

► Policy Brief

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Just transition and decent work implications from land degradation and desertification

Key Points

- It is estimated that natural resources, including land, soil, water, and biodiversity, is contributing to over half of global GDP¹. Meanwhile, land degradation and desertification (LDD) threaten the livelihoods of 1.3 billion people, particularly rural workers, smallholder farmers, and land-dependent businesses, causing economic strain, job losses, and forced migration and exacerbating food insecurity alongside significant environmental losses².
- Addressing LDD requires shifting to environmentally sustainable economies and societies, supported by responsible land management in a job-rich manner.
- This involves formalization of the economy and fostering sustainable and productive businesses practices, especially in rural areas, where many depend on the land for jobs and livelihoods.
- These ecological shifts can create, replace, and transform jobs but may also pose socio-economic challenges.
- Decent work and just transition implications of land LDD is not fully established. The United Nations Convention to Combat Desertification (UNCCD), the legally binding international agreement on the topic, has made progress in integrating the decent work agenda in the negotiations and agreements. For example, was "decent work" included in decisions at the 15th Conference of the Parties (COP15) of the UNCCD in 2022. However, the concept of just transition has yet to be fully mainstreamed in policies and actions in combating LDD.
- A just transition is essential for maximizing the social and economic benefits of environmental initiatives while minimizing and managing any negative impacts from the process, ensuring no one is left behind.
- In 2019, the ILO and UNCCD signed a Memorandum of Understanding (MoU) to enhance cooperation on human impacts of desertification, including halting LDD, and creating green jobs.

¹ World Economic Forum. (2020). [The Future of Nature and Business](#). Geneva: World Economic Forum.

² IOM and UNCCD. (2019). *Addressing the Land Degradation – Migration Nexus: The Role of the United Nations Convention to Combat Desertification*.

Background

The ILO Guidelines for a *Just Transition towards environmentally sustainable economies and societies for all* (hereafter the Just Transition Guidelines), adopted by representatives of governments, employers' and workers' organizations in 2015, provide a policy framework and an operational tool to address environmental change in a way that advances social justice and promotes decent work creation. This policy brief is part of a series of briefs that seek to deepen the technical and policy understanding of the application of the Just Transition Guidelines. They are mutually reinforcing and together form a body of policy guidance on the Just Transition Guidelines.

The just transition briefs are intended for use by policymakers and practitioners at all levels to provide practical information and guidance, fostering a common understanding of what is meant by a just transition in specific topic areas and providing recommendations for implementation by countries, international institutions and other actors in academia and civil society.

The objective of this policy brief is to explore the link between just transition and land degradation and desertification (LDD). The brief aims to provide insights on how LDD impact decent work while positioning the just transition agenda within the framework of the United Nations Convention to Combat Desertification (UNCCD) and related political processes. Additionally, the brief aims to synthesize key findings on the employment effects of LDD, identify challenges and opportunities, and illustrate approaches to address these issues in a way that supports job creation and socio-economic resilience.

Socio-economic impacts of LDD

Land, jobs, and the economy are intimately interlinked. Natural resources, including land, soil, water, and biodiversity, underpin global economic wealth, contributing over half of global GDP³. The ILO estimates 1.2 billion jobs⁴ depend on healthy ecosystems, and the Intergovernmental Panel on Climate Change (IPCC) reports⁵ between 1.3 to 3.2 billion people already being affected by land degradation.

LDD is driven by deforestation, unsustainable agriculture, and climate change, and it results in loss of soil health, biodiversity, and productivity, which are global issues. It intensifies poverty, hunger, inequality, and vulnerability to climate-related events like droughts and floods, disproportionately impacting women and population groups in situations of vulnerability, such as indigenous and tribal peoples, pastoralists⁶, persons with disabilities, and people living in the poverty⁸. This following section focuses on the socio-economic impacts of LDD and how the just transition agenda may be linked.

Economic impacts of LDD

LDD triggers broader economic disruptions, impacting industries reliant on natural resources. The estimated global economic value of natural ecosystem services, ranges from US\$ 125 to US\$ 140 trillion annually⁹. These services, such as pollination, water purification, and climate regulation, provide essential support to critical sectors including agriculture, tourism, energy, construction, and food production. In fact, most sectors depend on natural ecosystem services¹⁰ and land degradation is increasingly putting the delivery of many of these ecosystem services at risk.

For example, agriculture experiences declining yields, tourism suffers losses due to degraded landscapes, and

³ World Economic Forum. (2020). [The Future of Nature and Business](#).

⁴ ILO and WWF. (2020). Nature hires: How nature-based solutions can power a green jobs recovery

⁵ Intergovernmental Panel on Climate Change (IPCC). (2022). [Special Report on Climate Change and Land \(SRCL\), Chapter 4: Land Degradation](#).

⁶ Pastoralists, reliant on access to grazing and water, face threats from land uses restricting mobility (UNCCD and FAO 2024)

⁷ UNCCD and FAO. (2024). [Synergy Brief: Enhancing Collaboration for Land Degradation, Food Security, and Climate Change](#)

⁸ IPCC. (2022). Special Report on Climate Change and Land (SRCL), [Chapter 4: Land Degradation](#).

⁹ OECD. (2019). [Biodiversity: Finance and the Economic and Business Case for Action](#).

¹⁰ Ecosystem services are categorized into provisioning services (resources extracted from ecosystems), regulating services (processes that regulate natural systems), cultural services (support for cultural development like architecture and recreation), and supporting services (fundamental natural processes like photosynthesis), with forests being a key example, providing timber, carbon sequestration, cultural benefits, and biodiversity.

energy production is disrupted by water shortages. These interconnected effects create a “multiplier effect” that amplifies the initial losses, contributing to wider economic instability¹¹.

