

Anafo, David; Asare-Nuamah, Peter; Beuchelt, Tina

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Assessment of the levels of synergies in the land policies of Ghana, Benin and Senegal

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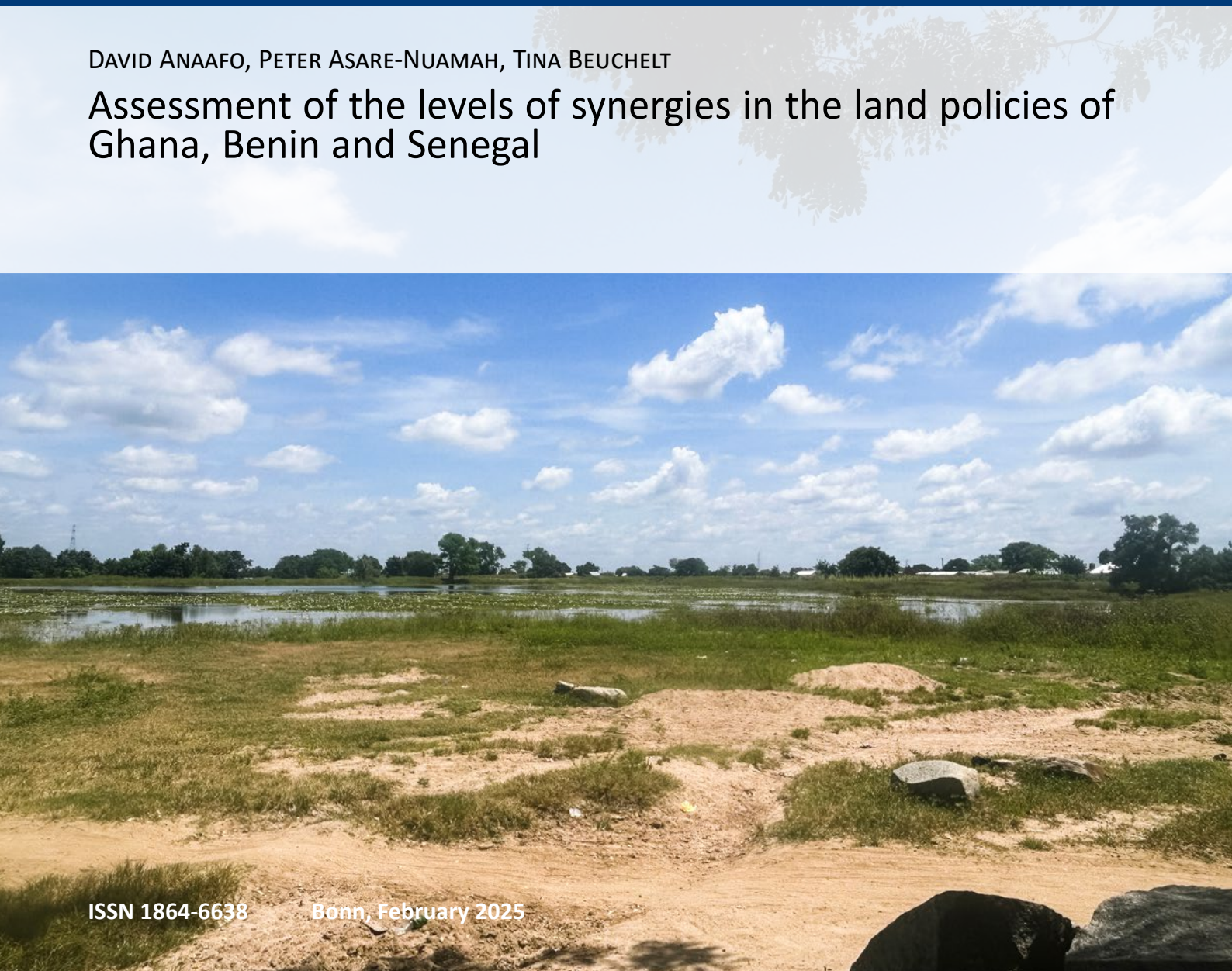
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Working Paper 240

DAVID ANAAFO, PETER ASARE-NUAMAH, TINA BEUCHELT

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Contact authors

Dr. David Anafo
West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL)
Competence Centre
Ouagadougou – Burkina Faso
anafo.d@wascal.org

Dr. Peter Asare-Nuamah
Senior Researcher
Center for Development Research (ZEF)
Department of Ecology and Natural Resources Management
University of Bonn
Genscherallee 3
53113 Bonn Germany
pasarenu@uni-bonn.de

Dr. Tina Beuchelt
Project Leader of INTERFACES
Senior Scientist
Center for Development Research (ZEF)
Department of Ecology and Natural Resources Management
University of Bonn
Genscherallee 3
53113 Bonn Germany
tbeuchel@uni-bonn.de

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David Anafo, Peter Asare-Nuamah, Tina Beuchelt

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Abstract

Various policies determine how land is accessed and used in many African countries. Often, the goals of these policies either diverge from, or reinforce each other in intricate ways. In the present study, we sought to understand the levels of synergies or otherwise, among various policies on land management and how they promote sustainable land management practices in Ghana, Benin and Senegal. This is important for any attempts at land tenure reforms in the wake of increasing land conflicts, rapid population growth, environmental degradation and climate change, hampering agricultural production. The study was undertaken through the review of published research work, policy documents and other grey literature in relation to the study countries. The study finds that in the three different countries, sustainable land management policies aim to promote equitable access to land through market-driven mechanisms. Mainly, the aim is to ensure easy access to land for commercial agriculture and other forms of investments. The policies, however, contradict each other in different ways. In Ghana, for instance, biodiversity conservation, promotion of sustainable management of savannah woodland and the promotion of ecotourism are inconsistent with the quest to promote small and medium enterprises in forest and wildlife resources. In Benin, the pursuit of resource conservation contradicts with the national goal for agricultural intensification and commercialization. And in Senegal, while national land policy objectives are implemented through the decentralized governmental structures, those on agriculture and the environment are implemented through centralized systems. We also find that all countries have attempted to decentralize the governance of land and natural resources, even though there is evidence of centralization especially with regards to mineral resources. Among the three countries, Benin stands out as one with deliberate policy pronouncements on the land access and ownership rights of women and other marginalized groups. Critical issues such as environmental degradation and climate change have not received any serious attention in the policies of the study countries. It is recommended that future policy formulation or review should be participatory including a diverse range of stakeholders such as gender experts, youth groups, civil society, traditional authority, and scientists. Policies should also deal with cross-cutting issues, including environmental degradation.

Keywords: Sustainable Land Management, Participatory policy making, National land policies, Synergies

ONE: GENERAL INTRODUCTION

Sustainable Land Management (SLM) is defined as “a system of technologies and/or planning that aims to integrate ecological with socio-economic and political principles in the management of land for agricultural and other purposes to achieve intra- and intergenerational equity” (Hurni 2000, p. 85). SLM has gained significant attention in global governance and development agenda. The Millennium Development Goals and their successors, the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction, among others, prioritize the need to promote SLM as a veritable response to global development challenges. For instance, the SDG 15 links water, biodiversity and ecosystems conservation and protection, halting desertification, deforestation, and land degradation, and restoring degraded land to SLM and its associated resources (United Nations, 2015). The guiding principles of the Sendai framework also requires of nations protect all persons and their property, health, livelihoods and productive assets, including cultural and environmental assets (UNDRR, 2015).

In Africa, the need to promote SLM is urgent for multiple reasons. Africa’s development is underpinned by its land and natural resource potentials. In many African economies, such as Chad, Democratic Republic of Congo, and Burkina Faso, agriculture contributes the largest share to their respective Gross Domestic Product (GDP) (about 25 to over 40%) and foreign exchange income (AUC et al., 2010). The agriculture sector also employs the majority of the labour force (about 60%) on the continent and serves as the main source of livelihoods, income and food security, particularly among the vast majority of the African rural poor and marginalized population, including women and children (AGRA, 2021). However, amidst its vast arable land and the importance of agriculture to development, Africa’s agriculture is often done with limited external inputs and mechanization levels, suffering from land degradation and with yields far lower than international yield potentials (Giller, 2020).

Climate change and its impact on droughts, floods, high temperature, and poor rainfall, adversely further affect agricultural productivity (IPCC, 2022). Studies have shown that the production of staple crops such as grains and cereals which support the food security strategies of many African countries is likely to reduce drastically between 20% to 50% due to climate change (Sultan & Gaetani, 2016), further worsening the state of food insecurity on the continent. This is problematic given that the United Nations report on the state of food insecurity in the world indicates that Africa has one of the largest food insecure and malnourished populations, globally (FAO et al., 2021). Coupled with this, climate change will significantly reduce the contribution of agriculture to development, with an average share of agriculture to GDP shrinking to about 15% (Oxford Business Group, 2021).

In addition to agriculture, natural resource exploitation contributes enormously to development in many parts of the continent (AUC et al., 2010). For instance, in Nigeria, oil exploration forms about 60% of national GDP. In Ghana the extraction of gold, diamonds and other precious minerals contribute significantly to the country's foreign exchange income. The excessive environmental pollution that accompany the extractive sector in Africa and the concomitant resource-fueled conflicts raise questions on the ability of states to ensure sustainable land and natural resources management while advancing development (Aigbe et al., 2023). In Nigeria, gas flaring has increased the release of toxic substances into the atmosphere particularly in the Delta region, posing concerns for the health of the population (Ako & Olawuyi, 2017). Similarly in Ghana, the financing of illegal mining of gold and other precious minerals (known in the local parlance as *galamsey*) by powerful individuals has resulted in excessive pollution of water bodies, land degradation, and contamination of arable lands (Barenblitt et al., 2021; Owusu, 2022). Being one of the natural resource-rich countries in Africa, the persistent conflicts and political instability in Congo has been associated with the question of ownership and control of land under the extractive sector (AUC et al., 2010).

The population of African countries is growing at a high rate. Africa has the largest population growth rate in the world and future projections indicate that the continent's population is likely to double by 2050 (Mo Ibrahim Foundation, 2021). Rising population coupled with degradation of arable lands will expose the continent to food insecurity and intensify pressure on natural resources, including land. Land degradation and low agriculture productivity would require robust adoption of agriculture mechanization and sustainable intensification, which are currently low on the continent (AGRA, 2021; Gurib-Fakim, 2015).

Nevertheless, recognizing the need to promote SLM as it is tied to sustainable growth and development on the continent, African governments have made efforts through the formulation and implementation of policies, strategies and actions that seek to scale up SLM. At the continental level, policies like the Comprehensive African Agriculture Development Programme (CAADP), Agenda 2063, Framework and Guidelines on Land Policy in Africa, the Maputo Protocol and the Malabo Declaration prioritize the need for state governments to initiate structures and strategies for SLM as critical component of Africa's development. The Framework and Guidelines on Land Policy in Africa in particular recognize that SLM is *sine qua non* and central to the continent's development (AUC et al., 2010).

