

Transition is Inevitable, Justice is Not: Pathways Towards Advancing a Just Transition in Kenya's Smallholder Agriculture Sector



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TRANSITION IS INEVITABLE, JUSTICE IS NOT: PATHWAYS TOWARDS ADVANCING A JUST TRANSITION IN KENYA'S SMALLHOLDER AGRICULTURE SECTOR

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List of Acronyms

ASAL	Arid and Semi-Arid Lands
ASTGS	Agriculture Sector Transformation and Growth Strategy
CFA	Community Forest Association
CoP	Conference of Parties
CSAS	Climate Smart Agriculture Strategy
FAO	Food and Agriculture Organization of the United Nations
FCMA	Forest Conservation and Management Act
FPIC	Free, Prior and Informed Consent
GDP	Gross Domestic Product
GHG	Greenhouse Gas
ILO	International Labour Organization
KVDA	Kenya Valley Development Authority
NAIP	National Agriculture Investment Plan
NCCAP	National Climate Change Action Plan
MTP	Medium Term Plan
MtCO₂e	Metric Tons of Carbon Dioxide Equivalent
NDC	Nationally Determined Contribution
NYS	National Youth Service
PELIS	Plantation Establishment and Livelihood Improvement Scheme
PLUPA	Physical and Land Use Planning Act
SDGs	Sustainable Development Goals
SME	Small and Medium Enterprise
TARDA	Tana and Athi River Development Authority
TIVET	Technical Vocational and Training Institutions
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
VGSSM	Voluntary Guidelines for Sustainable Soil Management

EXECUTIVE SUMMARY



This Discussion Paper explores the imperative of facilitating just transitions within Kenya's smallholder agricultural sector, particularly in the face of escalating climate change impacts.

Given the sector's significant contribution to the national GDP and its role in ensuring food security, addressing the vulnerabilities of smallholder farmers is paramount to achieving broader sustainability goals and fulfilling human rights obligations.

The Discussion Paper therefore focuses on the important link between climate change and agriculture in Kenya, emphasizing smallholder farmers' increased sensitivity to climatic hazards and the resulting implications for poverty alleviation and socioeconomic stability. It emphasizes the importance of a just transition framework that protects the rights of farmers, farmworkers, and communities while emphasizing the state's responsibilities. Thus, the Discussion Paper frames a comprehensive approach to sustainable smallholder agriculture, drawing on strategic conclusions and offering choices such as securing land rights, encouraging climate-smart agriculture, ensuring participatory procedures, and improving income protection. It advocates for concerted efforts to enable a just transition that protects smallholder farmers' livelihoods and contributes to Kenya's broader agricultural transformation agenda by outlining actionable strategies and emphasizing the importance of climate financing mechanisms aligned with the Paris Agreement.



The Discussion Paper has therefore drawn two strategic conclusions on the interface between climate change and agriculture in Kenya:

- i. Smallholder agriculture in Kenya remains susceptible to climate risks, which heightens vulnerability of farmers, farmworkers and those depending on the agriculture value chain to deeper poverty.
- ii. A just transition pathway unbundles the rights of farmers, farmworkers, and communities; and clarifies obligations of the state. The justice requirement is imperative in ensuring that while transitions maybe inevitable, fairness, equity, and inclusiveness are not sacrificed as an inconvenience.

In view of the identified need for action, the Discussion Paper has identified several options that can be considered towards a just transition focused on enhancing smallholder agriculture sustainability:

- a. Secure land rights for farmers at every scale (large, medium or smallholder), and enforcing constitutional protections for land rights is indispensable.
- b. Expanding the scope of people involved in smallholder farming is important, including through opening up of suitable public land for access through lease for agriculture. Suitable land could be identified after an inventory of public land held by ministries and state corporations.
- c. Adjudication and demarcation of community land rights processes should include appraisal of suitability for agricultural land use in order to aid communities with appropriate land use planning. Prior to adjudi-

cation of community land, the national and county governments should determine how to undertake inter-county physical and land use planning in order to, on a macro-scale, identify the community socio-economic and ecological assets needed for pastoralism, and protect these as public assets.

- d. Availing of financing to progressively implement climate smart agriculture interventions in Kenya that will enhance the role of ecosystem services and sustainable soil management in climate smart agriculture.
- e. Ensuring that participatory and inclusive processes needed to implement the just transition are an irreducible minimum to achieving sustainable smallholder agriculture.
- f. Taking policy steps to ensure that labour in smallholder agriculture sector meets the standards of decent work.

g. Provision of income protection to protect the needs of farmers, farmworkers and others working in the agricultural value chain.

h. Activation of provisions of the Employment Act to establish an unemployment insurance scheme that extends to those in the agriculture sector.

The options above demonstrate that options are available to trigger a just transition towards sustainable smallholder agriculture in Kenya. This is important because it supports an important portion of the GDP and enhancing smallholder farmer incomes is an important cog of Kenya's agriculture transformation strategy. However, further discussion is required on climate financing options for these interventions, in line with the Paris Agreement opportunities and other national, bilateral public or private opportunities.



INTRODUCTION: THE SOCIAL AND ECONOMIC IMPORTANCE OF SMALLHOLDER AGRICULTURE IN KENYA

The Sustainable Development Goals (SDGs) set a target for 2030 to end poverty, hunger, and ensure human potential fulfilment in dignity and equality within a healthy environment.



SDG 2 specifically aims to achieve food security, improved nutrition, and sustainable agriculture.

This includes promoting resilient agricultural practices to increase productivity while maintaining ecosystems and enhancing adaptation to climate change. SDG 2.4 targets sustainable food production systems by 2030, emphasizing the importance of resilient agricultural practices and maintaining land and soil quality. SDG 2.3 seeks to double the agricultural productivity and incomes of small-scale food producers, with a focus on women, indigenous peoples, and other vulnerable groups. This involves providing secure access to land, resources, knowledge, financial services, markets, and opportunities for value addition and non-farm employment.

Rural areas produce less, and fewer farmers participate in marketplaces than peri-urban areas. Growing demand, shifting dietary preferences, and intensive farming all present opportunities for profitable commercial agriculture.

Strategies include increasing input supply, strengthening institutional frameworks, adding value, and providing market information.¹ Indeed, the UN Declaration on the rights of peasants and other people working in rural areas calls on States to respect, protect and fulfil these rights including older persons, women, youth, children and persons with disabilities, including the entitlement to have access to and to use in a sustainable manner the natural resources present in their communities.²

The foregoing demonstrates the importance of agriculture to individuals and communities globally, including its role in fulfilling fundamental human rights. Agriculture is critical to realizing the right to be free from hunger, and to have adequate food of acceptable quality, guaranteed under the Constitution of Kenya.³ This right is indivisibly linked to the inherent dignity of the human person and is indispensable for the fulfilment of other human rights.⁴ The right is also inseparable from social justice, requiring the adoption of appropriate economic, environmental and social policies.⁵ Indeed, in Kenya, agriculture has been identified as the backbone of the economy, with a great potential for growth and transformation, contributing about 33% of total Gross Domestic Product (GDP).⁶ The sector contributes an additional 27% to GDP through linkages to other sectors such as manufacturing, distribution and services.⁷

1 Economic outlook: Omiti, J., Otieno, D., McCulloch, E., & Nyanamba, T. (2007). Strategies to promote market-oriented smallholder agriculture in developing countries: a case of Kenya. Nyoro, J. K. (2019). *Agriculture and rural growth in Kenya*. Tegemeo Institute.

2 United Nations, UN Declaration on the rights of peasants and other people working in rural areas. A/HRC/RES/39/12, 8 October 2018. Article 2(1) and 5.

3 Constitution of Kenya, article 43(1)(c).

4 CESCR General Comment No. 12: The Right to Adequate Food (Art. 11). 12 May 1999 (Contained in Document E/C.12/1999/5), para 4.

5 Ibid.

6 Kenya, Agricultural Sector Growth and Transformation Strategy 2019-2029 (Ministry of Agriculture), p. 19.

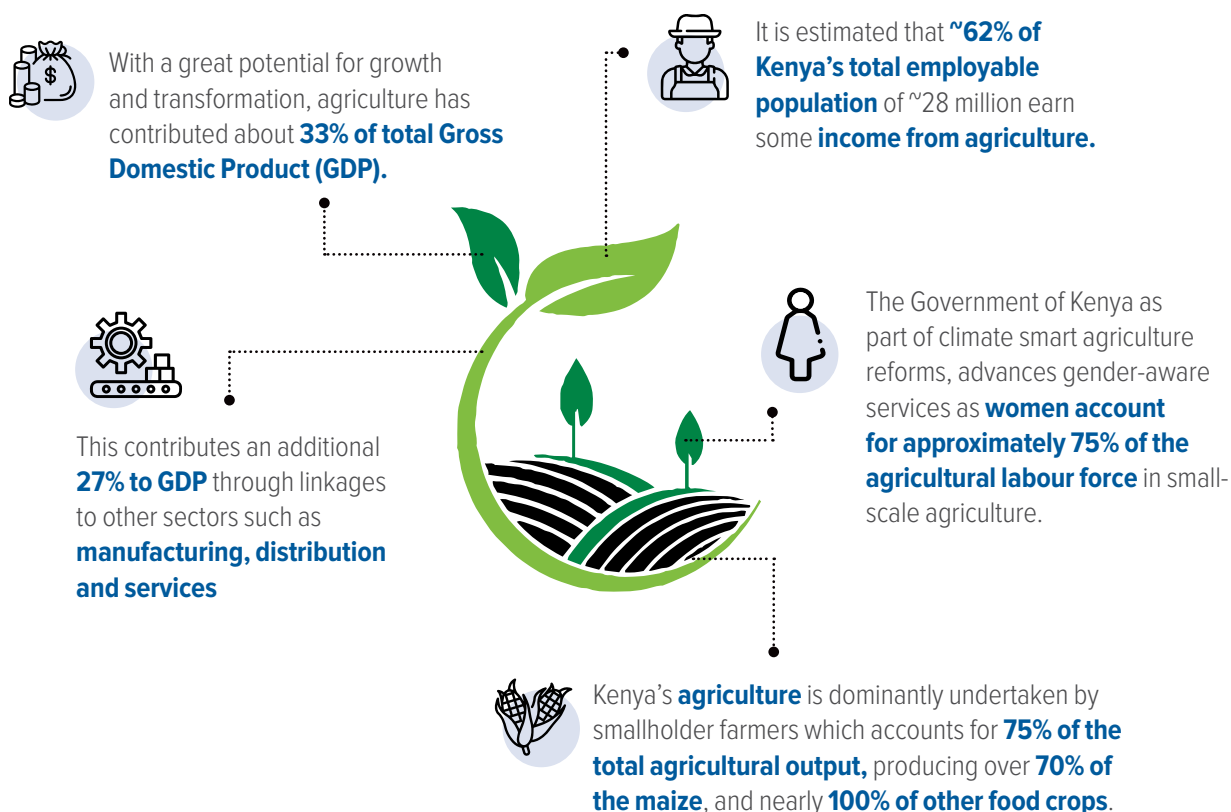
7 Ibid.

It is estimated that ~62% of Kenya's total employable population of ~28 million earn some income from agriculture, including farmers and other off-farm employment related to agriculture. Further, the 2019-2029 Agriculture Sector Transformation and Growth Strategy (ASTGS) estimates that that of the employable population half of them (~9 million) are farmers, both those formally employed (~340,000) and those in informal employment (~8.3 million).⁸ Importantly, Kenya's agriculture is dominantly undertaken by smallholder farmers which accounts for 75% of the total agricultural output, producing over 70% of the maize, and nearly 100% of other food crops.⁹

Small family farms in developing nations have the potential to improve food security and reduce poverty through sustainable intensification. This provides a foundation for studying sustainability in smallholder systems and in this case Kenya as a developing nation.¹⁰ It is evident that agriculture is important to Kenya, and that with its vulnerability

to climate change established, clear legal and policy actions are needed to integrate a just transition to sustainability. Sustainable agriculture is described as farming practices that encourage long-term food and livestock production while minimizing negative environmental impact.

This Discussion Paper advances a working definition of a just transition in smallholder agriculture as one that protects the welfare of smallholder farmers, sustainability in the land use, while prioritizing the climate resilience goals of Kenya's agriculture sector, in a low carbon context. The Government of Kenya, for instance, as part of climate smart agriculture reforms, advances gender-aware services that will be critical for success, as women account for approximately 75% of the agricultural labour force in small-scale agriculture, compared to 51% of men.¹¹ Various agrarian-focused reforms, in land, land use, labour and welfare may be required and are explored in chapter 4 and 5 .



8 Kenya, Agricultural Sector Growth and Transformation Strategy 2019-2029 (Ministry of Agriculture), p. 25-26.

9 Kenya, Agriculture Sector Development Strategy 2010-2020 (Ministry of Agriculture, 2010), 29.

10 Goswami, R., Saha, S., & Dasgupta, P. (2017). Sustainability assessment of smallholder farms in developing countries. *Agroecology and Sustainable Food Systems*, 41(5), 546-569.