To mitigate and address such risks, the public and private sectors can plan, finance, and implement the transition toward an economy that restores natural resources (for example through blended finance and climate finance, particularly for MSMEs). The UNCCD's 2022 Global Land Outlook highlights that every dollar spent on land restoration yields US\$ 7–30 in benefits. On the other hand, inaction could result in substantial annual economic losses, estimated between US\$ 10 trillion and US\$ 31 trillion¹², representing a significant percentage of global GDP.

Many economic sectors are not only adversely impacted by land degradation but also contribute to it. Human activity has already altered 70 per cent of Earth's land, leading to a loss of 100 million hectares annually due to degradation¹³. For instance, agriculture expansion is responsible for approximately 90 per cent¹⁴ of global deforestation, whilst industries such as mining, construction, and energy production strain land-based ecosystems. In emerging sectors, the water used for cooling server farms of the AI industry is projected to reach 6.6 billion m³ per year by 2027¹⁵.

Employment and livelihoods

LDD has far-reaching consequences for employment, particularly in rural areas where large segments of the workforce rely on natural resources for their livelihoods. The ILO estimates that 40 per cent of the global workforce is dependent on nature and ecosystem services, especially in agriculture, forestry, and fisheries¹⁶. LDD would further exacerbate prevailing decent work deficits that characterize many of these sectors, especially in low-income countries. As land productivity declines, jobs in those sectors become unstable and possibly lower in quality. Workers earn less, face deteriorating working

conditions, and have fewer opportunities for skills development, exacerbating poverty and food insecurity in rural communities. Ultimately, LDD can further exacerbate prevailing decent work deficits.

Box 1: Key terminologies

- **LDD (Land Degradation and Desertification):** The process of land becoming unproductive due to various factors such as climate change, deforestation, and unsustainable agricultural practices.
- **LDN (Land Degradation Neutrality):** A state whereby the amount and quality of land resources necessary to support ecosystem functions and services to enhance food security remain stable, or increase, within specified temporal and spatial scales and ecosystems.
- **Decent Work:** Decent work refers to productive employment that generates fair income, offers workplace security and social protection, and provides opportunities for personal development and social integration, while also ensuring freedom of expression and the right to organize and gender equality.
- **Green Works:** Employment-intensive development, restoration, and maintenance of infrastructure, community assets, and natural areas to contribute to environmental goals such as climate change adaptation, natural disaster resilience, environmental rehabilitation, and nature conservation. Examples include soil and water conservation, afforestation, reforestation, irrigation, and flood protection.
- **Green Jobs:** Decent jobs that contribute to preserving or restoring the environment, across sectors like manufacturing, construction, renewable energy, and energy efficiency.

Between 2000 and 2015, an estimated 23 million working-life years were lost annually due to environmental disasters, many of which were exacerbated by LDD¹⁷. The

¹¹ UNCCD. (2013). [White Paper 1: UNCCD 2nd Scientific Conference 2013](#)

¹² OECD. (2019). [Biodiversity: Finance and the Economic and Business Case for Action](#).

¹³ UNCCD. (2022). [Global Land Outlook 2. United Nations Convention to Combat Desertification](#)

¹⁴ FAO. (2022). [FRA 2020 Remote Sensing Survey](#).

¹⁵ Li, Yang, Islam and Ren, (2021). [Making AI less "thirsty": Uncovering and addressing the secret water footprint of AI models](#).

¹⁶ ILO. (2022). [Decent Work in Nature-based Solutions](#).

¹⁷ ILO. (2018). [World Employment and Social Outlook: Greening with Jobs](#).

loss of work years intensifies the vulnerabilities in rural areas where jobs are often informal, hazardous, and without social protection. Marginalized groups such as women and youth are especially affected, as they are more likely to work in low-wage, insecure roles with limited access to social protection. Moreover, high rates of underemployment and unemployment in low-income countries worsen these challenges, as economic opportunities become more limited.

Land grabbing, insecure land tenure, and unsustainable land use practices worsen rural vulnerability by degrading land and displacing communities. In regions like Sub-Saharan Africa, where agriculture is a key livelihood, an estimated 60 million people may be forced to migrate due to LDD and lack of viable livelihoods. Pastoralists are especially at risk, as decreasing grazing lands and water

Box 2: Socio-economic impacts of land degradation and the Aral Sea crisis

In Uzbekistan, the cotton sector serves as a vital source of employment, directly supporting around 1.5 million people²⁰, with many more employed in related industries. However, this sector has been severely impacted by land degradation and excessive water consumption. Most of the water required for cotton cultivation has been diverted from rivers, which flow into the Aral Sea. Once the fourth largest lake globally, the Aral Sea has vanished due to these practices. The consequences have been dire, particularly in the region, where unemployment has surged to 7 per cent as a direct result of the Aral Sea's decline²¹. Once home to 27 species of fish, the lake's shrinkage meant a total collapse of local fisheries. Lastly, rapid population growth in Uzbekistan has intensified the demand for food, exacerbating overgrazing, soil degradation, and uncontrolled deforestation²².

sources threaten their traditional way of life, leading to economic displacement and social instability^{18 19}.

These issues highlight the need for targeted policies and programs that support affected communities by enhancing access to resources and decent jobs, fostering sustainable land management practices, and promoting sustainable livelihood diversification.

