pessimistic about the role of various technical and policy pathways pursued by CBC, yet consider these a route to improved rangelands health, increased income from tourism, enhanced access to formal education and mitigation of inter-ethnic conflicts. Negotiated and forceful access to graze in restricted conservation areas by some pastoralists during drought may also be seen as an emergent strategy by pastoralists to mitigate their exposure to climate-change-induced droughts. Context-

specific adaptation re-emphasizes the centrality of power and politics in the understanding, design, execution and measuring of climate change adaptation.

With a focus on the region of Ankara, Antoine Dolcerocca And Ayşe Özge Savaş delivered their paper on Climate Change and Class Differentiation in Rural Areas. Here in Turkey's breadbasket of central Anatolia, climate change is impacting agricultural production both directly and indirectly, with significant seasonal shifts. Climate models predict a further drop in rainfall combined with a rise of temperatures. Farm size, cultivation activity, other income sources, total household income, type and origin of subsidies, perception of changes in climatic patterns, "adaptation" strategies, influence outcomes. Preliminary results show a striking correlation between farm size and awareness of the climate crisis or the implementation of adaptation strategies, with smaller landholders (<50ha) taking close to no measures, and larger landholders (>100ha) having already implemented significant adaptation strategies. The Turkish State, which ratified the Paris Agreement in early 2022, is largely absent. Smaller farmers struggle to survive, or abandon their activities altogether and migrate to urban areas.

Tomás Palmisano and Julieta Godfrid presented on Farmers' strategies in the face of climate change in the central valleys of Chile. Here, climate change has intensified water scarcity with devastating effects on food production. Farmers resist the effects of climate change through strategies shaped by local agrarian history. In two Andean valleys in the Region of Valparaiso, farmers' productive strategies are linked to the optimization of water and land use, and political strategies based on participation in the contentious and institutional actions of the socioenvironmental movement. Farmers have political, productive, cultural strategies to resist the effects of climate change like the megadrought in 2010, historical inequalities in water and land access and expansion of mining and agricultural extractivism. Productive strategies adjust to water availability through irrigation, water storage, monitoring of water infrastructure, and moving animals to communal land or better grazed land. Political strategies around mining projects see some farmers mobilise in opposition while others provide material, logistical and knowledge support; others work in strategies of territorial protection and others develop institutional actions. The relation between political and productive strategies needs to be further explored, amid water inequality and heterogeneous forms of participation.

Convergence:

- Adaptation always needs to be understood in the social context because responses are situated in specific societies. Technological fixes are not enough.
- Adaptation is very different according to the class differentiation so it is important to see the local strategies and politics but also take into consideration the global framing

New ideas:

- Climate changes mobilities of pastoralists are shaped by education and schools, as well as water availability. Most pastoralists in Kenya are still at least semi-nomadic.
- Different farmers are responding to climate change differently; in Turkey, this is converging with a dynamic covered in another JPS forum, on authoritarianism.

Session 8: Corporate and state narratives

Corinne Lamain presented **A review on framing of climate security policies and practices, beyond its discourse** - asking *whose* security? Climate change is increasingly cast as a threat to security, peace and stability. Coined as 'climate security', the concept spans ideational

differences across actors and sectors. Climate security is moving beyond the discursive realm and is evident in policies and practices. She offered a typology of climate security practices and their positioning in framings of climate security, pointing to a notable shift of the understanding of climate security towards human security. There remains, however, risk in this formulation around six common threads: a depoliticization of scarcity, control-seeking over natural resources through top-down governance approaches, a push for neoliberal approaches to economic growth, the dominant focus on violent conflict vis a vis conflicts as a clash of interests and knowledge politics. Alternative approaches would foreground guidance by affected communities through place-specific alliances and a plurality of knowledges. The UN security council had a debate as to whether climate security should be discussed as part of their agenda.

Ricardo Barbosa Jr delivered his paper on **How the securitization of climate change affects agrarian struggles**, on the case of 'green military political participation' in Bolsonaro's Brazil. As agri-food industries and financial agents invest in their climate discourses in Brazil, peasants and indigenous peoples are being subjected to unprecedented opposition regarding their land rights. The militarization of environmental governance is evident in governance of the Amazon, with the creation and recreation of the Amazon council, security threat assessments, rising military presence, civilian absence and undemocratic tendencies. It is crucial then to ask how does securitisation and militarization of climate security affect agrarian struggles.

Maritza Paredes and Anke Kaulard presented their work on Forest as "nature" or forest as "territory"? Knowledge, power, and climate mitigation conservation in the Peruvian **Amazon.** Forests have become crucial in the fight against climate change since their conservation saves valuable carbon stocks and reduces greenhouse gas emissions from deforestation. Conservation resistance has emerged amid growing international support for the state to fight deforestation to contribute to climate change mitigation. Building on Polanyi's concept of "countermovements", these resistances are complex and the forest is disembedded from local societies to serve climate change solutions. Sectoral policies and technical answers obscure uneven institutional and ecological arrangements that connect the past and the present, the macro and the micro in the territory, reproducing injustices related to the land and the authoritarian relationship of these communities with the state. Peru is rapidly expanding the area under natural protected areas, amid pressure for afforestation programmes as a means of revenue. Displaced peasants are moving into national protection areas, reproducing historical inequalities between both the state and citizens, and both past dispossessions and current land and tenure rights are overlooked when implementing REDD+. Addressing the local agrarian problem could be the solution rather than opposing those entering the Amazon for economic reasons.

Caio Pompeia presented a paper on Corporate climate discourses and agrarian struggles in Brazil. As agri-food industries and financial agents invest in their climate discourses in Brazil, peasants and indigenous peoples are confronting unprecedented attacks on their land rights. Such discourses confront ongoing agrarian struggles. Between 2006 and 2008, in the first period of corporate climate narratives, corporations mobilized two main narratives: adaptation via integrated crop-livestock systems and no-till farming, and productivity gains. Both narratives were a legitimizing apparatus that weakened redistributive agrarian initiatives. From the UNFCC in 2009, the second period saw the systematic incorporation of carbon language: carbon markets, low-carbon economies and carbon sequestration. With agrarian reform politically sidelined in the early 2010's, soy traders, meatpacking industries and banks simultaneously advanced carbon discourses while confronting indigenous territorial rights. By the mid-2010's the demarcations of indigenous lands were almost paralyzed. A third period from 2019 saw agri-food elites engage in climate change denialism and authoritarian populist calls for Brazil's withdrawal from climate negotiations, while agro-industries and financial agents defended varied carbon strategies. A third

agrarian strategy of capital is to seek control of substantial parts of already demarcated traditional lands and agrarian reform areas.

Convergence:

- The climate security debate is a political debate. Control over energy is central to the geopolitics unfolding, and the Russian invasion of Ukraine calls for a deframing of climate change in recognition of what Jason terms 'wars of re-division'.
- Scales produce particular dynamics. We notice the repositioning of forests as global value reserves due to their contribution to carbon sequestration and climate mitigation.

Divergence:

- There is a mismatch between proponents of SDG's like NGOs and multilateral organisations, and the role of the state as duty-bearer for their citizens.
- The SDG framing that is dominant among INGOs tends towards pushing the marginalised further to the periphery in the name of saving Mother Earth.
- The utility of human rights frameworks in shifting climate change narratives. This was not agreed. Anke pointed to a long history of environmental policy and climate change struggles. International mitigation policies and treaties such as COP don't address the needs of indigenous people. Indigenous people make alliances with human rights activists and sometimes the state supports them, but the state invites colonial settlers into the Amazon. Behind closed doors, deals are happening.

New ideas:

- Who owns which narratives? Climate change and crisis narratives have been coopted and transformed into state narratives and conservation narratives.
- Climate narrative has political connotations and framing it as a security issue makes it a
 military issue and not a human rights issue. Need to re-think the whole notion of climate
 change, maybe thinking of de-growth.
- 'Green grabbing' is about world systems, the power of capital and how Russia and China seek to change the world order by becoming the most powerful military alliances. The USA's backing of Ukraine is a fight for that military prowess. Financialization has become a problem. Too much money that is not backed by anything and is now hard to re-invest.
- A certain type of narrow "authorized knowledge" is blind to the history of the land and agrarian dispossession with present issues such as the need for forest conservation.
- Climate change is being framed and viewed in contesting visions, that is seen in the changing of policies in order to cope with pressures. (UN Security Council dropping it off their agenda). Is the UN adhering to its code of ethics?

Action points

• Looking at the political economy of these we learn about the need to build countermovements to draw the relationship between capitalism and nature. This call for uniting groups can be related to national policies on mobilization.

