

Principles for a Just Transition in Agriculture

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Cover photo: Ghanaian farmer Dora Klu shifted from using chemical fertilisers to agroecology, and her crop is now more resilient to climate impacts.

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Above: Industrial monoculture farming in Mato Grosso, Brazil. © Fabio Erdos

CONTENTS

Executive summary Introduction Principles & strategies for a just transition in agriculture:		4
		5
		7
1.	Address - don't exacerbate - inequalities	7
	Big Ag is squeezing small farmers	8
	Barriers faced by women	10
	Land tenure	10
	Workers' wages and exploitation	11
	Hunger	12
	Climate impacts and climate (in)justice	12
	Tokenism and rushed approaches	13
	False solutions	14
2.	Transform the food system to work for people, nature and the climate	15
	Systemic policy change vs individual action	15
	From industrial agriculture to agroecology: increasing resilience, reducing	
	emissions, supporting farmers	16
	Less and better meat	19
	Protecting and restoring degraded ecosystems	20
	Food Sovereignty	21
	Adaptation strategies	21
3.	Ensure inclusiveness and participation	23
	Map stakeholders	23
	Inclusive processes	25
	Ensure meaningful participation	25
	Building climate knowledge may be a necessary first step	26
	The role of unions	26
4.	Develop a comprehensive framework	28
	Impact assessment and planning at regional and national level	28
	Inclusive policies	29
	Training and reskilling	29
	Social protection	29
	Public procurement	29
	A just transition in a globalised marketplace?	30
	Links with other sectors and issues	30
	Climate policies: NDCs, NAPs, GCF	30
	Financing a just transition	30
	Regulate corporate power	31
С	Conclusions and recommendations	



Felice Mbwura harvests eggplants at her farm in Mombasa county, Kenya. PHOTO: NATALIA JIDOVANU

EXECUTIVE SUMMARY

Agriculture is a significant source of the world's greenhouse gases, and is highly vulnerable to its impacts. The IPCC Special Report on Climate Change and Land (August 2018) confirms that to become fit for purpose in an era of climate change, agriculture must move away from intensive and industrialised approaches towards food systems based on agroecology and less and better meat.

But efforts to dramatically cut greenhouse gases (GHGs) in the agriculture sector could also bring major disruptions to peoples' lives. Farmers using industrial agriculture techniques may feel demonised and defensive that they are being blamed for the climate crisis. They may be wary that top-down and simplistic climate policies will leave large sections of rural communities stranded, with few options for secure livelihoods. There is already deep injustice across the food system. Farmers and workers are already being squeezed and exploited by a system that concentrates wealth, land and power in fewer and fewer hands. Women farmers face additional barriers and burdens. Meanwhile, two billion people are still food insecure.

The transformation of food systems towards agroecological approaches that work for people and nature must therefore be done in a way that works for

farmers, farm workers, processors and marginalised communities, including low-income urban consumers. It must provide them with the support, safety nets and social protection required to make these shifts, and to improve working conditions and livelihoods. A just transition in agriculture must address - and not exacerbate - injustices.

The term "just transition" does not only define WHAT the new system will look like, but it also defines HOW that transformation is carried out. A just transition must be genuinely **inclusive and participatory**. It must identify key actors, particularly those that are marginalised and ignored such as women farmers. Farmers, workers and communities must be given a seat at the table and opportunities to shape their own future.

Governments must act as midwives for just transitions in food and agriculture, to facilitate effective transformations on the scale required. Thus with the involvement of communities, they can identify barriers, concerns and gaps, and develop comprehensive policy frameworks that provide joined-up solutions, social protection and positive opportunities for a better food system that works for farmers and the climate. In this way many communities that might otherwise resist climate action can become powerful advocates for change.



Climate strike in New York: young people and citizens around the world are demanding urgent climate action. PHOTO: BRANDON WU/ACTIONAID

INTRODUCTION



Why we need a Just Transition in Agriculture

The climate emergency is upon us. According to the ground-breaking IPCC special report on 1.5°C,1 released in October 2018, global emissions must approximately halve by 2030.

Agriculture is a significant source of the world's greenhouse gas (GHG) emissions. When taking into account the emissions from activities across the cycle of production and consumption - including deforestation, production of synthetic nitrogen fertilisers, soil loss, livestock emissions, transport, heating and waste - food systems can account for around 20-30% of global GHGs.2 The bulk of these emissions come from countries with highly industrialised systems of crop and livestock production, and where there are high levels of over-consumption and waste.3

At the same time, agriculture is the sector that is most vulnerable to the impacts of climate change. Farmers and food systems around the world are already struggling to cope with the erratic rainfall patterns, droughts, floods, landslides, cyclones and rising sea levels brought on by a warming planet. Adaptation of agricultural systems is an urgent priority to safeguard farmers' livelihoods, national economies and people's food security in the face of escalating climate change.

If we are to limit global warming to 1.5°C and avoid runaway climate chaos, we must make profound and systemic changes across key sectors, including energy, transport, construction, ecosystems and of course agriculture.

IPCC. 2018: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. In Press.

Vermulen et al, Climate Change and Food Systems (2012) IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.

But efforts to dramatically cut greenhouse gases (GHGs) in the various sectors could bring major disruptions to peoples' lives. Many that work in these key sectors will be concerned that climate action imposed from above might harm their futures. In the agriculture sector, farmers may feel demonised and defensive, wary that top-down and simplistic climate policies will leave large sections of rural communities stranded, with few options for secure livelihoods.

Across the food system there is already deep systemic injustice, with policies that favour the powerful while exploiting the poor and marginalised, especially women. In spite of its promises, the industrialised food system is still failing to feed the world properly. A shocking two billion people are food insecure4 - and many of these people are themselves food producers.

Millions of smallholder women and men farmers using agroecological practies are already doing great work to produce food in ways that benefit the climate, communities and nature, while strengthening resilience to climate change. But policies tend to penalise these farmers instead of rewarding them as the guardians of our food, land, biodiversity and climate stability. Women farmers - who must deal with specific barriers and burdens - are particularly ignored by policy makers, in spite of their huge contribution to feeding the world. These communities need and deserve more support from governments.

A "just transition" in agriculture therefore presents a powerful opportunity to re-shape food systems to be fit for purpose in an era of climate change, and to ensure real solutions to injustices in the global food system. While lowering the food system's climate footprint it must also redress power imbalances by ensuring food for all, strengthening gender justice, workers' rights, and ensuring social protection for those who would otherwise lose out in the transformation.

A just transition in agriculture must bring people particularly those whose voices are rarely heard - from across the supply chain into inclusive and participatory processes at an early stage, to shape positive alternatives and identify the support, skills and safety nets to make the transition. In so doing, a just transition in agriculture can help food-producing communities transform from potential sceptics and blockers to powerful advocates for the shift towards a climate-safe future.

Over the last decade, the concept of "just transition" has been developed by unions, particularly led by the international Trade Union Confederation (ITUC). They understand that the just transition must be seen as a positive opportunity to create more decent jobs, improve labour rights, strengthen social protection, bring about social dialogue and increase organised labour. Unless workers, for example those in the energy and coal mining sector, feel confident that they have a positive future, they are likely to resist change, and could block the action necessary to avoid runaway climate breakdown. ITUC and union allies have learned key lessons and developed valuable thinking about processes and principles for a just transition in the energy sector.

Many of the same issues and challenges apply in the agriculture sector as in the energy sector, but there are significant differences too. So far, little thinking has been done to unpack how a just transition approach could take place in agriculture, or to ensure that farmers' rights and concerns are addressed in the shift to food systems that work better for the climate.

We present this paper as a first attempt to unpack the concept of "just transition" in the context of agriculture, to open up conversations and shape strategy at this critical time.

The term "just transition" does not only define WHAT the new system will look like, but it also defines HOW that transformation is carried out, so as to deliver climate solutions and justice in a way that works for people and communities.

We find that a just transition in agriculture must:

- 1. Address and not exacerbate inequalities
- 2. Transform the food system to work for people, nature and the climate
- 3. Ensure inclusiveness and participation
- **4.** Develop a comprehensive framework

This briefing unpacks issues and strategies under each of those four key elements. We hope to learn many more lessons in the years to come as the conversation evolves.

FAO, IFAD, UNICEF, WFP and WHO. 2019. The State of Food Security and Nutrition in the World 2019. Safeguarding against economic slowdowns and downturns. Rome, FAO. Licence: CC BY-NC-SA 3.0 IGO.



The Coalition of Women Farmers (COWFA) have met with government to advocate on Malawi's National Adaptation Plan (NAP). PHOTO:BURTON KAMOWA/

PRINCIPLES & STRATEGIES FOR A JUST TRANSITION IN **AGRICUI TURF**



1) Address - don't exacerbate - inequalities

A just transition in agriculture must be undertaken in a way that works for farmers and workers, not against them. It needs to recognise and address the fact that many are already being unfairly squeezed by the system and by climate change; that smallholders and those practicing agroecology do not get the support that they deserve; that women face particular barriers and burdens; and that the system still leaves 2 billion people with food insecurity. Unless the transition addresses these pre-existing inequalities, it will likely only work for the most powerful stakeholders, and harm the very people whose role will be central to a climate-safe and food secure future.

When it comes to developing climate policy, there are also key lessons to be learned from previous clumsy

efforts. For example, in 2018, France's attempt to place a carbon tax on fuel prices backfired, generating powerful protests that came to be known as the "Gilets Jaunes" ("Yellow Vest") movement. The flat carbon tax at the fuel pump meant that low-paid workers living on the outskirts of Paris, forced by the lack of public transport to drive into the city for work, were obliged to pay proportionally more of their incomes on the carbon tax than wealthier sections of society. The protests, which spread across France and lasted months, showed that climate solutions must not burden those that can least afford it. The resulting conversation, which sought to be inclusive and responsive to sections of society who felt that they were usually ignored, was framed as drawing on just transition thinking.