Gendered dimension of LDD

Women and girls are disproportionately affected by environmental degradation, particularly in agriculture-dependent regions where one-third of the global female workforce is engaged. Rural women are particularly vulnerable as they are often concentrated in low-skilled, low-productivity, and informal employment, marked by low pay, poor working conditions, and limited access to social protection²³. Declining land productivity and insecure land tenure push women further into precarious, seasonal labour (especially during agricultural shocks) intensifying food insecurity. As water and food scarcity deepen, women and girls face heightened risks of gender-based violence, often walking long distances in unsafe conditions to secure basic needs. Structural barriers, including exclusion from land-use decision-making, reinforce these vulnerabilities.

Advancing gender equality through strengthened land rights and inclusive environmental governance is essential for a just transition and for building resilient, climate-adaptive communities.²⁴. Ensuring women's participation in decision-making processes related to land use, environmental management, and economic development can foster better outcomes for both environmental

¹⁸ International Organization for Migration (IOM). (2024). [Conflict drives displacement amidst rising climate shocks: New Africa migration report](#)

¹⁹ World Bank. (2024). [The Future of Jobs in Africa: Skills and Jobs for Youth Employment](#).

²⁰ Institute for Human Rights and Business. (2015). [Bitter Harvest – Uzbekistan's Cotton Sector and the Systemic Use of Forced Labour](#).

²¹ Anchita, Aibek Zhupankhan, Zhaniya Khaibullina, Yerlan Kabiye, Kenneth M. Persson, and Kamshat Tussupova. (2021). Health Impact of Drying Aral Sea: One Health and Socio-Economical Approach.

²² International Institute for Sustainable Development (IISD). (2024). [Uzbekistan State of the Environment Report](#)

²³ ILO. (2022) [Advancing Social Justice and Decent Work in Rural Economies](#).

²⁴ UNCCD. (2022). [Gender and Land: A Gender-Responsive Approach to Combat Desertification, Land Degradation, and Drought](#).

sustainability and gender equality²⁵. Furthermore, initiatives aimed at improving women's economic empowerment, such as access to credit, training, and market opportunities, are essential for promoting economic and employment resilience in the face of LDD.

Impacts on indigenous and tribal peoples

LDD undermines the cultural identity of many communities, particularly indigenous and tribal peoples. These communities often possess deep traditional knowledge and management practices that are vital for sustainable land use. Land degradation disrupts these practices, eroding their cultural heritage and sense of connection to the land²⁶. While challenging to quantify, the loss of cultural identity and spiritual connection caused by degraded lands is significant, affecting the community's cohesion and resilience²⁷.

These communities often possess valuable knowledge of sustainable land management, but their exclusion from decision making weakens their resilience. For example, conservation efforts, such as protected areas, can limit access to resources, undermining traditional practices and cultural identity. This displacement threatens their livelihoods and erodes their traditions. Involving them in restoration efforts and respecting their land rights is crucial. See box 3 for an example of integrating indigenous restoration techniques in restoration efforts in Burkina Faso.

Linking LDD and just transition

The socio-economic impacts of LDD underscore the urgent need for inclusive and equitable solutions that protect the livelihoods of vulnerable communities while promoting sustainable land management practices.

The ILO Just Transition Guidelines outline both guiding principles and specific policy areas to advance a just transition in the context of climate change and environmental degradation²⁸.

According to the ILO Resolution and Conclusion on Just Transition from 2023, a just transition means, "A just maximizing the social and economic opportunities of

Box 3: Leveraging traditional and indigenous knowledge in Burkina Faso

The Great Green Wall (GGW) initiative is a continental effort to address LDD in the Sahel across 22 African countries. It focuses on large-scale land restoration and tree planting to improve environmental sustainability. In Burkina Faso, the ILO has partnered to integrate indigenous restoration techniques through its Employment Intensive Investment Programme (EIIP).

The project addresses land degradation, soil fertility decline, and socio-economic challenges, including those exacerbated by conflict and migration. By employing traditional restoration methods, it creates sustainable livelihoods and fosters social cohesion in vulnerable communities, prioritizing women, youth, and internally displaced persons (IDPs) for employment opportunities.

Key activities include constructing 1,580 demi-lunes for water conservation, creating 215,910 zai pits, planting 1,500 trees, and building water management structures. These efforts created approximately 300 jobs, 70 per cent of which were filled by women. Early results show increased crop yields, particularly for white sorghum and millet.¹

climate and environmental action, including an enabling environment for sustainable enterprises, while minimizing and carefully managing challenges".

Despite its social and economic significance, the just transition agenda has previously mainly been applied in climate change and decarbonization efforts. Expanding this approach to environmental issues and sustainable land management is vital for ensuring LDD mitigation can safeguard livelihoods and jobs.

Policies and initiatives aimed at combating LDD should integrate decent work and labour rights, ensuring that affected populations have access to alternative livelihoods and jobs, social protection, and educational opportunities, to name a few. This approach not only addresses the

²⁵ UNCCD. (2022). Gender and Land: [A Gender-Responsive Approach to Combat Desertification, Land Degradation, and Drought](#).

²⁶ ILO. (2022). [Just Transition Policy Brief: Indigenous Peoples and a Just Transition for All](#). Geneva.

²⁷ IISD. (2022). [Still One Earth: Indigenous Peoples and the Conservation of Nature](#)

²⁸ ILO (2015). Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All

immediate economic impacts of LDD but also contributes to long-term social and economic stability, reducing migration pressures, preventing conflicts, and enhancing the overall well-being of vulnerable populations.

Priority agendas of the Global Framework of UNCCD

The UNCCD, established in 1994, was designed to combat desertification, land degradation, and drought (DLDD) in arid and semi-arid regions²⁹. Its mission aligns with the Rio Conventions, aiming for land degradation neutrality (LDN) and sustainable livelihoods through land restoration³⁰. By 2030, it seeks to restore one billion hectares of degraded land, contributing to the UN Decade on Ecosystem Restoration (2021–2030), which prioritizes global ecosystem recovery for human and environmental benefit.