11 Government of Kenya (2023). *National Climate Change Action Plan (Kenya) 2023-2027*. Ministry of Environment, Climate Change and Forestry, Nairobi, Kenya, p. 81.

As a developing country more vulnerable to these adverse impacts, Kenya will prioritize adaptation actions that build the resilience and adaptive capacity in agriculture, but also integrate a compatible low-carbon pathway consistent with the goal of the Climate Change Act.¹² Indeed, the updated December 2020 Nationally Determined Contributions (NDC), established in accordance with Article 4 of the Paris Agreement, confirmed that Kenya's GDP is based on climate-sensitive industries, notably agriculture. The NDC which is a climate action plan to cut emissions and adapt to climate impacts, is clear that adaptation is the highest priority for Kenya, not only through preventing further losses and damage but also to safeguard lives, livelihoods and social development.¹³

Accordingly, the NDC is clear that effective adaptation action will catalyse mitigation activity across sectors. Its worthy of note that Kenya submitted the revised NDC in 2020 which commits to a 32% reduction in emissions by 2030.¹⁴ Therefore, in framing a just transition pathway for agriculture in Kenya, the legal and policy guidance must be drawn from the Climate Change Act objects, and the NDC prioritization within the framework of the Constitution. Nonetheless, it is important to emphasize that while climate smart agriculture interventions are core to a just transition towards sustainable smallholder agriculture, the full bouquet of options is wider. It includes repurposing and sharpening a range of civil and political rights (e.g. partic-

ipation, inclusiveness), socio-economic rights, and even environmental rights such as the critical role of ecosystem services to sustainable agriculture.

The purpose of this Discussion Paper is to assess existing policies and propose new solutions to support a just transition to sustainable smallholder agriculture in Kenya. It seeks to identify deficiencies in current policies, investigate alternative options, and give actionable suggestions to politicians and stakeholders. By fostering debate and collaboration, the paper hopes to promote a complete understanding of the difficulties and opportunities in transforming the agricultural sector while maintaining fairness, equity, and inclusivity for all stakeholders.

The methodology employed in this paper is conducting a thorough review and analysis of existing policies related to smallholder agriculture in Kenya. This would involve examining national agricultural strategies, legislation, and institutional frameworks.

Section 2 of this Discussion Paper introduces the impacts of climate change on agriculture in Kenya. Section 3 unbundles the concept of a just transition basing this on previous work and discussion papers. Section 4 evaluates the options that could pave a just transition pathway to sustainable smallholder agriculture in Kenya. Section 5 is the conclusion.



The purpose of this Discussion Paper is to **assess existing policies** and **propose new solutions** to **support a just transition to sustainable smallholder agriculture** in Kenya. It seeks to **identify deficiencies** in **current policies**, **investigate alternative options**, and give **actionable suggestions** to **politicians** and **stakeholders**.

¹² Climate Change Act, No. 11 of 2016, section 3(1).

¹³ Kenya, Updated Nationally Determined Contribution (NDC), December 2020, Ministry of Environment and Forestry, p.14.

¹⁴ Ibid.

THE IMPACTS OF CLIMATE CHANGE ON AGRICULTURE IN KENYA

While, climate-induced risks threaten nations worldwide, poor countries are particularly vulnerable because of their low adaptive capacity and heavy reliance on climate-sensitive sectors such as agriculture.¹⁵ Climate change has adversely affected the agricultural production in East African nation, such as Kenya, and is expected to get worse in future.¹⁶ The 2018-2022 National Climate Change Action Plan (NCCAP) has identified “high reliance of the national economy and local livelihoods on rain-fed agriculture” as a major climate risk.¹⁷ This was affirmed in the 2023-2027 NCCAP which noted high dependence on rainfed agriculture, and insufficient irrigation system as a key vulnerability, with 98% of agriculture being rainfed.¹⁸ This overreliance on rainfed agriculture is also framed as a barrier to fulfilment of the targets of the Third Medium Term (MTP) for Implementation of Kenya Vision 2030.¹⁹

According to Kenya’s Climate Smart Agriculture Strategy (CSAS), the impacts of climate change in country’s agriculture sector are manifested in extreme weather events that causes flooding for example, In 2018, severe rains triggered deadly floods in Nairobi, Kisumu, and Mombasa. The floods

claimed lives, displaced people, destroyed infrastructure, and disrupted livelihoods. The floods were blamed on climate change-related extreme weather events. Kenya had severe drought conditions in 2017, hurting millions of people and cattle across. Crop failures, water shortages, and food insecurity were all the result of the protracted dry spells.

Climate change has been identified as a key cause of droughts in the region, with shifting rainfall patterns and rising temperatures contributing to water scarcity. Climate change has also had an impact on Kenya’s seasonal changes, reducing agricultural output and food security. Erratic rainfall patterns and temperature fluctuations have altered traditional farming practices, resulting in lower crop yields and financial loss for farmers. Furthermore, changes in precipitation patterns have influenced the availability of water supplies, affecting both rural and urban inhabitants.²⁰ Table 1 below sets out the damage or harm resulting from these impacts.²¹



The 2018-2022 National Climate Change Action Plan (NCCAP) has identified “**high reliance of the national economy and local livelihoods on rain-fed agriculture**” as a major climate risk. This was affirmed in the 2023-2027 NCCAP which noted **high dependence on rainfed agriculture**, and **insufficient irrigation system as a key vulnerability**, with **98% of agriculture** being rainfed.

15 Jeetendra Prakash Aryal , Tek Bahadur Sapkota , Dil Bahadur Rahut , Paswel Marenya & Clare M. Stirling Climate risks and adaptation strategies of farmers in East Africa and South Asia, Scientific Reports (2021) 11:10489 <https://doi.org/10.1038/s41598-021-89391-1> p. 1

16 Ibid.

17 Kenya, National Climate Change Action Plan (NCCAP) 2018-2022, Ministry of Environment and Forestry, p.12.

18 Government of Kenya (2023). *National Climate Change Action Plan (Kenya) 2023-2027*. Ministry of Environment, Climate Change and Forestry, Nairobi, Kenya, p.15.

19 Kenya, Fourth Medium Term Plan 2023-2027, The National Treasury and Economic Planning, 2024, p. 94.

20 Kenya, Climate Smart Agriculture Strategy, 2017-2026 (Ministry of Agriculture, 2017), p.27

21 Kenya, Climate Smart Agriculture Strategy, 2017-2026 (Ministry of Agriculture, 2017), p.27

TABLE 1
Harm or damage to agriculture resulting from negative impacts of climate change in Kenya

- Acute and chronic threats to agro-based livelihoods and leads to encroachment into fragile ecosystems.
- Land degradation and decrease in agricultural productivity.
- Increased incidences of pests and diseases affecting crops, livestock, fish and trees.
- Reduced yields and loss of income in the agriculture sector; food shortage and malnutrition
- Reduced quality of produce and earnings as well as increased postharvest losses.

In 2018, rain and flooding wiped out resources worth billions of shillings, with seasonal crops across an estimated 8,500 hectares of land destroyed, and over 20,000 livestock drowned.²² In 2017 the agriculture sector grew by a mere 1.6%, compared to 4.6% in the previous year because drought suppressed production of crops, and adversely affected livestock production.²³ In the decade leading to 2017, losses in livestock populations due to drought-related causes amounted to about US\$ 1.08 billion with the perishing of animals meaning the drought weighed heavily on pastoralist families.²⁴ The 2018-2022 NCCAP cautioned that Kenya risks losing about 1.7 million cattle, which is equivalent to 52% of the total cattle population in ASALs, in the next ten years, because of drought and effects of climate change. Livestock farmers risk losing between KES 34 and KES 68 billion in the ten-year period, with the largest impacts projected to be in Garissa, Wajir, Tana River, and Turkana counties.²⁵

The 2014-2018 drought translated into the 2019–2023 drought.²⁶ The latter was reported as the most severe and longest in 40 years, claiming the lives of people and livestock, while threatening the livelihoods of millions of Kenyans.²⁷ It caused massive displacement of populations with an estimated 508,104 people displaced by drought across five counties in Kenya by February 2023, and its negative effects were worsened by the preceding COVID-19 pandemic.²⁸ In February 2023, it was reported that around 4.4 million people (27% of the ASAL population) were facing high levels of Acute Food Insecurity, with about 774,000 people facing emergencies characterised by very high acute malnutrition/excess mortality or having to employ emergency livelihood strategies including sale of assets.²⁹ 3.6 million people were classified as facing a food security crisis characterised by above-usual malnutrition, or were marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies. Acute malnutrition across the ASAL counties increased in early 2023. Due to the prolonged drought, farmers did not have substantive crop production for five consecutive seasons.

Emerging agro-ecological changes and ecosystem shifts are leading that to alteration in fodder quality and quantity and changes in host-pathogen interaction resulting in increased incidences of emerging diseases and disease epidemics.³⁰ A direct impact includes change in water availability, affecting both pastoralism and zero-grazing.³¹ In essence, the negative impacts of climate change adversely affect crop and livestock keeping, and consequently the livelihoods of farmers and households who rely on this.

22 Kenya, Climate Smart Agriculture Strategy, 2017-2026 (Ministry of Agriculture, 2017), p.18.

23 Kenya, National Climate Change Action Plan (NCCAP) 2018-2022, Ministry of Environment and Forestry, p.18.

24 Ibid.

25 Ibid.

26 Government of Kenya (2023). *National Climate Change Action Plan (Kenya) 2023-2027*. Ministry of Environment, Climate Change and Forestry, Nairobi, Kenya, p.19-20.

27 National Treasury and Economic Planning. (2023, 15th June). Budget Statement FY 2023/24, p. 27–28. <https://www.treasury.go.ke/wp-content/uploads/2023/06/Budget-Statement-for-the-FY-2023-24.pdf>

28 IOM UN Migration. (2023). Kenya Displacement Tracking Matrix (DTM): September 2022 – February 2023. IOM Snapshot. See also, Government of Kenya (2023). *National Climate Change Action Plan (Kenya) 2023-2027*. Ministry of Environment, Climate Change and Forestry, Nairobi, Kenya, p.19-20.

29 Kenya-ASAL IPC. (2023). Acute Food Insecurity and Acute Malnutrition Analysis (February – June 2023). <https://reliefweb.int/report/kenya/kenya-ipc-acute-food-insecurity-and-acute-malnutrition-analysis-february-june-2023-published-20-february-2023>. See also Government of Kenya (2023). *National Climate Change Action Plan (Kenya) 2023-2027*. Ministry of Environment, Climate Change and Forestry, Nairobi, Kenya, p.19-20.

30 Kenya, Climate Smart Agriculture Strategy, 2017-2026 (Ministry of Agriculture, 2017), p.29.

31 Ibid.

It is important to recall the point made earlier that agriculture contributes 33% to the GDP of Kenya and employs a significant proportion of the population. Further, vulnerability of agriculture to climate change lowers productivity, and ensuing scarcity may increase food prices thereby putting fulfilment of the human right to adequate food and sustainable food production as envisaged in SDG 2.4 at risk.

For this reason, it is important for Kenya, to take into account the national circumstances as urged by article 4(3) of the Paris Agreement. This is especially key to ensuring that, as indicated in the 2020 NDC, there is prioritization of adaptation and that mitigation measures are co-benefits. According to ActionAid, efforts to dramatically cut greenhouse gases (GHGs) in the agriculture sector could also bring major disruptions to peoples' lives.³²



This policy distinction serves two purposes:

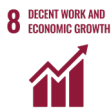
- a) ensure that at all times the priority is to enhance resilience of agriculture (which is dominantly smallholder) by reducing vulnerabilities to climate risks, and further, implementing interventions to enhance adaptive capacity; and
- b) screening mitigation actions to prevent them from contributing to Kenya's goal of reducing Greenhouse Gas (GHG) emissions without cushioning the populations and economy from climate risks. This, together with clarity on climate finance options for the interventions, are important considerations in framing a just transition pathway towards a sustainable agriculture sector for the country.



