CLIMATE CHANGE AND TENURE RIGHTS
Interlinked challenges in Lao People’s Democratic Republic
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Policy brief

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Introduction: unpacking the interlinkages between climate change and tenure rights

This policy brief sheds light on the challenges imposed on rural land tenure security by the risks and impacts arising from climate change, and enables a meaningful policy dialogue on pathways and opportunities to strengthen the protection of legitimate tenure rights in the context of climate change in Lao People’s Democratic Republic. The brief’s objectives are to: 1) provide a broad overview of the major issues involved in the intersection between climate change and land tenure; 2) engage policy-makers and other relevant stakeholders at national and international levels in an informed discussion; and 3) inform further analytical work on these matters. The brief builds on a series of policy briefs aimed at strengthening the recognition and legal protection of customary tenure systems in countries of the Mekong region (FAO and MRLG, 2019), in line with the “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security” (VGGT) (FAO, 2012).

Land use and management (including land tenure rights) and climate change are intrinsically linked. While land provides the basis for human livelihoods and plays a key role in the regulation of the climate system, human use has directly changed more than 70 percent of the ice-free land surface of our planet, causing great environmental impact (IPCC, 2020). Further, approximately 23 percent of total anthropogenic greenhouse gas emissions (GHG) that lead to climate change derive from activities in the sectors of agriculture, forestry and other land uses. Importantly, emissions from agricultural production will likely increase due to projections of population and income growth and changes in consumption patterns around the globe in the coming decades (IPCC, 2020).

Conversely, climate change has an increasing impact on land and terrestrial ecosystems, with important consequences on the way land can be used and, consequently, on land tenure rights. The 2019 Special Report on Climate Change and Land of the Intergovernmental Panel on Climate Change (IPCC, 2020) noted that climate change poses severe risks to human populations and ecosystems due to increases in global mean surface temperature, leading to desertification (e.g. decreased rainfall), land degradation (e.g. soil erosion, vegetation loss), wildfires, permafrost thaw, and challenges to food security (e.g. decreased in crop yields and food supply instabilities). The report further highlights that the most severe projections are focused on tropical regions, including Asia and Africa with the highest numbers of vulnerable people, and where warming is projected to result in unprecedented climatic conditions by the mid- to late twenty-first century. Impacts include high risks of soil erosion, declines in crop yields, sea-level rise and more extreme weather events. Such factors put at risk the livelihoods of farmers and small-scale food producers, foresters and fisherfolk who depend on land and natural resources. This in turn leads to increased displacement and induced migration, both within countries and across borders, disrupted food chains, and enhanced conflicts. Vulnerable groups

1 Of note, the concept of “legitimate tenure rights” is a fundamental part of the VGGT, and includes both legally recognized and socially recognized tenure rights, departing from the vision, which only recognizes statutory rights as being legitimate.
such as indigenous and local communities, women, youth, disabled, elderly and poor are considered among those most at risk. These grave projections also have important consequences for land and resource governance and associated rights across different landscapes. Changing climate conditions can alter how land and natural resources are accessed and used because they imply geographic shifts in resource productivity, resource scarcity, and land-use patterns. Climate change is also considered both a cause and a consequence of land inequality, which has become a growing phenomenon worldwide. Climate change may reduce agricultural yields and force people off the land, large-scale, and the more sustainable land practices of small-scale farmers and Indigenous Peoples are threatened by increased pressure on water and other natural resources due to large-scale, environmentally damaging monocultures, which are contributors to climate change (International Land Coalition, 2020). In addition, ethically and gender discriminative, insecure land and resource tenure rights often disincentivize rural people from investing in sustainable land management practices and forest conservation, ultimately leading to poor mitigation and adaptation outcomes in the face of climate variability (Quan and Dyer, 2008).