Day Three: Wednesday 28 September 2022

Plenary 3: Agrarian Struggles and Resistance

Kirtana Chandrasekaran, from India and working with Friends of the Earth International in Scotland, outlined what agrarian struggles against climate change are actually up against, framing this as the escalation of green capitalism and acceleration of green grabbing. These map onto violent, historical processes of colonialism, imperialism, and pose major challenges for agrarian justice movements. Recognising this as the arena for struggle today is the starting point for defining what should be done. Many governments and corporations persist with fossil fuelintensive growth plans, hidden behind a net-zero emissions smokescreen or through carbon offsets. Financial institutions have jumped in to create financial assets as a new form of accumulation: more than 1,500 corporations have announced net zero targets, creating huge demand for carbon offset credits to fuel these markets. They are buying carbon offset credits which do not in fact exist! There is not even a fraction of carbon offsets available to meet these net-zero targets. "The race is on to commodify every single carbon atom in nature." Nature-based solutions for carbon-removal will be (and already are) a major arena for agrarian justice movements as they lead to land grabbing. Shell needs an area the size of Brazil to offset its emissions! Nestle needs the size of Switzerland (of forest) every year to offset its emissions from dairy. The cheapest methods are tree planting, reforestation soil carbon, geo-engineering, CO2 removal pilot projects. Data grabbing by tech companies, fossil fuel giants and food companies accompanies all this. Agroecology is at risk of being co-opted by the terminology of nature-based solutions. Soil carbon projects exemplify this tendency. There are new methods to make all kinds of nature-based solutions into one single credit, which is not traceable.

Diana Aquiar of CASAS and the Universidade Federal da Bahia, Brazil, spoke about responses from below, and forms of agrarian struggle. Climate crisis is being captured by elites to foster false solutions which amplify dispossession. These instruments and markets have common trends globally, but are also tailored to different agrarian change contexts and histories. In Brazil, the occupation of the Cerrado by agribusiness has been promoted as a strategy to reduce the deforestation of the Amazon. The Cerrado becomes a "sacrifice zone". Greenwashing of largescale land grabs ('green grabs'), promoted by the World Bank, are new ways of dispossession. Conservation agendas have systematically erased people from nature, conservation NGOs are in continuous conflict with forest people, both recognized indigenous groups and the peasantry, putting past victories under threat. Indigenous groups are harassed to sign contracts for carbon credits, creating divisions within communities. As agrarian reforms are being dismantled, communities see these projects as a potential response to their dire situation amidst the lack of public services, sources of livelihood. Neoliberal dismantling of agrarian reform, land rights and food security policies have created an environment ripe for green grab projects to be embraced as the 'only solution'. As Chico Mendes said, "Environmentalism without class struggle is just gardening."

Boaventura Monjane from Mozambique, from CASAS and a postdoctoral fellow at PLAAS, University of the Western Cape in South Africa, shared stories of what is happening in Mozambique. The politics of green extractivism is evident at three levels: local community, state and agrarian social movements. Ten years ago, so-called community carbon projects for carbon sequestration were mushrooming, Boa visited a model project in the community of Nhambita in central Mozambique, where a UK-based company called Envirotrade had signed contracts with

farmers in to patrol and protect the local forest from logging and even use of other forest resources by the Nhambita residents, while others were to plant trees on their own farmland and residential plots to maximise the carbon sequestration so that Envirotrade could sell through the carbon market mechanism. This was 'soft land grabbing'. Payments are seen as a benefit to the community. MST did not initially oppose the REDD+ projects in Brazil at that time, as movements did not see the coming false solutions and their impact on the agrarian communities, but La Via Campesina started opposing these projects. Resistance took the form of people who signed the contract cutting the trees and opening more land for food production. After falling carbon prices and declining profitability, the company abandoned the project, leaving behind unfulfilled contractual obligations. LVC has articulated rural struggles as being about food sovereignty together with climate justice, to counter this kind of extractivist green grabbing.

Beyza Üstün, a Turkish scientist and activist with the People's Democratic Party (HDP) Ecology Commission, spelt out how green projects which depend on the market pose risks for land, water and biodiversity, particularly for developing countries. "We cannot speak to solidarity struggles in response to climate change without addressing the historic crises of capitalism", she said, ecological, health, water and public services crises - and the role of authoritarian states in advancing a capitalist political project. The commercialization of watersheds in the 1970s is just one example, with just a handful of companies owning these, and dams, tunnels, pipes and channels. Companies have promoted these projects as necessary but they are merely a source of further accumulation. For instance, mining systems spill over into green energy, including wind power. Companies have adopted insecure labour conditions, including inadequate occupational health and safety conditions, resulting in deaths and widespread work stoppages in protest. In response, governments have become increasingly violent, as predicted by Samir Amin, in his analysis of fascism and capitalism. Bizarrely, two months ago the EU declared nuclear energy as sustainable energy.

Convergences

- Fictions of carbon markets: not enough nature to commodify to offset emissions
- Agroecology is being equated with, or presented as compatible with 'nature-based solutions' reduced to 'soil carbon' as a way of using agroecology to commodify offsets
- Treating the forest as nature without people, conservation areas in continuous conflict with forest people, indigenous people
- The false solutions are embedded in neoliberal transformation of agrarian contexts regarded as necessary evil
- Water commercialization projects in Turkey resulted in extinctions. Water carried by tunnels to capital accumulation, lost cultural memory through dam projects.
- Meta-transport line, energy lines, big construction displace people ruin ecosystems
- Green technologies and mining proceed together (see papers in parallel session 9)

New insights

- There's a tension in agrarian movements about REDD+ projects.
- Corporations and big NGOs have done their best to separate land struggles from environmentalist movements. This is changing rapidly because peasants are increasingly realizing the deforestation and environment are affecting their livelihoods. Access to land is an ecological imperative and a way to agrarian justice.
- Perverse outcomes: displaced food production but also people needing to clear more forest for food production, having planted trees for REDD projects.
- Instrumentalising indigenous people as protectors of nature

• Governments are both facilitators and direct actors advancing green grabbing. In the global South, states import adaptation and mitigation policies directly from other contexts, facilitating elite accumulation.

Action points

- Develop, document and advocate for 'conservation with people' not 'conservation without people'
- REDD projects have failed as agrarian movements contest them. Opportunity to build alliances between climate justice and agrarian justice movements. Farmers can become carbon farmers, relying on the payments from these programs since their livelihoods are compromised. It can be stopped if the people continue resisting, bringing together radical climate justice movements.
- Mainstream climate movements erase the history of agrarian struggles. Counteract this
 erasure of the history of rural communities from the memory of anti-colonial struggles, and
 link to current struggles.
- Agrarian justice movements are trying to spread out and understand the scale of what is coming in the next few years and take on the narrative battle to steer away from carbon removal programmes. Carbon removal programs are dangerous for agrarian communities. There is a huge risk of displacement and movements need to be there waiting / anticipating for these risks. What solidarity and role for allies?
- We need to unite, strategise and try solidarity against patriarchal governance systems. We struggle as united (women, scientists, ecological organizations etc) We need to design a new life thinking from an ecological politics perspective.

Session 9: Frontiers of corporate capitalism

Daniela Calmon shared her paper on Frictions in the corporate-environmental regime about the rearranging of land and climate politics in Brazil and the United States since 2016. The election of Donald Trump in the United States and of Jair Bolsonaro in Brazil, along with other right-wing populist leaders across the world, destabilized the emerging corporate-environmental regime, in which corporations embrace the climate agenda both as a tool of legitimizing resource grabbing and of broader self-legitimation. Following these political shifts, some corporate sectors have moved to fill the vacuum of climate leadership, while others have taken the opportunity to withdraw from burdensome commitments. Some businesses are now leading an overt backlash to climate policy under the Biden administration. While sectors of financial capital have recently positioned themselves at the forefront of proposing climate solutions via the "net-zero transition", frictions continue to multiply. Neo-Gramscian analysis of accommodation and theories of regime formation help explain dynamics like the exit of agribusiness sectors from corporate-environmental commitments and alliances, like the Brazilian Coalition on Climate, Forests and Agriculture and the Soy Moratorium, since 2019; and the negotiations of American asset managers between fossil fuel industry and civil society demands since Trump's election in 2016. Struggles for climate justice need to target the tensions within climate discourse and policies among dominant capital and state powers. Climate denialism is not just a fringe/opportunistic position, but a persistent powerful competing narrative on climate change and agrarian struggle. Green capitalism is not a passive regime.

Mads Barbesgaard and Andy Whitmore set out their paper **Revenge of the miners: Interrogating mining company strategies in the green transition**. Amidst the so-called green energy transition, the mining industry is strategizing as to how to benefit from the expected rise in

demand for "transition minerals" like lithium (as a solution to de-carbonization) through rapidly expanding their production, while also being seen to down-size their involvement in fossil fuel production - even rebranding themselves as "material solutions providers" as they expand into new territories in the global North as well as global South. Scrutinizing the claims and practices of mining 'majors' illuminates what rural movements are up against. They call for closer scrutiny of industrial dynamics within nature-facing industries and particularly understanding the practices of corporations in relation to the imperative of competitive accumulation under capitalism. Moving beyond moralizing critiques of companies, analytical tools from Marxist political economy help to examine the different strategies of accumulation that companies deploy. A recent mining conference and the majors' own annual reports provide empirical insights into industry dynamics. By concretely elucidating the investment and political strategies of the majors, their analysis seeks to contribute politically to social movements and their allies' counter-strategizing.