Transitions must therefore avoid implementing climate policies that make things worse for poorer communities, Addressing poverty, injustice and hunger must be at the core of climate solutions in agriculture.

Big Ag is squeezing small farmers

Large-scale industrialisation of crops and livestock farming is at the core of agriculture's harmful contribution to climate change. (See Principle 2 on "Transforming the food system to work for people and nature" for more details.)

But many commercially-oriented farmers that use these industrial practices are being squeezed by the big agribusiness companies that they depend on for seed and agrochemicals. At the same time, they are being paid less and less by the agrifood and retail corporations that purchase their produce. For many, making a profit is only possible if done on a large scale. The logic that dominates industrial agriculture and policies is often "Get big or get out",5 rewarding farming approaches that harm the climate, undercut other farmers and erode communities.

Meanwhile, smallholder farmers, rural women and those that would rather be responsible stewards for the wellbeing of land and animals are usually penalised instead of supported by policy frameworks and services.

In the US, the industrialisation of agriculture has resulted in what some call "the death of rural America". Once-thriving small towns that served thousands of local farming families have emptied out, as a relatively small number of farms have grown and absorbed the farmlands around them, as mechanisation and chemicals replaced the need for farm labour, and customers disappeared from the local economy. In Brazil and Argentina, the farming landscape has been transformed in recent decades, as hundreds of thousands of small farmers have been forced off the land to make way for vast plantations of genetically modified soya, with chemicals and machinery replacing farmworkers. For small and even medium-size farmers, the conventional and competitive industrialised farming economy can be an extremely challenging place to survive.

The pressures facing commercially-oriented farmers must therefore be the starting point for a just transition in agriculture. The transition can and must provide

a real alternative to this race-to the-bottom and precarious way of life. Instead of forcing farmers to work against nature to produce more and more to survive economically, a just transition should include systemic changes to agricultural, energy and environmental policy to provide farmers with the technical, economic and political support to work with ecosystems. And it should reward the smallholder agroecological farmers that are already leading the way. Industrial farming is part of a much bigger industrial system that needs to be challenged.

Conversations with farmers can often begin with the starting point of their livelihoods and visions for rural vitality, instead of a narrative of blame. How are they being affected by dynamics such as corporate control, low wages, health and social cohesion? Are they concerned about the loss of soils on their farms? How is climate change affecting them? What are their visions for the food system? Conversations like these are needed across the supply chain. They can enable communities engaged in the industrial agriculture system to move beyond the fear that the transition to climate-friendly forms of agriculture does not need to be a burden on their already-precarious way of life. Instead, it can be a solution to their problems.



Monocultural industrial farming pushes small farmers off their land and destroys ecosystems. PHOTO: FABIO ERDOS/ACTIONAID

Quinn-Thibodeau, Tristan. "Get Big or Get Out." ActionAid USA and the National Family Farm Coalition. November 2017. https://www.actionaidusa. org/wp-content/uploads/2017/11/Get-Big-or-Get-Out.pdf

Changing the narrative

The mid-western USA state of lowa, which has enthusiastically adopted large-scale industrial production of GM corn and soybeans, clearly illustrates the impact of agribusiness on family farmers, rural communities and the environment. While farms have grown in size, relying on larger machines and more chemicals, rural communities have shrunk. Since the 1970's, lowa has lost one third of its farmers, and family farming has declined. Monocrop fields of corn and soy are doused with tens of thousands of tons of chemical pesticides and fertilisers, which are produced with fossil fuels and destroy the ability of the soil to hold and remove carbon from the air. Policies that used to ensure that farmers were paid a fair price for their produce have been dropped, meaning that farmers are forced to increase production to survive economically.

Organisations such as the National Family Farm Coalition (NFFC) are challenging the myth that US farmers want to expand to "feeding the world" with their soy and corn as agribusinesses claim, or that efforts to protect the environment must come at the expense of farmers. Since the 1980s NFCC, as a farmer-led organisation, has worked with producers across the US and internationally, to oppose corporate control of the agriculture sector and to advocate for policies that would improve prices for farmers and incentivise sustainable practices such as agroecology and organic farming. For NFFC, a just transition must put producers and rural communities - those most impacted by the extractive agro-industry, the climate crisis and systemic racism - in a position to lead change at local, national and international policy level. With a membership of small and medium size farmers, ranchers and fisherfolk, NFFC is a member of La Via Campesina North America, and strives towards this goal with peasant-led social movements and NGO partners like ActionAid.

(Refs: - https://nffc.net/what-we-do/farmers-and-the-environment/

- Quinn-Thibodeau, Tristan. "Get Big or Get Out." ActionAid USA and the National Family Farm Coalition. November 2017. https://www.actionaidusa.org/wp-content/uploads/2017/11/Get-Big-or-Get-Out.pdf



Gary Hoskey, hog farmer and former president of IOWA FArmer's Union. Family farming has always required hard work. But under the dominance of industrial farming, more and more family farmers are struggling to even get by. And they're told that the only way to stay afloat is to grow just one or two crops - namely corn and soybeans. PHOTO: MARK PETRUNIAK/ACTIONAID

Barriers faced by women

Women make up 43% of the agricultural labour force in developing countries and in Eastern and Southeastern Asia and sub-Saharan Africa they account for almost 50% of the farming population.6 But they are disadvantaged by numerous barriers, which are becoming more extreme in the face of climate change.

Due to patriarchal and cultural norms, women are usually expected to be responsible for caring for children and elderly family members and feeding the family. In rural areas, girls and women are responsible for fetching water and firewood. This unpaid care work often holds them back from productive activities including farming effectively, and leave them exhausted and with no time for leisure. Cultural pressures or low literacy and confidence will often discourage women from participating actively in community planning processes, meaning that their perspectives are not heard or addressed in local decision-making. Educational or cultural barriers, fear of violence and lack of infrastructure may also mean that women are unable to sell their products in local markets, or are at greater risk of being exploited.

Policies can add additional barriers. Even though women may make account for half of the farmers in many countries, it is often assumed that men are the default farmer. Policies that discourage women's land tenure or access to finance reduce their ability to make investments for more effective farming and adaptation. In many countries extension services ignore women farmers and agroecological farming techniques, only providing support and advice to men to grow cash crops for export using industrial agriculture approaches. If women were to have the same access to productive resources as men, they could lift 100-150 million people out of hunger.7

These injustices and burdens are deepening in the face of climate change. When wells dry up, women and girls must undertake longer journeys to fetch water. Crop failure and loss of livelihoods will often lead girls to be pulled out of schooling before their brothers.

Women often report higher incidences of domestic violence when drought brings crop failure and leaves families hungry. When climate change makes agriculture impossible, nine out of ten countries in the world have laws that impede women's economic opportunities, such as those which bar women from factory jobs, working at night, or getting a job without permission from their husband.8 Crop failure and hunger can drive women to undertake transactional sex work in desperation to feed their families, exposing themselves to violence and HIV. Climate-induced migration in which men often leave their families in rural areas to seek work in cities or abroad, is leaving many communities across Africa, Asia and Latin America with few men, driving the feminisation of agriculture, and further increasing the burdens on women.

If agricultural transitions are gender-blind, ignoring the people that grow the majority of the food eaten in the global South, and the daily realities and challenges that women farmers face, they will be both unjust and ineffective. A gender-just transition in agriculture is an opportunity to advance women's rights in agriculture, and that opportunity should be seized.

Land tenure

Landlessness, insecure access and control over land, and lack of recognition of communal land tenure present major barriers to social justice, food security, adaptation and addressing climate change. This is a particular problem in parts of the global South, but insecure land tenure can also be an issue for tenant farmers the global North too. Women farmers in particular can face legal, economic or cultural barriers to access and control over land. Communal or traditional lands that have been used by communities for generations are often at risk of being grabbed by corporations in the rush for biofuels, minerals or commodities. All too-often, when smallholder farmers are forced off their land, they end up working as poorly-paid labourers on the plantations that have taken over their former farms. Secure access and control over land is a critical ingredient in achievement of women's rights.9

Food and Agriculture Organization. "Smallholders and Family Farmers: Factsheet" 2012. http://www.fao.org/fileadmin/templates/nr/sustainability_ 6. pathways/docs/Factsheet_SMALLHOLDERS.pdf

Ibid Habtezion, Senay. "Gender and Climate Change: Overview of linkages between Gender and Climate Change." United Nations Development Programe. 2016. https://www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/UNDP%20Linkages%20Gender%20 and%20CC%20Policy%20Brief%201-WEB.pdf

ActionAid "From Marginalisation to Empowerment" (2013) https://actionaid.org/sites/default/files/from_marginalisation_to_empowerment_final_ research_report.pdf

Without documentation, security of land tenure including communal or collective land rights - many cannot access finance to make investments towards more sustainable and resilient ways of farming. Improving soils, controlling erosion, planting trees, managing water systems or changing land use can be expensive and take years to bear fruit (literally). When future access is insecure, farmers may not be motivated to make long-term investments.

The recent IPCC Special Report on Climate and Land identifies the need to improve land tenure and access - particularly for women - as a key strategy for enabling transitions to sustainable land management approaches.

Workers' wages and exploitation

Worker exploitation and low wages are extremely prevalent across the agriculture industry, in all parts of the world. Women make up a major part of this workforce. A relatively low percentage of the world's farm workers are unionised, which means that the vast majority are not collectively bargaining for decent wages or work conditions from their employers. The heavy use of agrochemicals such as pesticides and fertilisers can also present health threats to workers, particularly where oversight is minimal.

The seasonal nature of agriculture means that many employers prefer to take on high numbers of temporary workers at harvest time, often without formal employment contracts that bind the farms to ensuring decent wages, conditions, health and safety, or secure employment. Many farming industries - from tomato producers in Italy, to fruit producers in Australia and the UK, to the vineyards of South Africa, and the meat processing industry in the US - are heavily dependent on migrant workers. Many are there illegally, and do not have permission to work or be in the country, making them particularly vulnerable to exploitation. In some of these cases, conditions have been described as comparable to slavery. Workers may not be trapped by chains, but by fears of being reported for illegal immigration, that they have no other options, or by the threat of violence from their employers.