The issue of decent work, though not initially part of the UNCCD's focus, has been slowly introduced into the agenda. During COP14 in 2019, the social dimension of DLDD was introduced with the "People's First Agenda", prioritizing gender equality, youth empowerment, and Indigenous people's rights. This agenda also established a framework for addressing land degradation through the principles of "avoid, reduce, restore." The UNCCD's Strategic Framework (2018–2030) continues to emphasize livelihood diversification, entrepreneurship, and the promotion of sustainable land management. Likewise, a youth engagement strategy³¹ was launched at COP14 and further developed at COP15, empowering young people to take leadership roles in land restoration through meaningful participation and the creation of "landpreneur" opportunities.

Furthermore, at COP15 in 2022, decent work became, formally integrated into the Convention's agenda³². This shift marked a significant commitment to creating sustainable jobs, with an emphasis on green employment opportunities for vulnerable groups, including women,

youth, Indigenous communities, and persons with disabilities.

Gender inequalities in land access were also addressed, as these disparities hinder women's ability to manage and invest in land-based economic activities. Land tenure security, which allows women to invest in sustainable agricultural practices, is essential in breaking down these barriers.

COP15 also marked a significant shift toward private-sector engagement in land restoration through the Private Sector Strategy (2021–2030)³³, aimed at creating sustainable value chains in agriculture and forestry. This includes initiatives like Business for Land (B4L), which aims to restore 1.5 billion hectares by 2030, with corporate commitments to land degradation neutrality.

In 2024, Brazil's G20 Presidency promoted the Just Land Transition (JLT) recommendations³⁴, focusing on job creation through sustainable land management, strengthening rural and peri-urban economies, and facilitating access to credit. This initiative also encourages sustainable livelihoods, ensuring that people in vulnerable regions, including rural areas, have opportunities for economic advancement.

COP16 in 2024 continued to address land restoration, drought resilience, and environmental sustainability with a people-centred approach, emphasizing greater involvement from the private sector and civil society, however the connection to a just transition remains underdeveloped.

How labour markets may change with land degradation neutrality

Transformation of jobs in combating land degradation and desertification

As outlined in this brief, both LDD and LDD mitigation policies and actions have impacts on jobs and livelihoods, thus calling for the integration of just transition and decent work in the policy frameworks. According to the UNCCD, combating LDD requires a comprehensive

²⁹ UNCCD. (ND). [Unite for Land: 30 Years of the United Nations Convention to Combat Desertification](#).

³⁰ UNCCD. (ND). [Land Degradation Neutrality \(LDN\) Principles](#).

³¹ UNCCD. (2022). [Global Youth Initiative: Youth Declaration](#)

³² UNCCD. (2022). [ICCD COP\(15\) 4-2201812E](#)

³³ UNCCD. (2024). [Private Sector Strategy 2021-2030](#)

³⁴ Think20 Brazil. (2024). [A just land transition: Advancing decent work, resilience, and sustainability in land management](#)

approach, using a response hierarchy focused on avoiding, reducing land degradation and restoring degraded land to achieve land degradation neutrality (LDN)³⁵. This approach emphasizes sustainable land management and transforming the way we produce and consume.

Labour market effects from LDD responses, informed by experiences from other green transitions³⁶ (e.g., the Circular Economy and energy transition), are expected to fall into four categories: (i) new jobs created, (ii) existing jobs substituted, (iii) jobs eliminated without replacement, and (iv) transformation of existing roles. These may be direct jobs created through LDD-related interventions (e.g., restoration activities) or indirect jobs generated in supporting sectors supplying goods and services or benefitting from re-established ecosystems services.

Annex 1 links the avoid–reduce–restore hierarchy to employment outcomes, demonstrating the potential for job creation across skill levels. While some green jobs may displace existing employment, the net impact depends on the balance between creation and loss. Environmental improvements, for example, can contribute to sustaining and creating jobs in the long-term job ecosystem-dependent sectors like tourism and forestry³⁷. The table does not specify whether the effect is net- positive or negative.

A just transition is essential to accelerate the shift from jobs contributing to LDD toward those mitigating it, while addressing potential transition risks. The following section outlines measures to support this transition and ensure inclusivity.

Mitigating risks of transition to sustainable economies

Addressing LDD necessitates a transition to environmentally sustainable economies and societies, underpinned by responsible land management practices and sustainable business models. While these shifts have the potential to create, replace, and transform jobs, they may also introduce misalignments, meaning that the transition from unsustainable jobs and business practices

to sustainable employment and economies may not happen smoothly and without challenges.

Misalignments can take several forms (see box 4 for example). Temporal misalignment occurs when the creation of green jobs does not keep pace with the loss of traditional roles, leaving workers in prolonged unemployment. Spatial misalignment arises when green jobs are concentrated in regions distant from areas facing job losses, thereby limiting access to these opportunities for displaced workers. Skill-based misalignment is observed when workers in declining sectors lack the qualifications needed for roles in emerging industries, highlighting the necessity for targeted reskilling interventions. Sectoral misalignment adds complexity when job creation and loss occur across different

Box 4: Illustrative misalignment examples during transitions to combat LDD

Temporal: Grazing may need to be paused or reduced while restored grasslands recover. In this period, workers in livestock may be without sufficient work and income.

Spatial: Land degradation in one region may require the cessation of agricultural activities, while nearby regions may have land suitable for sustainable agriculture practices. However, those areas may lack skilled workers or sufficient infrastructure to support the transition, creating a mismatch between the availability of land and the availability of skilled labour.