The West African subregion is described as a climate sensitive hotspot where climate change coupled with changes in land use and rapid urbanization present significant challenges to agriculture and food security (Ahmed et al., 2016). Many of the countries in the sub-region are severely affected by creeping desertification, land degradation and drought. The cumulative effects of these are loss of

soil fertility, resulting in poor agricultural productivity (Nchanji et al., 2023). These can also lead to food insecurity and social crises, further deepening the poverty situation. Coupled with the deteriorating land quality is rapid population growth and urbanization across the West African sub-region. Cumulatively, these are complicating the current and future food requirements of the sub-region (Nchanji et al., 2023). Consequently, state governments including those of Ghana, Benin and Senegal have instituted measures for the promotion of SLM. However, there is intense competition between the need to promote economic development on the one hand and environmental protection on the other hand, with many countries prioritizing the former (Aigbe et al., 2023). It is important to promote SLM in the region because land is not just a commodity but could also be a gift and has sacred relevance for many communities (Anafo, 2015). This paper therefore reviews the various land management policies of Ghana, Benin and Senegal to distil a synthesized knowledge and understanding of the policies and strategies for promoting SLM, agriculture and food security in the respective countries and to unpack ways by which consistency and harmony between diverse land management policies can be achieved. Specifically, the study aims at achieving the following objectives:

1. Review the future visions and plans of the selected West African countries pertaining to sustainable land management, agriculture and food security.
2. Analyze the synergies in individual country's policies and their strategies for sustainable land management, agriculture and land use.
3. Assess the levels of inconsistencies in individual country's policies and strategies for sustainable land management, agriculture and land use.

Our approach included a desk review, relying on the various national policies that relate to agriculture, land management and tenure as well forestry and food security (see Table 1). This was complemented by a review of the related literature. In the next chapter, we analyse Ghana's land management policies and their synergies, followed by the land policies in Benin and their associated synergies in chapter three. Chapter four introduces the land policies in Senegal and their synergies. In chapter five, we conclude with recommendations for strengthening sustainable land management in Ghana, Benin and Senegal.

Table 1: Policies and Pieces of Legislation Reviewed

Ghana	Benin	Senegal
<ol style="list-style-type: none"> 1. The National Land Policy, 1999 2. The Food and Agriculture Sector Development Policy (FASDEP I), 2000 3. The Food and Agriculture Sector Development Policy (FASDEP II), 2007 4. The National Environment Policy, 2014 5. The Forest and Wildlife Policy, 2012 6. The Minerals and Mining Policy, 2014 7. The National Urban Policy Framework of 2012 8. The Minerals and Mining Act, 2006 (Act 703) 9. The National Development Planning (System) Act, 1994 (Act 480) 10. The Land Act, 2020 (Act, 1036) 	<ol style="list-style-type: none"> 1. The Rural Land Tenure Act, 2007 2. Strategic Plan for Agricultural Sector Development, 2017 3. The Forest Code, 1993, Law No. 93-009 4. The Petroleum Code, Law No. 2019-06 of 2019 5. The Mining Code, Law No. 2006-17 of 2006 6. Law on the organization of the territorial administration of the Republic of Benin, Law No. 97-028 7. Law on the financial system of municipalities in the Republic of Benin, Law No. 98-007 	<ol style="list-style-type: none"> 1. The Agro-Sylvo Pastoral Guidance Law (LOASP), 2004 2. Emerging Senegal Plans, 2019 3. The Environment and Natural Resources Sector Policy Letter, 2016 4. Forest Code, Law N° 93-06, 1993 5. Decree No. 96-1134 of 27 December 1996 6. The Mining Code, Law No. 2003-36 7. National Biodiversity Strategy and Action Plan (NBSAP), 1998 8. National Plan for Land Use and Territorial Development, 2013

TWO: REVIEW OF GHANA'S LAND MANAGEMENT POLICIES

Ghana is one of the countries on the African continent with intractable land sector problems (Nchanji et al., 2023). The country responded with the formulation of a National Land Policy (NLP) in 1999 and the recently enacted Land Act, 2020 (Act 1036) seeking to address these challenges. Some studies (Schoneveld and German, 2014; Britwum et al., 2014; Nchanji et al., 2023) identify the land sector problems in Ghana to include unequal land tenure rights, lack of clarity between statutory and customary tenure, rising conflicts and contestations over land, undocumented customarily titled lands, land tenure that does not address the experiences of heterogeneous groups, weak land administration system, multiple land sales, illegal mining, haphazard development, wildfires, deforestation, indeterminate boundaries of customary-owned lands, land degradation and poor land use planning. Aside the NLP, which still represents the overarching policy document on land in Ghana, several other policies with relevance for sustainable land management, including the Food and Agriculture Sector Development Policy, the National Environment Policy, the Minerals and Mining Policy, and the Forest and Wildlife Policy were also developed to help deal with some specific land management issues. This review seeks to unpack the synergies between the various policies for the promotion of sustainable land management in Ghana.

2.2 Overview of Relevant Policies for Sustainable Land Management

2.2.1 The National Land Policy (NLP) of Ghana

Efforts aimed at formulating a NLP for Ghana began in 1994 following the inability of several colonial and post-colonial land policies to resolve the land sector challenges. Following several consultative processes, a draft policy was tabled for discussion at a national stakeholder's workshop in 1997 and finalized in 1999 (Aryeetey, 2007). The NLP sought to ensure equity and efficiency in land allocation and land holding to maintain a stable environment for sustainable social and economic development. Several administrative and institutional interventions were piloted and implemented based on the objectives of the NLP. These were the Land Administration Projects I and II and the creation of Customary Land Secretariats to oversee the management of lands held under customary allodium (Anaafo, 2015). The main goal of the NLP is to promote equitable access to land through the market mechanism. To achieve this goal, several strategies including securing Ghana's international boundaries and shared water resources; facilitating equitable access to land; security of tenure and protection of land rights; ensuring planned land uses; and developing effective institutional capacity and capability were implemented with the aim of reducing inefficiency and corruption, bringing land disputes and conflicts under control and decentralizing land administration services to the local level (Ministry of

Lands and Forestry, 1999). The Land Administration Projects have run their full course while several Customary Land Secretariats are still being established by the Lands Commission. However, the evidence emanating from some studies (Schoneveld and German 2014; Akafari et al., 2021) indicates that the land sector problems remain unresolved. As a response, Act 1036 of 2020 was enacted with the anticipation that it will help bring efficiency into the land market of the country. The Land Act, 2020 (Act 1036) has as its objective “to revise, harmonise and consolidate the laws on land to ensure sustainable land administration and management, effective and efficient land tenure and to provide for related matters.”

2.2.1 Agricultural and environmental policies

Several policies support agricultural development and environmental conservation in Ghana. The most important among them are those formulated by the respective sector ministries, i.e., the Ministry of Food and Agriculture and the Ministry of Environment, Science, Technology and Innovations, for agriculture and the environment, respectively. One of the far-reaching agricultural sector policies is the Food and Agriculture Sector Development Policy (FASDEP I) which was implemented from 2000 – 2006 with the aim of modernizing the agriculture through accelerated agricultural growth and development and strengthening the private sector as the engine of growth. A poverty and social impact analysis on FASDEP I indicated that the aim of modernizing smallholder agriculture was unrealistic due to poor targeting, weak problem and situational analysis and weak mechanisms for broad stakeholder involvement (Ministry of Food and Agriculture, 2007).

Based on the results of the review, FASDEP II was formulated as a successor to FASDEP I. While FASDEP I focused on agriculture sector modernization, FASDEP II focused on the sustainable use of all resources within the agriculture sector, the promotion of commercialization and market-driven growth, improving food security and the diversification of income among the poor farmers engaged in the sector (Ministry of Food and Agriculture, 2007). The FASDEP II argues that “with an estimated 64 percent of the natural wealth of Ghana locked up in crop lands, there is the need for more focused attention to address poor agricultural land management.” Instructively, both FASDEPs recognized that Ghana’s agriculture sector was heavily reliant on the ecology, and characterized by extensive crop and livestock production systems, hunting, rain-fed agriculture, and fish from natural water bodies. They further observed that traditional practices including bush burning, and the improper use of technologies such as agro-chemicals were challenges to agricultural transformation, particularly for the savannah regions.

Closely related to the FASDEPs is the Ghana Agriculture Sector Investment Programme (GASIP) which aims at boosting and scaling up investment in agriculture value chains. Sub-component 1.3 of the GASIP

advocates for the need to build climate resilience in the sector through conservation agriculture, efficient water usage techniques coupled with climate-friendly irrigation systems. In recent times, various policy initiatives including the Youth in Agriculture Programme, Planting for Food and Jobs, Rearing for Food and Jobs, and Youth in Afforestation have been implemented by the Government with the aim of boosting youth involvement in the sector (Ministry of Food and Agriculture, 2017). Interestingly, women, who are important actors in the agriculture value chain (Doss et al., 2018) have not been specifically targeted as is the case with the youth.

Regarding the environment, the National Environment Policy of 2014 was elaborated in line with the goals and themes of the Ghana Shared Growth and Development Agenda (GSGDA II). The National Environment Policy is anchored on specific policy goals including to:

1. reconcile economic development with conservation.
2. promote the sustainable use and maintenance of Ghana's natural resources.
3. maintain ecosystem and ecological processes and ensure sound management of natural resources and the environment.
4. adequately protect against harmful impacts and destructive practices and preserve biological diversity.

Essentially, the National Environment Policy seeks to ensure the integration of environmental considerations into sectoral, structural and socio-economic planning at the national, regional, district and grassroot levels (Actionaid Ghana, 2019; Botchway, 2021). These are to be achieved through strategies that include capacity building of the diverse stakeholders, revision of existing legislation, establishment of dispute resolution mechanisms, self-regulation through promotion of compliance, promoting equitable access to natural and cultural resources, ensuring balanced spatial development, promotion of sustainable land management practices, and instituting effective public participation mechanisms. The extent to which these have been achieved remains unclear (Botchwey, 2021).

2.2.2 Forestry and wildlife policies

The Forest and Wildlife Policy of 2012 is the main framework guiding the sector in Ghana. It was formulated through wide stakeholder engagement as a successor to the 1994 Forest and Wildlife Policy on the reason that there were demonstrable changes in the structure and form of the forest and wildlife sectors of the country (Ministry of Lands and Natural Resources, 2012). It became necessary to formulate a new policy for the sector due to emerging global issues such as the Voluntary Partnership Agreement (VPA), Forest Certification, Climate Change and Reducing Emissions from Deforestation and Forest Degradation (REDD) which had implications for the sector and dependent local livelihoods. The

policy goal was therefore to find new and innovative measures to halt and reverse the pace of deforestation and forest degradation in the country by emphasizing the non-consumptive values of forest and wildlife resources while ensuring a balance between timber production and marketing to satisfy domestic wood demands (Ministry of Lands and Natural Resources, 2012).

The Forest and Wildlife Policy seeks to achieve several objectives, including the promotion of transparency and efficiency in the management of forest and wildlife resources, participation of forest fringe communities in the management of forest resources, increased biodiversity conservation and implementation of climate change adaptation and mitigation measures. Some strategies to achieve the policy objectives include the preparation of forest management plans, eliminate the practice of mining in forest reserves, undertake regular biological inventories on forests, promote transboundary corridor management with neighbouring countries, increase community participation in forests and wildlife management, develop incentive system to promote investments in community based eco-tourism, and promote the establishment of commercial and small holder wood fuel plantations. Recent evidence, however, show that not much has been achieved as Ghana's forest have depleted significantly under the weight of agricultural expansion, unsustainable wood extraction, mining in forests, coupled with weak governance practices (Afele et al., 2022).