Jose Sobreiro presented on The battle of the trees: The convergences and singularities of the contentious politics in the Brazilian forests. Growing liberal perspectives in Brazil's rural areas have seen the imposition of a single model of development based on capitalist and colonial rationality. Deforestation is accompanied by rates of violence in the countryside analyzed by the Pastoral Land Commission (CPT) and indigenous organizations (CIMI, APIB). This is an unequal and brutal conflict. Although the socio-environmental conflicts involving the agribusiness and mining in Brazil are widely known, the contentious politics carried out by the social movements and other actors is not yet adequately analysed. The actions of struggle and resistance not only by counter-hegemonic actors but also hegemonic ones are captured in a Land Struggle Database (DATALUTA) on the contentious politics of actors in Brazil's forests. A broad and permanent survey guided by keywords, systematization and representation of actions in online newspapers on a national scale revealed that, even in the face of the pandemic scenario in 2020, the political actors carried out 615 resistance actions in 30 different ways. The diversity of these actions include their strategic and articulated meanings, the "typological tree" of actions, the contentious politics and its rationalities, scalar strategies, and territorial logic. Considering the territoritorial práxis, the actions reveal local and national strategies used by agrarian capitalism to promote expropriation and the resistance strategies, as well as advance in the understanding of the national map of the contentious politics of the Brazilian agrarian question. The database opens up discussion about effective strategies of resistance, and helps people to see how transnationals want to make a profit of their lands.

Guus Geurts presented his work on Alternatives to the current WTO rules and the EU Common Agricultural Policy, arguing that this can achieve a more just food supply chain. Agrarian resistance is done Via Campesina, free trade is neo-liberalism and causes problems in the market, this is due to capitalism. The EU in the 1980s was overproducing and prices were lowered to the farmers and offered subsidies while in the Global South structural adjustment programmes were introduced. The UN through the EU has put in trade policies to protect markets in the North. The alternative introduces flexible EU supply management and minimum prices in arable farming. EU Market protection through higher import taxes is necessary to enable the highest possible European self-sufficiency in food and feed. This means the EU will use much less land and water in the Global South for products like food and biofuels. The Global South can be food secure, close the cycle of minerals and it will increase job creation and self-sufficiency.

Convergence

- What does a more democratic and post extractivism vision look like?
- What is the role of the state in all of this?
- Capitalist systems can adopt any project as sustainable for their own selfish interests, framing green grabbing as an "unavoidable evil".

New ideas

- What are the opportunities for repurposing existing infrastructure
- How can other existing sectors, such as transport, be concretely reorganized so as to avoid the rise in metals demand
- The CAP, WTO, SDGs are all a political project coming into the lands of locals (those at the periphery), working for capitalists and capital accumulation.
- Resistance needs to be cut across board, what kind of grassroots collations can move this agenda considering the historical divide between the Global South and North?
- Via Campesina is working on free trade agreements with Our World is Not for Sale.

Action points

- Beyond resistance to the practices of the mining sector, as currently organized, should movements also be strategizing and reclaiming, restructuring the sector so that it can play a role in a post-extractivist vision?
- What would be the best ways to engage indigenous communities?
- Solutions must recognise that mining companies are powerful and have good PR (public relations). Which alliances can shift the balances, mining infrastructures and global value chains that these feed into, like the transportation sector? Natural gas is controversial; needs more debate.
- Emulate the Brazilian land struggle database with rural people to show the resistance they
 can proffer, and that the power is in the people. Mobilizing people that they can do land
 invasions, deal with dispute resolutions and indigenous people are defending their
 territorial environment and are using these lands. Analyze how the indigenous people are
 and how they share food to resist what is happening in their territory.
- Organise for a leftwing government. Local resistance is the best way to resist. In Brasilia we have an event called Free Land.
- Show that de-expropriation (re-occupation) is happening,
- We have so many movements resisting on the ground, a lot of issues are with alliances whether we can build transnational alliances. False climate solutions must be fought by rebuilding collective spaces.

Session 10: The past and future of extractivism

May Aye Thiri and Octasiano Mendoza presented **A global comparative analysis of anti-coal movements** in which they unpacked the uncertainties and realities of climate justice and coal. According to the global energy tracker, about 2,500 coal-fired power plants are operating worldwide, and several more are planned. Fossil-fuel supplies and consumption at the international and national levels are not being constrained. Grassroots actions against carbon emissions are becoming more visible. The Global Atlas of Environmental Justice (EJAtlas) identifies over 300 coal-related conflicts. This study examines 116 cases of movements against coal-fired thermal plants to analyse their bottom-up contribution to climate change mitigation. Using an estimation of the contested CO2 emissions, movements against coal-fired power plants have prevented 354 Mt CO2 emissions annually, amounting to 14.5 Gt CO2 that would have otherwise been released into the atmosphere. These movements are mobilised by farmers, fishers, indigenous women and youths from the south with limited resources, often portrayed as "vulnerable" and "powerless" in the climate change discourse, which have contributed to limiting carbon emissions through contestations. It further discusses the paradox of climate vulnerability to climate mitigation through the lens of feminist political ecology and decolonial perspective.

Amod Shah addressed the **Dynamics of land and labour in anti-coal struggles** in his paper on the 'End of Coal'. Communities resisting large coal mining projects navigate the significant tensions between imperatives of urgent climate action and economic growth in complex and contingent ways. A mining region of Central-Eastern India shows how livelihood and household reproduction struggles in mining-affected communities shape local anti-coal struggles. conceptualization of political contestations over coal extraction points to crucial possibilities for building broader counter-hegemonic movements for more inclusive 'just transitions' away from coal.

Daniela Soto Hernandez and Peter Newell presented their recent JPS paper 'Oro Blanco: Assembling extractivism in the lithium triangle. As the drive for global electrification proceeds, new pressures are placed on agrarian environments in areas abundant in key minerals for electric batteries. The so-called lithium triangle between Chile, Argentina and Bolivia is one of those places. We develop an account of the 'assemblages of extractivism' at work in this zone that operate at a material, institutional and discursive level. They explore how the construction of a commodity, the materiality of lithium and the role of the state intersect with local understandings in this latest form of 'renewable extractivism'. "Assemblages of extractivism" in the global south involve local and global politics being enmeshed. This commodity is not new but it has emerged recently in the context of the energy transition drive in Chile. Indigenous communities show how the state continues the processes of dispossession. What counts as knowledge and who decides which knowledge counts? Indigenous communities continue to be excluded and are being dispossessed in the name of a "just energy transition".

Conor Joseph and Jevgeniy Bluwstein presented on Rescaling the land rush and global political ecologies of land cover change "scenario archetypes" for achieving the 1.5°C Paris Agreement climate target. Although political ecology is rooted in heterodox analyses of land use or cover change and associated environmental change processes, political ecologists seldom turned their attention to projected future(s). They project the magnitude and rate of distinct land cover changes in four key "scenario archetypes" or illustrative emissions reductions pathways for meeting the 1.5°C climate target. Disaggregating these archetypes to examine their divergent impacts across several world regions, they situate trajectories of future vis-à-vis insights from recent global land rush literature. All four scenario archetypes seem to imply a considerable spatial and temporal rescaling of contemporary land rush dynamics, as well as rates of implementation with few empirical analogues in the twentieth and early twenty-first centuries. The prevailing scenario archetypes imply unprecedented rural and urban transformations, which have not yet received detailed critical attention in political ecology, critical agrarian studies, and related fields.

Convergence

- The left wing state in Chile is trying to get more access and stake in these extractivist mining activities in Chile.
- Coal struggles have diverse cross-class, cross-caste impacts. There is a tendency of people holding onto land for social reproduction activities not only for farming.
- Alliances are not always replicable eg. across classes, with scientists, etc.

Action points

 Scientists' involvement in the struggle against lithium mining sometimes extends to civil disobedience and some of the professors and other academics are involved in civil lawsuits against these mining companies. This should be encouraged.

- The future focus of climate justice in the global south could be on mitigating local emissions rather than changing their land use and destroying their production systems in order to accommodate the mitigation of emissions that have been produced far away.
- The failure that environmental struggles are having at the moment is that indigenous people are vulnerable as they rely heavily on the state to provide for basic needs. We therefore need to think about alternative sources of livelihoods. For instance the local people living in the areas where lithium is mined are involved in the negotiation with the mining companies to get something out of the mining in their area. Therefore the modeling of the future should include elements that can contribute to framing the future alternative to these mining companies.