Skills-based: The transition to regenerative agriculture may require farmers to adopt new techniques, but many lack the necessary skills and knowledge to make this shift effectively, necessitating targeted training programs.

Sectoral: A restored area may be developed for ecotourism, but local workers, previously employed in agriculture or forestry, may need to shift to the tourism sector. This transition may require significant reskilling and adjustments, especially if the tourism sector is underdeveloped or there is limited awareness of job opportunities in this field.

³⁵ UNCCD. (2017) [Achieving Land Degradation Neutrality: The Scientific Conceptual Framework for Land Degradation Neutrality](#). Bonn.

³⁶ ILO. (2018) [World Employment and Social Outlook 2018: Greening with jobs](#)

³⁷ IUCN. (2022). [Nature-based Solutions for Climate Change: Transformative Approaches for the Future](#)

industries, requiring workers to transition to entirely new sectors.

If not adequately addressed, these misalignments could result in the proliferation of decent work deficits (such as informal, poor compensation, unstable, or unsafe with insufficient occupational health and safety standards).

To mitigate the risks and challenges associated with these transitions, the just transition framework can provide guidance for policy coherence to integrate the social dimension in combating LDD. They offer a comprehensive set of policy recommendations that countries can draw on to implement their LDN commitments across; macroeconomic and growth policies, labour market policies, industrial and sectoral policies, enterprise policies and policies on skills development, rights, social protection and occupational safety and health.

The ILO Just Transition Guidelines highlight the significance of social consensus and fostering inclusive dialogue among stakeholders. Central to the Guidelines are the principles of policy coherence, along with the integration of gender equality. They advocate for nationally driven solutions rather than a "one size fits all" approach, ensuring that no one is left behind in the transition process as well as international cooperation³⁸. See annex 2 for country example of LDD responses and actions.

Role of government and social partners

Governments and social partners play essential roles in driving a just transition towards LDN, ensuring environmentally sustainable practices while maintaining economic and social objectives. However, this should be done through social dialogue with employers and business membership organisations (EBMOs) and workers' organisations.

The role of EBMOs is key in mobilizing businesses to take part in land restoration efforts and sustainable land use. These organizations can drive private sector involvement by offering training and capacity-building programmes and developing sector-specific guidelines and tools on sustainable land management, regenerative agriculture, and restoration techniques, promoting sustainable

business practices, advocating for policies that incentivise business-led initiatives in land restoration projects, establishing knowledge hubs and resource centres to share best practices, tools, and case studies on sustainable land use, and fostering public-private partnerships that facilitate and invest in large-scale land rehabilitation. Furthermore, EBMOs can participate in co-designing LDN strategies that reflect enterprise priorities and realities, develop sector-specific guidance for sustainable practices, and mobilise private-sector input in national LDD policy frameworks and in UNCCD negotiations, ideally through tripartite delegations and social dialogue.

Workers' organizations play an equally important role in ensuring that the transition to sustainable land management promotes decent work and protects workers' rights. They advocate for fair wages, safe working conditions, and social protections for workers in affected sectors, particularly those transitioning from traditional land-use practices to more sustainable models. Supporting the formalization of jobs and organization of workers is key in addressing decent work deficits. Furthermore, they support representation is key to ensure that the voices of vulnerable communities, including women, youth, and internally displaced persons, are included in decision-making processes.



A Yemeni beekeeper with his bees, 2022 (ILO). Honey production can create jobs and livelihoods, while promoting more natural pollinators in the area.

³⁸ ILO. (2023). *Achieving a just transition towards environmentally sustainable economies and societies for all: International Labour Conference, 111th Session*

Combatting LDD across the nine just transition policy areas

The following section highlights how countries can combat LDD through the nine policy areas outlined in the ILO Just Transition Guidelines. While not a comprehensive overview, this section illustrates how these policies can support a sustainable and inclusive transition to greener economies.

Macroeconomic and growth policies

The ILO Just Transition Guidelines outline the need for governments, in consultation with social partners, to integrate sustainable development and a just transition into macroeconomic and growth policies, align economic growth with social and environmental objectives, adopt appropriate regulations and instruments, invest public funds in greening the economy, and to develop trade and investment policies. A specific example given in the guidelines is to “use public investments to develop infrastructure with the lowest possible adverse environmental impact, to rehabilitate and conserve natural resources and to prioritize resilience in order to reduce the risk of displacement of people and enterprises”. Public, private, and international development finance can be mobilized for such efforts, see for example the Great Green Wall example previously mentioned (box 3).

Industrial and sectoral policies

The ILO Just Transition Guidelines emphasize the need for governments, in consultation with social partners, to set goals for the continuous improvement of the social, economic, and environmental sustainability of sectors. The Guidelines highlight the importance of social dialogue and stakeholder consultation to create incentives and markets for goods and services that are integral to the greening of economies. They also stress the need to pay particular attention to industries whose livelihoods may be most affected by the transition. To support workers and enterprises in these sectors, the Guidelines propose measures such as social protection, skills training, workforce upgrading, and redeployment.

The ILO's sectoral tools and meetings provide important insights into the implementation of just transition strategies³⁹. For example, the [ILO's Policy Guidelines on the Promotion of Decent Work in the Agri-Food Sector](#) includes a specific chapter on just transition, acknowledging that a just transition in the agri-food sector involves the transformation of food systems so that they work for the benefit of all in society, including farmers, farming communities, agri-food workers, enterprises, consumers and the environment. Other measures to support green job creation could include promoting organic farming, improving water use efficiency, and enhancing land stewardship. These measures aim to reduce costs and carbon footprints while contributing to sustainable practices within the sector.