2.2.3 Mining and other natural resources policies

Ghana has a long history of minerals extraction, particularly gold that dates to the late 1400. Mineral resources of Ghana are owned by the people of Ghana but held in trust by the President in accordance with relevant provisions of the 1992 Constitution. In accordance with the Constitution, the country recently enacted the Minerals and Mining Act, 2006 (Act 703) to replace the Minerals and Mining Law, 1986 (PNDCL 153). The Minerals and Mining Policy of 2014 also provides the framework for mineral resources exploration and extraction in Ghana. The policy identifies illegal small-scale mining as the main challenge facing the sector. It further observes that the practice increases the environmental and social cost of mining as it results in the pollution of water bodies and destruction of farmlands. Illegal small-scale mining in Ghana is a menace that threatens lives and livelihoods, destroys the natural environment and pollutes water bodies (Adranyi et al., 2023). Considering these challenges, the Minerals and Mining Policy seeks as its objectives to diversify the mineral production base of the country, generate geo-scientific data to promote investments, provide opportunities for artisanal small-scale miners, promote environmental stewardship in the exploitation of mineral resources, and use mining to catalyse development across different sectors of the economy.

Some strategies have also been outlined towards the achievement of the policy objectives for sustainable land management. These include decentralizing the offices of the Minerals Commission for

the provision of technical assistance to small-scale miners, demarcating areas suitable for small-scale mining, providing financial support to small-scale miners to improve upon their operations and educating, training and providing logistics to enhance corporate governance, efficiency and safety of small-scale mining operations. Scientists call for a review of the Minerals and Mining Policy and the Minerals and Mining Act, 2006 (Act 703) to reflect emerging trends on the mining landscape of the country by addressing the growing menace of illegal small-scale mining and the antecedent consequences (Antwi-Boateng & Akudugu, 2020). Stacey, (2025) observes that illegal small-scale mining in Ghana has become widespread, posing environmental problems, and embedded in local political economies, thus making it difficult to curtail. The practice weakens national strategies on mining and the environment, as well as policies and strategies for sustainable agricultural production, food security, attaining the SDGs, and good governance objectives (Stacey, 2025). The persistence of illegal small-scale mining point to weak policy implementation across scales of governance in the country.

2.2.4 Land use and spatial planning policies

The main policy and regulatory instruments in this regard are the National Development Planning (System) Act (Act 480) of 1994, the National Urban Policy Framework of 2012, the Land Use and Spatial Planning Act (Act 925) enacted in 2016, and the National Building Code promulgated in 2018. Currently, Act 925 has the highest impact on land use and spatial planning in the country. Act 925 aims to revise and consolidate land use planning laws, promote a decentralized system of planning for sustainable land development, promote and ensure judicious use of land and provide for spatial aspects of socio-economic development and related matters.

The changes introduced by Act 925 are the requirement for a three-tier planning system founded on the preparation of Spatial Development Frameworks at the National, Regional and Local Levels, and the preparation of Structure and Local Plans at the district level to regulate the development of human settlements. Notwithstanding these changes, the planning system has failed to promote sustainable land use due to the absence of agricultural zoning, urban sprawl, weak institutional capacities and the persistence of land sector problems (Cobbinah & Darkwah, 2017; Cobbinah, et al., 2015). It appears that while the NLP and other land policies seek to promote access to land for diverse uses, the focus of land use and spatial planning in Ghana is solely on settlement development. The neglect of other land uses is blamed as the driver for the loss of peri-urban agricultural and forested lands to settlement development (Ashiagbor et al., 2019).

2.3 Synergies among Land Management Policies

Ghana's land sector policies largely cohere on one central issue, i.e., to improve access to land for diverse socio-economic activities. That is the overarching goal of Ghana's National Land Policy, and it has found expression in the diverse land policies of the country. In the agricultural sector for instance, the FASDEPs and GASIPs seek to boost investment in agriculture by enabling access to land for large scale farming as a response to food insecurity. The Forestry and Wildlife Policy also seeks among others to promote investment in commercial and smallholder wood fuel plantations. And the Minerals and Mining Policy is demarcating tracts of land for artisanal small-scale mining. Essential, however, is that the different policies promote a market-driven approach to improving access to land (Asaaga and Hirons, 2019) and have in the process neglected the traditional sacred and gift values of land (Anafo, 2015). Meanwhile, there are areas of inconsistency among the objectives and/or strategies of the diverse land policies.

1. There are conflicting views between the Forest and Wildlife Policy and the National Land Policy. The Wildlife and Forest Policy is also internally inconsistent in terms of its policy objectives. It is inconsistent with the NLP because its focus on biodiversity conservation and sustainable utilization of savannah woodlands, is at variance with the NLP's goal of expanding land access through the market mechanism. It is also internally inconsistent because it pursues both biodiversity conservation, promotion of sustainable management of savannah woodlands and the promotion of ecotourism while also promoting exploitation through the establishment of commercial wood fuel plantations. Globally, the evidence shows that most plantations exist on, and their expansion takes place on, biodiversity hotspots (Fagan et al., 2022). Given that plantations are less biodiverse (Tudge et al., 2023), encouraging the establishment of wood fuel plantations can be counterproductive to biodiversity conservation efforts.
2. The minerals and mining policies and legislation seem to have been formulated with large-scale commercial mining as the object. Meanwhile scientific evidence shows that illegal small-scale mining is adversely impacting rural livelihoods and polluting water resources. It is leading to competition for arable land among rural farmers as significant portions of rural lands have been taken over by small-scale miners (Baffour-Kyei et al., 2021; Adranyi et al., 2023). The neglect of the small-scale sector by the minerals and mining policy could present small-scale miners with convenient loopholes with which to pursue their activities. Should that happen, access to arable land for agriculture and other non-mining activities, lives and livelihoods, the natural environment and water bodies could be severely affected.

THREE: REVIEW OF BENIN'S LAND MANAGEMENT POLICIES

This chapter reviews the various land policies of Benin to understand the synergies among and between them as well as their compatibility with broader national goals and objectives on sustainable land management as expressed through the national land policy. The review begins with an assessment of the national land policy to unpack its goal and objectives as well as the guiding principles and strategies. This is followed by a review of other relevant land policies focusing on areas such as agriculture and the environment, forestry and wildlife, mineral resources, and land use and spatial planning.

3.2 The National Land Policies of Benin

The Republic of Benin has no national land policy per se. Benin practices the hierarchist model of land governance (Davy, 2009). From Independence until 2007, lands that were not registered on behalf of private individuals were supposed to be in the public domain of the state. Mainly, “immatriculation” is the only route to private land ownership (Chauveau et al., 2006). Through “immatriculation”, which is predominantly practiced in Francophone African countries, the state grants private ownership, i.e. titles over land to individuals. Any land which is “unimmatriculated” is subsumed under “State Private Domain” with customary rights given varying degrees of recognition (Chauveau et al., 2006, p. 51).

While this review will not delve into the historical evolution of land policy reforms in Benin, the most salient and contemporary land sector issues are examined. Benin embarked on land reforms in 2004 under the auspices of the Ministry of Urban Planning and the Millennium Challenge Account-Benin with a view to harmonizing land law (Delville, 2019). Two main reforms were pursued. The first was a consequence of the Rural Land Tenure Act, 2007 (*Loi Portant Régime Foncier Rural*). The 2007 Act provided the legal basis for the mapping of customary land rights held by individuals and social collectives in the “*Plan Foncier Rural*” (PFR, Rural Land Map) (Delville, 2019). The PFR was pioneered by the Millennium Challenge Account with the goal of identifying, mapping, and registering individual and household rights within customary tenure regimes (Goldstein et al. 2016). This initiative marked a new era of land management in Benin as it led to a cessation in the principle of state land ownership (Chauveau et al., 2006). The second initiative, which was national in character, sought to standardize and harmonize land law by enabling ease of access to land title through a system of improved land administration. This was the goal espoused in the 2011 Land Policy Statement (MUHRFLEC, 2011) which led to the adoption of the Land and Domain Code in 2013 and was amended in 2017. As a result of this, the *Agence Nationale du Domaine et du Foncier* (ANDF, National Agency of Land and Domains) was established in 2016 to oversee the reform processes (Delville, 2019).

Land law and policy reforms in Benin sought mainly to substantially enhance the productivity of the agricultural sector by:

1. Eliminating overlapping customary and state tenure systems, which were presumed to be the main sources of insecurity in land.
2. Eliminating the cost and time constraints which discouraged rural smallholders from seeking state-issued land titles.
3. Eradicating land conflicts, which were blamed on the absence of state-based documentation of land rights and locally accessible land registries.
4. Improve sustainable land management behaviours by incentivizing rural households to engage in land practices that increase agricultural productivity.
5. Improve the security of tenure for women through registered titles and thereby eliminating the continued existence of derived access and use rights to land and other resources, which are relatively insecure (Yemadje et al. 2014; Giovarelli et al. 2015; World Bank Gender and Innovation Lab (WBGIL) 2019).

Predominantly, for the most part, land law and policy actions of the Government of Benin seek to simplify the processes of accessing land to boost investments in land and improve agricultural productivity. The Government of Benin is also deliberate about improving tenure security for women, having specifically captured it as a goal of the land reform processes. However, these are only attainable to the extent that diverse land policies are aligned to and compatible with the national goals and objectives.

3.2.1 Agricultural and environmental policies

Agricultural and environmental policies and practices are important for the realization of food security, poverty reduction, environmental sustainability and the management of land and other natural resources (Dayou et al., 2020). The agricultural sector of Benin is driven by the Strategic Plan for Agricultural Sector Development, 2017-2025 which is anchored on three main pillars, i.e., enhancing food sufficiency, increasing incomes, and enhancing the competitiveness and attractiveness of agricultural activity of rural areas (Ministère de l'Agriculture, de l'Élevage et de la Pêche (MAEP), 2017; FAO, 2017). The overall goal of the policy is to increase agricultural sector productivity of Benin, as a way of guaranteeing sustainable food sovereignty, food and nutritional security, and the socio-economic development of men and women towards the achievement of the Sustainable Development Goals (MAEP, 2017). Specific objectives of the policy are:

1. To improve the performance of the agricultural sector for the attainment of food sovereignty and food and nutritional security for both men and women, by ensuring efficient and sustainable management of farms owned by men, women and young people.
2. To enhance the competitiveness of the agricultural sector by ensuring access to agricultural produce and agri-food products, including food produced by various gendered and marginalized groups.
3. Last, to enhance the resilience of vulnerable segments of the population by protecting smallholder family farms including crops, livestock and fisheries/aquaculture (MAEP, 2017).

Agricultural production and environmental quality are intricately related (Oyekale, 2008). Environmental issues in Benin started to gain the attention of policy makers in the early 1990s. As a result, environmental issues were for the first time included in the Constitution of the Republic of Benin. This was followed by the adoption of Agenda 21, the Framework Conventions on Climate Change, Biodiversity and Combating Desertification to formulate the Framework Law on the Environment in 1999 (Dayou et al., 2020). Initial attempts involved the establishment of a ministerial department for the environment in 1991, which was subsequently made the Ministry of Environment and Protection of Nature (MEPN). Several directorates come under the supervision of the MEPN. These are the General Direction of Environment, the General Direction of Forests and Natural Resources and the Departmental Direction for the Environment and Protection of Nature. Other agencies under the MEPN are the Beninese Environmental Agency, the National Commission for Sustainable Development, the National Center for Wildlife Management and the National Environment Fund (Banque, 2010).