The VGGT emphasize the importance of respecting and protecting, as well as safeguarding, promoting and facilitating, the enjoyment of legitimate tenure rights of those likely to be affected by climate change, particularly farmers, small-scale food producers and other marginalized communities (e.g. indigenous and local communities), and groups (e.g. ethnic minorities, women and youth) (VGGT para. 23), and highlight the need to address tenure concerns caused by climate change or natural disasters (VGGT paras. 24 and 25). Important enabling elements in this regard include:

- The recognition and security of all the legitimate tenure rights, especially considering that millions of small holder farmers worldwide hold land under customary tenure systems, enjoying socially recognized tenure rights but frequently lacking legally recognized tenure rights; and the mainstreaming of climate change considerations and responses into land administration and management frameworks (FAO, 2020).
- Tenure security, also considered a direct investment in disaster recovery ability and resilience, as secure tenure rights and systems render land users less vulnerable to eviction or loss of livelihoods in the case of disasters. Accurate and secure land records offer important protection for tenure rights when populations are displaced by climate hazards and disasters (World Bank, 2020a).
- Land and geospatial systems and the data they contain are critical, but also vulnerable to natural hazards and human interference. Relevant strategies to face this include ensuring resilience of land and geospatial information systems by providing digitalized and electronically stored land records; and sharing this information with disaster risk management agencies and the stakeholders, to enable the use of this valuable data in planning and operations (World Bank, 2020b).
- Measures and policies can achieve positive adaptation and mitigation outcomes, while generating revenue and encouraging the rehabilitation of degraded lands. These actions include: a) land-use zoning, spatial planning and integrated landscape planning; b) land degradation neutrality; c) land valuation, as basis for climate-disaster related insurance and compensation schemes; d) securing Indigenous Peoples and customary land tenure regimes, and validating their practices for restoring ecosystems, as much of the world’s carbon is stored in the biomass and soil on the territories of customary landowners, including Indigenous Peoples; and e) incentives, such as payment for ecosystem
services, standards and certification for sustainable production, the use of scientific, local and indigenous knowledge and collective action), all of which can achieve positive adaptation and mitigation outcomes (IPCC, 2020).

“Climate-proofing” land policies and legislation is important for assessing their ability to address impacts and risks arising from climate change on tenure governance (Land Portal, 2020). This includes assessing legal and policy frameworks, with a view to:

- identifying how existing land and resource governance regimes – in particular, types of production systems – will be affected under various climate change scenarios, to strengthen tenure security, especially in climate change “hotspots”;

- mainstreaming climate change considerations and responsiveness in the mandate of land-related institutions, while also enhancing cross-sectoral coordination between land (use planning and management) and climate change;

- adjusting national land administration and spatial planning systems to have the resources, tools and data to adequately predict climate change risks, respond to (potential and estimated) climate impacts and report on climate change adaptation and mitigation actions;

- using new digital technologies and resilient land and geospatial information systems (e.g. electronic land records to enhance tenure security in the face of hazards and disasters), reducing related threats to paper records, and targeting land registration efforts to disaster-prone areas;

- applying a climate lens analysis to the landscape level to clarify how tenure regimes are affected by climate change and enable holistic approaches in response;

- promoting interlinked sustainable land management and climate change adaptation and mitigation actions (e.g. removing barriers to freedom of crop choice by farmers and promoting resilient crop alternatives, which can enhance adaptation and resilience);

- identifying approaches to address socio-economic dimensions of climate change regarding land rights and access, such as tenure rights of displaced people, and the gender gap in tenure rights and access, which further aggravates the impacts of climate change on women; and

- ensuring that mitigation actions do not threaten tenure security: for example, the growing interest in “nature-based solutions” in the land sector, in view of the Paris Agreement’s emissions neutrality target, might mean more opportunities for sustainable land and natural resources management, while potentially leading to challenges such as increased land value and pressures on tenure security (see Borras et al., 2020 for a broader discussion of this issue).