Session 11: The contentious politics of labour displacement and migration

Camelia Dewan's paper on Climate Refugees or Labour Migrants? Identified "climate reductive" translations of women's migration from coastal Bangladesh. She identifies false solutions arising from 'climate reductive translation' in international development to mainstream narratives of 'climate-induced migration' among rural workers in coastal Bangladesh. Based on her book, historical and ethnographic insights show multicausal drivers of migration that are overlooked in narratives of 'climate-induced migration' and contribute to a growing critical literature on migration from coastal Bangladesh. Migration is the outcome of historical inequalities as well as climate change. Migration is misread as arising from environmental processes such as riverbank erosion, flooding and saline tiger-prawn cultivation while understating structural socio-economic pushfactors of agrarian migration. Seasonal labor migration is a livelihood strategy for the working classes of Bengal. Landless women choose to migrate to brick kilns, Dhaka garments industry and the Gulf for domestic work. Circular migrations are based on kinship relations. Regional, national and international migration is opted for even though women prefer local work. There is also gendered social stigma with a long history associated with single women's work in the Mughal-era muslin industry and in colonial jute mills. Climate reductive translations of migration misread the push factors of migration and ignore women's agency, and fail to identify policy solutions to remediate rural underemployment, floods, riverbank erosion and salinisation by aquaculture.

Arun Kumar and Diksha Shriyan's paper was on Caste of Marginality: Migrations as Coping Mechanisms of the Agrarian Poor in Bihar, India. While migration decisions are complex, climate change and the subsequent decay in the state of agriculture is certainly a factor that aggravates vulnerability, especially of those on the margin. Lack of non-agrarian employment options in the rural part of Bihar, coupled with poor social security provisions, push people out. This narrative would be similar throughout the Global South. However, in South Asia, the impact of climate change, the political economy of the informality of mobile labour and sedentary citizenship (geography-bound welfare net rendering them quasi-disenfranchised in the city) can barely be understood without applying the critical lens of caste. Caste is a critical lens to examine this nexus. Bihar is one of the poorest state in India and climate-sensitive with hydrometeorological uncertainties, high migration and inequality: upper castes own four times the average land owned while in lower, 80% don't own anything and depend on casual wage labour. Social networks influence migration decisions and outcomes. Circular migration is a means for dalits to be less dependent on the dominant castes for credit and employment in rural areas. 8-9 months away from the village, 2-3 in the village, during the peak of agriculture. Lower castes also receive lower incomes and more precarious conditions. A deeper look into data shows that marginalized social groups are over-represented in short-term migration streams and the most vulnerable (exploitative) occupations. Recent data on the 'informal sector' in India shows that marginalized social groups comprise over 70% of informal sector workers in India earning an income below \$128 (Rs 10000) per month. We ask the panel to discuss: why do narratives on CC, migration and informalization overlook the lens of caste? Capitalism in India is entangled with caste. How can research and social movements invested in cc, migration and informalization converge and develop a powerful narrative against the profit-obsessed capitalist accumulation in the north?

Ajmal Khan presented **The Sinking Rice Bowl and Climate Justice in South India**, setting out a case of Dalit farmers in Kuttanad, a wetland region in Kerala. Dalit (ex-untouchable) communities navigate their lives in the "rice bowl" where farming takes place 1.2 to 3.0 meters below sealevel, an agricultural heritage system. This historically flood-prone region is aggravated by changing climate and was hit by two major floods in 2018 and 2019. As a result, inhabitants are moving elsewhere: the Government of Kerala estimates over 6,000 families (over 30,000 members) have abandoned their houses and properties in the last two years and those who can't afford to move out are poor farmers, lower caste, and Dalit farmers. Dalit farmers and farm laborers experience the disproportionate burden_of the changing climate and problematize the traditional agrarian studies that didn't pay adequate attention to the cast or the Dalit question, Dalit farmers and farm laborers, while demonstrating the new challenges of understanding climate justice and the ex-untouchable agrarian communities. Moving from the places that were flooded is a privilege. What does climate justice mean in such a caste society? A universal climate framework is not adequate to understand climate justice in India.

Surulola Eke's paper on Climate change, soft capital, and agrarian struggles in northern Ghana looked at the interplay between capitalism and climate change and its effect on agrarian struggles. The idea of the intrusion of corporate and state-guided capitalism into the agrarian world has been preeminent. Using the Marxian concept of social relations of production as a theoretical lens, this paper unpacks how this interface plays out in Gushiegu, Northern Ghana. Relations of production shape forms of revolt that peasants undertake in response to threats to their livelihoods. Agrarian scholars should become more attentive to their diversity in order to recognize the different ways peasants are responding to the twin threats of climate change and capitalism, especially distinguishing between landowners and non-owners, semi-nomadic and pastoralists and those who exchange labour for a piece of land to feed their animals. The focus on hard capital obscures indirect linkages, such as how soft capital (business that are not considered in the big picture of cc policies), although disoriented towards the raping of nature, unlike the former, exacerbates climate change effects in ways that accelerate the destabilization of agrarian economies. This indirect connection is evident in agrarian settings in the Northern Region of Ghana, where the resultant peasants' revolt is directed neither at capital nor the state but at local landed-elites, who transfer the burden of the twin pressures of climate change and soft capital to their labourers. Soft capital is also needed to be considered in the discussion of climate change and agrarian labor relations.

Convergences:

- Caste like class, race, gender and other intersections shapes experiences and impacts of climate change, which is best understood as a multiplier of social difference.
- Upper castes are diversifying while lower castes are willing to leave the area also to not depend anymore on the upper caste who historically humiliate them so the upper caste is leaving production and selling the lands.

 The state is supporting farmers to adapt to the climate impacts, but based on caste differentiation. Migration is not always an option: some places are those that people can't leave anymore.

Divergences:

• Whether there is utility in pushing to find resolution of universal frameworks and local comprehensions of climate change

Action points

• Research gap: who migrates, on what conditions? What forms of migrations?

Session 12: Resisting Green Extractivism

Ísis Táboas and Tamara Rusansky's research on Three battles against the mining capitalist model in the Global South focused on political strategies in the case of Brumadinho, Brazil. One site of battle is provided by technical advisory services like agronomists, researchers and others who communities hire to help them to defend them against companies violating their rights, as in the context of company-induced disasters. Both presenters are connected with the struggle for reparation in the case of Minas Gerais state, where an oligarchy linked to mining interests dominates. Territory affected by the Brumadinho dam collapse is also affected by climate-change impacts and risks - communities are affected by intersecting events like floods and non-climate corporate disasters. The challenge here is not only to claim reparation for a non-natural disaster but also a wider struggle for environmental justice. The "three battles" in this conflict are among these actors: the transnational company Vale, state public institutions and the affected communities, with a special focus on the social movements leading the organized struggle. The first battle starts on January 25, 2019, when the BI Dam at the Córrego do Feijão Mine, owned by the company Vale SA, collapsed, unleashing a wave of 12.7 million cubic meters of mud containing the byproducts of iron ore mining into the Paraopeba river, killing 272 people and affecting peasant communities in over 25 riverside municipalities, causing dramatic socioenvironmental damage. The second battle involves the largest judicial settlement agreement in Latin American history. Finally, the third battle is centered in the efforts to stop the rampant growth of the extractive mining industry in the territory after the agreement. These confrontations against the mining capitalist model used Independent Technical Advisory Services (ATIs) which social movements of La Via Campesina can use as a key tool.

Natacha Bruna and Boa Monjane presented their joint work on **The struggle against green extractivism in central Mozambique** which contrasts cases of mitigation from above and adaptation from below. Climate policy has become a new vehicle of accumulation and is in fact used as a legitimizing strategy for accumulation rather than addressing the pertinent problems of social exclusion and poverty. Green extractivism is profiting while hiding behind green discourses: examples include tree plantations for carbon sequestration, biofuel production, REDD+ . These are as extractivist as mining and agrarian extractivism. "What is being extracted isn't coal, natural gas, or timber - but the emission rights of peasants. These are expropriated, extracted and transferred to industrialised regions where, based on carbon credits, capital can legally keep polluting elsewhere. This is climate injustice." This is shown in the Gorongosa case. Not only the historical carbon/environmental footprint of developed countries that has negative social and economic impacts on poorer developing countries, but also the policies to address them. A counter-example is the Mabu case which shows 'climate action from below' in Zambezia, with coconstruction of agroecology project, livestock and traditional practices on 8,000 ha of community

forest. Four characteristics of this are: participation in all phases from conceptualisation to planning to implementation; horizontal relations with external partners; symmetry of information; non-extractivist.

Ryan Stock's paper on **Power for the Plantationocene** looked at solar parks as the postcolonial form of an energy plantation. These produce dispossession as they are located on marginal public lands or 'wastelands' and grabbing smallholders' land. In India's states of Gujarat, Rajasthan and Andhra Pradesh, green grabbing has happened for solar park development, to meet the country's target for renewables is 50% by 2030, and carbon neutrality by 2070. Powering all nations through renewable energies will require an estimated land footprint of 120 million square kilometres - which is impossible. The imperative to mitigate the climate crisis through renewables has exacerbated a global land rush already underway. The last few decades have seen an increase in foreign land acquisitions for large-scale agricultural investments and the funding of massive infrastructure projects under the auspices of rural development in the periphery by core countries looking to sustain economic hegemony. The rush to enclose vast swathes of rural land has been characterized as land grabbing due to the dispossession of arable land and the displacement or partial proletarianization of peasants.