Accompanying these institutions is a plethora of laws on the environment. Dayou et al. (2020) observed that Benin has about ten environmental laws and a countless number of decrees and orders which set out the conditions under which laws should be applied. There are also several procedures and guidelines on environmental assessments, including water and air quality standards, wastewater discharge, public hygiene, forests, mines, and regulations on the protection of the environment against dangerous substances. While the policy and regulatory spaces are seen as enabling for addressing the environmental challenges associated with the country, critical issues remain. There are overlaps in roles between ministries and municipalities resulting in questions over synergies (institutional, financial, ecological, and communicational) between institutions, laws, guidelines and policies at the national and international levels (Dayou et al. 2020).

3.2.2 Forestry and wildlife policies

Benin's natural forest performs the numerous ecosystem services that are often associated with forests in different world regions. These include serving as a habitat for biodiversity, regulating climate,

providing clean water, controlling soil erosion, supporting recreational services and materials for use in local construction (World Bank, 2020). About 51% of the total land area of Benin is covered by forests. This is composed of dense forests, open forests and bush savannas, mangroves, forest plantations, and wetland formations. The country also boasts of two national parks and three contiguous hunting areas with a total land area of 1.26 million ha, as well as some 54 forest reserves, which occupy a land area of about 890,000 ha, approximately 8 percent of the national territory (World Bank, 2020).

Forest and wildlife management in Benin is the responsibility of the Ministry of Living Environment and Sustainable Development (MCVDD: *Ministère du Cadre de Vie et du Développement Durable*), which operates through several directorates. These are the Directorate General of Water, Forests, and Hunting (DGEFC: *Direction Générale des Eaux et Forêts et Chasse*); the National Office for Wood (ONAB: *Office National du Bois*); and the National Center for the Management of Wildlife Reserves (CENAGREF: *Centre National de Gestion des Réserves de Faune*). The Forestry Code provides the legal basis for the governance and management of Benin's forests and provides the conditions under which rights to use forest resources by Beninese citizens may be exercised. Two types of forests domains are specified under the Code: (a) there is a restricted use rights regime, including the gazetted forests, and (b) Protected Estate Domain, which is unrestricted although subject to authorization from the Forestry Administration (World Bank, 2020). Wildlife management on the other hand is governed by an Act¹ and its implementing decrees which deal with the wildlife regime. The management of hunting areas and national parks has been delegated to the National Center for the Management of Wildlife Reserves (CENAGREF: *Centre National de Gestion des Réserves de Faune*) while management of the classified and protected estate domain is the responsibility of DGEFC. The DGEFC's responsibility in this area mainly has to do with the management of international trade in endangered species of wild fauna and flora and the issuance of hunting or capture permits (Direction Générale des forêts et Chasse (DGEFC), 2017).

The forest and wildlife sector of Benin is under severe stress from an agricultural sector that is still predominantly traditional and based mainly on shifting cultivation and slash and burn farming methods. These practices coupled with the activities of pastoralists are resulting in significant forest loss. Additionally, the expansion in land area used for cotton production, mostly in the north, accompanied by tax deductions and subsidies for fertilizers and pesticides are leading to extensive forest cover loss. Other activities including energy supply through wood fuel and charcoal for cooking, hunting and poaching of wildlife, urbanization and uncontrolled logging of timber are having a visible

¹ Act No. 2002-16 of 18

impact on the wildlife resources of Benin (World Bank, 2018; Government of Benin, 2018; World Bank 2020).

3.2.3 Mining and other natural resources policies

The minerals and mining sector of Benin is relatively underdeveloped when compared to other countries in the sub-region. Recently, however, several Codes have been adopted by the Government to regulate the prospecting and mining of various mineral resources. The new Petroleum Code² serves as the legal and fiscal regime for prospection, exploration, exploitation, refining, transport and marketing of hydrocarbons throughout Benin. The Code vests in the Republic of Benin all liquid and gaseous hydrocarbon resources (Plaza-Toledo, 2022).

In respect of mining generally, Benin has a Mining Code³, with elaborate provisions for mining and mining taxation. It also has provisions that are similar to those of the Petroleum Code, retaining in the Republic of Benin ownership over all natural deposits of mineral substances in, under or on the surface of the land throughout the territory of the State. Holders of valid mining exploitation permits, however, can exercise ownership over mineral substances that have been extracted. Three main permits can be granted by the State under the Code. These are the prospection authorization permit which retains in the State any substances discovered by the holder of such a permit; the exploration permit; an operating permit valid for ten years and, and subsequently renewable for ten-year periods until the exhaustion of the mineral deposits; and small-scale or semi-industrial operating permits (Plaza-Toledo, 2022).

3.2.4 Land use and spatial planning policies

Land use and spatial planning in the Republic of Benin is the responsibility of the Ministry of Living Environment and Sustainable Development (MCVDD). The ministry oversees the implementation of government policies on management of land use, land registry, property and land management, construction, housing, sewage systems, protection of shorelines and coasts, preservation of urban planning ecosystems, and climate change. Five directorates and three sector agencies come under the ministry. These are the General Directorate for Urban Development, the Directorate of Living Environment and Sustainable Development, the Departmental Directorate of Living Environment and Sustainable Development, the General Directorate for Environment and Climate, the General Directorate for Housing and Construction. The agencies under the MCVDD are the Agency for Living Environment and Sustainable Development, The National Agency for Land Use Planning and the mandate of the Society of Real Estate and Land Use Planning (World Bank, 2019).

² Law No. 2019–06 of 2019

³ Law No. 2006-17 of 2006

Benin does not have a coordinated national urban or spatial planning policy. In the recent past, the country, through a World Bank 2-phase Adaptable Programme Loan programme has been implementing a “Decentralized City Management Project” aiming to formulate national urban strategies and ensure the upscaling of services to various residential neighbourhoods (UN-Habitat, 2017). Decentralized governance is not an entirely new phenomenon in the Republic of Benin. In 1990, following a national conference of vital forces, Benin was administratively structured into 77 communes and 12 departments. Subsequently, there was a transfer of competencies and resources to the municipalities to execute governance functions (Moussa, 2017). The decentralization drive was anchored around some pieces of legislation aimed at the organization of the territorial administration of the Republic of Benin⁴; the organization of the Communes in the Republic of Benin⁵; the organization of municipalities with special status⁶; and the financial arrangements of the Communes in the Republic of Benin⁷ (Moussa, 2017). Essentially, the decentralized governance system is the main conduit for the execution of land use and spatial planning functions in Benin. It will be prudent for all policies on land and natural resources to be implemented through the decentralized governance system to promote synergies and eliminate overlaps. Currently, however, that appears not to be the situation.

3.3 Synergies among Land Management Policies of Benin

The various land policies of the Republic of Benin show some levels of coherence and consistencies, although there are some areas that require a relook. The main areas of policy coherence are in the efforts to simplify access to land, boost investments in land and improve agricultural productivity. For instance, the present review shows that the various policies aim to standardize and harmonize land law in a manner that enables diverse actors including women and other marginalized groups to have easy access to land title through a system of improved land administration. The policies also place serious emphasis on the need to improve the land access and use rights of women, youths and other marginalized groups. It is envisaged that these interventions will lead to food sufficiency, increased incomes, and enhanced competitiveness and attractiveness of agriculture and other land use activities. Notwithstanding, significant areas of policy inconsistencies also exist. Based on the review the following are considered salient:

1. Benin’s agricultural policies diverge with the national land laws on the “how” as opposed to the “what” of the policies. While the national land laws seek to boost large-scale investment in land and agriculture by ensuring ease of access, agricultural policy seeks to protect

⁴ Law No. 97-028

⁵ Law No. 97-029

⁶ Law No. 98-005

⁷ Law No. 98-007

smallholder farms of women, men, the vulnerable and young people. Meanwhile, large-scale commercial agriculture can lead to significant losses of land from smallholders to wealthy investors and the displacement and dispossession of agrarian communities (Hall et al., 2017). Therefore, achieving the national goal without imperiling rural livelihoods will require some policy realignment. This is important because it has been established that while commercial agriculture produces wage employments, including flexible temporal jobs that benefit women, these are mostly of low quality and casual (Hall et al., 2017).

2. There is a weak level of internal consistency between agricultural and environmental policies. Large scale commercial agriculture is often associated with the destruction of forest cover. Therefore, pursuing resource conservation based on the forest policy conflicts with agricultural intensification and commercialization being pursued by the agricultural policy. While forest cover loss is a global phenomenon, it is more pronounced in the tropics, which account for 35% of annual losses (FAO, 2016). The evidence also shows that growth in the agricultural frontier is the most significant driver of deforestation, globally (Curtis et al., 2018; Seydewitz, 2022). It is therefore important for Benin to properly align its agricultural and environmental policies to avoid a situation where agricultural expansion adversely impacts environmental outcomes.
3. Maintaining a balance between sustainable resource use and poverty reduction remain a challenge for the Government of Benin. Environmental and wildlife policies have not been effective in reducing reliance on the natural resources base to address livelihood challenges in the areas of fuelwood, cotton cultivation, shifting cultivation and slash and burn among other harmful land use behaviours (Djagba et al., 2019). Olanipekun et al. (2019) found that unsustainable agricultural practices as in the case of Benin degrade the environment. However, the effects can be mitigated through poverty alleviation interventions. It may be important for agricultural sector policies that seek to intensify and boost investment in land to be coupled with poverty alleviation initiatives to avert any potential negative environmental consequences (Hall, 2017).
4. The minerals and mining laws of Benin are under-developed. Notwithstanding, the extent to which mining policies incorporate issues of environmental protection, corporate social responsibility and local content remain unclear. It has been observed that mining policies must have frameworks of environmental regulation to protect the environment, enhance competitiveness of the mining industry, promote public participation and expand opportunities for local communities to influence their surroundings (Kokko, et al., 2015). As the government seeks to boost private investment in these critical areas, greater diversification of the local economy and opportunities for local actors are important for policy success (Wilhelm, 2023).

It is also important for the Government of Benin to ensure that the most robust legal, regulatory and policy frameworks are in place to guide exploration and any future exploitation of mineral resources. Vesting all mineral resources in the State is in tandem with the best practices the world over (Cotula, 2019). However, care must be taken to ensure that it does not become an impediment to national efforts to promote private sector participation in the land and natural resources sector of the country (Suxun, & Chenjunnan, 2008).

FOUR: SYNERGIES IN SENEGAL'S LAND SECTOR POLICIES

Land is increasingly becoming a scarce resource in Senegal due to demographic growth, climate change (variable rainfall), large scale land acquisitions, state agricultural projects, and increasingly dynamic local land markets (Niang et al., 2017). In this Chapter policies underpinning land use practices and decision-making in Senegal including the national land policy, agricultural and environmental policies, forestry and wildlife policies, mining policies and land use and spatial planning policies are reviewed to understand the synergies among the policies and to make recommendations for policy.