But even as the industrialised farming system can be highly exploitative, shifting to farming systems that are better for the climate and work with nature, must also avoid creating new risks for workers. The use of labour to replace agrochemicals could enhance employment opportunities, but also increase the intensity of

labour and physical demands of work. If employer farmers are already struggling to make ends meet, they are less likely to pay workers fairly. Additional economic burdens from investing in the transition to agroecological farming approaches could exacerbate this risk. Transitions in agriculture must therefore take account of the risk to workers, and ensure farmer owners' and plantation owners' responsibility and ability to pay fair wages and ensure decent working conditions.

A just transition must provide opportunities for positive change when transforming sectors. The International Trade Union Confederation (ITUC) sees the goal of a just transition as going beyond protecting livelihoods in the context of climate change, to also improving well-being, rights and opportunities for workers. It can also be an opportunity to organise and build collective power, to create jobs that end poverty, respect labour rights, and create a sustainable environment. Key goals of a just transition should therefore be to ensure decent jobs, social protection and social inclusion, while also addressing the climate crisis.

Climate change is exposing the faulty logic of the industrial agriculture system based on exploration of nature and cheap labour, including women's unpaid work. A just transition is a way to show the link between climate change and workers' struggles, and to demonstrate that addressing climate change can provide answers to the socio-economic challenges they face.



Indigenous peoples and small-scale farmers in Guatemala like Margarita Osorio, are facing ongoing threats to their existence due to loss of their land to agribusiness plantations. PHOTO: FABIO ERDOS/ACTIONAID

Hunger

The recent 2019 State of Food Security and Nutrition (SOFI) report¹⁰ highlighted the shocking fact that worldwide over two billion people face moderate to severe food insecurity, and 820 million people go to bed hungry. This is unacceptable in 2019. Achieving Sustainable Development Goal of ending hunger in all forms by 2030 will require a colossal effort on the part of all actors. Especially in the context of increasing climate variability, which is disrupting yields, incomes and food supplies.

Many of the world's hungry are themselves food producers, and women farmers are particularly at risk of hunger.¹¹ A just transition in agriculture must address the root causes of hunger, including the structural economic policies that disadvantage and undermine smallholder and women farmers, their families and communities.

Climate impacts and climate (in)justice

As climate change heats up the Earth's atmosphere and disrupts weather patterns, farming systems are highly sensitive to these changes. So far the impacts of climate change have been felt most severely in the global South, but farmers and food producers in all corners of the world have been dealing with changing and unpredictable weather patterns and crop losses.

Seasons are becoming increasingly erratic, with rainy seasons starting early, late or not at all, or bringing too little or too much rainfall. Planting and harvesting times must be carefully matched to time with or avoid rains, but seasonal irregularities make this harder every year. Meanwhile rising local temperatures or heat waves affect pollination or seed development, bring on pest attacks on crops, heat exhaustion in livestock, increase evaporation of water from soils and dry up water sources. Glaciers whose melt water provides critical water sources in mountain regions are disappearing. Floods, cyclones or hailstorms lead to heavy crop damage. Rising sea levels can either cover cropland permanently, or flood agricultural soils with salt water

that renders them infertile.

For many, this situation is being worsened by competition for access to scarce water resources including rivers, lakes, reservoirs, and underground water. Large agribusiness plantations may capture water access or grab land for its water, preventing smaller and less powerful farmers from accessing this vital resource. A lack of democratic water governance is worsening existing inequalities and exacerbating conflicts in some regions of the world. Women suffer the worst consequences due to their gendered roles around provision of water and food.

In some cases, the changes in weather, temperature or landscapes will cause huge losses to farming, or render agriculture no longer viable in some areas. This trend is already driving significant levels of migration from rural areas.12

Just transitions in agriculture must therefore strengthen vulnerable communities' resilience to impacts, while also taking into account the losses and damages that some farmers are suffering in the face of climate change.

This climate crisis is a result of nearly a century's worth of pollution produced by wealthy developed countries. However, the poorer countries of the global South that have done the least to cause the climate problem are experiencing climate impacts first and worst. At the same time, wealthy polluting countries continue to emit GHGs, yet are the last to experience the effects.

When poor countries are hit by climate disasters, they are forced to spend their limited national budgets on picking up the pieces and rebuilding lives. Remaining national budgets must also prioritise adaptation to strengthen resilience to future climate disruptions or extreme weather events. This reality leaves poorer countries with little remaining budget to undertake mitigation strategies, including transitions in agriculture.

Wealthy countries must therefore fulfil their obligations to provide climate finance to developing countries, so that they can undertake mitigation, adaptation and address the impacts of loss & damage. Each country's

^{10.} FAO, IFAD, UNICEF, WFP and WHO. 2019. The State of Food Security and Nutrition in the World 2019. Safeguarding against economic slowdowns and downturns. Rome, FAO. Licence: CC BY-NC-SA 3.0 IGO.

^{11.} Botreau, Hélène and Marc J. Cohen. "Gender Inequalities and Food Insecurity." Oxfam International. July 2019. https://reliefweb.int/report/world/ gender-inequalities-and-food-insecurity-ten-years-after-food-price-crisis-why-are-women

Anderson, Teresa, Md Shamsuddoha, and Ajaya Dixit. "Climate Change Knows No Borders." ActionAid International, Bread for the World, and Climate Action Network South Asia. December 2016. https://actionaid.org/publications/2016/climate-change-knows-no-borders

fair share of providing or receiving climate finance can be calculated according to their historical responsibility for causing the climate crisis and their current capacity in terms of income. 13 Climate justice requires wealthy countries to face up to their global responsibility, and address the international injustice of climate change.

A just transition in agriculture must therefore focus mitigation pressure on the countries with the wealthy farmers and food chain actors that are contributing most to causing climate change, i.e. those with high levels of industrialisation and driving of deforestation in agriculture. The world's poorest farmers who have done the least to cause the climate problem, must not be burdened with an unfair responsibility for fixing the crisis. At the same time, climate justice means providing climate finance so that poor farmers in climate-vulnerable countries can undertake adaptation to cope with the impacts. Just transitions in agriculture must strengthen vulnerable communities' resilience to impacts, while also taking into account the losses and damages that some farmers are already suffering in the face of climate change.

Tokenism and rushed approaches

Industrial farmers and farm workers can often harbour deep suspicions that "just transition" discourse is tokenistic, not thought through properly, or is used to green-wash business-as-usual. There are lessons to be learned from proposals for a US Green New Deal to facilitate a just transition in the energy sector. Shortly after its launch, energy workers were not immediately reassured by broad promise of a "jobs guarantee". Instead they said that they need to see what exactly this means, and how it will be delivered, before they could trust it. Farmers and farmworkers involved in the industrial agriculture system are likely to be similarly cautious of vague and abstract promises. They need to see and be convinced by real plans, and need to be reassured about the future, the need for action and justice, the possible benefits, and the urgency of climate action before they can be persuaded to support and join the transition.

Poorly-planned transitions could also backfire. There is a risk that the language of "climate emergency" and "urgency" could create pressure for quick climate solutions that end up harming farmers and workers, particularly those that are already marginalised, and that undermine processes for careful planning, inclusiveness and addressing inequality. There is therefore a need to balance the need for urgent climate action with the potential risk of job losses, alienating workers, causing harm to subsistence farmers and indigenous peoples and increasing inequality. Human rights, participation of communities - particularly those that are marginalised - and other social considerations must therefore be central to processes and plans to shift power in the agricultural system.



Drought and high temperatures have affected harvests in Zambia in the 2018-2019 season. Smallholder Given Mwanda, her family and community are struggling with hunger. PHOTO: DAVID MWANAMAMBO/ACTIONAID

CSO Equity Review (2018) After Paris: Inequality, Fair Shares, and the Climate Emergency. Manila, London, Cape Town, Washington, et al.: CSO Equity Review Coalition. [civilsocietyreview.org/report2018] [doi:10.6084/m9.figshare.7637669]



Large scale agribusiness infrastructure in Iowa. PHOTO: ACTIONAID USA

False solutions

As new technologies are proposed as climate solutions, a just transition must take great care to foresee and avoid potential socio-economic and environmental harm they might bring. Even as new technologies are often assumed to bring progress, challenging questions must always be asked about who controls the technology (and who doesn't), who would benefit (and who would lose out), whether impacts of new technologies are reversible (or not), and other possible unintended consequences from profound and largescale changes in farming systems. Solutions that increase inequality, concentrate control, wealth and power in fewer hands, threaten land rights, agricultural biodiversity and farmers' livelihoods, or green-wash business-as-usual corporate practices, should not be promoted under a just transition.

Even as there is now widespread scientific consensus that the world must move away from large-scale agribusiness14 (see section on Transforming the Food System), the industry will likely continue attempts to defend their interests by presenting themselves as the solution to the climate problem. Proactive attempts to repackage industrial approaches of GMOs, fertilisers and factory-farm feeding operations as "Climate Smart Agriculture," "precision agriculture," "sustainable intensification" or "reducing emissions intensity per kilo" could sound appealing to many farmers and

governments who would understandably like to see themselves as climate leaders while minimising disruption to their way of doing things. However these approaches lead to far higher emissions than systems based on agroecology and less and better meat, while also concentrating land and wealth in fewer hands.

Hi-tech approaches based on data and algorithms are foreseen by some to be the future of low-impact farming. There is even futuristic talk of agricultural drones that can transform farming in the global South, and reduce the need for pesticides and labour, for example. But farming systems that quickly adopt automation may strongly favour only those farmers wealthy enough to own expensive technology, mostly men, effectively eliminating the need for workers, and forcing poor farmers out of the system. (Technology development to support women farmers, farm workers and labourers is essential, however. This could include devices to save drudgery, innovations in the preservation of water and biodiversity, easier food processing to save women's time, or safe transport for women to be able to sell their produce. However most technological innovations are gender-blind, at best only benefiting men, or at worst threatening communities.)