Building on the elements outlined above, this brief aims to analyze the potential climate risks posed to rural tenure rights in Lao People’s Democratic Republic, and to assess the national legal framework’s preparedness to cope with such changes, risks and opportunities for adaptation and mitigation actions.
2. Climate change and tenure rights in Lao People’s Democratic Republic

2.1. Climate change risks and challenges in Lao People’s Democratic Republic

The Asia and Pacific region is home to one-quarter of the global population, including China, Cambodia, Lao People’s Democratic Republic, Myanmar and Viet Nam. This region has the highest proportion of weather-related disasters worldwide, experiencing more than 70 percent of all storms and half of all floods globally (Saghir et al., 2020). Such climate change-related vulnerabilities pose significant threats to agriculture and food security, including drier conditions, higher temperatures, flooding and sea-level rise, and make adaptation a high priority for the region (Saghir et al., 2020). This is particularly relevant in this region as Cambodia, the Lao People’s Democratic Republic, Myanmar and Viet Nam are predominantly rural countries, with rural populations representing 75.8, 63.7, 68.9 and 62.7 percent, respectively, of each country’s total (2020 estimates) (CIA, 2020), which are also heavily dependent on agriculture and strongly based on customary land tenure systems.

In this already challenging context, the Lao People’s Democratic Republic is considered highly vulnerable to climate change, being ranked as the forty-fifth-most susceptible country to the effects of extreme weather events (e.g. storms, floods and heatwaves) in the 2021 Climate Risk Index (compiled with data regarding events in 2019). Of note, historically the country has been moving up in this index: while it was eighty-seventh between 1996 and 2015, it moved up to fifty-second between 2000 and 2019. Further, even though the country’s vulnerability might be lower than that of other countries in the region – potentially because it is a landlocked country and coastal areas are usually among the most vulnerable – the numbers outlined above indicate that extreme weather events are becoming both more frequent and more damaging.

Flooding is a major climate risk, threatening the livelihoods of people almost every year, with 14 out of 17 provinces and the capital Vientiane experiencing floods since 1995 (see Laws and policies – NDC, 2015). As examples of climate threats, flooding in 2005 caused widespread disruption and economic damages estimated at USD 29 million; while drought, another major threat, has affected 6 out of 17 provinces and caused serious problems in 1996, 1998 and 2003 (see Laws and policies – NDC, 2015). The country’s annual rainfall is expected to increase in variability, which, when combined with the increase in air temperature could have significant impacts on water resources, ecosystems and agricultural production. For instance, paddy rice production was expected to be one-third less in late 2019 compared to a normal year because of climate change (Nasar Hayat, FAO Representative, personal communication, 2019). In general, vulnerability mapping exercises show that the areas of Phongsali, Houaphan and Louang Namtha are considered hotspots for the impacts of multiple hazards, including floods, droughts, landslides, sea-level rise, earthquakes, landslides and others (World Bank, 2021).

Lao People’s Democratic Republic is a landlocked country, with a total land area of 236 800 square kilometres, of which
around 80 percent is mountainous, and 20 percent is flat land along the Mekong River (CGIAR, 2021). Agriculture and forestry account for 47 percent of the country’s GDP and for more than 80 percent of total employment. In rural areas, about 620,000 households depend on agriculture for their livelihoods, and more than 80 percent of the farms practice subsistence farming, mostly smallholders with farm sizes averaging less than two hectares. Most agricultural activity is concentrated on rice production in the Mekong River basin, with rice accounting for 85 percent of total crop production, 39 percent of agricultural GDP and more than 80 percent of the total cropped land (CGIAR, 2021). Climate hazards such as flooding and droughts can be very destructive, and it is expected that climate change will increase the frequency and magnitude of such weather events, leading to food insecurity and threats to livelihoods. This is a considerable challenge as over one-third of the population is already in a situation of food insecurity, experiencing rice shortfalls of two to six months per year, which might rise to 46 percent of the rural population, approximately 188,000 households, mostly in lowlands, as a result of loss of access to natural resources, floods and droughts, or a sudden increase in food prices. 