32 Actionaid, Principles for a Just Transition in Agriculture. Actionaid International, 2019, p. 4.

UNBUNDLING THE CONCEPT OF A JUST TRANSITION TO CLIMATE CHANGE AND ITS UTILITY TO SUSTAINABLE AGRICULTURE

In the Paris Agreement, the parties agree to take into account “the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.”³³ Decent work incorporates people’s objectives by enabling productive, fair, secure, and socially protected work, personal growth, the ability to express issues, and equal opportunity and treatment for everyone. The four pillars of the Decent Work Agenda—employment creation, social protection, workplace rights, and social dialogue—have been incorporated into the 2030 Agenda for Sustainable Development, with Goal 8 fostering long-term economic growth and decent work.³⁴



The four pillars of the Decent Work Agenda—**employment creation, social protection, workplace rights, and social dialogue**—have been incorporated into the 2030 Agenda for Sustainable Development, with **Goal 8 fostering long-term economic growth and decent work.**

Prior to inclusion in the 2015 Paris Agreement, the Final Decision of the 16th Conference of Parties (CoP16) of the UNFCCC, had noted that, among other actions, ensuring a just transition of the workforce that creates decent work and quality jobs was critical to addressing climate change.³⁵

In accordance with article 4(4) of the Paris Agreement, developed countries should take the lead by undertaking absolute economy-wide emission reduction targets. This has led to many developed countries committing to achieving net zero emissions by a given target year, through a shift to zero emissions. An example is the United States, through its second NDC after rejoining the Paris Agreement, where it has given a commitment to achieve zero emissions by 2050,³⁶ and the European Union commitment in its 2020 Updated NDC that all its member states will achieve carbon neutrality by the same year.³⁷ The Paris Agreement, on the other hand, calls on developing countries like Kenya to move over time towards economy-wide emissions reduction targets in light of different national circumstances.³⁸ Thus, Kenya’s 2020 updated NDC is clear that adaptation is the highest priority for Kenya, not only through preventing further losses and damage but also to safeguard lives, livelihoods and social development.³⁹

33 Paris Agreement, preamble.

34 UN General Assembly in September 2015, Decent work. (n.d.). <https://www.ilo.org/global/topics/decent-work/lang--en/index.htm>

35 Decision 1/CP.16 The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, FCCC/CP/2010/7/Add.1, p.4

36 United States of America, Nationally Determined Contribution: Reducing Greenhouse Gases in the United States: A 2030 Emissions Target, p. 22. Online: <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/United%20States%20of%20America%20First/United%20States%20NDC%20April%2021%202021%20Final.pdf>

37 European Union, Update of the NDC of the European Union and its Member States: Submission by Germany and the European Commission on Behalf of the European Union and its Member States, 17 December 2020. p.1. Online: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/European%20Union%20First/EU_NDC_Submission_December%202020.pdf

38 Robert Kibugi, Assessing Kenyan Law and Practice in the Mainstreaming of a Low Carbon Development Pathway in Agriculture, Carbon and Climate Law Review (CCLR) 1 2021, p.7.

39 Kenya, Updated Nationally Determined Contribution (NDC), December 2020, Ministry of Environment and Forestry, p.14.

Accordingly, the NDC is clear that effective adaptation action will catalyse mitigation activity across sectors.⁴⁰ Indeed, this distinction between developed countries, and a developing country (in this case Kenya) shows how deployment of the principle of “in context of national circumstances” operates within the objectives of the Paris Agreement.

Under article 2(1)(b), the Paris Agreement aims to increase the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production. This suggests that rather than pursue a commitment to carbon neutrality, developing countries that still face significant vulnerability to climate risks, in critical economic sectors such as agriculture, ought to embrace a low carbon development pathway which envisages a progressive transition to lesser GHG emissions, while maintaining a firm focus on building resilience and enhancing adaptive capacity. In the context of Kenya therefore, a just transition in agriculture should recognize that a shift toward a climate-resilient and low-carbon economy is inevitable, and in order to protect livelihoods

and food production, the millions of workers engaged in farming should be supported. Later in section 5, this Discussion Paper has examined whether reforms to agriculture advanced by the Kenyan government through the ASTGS and the medium-term National Agriculture Investment Plan (NAIP) have risen to the level of mainstreaming a just transition approach.

A 2020 Discussion Paper on Shaping a Just Transition for Kenya proposed a framework through which the concept should be analysed for Kenya. This framework focused on three aspects:

- i) the process, which should integrate a justice requirement by paying heed to human rights;
- ii) the outcome, which is core requirement of the just transition to create decent work; and
- iii) the context, that affirms the critical imperative of climate transitions under the Paris Agreement which is to prioritize nationally defined development priorities and circumstances.

The normative elements of this aspects are succinctly set out below, drawn from the 2020 Discussion Paper:

a. *The justice requirement*, which in essence stipulates that:⁴¹

- i. The transition is about “how we get there”, such that it should be based on a managed transition with meaningful social dialogue at all levels to make sure that burden sharing is fair and societies for all and nobody is left behind.
- ii. The transition is about the pathway taken to ensure that the transition integrates all the components of justice, such as equity, inclusion, participation, respect for human rights, respect for human dignity, among others.

Therefore, it is critical to ensure that the notion of justice, inherent to the just transition, is carefully harmonised with the national human rights framework, as set out in Chapter 4 of the Constitution of Kenya on the Bill of Rights, and especially the obligation of the State to ensure there is respect, promotion, protection and fulfilment of human rights, stipulated in article 19 of the Constitution.⁴² Notably, and as highlighted in section 2 above, human rights such as the right to adequate food, and the right to a clean environment (key to protecting ecosystem services) are integral to securing an adequate standard of living for people.

⁴⁰ Ibid.

⁴¹ Robert Kibugi. Towards a Low Carbon Climate Resilient Development: Discussion Paper on Shaping a Just Transition for Kenya. Friedrich-Ebert-Stiftung Kenya Office, 2020, p. 14-15.

⁴² Robert Kibugi. Towards a Low Carbon Climate Resilient Development: Discussion Paper on Shaping a Just Transition for Kenya. Friedrich-Ebert-Stiftung Kenya Office, 2020, p. 14-15.

The creation of decent work and quality jobs. The argument supporting this element is that the goal, in pursuit of decent work, is not just the creation of jobs, but the creation of jobs of acceptable quality, as the quantity of employment cannot be divorced from its quality.⁴³

- b. *Paying attention to nationally defined development priorities and circumstances.* In context of Kenya, the national priority focus is twofold:⁴⁴
- i. Abiding by the low carbon climate resilient development pathway which prioritizes adaptation and conforms to the elements of sustainable development in line with article 10 of the Constitution.
 - ii. Ascertaining that the process of Just Transition is undertaken in a participatory manner (consultation and social dialogue) in line with the human rights framework under the Constitution of Kenya.

In addition, due to the sensitivity of agriculture to the impacts of climate change, protection of the environment, and the attendant (regulating, supporting, provisioning and cultural) ecosystem services is a critical intervention to reverse the vulnerability to climate risks. Climate smart agriculture, an important gateway for implementing the just transition, enjoys a symbiotic relationship with robust ecosystem services.

43 Robert Kibugi. Towards a Low Carbon Climate Resilient Development: Discussion Paper on Shaping a Just Transition for Kenya. Friedrich-Ebert-Stiftung Kenya Office, 2020, p. 15.

44 Robert Kibugi. Towards a Low Carbon Climate Resilient Development: Discussion Paper on Shaping a Just Transition for Kenya. Friedrich-Ebert-Stiftung Kenya Office, 2020, p. 21.

EVALUATING THE OPTIONS FOR A JUST TRANSITION PATHWAY TO SUSTAINABLE SMALLHOLDER AGRICULTURE IN KENYA

In this chapter, several options for a just transition pathway to sustainable smallholder agriculture in Kenya are framed.

4.1 Opportunities for advancing access and security of land tenure rights to advance a just transition in agriculture

It is beyond doubt access to secure land rights is central to practice of agriculture, whether by large, medium or smallholder farmers. More so, as shown above, because agriculture is the backbone of the economy. Importantly, because Kenya's ASTGS has premised agricultural transformation on smallholder agriculture, it is important to widen opportunities and pathways for access to land, through secure tenure for this category of farmers.

The Constitution of Kenya, while not guaranteeing a right for everyone to own land, protects any lawfully acquired land rights. Article 40 guarantees a right for every person to own land individually or in association with others in any part of Kenya. This right is protected for land that is lawfully acquired, and for this reason, the land cannot be taken by the government unless for a public purpose, or in the public interest. There must be a due process that includes consultations and valuation, as prescribed by the Land Act, followed by payment of just compensation in a prompt manner. Importantly, the Constitution gives discretion for the State to provide compensation, where persons lack outright legal ownership of land, but have been occupants in good faith.

Land is classified either as public, community, or private land, defined by the Constitution. Although all categories of land are important, this Discussion Paper focuses on opportunities available from public and community land which could enhance a just transition to sustainable agriculture for citizens of Kenya. This is important because land is a finite resource, and across Kenya, increasing population has meant a decline in farmland available per capita. Rampa et al., have advanced the need for land reforms to help agriculture be climate smart.⁴⁵ They conceptualize a working definition of land reforms to mean "modifications in the legal and institutional framework governing land policy" with a focus placed on agricultural land reforms, omitting reforms directly affecting urban tenures and urban land use.⁴⁶ These can take the form of (varying) tenure reforms, and land distribution, with the latter either state or market-led or a hybrid of both. These reforms ought to be accompanied by the interventions enhancing the support services available to rural populations, and in particular to land reform beneficiaries to accelerate the climate smart agriculture goals.

4.2 Public Land reforms and opportunities to expand access to agricultural land through affirmative action

Public Land is defined broadly (article 62) to include different categories such as public forests; minerals and oils; roads; lakes and rivers; land between the high and low water marks; land not classified as private or community

⁴⁵ Alexis Rampa, Yiorgos Gadanakis and Gillian Rose, Land Reform in the Era of Global Warming—Can Land Reforms Help Agriculture Be Climate-Smart? *Land* 2020, 9, 471; doi:10.3390/land9120471, pp. 2-3.

⁴⁶ Alexis Rampa, Yiorgos Gadanakis and Gillian Rose, Land Reform in the Era of Global Warming—Can Land Reforms Help Agriculture Be Climate-Smart? *Land* 2020, 9, 471; doi:10.3390/land9120471, pp. 2-3.

land; land in respect of which no individual or community ownership can be established by any legal process, among others. The first category of public land vests in and is held by a county government in trust for the people resident in the county but is administered on their behalf by the National Land Commission.⁴⁷ The second category of public land classified vests in and is held by the national

government in trust for the people of Kenya and shall be administered on their behalf by the National Land Commission.⁴⁸ It is important to note that the foregoing provisions reiterates the public trust doctrine, noting regardless of the category, all public land “vests in and is held in trust for the people.”



47 This includes land under section 62(1)(a) clause (1) (a), (c), (d) or (e); and 62(1)(b) clause (1) (b), other than land held, used or occupied by a national State organ.

48 This land falling under article 62(1) (f) to (m) of the Constitution.

Section 12 of the Land Act⁴⁹ permits the allocation of certain public lands for the use by people for various permissible uses, including agriculture. This provision requires the government to make regulations putting in place mechanisms of benefit sharing with local communities whose land have been set aside for investment.

While this is an important provision, guaranteeing an affirmative action right to citizens or a group of citizens to access public land for purposes of medium or smallholder agriculture would have higher impact. Amongst the criteria for allocation of public land is through an application "confined to a targeted group of persons or groups in order to ameliorate their disadvantaged position."⁵⁰

Vision 2030, Kenya's national development policy, identified agriculture as a key sector in achieving the envisaged a national economy growth of 10%. The ASTGS has positioned this target to be achieved through transformation of smallholder agriculture from subsistence to an innovative, commercially oriented and modern agricultural sector.⁵¹ In this context, promulgation of regulations under the Land Act to specifically provide an opportunity where categories of people interested in undertaking medium or smallholder agriculture can receive affirmative action access to lease public land for that purpose would be a valuable step. This could, for instance, be based on the constitutional obligation of the State to implement affirmative action plans for different groups of people in the Kenyan society, including the youth, minorities and marginalized persons, or even the elderly.⁵²

Kenya has already set legal precedence on affirmative action in public policy through amendments to the Public Procurement and Disposal Act (and regulations) to reserve certain types of procurement for small and micro-enterprises or enterprises owned by women, youth, persons with disabilities and other disadvantaged groups. Similar criteria could be used to reserve allocation of public land to groups of a similar nature. Importantly, such allocation should define the nature of rights held through such a

lease; and further must not include land excluded from allocation under section 12(2) of the Land Act.



Two key concerns arise.

- ⊕ **First**, whether Kenya has public land that is suitable for smallholder irrigation which could be allocated under the provisions above.
- ⊕ **Second**, to protect the public trust doctrine, and ensure there is integrity, transparency and accountability in the process, in line with article 10 of the Constitution.

An accurate inventory of the public land, compatible with agriculture, that could be available for allocation under this provision of the Land Act is required. The 2019-2024 National Agriculture Investment Plan (NAIP), while not giving actual figures, reports that a significant proportion of land that could be used to enhance farming is owned by regional development authorities, including the Kenya Valley Development Authority (KVDA) and Tana and Athi River Development Authority (TARDA). NAIP thus urges that availing this land that is in medium- to high-potential agricultural areas for farming is critical, versus the land being provided to other uses.⁵³ In addition to regional development authorities, news reports during 2024 have indicated efforts have underway to lease out land held by other public entities (such as public universities, National Youth Service (NYS), etc), for agricultural uses.⁵⁴ According to news reports in 2024, the Ministry of Agriculture has moved to make 21,000 acres of land owned by TARDA and NYS available for farming, but this was availed to commercial agribusiness and such investors with demonstrable financial and technical capacity.⁵⁵

In April 2024, Moi University, a publicly owned university, put out a call for proposals inviting bidders to tender for leasing of arable land for agriculture purposes.