Strategies to apply large-scale technical fixes to the climate may also have far-reaching consequences on smallholder farmers and rural communities who depend on access to land for their survival. Many governments hope that scientific advances in a technology called "Bioenergy with Carbon Capture and Storage" (BECCS) will enable them to "remove" carbon dioxide from the air on a large scale, and counter the effect of climate change. But - aside from the possibility that the CCS technology may never be effective at scale - for BECCS to work on the scale envisioned, it would require hundreds of millions of hectares to grow tree plantations, which would then be cut down for biomass to be burned.¹⁵ Those hundreds of millions of hectares would likely create huge conflicts over land and water for food production. It is more than likely that lands in the global South would be targeted for these plantations, particularly so-called "under-utilised land" in areas where farmers, indigenous peoples, local communities and women have insecure land tenure, and are highly vulnerable to being displaced by land grabs.

IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

Stone, Kelly. "BECCS: A Dangerous Distraction." ActionAid USA. June 2016. https://www.actionaidusa.org/wp-content/uploads/2019/06/BECCS-Explainer.pdf



At the climate march in New York in September 2019. PHOTO: TERESA ANDERSON/ACTIONAID



2) Transform the Food System to work for people, nature and the climate

Systemic policy change vs individual action

We can only address the climate crisis if we transform the systems that are at the root cause of the crisis. To avoid climate disaster, we will need to really change the way we obtain our food, so that it no longer harms nature, soils, women farmers, workers' health and the climate; or concentrates land and wealth in the hands of elites and corporations while leaving people hungry, poor and malnourished. A food system of the future must not only benefit nature and the climate but it must also ensure the right to food for all, and benefit food producers, workers consumers and people throughout the supply chain.

But this transformation cannot happen on the scale required if it is just left to individuals to choose whether or not to take a leap. Industrial farmers in rich countries reliant on corporate agribusiness, poorer smallholder farmers in developing countries trapped in a system dependent on agro-chemical dealers or fertiliser subsidies, as well as many consumers are engaged in the industrial food system. They may find

narratives that emphasise their individual responsibility to transition to climate-friendly ways of farming are alienating, disempowering and confusing.

Simply urging farmers to take on the financial burdens and potential risks that come with a shift in farming from industrial towards agroecological methods, and which may set them at a competitive disadvantage against other farmers (at least in the short-term) will not motivate many conventional and large-scale farmers to make the change. They may worry that they will need deep pockets to survive the uncertainties and risks from additional investments and short-term losses. They may not have enough nutrients available to fertilise poor soils, or access to indigenous and diverse seeds. This approach could further marginalise smallholder farmers who are caught up in dependency on chemical fertilisers. Many of these farmers simply cannot make the change on their own without sufficient institutional and policy support that creates the right incentives and opportunities.

ActionAid works with many thousands of smallholder women farmers in dozens of countries who already

practice agroecology or are transitioning from using agrochemicals towards agroecological farming techniques. They do so to strengthen their resilience to climate impacts and earn a better living from the land. However they get little to no support from government for this change, and markets rarely reward them with higher prices for their better quality products. Policies even often undermine their efforts and hinder agroecological practices. Restrictive seed laws that forbid saving and sharing of local seed varieties, subsidies of hybrid seeds and agrochemicals, as well as the continued reduction and dismantling of public sector agriculture research and extension provision, all undermine the efforts of agroecological farmers.

In this context, approaches that emphasise and rely on individual action will therefore be unlikely to create rapid shifts in the numbers and scale required. They may even end up perversely penalising those that are brave enough to make the shift, discouraging their peers from following suit.

The approach to just transition must therefore ensure that it supports poorer smallholder farmers, women producers, farm workers, building their collective power and addressing their needs within agriculture policy and support. Policies must address false incentives provided to larger industrial farmers in the form of farm subsidies, as well as the means by which processors and supermarkets keep prices artificially low. Systemic policy change will be necessary to achieve this.

Nonetheless, it is often thanks to the courage of individual and pioneering farmers who have chosen to operate outside of convention and adopt environmentally-beneficial farming practices, that there is a clear path for the way forward. These farmers can play an active role in showing others that efforts to protect nature don't have to come at the expense of farmers.

In more formalised food markets, large supermarkets and food processors often determine our relationship with our food. In these cases, consumer pressure can also play a useful role, particularly as it can shift cultural expectations and political pressure. Within these circumstances of changing public perceptions, politicians may feel that it is easier to take policy steps to speed the transition towards agroecological

production and less and better meat (see section below), and may start to consider the role of tools such as regulations, subsidies, taxes or public procurement policies to bring about the systemic changes that are so urgently needed.

From industrial agriculture to agroecology: increasing resilience, reducing emissions, supporting farmers

In the last decades, agriculture around the world has undergone a profound shift. Increasing industrialisation of agriculture has re-shaped the global food system, with far-reaching consequences for land, landscapes, farmers, consumers and the climate. The building blocks of agriculture - seeds, soil nutrients and pest management - that have been freely available to farmers for millennia, are now largely controlled and produced by powerful multinational corporations and sold to farmers at ever-higher costs, in the quest for ever-higher yields. What was once agri-culture has steadily become agri-business. The once-huge global diversity of local farming knowledge, resources and practices are being replaced with the contents of the same store-bought canisters the world over.

This industrialised approach to crop production may have, in many cases, served to increase crop yields. However this approach has come with significant cost - not least to farmers' wallets, their health, the climate and other so-called "externalities" such as pollution. The high-yield approach to farming is also often accompanied by low returns, as farmers spend more and more of their income on purchasing products that could, with skilled management, be delivered by nature.

The industrialisation of agriculture has also had disastrous impacts on the climate and environment. The burning of large amounts of fossil fuels is required to produce synthetic nitrogen fertiliser. For this reason, the fertiliser industry has close links to the oil and fracking industries,16 and development of their products is associated with high levels of CO2 emissions. Unsurprisingly, these corporations are known as the "Exxons of Agriculture" for their outsize climate impact and powerful grip on the industry and political system.¹⁷

^{16.} Corporate Europe Observatory. "Yara: Poisoning our soils, burning our planet." September 17, 2019. https://corporateeurope.org/en/2019/09/ yara-poisoning-our-soils-burning-our-planet

^{17.} Grain. "The Exxons of Agriculture." Against the Grain. September 2015. https://www.grain.org/article/entries/5270-the-exxons-of-agriculture.

When chemical fertilisers are applied to the soil, they kill off the key soil biota such as the mycorhizzae fungi that naturally provide nutrients, store carbon and absorb water. Governments can no longer ignore the reality that industrial agriculture is simultaneously contributing to the climate crisis and rendering food systems more vulnerable to its impacts.¹⁸

To ensure the resilience of food production in the face of the climate crisis, and to avert the climate crisis itself, food systems must convert from industrial agriculture techniques towards sustainable land management approaches such as agroecology and agroforestry.

Agroecology is an important solution to the challenge of feeding the world in an era of climate change. By working with nature, increasing biodiversity and avoiding harmful agro-chemicals that impact the environment and human health, agroecology improves resilience to climate change and significantly reduces the GHG emissions released in the process of producing agrochemicals and growing food.



Gambian farmer Pemba Mballow finds that using agroecological techniques such as composting and diversification have made a huge difference to her crops' resilience to climate change impacts such as drought. PHOTO: TERESA ANDERSON/ACTIONAID

A succession of recent high-profile reports on climate change, biodiversity and agriculture, including the Intergovernmental Panel on Climate Change (IPCC) special report on Climate and Land (August 2019), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystems Services (IPBES) global assessment report on Biodiversity (April 2019) and the Committee on World Food Security (CFS) High Level Panel of Experts (HLPE) report on Agroecological approaches (October 2019) confirm the necessity and urgency of this transformation.

However farmers who are already using or converting to agroecology do not currently get the policy support that they deserve. In the global South, extension agents usually find it easier to provide farmers with packages of fertilisers and hybrid seeds, rather than give advice on beneficial agroecological practices that are appropriate for the local soil and climate conditions. Women farmers tend to be ignored by extension services offering advice. It can be challenging for farmers - especially women - growing diversified mixed cropping systems to successfully access local and territorial markets. More support is needed from government to build the skill-sets, support mechanisms, economic infrastructure and consumer interest to market diverse produce.

These existing challenges and lack of support may discourage new farmers from transitioning to agroecological approaches. In addition, conversion periods from industrial crop production to agroecological production can be challenging for farmers. Years of applying synthetic nitrogen fertilisers usually kills off the mycorhizzae fungi in soils that not only store carbon and water, but provide nutrients for crops. It can take 2 - 3 years of restoring soil health through agroecological methods, before the *mycorhizzae* and other soil biota spread through the soil depth and reach their full potential to support plant growth. For these reasons, farmers often witness a drop in yields in the initial years of conversion. (On the other hand, agroecological practices can also significantly reduce the risk of total crop failure in the event of low rainfall, which is why they are an effective adaptation strategy.)

Agroforestry, in which a mix of annual, perennial and tree crops are grown, can also take several years for trees to reach maturity and produce yields on an economic scale. Farmers may therefore require financial

IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

support in the initial years of conversion, to be able to successfully shift from industrial to agroecological or agroforestry approaches.

Training for farmers to learn agroecological techniques, extension services to support responses to challenges as they arise, and support for new crops to reach

markets, are needed. Policies must support and give reassurance to industrial farmers so that they can trust in a good outcome before they make the leap. They should recognise the multiple public benefits delivered by agroecological approaches, and structure policies and payments to incentivise farmers.

Agroecology provides multiple benefits to agriculture and farmers in the face of climate change, including:

Adaptation:

- Healthier soils packed with soil organic matter are spongy, retain water, and are slow to dry out. In times of reduced rainfall and higher temperatures, water is available to crops for longer, extending growing times and increasing yield.
- Improved soils and more trees significantly reduce the risk and impact of local flooding in times of heavy
- Increased crop and seed diversity spreads risk, reducing chances of total crop failure following drought, flood, pests or disease.