Insights

• Pastkian's "billion trees tsunami" is seeing replacement of sharecroppers by commercial forestry (ie. tenure) in the north of the countryWhat is particular about resistance to green extractivism versus extractivism?

Convergence

- Green opponent isn't a new opponent; strategies through which they accumulate might differ, but it's the same logic of accumulation that occurs - whether mining capital or other areas of extractivism.
- Legitimating resource grabbing via the collective of humanity, the world, now and in the future is a way of delegitimising real current struggles for livelihoods.
- National policies are being revised to accommodate carbon schemes; a priority to position climate justice as being the alternative to climate-friendly green extractivism.
- Colonial production systems necessitate a racialised labour force (really?)
- Social reproductive labour burden increased due to loss of common lands
- Renewable energy does create jobs but employs non-local labour; in this case, all-male; mostly professionalised (it is known as a 'bachelor's place')
- Strategy of people resisting hydropower dams, in one case is saying 'we are producing clean energy'.

New insights

- We see rural zones reflecting different elements of the climate crisis and responses to it: conservation zones, REDD+ zones, industrial agriculture zones, fossil fuel extraction zones - and amid all this, struggle to defend and push back.
- Photovoltaic potential is a global south strength. Yet it produces displacement not because
 of the technology itself but its social and institutional form (what about smallholder solar
 parks?)

Action points

- Participatory action research methods are important and need thoughtful application
- Analyse 'the state' in nuanced ways
- Needing a theoretical debate (eg. for attribution)

- Research and learning is needed about the joint management and distribution of incomes and proceeds from community-based 'climate action from below'. Multi-scalar analysis is needed, to locate these within national and global processes, but also to investigate intracommunity and intra-household impacts and responses.
- An under-explored area is about the tenure implications and privatisation of customary and common property regimes via carbon projects. Even without displacement, capital still penetrates.

Day Four: Thursday 29 September

Plenary 4: Towards Agrarian Climate Justice: Strengthening Alliances for an Anti-Capitalist Approach to Climate Change

The last plenary session, chaired by Ricardo Jacobs of JPS and the University of California Santa Barbara, focused on the political imperative of emancipatory alternatives: (a) what an anticapitalist approach to climate and agrarian change looks like, (b) who are the forces that will lead/are leading this, (c) what existing alternatives are on-going and emerging, (d) what are their common elements, and (e) what strengthening alliances entails?

Diana Ojeda, a Colombian feminist geographer and political ecologist at the Universidad de los Andes in Bogotá, argued that an anti-capitalist approach to agrarian and climate change puts the issue of social reproduction—nature and care, and everything that sustains life—at the centre. This idea takes inspiration from the growing body of work inside and outside academia in Latin America, particularly led by feminist political ecologists. Putting life at the center—the defense of life— as emphasized by feminist movements is a source of inspiration and radical transformation. It is not about the capitalist 'green' or 'nature-based solutions' but about what sustains life on a daily basis. To talk about 'emancipatory alternatives' is to emphasize that they are already here. There are so many anti-capitalist struggles that are happening in different sites as well as political mobilizations engendered by processes of deepening precarity of life. There are different banners and movements coming together, which point to different ways of understanding and doing politics. This is where we, as scholars, can contribute to understanding processes of transformation happening at smaller scales, connected to life-giving resources and issues such as food, water, health, housing amidst widespread precarity and uncertainty. One cannot talk about climate justice without a clear understanding of racial, gender and reproductive justice. These issues converge and allow us to see the many alternatives that already exist. They may exist outside of the state and market, because the capitalist state has not been on the side of sustaining life. What we need to do is to disrupt the 'capitalist narratives of solutions' and amplify anti-capitalist alternatives that centre on sustaining life.

Mamadou Goita, executive director of the Institute for Research and Promotion of Alternatives in Development (IRPAD) in Mali, works closely with farmers' organizations in Africa and other continents. He noted that the conference has highlighted how capitalism manifests itself from different dimensions- social, political, economic. Its extreme manifestations, particularly in the African continent, are false solutions to climate change which have roots in the continent's historical trajectory. An anti-capitalist approach is not only about the question of stopping these false solutions but also building alternatives by creating the conditions for them to flourish. These alternatives involve paradigm shifts, particularly emphasizing wealth redistribution. The anticapitalist approach also needs to be based on a new multilateralism that brings back the question of the role of the state at the centre. In terms of social forces, the food justice actors like farmers' groups in Mali are visibly raising awareness on false solutions and creating conditions for alternatives to happen. Such an approach must also address the inherent violence of capitalism along issues of race, class, ethnicities, gender, etc. The challenge is to bring these forces together and create conditions for convergences that can dismantle the false solutions to climate change. These convergences must happen at various levels, from the national to international levels (issue of scale of organizing and convergences). The alternatives are already here. Examples are i) food sovereignty movements backed up by agroecological approaches that challenge the Green Revolution in Africa and the rest of the world; ii) alternative peasant markets that challenge the dominant global markets; and iii) water and seed sovereignty and socializing the resources. At the core of these alternatives is the importance of co-creation of knowledge and the roles that social movements play in contributing to a joint anti-capitalist agenda.

Kasia Paprocki of the London School of Economics in the UK, and author of Threatening Dystopias: The Global Politics of Climate Change Adaptation in Bangladesh (2021) picked up on the viability of discourses that Amita brought up in the Day 2 plenary as powerful constructs for building an anti-capitalist approach to agrarian climate justice. She shared her work in coastal Bangladesh where farming communities have been producing rice along the flood-plains and have been deemed as unviable by the World Bank and other development agencies. Instead, shrimp aquaculture, which has social and ecological devastating impacts, is proposed as the solution to climate change. This solution/intervention speaks of the old capitalist trope that agriculture is not viable for farmers and they need to move to the cities. Such tropes are at the heart of critical agrarian studies. In terms of social forces, farmers and movements in Bangladesh are challenging shrimp aquaculture by going back to their practice of flood-plain agriculture. This anti-capitalist move arrests the 'institutionalization of disasters' and stresses the politics of viabilities (with inspiration from Indigenous and Black studies) on identifying viabilities and life in the context of ruination. Demanding and pursuing viabilities in the face of imminent crisis are important strategies for an anti-capitalist approach. She is energized by the anti-capitalist movements that are speaking the language of climate change. But we should not expect that these alternatives automatically speak the language of climate change or climate justice. We heard from others that the struggle for economic justice should be a struggle for climate justice even if they do not speak the language. What Black and Indigenous studies stress is that we need to challenge dominant conceptions of climate justice that leave alternative visions of anti-capitalist and anti-racist futures/societies. Climate actions, indeed, need to happen at multiple scales but it is not necessary that the social movements or actors speak the language of climate justice in all of these scales.

Katie Sandwell of the Transnational Institute, Netherlands, works on food justice movements, and argued that an anti-capitalist approach rejects the dichotomy between people and nature. As Diana said, an anti-capitalist approach differs from green capitalism and sustainability models aimed at sustaining capitalism and capitalist accumulation because it struggles for sustaining life and places social reproductions at the center. On social forces at the frontlines, Mamadou has identified actors as well as Diana (i.e. feminist social movements). But there is a tension in the question- who are the social forces acting now and who ought to lead? The dynamics of neoliberalism has given birth to massive displacement and dispossession, inflation crisis, costsof-living crisis. We have an ever-increasing number of people who cannot make ends meet on a daily basis. While a variety of people have arrived here in the context of expropriation, dismantling of welfare state, precarity of labor, etc., the situation creates a potential for collective actions/struggles but it is not automatically translated. Work needs to be put into organizing by existing social movements but also the far right. Social movements are aware of this dilemma and there is hunger to build intersectional and cross-cultural alliances but it's a long and painful process. On emancipatory alternatives: two different scales and types exist: (i) prefigurative alternatives- grassroots mobilizations that operate differently from the logic of capitalism and marked by praxes of putting life in the center and recognizes different values- e.g. local commoning movements around seed saving initiatives and revalorizing agroecology, cooperative movement, community shared agriculture (CSA) and, scale up these alternatives to policy/state level (e.g. energy democracy and national calls for revalorization of care work in Chile); and (ii) emergence of more convergence processes that Mamadou alluded to. More movements see their work not in isolation but part of wider articulations—e.g. just transitions that originated from labor movements now unifying climate justice, feminist struggles, etc. in a common umbrella, food sovereignty movements building bridges with anti-racists and anti-colonial struggles in different sites. The question for everyone is what is the role of activist-scholars in strengthening these alliances and in building an anti-capitalist approach to agrarian and climate change.