Such practices, which integrate just transition principles at the sectoral level, are critical in addressing the challenges posed by environmental transitions, ensuring that no one is left behind and that sustainable development is achieved across all sectors. Likewise, sectoral social dialogue is essential to ensure that just transition strategies include the voices of sectoral employers, workers, and other relevant stakeholders.

Box 5: The industrial policy case of Tanzania

An example of sectoral integration can be found in the Government of Tanzania's 2014 guidelines, which mainstream actions to combat desertification into sectoral policies. These guidelines specifically target sectors such as forestry, tourism, marine and coastal, energy, mining, fisheries, livestock, water, agriculture, land use, and health. The Tanzanian guidelines also outline intervention measures across these sectors to encourage the adoption of sustainable practices.

By incorporating sustainable land management into sectoral frameworks, these guidelines aim to mitigate the negative impacts of land degradation while contributing to the overall well-being of both the environment and society.

³⁹ ILO. (2022). [Sectoral Policies for a Just Transition towards Environmentally Sustainable Economies and Societies for All](#).

Box 5 source: The United Republic of Tanzania Vice President's Office (2014) [Guidelines for mainstreaming national action programme to combat desertification into sectoral policies, plans and programmes](#)

Enterprise policies

Governments, in consultation with social partners, are key to fostering an enabling business environment that drives innovation, productivity, decent work, and environmental compliance. Streamlining regulations and supporting fiscal reforms can reduce barriers for businesses to adopt sustainable practices, while resilience measures should prioritize MSMEs by providing access to affordable finance and capacity-building programs. Other support to MSMEs may include bundled finance and training or the promotion of public-private partnerships and incentives to integrate MSMEs in land rehabilitation value chains.

Fiscal reforms should incentivize environmental compliance, and financial tools such as grants and tax benefits can encourage sustainable practices. Governments and social partners can also support technical initiatives, including worker training and research and development in green technologies. Workplace cooperation is crucial for improving environmental practices at the company level.

In rural areas, promoting sustainable enterprises, including MSMEs, cooperatives, and social economy units, can create decent jobs, transition informal businesses to the formal economy, and achieve social as well as environmental goals.

Skills development

The ILO Just Transition Guidelines outline that governments, in consultation with social partners, should ensure skills policies which support the transition to more environmentally sustainable economies, by reviewing policies and supporting capacity building and curricula development in line with enterprise needs. This includes assessing skills gaps, updating occupational profiles, and promoting education in sustainable practices and technologies. A particular focus is given, in the Guidelines, to ensure policy coherence and coordination between skills development and TVET systems with environmental policies, private sector, and EBMOs.

Furthermore, both governments and social partners should, engage in social dialogue for responsive training systems, promote work-related training to increase the employability of job seekers. The Guidelines specifically

states the need to “formulate a holistic skills development policy to promote skills for green jobs that are coherent with environmental policies, including means for appropriate recognition through certification of skills”, which could be particularly relevant to LDD skills initiatives.

Occupational safety and health

The ILO Just Transition Guidelines emphasize the need for governments, in consultation with social partners, to assess and address OSH risks related to both human health and the environment. ILO data highlights that new OSH risks are emerging due to climate change and environmental degradation. For instance, agricultural workers face increased risks of poisoning as climate change drives greater reliance on pesticides and chemical fertilizers⁴⁰. Additionally, outdoor workers, particularly in agriculture and forestry, are exposed to more extreme temperatures, as well as more frequent and intense extreme weather events and a higher prevalence of vector-borne diseases. In this context, building on social dialogue, policies need to ensure alignment between occupational health, environmental agencies, and labour sectors, with strengthened enforcement in sectors most affected by land degradation.

Furthermore, governments and social partners should promote OSH training for workers, employers, OSH committee members, and labour inspectors. The ILO Just Transition Guidelines also emphasize that new jobs created in response to environmental degradation must be decent jobs, linking OSH, job formalization, and the greening of the economy.

The ILO provides technical guidance through tools such as sectoral codes of practice. For example, the Code of Practice on Safety and Health in Forestry Work⁴¹ provides targeted recommendations for ensuring worker safety in the sector.

Furthermore, in the context of climate change, emerging data on heat stress in land-based sectors, including agriculture, underscores the growing risks and the need for enhanced worker protection as rising temperatures increasingly threaten their health and safety⁴².

⁴⁰ ILO. (2024). [Ensuring safety and health at work in a changing climate](#).

⁴¹ ILO. (2024). [Code of Practice on Safety and Health in Forestry Work](#).

⁴² ILO. (2023). [More Workers than Ever Are Losing the Fight against Heat Stress](#).

The ILO Policy Guidelines for the Promotion of Decent Work in the Agri-Food Sector underscore the importance of a just transition in the agri-food sector as a driver of sustainable development and green job creation⁴³. It emphasizes that transforming food systems through sustainable practices and social dialogue can enhance livelihoods and ensure food security.

Social protection

The ILO Just Transition Guidelines outline the need for governments, in consultation with social partners, to promote and establish adequate social protection systems with a view to increasing resilience and safeguarding populations against the impacts of environmental vulnerabilities. As mentioned in the previous sections of this brief, some people's jobs and livelihoods are already harmed by LDD while others may be harmed as their jobs could change due to efforts to combat LDD. Social protection measures could be designed to respond to such vulnerabilities. Furthermore, the ILO Guidelines outline the importance of utilizing employment guarantee schemes or public works programmes to rehabilitate natural resources, for example. Lastly, Governments should facilitate bilateral discussions on portability of social protection entitlements in situation of cross-border displacements.