Mitigation:

- Significantly reduces fossil fuel CO2 by avoiding production of synthetic nitrogen fertilisers.
- Avoids degrading soil carbon to atmospheric CO2 through the application of synthetic nitrogen fertilisers.
- Soils act as carbon sinks.
- Trees and multiple crop layers in agroforestry act as additional carbon sink.
- Avoids biodiversity loss, including deforestation pressure caused by aggressive expansion of plantations incentivised by industrial and mechanised agriculture e.g. soya in Latin America and palm oil in South East Asia.

Economic benefits:

- Farmers can retain more of their income when not purchasing agribusiness inputs, and are less squeezed by the corporate sector.
- Benefits smallholders, especially smallholder women farmers who may not have access to finance or deep pockets.
- Provides a counter to the concentration of land and wealth facilitated by corporate agribusiness, in which millions of smallholder farmers are forced out of farming by tight margins or aggressive land expansions.
- More smallholder farmers retained around a community strengthens local economies and services.
- Re-allocating government budgets currently spent on subsidising synthetic fertilisers can free up millions to provide support for adaptation, training, extension services based on agroecological approaches.
- Improved local water, biodiversity and environment, including from reduced fertiliser runoff.
- Health benefits for farmers, local communities and consumers through avoidance of pesticides and fertilisers, and more nutritious food.

Less and better meat

The high contribution of meat (particularly red meat) and livestock to global greenhouse gas emissions is now very much in the climate spotlight. The urgent need for climate action to address the emissions resulting from the livestock sector was recently confirmed by the Intergovernmental Plan on Climate Change (IPCC) special report on Climate and Land (August 2019).

The huge volumes of livestock feed grown to meet factory farming demand are driving the escalation of GHG emissions through both deforestation (regions of Latin America such as the Amazon, Cerrado and Chaco Grande are particularly affected) as well as the emissions associated with fertiliser production and soil degradation resulting from industrialised crop production.

It is important to note that some types of livestock and production methods are far worse for the climate that others. Factory farms cause huge emissions by vastly increasing the amount of livestock grown overall (hence increasing the total production of methane emissions), while also requiring huge amounts of land for production of feed.

These trends are resulting in calls for "less and better meat" as a climate strategy. The "better" meat means animals that are reared agroecologically, in more natural conditions, eating natural grass and food waste instead of imported grain, and in harmony with nature.19 A huge diversity of different breeds can be reared for their natural qualities such as resistance to disease, behaviour or flavour, in contrast to the fast-growing breeds that dominate industrial operations.

Livestock rearing can be far less harmful for the climate - and possibly even beneficial - if done as part of mixed farming systems, smallholdings or pastoralist systems, and of course on a smaller scale than the industrialised approach. The climate benefits from low-impact approaches to livestock rearing will likely arise from the reduced need to grow huge amounts of feed grain, and the avoided deforestation pressure that comes from this.

In the global South, traditional livestock cultivation can have a low climate impact, and can even provide environmental benefits if done in a traditional manner

and on a small scale. In parts of the world vulnerable to crop failure from climate change, keeping goats and chickens on a small scale can provide climate-resilient livelihood alternatives. Per capita meat consumption in the global South is typically low compared to the global North,²⁰ so many developing and low-income countries would not necessarily need to prioritise targeting their traditional livestock sectors. For people on low-protein diets, particularly poorer people in the global South, policies must remember to include strategies to increase people's access to healthy protein.

In the global North however, where industrialised livestock production means that per capita meat consumption is high, awareness of climate change and health motivations are creating a noticeable shift in diets towards reduced meat consumption. This trend is currently being led by individual behaviour change, increased awareness, culture shifts and increased availability of meat-free alternatives.

Studies suggest that a sustainable global level of meat consumption would involve a maximum of two five-ounce servings of meat per person per week.²¹ Reducing land used for livestock feed and meat production, can also free up land for agroecological crop production for human consumption, reduce deforestation pressure, and possibly free up land for restoration of biodiverse ecosystems.²²

The IPCC special report on Climate Change and Land recommends that alternative sources of plant-based protein such as pulses, nuts and seeds, become a larger part of people's diets, to ensure both personal and planetary health. Beans and pulses already make up a significant proportion of traditional diets and agricultural systems in Africa, Asia and Latin America. But there is huge potential to expand the growing of diverse varieties of beans and pulses in the global North. Many beans and pulses also naturally fertilise soils, making them a wonder crop for farmers. Plans to scale up available alternatives to meat must, however take account of the implications for farmers, their role. and the support required. Transitions must not leave farmers stranded without options.. Furthermore the rise in "lab-based meats" also raises questions about

^{19.} Dooley, K et al. "Missing Pathways: The role of land sector in ambitious climate action." Climate Land Ambition and Rights Alliance. October 2018, https://www.climatelandambitionrightsalliance.org/report.

Our World in Data. "Meat Supply per person, 2013." https://ourworldindata.org/grapher/meat-supply-per-person

^{21.} Dooley, K. "Missing Pathways." 2018.

^{22.} Ibid.

whether a world in which protein sources are entirely controlled by corporations and do not provide for rural livelihoods or fair distribution of incomes, can be just.

Industrial livestock farmers and workers may feel unease with a possible future in which their role is unclear. These concerns should be fully mapped and understood, to understand the options available to farmers in a future that produces less and better meat.

The transition to better meat production and plant-based foods must protect jobs and distribute income fairly. Industrial livestock farming usually requires significant infrastructure and farmers are likely to have made significant investments in that infrastructure, often taking huge loans that they are still paying back. Transitioning from this model of farming risks leaving farmers with stranded assets. Farmers dependent only on one type of farming are likely to find the shift particularly difficult. Industrial livestock farmers therefore need support and incentives to leave this model of farming behind and shift towards alternative approaches.



Fishing communities in Cambodia are restoring mangrove ecosystems. PHOTO: NATASHA MULDER/ACTIONAID

Protecting and restoring degraded ecosystems

Expansion of intensive or industrial agriculture is a major driver of forest loss. Insatiable consumption patterns in the global North - for example high demand for beef, soya for livestock feed, timber and palm oil - are often the biggest root causes of the trends driving the most aggressive destruction of ecosystems. Countries and regions with high levels of consumption and dependence on imports must recognise their own responsibility for driving the destruction of the Earth's critical ecosystems such as the Amazon and Cerrado.

The loss of the world's critical ecosystems presents a serious challenge to efforts to solve the climate crisis. The planetary crisis we face today is partly due to the loss of many of the Earth's ecosystems, which provide vital terrestrial carbon sinks that absorb industrial CO2 emissions. Thus, climate sol utions must include reducing the emissions we release at source, while also doing all we can to protect and restore ecosystems so as to absorb whatever CO2 we are unable to avoid emitting.

Natural biodiverse and primary ecosystems are shown to have up to 40 times the capacity to absorb and retain carbon, when compared to monoculture, exotic, fast-growing tree plantations.²³ They are shown to be far more resilient to the increasing climate risks posed by droughts and fire. Policies on agriculture and land in both the global North and South must therefore work to integrate strategies to protect, restore, and where possible scale-up biodiverse ecosystems to provide valuable climate and other ecosystem functions.

All countries must prioritise the responsibility to halt deforestation, through policy measures and good practices. International cooperation must be key to reducing pressure for deforestation. Strategies must include efforts to significantly reduce overall consumption, including imports, and to strictly regulate the sustainability and human rights compliance of those products that make it to market and are imported. Studies show that the most effective approach to protecting biodiverse ecosystems is by securing the land tenure rights of indigenous peoples, who effectively use their traditional knowledge and cultural practices to protect the ecosystems on which they have depended for many generations.24

^{23.} Pearce, Fred. "Why Green Pledges Will Not Create the Natural Forests We Need." Yale Environment 360. April 16, 2019. https://e360.yale.edu/ features/why-green-pledges-will-not-create-the-natural-forests-we-need

Dooley, K. "Missing Pathways." 2018.

However as pressure for resources has increased, and indigenous and local communities have stood up to defend these ecosystems, environmental defenders are experiencing escalating threats, violence and murders. Securing the human rights and land tenure rights of indigenous peoples must therefore be a key climate strategy, particularly in the global South.

Studies show that there is also huge potential for restoration of biodiverse ecosystems such as forests and peatlands that have been degraded by practices such as agriculture and logging, in the global North and South.25 Community-based management, securing of land tenure and allowing natural regeneration of forests in recently deforested areas should be incentivised.

There is also potential to expand natural ecosystems and scale up biodiverse forests. However this must be approached with careful consideration of the needs of those who are currently managing the land that would be targeted for this expansion. In the UK, for example, conversations about sustainable land management are starting to include questions about whether and how the UK can double its tree cover, 26 and issues of acceptability to farmers, rural communities and the general public.27

Commercial farmers may be cautious about proposals to expand ecosystems onto farmlands if it reduces the land available to agriculture and resulting loss of income. Even if mechanisms are developed to pay farmers for the ecosystems benefits provided by their activities, there may be complex issues around timing of payments. Farmers in both the global North and South often feel that the tight margins means that their livelihoods are precarious, and they expect returns on their investments in under a year to be able to survive financially. Many may feel understandably cautious about undertaking strategies that would mean losing income, or waiting for a decade or more for payment. Strategies to support farmers risking income loss as a result of scaling up ecosystems should be explored.

Food Sovereignty

The principles of "food sovereignty" can provide a basis for shaping a just food system that works for farmers,

workers, consumers and the planet. Developed by the peasant farmers' movement La Via Campesina, "food sovereignty" recognises that agriculture does not exist to only serve a narrow goal of food production. Instead, the concept recognises that food systems should be based on six pillars:28

- Focusing on food for people
- Valuing food providers
- Localising food systems
- Putting control locally
- Building knowledge and skills
- Working with nature.

Thus, food sovereignty is defined as "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems."