49 Land Act, No. 6 of 2012.

50 Ibid, section 12(1)(b).

51 Kenya, Agricultural Sector Growth and Transformation Strategy 2019-2029 (Ministry of Agriculture), p. 19.

52 Constitution of Kenya, article 55 and 56.

53 Kenya, National Agriculture Investment Plan (NAIP), 2019-2024, *Ministry of Agriculture, Livestock, Fisheries and Irrigation*, 2019, p. 85.

54 Kenya, National Agriculture Investment Plan (NAIP), 2019-2024, *Ministry of Agriculture, Livestock, Fisheries and Irrigation*, 2019, p. 85.

55 Daily Nation, Kenya Offers 21,000 acres NYS, TARDA Land Lease To Boost Food Production, 14 February 2024, Online: <https://nation.africa/kenya/business/kenya-offers-21-000-acres-nys-tarda-land-lease-to-boost-food-production--4524234>

1,500 acres of arable land were made available for leasing for up to 60 months to potential investors in maize farming.⁵⁶ It was later reported that ownership of the leased land was disputed with claims that it was ancestral land for certain communities. Despite the tender document requiring disclosure of beneficial ownership by any bidders, claims have been rife that the process was no transparent and remains under investigation by the National Assembly

Lands Committee.⁵⁷ This, although happening two decades apart, aligns with concerns raised by the 2004 Report of the Commission of Inquiry into the Irregular or Illegal Allocation of Public Land (Ndung'u Commission Report) which found out that public agencies (Ministries and State Corporations) held public lands that were illegally allocated.⁵⁸

TABLE 2

Ndung'u Commission Report findings on misuse of public land by Ministries and State Corporations

» **Public Land held by Ministries**

According to the report, Ministries hold and manage a substantial amount of land to enable them carry out their mandate.⁵⁹ Yet, during the inquiry, Ministries which are reputed to hold a lot of land did not send in details of any lands they may have lost through illegal allocations. An example given by the report is the then Ministry of Livestock and Fisheries Development which submitted information showing that it had lost small fisheries land while information given to the Commission of Inquiry from the public indicated that the Ministry had lost large tracts of its livestock holding grounds to grabbers.⁶⁰ Equally while the National Youth Service (NYS) reported that all its land was intact, the Commission of Inquiry received complaints from the public that land belonging to the NYS had been illegally allocated to prominent politicians in Yatta Machakos, Naivasha, Mombasa and Mathare valley.⁶¹

» **Public Land held by State Corporations**

According to the Commission report, the Government allocates land to State Corporations to enable them carry out their mandate.⁶² It is clear that such land is public land which the State Corporation holds in trust for the people of Kenya. Such land cannot therefore be allocated to an individual or a company, because it is reserved for use by the Corporation, and if that state agency no longer has use for the land, the ideal situation would be for it to surrender the land back to the Government which should hold it for public uses.⁶³

While this is a 2004 report, it indicates that with a proper, transparent and accountable audit and inventory of land held by Ministries and State Corporations, it is possible to identify adequate and suitable land that can be utilized for smallholder crop and livestock agriculture. It is important to qualify that the recommendation here is not for outright allocation of this public land to smallholder farmers, with

indefeasible rights under a freehold title. Rather, this type of allocation should be used to provide restricted but secure tenure –

- a. With a clear but economically viable period of use in terms of years, informed by empirical evidence. Secure land tenure rights

56 Moi University, Tender Document: Provision for Leasing of Moi University Arable Land, April 2024, p. 52. Online, https://www.mu.ac.ke/images/Announcements/2024/April/LEASING_OF_MOI_UNIVERSITY_ARABLE_LAND.pdf

57 The Star, MPs Suspend Activities On Disputed 1500-Acre Moi University Land, 10 June 2024, Online: <https://www.the-star.co.ke/news/2024-06-10-mps-suspend-activities-on-disputed-1500-acre-moi-university-land/>

58 Kenya, Report of the Commission of Inquiry into the Illegal/Irregular Allocation of Public Land, 2004.

59 Kenya, Report of the Commission of Inquiry into the Illegal/Irregular Allocation of Public Land, 2004, p.111.

60 Kenya, Report of the Commission of Inquiry into the Illegal/Irregular Allocation of Public Land, 2004, p.112.

61 Ibid.

62 Kenya, Report of the Commission of Inquiry into the Illegal/Irregular Allocation of Public Land, 2004, p.87.

63 Ibid.

- b. With clear stipulations that the land allocated under section 12(1)(b) is confined to a targeted group of persons or groups in order to ameliorate their disadvantaged position.
- c. Land tenure security, which exists when an individual or community has confidence regarding the certainty of their bundle of rights. Security of tenure has three components, as summarized in Table 3 below.

TABLE 3

Explanation on how land allocated to disadvantaged persons for smallholder farming under affirmative action provisions can enjoy secure tenure.⁶⁴

Applicability of security of tenure parameters in the potential use of public land for smallholder agriculture:

- **Breadth of rights** which may include the entire spectrum of use, control and transfer rights, or certain rights out of this bundle being held either as preferential or limited rights tenure rights. Use rights restrict the holder to only utilization of the land for a variety of defined purposes, such as grazing, growing subsistence crops, gathering minor forestry products, or settlement. *Control rights* give the holder ability to make decisions how the land should be utilized, such as deciding what activities can be undertaken on the land, crops to be planted, etc. *Transfer rights* on the other hand, in addition to user and control rights, give the holder the ability to sell or mortgage the land, to convey the land to others through intra- community reallocation, to transmit the land to heirs through inheritance, and to reallocate use and control rights.

In this case, the land allocation in terms of the breadth of the rights should have have restrictions on transferability to third parties but should provide the people with user and control rights subject to limitations that the land is for farming in terms of the selected value chains as explained below.

- **Duration of rights**, which refers to the length of time during which a given right is legally valid and, ideally, longer durations imply greater tenure security. The duration of the land rights should be clear, and the length ought to have certainty if the rights are not held in perpetuity.
- **Assurance of the rights** which refers to the certainty of the breadth and duration of the land rights, which is necessary to ensure that an individual or community that possesses land rights of a specific breadth and duration is legally able to exert or enforce those rights. Without such capability, the assurance of such rights is compromised, which may result in weak legal enforcement of the bundle of rights such that the landowner(s) is unable to prevent external interference, or even in dispossession and loss of the entire legal rights, for instance through evictions, or land grabbing. As an allocation of public land, appropriate documentation and legal protections should be provided to prevent interference with these rights during the period the smallholder farmer is permitted to utilize the land.

4.3 Market Value Chains in Smallholder Agriculture in Kenya

Rampa et al., argue that investments in markets and infrastructure is central to climate smart agrarian land reforms that can enhance farmers' opportunities to adopt CSA practices and technologies.⁶⁵ In this context, the 2019-2024 NAIP has identified priority value chains that could benefit agriculture productivity in Kenya, including market access. Beneficiaries of agrarian land reforms who are allocated

land under section 12(1)(b) of the Land Act should be encouraged or required to focus their farming amongst the thirteen (13) value chains (Table 4 below) which have been prioritized by the 2019-2024 National Agriculture Investment Plan (NAIP) which is the tool for implementing the ASTGS in the medium term.

64 See: Kibugi R. 2021. Local communities' and indigenous peoples' land and forestry rights: Assessing the law and practice on tenure security in Kenya. Occasional Paper 222. Bogor, Indonesia: CIFOR, p.13-17.

65 Alexis Rampa, Yiorgos Gadanakis and Gillian Rose, Land Reform in the Era of Global Warming—Can Land Reforms Help Agriculture Be Climate-Smart? Land 2020, 9, 471; doi:10.3390/land9120471, p. 14.

TABLE 4
Excerpt of 13 value chains prioritized for smallholder agriculture by the NAIP.⁶⁶

	Maize	Potato	Beef	Fish	Banana <small>xxxviii</small>	Dairy <small>xxxvix</small>	Flowers	Tea	Sugar <small>xliii</small>	Poultry ^{xl}	Oil crops ^{liii}	Rice	Wheat	Cotton	Beans	Coffee
Production value, 2016 (KES b)	8	No data	85 ^{xliii}	No data	No data	23	71	117	24	9	3 ^{xlv}	6	8	1 ^{lv}	18 ^{lv}	16
Regional import demand (USD mn) ^{li}	102	9	13	34	80	68	0	180	219	13	6	317	627	0	133 ^{lvii}	6
Competitive advantage ^{xlviii}	3.3	0.4	1	No data	2	2	No data	0.6	No data	1.4	2	0.7	0.8	0.7	0.8	No data
Potential yield increase (%) ^l	157	50	0	TBD	0	42	TBD	102	0	9	0	0	84	102	393	111%
Nutrient composition ^{li}	F ^{xlvi}	TBD	M ^{xlvii} , P ^{lii}	M ^{xlvii} , P ^{lii}	M ^{xlvii}	F ^{xlvii} , M ^{xlvii}				M ^{xlvii} , P ^{lii}	M ^{xlvii} , P ^{lii}	F ^{xlvi}	F ^{xlvi}		M ^{xlvii} , P ^{lii} , F ^{xlvi}	
Smallholders share of total production (%)	75%	83%	80-90%	80%	80% ^{xlix}	No data	3%	58%	92%	No data	No data	No data	No data	No data	No data	63%
Agro-processing potential ^{li}																
Calorific value(kcal/100g)	365	77	247	129 ^{xliv}	89	61	N/A	1	387	239	567 ^{lv}	151	270	N/A	329	1
Relative transformation rant (10=highest)	7	6	8	5	7	8	4	5	6	6	4	7	6	4	7	5

Full consideration of Kenya's agro-ecology, national priorities, prior value chain analysis and CGE output provides 13 value chains for ASTGC

○ All ● Agro-processing ● Small scale ● Food security ● High ● Medium ● Low

The selection of value chains, in terms of suitability, should certainly be based on agro-ecology suitability subject to appropriate studies and analysis. From the above, it is evident that the value chains below indicate the highest for potential smallholder farmer production (subject to other incentives under ASTGS):

TABLE 5
Summary of value chains indicating highest smallholder farmer production potential under ASTGS

Crop	Smallholder farmer share of total production (%)
Maize	75
Potato	83
Beef	80-90
Fish	80
Sugar	92

How does this approach contribute to a just transition towards sustainable agriculture in Kenya?

This is because one of the ASTGS Anchors is to increase smallholder farmer, pastoralist and fisherfolk incomes through targeting approximately 1 million farmers (initially) producing crops, livestock and fish served by ~1000 farmer-facing SMEs that provide inputs, equipment, processing and post-harvest aggregation.⁶⁷

Further, the ASTGS proposes to shift the nationwide subsidy programme focus to allow ~3 million registered high needs farmers to access a wide range of inputs (seeds, crop protection, fertilizer, equipment) from a variety of private and public providers, using e-vouchers with digital service delivery.⁶⁸

66 Kenya, 2019-2024 National Agriculture Investment Plan (NAIP), Ministry of Agriculture 2019, p.20.

67 Kenya, Agricultural Sector Growth and Transformation Strategy 2019-2029 (Ministry of Agriculture), p. 48.

68 Ibid.

The use of SMES in providing inputs to farmers is critical to a Just Transition since, if properly structured and implemented, provides more job and income opportunities within the agriculture sector. However, enabling and activating these SMES, and also, providing the nationwide subsidy system as intended require significant climate financing. It is important that the 2018-2022 NCCAP has prioritized investment into the 13 value chains as a critical adaptation action. It aims to promote diversification of livelihoods by ensuring that smallholder farmers, pastoralists, and fisher communities supported to transition to specialised and market-oriented output in 13 priority value chains, including drought-tolerant values chains.⁶⁹

However, while this idea maybe novel and beneficial to citizens to engaging in small or medium scale agriculture, safeguards must be put in place to prevent the failures of the *shamba* system from creeping in. *Shamba* system is a form of agroforestry where forestry practices are combined with agricultural and agriculture related activities.⁷⁰ In the ideal taungya setting, farmers were given parcels of degraded forest reserves to produce food crops and to help establish and maintain trees.⁷¹

The Forest Conservation and Management Act (FCMA) permits forest-adjacent communities (forest community), through a registered Community Forest Association (CFA) to apply to the Kenya Forest Service for permission to participate in the conservation and management of a public forest.⁷² The CFA, in order to obtain the rights, signs a

community forest management agreement with KFS, which confers upon the CFA various user rights over the specified public forest, including "plantation establishment through non-resident cultivation."⁷³ Non-residential cultivation permit system (commonly known as the *Shamba* system) is a Kenyan modification of the Taungya system, designed as a periodic tenancy, whereby short-term tenants are granted defined user rights and obligations in a state forest.⁷⁴ Now formally known as the Plantation Establishment and Livelihood Improvement Scheme (PELIS), the *shamba* system is the means through which KFS allows forest adjacent communities, through CFAs the right to cultivate agricultural crops during the early stages of forest plantation establishment. Cultivation is allowed to continue for 3 years until tree canopy closes.⁷⁵ The PELIS scheme was meant to improve economic gains of participating farmers while ensuring success of planted trees.⁷⁶ The PELIS scheme has, instead, led to considerable abuse and loss of forestland and many other illegal practices are camouflaged under its umbrella, including agricultural encroachment into the indigenous forest via plantations.⁷⁷

According to a Government Taskforce established to inquire into Forest Resources Management and Logging Activities in Kenya, from 1960s to 1999 indigenous forest cover declined by a third from 53,281 hectares (49% of the protected area) to 35,140 hectares (33% of the protected area) while in the same period, the forest area under the *shamba*-system (now PELIS) increased from 0 to 9,582 hectares.