Convergence

- The elements of an anti-capitalist approach to agrarian and climate change: (a) ideas of viability, discourses of unviable, resisting/stopping the causes and false solutions as first steps because they engender new politics of life amidst uncertainty, precarity and ruination (Diana and Kasia); (b) rejecting the dichotomy between nature and people/society and placing social reproduction—the defense of life at the center; (c) different ways of understanding and doing politics that is different from the logic and values of capitalism; (d) importance of working at multiple scales or levels
- Emancipatory alternatives are already here: prefigurative alternatives and convergences and there are many examples brought up by the speakers (e.g. local commoning/commons, food sovereignty, energy democracy, peasant-led markets, etc.)
- Role of activist-scholars in building alternatives: (a) contribute to the understanding and amplification of the sites of transformations and alternatives are happening; (b) enable, bridge and facilitate new anti-capitalist alliances and convergences.

Divergence

- What are the social forces and who ought to lead? There was no resolution (Katie)
- Kasia agrees with most existing anti-capitalist movements (ACM) that Katie identified, but they don't always speak the language of climate change and climate justice and we should not expect them to. Their discourses are also co-opted by corporations.
- Mamodou's idea of alternative local markets, are they not capitalist ideas?
- State-society interactions: on working against or with or through the state? To center or decenter the state in analysis and action?: While there seems to be convergence on the idea that the state is not a monolithic institution but a space of contestation and that the state has a role to play, there are tensions in terms of the centrality of the state as a potential actor for advancing an anti-capitalist agenda when its very nature is capitalist vs. the idea that change should come from grassroots movements and mobilizations. Who is authorized to make change and at which levels of the state? Occupying the state to address the violence.

New ideas

- The idea of putting life at the center: social reproduction, inspired and pushed by Latin American feminist political ecologists
- An anti-capitalist view requires a paradigm shift from capitalist accumulation to wealth redistribution and co-creation of knowledge that can support anti-capitalist movements
- Focus on disrupting problematic state-led narratives
- Need to think about resource access within communities and not just climate justice discourse that's devoid of class, race and colonial analysis
- Scramble for new resources driven by the geopolitical rivalry of the US and China and the global rush for semiconductors, artificial intelligence and digital technology
- Geopolitical rivalry between the US and China created a new scramble for semiconductor resources that will shape agrarian conflicts in the coming 10 years.

Action points

• The importance and political imperative of convergences among different struggles and movements to envision and engender emancipatory alternatives to change the world (e.g. climate and agrarian movements linking with anti-racist, feminist, and anti-colonial, indigenous struggles to expose and fight against the structural violence of capitalism)

- Need to address the disconnect between climate justice and communities' access to resources: we cannot have agrarian climate justice without addressing inequitable access to resources by communities (addressing questions of redistribution as part of anticapitalist alternatives).
- Role of activists-scholars: important to "study the rich" and to understand where is capital
 advancing strategically that can help anti-capitalist movements strategize and advance
 alternatives; co-creating knowledge with/led by social movement; at transnational spaces,
 to offer analysis and spaces for reflection on how can we work through, against and with
 the state to bring about anti-capitalist alternatives and visions of agrarian climate justice.
- Challenge of defining and building a collective research agenda anchored on real movements of people, new politics, and alternative visions and praxes.

Session 13: Agroecology, Agroforestry and Anti-Capitalist Ecologies

Shantanu De Roy and C. Saratchand's paper on **The 'Green' Revolution in the Indian state of Punjab** depicted a dirigiste proliferation of conventional farming. But this was devoid of redistribution of land and non-land inputs in the rural areas. By the 1980s, there was stagnation in yields and the momentum of the 'Green' Revolution could not be sustained. Subsequently, the ascendancy of the neo-liberal project in the 1990s retarded public investment and other support measures for agriculture. This led to a further deceleration of conventional farming, with deleterious ecological consequences. Punjab's ecological crisis is bound to intensify as adverse climate change negatively impacts agricultural output, inequality and domestic food security. They propose a transition towards climate-resilient agroecological farming involving diversified crops (involving bajra for instance) and estimate the resources required for such a transition, including changes in the consumption sphere. They argue that "a sustainable agroecological transition will require changes in both productive forces and production relations".

Cristián Alarcón presented on Counter-plantations, Prefigurative Political Ecologies of Labour and Agroforestry and Agrarian Class Struggles in the climate crisis. He argued that agroforestry is about planting, especially trees, which is why he wants to explore the concept of 'counter-plantations' and its potential. This refers to the agrarian praxis of rural people counter-planting certain trees and crops as resistance to capitalist monoculture plantations, and also counter-planting as an alternative to confront the climate crisis. He compares agroecology and counter plantations in Sweden and Chile, engaging with the work of Haitian thinker Jean Casimir and his analysis of counter-plantations in Haiti. Counter-plantation is an opposition to the capitalist and commodity-producing plantations and to the 'plantocracy', the class and owners of plantations. Thinking with EP Thompson 's approach to class and class formation and the historical question about class struggles without class, we need to bring agrarian class struggles in the climate crisis combined with the idea of prefigurative political ecologies of labour and agroforestry. Our understanding of class struggles must come from the base and not from imposing our theoretical framings.

Nosheen Ali's paper on **Reparations towards Nature** set out reflections on food sovereignty, ecological thought and land-based learning. On how we think of colonial/capitalist relations to land, Nosheen started with a story about how religion and faith are combined with farming practices in her own family, and a domestic worker waking up in the morning to pray and leave a pinch of flour to feed the ants. Interspecies connections are good blessings and reciprocity is the

base of female farming in Pakistan and could not be left out of our analysis. Agroecological and decolonial approaches, cultural/spiritual frameworks are very important to climate relations, that Maxist approaches fail to grasp sometimes. We are fighting against the growth of urbanization towards farming lands, she said, but the question is how to bring religion and spirituality (which are crushed by modernist frameworks) into decolonial agroecological practices. Since she wrote the paper, 'the floods have changed everything' and climate reparations are needed in the Global South, especially in Pakistan because there are historical differences that have created this catastrophe.

Convergences

 Ecological/ productive transformations need to address historical inequalities about land and its distribution

Divergences

- When it comes to gender struggles in relation to agrarian justice, India and Pakistan the reparations to nature are the same to women. Landless workers in Pakistan are women and agroecological discourse is not political enough to robustly engage with this.
- In Chile it's about class formation and how gender, ethnic and other interests could be included in social base movements.

Action points

• A need for more sharper approaches to the tension and struggles inside the state and national public policies.

Session 14: Agrarian struggles, resistance and alternatives

John McCarthy presented on **Rural Indonesia in the Shadow of Climate Change**, envisioning rural climate politics 'from below'. Entanglements between livelihoods,commodity frontiers and Climate change. There is a need to think about heterogeneous strategies against climate change. Climate is political "all the way down". The nature of the everyday politics that emerge as climate impacts rural societies shows that "the real and the political are implicated in one another." In his study he focused on everyday politics and how climate change policies become projects. He is interested in unacknowledged ontologies. Ontological politics is all about everyday politics and the future making is interconnected, working together to shape the frictions between rural people, programs and policies. He draws from quotidian ways of future making from below in East Kalimantan: in the mid-90s people tried to resist monoculture plantations but it didn't work and these locals became laborers for the big plantations. They started to plant their oil palm gardens which they have integrated into a diverse setting. The responses to change facing disappearing livelihoods may constitute alternatives to capitalism. Everyday politics, future making are tightly interconnected and we seek to identify a research agenda for unpackaging the politics of agrarian climate change.

Danish Khan's work on **Agrarian Struggles, Climate Governance and China-Pakistan Economic Corridor** focused on a case study of Gilgit Baltistan, caught in the middle of conflict between the India and China borders, and currently under the purview of Pakistan. Historically GB has been classified as the "other" and a special mode in the Pakistan-China corridor. While the corridor has industrialisation projects and attracts people with competitive wages, rural livelihoods are anchored in subsistence farming. Power generation has been extremely low in Pakistan, and while GB is on the periphery, it has become important to the China-Pakistan

economic corridor (CPEC). Under CPEC, more than 54,000 trees have been chopped down in the Northern Areas including Gilgit-Baltistan. After the completion of the road project, it is expected that Karakorum Highway will carry up to 7,000 trucks per day, emitting CO2 that will melt glaciers, risking the lives of 240 million people. Meanwhile, under the so-called "national parks" initiatives, the Pakistani government is grabbing lands from indigenous people. Climate change related catastrophes in this disputed region remain under-reported. What can be done for the indigenous people in Gilgit-Baltistan, Kashmir and Balochistan who are suffering due to climate change and are vulnerable both politically and regionally? Most of the climate and agrarian justice movements have been crushed by the government of Pakistan. The climate governance regime imposed here centered on 'conservation' and commodification of nature, undermining and threatening the agro-ecological peasant livelihoods of local communities. Market-oriented solutions such as carbon are counter-productive. National parks are in effect commodification of nature and green grabbing. This forced separation between local human and non-human nature severely undermines the agroecological farming practices. Despite facing intimidation and imprisonment, local activists and farming communities of GB continue to defy the neo liberal climate governance. They are promoting a holistic conceptualisation of nature in which humans and non-human nature are seen as parts of a dialectical unity. The agrarian struggles in GB are illuminative for other agrarian communities in their struggle to defend their socioeconomic spaces and environment.