By re-orienting priorities in the food system, food sovereignty helps to protect the interests of the climate, farmers and everyone who eats, now and in the long-term. Its principles can serve as a counter to the dangerous concentration of corporate control in the food system, and should be used to shape decisions and governance around agriculture, particularly when planning a just transition.

Adaptation strategies

A just transition in agriculture must not only reduce emissions, but also ensure that farming systems can cope with future climate impacts. Adaptation must therefore also be a key component in planning. Agroecology is a highly effective adaptation strategy, as the improved soils increase water availability in the face of drought, and diversified crops spread risk and reduce risk of crop failure.

Solutions may range from technical approaches and building skills, to strategies that ensure social inclusion and empowerment. Technical solutions can include building infrastructure for managing water or protecting lands from flooding, as well as early warning systems

^{25.} Kate Dooley & Sivan Kartha, 2018. "Land-based negative emissions: risks for climate mitigation and impacts on sustainable development," International Environmental Agreements: Politics, Law and Economics, Springer, vol. 18(1), pages 79-98, February.

EDM 31 "Trees and Climate Change." 2019-19. https://edm.parliament.uk/early-day-motion/53374/trees-and-climate-change

Shrubsole, Guy with research by Chris Gordon-Smith. "Finding the land to double tree cover." Friends of the Earth. 18 June 2019. https://policy. friendsoftheearth.uk/insight/finding-land-double-tree-cover?_ga=2.164769724.2069221281.1571907617-1958304178.1571907617

Global Justice Now. "The Six Pillars of Food Sovereignty." https://www.globaljustice.org.uk/six-pillars-food-sovereignty

that advise farmers on when to plant and harvest. Adaptation strategies should also ensure social inclusion and women's empowerment. Strategies should work to bring women's invisible and undervalued knowledge on how to enhance their own, their families' and their communities' welfare to the fore, so that the needs and rights of the people who are most vulnerable to climate change are listened to, analysed and effectively addressed.29

Strengthening women's access to markets through empowerment and strategies that can include mapping of the value chain, improved numerical literacy, product processing and diversification, can help communities to increase income generated from the crops that they grow.³⁰ Strengthening local, regional and national markets can also play a role in offering marketing opportunities for diverse crops grown using agroecological methods.

How to feed the world in an era of climate change

- Shift from industrial agriculture to agroecology and agroforestry to become more resilient to climate impacts and reduce GHG emissions from food production.
- 2. Less and better meat production & consumption. No more factory farming which uses agricultural land and drives deforestation to grow feed. Grow more beans & pulses for healthy protein.
- 3. Reduce food loss & waste.
- Reduce energy used in transport and heating greenhouses; strengthen local, seasonal food and markets.
- No biofuels, which use up precious agricultural land and are usually worse for the climate than fossil fuels.
- 6. Reduce consumption and thereby agricultural land used for non-nutritional and luxury commodities such as flowers, tobacco & sugar.*
- 7. Secure land rights for smallholder farmers, particularly women, so that they can make the investments needed to transition to agroecology.
- 8. Gender-responsive extension services to train farmers in agroecology & support a Just Transition in Agriculture.
- 9. Counter the power of corporate agriculture and the concentration of land & wealth, so that smallholder farmers and local food systems can thrive.

*For more information on 1-6, see "Missing Pathways to 1.5°C: The role of the land sector in ambitious climate action" by the Climate, Land, Ambition and Rights Alliance (CLARA), 2018.

^{29.} Anderson, Teresa. "Agroecology, Empowerment and Resilience: Lessons from ActionAid's Agroecology and Resilience Project"." ActionAid International. October 2017. https://actionaid.org/sites/default/files/agroecologyempowermentresilience-lessons_from_aer.pdf

Ratner, Shanna et al. "Gender Sensitive Access to Markets: A Training Handbook." ActionAid International. November 2015. https://actionaid.org/ publications/2018/gender-sensitive-access-markets



The Aboroshya women's farmers group in Nyanza district, Rwanda met with local authorities to explain their needs. As a result, they were granted access to farmland, on which they are successfully producing carrots and cabbages. PHOTO: JANE LENNON/ACTIONAID



3) Ensure inclusiveness and participation in planning processes

A just transition does not only describe WHAT food systems will transition to, but also HOW that transition is carried out. How a process is undertaken is key to success in a just transition. To be successful, climate transitions must address power inequalities in the food system and give marginalised communities a seat at the table. By presenting these communities with an opportunity to shape their own future in a way that benefits them, inclusive planning processes can avoid the risk of top-down change that reinforces inequality. In this way, workers and smallholders can transform from resisting change, to become powerful advocates for climate action.

Map stakeholders

An essential first step to facilitating a just transition in agriculture is to map the many different stakeholders who are likely to be affected by changes, and their relative power.

Farmers are not a homogenous group. Depending on their gender, economic status, ethnicity or caste, crops, livestock, methods of production, geographic location and topographic context, they will wield different degrees of influence and have very different perspectives. Stakeholders are also not limited to farmers, but also include farmworkers (women and men, formal and informal, including seasonal, non-unionised and migrant workers), those up and down the food chain (including those that process products for sale in local markets, often women), and of course the wider community that is dependent on agriculture, including young people whose working lives are before them. Input suppliers, aggregators, processors and supermarkets may also be integral parts of the food system.

Particular efforts must be made to recognise and include those who may not be empowered to have an active voice in advocacy processes, and whose perspectives are often ignored in policy making. Processes that skip this essential stage and which fail to be inclusive are likely to only recognise and address the needs of industrial farmers or businesses with the power and access to decision makers. Failure to be inclusive from the very start will mean that transitions may well only benefit elites, while harming women, young people, the poorest workers and the most marginalised communities.

In addition to affected communities, processes must also make sure to include those working on a diversity of relevant issues, including organisations working on farming, climate, labour, human rights, migrant rights, the environment, youth and gender. Just transitions provide an opportunity for these groups to work together and find common ground for exciting new pathways that work for all.

Case study: Lessons from replacing rice with mango production in Bangladesh

The importance of mapping and consulting stakeholders is shown through a case study from Bangladesh, where in the 2000's, agronomists encouraged a shift from rice production towards mango production. This shift was based on the logic that mango generates more income per kilo, and requires less water and labour.

Agronomists focused their outreach and education on farmers and landowners, many of whom were persuaded to shift their land use from rice to mango production, which had far lower requirements for labour. However, this shift failed to take account of the needs of the one-third of households in the region dependent on their work as agricultural labourers in the rice fields. Rice production in the region had not only generated employment for labourers, but also in processing and marketing rice products, and the secondary industries that had built up around the sector. Many of these activities were led by women. Not only this, but Bangladesh usually produces two rice harvests annually, whereas mango trees only produce fruit once a year - a factor that the agronomists had apparently forgotten to account for.

The shift to mango production has therefore been disastrous for communities who lost their livelihoods as rice workers, and has contributed to social unrest in the region. The agronomists failed to grasp the economic importance of the different workers and stakeholders, and failed to consult them in the design of the new agricultural plan. Instead they were guided only by a narrow focus on minimising costs and maximising profit per kilo, and a one-size-fits-all approach to change.

International Journal of Labour Research. "Climate change and labour: The need for a "just transition." International Labour Office. Vol. 2 Issue 2. 2010. https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_153352.pdf



Zakir working in his rice fields in Patuakhali, Bangladesh. PHOTO: MAHMUD/ MAP/ACTIONAID

Inclusive and just processes

Once the relevant stakeholders have been mapped. active efforts are required to bring marginalised voices to the table and empower them to be heard at an early stage. If processes simply open the door to whoever turns up to discussions, then only those with time, money and organised lobbying capacity will be represented. The needs of key constituencies will not be heard, and the transition will fail to be just.

Processes must recognise that for many people such as women, informal workers, ethnic minorities, people living in poverty or youth, meetings and decisionmaking processes are an intimidating place. They may feel that they don't have enough status, confidence or knowledge to speak up. Their knowledge may not be documented or valued. They may worry that their thoughts are not coherently organised enough to be communicated clearly. They may feel that their views and experiences are not important compared to those of the men or the elites. Women in rural communities may not be available to attend meeting times if they conflict with their childcare, household or agricultural responsibilities. But it is precisely the fact that people face these barriers, that makes their input all the more necessary, to ensure that solutions are just and avoid exacerbating inequality.

To be inclusive, processes must use deliberate strategies to address power imbalances and to create safe spaces where people feel confident to speak. Addressing people's logistical barriers to attending meetings by including organising meetings at times that don't conflict with work or harvest times, organising crèches for childcare, organising meetings in communities or local locations instead of in the capital, or compensating people for their travel and time required away from their livelihoods can all help. Just transition planning processes can be an opportunity to empower people who may otherwise hesitate to step forward.

Inclusive planning processes that really listen to people and address their challenges can build trust as a foundation for on-going participatory policy development. They should therefore result in sincere efforts to design inclusive and responsive policy outcomes.

Ensuring meaningful participation in local and national policy processes

policy processes Just transitions require stakeholders' meaningful participation in the development of

plans and policies. Participation does not simply mean holding a quick consultation on a ready-made plan or policy, and then going ahead with a few tweaks. It means taking account of perspectives, knowledge and concerns right from the start, and building comprehensive plans centred on the needs and rights of all people. There may be deep power imbalances between different actors in the food system. Corporations and large-scale farmers may be used to having a seat at the table, while smallholders and farmworkers may by systematically ignored and excluded. A just transition must seek to reverse this power imbalance, and prioritise the voices of people who are marginalised. Just transition processes must also recognise that different stakeholders have different skillsets, different ways of communicating their views, and different levels of literacy. Not everyone with a valuable perspective will be ready with a powerpoint presentation and a lobby document!

Civil society organisations can play a key role in supporting and empowering marginalised farmers, workers and community members, especially women, so that they can enter the space, and more confidently communicate their views to policy makers. Sometimes holding separate group discussions for women and men, and for people of different ages or income, can help people to feel more comfortable and less intimidated to speak out. CSOs can work with stakeholders to develop capacity and understanding of climate change, analyse contexts, map concerns, identify needs, hopes and visions, and build solidarity and common positions for effective advocacy. Participatory and visual methodologies can enable community members and other participants to draw out their experiences and views. Tools can include maps, calendars, timelines, mind maps and future visioning.