Shamba system is a form taungya or agroforestry where **forestry practices** are **combined** with **agricultural and agriculture related activities**. In the ideal taungya setting, farmers were given parcels of degraded forest reserves to produce food crops and to help establish and maintain trees.

69 Kenya, National Climate Change Action Plan (NCCAP) 2018-2022, Ministry of Environment and Forestry, p.61.

70 E. Ehiagbonare, "Effect of taungya on regeneration of endemic forest tree species in Nigeria: Edo State Nigeria as a case study" (2006) 5 (18) African Journal of Biotechnology, 1608-1611, 1609.

71 Ibid.

72 Forest Conservation and Management Act, No. 34 of 2016, section 48(1) and (2).

73 Forest Conservation and Management Act, No. 34 of 2016, section 48(2)(h).

74 Kibugi Robert, Governing Land Use in Kenya: From Sectoral Fragmentation to Sustainable Integration of Law and Policy. Thesis submitted to the Faculty of Graduate and Postdoctoral Studies, University of Ottawa, in partial fulfilment of the requirements For the Doctor of Laws (LL.D) degree, October 2011, p. 321.

75 Kenya, Taskforce to inquire into Forest Resources Management and Logging Activities in Kenya, Ministry of Environment and Forestry, 2018, p.35

76 Ibid.

77 Kenya, Taskforce to inquire into Forest Resources Management and Logging Activities in Kenya, Ministry of Environment and Forestry, 2018, p. 38.



For this reason, the Taskforce recommended that PELIS should be progressively phased out in the next four years, with no other *shamba* system permits approved.⁷⁸ In parallel to the phase out of the PELIS, concessions of forest plantations should be established that provide a role for the CFA members in the establishment of the plantations.⁷⁹

It is therefore important that regulations and policy developed to apportion affirmative action pathways for citizen allocation of public land for medium and smallholder agriculture should provide safeguards to prevent this kind of catastrophic failure. This includes not protecting land excluded by section 12 of the Land Act from any form of allocation, including public forests typically within scope of PELIS.

4.4 Adjudication and registration of community land rights

The Constitution is clear that community land will vest in and be held by communities identified on the basis of (i) ethnicity, (ii) culture or (iii) similar community of interest.⁸⁰ It is defined to consist of -⁸¹

- a. land lawfully registered in the name of group representatives under the provisions of any law.²⁷

- b. land lawfully transferred to a specific community by any process of law
- c. any other land declared to be community land by an Act of Parliament
- d. land that is
 - i. lawfully held, managed or used by specific communities as community forests, grazing areas or shrines
 - ii. ancestral lands and lands traditionally occupied by hunter-gatherer communities; or
 - iii. lawfully held as trust land by the county governments.²⁸

The Community Land Act defines “community” to mean “... a consciously distinct and organized group of users of community land who are citizens of Kenya and share any of the following attributes: common ancestry; similar culture or unique mode of livelihood; socioeconomic or other similar common interest; geographical space; ecological space; or, ethnicity”.⁸² Further, the community land law defines “community of interests” to mean “the possession or enjoyment of common rights, privileges or interests in land, living in the same geographical area, or having such apparent association”.⁸³

78 Kenya, Taskforce to inquire into Forest Resources Management and Logging Activities in Kenya, Ministry of Environment and Forestry, 2018, p. 82.

79 Ibid.

80 Constitution of Kenya, article 63(1).

81 Constitution of Kenya, article 63(2).

82 Community Land Act, No. 27 of 2016, section 2.

83 Community Land Act, No. 27 of 2016, section 2.

The Community Land Act has introduced reforms that can enhance secure tenure and equitable access to land that may enhance investments in crop farming or livestock

keeping, since much of community land is located in Kenya's rangelands that are arid or semi-arid. Table 6 below summarizes the reforms:

TABLE 6
Summary of Community Land Act reforms favorable to a just transition in agriculture.

<ul style="list-style-type: none"> ➔ By making provision for adjudication and registration of community land, it aims to enhance implementation of the various human rights (e.g right to own land; socio-economic rights in article 43) set out in the Constitution whose fulfilment has been undermined by weak or absent community tenure rights. ➔ Establishes the community as a collective legal entity, capable of being registered and issued with a title document over land and of making decisions regarding the use, control and transfer of the land. ➔ Eliminates certain discriminatory customary practices, such as patriarchy, by providing that all adult members of the community will comprise the community assembly. ➔ Prohibits all forms of discrimination and seeks to address gender inequality by specifying that "every member of the community has the right to equal benefit from the community land." <ul style="list-style-type: none"> • Specifies that women, men, youth, minorities, persons with disabilities and marginalized groups have the right to equal treatment in all dealings with community land. ➔ In addition, the law provides for the election of a community land management committee by the community assembly and this committee exercises day-to-day management of community land affairs.

In addition to the above, the Community Land Act contains certain other provisions that can have a direct bearing on crop farming and livestock keeping –

- a. Individual members of the community maybe allocated land for exclusive use and occupation for defined period, and subject to defined conditions.⁸⁴
- b. Community land in a pastoral community shall be available for use by members of that community for livestock grazing subject to critical conditions, including, the kind and number of livestock that maybe grazed; and further, a adherence to a grazing plan on sections of land where grazing may occur including rules on rotation.⁸⁵
- c. A registered community can develop a land use plan and submit to the county government for approval.⁸⁶ This is a valuable provision to aid the community in

implement land use zoning, including for farming, settlement, conservation, cultural and heritage conservation, urban development or other important purpose such as investments.⁸⁷ As most of community land is located in arid and semi-arid lands (ASAL) or rangelands, this land use planning power can be utilized to rehabilitate land that is degraded, and to protect critical ecosystems such as water catchments. Further, land use planning or zoning permits the community to include areas of conservation through tree growing, and this tree growing zones can be registered as a community-owned forest by the Kenya Forest Service bringing additional technical benefits to the community, including extension advice. Importantly forestry, including dryland forestry, is likely to enhance ecosystem services (regulating, supporting, provisioning and cultural) that have a concomitant ecological benefit to crop farming, and livestock keeping.

84 Community Land Act, No. 27 of 2016, section 27.

85 Community Land Act, No. 27 of 2016, section 28.

86 Community Land Act, No. 27 of 2016, section 19.

87 Community Land Act, No. 27 of 2016, section 13(3).

This may reduce the vulnerability of these communities to the negative impacts of climate change due to enhanced ecosystem resilience while contribution to GHG reductions

as the tree growing and forestry enhances the carbon sink capacity of the Kenyan rangelands.



- d. Investment agreements are important, as they may provide much needed revenue to advance internal development and benefit sharing, which in turn, can enhance internal economic actions (e.g agriculture) by community members.⁸⁸ The Community Land Act requires that an agreement relating to investment in community land "shall be made after a free, open consultative process. Since the agreement can only be approved by two-thirds majority of adult members, with a quorum of two-thirds of registered members, it means this law has implicitly integrated free, prior and informed consent (FPIC) into investment dealings between a community and investors.

This is an important provision for two reasons. First it militates against the risk of investment agreements being forced upon the community by requiring the free, open and consultative process to be undertaken first. Secondly, informed consent is key to prevent community members from being misled, and the very high quorum requirements address this problem. In effect, since access to secure land rights is integral to supporting a just transition in sustainable agriculture, it remains critical for a community to only accept investment agreements if they are economically beneficial and not socially or environmentally harmful.

This way, the benefits received can be applied by the community and/or individuals to their livelihoods, including farming. It is instructive to note that where agro-ecologically suitable, community land that enjoys secure tenure presents a win-win situation for advancing investments in the prioritized value chains under the 2019-2024 NAIP and the ASTGS. For instance, beef production which is suitable for much of the community land falling in the ASALs/rangelands, is indicated to have a smallholder farmer production of 80-90%. Equally crop-farming could be pursued without the need to allocate public land as above discussed, since these communities would already own their land under secure tenure. There is a risk that adjudication of community land rights may result in an unintended

negative consequence to pastoralism. This is because there are certain common ecological, social and economic assets that are commonly used, regardless of who owns the land. This includes migratory routes for livestock movement, and water sources. An opportunity to avoid this problem exists under Kenya's Physical and Land Use Planning Act (PLUPA) which empowers two or more counties, by mutual agreement or out of compelling necessity, to formulate an Inter-County Physical And Land Use Plan.⁸⁹ The Community land Act requires the Cabinet Secretary responsible for land to document, map and develop an inventory of community land.⁹⁰ This inventory could form the primary basis for development of Inter-County Physical and Land Use Plans covering two or more counties, or parts of those counties.⁹¹

PLUPA requires that all forms of physical and land use planning must promote sustainable use of land and livable communities by integrating the human needs of the locality; and also integrate economic, social and environmental needs of present and future generations.⁹² The Inter-County Physical and Land Use Plans must also be prepared in a manner that is inclusive and takes into account the culture and heritage of the people concerned.⁹³ Indeed, this focus on sustainable development demonstrates that PLUPA conforms with mandatory requirements of article 10 of the Constitution to integrate sustainable development and public participation in implementation of any laws and making public policy decisions.

Equally inclusivity, for instance, is a core element of the Just Transition to climate change concept. Inter-County planning, as a macro-form of land use planning informs preparation of county-specific, or local land use and physical development plans. The benefit of using the land inventory to undertake inter-county land use and physical planning is that all the ecological, social and economic assets needed to support pastoralist transhumance can be identified, and the necessary connectivity put in place to make livestock keeping in the ASAL areas sustainable.

88 Community Land Act, No. 27 of 2016, section 36.

89 Physical and Land Use Planning Act, No. 13 of 2019, section 29(1).

90 Community Land Act, No. 27 of 2016, section 8(2).

91 Physical and Land Use Planning Act, No. 13 of 2019, section 2.

92 Physical and Land Use Planning Act, No. 13 of 2019, section 5(a) and (b).

93 Physical and Land Use Planning Act, No. 13 of 2019, section 5(e).

4.5 Climate-smart agriculture policy

The agrarian land reforms proposed in 4.1 to enhance utility of public land for agriculture purposes require harmonization with climate smart agriculture policy goals, in order to deliver the just transition outcome desired for Kenyan agriculture. Climate-Smart Agriculture (CSA) is an approach to agricultural development that aims to address the intertwined challenges of food security and climate change.⁹⁴ From the perspective of a developing country like Kenya, where priority is on adaptation, agriculture interventions are considered to be “climate smart” where they meet the following objectives:⁹⁵

- i. Sustainably increasing agricultural productivity to support equitable increases in farm incomes, food security, and development
- ii. Adapting and building resilience of food systems to climate change; and
- iii. Where possible, reducing greenhouse (GHG) emissions from agriculture.

The qualification in (iii) above on reduction of GHG emissions through climate smart agriculture is important, because Kenya's official position is that the country will not adopt measures to reduce greenhouse gas emissions if they threaten the country's ability to feed its growing population or reduce export earnings.⁹⁶ This view is consistent with one of the objectives of the Paris Agreement, which is to increase the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production.⁹⁷

Based on the three objectives of climate smart agriculture, Kenya's government had identified key interventions that can enhance a just transition to sustainable agriculture. It is important to note that CSA interventions will not, alone, be sufficient to deliver a just transition pathway, and should be implemented in concert with other proposals presented in this section. Table 7 below is sets out the key CSA interventions (in terms of adaptation and mitigation) identified as suitable for Kenya's agriculture.

TABLE 7
Key Climate Smart Agriculture interventions identified as suitable for Kenya.