Alessandro Manzini's paper on **Temporality, desires of change and resistance** in peasant territories and "eco villages" in Diola Kasa, Senegal. This is a territory which has often been neglected, where peasant resistance opposes new interpretations of spatial and social relations. Subsistence strategies are based on rain-fed agriculture and water for a lot of rice fields. In an "eco-village" each household has a wet rice field and a sacred forest. They differ in nature, strategies and temporality. Land that has been abandoned due to erosion, salinisation and sand storms that affect these areas. Community mapping shows there is an alternative modernization taking place. Farmers want to modernize farm fishing and to have electricity, but authorities are still preserving the historical places. Climate change in these territories affects rice cultivation that is rainfall-dependent and for the processes mentioned that is erosion, salinization and sea level rise. Anti-hegemonic narratives emerge and can be seen from some of the following practices: Women started reusing abandoned plots for horticulture for the purpose of self-sufficiency using self-organised means, and showed a deep ecological awareness in food selection. Resilience practices are based on providing spaces to mangroves, maintaining a subsistence focus, persistence of soil management, and sacralization of nature.

Benjamin Fash presented the paper on **Prefiguring Buen Sobrevivir: Lenca Women's (E)utopianism amid Climate Change.** He began by explaining the objective of the project, to make alternatives visible. They are radical activists in Latin America. They propose "Buen vivir" (surviving well). "Buen vivir" is a utopian, anti-capitalist, decolonial way of life situated as an alternative to development. 'Buen vivir' discourse has been equated to 'live in solidarity, in equality, in harmony, in the land without evil. They argue that by proposing buen vivir as a paradigm somehow outside the precarious circumstances does not do justice to how people live, adapt and innovate. Buen vivir is still central to the proposal, post-extravism still central, Climate change, communitarian feminism and prefigurative politics are relevant in this proposal. Buen vivir has something to offer. It started out almost as a state project. Activists realized that this was hot air since they were co-opting their models. They were disillusioned. It is now being looked at from a territorial standpoint to see what is possible on ground - whenever possible with the government. State needs to embrace the visions of its citizens.

Convergence:

- Green grabbing from the indigenous people in the name of conservation?
- Danish: The resistance has to be imagined atr multiple registers. Climate change is a global issue and has to be thought of on a global scale.

Divergence:

- Benjamin: Argues that the case for beun sobrevivir responds to the urgency to understand ways to curb scale, intensity and violence of resource extraction
- Climate change needs consideration in reframing the concept of extractivism to address issues of extraction for national consumption.

New ideas

- Analyses of extractivism have shown and laid bare the reality that socialism can easily
 adopt logics and practices that perpetuate the same devastating impacts on the planet,
 even if the proceeds of extraction are better distributed among people.
- Adaptation and resilience programs through technocratic or neoliberal have brought significant funding that social movements channel toward radical efforts.
- Development needs to be reimagined, reframing climate change, beyond transforming territory and focus on the use value.
- To shift development paradigms, understand that local people have their own growth patterns, and governments sometimes do believe in the power of their own people,
- We argue that we have a colonization of desire, that everyone should desire the Global North way of living, listen to the views of the small minority groups and not just focus on modernization.
- The resistance in Jola Kasa territories of socio-economic organization gave back space and nature and returned to the culture of non-accumulation.
- Farmers in Senegal deciding not to sell their lands was a key factor in resistance.
- An example from Central Kalimantan in Indonesia: a village collectively used a REDD project to build a program that supported their causes for mapping land tenure.

Action points

- Need to reframe the concept of extractivism to better address extraction for national consumption.
- As agrarian change and local politics are co-produced under climate change, insecurities coincide with competing aspirations, livelihood strategies and policy contestation.
- A lot of the action from below comes in subtle ways, and can amount to collective action. How communities try and develop their lives from below can be critical.
- Can collective resistance by rural agrarian communities be seen as a new way to build resilience against climate change and resistance to the neoliberal approach to reducing the rural commons?
- Resistance has to be built at multiple scales. Local resistance is hard to imagine and implement. It would be better to form alliances at the local level keeping survival as focus.
- What is the role of the government and private sector? The underlying problem is endless accumulation of capital. As long as this exists and nature is seen as something for profit. This needs to be rethought. "Development' needs to be reimagined. It has to go beyond making another America or Europe.
- Some top-down projects from governments are being used by locals for their own benefits. Change the narrative.
- Resistance comes back to the issue of survival as a collective, what can we do to prepare for disaster?

Session 15: Visions of agrarian climate justice

Sita Venkateswar et al's work on Critical Agrarian Questions in Te Moanaui a Kiwa in New Zealand draws attention to settler postcolonies, Te Whenua and just, multi-species futures. New Zealand has projected itself as punching above its weight, able to feed the world from its agroexport economy. What are the critical agrarian issues to be addressed in the Global North within a settler postcolony like New Zealand, situated in the Pacific? How might we reconsider agriculture and agrarianism as ethical and viable relationships with more-than-human kin, in a space where it has historically served to drive a wedge between fluid land/water assemblages, creating borders and binaries, replacing the mobility of indigenous communities and ecologies with the supply chains of capital. Accumulation by dispossession is the founding basis for the contemporary primary industries, despite the ongoing Treaty of Waitangi Tribunals addressing breaches to Te Tiriti, and the settlements process underway since 1975 for reparations to Māori. Reclaiming lost tenure means reclaiming land, focusing on more than land, healing communities. 'The agrarian' has acted as a diversionary tool and immobilised indigenous people. Living with dignity in the Anthropocene requires rethinking interventions beyond mere 'carbon control'. The modern nation state wields a colonial land management ethic and the territorial transformation of indigenous lifeworlds. Envisioning the coming age of climatic transformation within such a setting, brings into sharp focus the limits of both, defining agriculture with its menagerie of domestication as the most viable form of relating to the more-than-human world, exposing the terrestrial bias at the heart of our climate change responses. However, living with dignity in the Anthropocene requires us to rethink our interventions beyond mere 'carbon control'. In Aotearoa New Zealand this has led to a 'recolonization' of land, spearheaded by carbon markets and other ecomodernist solutions.

Jessica Ham's work on Food Justice and the Farmer explores how smallholders navigate climate and environmental change to inform food sovereignty dialogues in semi-arid West Africa. Smallholder decision making about inorganic fertilizer in Upper West Ghana shows the complicated intersection of food, environment, and climate. Throughout the region, inadequate food access remains a pressing issue—one shaped by a capitalist food regime and exacerbated by volatile rainy seasons and declining soil conditions. 'Food insecurity' remains the dominant discourse of diagnosis, and 'food sovereignty' the alternative radical prognosis, neither provides adequate insight into how smallholders contend with their livelihood realities. 'Food justice', though usually associated with urban food access, is analytically useful also in agrarian contexts because it enables attention to environmental and climate justice. In the pursuit of fertilizer, compromising cultural norms and ethics about environmental stewardship and how such derivations from environmental stewardship are, in turn, filtered into pejorative narratives about the role of rural livelihoods in climate change politics. While their actions speak against what they know to be best for their agro-ecological context, they navigate both food and livelihood security. In the upper west region of Ghana, 'food sovereignty' fails to uncover how farmers are managing within the context of climate, given the necessity of fertilizers in maize farming, and the pressure on farmers towards commodification. One farmer says fertilizers are responsible for killing microorganisms in the soil. If fertilizer is damaging to humans, it must be damaging to other living things including soil. Forest is perceived to invite rain, thus their destruction reduces rain. Painting rural people as bad actors in climate mitigation due to the charcoal making - to finance fertilizer is unhelpful.

Sophie Redecker and Christian Herzig ask 'Can nature speak?' in their paper on how to think with nature in climate change discourses. They advocate a more- than-human approach to Critical Agrarian Studies.o start with a radical questioning of the current human-nature relationship. We thus challenge hegemonic understandings of "human" and "nature", using examples of farming practices and peasant voices. To call for thinking with, rather than about nature, they drew inspiration from Gayatri Spivak's 'Can the Subaltern Speak?' and asked the question, 'Can nature speak?' Within this postcolonial investigation, indigenous perspectives are highlighted in which there is 'no it for nature' (Kimmerer, 2013) and thus concepts like "resources" are revealed to be intertwined with colonial continuities. They asked farmers from Baltimore: Does the soil speak? Farmers said, variously: 'the solid speaks through the plans'; 'it doesn't use human language but it can tell all sorts of things including how it feels'; 'yes, by producing or not producing depending on how you take care of it'; 'soil does speak, but it takes time to understand its language'. Nature in climate change discourse is always presented as a victim. They explore whether nature can speak - without theories but with photos. The aim is not to destroy critical agrarian, but to rebalance people and living nature. Alternative human nature relationships already exist, but are silenced and marginalized. 'Climate change cannot be stopped if we see nature as passive', they argued. The alternatives that exist do not call themselves anti-capitalist. If it's not explicitly stated as being anti-capitalists, Agrarian Studies must pay more attention, instead of just looking at alternatives that outrightly call themselves anti-capitalist.