In Kyon Kan Zing Baung village in Myanmar, regular community meetings have built the confidence of community members. They met with local government and successfully advocated for activities to strengthen resilience and disaster risk reduction. PHOTO: THAN ZAW AUNG/ACTIONAID

Building climate knowledge may be a necessary first step

Community members may often have limited knowledge or access to information about climate change. Many will not yet understand why weather patterns are changing, why crop yields are going down, or why lives and livelihoods are becoming more difficult. Most of the world's farmers will have noted the effects of climate change. However many - particularly in developing countries - will not yet understand the causes, have put a name to the concept, or discussed the trend within their community. Farmers might think that their poor yields are down to an unlucky few years, and hope things will get back to normal again in the future. An understanding of the climate change trend and likely future challenges is therefore key to motivating shifts in agricultural practices. Understanding that climate change is the "new normal" is key to action.

The role of unions

Trade unions, particularly ITUC, have been strong advocates and pioneers for the concept of "just transition" as a key component of government and intergovernmental plans for climate action.

With growing recognition that addressing the climate crisis requires a shift away from fossil fuels, some coal mining communities are working with ITUC to advance a proactive agenda to facilitate the shift from coal to renewables, in a way that does not leave mining communities behind. Much - if not most - of the pioneering thinking about a just transition has so far been led by ITUC and its members in the energy sector.

For ITUC and its members, a truly "just transition" means inclusion of unionised and organised groups of workers in processes to determine the way forward, in a way that strengthens the livelihood opportunities, decent jobs, labour rights, social dialogue and social protection of workers. Advocating for a fair deal for workers in

the transition can itself be a tool for strengthening the power of unions, by encouraging workers' participation as the benefits of being part of an organising collective with leverage can become very clear.

There is much to learn from the energy unions' demands for a just transition, and their potential for application in the agriculture sector. However it is important to note that the economic and social structure of the agriculture sector can be quite different from that of the energy and mining sectors. While mining operations - particularly in the fossil fuel industry - are usually structured as a company employing many workers, the agriculture sector is usually organised differently. Often a farming region's economy will not be in the hands of a single employer, but of thousands of small and medium-size farmers, who themselves may employ a handful of workers. The typical union structure designed to improve collective power against a large employer will not always apply when the farmers (who may or may not be employers) are the ones at risk from change. The traditional union model for engagement in a just transition may be easier to apply when engaging with plantation farmworkers or workers employed by large food sector companies (meat processing, fishing boats, food processing) that employ large numbers of workers, and who may already be motivated to join unions to access their rights.

Farmers' unions are therefore usually organised and structured differently from the unions that represent farmworkers or miners. Unfortunately, agribusiness and technology interests are over-represented in some farmers' unions, and they can crowd out the voices and concerns of smallholder farmers and those that practice agroecology.

Measures must therefore be taken to recognise and compensate for instances when corporations are pretending to speak for farmers, and when the disproportionately powerful are given the chance to speak "on behalf" of those whose interests they may be stifling.

Building resilience to climate change through women's empowerment

Strategies to empower women and facilitate their participation in local planning processes are particularly key to ActionAid's programme work in communities. Women offer critical insights into their family and community needs, challenges, opportunities and potential. They are responsible for most of the food produced and eaten in Africa and Asia, and are responsible for key household activities such as fetching water, firewood and animal fodder, as well as preparing food and caring for children and elderly and disabled people. These responsibilities mean that women face burdens and challenges that are often invisible, and they hold specific insights into the realities of holding families and communities together in the face of climate change.

Even though women's knowledge and participation are central to the process of building resilience and food security, they are all too often left out of key decision-making processes. The entire community is losing out as a result.

ActionAid therefore prioritise women in climate adaptation activities. Resilience programmes are structured along a process of empowerment, participation and capacity development. They are supported to create women's groups where they can discuss climate change and issues affecting their lives, analyse trends, identify solutions and take action together. Participatory tools such as mapping and seasonal calendars are often used to jointly evolve analysis.

In cultures where women are expected to stay quiet during community meetings, being in a women's group enables them to talk freely, and identify work they do and challenges they face that often go unnoticed by men. They can put ideas together, so that they can then bring them more clearly and confidently to the wider

In ActionAid programmes, women then lead and participate in development of community resilience plans, training on agroecology, community disaster risk management committees, emergency response teams and farmers' groups usually in equal or higher numbers than men, ensuring that their perspectives are reflected in activities.

This process of empowerment can be extremely effective in giving women confidence. They are then often supported to identify particular gaps and risks, and opportunities for local or national government to provide targeted support. This has often resulted in women farmers' groups effectively lobbying local or national government to allocate budget to services or infrastructure that strengthen the resilience of the community. In Malawi, for example, women farmers have met with the national government to present recommendations for the development of the National Adaptation Plan (NAP).



Farmers and inhabitants from 37 villages in Ndiaël, Senegal were at risk of losing their livelihoods when a biofuel company moved into the area with plans to take their lands. Campaigning and advocacy by the community successfully halted the project expansion. PHOTO: MAMADOU DIOP/ ACTIONAID



Nyara Fatty at her vegetable stand in the market in Salikene. The Gambia. PHOTO: JANE HAHN/ACTIONAID



4) Develop a comprehensive framework

Governments must act as midwives for just transitions in food and agriculture, to facilitate effective transformations on the scale required. Once solutions and strategies have been developed in collaboration with stakeholders, government has the responsibility to implement plans using policy tools. It is important to remember that a genuine just transition in the food system cannot simply rely on individuals choosing to do the right thing. A just transition requires proactive government intervention in the sector at regional and/ or national level as well as integration with different strategies and services, in order to properly address the views and needs of affected communities.

To reshape agriculture and the food system to be fit for purpose in the face of the climate crisis, a framework for a just transition must be comprehensive. A range of factors including impact assessments, support required, links with other sectors and issues, the role of finance, and of course the regulation of corporate power, must all be included in the strategy.

Impact assessment and planning at regional and national level

Just transitions in agriculture must incorporate planning on a broad enough scale to be effective. Ideally these processes should take place at regional and/or national level, to fully take account of the diversity of stakeholders, sectors, services, infrastructure, gaps and opportunities.

The International Labour Organisation (ILO) Guidelines on a Just Transition³¹ recommends that impact assessments are undertaken at regional and national level, to understand the impacts of climate change and climate change policies on respective sectors, looking at a range of factors including jobs lost, potential created and skills needed. These impact assessments must be gender-sensitive.

^{31.} International Labour Office. "Guidelines for a just transition towards environmentally sustainable economies and societies for all." 2015. ISBN: $978-92-2-130628-3. \ https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf$

Inclusive policies

Inclusive policies and strategies are necessary to avoid exacerbating inequalities in a just transition. A key principle underpinning just transitions must be for gender-responsive and gender-transformative policies that recognise and address the barriers that women face in farming. For example, ensuring that women have secure land tenure, have access to finance, and benefit from extension services that are oriented to the needs of women farmers.

Policies should also consider strategies to support young people to get into and stay in farming, and the potential for strategies to facilitate community collaboration, for example by supporting complementary specialisms, or sharing of machinery.

Training and reskilling

Transitions will likely require significant changes in practice, requiring new knowledge and skills, whether it is for converting to agroecology or agroforestry, cultivating different types of produce or livestock, reaching into to new markets, or shifting into new and different sectors altogether. The farmers, farmworkers and communities who are expected to deliver the new vision for the sector, should not have to carry the cost of their own training and reskilling, or risk being left behind if they cannot afford it.

For a just transition to effectively protect and reshape regional or national economies, it must incorporate planning and budget for training, education and reskilling as well as extension support. To deliver on this strategy, collaborations with educational institutes should be explored. This approach should also align with strategies to address the research gap into agroecology, which is still largely neglected by science and innovation research.

Social protection

Farmers, workers and communities will face deep concerns and uncertainties about what the future will hold in a changing sector. For example, many livestock farmers are well aware that the growing conversation

about the climate impact of meat consumption could mean that major shifts are on the horizon. Climate transitions, if not handled carefully, might mean loss of jobs and income and widespread change across communities. Farmers will likely resist change if they foresee that they will lose out.

To be convinced of the value of joining a just transition, farmers need to know that there is a social protection safety net to help them survive the changes ahead. They must feel that they really can trust the state to protect them, and that they will not be abandoned or sacrificed amid rushed climate policy responses.

Ensuring social protection for farmers, workers and communities must therefore be a fundamental component of any just transition in agriculture. Social protection may be needed to, for example, support farmers suffering temporary yield and income losses in the first years of transitioning to agroecology, or provide job guarantees, wage and benefit parity guarantees, income support, or pensions if older workers would find switching to new approaches too challenging.

Ensuring social protection is therefore critical for ensuring that the transition is both just and successful. Just transition discussions in the energy sector also provide useful learning for the agriculture sector. Workers need to hear certainties, not vague promises, otherwise they will remain highly sceptical. As a spokesperson for the Mineworkers' Union of America said in response to early discussions about a proposed US Green New Deal, "Will people be paid what they are earning now, with the same level of benefits? None of that has been clarified... If you're able to say to these folks, here's a \$30-an-hour job with all the rest of the stuff you're used to, and you'll pretty much work the same hours, you'll have folks say 'OK, I'll consider this'. But that's not what anyone is saying."32 Social protection guarantees are therefore crucial to unlocking resistance to a just transition.

Just transitions in agriculture must seek to achieve multiple objectives of solving the climate, ensuring justice, rewarding good practice and providing social protection to the farmers and workers who must shift their practices. However in certain cases, complex situations may also arise, for which the answers are not easy.