4.2 The National Land Policy of Senegal

Land governance in Senegal is not regulated by any national policy – like in Benin. However, several pieces of legislation and reform initiatives provide important markers to the policy aspirations for land governance in Senegal. The main pieces of legislation that determine how land is accessed, used and managed in Senegal are the Land Law of 1964, the local government code of 1996, the Agro-Sylvo Pastoral Guidance Law (LOASP) of 2004 and land reform initiatives expressed in the Emerging Senegal Plans I & II (PSE I & II).

Land governance in Senegal mutated alongside the political and historical evolution of the country. Prior to independence in 1960, land governance evolved in response to changes in human settlements, political systems and technical and religious developments. Attempts by the French Colonialists to reform the land governance system were resisted by various customary groups who preferred the traditional system. These groups saw land as a common asset that cannot be exchanged and for which access to use by community members is determined by family and social status (Faye, 2008). Since independence, land governance in Senegal has been intricately woven into the decentralized governance system of the country. The management of public land is the shared responsibility of local governments and rural communities. The responsibility of local governments is mainly limited to the issuance of building permits with rural communities tasked to ensure the efficient management of land and natural resources in unprotected parts of their territory. The management of designated areas of national interest including classified forests, national parks and other protected spaces is a shared responsibility of rural communities, municipalities and regions (Faye, 2008).

A new land governance system was adopted in Senegal in the immediate post-independence era in 1964. The distinguishing feature of the new system was the categorization of land under three main governance regimes. These were:

1. **Private property:** this was seen as a colonial legacy and confined mainly to urban areas. Private property areas have expanded significantly over the years due to rapid urbanization, sprawl and growth in economic activities.
2. **Public ownership:** this concept vests in the state apparatus, the power to appropriate land from rural councils for purposes of public interest or in exceptional circumstances, including disasters and emergencies.
3. **Rural lands:** these were lands that came directly under the national land law, and constitute the common law regime (Dieng, 2019).

The coming into existence of the local government code in 1996, resulted in modifications to how land is governed in Senegal. The local government code changed the centre/periphery relations in respect of the powers exercised over land by vesting in local governments responsibilities for managing public lands. The 1996 reforms saw the emergence of three entirely new and conflicting categories of land. i.e., state land, public land and national land. Under the concept of state land, the state granted power to local governments to exercise ownership over or use of its assets, either exclusively or under shared management arrangements. Public land deals with the management of economically and ecologically sensitive land resources including land adjacent to riverbanks and water courses. Due to the valuable or fragile nature of these lands, the state decides the use to which such land should be put, mainly through the preparation of special land management plans, by local governments, which are approved by the State. National lands are all the lands held by the state. While the state sets the rules for the use of national lands, these rules are administered by rural councils under the auspices of sub-prefects (Faye, 2008).

In 2004 the “*Loi d’Orientation Agro-Sylvo Pastorale*” (LOASP, Agro-Sylvo Pastoral Guidance Law) came into being, introducing new arteries to land governance in Senegal. The main incursions by LOASP into the land governance system are the protection of land rights of both individual actors and communities, rights to cede over land, inheritance rights, and the introduction of clauses which enable individuals to use land as collateral to access credit (Ndiaye, 2019). The underlying assumption of the LOASP is that there is already a burgeoning land market, ready to be tapped. As a result, the aim of LOASP is to promote intensive, diversified and commercial agricultural production through the transformation of rural enclaves into productive investment environments. It has been argued that while the LOASP ushers into the Senegalese land governance system “a new form of market-assisted land governance”, the 2004 reforms have served to open the floodgates for monetary scramble for land in Senegal (Ndiaye, 2019, p. 152).

The 2004 efforts of the Government of Senegal were particularly given further impetus in the Emerging Senegal Plan II (PSE II, 2019-2023). Land reforms feature prominently among the six major

reforms outlined in the PSE II. It is specifically indicated that “Senegal will pursue reforms linked to land access. It will therefore be necessary to establish a universal cadastre, to accelerate land tenure security in rural areas through the granting of property titles, and to finalize the dematerialization of the electronic land register” (World Bank, 2017, p. 7). Even though some priority actions were planned for implementation over the five-year period not much was achieved due to the adverse impacts of the COVID-19 pandemic and the Russia-Ukraine war on the Senegalese economy (Simmons, 2024).

4.2.1 *Agricultural and environmental policies*

The agricultural policies of Senegal have mainly been oscillating between state control and market liberalization since the country attained independence in 1960. Agricultural sector policies were initially state driven until the 1980s when they were discontinued following the implementation of the Structural Adjustment Programmes and other fiscal challenges (Mockshell, 2016). The “*Nouvelle Politique Agricole*” (new agricultural policy) which was launched in 1984 liberalized the agricultural input and output markets and in the process brought an end to the state-controlled system of the pre-independence era (Oya, 2006). Despite the initiatives that have been implemented over the years, the agricultural sector of Senegal is still beset with several challenges, including poor soils, poor infrastructure and transport networks, erratic rainfall and frequent droughts (Stads and Sène, 2011; Ahmed et al., 2021). These challenges served as the basis for consultations on the “*Loi d’Orientation Agro-Sylvo Pastorale*” (LOASP) beginning from 2000 (Resnick and Birner, 2010). The main goal of the LOASP under agriculture was to increase agricultural outputs through a three-pronged approach of stabilization, liberalization and privatization. As a result, several agreements such as the “*Grande Offensive agricole pour la nourriture et l’abondance*” (Great Agricultural Offensive for Nutrition and Abundance), the plan for a “*Retour vers l’agriculture*” (Return towards Agriculture), the Strategy for Accelerated Growth (SCA) and the programme concerning biofuels, were to be implemented under a liberalized and privatized agricultural policy regime (Ndiaye, 2019).

In recent times, there has been some reversal to state interventionism in the agricultural sector. Consequently, the “*Programme National D’Investissement Agricole*” (PNIA), was developed as part of the Comprehensive Africa Agricultural Development Programme initiative. The PNIA highlights eight priority areas, which were to be implemented between 2011 and 2015 (Mockshell, 2016). In terms of agricultural productivity, the aim was to boost output by supporting smallholder farmers with inputs such as seeds and fertilizer (Mockshell, 2016). Currently, the Government of Senegal is seeking to reform the agricultural sector through the *Programme d’Accélération de la Cadence de l’Agriculture Sénégalaise* under the Plan for an Emerging Senegal (PSE II) initiative. It was anticipated that the PSE II, implemented from 2019-2023 will accelerate economic growth by an annual average of about 9%.

Specific investments to boost the contributions of the agricultural sector to the overall growth of the national economy included investment in infrastructure in the areas of transport, collection, storage, conservation and processing of local products through the densification of production support infrastructure; the opening up of production areas through a network of roads and rural roads; the development of integrated multimodal transport network (road, air, rail, sea and river); and the reinforcement of infrastructure for integration into the sub-regional and international markets (IUCN, 2019). It can be deduced that agricultural policies have not been pursued consistently as they oscillate between state control and market liberalization.

The main environmental policy is contained in *the Lettre de Politique sectorielle dans le Domaine de l'Environnement* (LSP) for the period 2016-2020. The policy is carved out of the second strategic pillar of the Plan for an Emerging Senegal. The LSP is being implemented by the Ministry of Environment and Sustainable Development which has in turn formulated some plans and programmes to guide the attainment of the goal and objectives contained in the LSP (IUCN, 2019). These are the National Action Plan for the Environment; the National Action Programme to Combat Desertification; the strategy and action plan for biodiversity conservation; the National Plan for Adaptation to Climate Change; and Senegal's Forest Action Plan. Meanwhile, the legal backing for the plans and strategies for ensuring environmental protection are detailed in the Environmental Code⁸ of Senegal (IUCN, 2019). Despite all these initiatives, Senegal still suffers from significant levels of environmental degradation as it is estimated that about one-third of Senegalese soils are highly degraded (Schöffberger, 2018). The environmental situation is worsened by climate variations, recurrent droughts, and a rising population growth rate (United Nations Department of Economic and Social Affairs (UN DESA), 2017).

4.2.2 Forestry and wildlife policies

It is estimated that about 42% of the total land area of Senegal is covered by forests. Also, about 25% of the land area is classified as nationally protected areas and include the 913,000-hectare Niokolo Koba National Park in Tambacounda (IUCN, 2019). At the international level, Senegal is a signatory to several treaties and conventions on forestry and wildlife resources. These include the Ramsar Convention, Paris Convention of 1972, Washington Convention of 1973 (CITES), the Bonn Convention related to the protection of migratory species, United Nations Law of the Sea, Biodiversity Convention, the Desertification Convention, the African Convention of Algiers, and the Convention of Abidjan concerning protection of marine species (IUCN, 2019).

The management and conservation of forest resources is the responsibility of the Department of Water and Forests (DEF). The only instance where forest management has been delegated to local

⁸ Law No. 2001-01 of January 15, 2001

communities is in respect of “*terroir lands*” with responsibility often executed based on a plan approved by the DEF. Law N° 93-06, of 1993 and its enforcement decree 95-357 of 1995 delegate the protection of forests in the *Direction des Eaux, Forêts, Chasse et Conservation des Sols* (DEFCCS). Under the law, water and forests agents “are responsible for the protection, conservation, and development of both national plant and animal forest resources⁹” (USAID, 2008). Hunting and wildlife are regulated by two laws¹⁰ which provide the framework for dealing with poaching and the destruction of forests and savannah ecosystems. The main legal framework¹¹ governing natural resources was formulated in 1996. It entrusts the responsibility for wildlife protection, particularly, the authority to create natural animal reserves in local authorities (USAID, 2008).

The legal framework for forests and wildlife management is associated with a corresponding policy framework. Senegal adopted its forest policy in 2005 to span a period of 20 years. The policy aims essentially to:

1. Deepen decentralized governance by involving and supporting local communities in the management of transferred environmental authority.
2. Strike a fair balance between resources protection and sustainable utilization with the broader aim of combating desertification and promoting the preservation of biodiversity.
3. Promote the involvement of the private sector as well as non-governmental actors in the collaborative management of natural forests, plantations, parks and wildlife reserves by creating an enabling environment for increased investment in the sector to make it more profitable, without compromising the sustainability of the resources.
4. Promoting the adoption of rationalized and more efficient approaches to forest exploitation by diversifying energy sources to include solar energy, wind energy, biogas, crop residues, and plant biomass (USAID, 2008).

There is also a hunting and wildlife policy that places emphasis on outreach and public education to increase public involvement in the protection and management of wildlife. The overall aim is to reduce poaching, which has often been justified on grounds of poverty. This is done through the creation of protected area communities aimed at promoting co-management of such protected areas and the implementation of income-generating activities (USAID, 2008).

4.2.3 Mining and other natural resources policies

Several pieces of legislation govern the mining sector of Senegal. The Constitution of Senegal, which is the apex law of the land, guarantees every Senegalese the right to a healthy environment. Beyond that,

⁹ Article L. 56 of the Forest Code

¹⁰ Law No. 86-04 of January 24, 1986 and Decree No. 86-844 of July 14, 1986

¹¹ Decree No. 96-1134 of 27 December 1996

the constitution is silent on important issues such as natural resource use and ownership, environmental management or sustainable development (IISD, 2016). The main legislation which regulates mining and related activities in Senegal is the Mining Code of 2003, enacted by Law N° 2003-36 and implementation decree (Decree N° 2004-647). The law also deals with issues of ownership of mineral rights, land ownership and usage, the types of minerals that are subject to regulation and their legal regimes, and minerals prospection, exploration and exploitation system (IISD, 2016).