2.2. Lao People’s Democratic Republic’s regulatory framework

2.2.1. Legal and policy framework on land and forests

Its 2015 constitution states that Lao People’s Democratic Republic is a multi-ethnic country that enshrines equality and the right to protect and promote customs (art. 8). Article 17 of the constitution and article 3 of the 2019 Land Law provide that land and natural resources belong to the national community and are managed by the state, which grants “long-term and secure land-use rights” to citizens, legal persons, collectives and organizations. Article 16 of the constitution determines that the state protects and promotes all forms of property rights, including state, collective, private domestic and foreign investment. Article 17 mandates the state to protect the property rights (e.g. the rights of possession, use, usufruct and disposition) and the inheritance rights of organizations and individuals. All lands, minerals, water resources, the atmosphere, forests, natural products, aquatic and wild animals, and other natural resources are a national heritage, and the state should ensure the rights to use, transfer and inherit these in accordance with legislation. The constitution also secures equality before the law for all citizens irrespective of their gender, social status, education, beliefs and ethnic group (art. 35), and enjoyment of equal rights irrespective of gender in the political, economic, cultural and social fields and in family affairs (art. 37). All ethnic groups are also ensured the right to protect, preserve and promote their customs and cultures, with discrimination among ethnic groups being expressly prohibited (art. 8).

The Ministry of Natural Resources and Environment (MoNRE), established in 2011, is the main government authority that oversees the management of all categories of lands. Among its responsibilities, MoNRE implements the National Land Allocation
Master Plan in coordination with relevant ministries (2019 Land Law, art. 12). At the same time, other ministries also have responsibilities for the management of respective land-use categories:

- the Ministry of Agriculture and Forestry is responsible for managing agricultural and forest lands;
- the Ministry of Industry and Commerce for industrial land;
- the Ministry of Energy and Mines manages industrial land in energy and mining areas;
- the Ministry of Planning and Investment for industrial land in Special Economic Zones;
- the Ministry of Public Works and Transport for construction and communication lands;
- the Ministry of Information, Culture and Tourism for cultural lands;
- the Ministry of Defense and Ministry of Public Security for national defense and security lands (art. 31); and
- MoNRE’s Natural Resources and Environmental Information Centre gathers data on land use, including leases and concessions (Land Portal, 2021).

The 1990 Property Law establishes five forms of property: 1) State property, 2) collective property, 3) individual property, 4) private property (property belonging to a private economic unit), and 5) personal property (items for personal use) (art. 2). The revised 2019 Land Law was adopted by the National Assembly on 21 June 2019 and is considered a substantial update, expansion and reorganization of the 2003 Land Law (MRLG, 2021). The 2019 Land Law includes a provision on the general State Policy on Land, which includes the encouragement and promotion of environmentally friendly research and development of national and local know-how for the management, administration, protection, use, development of land, and the rehabilitation of degraded lands (art. 5). This indicates an openness to include matters such as climate change risks and mitigation and adaptation priorities in land policy and practice.

The 2019 Land Law classifies lands in several categories: agricultural land, forest land, water area land (e.g. submerged land or land located around a wetland within other land categories such as swamps, ponds, lakes, saturated grass lands, water spring lands, land at water edges), industrial land, communication land (i.e. land used for public roads, bridges, airport runways, tunnels), cultural land, land for national defense and security purposes, and construction land (art. 21). Further, the law requires the development of a Land Allocation Master Plan, comprising both national and local land allocation plans (arts. 11–13). These plans serve to determine zones and categories of land, consistent with characteristics and potentials of natural resources, geographical locations and specificities, in order to ensure they obtain objectives such as protecting the environment, engaging in sustainable development and national defense and security, and meeting the objective of using 30 percent of all land for agriculture and development, and retaining 70 percent of land for the protection of forests and natural resources. Of note, local land allocation plans are to comprise plans for land allocation and use of natural resources at provincial, district and village levels as well as climate change prone areas (art. 13). Furthermore, land-use strategies (including central and provincial ones) and a land-use plan are to be developed for each land category, containing the directions of land management, management tasks, safeguards and use of land in each zone, policies, mechanisms and measures for implementing land-related activities, among other points. Conversion of land from one category to another requires the
approval of different authorities, including the National Assembly, the Government of the Provincial People's Assemblies, depending on the category and size of land. All of these mechanisms provide important planning tools that should, as pointed out above, take climate change into account. It is important, in view of changing climatic conditions, that planning mechanisms, such as land-use plans, are constantly reviewed, monitored and updated accordingly, to take into account changes in land-use conditions and related impacts on land-use rights. This is also important when considering requests to change land uses through conversions; for instance, to protect the tenure rights of land users whose land, becomes unsuitable to be used as agriculture land due to changing climatic conditions.