Convergence

• Important to engage with the more-than-human in critical agrarian studies - from climate change to how intensive agriculture depletes soil fertility.

Divergence

- We are giving the climate change narrative to much prominence and linking every crisis to it. Farmers have the capacity to adapt to the changing climate.
- There is 'too much attention to climate change' to the neglect of wider agrarian struggles? We need to de-centre climate change?

Action points

 Conceptual and methodological implications: A human-centric approach to climate change limits research questions when engaging with participants and the general landscape. Research needs to foreground nature as an actor, and also needs to break the traditional boundaries between researchers and participants.

Session 16: Strengthening alliances around land struggles

Itayosara Rojas Herrera's presentation on **Forests without Peasants** focused on climate change politics and the land rush in the north of the Colombian Amazon. The interaction between land conflicts and climate policy imperatives set by international agendas and the Colombian government is compounded by current land rush dynamics as well as by local socio-political processes linked to the recent peace agreement. The testimonies of local peasant *colonos* affected by military operations against deforestation, such as the 'Artemisa' Campaign of 2022 show how militarised anti-deforestation campaigns amount to forms of eviction that complement mechanisms of judicial dispossession within protected areas. After the signing of the Colombian peace agreement, the emergence of the 'North Ark' of deforestation is brought about by the current land rush in Colombia. Amazon forest is a sociohistorical construct, a 'political forest', to use Peluso and Vandergeest's concept. Environmental NGOs, Jeff Bezos, and former Colombian

president view the problem from satellite-based geospatial technology which cannot capture indigenous practices in the Amazon. Curbing deforestation is part of the Colombian government's commitment to reduce emissions and to raise carbon offsets through increasing protected areas. Peasant *colonos* are forcibly evicted from Amazon, with war legitimating violence 'to save the Amazon'. Justifications include: they are guerilla supporters, they grow coca, and they do deforestation. Peasants and guerilla organizations contested these military operations and their protests led to negotiations with the government and agreement to make a natural national park with peasants.

Markus Kröger's paper Clearcut: Political Economies of Deforestation asked: what is the role of different political economic sectors in driving deforestation and clear-cutting? This research compares how mining, ranching, plantation agriculture for export crops, forestry and other sectors influence clear-cutting in different parts of the world. The paper seeks to explain what are the key actors, systems and technologies behind worsening climate and biodiversity crises, both aggravated by deforestation. Multi-sited political ethnography across multiple frontiers of deforestation in the world, especially in Brazil, Peru and Finland shows different sectoral impacts, for example ranching in Brazil, in Peru also deforestation and illegal goldmining, eucalyptus plantation in the Atlantic region, and a highway between Brazil, Peru and Bolivia. In Acre, 80% of deforestation is due to ranching. In the iconic extractive resource of Chico Mendes, ranches are illegally expanding in a protected area. Ranching speculation is like cattle capitalism, as the main drivers of deforestation. This paper tracks how and why these global extractivist sectors expand even today, in times of climate emergency, via deforestation. Distinct technologies are tied to particular political economic interests and regional systems. The linkages between ranching, mining, and forestry capital, national elites, and political power and policy-making can be investigated via process-tracing and case study comparisons. Dominant economic sectors with political power are major explanations for if, how and where contemporary deforestation occurs. To understand these power relations within capitalist extractivisms of different types is essential for addressing the deepening global crises.

Suravee Nayak and Mijo Luke's joint research on Assemblages of Land Metabolic Rift and Climate Politics in Eastern and Southern India explored socio-ecological processes in two distinct and uneven trajectories of capitalism and agrarian change in rural India. At the intersections of, and refracted through, caste and class relations, diverse responses arise to climate change in the capitalist development process. The lens of 'metabolic rift', and employing assemblage thinking, help to make sense of how agrarian politics (around land) unfolds at the micro-level. In two ecologically sensitive regions of India - Kerala and Odisha - ethnographic fieldwork and comparison of the assemblage of actors around land shapes both agrarian and climate politics. While in both cases, landless Dalit communities are at the margins and face pressures to migrate elsewhere, Kerala's communist government offers greater opportunities in view of its many experiments in decentralised planning, which could heal the land metabolic rift and intersectional inequalities. Complex realities of climate politics require decentralised political interventions at the local level and must move beyond technocratic approaches to climate change.

Kasia Paprocki and Michael Levien's paper **Against the Planetary** calls for a 'critical ethnography' of the climate crisis that connects macro-forces of capitalism and climate change to the micro-processes of agrarian milieux in both the Global North and South. The shortcomings of concepts like "just transitions" and the "Green New Deal" stem from their level of abstraction, failure to connect scales, and imprisonment within the terms of climate policy discourse. Their analyses of the politics of adaptation in coastal Bangladesh and the politics of mitigation in fossil-fuel producing regions of the United States illustrate the baneful analytical and political implications of these methodological shortcomings. Ethnographic research of the climate crisis

needs to 1) connect scales rather than remaining in either planetary abstraction or local particularity; 2) advance critical theory informed by the agrarian studies tradition rather than taking its terms from climate science and policy; 3) incorporate both Global North and South, attentive to both the combined and uneven nature of capitalism and climate change. Environmental politics in Bangladesh and the US that framed itself as planetary exposes a disjuncture that is not inherent in climate change but is due to the lack of sociological imagination in connecting scales. Internationally, mechanisms of planetary climate justice between nation states are mostly not anticapitalist, and are depoliticized, dehistoricized and does not take into account the agrarian concerns of communities in Bangladesh. The politics of energy transition in West Virginia and Louisiana, between the politics of decarbonisation and just transition, doesn't grapple with the reality of fossil fuel-producing regions and people's dependence on this industry. Climate justice demands that fossil fuels be kept in the ground - ie. deindustrialisation - creates support for the far right movement among white uneducated men receptive to supporting Trump. The problem is there is a hegemony of the fossil fuel sector. The envisioned coalition of frontline workers (meaning in the fossil industry) and communities who are at the receiving end of climate devastation, has failed to materialise and drive an energy transition. There is no resonance with people working in the fossil fuel-producing regions. The left really needs analysis that neutralizes the right wing spread and messaging that can resonate with out-of-urban areas. Planetary imperatives dictate both regions of fossil fuel-producing areas in the US (through decarbonisation agenda) and regions in Bangladesh (through adaptation projects), and failures of articulation have increased the disjuncture between environmental movements and agrarian struggles. We need to advance critical theory from critical agrarian studies tradition instead of climate science and policy, and also to include the global south perspective.

Convergence

- Green initiatives often go hand in hand with state-led colonization, supported by violent
 military action against peasant movements, like Artemisa in Colombia, to legitimize the
 dispossession of some groups in national parks and forestry reserves, and allocation of
 land to others, under the guise of saving the Amazon and fighting deforestation.
- Green initiatives are often tied to Big Tech, buttressed by collection of data, technology, surveillance and territoriality
- Approaches to healing the metabolic rift can arise from peasant resistance (Colombia) or decentralised planning (Kerala)
- Contemporary vision for climate justice and politics of energy transition is not anticapitalist. They are dehistoricized, depoliticized - "just get the policies right" - and do not respond to the material conditions of peasant movements and working classes.

Divergence

- 'Who are we giving epistemic authority to' in critical research in the climate crisis? 'I cannot see that one person can be authoritative on today's and the things happening 500 years ago, such as proposed in Jason Moore's presentation. And why do we mobilize Foucault to speak about things that are happening in other places of the world where he never worked?'
- Though there are also far right reactions among a rural, white, male working class in the US, who have supported local fossil fuel hegemonies, amidst limited alternatives and an alienating cultural politics.

New ideas

 Why is it that planetary climate politics and everyday agrarian politics are so often in tension, and what are the possibilities for strengthening alliances around agrarian struggles?

- Abstraction of climate change politics and absence of concreteness planetary abstraction-, unable to connect scales, including locating the local in the global,, to articulate a politics and vision which resonates with agrarian movements.
- 'Failures of articulations' (Stuart Hall's concept) is one way of understanding the uncontested space of the rural working class in the USA, which is 'left to the right'.

Action points

- Research gap: more ethnographies of climate crisis to link between specific localities and macro-forces at the global scale; multi-scalar analysis is urgently needed.
- Approaches to climate change mitigation and adaptation must take into account intersectional inequalities, including along the lines of class and caste.
- Climate demands that are not rooted in local vision and local communities' demands are not climate justice at all. This is why critical ethnography is needed - to derive knowledge to inform and in service of emancipatory politics.
- Study the disjunctures and connections across the macro-forces and micro-processes of climate change.

Conference call, program and papers: https://www.peasantjournal.org/events/

JPS, PLAAS, TNI and CASAS. 2022.

Disclaimer: please note that this record of the conference was compiled by a team of rapporteurs, who did their utmost to capture the inputs and discussions accurately. Any misrepresentation or omission is much regretted.

For a fuller understanding of the inputs, please refer to the presenters' published work.