The pieces of legislation governing the mining sector are accompanied by the mining policy of 2003. The mining policy aims to attract increased investments in the mining sector and to create an enabling environment in support of the sector's contribution to the sustainable development of Senegal (Béland et al., 2022). Key priorities for realizing this goal include improving the legal and regulatory regime for mining; improving the collection, storage and access to geological data through the establishment of a geological and mining information system; building the efficiency of the institutions responsible for the sector; strengthening the tax regime and mitigating investment risks; increasing local content, expertise and manpower in the sector; promoting and supporting the artisanal and small scale mining sector; establishing systems in support of domestic processing of mined products; and ensuring environmental protection (IISD, 2016).

Other important policy and legal instruments relevant to the operations of the mining sector of Senegal are the Senegal Model Mining Agreement, the Emerging Senegal Plans (PSEs I & II), the Environmental Code of 2001, the Forest Code of 1998, the Water Code of 1981, the Labour Code of 1997, the National Domain Law of 1964 and the Investment Code of 2004. The Senegal Model Mining Agreement seeks to standardize the contractual relations between the Government of Senegal and all large mining companies operating in the country. As a contract, it specifies the rights and obligations of companies that hold permits to exploit minerals and the role and responsibilities of the Senegalese government. The PSEs, which are Senegal's long-term development visions identify the mining sector as one of the six priority sectors for spearheading Senegal's development. The sector is seen as having the potential to attract direct foreign investments to help stabilize the country's balance of trade. The PSEs prioritize the development of the country's phosphate deposits, iron ore exploitation, exploitation of the country's gold deposits, formalization, monitoring and promotion of artisanal mining, exploitation of zircon and other heavy minerals, and the establishment of Dakar as a regional mining hub as the main initiatives for driving economic activity and creating jobs (IISD, 2016, p. 8).

The National Biodiversity and Strategy Action Plan of 1998 is also an important policy instrument for natural resources management in Senegal. It has four main policy objectives. These include the conservation of biodiversity in high density sites; the integration of biodiversity conservation in programmes and production activities; equitable sharing of the roles, responsibilities

and benefits of biodiversity conservation; and the education of all stakeholders on the importance of biodiversity and the need for its conservation (USAID, 2008, p. 9). The integration of biodiversity conservation with natural resources management is a laudable initiative and requires careful monitoring to ensure compliance by the stakeholders.

4.2.4 Land use and spatial planning policies

Senegal is one of the rapidly urbanizing countries in the West African sub-region. However, planning lags the rate of urbanization, resulting in the emergence of territorial imbalances. The disparity in development between Dakar, the national capital, and other secondary cities is quite marked. More than 25% of the total population of the country live in Dakar. The city accounts for more than 55% of the country's GDP, generates about 87% of national tax revenues and serves as the hub for 80% of modern businesses and jobs (World Bank, 2021).

The main attempt at land use planning in Senegal was in 1972 when an experiment with decentralization was embarked upon briefly. The process stalled until 1996 when the drive to decentralize governance was resurrected, implemented and accompanied by the transfer of competencies to deconcentrated local governments under Act II of decentralization. In 2013, Act III, through the establishment of municipalization, extended and deepened the competencies transferred to the local governments. Irrespective of the reforms that have taken place, local governments remain weak and lack the competencies and autonomy to execute land use planning functions (UN-Habitat, 2023).

As already elucidated in various sections of this report, Senegal has been implementing *Plan Sénégal Émergent* (PSE) since 2014, seeking to achieve inclusive social and economic development through good governance and human development in Senegal by 2035. The land use and spatial planning goal of the PSE is the territorialization of public policies by the pursuit of programmes and interventions in critical sectors that promote economic growth and social inclusion. The government also seeks to pursue an aggressive programme against social inequalities, while ensuring the protection of resources as geared towards the promotion and emergence of viable territories (UN-Habitat, 2023). Senegal has no discernible land use and spatial planning legislation nor policy. In consequence it suffers from urbanization dysfunctions that dates back several decades, including poor harnessing of the resources and potentials of the territories, weak capacity for intervention at the level of local governments, weak intra- and inter-territorial integration with people residing in risk-prone areas (UN-Habitat, 2023). Based on the observed challenges, Senegal as part of the implementation of Act III of decentralization in 2013, drew up the *Plan National d'Aménagement et de Développement Territorial*. The general objective is to "promote the development of Senegal from its territories, through a good

structuring of the space and a sustainable development of resources and potentialities" (UN-Habitat, 2023, p. 4).

4.3 Synergies among Land Management Policies of Senegal

The various land governing policies and legislation of Senegal seek to reinforce each other. Mainly of the policies are consistent as they all seek to promote improved access to land through a new form of market-assisted land governance which has resulted in increasing land commodification (Bourgoin, et al., 2023). The different policies reviewed also place significant emphasis on the need to promote biodiversity conservation across scales and sectors. However, areas of policy inconsistencies also exist. Some of the issues identified through this review are:

1. While national land policy is being implemented through the decentralized governmental structures of deconcentrated local governments, policies on agriculture and the environment are more centralized. Hence, the central government is the final arbiter of whether the agricultural sector should be liberalized, privatized or state driven (Niang et al., 2017). Senegal experiences wide range of bioclimatic diversity among its different regions (Dieng et al., 2023). However, it is unclear how variations in bioclimatic conditions are accounted for in centralized governmental policies on agriculture and the environment (Tappan et al., 2004). Again, the lack of policy consistency in the agricultural sector may hamper the quest of the Government to achieve the goals of the *Plan Sénégal Émergent* and promote sustainable land management. Already, the inconsistencies in agricultural and national land policy have led to polarized land access and accelerated land concentration by private and foreign investments due to state- and donor-funded initiatives to intensify agricultural production (Niang et al., 2017)
2. Forest and wildlife laws and policies are aligned to national policy for a market-assisted land governance regime. They seek to promote the private sector and to some extent the involvement of local communities in the protection of forest and wildlife resources (Dieng et al., 2023). However, the policies also deviate significantly from national policy on decentralized land governance. As a result, minimal roles are assigned to community members for collaborative forests and wildlife protection (Recha et al., 2016). There is no clear government policy on sustainable land management and that could hamper sustainable forests and wildlife governance (Niang et al., 2017).
3. Mining and natural resources policies and legislation show some internal harmony, but also some inconsistencies. They are more in harmony with overall national land policies as they seek to promote private sector investment in the mineral and natural resources sectors of the country (Béland et al., 2022). The main area of contention is the lacuna on natural resource

use and ownership and environmental management. While the mining code addresses issues such as ownership of mineral rights, land ownership and usage, these are not synonymous with natural resource use and ownership and sound environmental management. Dietsche (2019) indicates that mining companies operating across West Africa often resist attempts by the states to autonomously determine the economic, social, environmental and fiscal conditions under which they operate. Resistance by these companies affects the abilities of governments to achieve policy coherence (Béland et al., 2022). Even though the mining policy seeks to promote biodiversity conservation, the implementation has been compromised. Consequently, mining has resulted in the depletion of significant forest area, the destruction of habitats of mammals, and various economic tree species (Tambol et al., 2023).

4. Senegal has no specific land use and spatial planning legislation and/or policy. This undermines the national land policy by adversely affecting diverse ecological systems and contributing to the proliferation of slums (Faye et al., 2024). Land use planning is essential to the realization of sustainable land policy goals as it helps ensure that everything is happening at the right place. It is therefore important for Senegal to initiate interventions to formulate a national urban policy, a land use and spatial planning policy and perhaps a land use and spatial planning law by taking into consideration the policy goals in the PSE and the national land policy (Paniagua, 2021; Zhu et al., 2024).

FIVE: CONCLUSIONS AND RECOMMENDATIONS

Land remains a foremost resource of Ghana, Benin and Senegal. This review set out to understand the levels of policy synergies between land sector policies of selected West African Countries, i.e., Ghana, Benin and Senegal. This is important for any attempts at land tenure reforms in the wake of increasing land conflicts, rapid population growth, environmental degradation and climate change, hampering agricultural production. The review juxtaposed the national land policies of these countries with policies for agriculture and the environment, forestry and wildlife, mining and other natural resources and land use and spatial planning.

The review shows that the land policies of the different countries are heavily influenced by their historical and political evolution. While Benin and Senegal have no national land policy per se, Ghana, a former British colony, has a national land policy. The political trajectory of the countries is also shaping the evolution of land policies. While in all instances, the countries have sought to decentralize the governance of land and natural resources, there remains strong evidence of centralization especially with regards to mineral resources. All the countries have vested the ownership of mineral resources in the state. Among the three countries, Benin stands out as one with deliberate policy pronouncements on the land access and ownership rights of women, youth and other marginalized groups. Ghana and Senegal do not specifically address gender or social inclusion in their policies, although they have provisions that seek to facilitate equitable access to land. Regarding the environment, all the countries strive to balance conservation with sustainable exploitation of natural resources, although not much success has been achieved. Issues of alignment of institutional responsibilities would have to be carefully addressed by the different countries to allow for efficient execution of responsibilities like exploitation and conservation.

Promoting sustainable land management can lead to increased agricultural production, food security, reduced land sector conflicts, reduction in greenhouse gas emissions and poverty reduction, significantly contributing to national development (Bourgoin et al., 2023). Based on the review, the following recommendations are salient:

- **Undertake participatory formulation of national land policies:** each of the countries will have to use participatory approaches by involving diverse stakeholders such as gender experts, youth groups, civil society, traditional authority, and scientists in the formulation of national land policies. In the case of Ghana, the current national land policy will have to be reviewed to address emerging concerns and provisions contained in the new National Land Act 2020 (Act, 1036). Benin and Senegal have no specific national land policies. They will therefore need to

participatorily prepare national land policies that will harmonize and consolidate the goals and objectives of the diverse policies related to land management.

- **Consider the unique situation of women and the marginalized:** the national land policies of the different countries must deliberately contextualize and find ways of dealing with the precarity associated with women's land access and ownership. This should be accompanied by concrete policy actions to address the imbalance. While the Ghanaian national land policy recognizes the need to facilitate equitable land access, the strategies will not lead to the outcomes desired. Benin and Senegal have the unique opportunity to avoid such pitfalls in the formulation of their respective land policies.
- **Address climate change and environmental degradation:** the policies of the respective countries have not sufficiently addressed the issue of climate change. Ghana's national land policy does not even mention it. Environmental degradation is addressed rather incomprehensively, due in part to resistance from private land actors. It is important for the policies of the respective countries to holistically address climate change and its potential impacts on agriculture and natural resources management. They must also address ways of adapting to and mitigating effects on diverse land uses.
- **Private sector involvement:** all the policies reviewed seek to promote private sector involvement in the management of land and natural resources. However, the review also shows evidence of instances of resistance to the goals of national policies, particularly mining policies. In some instances, the policies have been watered down to satisfy the interest of private sector players. It is important for national policies to properly delineate the roles and responsibilities of the private sector in the land and natural resources sectors. These must be accompanied by clearly stipulated sanctions for errant conduct.
- **Decentralise governance of land and natural resources:** all the countries are decentralizing and deepening governance functions. In respect of policies on land management, there is still no clear governance model. While some policies seek to decentralize, and others adopt a more centralized approach. The lack of a common policy approach to land policies could weaken the coordination of efforts at different scales of governance. It is recommended that all policies on land are formulated and implemented through the decentralized governance structures.