The 2019 Land Law contains relevant provisions on the protection of land-use rights of different categories of land. Lao citizens acquire land-use rights through allocation by the state, transfer of land, inheritance, or sale of allocated state land-use rights (art. 126). The law also provides for the protection of customary land-use rights and land title registration in accordance with the laws, recognizing the “acquisition” of customary land-use rights by Lao citizens that occupied and used lands for more than 20 years before the law came into force, subject to certification from village administrative authorities and owners of adjacent land parcels (art. 130). For agricultural land, provincial administrative authorities define the area for agricultural land use within their respective areas, in line with the Land Allocation Master Plan and agricultural and forest sector land-use plans. In addition, the state acknowledges the right of Lao citizens to long-term use of agricultural land by issuing a land title (art. 38). With regards to forest lands, the language in the 2019 Land Law is slightly different, providing that the state acknowledges the use of land by people who have been living and using forestlands before their classification as such, tasking relevant authorities to conduct surveys, data collection and re-allocation of the forest lands, and issue land-use certificates to individuals or families (art. 44).

Forestry is also a key sector in the country, and the government has a “70 percent forestland policy” (MRLG, 2019a). The forestland cover has, however, decreased in the past five decades, decreasing from 70 percent of total land area in 1940 to over 41 percent in 2020 (First Biennial Update Report to the UNFCCC). The main driver of deforestation is commercial agriculture (Department of Forestry, 2018). These challenges gain additional importance as 80 percent of the population is heavily dependent on forest resources (ADB, 2020). The legal framework for the forest sector includes the 2019 Forestry Law, which was adopted around the same time of the 2019 revision of the Land Law, and supersedes the 2007 Forestry Law. While also containing, like the 2019 Land Law, important updates and improvements with regards to its previous iteration, the 2019 Forest Law also falls short of providing more security of forest land tenure rights, including for communal and customary forestland users (MRLG, 2021). Climate change might pose different types of impacts on forests and its uses by different groups, such as degradation and loss of biodiversity and natural resources, with impacts on uses and products, including forest and non-forest ones, which might push populations off their land. In addition, the implementation of carbon markets, which are growing worldwide as approaches to support climate change mitigation, have important implications related to definition of carbon rights. For all these challenges, land tenure security plays a key role, and should therefore be strengthened.
2.2.2. Legal and policy framework on climate change

Lao People’s Democratic Republic is highly climate-vulnerable, but the country’s greenhouse (GHG) emissions are negligible compared to total global emissions. Despite this, Lao People’s Democratic Republic has ambitious plans to reduce its GHG emissions while at the same time increasing its resilience to the negative impacts of climate change (see Laws and policies – NDC, 2015).

MoNRE has a leadership role on climate change, with its Department of Climate Change responsible for managing reporting requirements under the United Nations Framework Convention on Climate Change. Relevant instruments in this area include the National Strategy on Climate Change, approved in 2010, which led to climate change action plans for the period 2013–2020 defining mitigation and adaptation actions in the sectors of agriculture and food security, forestry, land-use change, water resources, energy, transportation, industry and public health. The National Adaptation Programme of Action (2009) contains a country-driven programme to address immediate and projected climate change adaptation requirements in the agriculture, forestry, water resources and public health sectors. Other relevant policy documents include the 2013 Climate Change Action Plan, the 2015 NDC 2015, the 2017 Climate Change Technology Action Plan (2017); and the National REDD+ Strategy (still in draft form). Among the relevant targets included in these documents, the NDC outlines relevant mitigation and adaptation efforts, including supporting the target set out in the National Forestry Strategy to increase forest cover to 70 percent of the total land area by 2025, and maintaining it at that level into the future (see Laws and policies – NDC, 2015).