Climate smart agriculture intervention	Adaptation/ mitigation	Description of activities
Source: Kenya Climate Smart Agriculture Strategy⁹⁸		
1		<ul style="list-style-type: none"> • This entails promotion of use of improved technologies; post-harvest approaches such as improved storage and distribution of agricultural products and market access. • The 2018-2022 NCCAP has prioritized interventions to reduce pre- and post-harvest losses from 40% to 15%.⁹⁹
2	adaptation	<ul style="list-style-type: none"> • Provide improvement, modernization and maintenance of weather infrastructure; integration of scientific and indigenous technical knowledge and technical skills enhancement in weather data analysis, packaging, dissemination and use of early warning weather information. • Developing effective early warning systems, producing and disseminating

94 Kurgat BK, Lamanna C, Kimaro A, Namoi N, Manda L and Rosenstock TS (2020) Adoption of Climate-Smart Agriculture Technologies in Tanzania. *Front. Sustain. Food Syst.* 4:55. doi:10.3389/fsufs.2020.00055, p. 1.

95 Kurgat BK, Lamanna C, Kimaro A, Namoi N, Manda L and Rosenstock TS (2020) Adoption of Climate-Smart Agriculture Technologies in Tanzania. *Front. Sustain. Food Syst.* 4:55. doi:10.3389/fsufs.2020.00055, p. 2.

96 Kenya (2017), Nationally Determined Contribution (NDC) Sector Analysis Report: The Evidence Base for Updating Kenya's National Climate Change Action Plan, Nairobi: Ministry of Environment and Natural Resources, p. 11.

97 Paris Agreement, article 2(1)(b).

98 Kenya, Climate Smart Agriculture Strategy, 2017-2026 (Ministry of Agriculture, 2017), (Chapter 3) p.57-60.

99 Kenya, National Climate Change Action Plan (NCCAP) 2018-2022, Ministry of Environment and Forestry, p.60.

Climate smart agriculture intervention		Adaptation/ mitigation	Description of activities
3	Promote crop varieties, livestock and fish breeds and tree species that are adapted to varied weather conditions and tolerant to associated emerging pests and diseases	adaptation	Breeding and promoting the use of crop and forage varieties, livestock breeds, fish and tree species that are adapted to flooding, drought, strong winds, hailstorms, heat waves and frost as well as tolerant to emerging pests and diseases.
4	Technology development, dissemination and adoption along crops, livestock, fisheries and forestry value chains	adaptation	Research that includes crops and forage varieties, livestock breeds and fish species that are able to withstand weather variations; facilitating the adoption of crop varieties, livestock breeds and fish and tree species; providing efficient extension and advisory services and improving the capacity of actors to use new or existing technologies.
5	Promote water harvesting and storage, irrigation infrastructure development and efficient water use	adaptation	<ul style="list-style-type: none"> • Incorporates components that enhance resilience (irrigation of crops, aquaculture, livestock watering and agroforestry) in designs and development of water harvesting and storage structures • development of appropriate irrigation infrastructure and technologies (including use of clean energy) as per the prevailing farming and pastoral systems • The 2018-2022 NCCAP has prioritized irrigation intervention through increasing irrigated land from 202,000 hectares to 486,000 hectares; and increasing production efficiency from irrigated fields increased from 50% to 90%.¹⁰⁰
6	Reduce the rate of emissions from livestock (manure and enteric fermentation).	mitigation	<ul style="list-style-type: none"> • The GHG emissions are caused by feed production, enteric fermentation, animal waste, land-use change and livestock transport and processing.¹⁰¹ • Formulation of improved feeds and feed additives to reduce enteric fermentation is a key policy intervention. • In Kenya, improving animal and herd productivity is one of the key pathways to reduce enteric CH₄ emissions per unit of product.¹⁰² This is because since methane is produced in the process of feed energy utilisation by the animal, changes in the efficiency of feed energy utilisation therefore influence enteric methane emissions of animals.¹⁰³ • Efficiency in dairy management improved for 267,000 households; and • Manure management improved through the adoption of biogas technology by 80,000 households, and at least 200 abattoirs.¹⁰⁴
		adaptation	<ul style="list-style-type: none"> • According a 2017 study, the use of non-conventional feed resources, feed conservation and feeding of high energy/protein resulted in 26–28 percent reduction in methane emission intensity and 34–36 percent increase in milk production.¹⁰⁵ • Annual ASAL's water harvesting and storage • increased by 25%, from 16 million cubic metres (m³) to 20 m³ via small dams and water pans, and 700 m³ through large multipurpose dams; and • Animal disease control and surveillance improved.

100 Kenya, National Climate Change Action Plan (NCCAP) 2018-2022, Ministry of Environment and Forestry, p.60.

101 Robert Kibugi, Assessing Kenyan Law and Practice in the Mainstreaming of a Low Carbon Development Pathway in Agriculture, Carbon and Climate Law Review (CCLR) 1 2021, p.17.

102 Ibid.

103 Ibid.

104 NCCAP, p.60

105 FAO & New Zealand Agricultural Greenhouse Gas Research Centre, 'Options for low emission development in the Kenya dairy sector - reducing enteric methane for food security and livelihoods' (2017), vi.

Climate smart agriculture intervention		Adaptation/ mitigation	Description of activities
7	Mainstream Sustainable Land Management to reduce emissions as a co- benefit.	Adaptation with mitigation co-benefits	<ul style="list-style-type: none"> Promotion of agroforestry/farm forestry and adoption of practices that encourage inclusion of trees in the farming systems. Agroforestry is the interface between agriculture and forestry, and encompasses mixed land-use practices and refers to land-use practices in which trees and other woody perennials are spatially or temporally integrated with crops and livestock on a given unit of land.¹⁰⁶ It is the mitigation option with the greatest emission reduction potential for Kenya.¹⁰⁷
8		Adaptation with mitigation co-benefits Adaptation with mitigation co-benefits	<ul style="list-style-type: none"> The most pronounced type of conservation tillage is no-till, where lands are not ploughed at all and 100 percent of crop residues remain on the land. Given the competing uses for agricultural residues as animal fodder and fuel in Kenya's predominantly mixed farming systems, no-till practices may not be appropriate or feasible.¹⁰⁸ Reduced tillage rather than zero-tillage has been identified by Kenya's agriculture experts as the most viable form of sustainable land management in Kenya.¹⁰⁹ Reduction in tillage increases organic matter in the soil, thereby increasing the amount of carbon stored in the soil.¹¹⁰ This provides a valuable mitigation co-benefit to the resilience in agriculture that derives from enhanced soil fertility, and rehabilitation of land. Limiting use of fire in cropland and rangeland preparation¹¹¹ Limiting the use of fire in range and cropland management involves reducing the frequency and extent of fires and/or reducing the fuel load through vegetation management and burning at times of year when fewer GHGs are emitted from burning. Fire is used on grass and rangelands in Kenya to clear vegetation, stimulate growth and control pests. On cropland, fire is used to attempt to regenerate soils or facilitate harvesting. It serves a valid purpose as an important land management tool for pastoralists and farmers for its regenerative effects, and for grappling with invasive plants and species and conducting pest control. But burning range and croplands is also a major source of GHG emissions in Kenya due to the permanent loss of protective vegetation and crop residue cover that causes reductions in soil carbon levels. It can also negatively impact the long-term viability of the land. The practice of using fire to manage rangelands is quite common in Kenya, with over 430,000 hectares burned each year results in emissions of approximately 0.26 MtCO₂e per year, and further, burning agricultural residues of maize, wheat, sugarcane and rice crops is a common practice leading to emissions of 0.93 MtCO₂e per year. This mitigation option would prevent 60% of the rangeland and cropland burning that occurs each year
9	Enhanced capacity to measure, report and verify emissions from the agriculture sector		<ul style="list-style-type: none"> Development of Measurement, Reporting and Verification Systems The MRV systems help in improving the transparency in reporting of actions and mitigation measures in the agriculture sector. This will involve setting standards and install MRV infrastructure and development of an inventory system data bank on sector emissions. Development of structures on data collection and recording including an inventory will be necessary for continuous reporting on GHG emissions status for the country, particularly on the interventions carried out on mitigation.

106 Kenya (2017), Nationally Determined Contribution (NDC) Sector Analysis Report: The Evidence Base for Updating Kenya's National Climate Change Action Plan, Nairobi: Ministry of Environment and Natural Resources, p. 13

107 Ibid

108 Kenya (2017), Nationally Determined Contribution (NDC) Sector Analysis Report: The Evidence Base for Updating Kenya's National Climate Change Action Plan, Nairobi: Ministry of Environment and Natural Resources, p. 15.

109 Kenya (2017), Nationally Determined Contribution (NDC) Sector Analysis Report: The Evidence Base for Updating Kenya's National Climate Change Action Plan, Nairobi: Ministry of Environment and Natural Resources, p. 15.

110 Ibid.

111 Ibid.

Sustainable land management practices, a key cog of climate smart agriculture, contribute to improving soil fertility and structure, adding biomass and nutrients to the soil, causing minimal soil disturbance as well as conserving soil and water.¹¹² Importantly, a just transition to a sustainable agriculture pathway will need to protect, and keep functional, the natural ecosystem within which farming is undertaken. Functioning ecosystems provide a range of services that are essential to support economic performance and human welfare.¹¹³ Ecosystem services are generated when ecosystems directly or indirectly contribute towards meeting and sustaining human life needs.¹¹⁴ They comprise:¹¹⁵

- a. Regulating services - the benefits obtained from the regulation of ecosystem processes such as greenhouse gas (GHG) regulation, natural hazard regulation, and water purification, pollination and pest control.
- b. Provisioning services refer to goods and physical products obtained from ecosystems such as food, fresh water, fibre, genetic resources and medicines.
- c. Supporting services support the delivery of other services, such as soil formation and supplying habitat



Sustainable land management practices, a key cog of climate smart agriculture, **contribute to improving soil fertility and structure, adding biomass and nutrients to the soil, causing minimal soil disturbance as well as conserving soil and water.**

for species, and in turn enable ecosystems to continue supplying, regulating and provisioning services.

- d. Cultural or aesthetic services include non-material benefits that people obtain from ecosystems, such as spiritual enrichment, intellectual development, recreation and aesthetic values.⁶⁰

Ecosystem services are important to avoid the use of pesticides and promote agro-ecology. Regulating services such as pest control requires, for instance, a focus on designing and promoting ecosystem systems in which pests do not become problems.¹¹⁶ An example of this is the push-pull system of maize production, which considers the value of placing different crops (including maize, forage grasses and forage).¹¹⁷

According to FAO, soils have a role in most categories of ecosystem services.¹¹⁸ These includes:¹¹⁹

- i. **Regulating services** - e.g., nutrient cycling, water release and retention, soil formation, exchange of gases with the atmosphere and degradation of complex materials.
- ii. **Supporting services** -e.g., providing a medium for plant growth, regulating the water cycle (including mediating the flow of surface water, recharging of subsurface aquifers and filtration of runoff), or sequestering carbon.
- iii. **Provisioning services** (e.g., soils are the basis of food and fibre production and are of vital importance for recharging water supplies.

112 Kenya (2017), Nationally Determined Contribution (NDC) Sector Analysis Report: The Evidence Base for Updating Kenya's National Climate Change Action Plan, Nairobi: Ministry of Environment and Natural Resources, p. 15.

113 N. Small, M. Munday, I. Durance, The challenge of valuing ecosystem services that have no material benefits. *Global Environmental Change* 44 (2017) 57–67, p. 58

114 Ibid. See also FAO, Mainstreaming ecosystem services and biodiversity into agricultural production and management in East Africa: Technical Guidance Document, FAO and CBD, p. 4.

115 FAO, Mainstreaming ecosystem services and biodiversity into agricultural production and management in East Africa: Technical Guidance Document, FAO and CBD, p. 4.

116 Robert Kibugi, Assessing the Utility of Human Rights, Environmental Assessments and Devolved Functions as Constitutional Tools to Enhance the Mainstreaming of Biodiversity in Kenya, in P. Kamer-Mbote, Robert Kibugi & Nkatha Kabira (Eds) *Implementing the Constitutional Framework*. University of Nairobi, Faculty of Law. 2023, p. 519

117 FAO, Mainstreaming ecosystem services and biodiversity into agricultural production and management in East Africa: Technical Guidance Document, FAO and CBD, p. 19.

118 FAO, Mainstreaming ecosystem services and biodiversity into agricultural production and management in East Africa: Technical Guidance Document, FAO and CBD, p. 48.

119 FAO, Mainstreaming ecosystem services and biodiversity into agricultural production and management in East Africa: Technical Guidance Document, FAO and CBD, p. 49 & 51.

According to Voluntary Guidelines for Sustainable Soil Management (VGSSM), soil management is sustainable if the supporting, provisioning, regulating, and cultural services provided by soil are maintained or enhanced without significantly impairing either the soil functions that enable those services or biodiversity.¹²⁰ Further, the balance between the supporting and provisioning services for plant production and the regulating services the soil provides for water quality and availability and for atmospheric greenhouse gas composition is a particular concern.¹²¹ Therefore, the interventions proposed by the Government of Kenya, as discussed above for enhancing climate smart agriculture, will face significant limitations in succeeding without additional investments to protect ecosystem services, and tap the concomitant adaptation benefits such as enhanced soil fertility, water catchment conservation, groundwater aquifer recharges; and mitigation co-benefits such as soil carbon sequestration.