References

- ActionAid Ghana. (2019). Policy framework for agroecology in Ghana: Review of policies and approaches. Available at: https://ghana.actionaid.org/sites/ghana/files/publications/FINAL%20REPORT%20ON%20POLICY%20MAPPING%20ON%20AGROECOLOGY%20IN%20GHANA_2.pdf.
- Adranyi, E., Stringer, L. C., & Altink, H. (2023). The impacts of artisanal and small-scale gold mining on rural livelihood trajectories: Insights from Ghana. *The Extractive Industries and Society*, 14, 101273. <https://doi.org/10.1016/j.exis.2023.101273>.
- Afele, J. T., Nimo, E., Lawal, B., & Afele, I. K. (2022). Deforestation in Ghana: Evidence from selected forest reserves across six ecological zones. *International Journal of Forest, Animal and Fisheries Research*, 6(1), 1-7.
- AGRA. (2021). A decade of action: Building sustainable and resilient food systems in Africa. Available at : <https://agra.org/wp-content/uploads/2021/09/AASR-2021-A-Decade-of-Action- Building-Sustainable-and-Resilient-Food-Systems-in-Africa.pdf>.
- Ahmed, A., Suleiman, M., Abubakar, M. J., & Saleh, A. (2021). Impacts of climate change on agriculture in Senegal: A systematic review. *Journal of Sustainability, Environment and Peace*, 4(1), 30-38.
- Ahmed, K. F., Wang, G., You, L., & Yu, M. (2016). Potential impact of climate and socioeconomic changes on future agricultural land use in West Africa. *Earth System Dynamics*, 7(1), 151-165.
- Aigbe, G. O., Stringer, L. C., & Cotton, M. (2023). Gas flaring in Nigeria: A multi-level governance and policy coherence analysis. *Anthropocene Science*. <https://doi.org/10.1007/s44177-023-00045-5>.
- Akafari, A. A., Kifle Abebe, G., Martiniello, G., Chaaban, J., & Chalak, A. (2021). Land appropriation, customary tenure and rural livelihoods: gold mining in Ghana. *Third World Quarterly*, 42(11), 2572-2592.
- Ako, R. T., & Olawuyi, D. S. (2017). Environmental justice in Nigeria: Divergent tales, paradoxes and future prospects. In R. Holifield, J. Chakraborty, & G. Walker (Eds.), *The Routledge Handbook of Environmental Justice* (1st ed., pp. 567–577). Routledge. <https://doi.org/10.4324/9781315678986-45>.
- Anafo, D. (2015). Land reforms and land rights change: A case study of land stressed groups in the Nkoranza South Municipality, Ghana. *Land Use Policy*, 42, 538-546.
- Antwi-Boateng, O., & Akudugu, M. A. (2020). Golden migrants: The rise and impact of illegal Chinese small-scale mining in Ghana. *Politics & Policy*, 48(1), 135-167.
- Aryeetey, E. (2007). *The politics of land tenure reform in Ghana: From the Crown Lands Bills to the Land Administration Project*. Institute of Statistical, Social & Economic Research, University of Ghana.
- Asaaga, F. A., & Hirons, M. A. (2019). Windows of opportunity or windows of exclusion? Changing dynamics of tenurial relations in rural Ghana. *Land Use Policy*, 87, 104042. <https://doi.org/10.1016/j.landusepol.2019.104042>.
- Ashiagbor, G., Amoako, C., Asabere, S. B., & Quaye-Ballard, J. A. (2019). Landscape transformations in rapidly developing peri-urban areas of Accra, Ghana: results of 30 years. *Open Geosciences*, 11(1), 172-182. <https://doi.org/10.1515/geo-2019-0014>.
- AUC, AfDB, & ECA. (2010). *Framework and guidelines on land policy in Africa. Land policy in Africa: A framework to strengthen land rights, enhance productivity and Secure livelihoods*. Available at: https://www.un.org/en/land-natural-resources-conflict/pdfs/35-EN-%20Land%20Policy%20Report_ENG%20181010pdf.pdf.
- Baffour-Kyei, V., Mensah, A., Owusu, V., Horlu, G.S.A.K., 2021. Artisanal small-scale mining and livelihood assets in rural southern Ghana. *Resources Policy* 71. <https://doi.org/10.1016/j.resourpol.2021.101988>.
- Banque, M. (2010). République du Bénin: Analyse Environnementale Pays. Département du Développement Durable, Région Afrique. Rapport Final 58190-BJ, Août 2010, p. 87.

- Barenblitt, A., Payton, A., Lagomasino, D., Fatoyinbo, L., Asare, K., Aidoo, K., Pigott, H., Som, C. K., Smeets, L., Seidu, O., & Wood, D. (2021). The large footprint of small-scale artisanal gold mining in Ghana. *Science of the Total Environment*, 781. <https://doi.org/10.1016/j.scitotenv.2021.146644>.
- Béland, D., Campbell, B., Coderre, M., & Haang'andu, P. (2022). Policy change and paradigm shifts in Sub-Saharan Africa: implementing the Africa Mining Vision. *Canadian Journal of African Studies/Revue canadienne des études africaines*, 56(1), 79-97.
- Botchway, T. P. (2021). Implementing effective environmental policies for sustainable development: Insight into the implementation of the CBD in Ghana. *Cogent Social Sciences*, 7(1), 1970893. <https://doi.org/10.1080/23311886.2021.1970893>.
- Bourgoin, J., Diop, D., Jahel, C., Interdonato, R., & Grislain, Q. (2023). Beyond land grabbing narratives, acknowledging patterns and regimes of land control in Senegal. *Land Use Policy*, 131, 106753.
- Britwum, A.O., Tsikata, D., Akorsu, A.D., & Ako, M.A., (2014). *Gender and land tenure in Ghana: A synthesis of the literature*. University of Ghana. Institute of Statistical Social and Economic Research.
- Chauveau, J. P. (2006). *Changes in Land Access and Governance in West Africa: Markets, Social Mediations and Public Policies: Results of the CLAIMS Research Projects*. IIED.
- Cobbinah, P. B., & Darkwah, R. M. (2017). Urban planning and politics in Ghana. *GeoJournal*, 82, 1229-1245.
- Cobbinah, P. B., Erdiaw-Kwasie, M. O., & Amoateng, P. (2015). Africa's urbanisation: Implications for sustainable development. *Cities*, 47, 62-72.
- Cotula, L. (2019). *Reconsidering sovereignty, ownership and consent in natural resource contracts: From concepts to practice*. European Yearbook of International Economic Law 2018, 143-174.
- Curtis, P. G., Slay, C. M., Harris, N. L., Tyukavina, A., & Hansen, M. C. (2018). Classifying drivers of global forest loss. *Science*, 361(6407), 1108-1111. <https://doi.org/10.1126/science.aau3445>.
- Davy, B. (2009). Centenary paper: The poor and the land: Poverty, property, planning. *Town Planning Review*, 80(3), 227-265.
- Dayou, E. D., Zokpodo, B. K., Montcho, M., Ajav, E. A., Bamgboye, I. A., & GldeKaka, R. L. (2020). Current Agricultural and Environmental Policies in Benin Republic. *Sustainable Agriculture Research*, 9(2), 87-100.
- Delville, P. L. (2019). History and political economy of land administration reform in Benin. In Research Project "Economic Development and Institutions (EDI)". Oxford Policy Management/Paris School of Economics/Université de Namur/ADE Namur.
- Dieng, M., Mbow, C., Skole, D. L., & Ba, B. (2023). Sustainable land management policy to address land degradation: linking old forest management practices in Senegal with new REDD+ requirements. *Frontiers in Environmental Science*, 11, 1088726.
- Dieng, R. S. (2019). *Contemporary land rush, and dynamics of agrarian change in Senegal (2006-2017)* (Doctoral dissertation, SOAS University of London).
- Dietsche, E. (2019). Balancing mining contracts and mining legislation: experiences and challenges. *Mineral Economics*, 32(2), 153-169.
- Direction Générale des forêts et Chasse (DGEFC). (2017). Rapport Annuel d'Activités 2017. Ministère du Cadre de Vie et du Développement Durable. République du Bénin.
- Djagba, J. F., Zwart, S. J., Houssou, C. S., Tenté, B. H., & Kiepe, P. (2019). Ecological sustainability and environmental risks of agricultural intensification in inland valleys in Benin. *Environment, Development and Sustainability*, 21, 1869-1890.
- Doss, C., Meinzen-Dick, R., Quisumbing, A., & Theis, S. (2018). Women in agriculture: Four myths. *Global Food Security*, 16, 69-74.
- Fagan, M. E., Kim, D. H., Settle, W., Ferry, L., Drew, J., Carlson, H., ... & Ordway, E. M. (2022). The expansion of tree plantations across tropical biomes. *Nature Sustainability*, 5(8), 681-688.
- FAO. (2016). Global forest resources assessment 2015 (Tech. Rep.). Food and Agriculture Organization of the United Nations.