The Eighth Five Year National Socio-economic Plan (NSEDP 2016–2020) outlined a vision for the country that included a transition from a least developed country to a middle-income country by 2030. Relevant actions in this regard included mainstreaming environmental and climate change considerations into the country’s development plans. The outline of the Ninth NSEDP (2021–2025) also includes climate change as a priority under the fourth planned outcome, which deals with environmentally friendly and green development (Outhavong, 2019).

The 2013 Environmental Protection Law defines principles, regulations and measures related to environmental management, and emphasizes mitigating anthropogenic impacts and pollution. Relevant provisions include a requirement of strategic environmental assessments that consider climate change effects (art. 19), and preventive measures against natural disasters, such as planting trees, and constructing dikes and drainage canals (art. 20). In 2019, the Lao government enacted Decree No. 321 on Climate Change, to govern the management, monitoring and inspection of climate mitigation and adaptation efforts in the country. The decree works as an umbrella law to create an institutional framework that enables climate action in the country, seeking to mainstream climate change into the national and local planning, and to promote unified and collaborative government action on climate change. Important elements in the decree include the creation of a national data and information system on climate change, managed by MoNRE, and a framework for undertaking climate vulnerability assessments in adaptation planning (ADB, 2020).

Also in 2019, a Disaster Management Law was passed, creating a risk information system and establishing national rights and responsibilities for disaster management. The law provides that each sector is responsible for evaluating potential risks and reporting to the National Disaster Management Committee, and contains
provisions for disaster risk reduction and early warning (ADB, 2020). The Plan of Action for Disaster Risk Reduction and Management in Agriculture (2014–2016), although outdated, represented an important adaptation-related policy, recommending that the Ministry of Agriculture and Forestry integrate risk prevention and mitigation into agricultural activities, in five priority areas, including:

a) adapting to climate change in agriculture,
b) monitoring and assessing risks and vulnerabilities posed by climate change,
c) raising awareness on climate change-related impacts,
d) reducing and managing disaster risks, and
e) adapting to climate change (ADB, 2020).

3 Copies in English of the Climate Change and Disaster Management laws have not been found at the time of writing this brief.
In addition to securing land tenure rights, land-use planning is fundamental for both climate change adaptation and mitigation efforts, and for protecting land tenure rights from potential and actual risks by analyzing climate impacts on different lands. Despite the provisions of the 2019 Land Law outlined above, including the requirements to take climate change into account, it is reported that participatory land-use planning activities are numerous, especially those supported by donor-funded projects, but have covered a limited area in practice. Further, in rural areas where titling programmes have had limited access, land-use plans have provided limited tenure security for communities over land and forest resources (MRLG, 2019b). Addressing these limitations is an important element in facing the impacts of climate change.