It is important to recall that under the Climate Change Act, there is an obligation for public agencies (national and

county) to mainstream climate change considerations into their planning, budgeting and expenditure.¹²² For purposes of an effective Just Transition to sustainable agriculture, the implementation mandate vests on county government which have a constitutional duty to implement crop and livestock agriculture. The national government is responsible for putting in place a durable system of sustainable development, and necessary policies, such as the CSAS, NDC, or even NCCAP. However, both the national and county governments have shared obligations to respect, protect and fulfil the constitutional right to be free from hunger and to have adequate food of acceptable quality.

4.6 Participatory and inclusive transition to sustainable agriculture

According to ActionAid International, a just transition in agriculture must be inclusive and have just processes.¹²³

TABLE 8

Summary of ActionAid recommendations for a participatory inclusive and just transition in agriculture.

- ➔ **Inclusiveness.** To be inclusive, processes must use deliberate strategies to address power imbalances and to create safe spaces where people feel confident to speak. Further, addressing people's logistical barriers to attending meetings by including organising meetings at times that don't conflict with work or harvest times, organising meetings in communities or local locations instead of towns, urban areas or cities, and compensating people for their travel and time required away from their livelihoods are important interventions.
 - 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.
- ➔ **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 be 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.

120 FAO 2017. Voluntary Guidelines for Sustainable Soil Management Food and Agriculture Organization of the United Nations, Rome, Italy, p. 3.

121 Ibid.

122 Climate Change Act, No. 11 of 2016, section 15(5), 19.

123 ActionAid, Principles for a Just Transition in Agriculture, 2019, p. 23-26.

In the Constitution, article 10 prescribes national values and principles of governance, which are mandatory when making or implementing any law or public policy decisions for state organs, public officers and all persons. These national values and principle include several that are relevant to the current discussion:

- i. Public participation.
- ii. Sustainable development.
- iii. Good governance, transparency and accountability.
- iv. Human dignity, equity, social justice, inclusiveness, equality, human rights, non-discrimination and protection of the marginalised.

In addition, the Constitution is clear about gender equality, affirming that women and men have the right to equal

treatment, including the right to equal opportunities in political, economic, cultural and social spheres.¹²⁴ Similarly, the Constitution protects the rights of the youth, elderly, persons with disability, and affirmative actions for the minorities and marginalized.¹²⁵ This means that, in order for the transition to sustainable agriculture to be just, inclusive and participatory, appropriate action must be taken to ensure that these mandatory requirements are met, and that constitutional provisions are respected, and implemented in a manner that promotes the constitutional values and principles; advances the rule of law, and the human rights and fundamental freedoms in the Bill of Rights; and contributes to good governance.¹²⁶

The Climate Change Act in Kenya has already taken statutory steps to require meaningful participation in consultations on climate change decision making, as explained in Table 9 below.

TABLE 9
Meaningful public participation requirements under the Climate Change Act.

- ➔ Basis. Article 10 of the Constitution stipulates public participation is a mandatory national value and principle of governance when making or implementing any law or public policy decision.
- ➔ Climate Change Act. (section 24) –
 - (1) Public entities at each level of government shall, at all times when developing strategies, laws and policies relating to climate change, undertake public awareness and conduct public consultations.
 - (2) Public consultations shall be undertaken in a manner *that ensures the public contribution makes an impact on the threshold of decision making.* (emphasis added)

Climate Change (Public Participation and Access to Climate Change Information) Regulations, 2023¹²⁷ have advanced a definition of “making an impact on the threshold of decision making” as:

 - a) The public and all relevant stakeholders and entities directly affected by the regulations shall be adequately consulted during the public participation consultation process,
 - b) Demonstrably sufficient amount of feedback shall be drawn from the consultations and engagements in the public participation process, and
 - c) There shall be evidence that the feedback received from the process has been taken into account in developing the proposed action and/or in the eventual decision made.

124 Constitution of Kenya, article 27(3).

125 Constitution of Kenya, article 54-56.

126 Constitution of Kenya, article 259(1).

127 Kenya, Public Participation Consultations and Access to Climate Change Information Regulations, Ministry of Environment and Forestry, January 2021, p.6.

Central to inclusiveness is access to climate-relevant information, including meteorological information that can enable farmers make clear and timely farm-level decision making. Article 35 of the Constitution, which guarantees the right to access information for Kenyans, also requires the State to publish and publicize any important information affecting the nation. A key strategic objective of the CSAS, as seen above, is to institute measures to reduce the vulnerabilities of farmers, pastoralists and fisher-folk to changing temperature regimes and precipitation patterns. This is to be achieved through the provision of accurate, timely and reliable climate/weather information to inform decisions of actors on crops, livestock and fisheries value chains. Agricultural extension services will remain a critical pathway for providing knowledge on climate smart interventions to farmers, and must be designed and screened through participatory, inclusive and just lens. It is important for public policy and technical knowhow to ensure that the climate knowledge, provided through agriculture extension, promotes the critical social, ecological and economic balancing of interests needed to promote sustainable development, such as advancing the value of ecosystem services in agriculture.



A key strategic objective of the CSAS, is to **institute measures to reduce the vulnerabilities of farmers, pastoralists and fisher-folk to changing temperature regimes and precipitation patterns** and this is to be achieved through the **provision of accurate, timely and reliable climate/weather information to inform decisions of actors on crops, livestock and fisheries value chains.**

4.7 Expansion and deepening of social protections

The just transition process generally, and within smallholder agriculture, is likely to result in shocks that can harm resilience unless adequate social protections are put in place. The ILO Decent work agenda has identified various

parameters.¹²⁸ Below, the Discussion Paper assesses the utility of several of these, and other parameters in expanding and deepening social protections:

4.7.1 Employment opportunities, adequate earnings and productive work

As seen earlier, a core objective of the ASTGS through Anchor 1, is to *increase small-scale farmer incomes, noting that the average daily household income for smallholder farmers is Kshs 400*. In addition to farm-level work, the value chain approach that is proposed would include active role of SMEs to serve farmers thus provided more employment and income opportunities.

The anticipated changes in smallholder farming will require retraining and new skills for farmers, farmworkers and other people taking up new jobs and roles in the agricultural value chains, and to switch to new roles in the event their current work is abolished. These includes for instance agro-processing, provision of inputs, as well as farm-level skills to undertake smallholder agriculture in a manner compatible with climate smart farming objectives. The farmers, farmworkers and communities should not have to carry the cost of their own training and reskilling, or risk being left behind if they cannot afford it.¹²⁹ 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.¹³⁰ Legally, the obligation on the national and county governments (and their agencies) to mainstream climate change considerations in their interventions is adequate to justify the public financing of the required training and skills needed. Techniques traditionally applied for agriculture extension, such as farmer-field schools and other forms of peer learning can be explored further for provision of this retooling.



A core objective of the ASTGS through Anchor 1, is to **increase small-scale farmer incomes**, noting that the **average daily household income for smallholder farmers is Kshs 400**.

128 ILO manual: second version / International Labour Office. - Geneva: ILO, 2013, p.12. Online: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_229374.pdf

129 ActionAid, Principles for a Just Transition in Agriculture, 2019, p. 29

130 Ibid.

For more specialized or business-oriented training and skills, bespoke programmes can be put in place. Collaborations with educational institutes should be explored.¹³¹ Kenya has the Technical Vocational and Training Institutions (TIVET) Act that creates a TIVET Authority with a mandate to regulate curriculum and training.¹³² This is an important pathway for retraining and retooling workers for business, and the review of this curriculum to integrate the needs of a Just Transition should be underpinned by consultation and social dialogue with various stakeholders and the public.¹³³



4.7.2 Wages adequate to support a decent standard of life

The Constitution guarantees a human right to fair labour practices. It further guarantees each worker the right to fair remuneration, and to reasonable working conditions.¹³⁴ Under the Labour Institutions Act, the Cabinet Secretary responsible for Labour regularly publishes a legal notice setting out minimum wages including for the agricultural sector.¹³⁵ A new publication of minimum wages for the agricultural sector was made in October 2024, six years after the last one in 2018. There was a freeze on upward revision, with the onset of the COVID-19 pandemic given as a reason for a freeze on upward revision. The new agricultural sector minimum wages mark a marginal increment, considering the time that has passed.

TABLE 10
Excerpt of Legal Notice No. 3 of 2018 (Regulation of Wages (Agricultural Industry) (Amendment) Order, 2018) publishing minimum consolidated wages for the agriculture sector.

BASIC MINIMUM CONSOLIDATED WAGES			
No	Occupation	Per month Kshs. Cts.	Per day Kshs.cts
1	Unskilled employee	7997.329	335.8
2	Stockman, herdsman, watchman	9235.78	391.
<i>Skilled and semi-skilled employees</i>		<i>Per month Kshs. Cts.</i>	<i>Per month Kshs. Cts.</i>
3	House servant or cook	9129.409	347.6
4	Farm foreman	14427.13	609.6
5	Farm Clerk	14427.13	609.6
6	Senior foreman	9339.66	397.1
7	Farm artisan	9558.656	406.4
8	Tractor driver	10136.303	430.5
9	Combined harvester driver	11166.62	473.
10	Lorry driver or car driver	11718.67	496.7

Made on 2nd October, 2024

ILO defines a minimum wage as the minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract.¹³⁶

131 Ibid.

132 Robert Kibugi. Towards a Low Carbon Climate Resilient Development: Discussion Paper on Shaping a Just Transition for Kenya. Friedrich-Ebert-Stiftung Kenya Office, 2020, p. 49.

133 Ibid.

134 Constitution of Kenya, article 41.

135 Labour Institutions Act, No. 12 of 2007, section 46.

136 ILO, Minimum Wage Systems, 2014, p.33. Online: https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_235287.pdf

This means that minimum wages must have the force of law.¹³⁷ The minimum wage should also extend beyond merely the public service,¹³⁸ which is important because for instance, agricultural workers such as farmers and farm-workers are not ordinarily public servants. In 2021 report assessing minimum wages during the time of COVID-19, ILO has identified key areas where safeguards are required to protect minimum wages:¹³⁹

a) Setting an adequate level of minimum wage

The ILO report acknowledges that setting an adequate minimum wage is challenging.¹⁴⁰ This is because, if set too low, minimum wages will have little effect in protecting workers and their families against unduly low pay or poverty. If set too high, compliance will be poor and/or there will be adverse employment effects. In addition to taking into account the social and economic context of the country, setting of a minimum wage should be done with full participation of the social partners and through evidence-based social dialogue.¹⁴¹ Participation, and inclusive process are, as seen above, not only core to the just transition process but mandatory under Kenya's Constitution. Central to this is the role of trade unions in representing unionisable workers in negotiations to determine the minimum agricultural wages. Joining and participating in a trade union is a fundamental human right. Equally important, is expansion of farm-work trade union membership as a means to enforce compliance with minimum wages.

In order to align to the Constitutions guarantees of fair remuneration, minimum wages should be adequate, aligning with provisions of the Minimum Wage Fixing Convention, 1970 (No. 131), ratified by Kenya in April 1979. In article 3, this Convention emphasizes the necessity of taking into consideration the needs of workers and their families, including the cost of living and the relative living standards of other social groups. In this sense, the minimum wage should provide individuals with sufficient income

to guarantee a decent living and a satisfactory level of social inclusion.¹⁴² It is important to consider the net levels of minimum wages because, to satisfy their immediate needs, individuals can only use that part of their wages that remains available to them after the payment of income taxes, social security contributions and any other levies.¹⁴³

b) High rates of non-compliance which reduce the effectiveness of minimum wages.

According to the report, high rates of non-compliance with minimum wages have negative consequences not only for workers and their families, whose rights are violated, but also for compliant employers, as it gives non-compliant enterprises an illegitimate cost advantage. A study found that in Kenya non-compliance affected one in four salaried workers in agriculture, and it was higher for women, youth and workers with a low level of education attained.¹⁴⁴

In this sense, ILO identifies a number of implementation measures that can be put in place in order to increase compliance with minimum wage legislation, including targeted labour inspections, information and awareness-raising campaigns, capacity- building activities for employers' and workers' representatives, channels enabling workers to claim their rights through individual complaints (which could include whistleblowing on violations), as well as public employment programmes that pay minimum wages.¹⁴⁵

4.7.3 Income protection through index-based insurance and income replacement options

As explained earlier, the negative impacts of climate change such as droughts or floods are hazards that interact with vulnerable smallholder agriculture and result in losses. The vulnerability could result from reliance on rainfall, or land degradation, infertile soil or poor-quality seeds that lack sufficient adaptive capacity.