^{32.} Cohen, Rachel M. "Labor Unions are Skeptical of the Green New Deal and they Want Activists to hear them out." The Intercept. February 28 2019. https://theintercept.com/2019/02/28/green-new-deal-labor-unions/

Brazilian agriculture, for example, exemplifies extreme inequalities of wealth and land. Many industrial largescale farmers are responsible for grabbing thousands of hectares of land and driving the deforestation of precious ecosystems such as the Cerrado and the Amazon. Meanwhile ActionAid works with smallholder agroecological farmers in the Cerrado region who protect the local ecosystems and are responsible guardians of the land.

Scenarios like this raise challenging questions: Is it right that the powerful large-scale farmers who are responsible for damage to people and ecosystems are given social protection or compensated for any loss of profit in the shift to better practices? If so, will this increase inequality and drive further abuse? Will the responsible agroecological smallholders be rewarded for their decades of good practice?

At this point, there may not be simple answers to these questions. Solutions may be complex. Nonetheless it is the role of a just transition in agriculture to find equitable ways to address systemic inequalities.

Public procurement

Public procurement can be a useful tool in accelerating the transition to climate-friendly food systems. Public institutions for health, social care, energy and education provide and consume huge amounts of food to their users and staff. They can form a significant component of the food that is consumed in a country on a weekly basis. These institutions can be leveraged to direct the demand of the economy. By putting in place criteria on food procurement in the public sector, for example requiring that a percentage of food is organic, or that meat consumption is reduced, government can aggregate demand, ensure stable market prospects for farmers, accelerate improvements in standards and best practice at national level, and significantly reduce GHG emissions from the sector.

A just transition in a globalised marketplace?

The industrialisation of agriculture has brought about many changes in the global food system, not least in the way that food and feed are now transported around the world. Local domestic markets have been transformed by these trends, along with diets, farmers' incomes and crop diversity. A just transition, in seeking to address the global challenge of climate change. must therefore also consider the global nature of the current food system and how benefits or impacts will be felt in other parts of the world, in both the short and the long term.

As climate response measures look to address emissions in the food and agriculture sector, the climate impact of commodity trading must also be accounted for. The scope of the just transition should not only take into account the GHG emissions produced and consumed domestically, but also the impact of food and feed that is imported and exported. Climate strategies must avoid the trap of pretending to reduce domestic emissions, while increasing imports that outsource and increase total global emissions.

For example, livestock production must take into account whether the feed that is used is driving deforestation in other parts of the world. Shifts towards less and better meat production can factor in elements such as these.

Links with other sectors and issues

As just transitions in agriculture are developed, links and synergies with other sectors must be incorporated in planning. Sectors including rural development, energy, transport, education, social protection and economy can help to deliver comprehensive and effective strategies. Plans should also optimise synergies with other social and environmental goals, for example those on hunger, poverty, water and other relevant Sustainable Development Goals (SDGs).

Climate policies: NDCs, NAPs, GCF

Plans for just transitions in agriculture should be linked to climate policies initiated under the United Nations Framework Convention on Climate Change (UNFCCC).

Nationally Determined Contributions (NDCs) are the national climate plans that all countries are required to develop and implement under the Paris Agreement, the globally-agreed treaty on climate action. NDCs can include national actions to mitigate climate change, as well as to adapt to its impacts and cope with climateinduced loss and damage. Just transition plans can and should be incorporated under NDCs as part of national strategies to address the climate crisis.

National Adaptation Plans (NAPs) are also being developed by countries vulnerable to climate change in the global South, so as countries work to strengthen the resilience of their food systems to climate change, there are also opportunities to integrate just transition strategies into these processes.

The GCF was set up under the UNFCCC to facilitate financial flows from wealthy developed countries, to poorer developing countries so that the latter can implement mitigation and adaptation activities. There is therefore potential for developing countries to seek GCF funding to support the development and implementation of a just transition in agriculture.

The participation of key stakeholders and at-risk communities should be central to development of just transition, NDC, NAP and GCF plans, so there is significant potential to integrate these processes for greater impact.

Financing a just transition

Financing a just transition in agriculture may take significant resources, to cover all the different elements of participation, planning, investment, creation of new sectors, training, reskilling and social protection. Even though the cost of transforming the food system may be significant, the costs of inaction on climate will be far, far higher. To become a reality, plans and policies for a just transition must be coupled with funding, to ensure successful implementation.

Economic strategy can therefore play a key role for the funding and implementation of a just transition. Subsidies for harmful products such as synthetic nitrogen fertilisers, chemical inputs and fossil fuels

(without which farmers would not find industrial agriculture to be profitable), should be withdrawn, and the funds re-allocated to enable training, adoption and extension support on agroecology. The funds represented by these subsidies are significant. Countries like Ghana, for example, have allocated more than 40% of their national agricultural budget towards subsidising fertilisers.33

Progressive tax systems can raise funds, but they must be designed in a way to ensure that those with the most responsibility for GHG emissions (Polluter Pays Principle) or those with the greatest ability to pay, are contributing the most.34 An example of this approach could be the targeting luxury goods or services. Pension funds and other investors should be obliged to do their due diligence to do no harm, and encouraged to make better use of their finance and power to shift practices and support the transition, for example by divesting from harmful sectors or businesses (industrial agriculture, fossil fuels) and re-investing those funds into attractive, ethical and climate-friendly options that enable the transition.

Regulating corporate power

Finally, regulation of corporate power will be an essential component of the just transition. Agribusiness corporations hold immense power, wealth, land and control. Around the world they have successfully converted that power and influence into benefits from government in the form of state subsidies and investments, low taxes, minimal environmental regulations or workers' rights, and low accountability for the harm they cause.³⁵ These policies (or lack of them) serve to further concentrate power and wealth into corporate hands, which in turn are used to block any attempts to change the status quo. Unless governments regulate corporate power, this vicious cycle will continue to squeeze farmers, delay the necessary transformation and push us towards climate breakdown.

^{33.} CIKOD. "A report on assessment of Ghana's agricultural development budget and farm input subsidies programmes 2008-2017. (2018) http:// www.cikodghana.org/wp-content/uploads/2019/04/A-REPORT-ON-ASSESSMENT-ON-GHANAS-AGRICULTURAL-DEVLOPMENT-BUDGET-AND-FARM-CIKODGHANAS-AGRICULTURAL-DEVLOPMENT-BUDGET-BUDGET-BUDINPUT-SUBSIDY-PROGRAMMES-2008-2017-1.pdf

^{34.} ActionAid International Briefing. "Excise taxes." October 2018. https://actionaid.org/sites/default/files/publications/excise_taxes.pdf

Brennan, Bird and Gonzalo Berrón. "Corporate Power: A David and Goliath struggle for the 21st century". Transnational Institute. https://longreads. tni.org/corporate-power-the-david-and-goliath-struggle-of-the-21st-century/



Women farmers march for agroecology and climate justice in Nigeria. PHOTO: ACTIONAID NIGERIA

CONCLUSIONS & **RECOMMENDATIONS:**

To have a chance of avoiding runaway climate breakdown, governments must transform their agriculture and food sectors. They must shift from industrialised crop and livestock production to agroecological approaches that work with nature and for the climate.

But widespread sectoral transformations could bring major disruptions to those whose lives and livelihoods depend on industrial agriculture. Many farmers and workers feel that their livelihoods are already precarious, squeezed by the industrial agriculture system which forces them to either "Get big or get out". At the same time, world hunger is rising, while farmers - particularly women smallholder farmers - who are currently leading the way in agroecological production, are not getting the institutional policy support they need and deserve.

A just transition in agriculture is therefore needed to address existing inequalities in the food system, and to support farmers, workers and communities to undertake and benefit from the transition. Farmers' and workers' own struggles must be the starting point for the necessary conversation for a just transition.

To understand and address the real needs of affected communities, just transition processes must open up to participatory social dialogue with farmers, workers and communities, with a particular emphasis on inclusive processes that bring in, empower and listen carefully to women and marginalised communities.

A comprehensive policy framework can then enable the transition through training, reskilling, social protection, workers' rights and regulating corporate power.

A just transition must take in many different threads, and listen to many different perspectives. It must elegantly knit these together for a strategy that delivers on social justice, economic transformation and climate ambition. It is no small task. But it can be a powerful means to transform communities that might otherwise resist climate action, to become powerful advocates for change.

Recommendations:

- 1. Governments must work to reduce the climate vulnerability and emissions footprint of their agriculture and food systems, by bringing in policies that promote agroecology over industrial and intensive crop and livestock production. The mainstreaming of agroecology into national agriculture policy can facilitate public finance for agroecology. Polices should also include regulation of agribusiness corporations, public procurement, and shifting of public finances from the subsidising of synthetic nitrogen fertilisers, towards supporting agroecological farming practices and markets. Policies enabling a just transition in agriculture can be integrated into national climate policies and proposals, including Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and the Green Climate Fund (GCF).
- 2. Governments must initiate inclusive and participatory dialogues with stakeholder communities including farmers, women, workers, and people up and down the supply chain, to understand the struggles they currently experience within the food system, and the support that they require to effectively make the transition to better farming practices.

- 3. Unions and civil society organisations have a key role to play in organisising farmers, labour and communities to work together to articulate and advocate for their needs.
- 4. Policy frameworks must avoid rushed approaches that exacerbate inequality, create job losses, or rely on tokenism, business-as-usual green wash or false solutions.
- 5. Solutions for a just transition must be based on the goal of advancing human rights, including women's rights, the right to food, land rights and workers' rights, in addition to addressing the climate crisis.
- 6. As plans for new production methods, markets and food systems emerge, they must be enabled and supported through planned investment, new livelihood opportunities, and strategies for reskilling, training and social protection where needed.
- 7. By presenting this process as an unprecedented opportunity to address the concerns, pressures and injustices faced by rural communities, a just transition in agriculture can accelerate the public demand and momentum for ambitious climate action.

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ActionAid is a global movement of people working together to achieve greater human rights for all and defeat poverty. We believe people in poverty have the power within them to create change for themselves, their families and communities. ActionAid is a catalyst for that change.

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