Displacement, loss of land and induced migrations are also relevant challenges arising from climate change and increased extreme weather events. The Disaster Management Law of 2019 offers important mechanisms to prevent and deal with disasters. Further, safeguarding the tenure rights of those displaced is also a key concern. The 2018 Law on Resettlement and Vocation outlines principles, rules and measures regarding the supervision, inspection and monitoring of resettlement and vocation, to contribute to national socio-economic development, and to safeguard national defense and security. The law provides the right to resettlement and vocation of citizens, viewed as a strategic measure for rural development and poverty reduction. People living in high-risk areas for natural disasters, such as flooding, are included in general resettlement programme measures. These instruments offer important provisions to safeguard the tenure rights of rural land users whose land is at risk or affected by climate change. At the same time, as a new instrument, it will be important to follow up on its adequate implementation.
Another topic of concern is the need to proactively upgrade the national land administration system to cope with climate change challenges and risks. Two major aspects are relevant in this regard: 1) access to data on climate change and likely impacts, as a basis for improved decision-making; and 2) the existence of an accurate and reliable land information system, including transition into a digital system of land tenure records to avoid risks posed to physical records by the increasing occurrence of natural disasters (Land Portal, 2020). The 2019 Land Law includes relevant provisions on land administration, covering, for the first time, land information systems, which can also be considered a first step in modernizing the country’s regulatory framework for land administration. It also determines land title registration, including cadastral maps and land registers (art. 94), and states that land titles are the only piece of evidence of land-use rights (art. 99). These are important updates, as previously it was reported that land titling remains limited mainly to urban and peri-urban areas, leaving the majority of rural land untitled and unregistered. The Lao Land Titling Programme, initiated in 1997, focused on issuing titles in urban areas and, in 2003, began to pilot titling in rural areas (MRLG, 2019b). Currently, a World Bank project is being developed that will aim to title 1 million rural parcels (World Bank, 2019). Enhancing the land titling and registration system, including the development of modern and electronic land and geospatial information systems, would enhance tenure security of rural populations. One potential starting point to address this could be to draft implementing decrees and regulations to the Land Law, to promote an e-government approach to land administration and management (MRLG, 2021).
4. Recommendations

In view of the above, the following recommendations can be made:

- Consider climate change risks and impacts in the implementation of the newly adopted 2019 Forestry and Land Laws, and of the Prime Minister’s Agreement #10 of 2019 of the national land use master plan, where land-use zoning and planning at local levels are prescribed. In particular, the consideration of spatial planning and climate change would be of special relevance: a) of predicted impacts on land use and related changes for land tenure; b) to identifying how existing land and resource governance regimes, in particular types of production systems, will be affected under different types of climate change scenarios; and c) strengthening tenure security in climate change “hotspots”. Consideration should also be given to social protection plans for areas in which climate change and extreme events are predicted to hit the hardest in order to help people recover faster or to transit to other practices or regions in the country, together with increasing capacity to adapt, so that areas where land is owned can be used better and the need for migration might be decreased.

- Consider multi-sectoral spatial planning that includes climate change risks and opportunities.

- In the face of negative impacts posed by climate change – such as increased droughts, floods and storms, and increased temperature changes – streamline and advance ongoing efforts of land registration and titling in order to increase tenure security, and promote more systematic prioritization of areas for land registration, including their vulnerability to climate change disaster events and opportunities, alongside other parameters including poverty. One potential approach could be to target registration activities to most disaster (flood)-prone areas as priority measures for intervention. Also consider providing capacity building to adapt to changes in climate, for example by diversifying crops and promoting integrated agricultural and farming systems.

- Improve land information systems, and consider improving geospatial and digital systems, which would not only reduce chances of land-use rights records being destroyed, but also provide much more accurate information on land uses that can be instrumental in the face of climate change. Sharing such data with relevant stakeholders such as planning and disaster risk resilience authorities is also recommended.

- Improve early warning systems, which will help with anticipating land use changes, and also improve climate projections, which will help to estimate future land-use changes and needs.

- Enhance recognition and protection of land tenure rights, as climate change might exacerbate already-existing challenges to tenure security within the different land categories, especially agriculture and forest lands. Also emphasize the special challenges faced by women, Indigenous People, customary land users and forestland users, and the disproportionate impact on their tenure security due to climate change threats and risks.

- Use existing legal instruments related to disaster management and resettlement, with appropriate interpretation, such as provisions of the Law on Resettlement and Vocation and of the Disaster Management Law, to protect land-use rights that are threatened by the risk of displacement and by changes in the suitability land uses, due to climate change.
References


Laws and policies

2013 Environmental Protection Law
2019 Forest Law
2019 Land Law
2019 Disaster Management Law
1990 Property Law
2018 Decree on Resettlement and Vocation
Nationally Determined Contribution (NDC, 2015)
National Strategy on Climate Change (2010)
National Adaptation Programme of Action (2009)


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2018 Decree on Resettlement and Vocation
Nationally Determined Contribution (NDC, 2015)
National Strategy on Climate Change (2010)
National Adaptation Programme of Action (2009)