137 Global Wage Report 2020–21: Wages and minimum wages in the time of COVID-19 International Labour Office – Geneva: ILO, 2020., p. 61

138 Ibid.

139 Global Wage Report 2020–21: Wages and minimum wages in the time of COVID-19 International Labour Office – Geneva: ILO, 2020.

140 Global Wage Report 2020–21: Wages and minimum wages in the time of COVID-19 International Labour Office – Geneva: ILO, 2020, p. 98

141 Ibid.

142 Ibid.

143 Ibid.

144 Mabel Andalon & Carmen Pagés, Minimum Wages in Kenya, IZA Discussion Paper No. 3390 March 2008, p.18.

145 Global Wage Report 2020–21: Wages and minimum wages in the time of COVID-19 International Labour Office – Geneva: ILO, 2020, p. 96/

As the adjustment of smallholder agriculture through the just transition will take time, and will be prone to challenges, it is important to put in place measures to protect incomes for farmers, and those in the agriculture value chain who stand to be adversely affected.

For purposes of farm-level losses, the role of insurance is critical. As a priority adaptation action in the medium-term period, the 2018-2022 NCCAP aims to increase the number of customers/beneficiaries farmers accessing climate-oriented livestock insurance increased from 18,000 to 105,750;¹⁴⁶ and the number of beneficiaries accessing climate-oriented crop insurance increased from 280,000 farmers to 3,500,000 farmers.¹⁴⁷ According to the Draft National Agriculture Insurance Policy, there are key inhibitions facing establishment of adequate and affordable insurance mechanisms for crops and livestock due to a number of reasons:¹⁴⁸

- a. Low incomes inhibit the development of insurance markets as the incomes for the majority of the population are absorbed by basic necessities, such as food and housing.



For purposes of farm-level losses, the role of insurance is critical thus as a priority adaptation action in the medium-term period, the 2018-2022 NCCAP aims to increase the **number of customers/beneficiaries farmers accessing climate-oriented livestock insurance increased from 18,000 to 105,750**; and the **number of beneficiaries accessing climate-oriented crop insurance increased from 280,000 farmers to 3,500,000 farmers.**

- b. Where insurance is available, health insurance and life insurance are usually given higher priority over agricultural insurance. In many cases, rural households involved in agricultural activities do not generate enough profits to cover the costs of agricultural insurance

For traditional crop indemnity insurance, the costs of assessing losses are usually high resulting in high volumes.¹⁴⁹ On the other hand, index insurance which lowers the transaction cost, however, carries extremely high development and other start-up costs and the start-up costs may eventually translate into high premiums.¹⁵⁰ Index insurance policies make indemnity payments according to the value of an “index”, which is assumed to be a proxy and highly correlated for actual losses, and it is used to protect against shared rather than individual risk.¹⁵¹

On the converse, traditional insurance makes pay-outs based on case-by-case assessments of individual clients' loss and verify the truth of their claims, meaning that conventional agriculture insurance is rarely made available for rural or low value (smallholders) settings.¹⁵² With index-based insurance products, all insurers have to do is to monitor the index, thereby sharply reducing operating costs.¹⁵³ Lesson can be drawn from the Index Based Livestock Insurance (IBLI) developed and piloted by the International Livestock Research Institute (ILRI) and being implemented in northern Kenya. It is clear that further discussion is required to determine the structure of either conventional or index-based agriculture insurance, and suitability for different localities, and type of agriculture. For some smallholder farmers, a government subsidy may be required to cover the premiums, especially where income levels are not adequate to meet cost of life and make insurance payments. Where viable, credit-based insurance that is backed by the government or cooperative societies maybe viable.

146 Kenya, National Climate Change Action Plan (NCCAP) 2018-2022, Ministry of Environment and Forestry, p.60.

147 Kenya, National Climate Change Action Plan (NCCAP) 2018-2022, Ministry of Environment and Forestry, p.59.

148 Kenya, Draft National Agriculture Insurance Policy, Ministry of Agriculture, April 2021, p. 14-15

149 Ibid.

150 Ibid.

151 James Warner and Solomon Alemu , Current challenges and opportunities of public and private livestock insurance markets in Kenya.International Food Policy Research Institute Addis Ababa, Ethiopia, October 2018 , p. 13-14

152 James Warner and Solomon Alemu , Current challenges and opportunities of public and private livestock insurance markets in Kenya.International Food Policy Research Institute Addis Ababa, Ethiopia, October 2018 , p14

153 Ibid.

In addition to insurance, social protection may include provision of credit for agricultural inputs, or advances against expected incomes. But the latter presents a viability risk and could worsen exposure to climate risks were the farmer to receive a credit advance and thereafter have their crops fail, or livestock die from drought or floods. Minimum price guarantees for crops, where possible, should be pursued to ensure there is no farmer exploitation.

In addition to options to provide direct farm-level income protections, as discussed above, the just transition requires clear policy and investment into two key areas.

» **First**, in anticipation that job losses through redundancies and abolition of work may be inevitable, there is need for income replacement options for workers while they undergo retraining and transition to different roles. An opportunity for this is available through, section 41(2) of the Employment Act which empowers the Cabinet Secretary responsible for labour through regulations to require employers to ensure employees against risk of redundancy through an unemployment insurance scheme. This scheme could be through a publicly operated scheme, or a scheme through an insurance firm and fully based on

worker contributions to enhance fairness and equity. Conditions should be stipulated through regulations to specify the criteria for accessing the money for income replacement (e.g., loss of work, illness, injury, maternity or paternity leave, etc.), prerequisites for accessing the money (e.g., how long between entitlements can a person qualify to draw income from the insurance); amount of income that can be drawn (e.g., how much (%), relative to previous income can a person during an eligibility period), among others. These provisions have, however, not been operationalized.

» **Secondly**, it is important for the government to further expand the number of people engaged in smallholder agriculture that are putting money into voluntary pension savings programmes. While the Discussion Paper does not urge making this mandatory (in view of depressed incomes in the sector), incentives to enhance this are needed to avoid decent into poverty after leaving active employment after reaching retirement age, or during old age. As part of the social protection system, Kenya has been providing stipends for the elderly, but this requires to be augmented.

CONCLUSION AND FRAMING OF JUST TRANSITION OPTIONS FOR CLIMATE SMART SMALLHOLDER AGRICULTURE

Agriculture is important to individuals and communities globally, including its role in fulfilling fundamental human rights. In Kenya, agriculture, which is highly vulnerable to the negative impacts of climate change, is dominantly smallholder and contributes up to one-third of the national GDP. This means that as Kenya joins the world in framing a just transition pathway, smallholder agriculture will remain critical to meeting national sustainability needs, as well as fulfilling the objectives of the Paris Agreement. Indeed, as shown in the discussion paper, the country has put in place law, policy and institutional mechanisms to support a just transition. While climate smart agriculture interventions are core to a just transition towards sustainable smallholder agriculture, the full bouquet of options is wider. It includes repurposing and sharpening a range of civil and political rights (e.g participation, inclusiveness), socio-economic rights, and even environmental rights such as the critical role of ecosystem services to sustainable agriculture.



The Discussion Paper has drawn the following strategic conclusions regarding the interface between climate change and agriculture in Kenya:

- i. Smallholder agriculture in Kenya remains susceptible to climate risks, which heightens vulnerability of farmers, farmworkers and those depending on the agriculture value chain to deeper poverty.
 - ii. A just transition pathway unbundles the rights of farmers, farmworkers, and communities; and clarifies obligations of the state. The justice requirement is imperative in ensuring that while transitions maybe inevitable, fairness, equity, and inclusiveness are not sacrificed as an inconvenience.
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Drawing from these, the Discussion Paper has identified the following options as forming the basis for an integrated just transition that is focused on enhancing smallholder agriculture sustainability:

- a. Secure land rights are critical to farmers at every scale (large, medium or smallholder), and enforcement of the constitutional protections for land rights is indispensable.
- b. The Agriculture Sector Transformation and Growth Strategy (ASTGS) has pegged its success on transforming the incomes and productivity of smallholder farmers. For this reason, expanding the scope of people involved in smallholder farming is important. An opportunity for this is available through section 12(1)(b) of the Land Act that permits allocation of land through affirmative action to those who qualify in order to ameliorate their disadvantaged position. Such people include women, youth, elderly, poor, persons with disability, minorities and marginalized people. There is evidence that suitable land could be identified after an inventory of public land held by ministries and state corporation, which could be allocated to smallholder farmers. The land tenure rights here have to be defined carefully in terms of breadth (user and control rights, no transfer rights), duration (reasonable period that is economically viable, based on empirical evidence and studies); assurance, through issuance of relevant leases. This land should not include areas excluded under section 12(2) of the Land Act, and safeguards should be put in place to prevent the failures of the shamba system.
- c. Community land rights present a valuable window through which people can individually or collectively

now utilize their lands more productively for crop and/or livestock agriculture. Rules around gender equality amongst members of a community must be enforced. Further land use planning and zoning should be effected and enforced.

This may permit allocation of space for crop farming and for livestock keeping, as well as tree-growing and agro-forestry. There is room under the Forest Conservation and Management Act for a community to apply to the Kenya Forest Service for registration of the forest they grow on their community land. The forest may include indigenous trees (fruit, beekeeping, ornamental for ecosystem services) or plantation trees for timber harvesting. Further, the FPIC rules stipulated to precede approval of investment agreements should be enforced. Importantly, care should be taken to prevent registration and demarcation of community land boundaries from interfering with the assets needed for pastoralist transhumance. These include livestock movement corridors, and access to water.

The Discussion Paper proposes that prior to adjudication of community land, the national and county governments should determine how to undertake inter-county physical and land use planning in order to, on a macro-scale, identify the community socio-economic and ecological assets needed for pastoralism, and protect these as public assets.

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- d. Climate smart agriculture interventions for agriculture in Kenya have been identified as evident through government policy documents reviewed in this discussion paper. The role of ecosystem services and sustainable soil management in climate smart agriculture cannot be overstated. However, implementing these at the scale smallholder agriculture nationwide requires investments in labour, and infrastructure. Financing is needed to progressively implement and put them in place. Further, there are mainstreaming obligations under the Climate Change Act requiring both the national, and county governments to integrate climate smart agriculture interventions into their budgets and implement them.
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- e. Participatory and inclusive processes is an irreducible minimum to achieving a transition to sustainable smallholder agriculture. In addition to norms developed from global practice, Kenya's Constitution already stipulates mandatory national values and principles of governance

that include public participation, sustainable development, good governance, inclusiveness, social justice, human rights, and protection of the marginalized.

Violation of these values could result in nullification of a public policy decision by the courts upon a challenge. In addition, affirms gender equality between men and women. Instructively, the Climate Change Act has set a higher standard for public participation, requiring that it should be meaningful, and there should be evidence that the information given by the public had an impact on the threshold of decision making.

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- f. Decent work requires, among others, that minimum wages should be adequate to support the needs of workers (including their families, and social protections), and should be enforced to reduce instances of violations. The setting of minimum wages should ascribe to the just transition principles of meaningful participation and inclusive dialogue. This includes a role of trade unions, where suitable, as an appropriate stakeholder representing the interests of worker during discussion on the levels of minimum wage. Under the Constitution, the level of minimum wage should result in a fair remuneration, and inclusive discussions are required to set a correlation between fair remuneration and adequate minimum wages in the country.
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- g. Income protection is essential to protecting the needs of farmers, farmworkers and others working in the agricultural value chain. Agriculture insurance is critical. However, analysis and policy decisions (with inclusive participation) should inform whether conventional insurance or index-based insurance is suitable, taking into account the impacts of context, locality and value on the cost of premiums and viability of the insurance product. While literature recommends index insurance, for instance for livestock, depressed income may necessitate a subsidy from the government for farmers based on evidence showing need.
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- h. Activation of provisions of the Employment Act to establish an unemployment insurance scheme is important and urgent. Whether publicly funded, or privately operated options, this would give structured avenues through which farmers and agriculture workers can access income replacement where job losses through redundancies and abolition of work may be inevitable, or while they undergo retraining and transition to different roles.

Conditions should be stipulated through regulations to specify the criteria for accessing the money for income replacement (e.g., loss of work, illness, injury, maternity or paternity leave, etc.), prerequisites for accessing the money (e.g., how long between entitlements can a person qualify to draw income from the insurance); amount of income that can be drawn (e.g., how much (%), relative to previous income can a person draw during an eligibility period), among others. Further, enhancing the number of people making pension savings is important to ensure gains that may be made through just transition interventions are not eroded when farmers and agriculture workers retire.

The options above demonstrate that options are available to trigger a just transition towards sustainable smallholder agriculture in Kenya. This is important because it supports an important portion of the GDP and enhancing smallholder farmer incomes is an important cog of Kenya's agriculture transformation strategy. However, further discussion is required on climate financing options for these interventions, in line with the Paris Agreement opportunities and other national, bilateral public or private opportunities.

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JUST TRANSITION IN KENYA'S SMALLHOLDER
AGRICULTURE SECTOR**