- FAO. (2017). Cadre de programmation pays du Benin 2017-2021. p. 19.
- FAO, IFAD, UNICEF, WFP, & WHO. (2021). *The State of Food Security and Nutrition in the World 2021: Transforming food systems for food security, improved nutrition and affordable healthy diets for all*. Available at: <https://www.fao.org/3/cb4474en/cb4474en.pdf>.
- Faye, J. (2008). *Land and decentralisation in Senegal* (Vol. 149). IIED.
- Faye, B., Diéne, J. C., Du, G., Liang, C. A., Kouadio, Y. D., Mbaye, E., & Li, Y. (2024). Decentralization Policies and Rural Socio-Economic Growth in Senegal: An Exploration of Their Contributions to Development and Transformation. *World*, 5(4), 1054-1076.
- Giller, K. E. (2020). The food security conundrum of sub-Saharan Africa. *Global Food Security*, 26, 100431. <https://doi.org/10.1016/j.gfs.2020.100431>.
- Giovarelli, R., Hannay, L., Scalise, E., Richardson, A., Seitz, v., & Gaynor, R. (2015). *Gender and Land: Good Practices and Lessons Learned from Four Millennium Challenge Corporation Compact Funded Land Projects. Synthesis Report and Case studies: Benin, Lesoto, Mali, and Namibia*. Landesa and Center for Women's Land Rights. Available at: <https://resourceequity.org/record/2734-gender-and-land-good-practices-andlessons-learned-from-four-millennium-challenge-corporation-compact-funded-land-projects/>.
- Goldstein, M., Hounbedji, K., Kondylis, F., O'Sullivan, M., & Selod, H. (2016). *Formalizing rural land rights in West Africa: Early evidence from a randomized impact evaluation in Benin*. World Bank Policy Research Working Paper, (7435). <https://hdl.handle.net/10986/22857>.
- Government of Benin. (2018). Plan National de Développement 2018-2025.
- Gurib-Fakim, A. (2015). Innovation, entrepreneurship and governance for sustainable development of Africa's agri-food system (15/01).
- Hall, R., Scoones, I., & Tsikata, D. (2017). Plantations, outgrowers and commercial farming in Africa: agricultural commercialisation and implications for agrarian change. *The Journal of Peasant Studies*, 44(3), 515-537.
- Hurni, H. (2000). Assessing sustainable land management (SLM). *Agriculture, Ecosystems & Environment*, 81(2), 83-92.
- International Institute for Sustainable Development (IISD) (2016). IGF mining policy framework assessment: Senegal. Winnipeg, Manitoba, Canada. Available at: <https://www.iisd.org/system/files/publications/senegal-mining-policy-framework-assessment-en.pdf>.
- International Union for the Conservation of Nature (IUCN) (2019). *Country profile: Senegal*. Global Policy Unit, IUCN.
- IPCC. (2022). *Climate change 2022: Impacts, adaptation and vulnerability*. Available at: https://reliefweb.int/report/world/climate-change-2022-impacts-adaptation-and-vulnerability?gad_source=1&gclid=CjwKCAjwydSzBhBOEiwAj0XN4GnbxL1M7ZemIKFLX_fLBUJk7ccD0KbNxdYrC--eTEKLU57HNTR0cxoC8HoQAvD_BwE.
- Kokko, K., Buanes, A., Koivurova, T., Masloboev, V., & Pettersson, M. (2015). *Sustainable mining, local communities and environmental regulation*. Barents Studies.
- Ministère de l'Agriculture, de l'Elevage et de la Pêche (MAEP). (2017). Cadre programmatique du secteur agricole. Version validée. p. 154.
- Ministry of Food and Agriculture. (2007). *Food and Agriculture Sector Development Policy (FASDEP II)*. Accra, Ghana.
- Ministry of Food and Agriculture. (2017). Planting for food and jobs strategic plan for implementation (2017 – 2020). Available at: <http://mofa.gov.gh/site/wpcontent/uploads/2018/03/PFJ%20document%20New%20New.pdf>.
- Ministry of Land and Natural Resources. (1999). National Land Policy. Available at: <https://mlnr.gov.gh/wp-content/uploads/2023/07/national-land-policy-1999-ext-en.pdf>.
- Ministry of Lands and Natural Resources. (2012). *Ghana forest and wildlife policy*. Accra, Ghana.

- Mo Ibrahim Foundation. (2021). Africa's youth: Actions needed now to support the continent's greatest assets. Available at: <https://mo.ibrahim.foundation/sites/default/files/2020-08/international-youth-day-research-brief.pdf>.
- Mockshell, J. (2016). Two worlds in agricultural policy making in Africa? Case studies from Ghana, Kenya, Senegal and Uganda. PhD Dissertation submitted to the University of Hohenheim, Germany.
- Moussa, A. (2017). City growth: Issues and challenges of urban sustainability in Republic of Benin. *Journal of Social Sciences*, 13 (4), 208 – 215.
- MUHRFLEC. (2011). Déclaration de politique foncière et domaniale', in Etudes Foncières, MUHRFLEC/République du Bénin, Cotonou, p. 40.
- Nchanji, E. B., Chagomoka, T., Bellwood-Howard, I., Drescher, A., Schareika, N., & Schlesinger, J. (2023). Land tenure, food security, gender and urbanization in Northern Ghana. *Land Use Policy*, 132, 106834. <https://doi.org/10.1016/j.landusepol.2023.106834>.
- Ndiaye, A. (2019). The Scramble for Agricultural Land in Senegal: Land Privatisation and Inclusion? In: S. Moyo, P. Jha, & P. Yeros (Eds). *Reclaiming Africa: Scramble and Resistance in the 21st Century* (pp. 143-162). London, UK; New York, NY; Cape Town, South Africa: Zed Books and David Philip.
- Niang, A., Sarr, N. F. M., Hathie, I., Diouf, N. C., Ba, C. O., Ka, I., & Gagné, M. (2017). *Understanding changing land access and use by the rural poor in Senegal* (pp. 63-pp). International Institute for Environment and Development.
- Olanipekun, I. O., Olasehinde-Williams, G. O., & Alao, R. O. (2019). Agriculture and environmental degradation in Africa: The role of income. *Science of the Total Environment*, 692, 60-67.
- Owusu, S. K. A. (2022). Galamsey voluntary technical advice to government, as challenges intensify. Available at: <https://www.myjoyonline.com/galamsey-voluntary-technical-advice-to-government-as-challenges-intensify-dr-solomon-owusu/>.
- Oxford Business Group. (2021). Agriculture in Africa 2021. Available at: https://oxfordbusinessgroup.com/sites/default/files/blog/specialreports/960469/OCP_Agriculture_Africa_Report_2021.pdf%0A.
- Oya, C. (2006). From state dirigisme to liberalisation in Senegal: Four decades of agricultural policy shifts and continuities. *The European Journal of Development Research*, 18, 203-234.
- Oyekale, A. S. (2008). Land Degradation, Soil Conservation Practices and Poverty Incidence in Southwestern Nigeria. *Agricultural Journal*, 3(6), 482-487.
- Paniagua, A. (2021). Sustainable Geographical Changes in Rural Areas: Key Paths, Orientations and Limits. *Sustainability*, 13(4), 2059.
- Plaza-Toledo, M. (2022). The mineral industries of other countries of Africa: Benin, Cabo Verde, The Gambia, Guinea-Bissau, and Sao Tome and Principe. US Geological Survey. Available at: <https://pubs.usgs.gov/myb/vol3/2019/myb3-2019-other-africa.pdf>.
- Recha, J., Radeny, M., Kimeli, P., Atakos, V., Kisilu, R., and Kinywee, J. (2016). *Building adaptive capacity and improving food security in semi-arid eastern Kenya*. Copenhagen: CGIAR-CCAFS
- Resnick, D., & Birner, R. (2010). Agricultural Strategy Development in West Africa: The False Promise of Participation? *Development Policy Review*, 28(1), 97–115.
- Schöffberger, I. (2018). Environmental change and translocal vulnerability in Senegal. *Migration, Environment and Climate Change*, 4(3), 1-8.
- Schoneveld, G. C., & German, L. (2014). Translating legal rights into tenure security: lessons from the new commercial pressures on land in Ghana. *Journal of Development Studies*, 50(2), 187-203.
- Seydewitz, T., Pradhan, P., Landholm, D. M., & Kropp, J. P. (2023). Deforestation drivers across the tropics and their impacts on carbon stocks and ecosystem services. *Anthropocene Science*, 2(1), 81-92.
- Simmons, C. (2024). The Chronology of Development in Senegal. Available at: https://digitalcommons.bard.edu/cgi/viewcontent.cgi?article=1313&context=senproj_s2024.
- Stacey, P. (2025). Institutional coalescence and illegal small scale gold mining in Ghana. *World Development*, 185, 106808. <https://doi.org/10.1016/j.worlddev.2024.106808>.

- Stads, G., & Sène, L. (2011). Private-Sector Agricultural Research and Innovation in Senegal: Recent Policy, Investment, and Capacity Trends. Washington DC.
- Sultan, B., & Gaetani, M. (2016). Agriculture in West Africa in the Twenty-First Century: Climate Change and Impacts Scenarios, and Potential for Adaptation. *Frontiers in Plant Science*, 7(August), 1–20. <https://doi.org/10.3389/fpls.2016.01262>.
- Suxun, & Chenjunnan. (2008). Private capital: What impedes its entry into China's minerals industry. *Resources Policy*, 33(1), 23-28.
- Tambol, T., Vodounou, G. M. B., & Moussa, S. (2023). Impacts of Mining on the Environment in West African Sahel: A Review. *Environmental Protection Research*, 263-277.
- Tappan, G. G., Sall, M., Wood, E. C., & Cushing, M. (2004). Ecoregions and land cover trends in Senegal. *Journal of Arid Environments*, 59(3), 427-462.
- Tudge, S. J., Harris, Z. M., Murphy, R. J., Purvis, A., & De Palma, A. (2023). Global trends in biodiversity with tree plantation age. *Global Ecology and Conservation*, 48, e02751. <https://doi.org/10.1016/j.gecco.2023.e02751>.
- UN-Habitat (2017). *National Urban policy: Sub Saharan Africa Report*. United Nations Human Settlements Programme.
- UN-Habitat (2023). Country brief: Senegal: A better quality of life for all in an urbanizing world. Available at: https://unhabitat.org/sites/default/files/2023/06/senegal_country_brief_final_en.pdf.
- United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development. <https://sdgs.un.org/2030agenda>.
- United Nations (2015). Sendai Framework for Disaster Reduction 2015–2030. United Nations Office for Disaster Risk Reduction (UNISDR): Geneva, Switzerland. Available at: <https://www.undrr.org/media/16176/download?startDownload=20250217>.
- United Nations Department of Economic and Social Affairs (UN DESA). 2017 World Statistics Pocketbook. 2017 edition. UN DESA, New York. Available at: <https://unstats.un.org/unsd/publications/pocketbook/files/world-stats-pocketbook-2017.pdf>.
- USAID (2008). Senegal biodiversity and tropical forests assessment: Prosperity, livelihoods and conserving ecosystems (PLACE) IQC Task Order #1. United States Agency for International Development.
- Wilhelm, C. (2023). “Local Content is politics”: An examination of the origins of local content policies in Guinea’s mining sector. *The Extractive Industries and Society*, 13, 101158.
- World Bank (2017). *Senegal rural land policy: Modernizing the rural land sector*. The World Bank, Washington D.C.
- World Bank (2018). Benin Evaluation des Forêts Classees -rapport final.
- World Bank (2019). *Diagnostic study: Policies for sustainable accessibility and mobility in the cities of Benin*. The World Bank Group 1818 H Street, NW Washington D.C. Available at: <https://www.ssatp.org/sites/ssatp/files/publication/Country-Assesment-report-Benin-En.pdf>.
- World Bank (2020). *Benin: Country Forest Note*. Report No: AUS0001346. Washington DC.
- World Bank (2021). Senegal Cadastre and Land Tenure Improvement Project (P172422): Project Appraisal Document. Available at: <https://ewdata.rightsindevelopment.org/files/documents/22/WB-P172422.pdf>.
- World Bank Gender and Innovation Lab (WBGIL). (2019). Impact Evaluation of Access to Land Project in Benin. Prepared for the Millennium Challenge Corporation. Available at: <https://thdocs.worldbank.org/en/doc/537351555943343180-0010022019/original/MCCEvaluationReportIofAccesstoLandProjectinBeninFINAL.pdf>.
- Yemadje, R. H., Crane, T. A., Mongbo, R. L., Saïdou, A., Azontonde, H. A., Kossou, D. K., & Kuyper, T. W. (2014). Revisiting land reform: land rights, access, and soil fertility management on the Adja Plateau in Benin. *International Journal of Agricultural Sustainability*, 12(3), 355-369.
- Zhu, H., Geng, C., & Chen, Y. (2024). Urban–Rural Integration and Agricultural Technology Innovation: Evidence from China. *Agriculture*, 14(11), 1906.



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Authors: David Anafo, Peter Asare-Nuamah, Tina Beuchelt
Contact: anafo.d@wascal.org, pasarenu@uni-bonn.de, tbeuchel@uni-bonn.de
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Phone: +49-228-73-1861
Fax: +49-228-73-1869
E-Mail: presse.zef@uni-bonn.de
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