Quarry truck driver, now working on restoring the land for the former coal mine in Spain. (Source: ILO, 2023)

Active labour market policies

The ILO Just Transition Guidelines outline the need for governments, in consultation with social partners, should “give particular attention to unemployed workers and workers at risk of unemployment in communities and industries affected by [...] resource degradation or structural change”. Likewise, the Guidelines suggest linking public works and employment programmes to poverty eradication and ecosystems protection for those workers affected by transitioning to environmentally sustainable economies, or who have been laid off due to structural changes (see again box 3 for the Great Green Wall example).

Rights

The ILO emphasizes the importance of core labour standards in supporting a just transition. International Labour Standards, such as the Fundamental Conventions (No. 87 and No. 98) and the Governance Convention (No. 144), are critical in promoting social dialogue, which is essential for aligning economic, environmental, and social objectives. The Freedom of Association and Protection of the Right to Organise Convention (No. 87) upholds workers' rights to freely form and join organizations, while the Right to Organise and Collective Bargaining Convention (No. 98) strengthens workers' rights to engage in collective bargaining, ensuring fair wages and working conditions.

Furthermore, the Tripartite Consultation (International Labour Standards) Convention (No. 144) encourages consultations between governments, employers, and workers to create policies that address the social and environmental challenges arising from LDD. These rights, alongside others such as the right to safe working conditions, non-discrimination, and social protection, are key to ensuring that green jobs, created as part of efforts to combat LDD, are decent, inclusive, and accessible to all workers. These standards support a framework where workers' rights are central to the transition, contributing to a fair and equitable shift towards sustainable economies.

⁴³ ILO. (2023). [Policy guidelines for the promotion of decent work in the agri-food sector.](#)

Social dialogue and tripartism

The ILO Just Transition Guidelines outline the need for governments to “actively promote and engage in social dialogue, at all stages from policy design to implementation and evaluation and at all levels from national to enterprise level in line with applicable international labour standards most relevant to the just transition framework, to forge consensus on pathways towards environmental sustainability with decent work”. Another recommendation to integration social dialogue and tripartism in climate and environment agendas is to “actively promote the creation, development and formalization of dialogue mechanisms and structures at all levels to discuss the best means to implement national social, economic and environmental goals”.

The Guidelines also outline the role of social partners in this regard, where a focus is given to raising awareness amongst their members and providing guidance on developing just transition frameworks. Social partners should also play an active role in the formulation, implementation, and monitoring of national policies and promote the participation of their members in social dialogue and enterprise, sectoral and national level. Lastly, collective bargaining and collective agreements, where appropriate, are concrete ways of facilitating cooperation between social partners on environmental regulations.

Conclusions and key recommendations

Addressing LDD is critical for safeguarding livelihoods, ensuring food security, and fostering socio-economic resilience. LDD affects billions of people globally, particularly smallholder farmers, rural communities, and marginalized groups, thereby intensifying poverty, migration, and environmental degradation. Transitioning to sustainable land management offers immense potential for job creation, economic growth, and ecosystem restoration but requires careful planning to manage socio-economic risks.

The ILO Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All from 2015 and the 2023 ILO Resolution and Conclusions on Just Transition serve as key policy frameworks for integrating just transition principles into climate change as well as environmental policies. Thereby, they provide a comprehensive approach for governments,

employers' organizations, and workers' organizations to navigate the socio-economic and environmental complexities of addressing land degradation and transitioning to sustainable economies with social justice.

However, just transition and decent work considerations are still nascent in LDD related negotiations and decisions under UNCCD. Thereby, this Just Transition Policy brief is amongst the first efforts to conceptualize and clearly link the ILO Just Transition Guidelines with the UNCCD agenda. Therefore, the policy brief gives rise to a few recommendations and next steps.

Social dialogue and tripartism in LDN policies

Governments and social partners must play a key role in combating LDD and ensuring that the environmental action and policies taken are founded on the just transition principles of promoting decent work, social dialogue, fundamental principles and rights at work, gender equality, policy coherence, no one-size fits all, and international cooperation. The ILO Just Transition Guidelines present concrete policy recommendations for governments and social partners across 9 policy areas, of which some are directly relevant for the LDN responses. To promote social dialogue and policy coherence, more delegations to UNCCD can consider tripartite delegations at the UNCCD negotiations, as well as setting up social dialogue mechanisms for national policy development. To do so effectively, capacity building of both the world of work actors as well as actors engaged in LDD must be enhanced with regards to just transition and green jobs issues.

Policy coherence

The success of the transition depends on coordinated efforts from governments, employers' and workers' organizations, alongside other relevant stakeholders and civil society. Key principles for achieving this include decent work, social dialogue, fundamental principles and rights at work, gender equality, policy coherence, no one-size fits all, and international cooperation. Additionally, the inclusion of vulnerable groups such as indigenous and tribal peoples, as well as persons with disabilities, is vital in ensuring that the transition is truly inclusive and just for all.

Most importantly, governments must consider integrating just transition principles into their responses to LDN.

While the specific efforts will vary by country based on national circumstances, the growing momentum for the decent work agenda under the UNCCD presents a significant opportunity to align social, economic, and environmental objectives in combating LDD.

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Need for further research

To effectively address LDD within the framework of a just transition and the decent work agenda, a comprehensive, context-specific analysis is required across all nine policy areas of the ILO Just Transition Framework with additional policy cases and national examples. This should include a mapping out of risks and misalignments related to the transitions required to achieve LDN. Likewise, such research could focus on the particular business case and enterprise needs in such transitions, or how sustainable land management contributes to productivity, cost reduction, and market competitiveness.

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► Annexes

► Annex 1: Illustrative examples of direct and indirect jobs across the response hierarchy for land degradation neutrality (LDN), Source: Author

LDN Response	Sectors	Direct Jobs	Indirect Jobs
Avoid Land Degradation and Desertification	Agriculture and No-Till Farming (Prevents soil erosion and degradation)	Farmers and Farm Laborers, Agronomists, Soil Scientists, Agricultural Technicians	Equipment Manufacturers and Suppliers (e.g., factory workers producing combine harvesters, plows), Agricultural Extension Services, Biological Input Suppliers (e.g., organic fertilizers, bio-pesticides), Agricultural Consultants
	Sustainable Forestry Practices (Prevents deforestation and degradation of forest ecosystems)	Forest Managers, Tree Planters, Forestry Technicians, Forest Rangers	Logging Equipment Suppliers, Forest Restoration Consultants, Transport Services for Timber, Carbon Offset Providers
	Sustainable Mining Practices (Minimizes land degradation from extraction activities)	Environmental Engineers, Mining Technicians, Land Rehabilitation Workers	Mining Equipment Manufacturers, Compliance and Certification Specialists, Logistics Providers
	Sustainable Infrastructure and Housing (Promotes land use planning to prevent degradation)	Urban Planners, Construction Engineers, Soil Conservationists, Environmental Impact Assessors	Sustainable Materials Suppliers, Green Building Consultants, Construction Equipment Manufacturers, Architects
	Sustainable Energy (Solar, Wind) (Reduces land degradation by utilizing renewable energy)	Solar Technicians, Wind Turbine Technicians, Renewable Energy Engineers	Solar Panel Manufacturers, Wind Turbine Manufacturers, Electrical Engineers, Renewable Energy Policy Advisors
	Water Conservation and Management (Protects water resources, preventing soil erosion)	Water Management Specialists, Irrigation Engineers, Hydrologists	Water Conservation Equipment Suppliers, Irrigation System Manufacturers, Water Quality Analysts, Logistics Providers
Reduce Land Degradation and Desertification	Agroforestry (e.g., shade-grown coffee) (Enhances soil fertility and prevents erosion)	Farmers, Field Workers, Agroforestry Technicians, Processing Plant Workers, Quality Control Inspectors	Tool and Material Suppliers, Logistics and Transport Companies, Ecotourism Operators, Environmental Education Services, Certification and Compliance Firms
	Sustainable Automotive Industry (Reduces industrial impact on land and resources)	Environmental Engineers, Sustainability Specialists, Water Treatment Technicians, Plant Operations Technicians	Water Treatment Technology Suppliers, Environmental Compliance Consultants, Equipment Suppliers, Logistics Providers
	Green Urban Development (Reduces urban sprawl and	Urban Planners, Green Infrastructure Specialists,	Green Building Material Suppliers, Urban Farming Equipment

LDN Response	Sectors	Direct Jobs	Indirect Jobs
	promotes sustainable land use)	Landscape Designers, Horticulturists	Manufacturers, Energy Efficiency Consultants
	Sustainable Fisheries and Aquaculture (Protects aquatic ecosystems and soil integrity)	Fishery Managers, Aquaculture Technicians, Marine Biologists, Environmental Impact Assessors	Aquaculture Equipment Suppliers, Environmental Impact Consultants, Fish Feed Suppliers, Logistics Providers
	Sustainable Fashion Industry (Reduces environmental impact of textile production)	Textile Workers, Designers, Sustainability Managers, Supply Chain Specialists	Sustainable Fabric Suppliers, Eco-friendly Packaging Manufacturers, Fashion Retailers, Logistics Providers
Restore Degraded Land	Ecological and Landscape Restoration (Revitalizes ecosystems and prevents further degradation)	Reforestation Workers including ecologist, landscape architects, Erosion Control Specialists, Ecological Restoration Specialists, Nursery Workers, Environmental Engineers, Project Managers	Equipment and Material Suppliers, Environmental Consultants, Wildlife Biologists, Land Surveyors, Logistics Providers
	Reforestation and Habitat Restoration (Revives forests and habitats that were degraded)	Reforestation Experts including ecologist, landscape architects, Habitat Restoration Technicians, Conservation Scientists, Plant Ecologists	Tree Nursery Operators, Reforestation Equipment Suppliers, Transportation and Logistics Providers
	Wetland and Riparian Zone Restoration (Restores vital water-filtering ecosystems)	Wetland Restoration Technicians, Hydrologists, Environmental Planners, Coastal Zone Managers	Environmental Consultants, Hydrological Equipment Suppliers, Water Management Specialists, Transport Companies
	Soil Rehabilitation and Erosion Control (Improves soil fertility and reduces erosion)	Soil Scientists, Erosion Control Technicians, Environmental Engineers, Agricultural Workers	Erosion Control Product Suppliers, Soil Amendment Suppliers, Landscaping and Excavation Service Providers
	Coastal and Marine Ecosystem Restoration (Revives marine habitats and coastal ecosystems)	Marine Ecologists, Coastal Restoration Technicians, Coral Reef Restoration Specialists	Marine Equipment Suppliers, Environmental Compliance Consultants, Marine Tourism Operators, Coastal Management Experts
	Land and Ecosystem Restoration through NbS (Uses nature-based solutions for land restoration)	Nature-Based Solutions Specialists, Ecologists, Restoration Project Managers, Urban Green Designers	NbS Technology Providers, Green Infrastructure Suppliers, Landscaping Companies, Local Community Engagement Specialists
	Climate-Smart Agriculture (Restores degraded agricultural land through sustainable practices)	Climate Change Adaptation Specialists, Sustainable Agriculture Trainers, Crop Scientists, Agronomists	Agrochemical Suppliers, Climate Adaptation Equipment Manufacturers, Certification Bodies, Agricultural Consultants



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