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## RESEARCH ARTICLE

### USE OF AGRICULTURE LAW IN LDCS AS AN INTERNATIONAL LAW - MYTH OR REALITY

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#### ABSTRACT

Environmental law is a branch of law that dictates the interaction between humans and their environment. Agricultural law is a branch of the law that deals with the infrastructure of agriculture and cover agricultural production, marketing, and distribution. The two branches of law intersect on issues that overlap the two legal spheres, such as pollution. While environmental law regulates agricultural pollution, agricultural law regulates environmental protection. Governments aim to strike a balance between protecting the environment and allowing the agriculture sector to grow and prosper. The right balance delivers optimal environmental and economic outcomes. Political regime influences the government's agricultural policy with democracies appearing to enhance agricultural production compared to autocracies. Political accountability present in democracies prevents the implementation of laws that would adversely affect farmers. Continuous globalization increases the importance of international agriculture law, with some countries calling for its internationalization. However, in light of the weak policy, legal, and institutional framework in developing countries, it is not yet time to internationalize international agriculture law.

**Key words:** Environmental law, agricultural law, democracy, developing and LDC countries, Agriculture Infrastructure; Environmental and Agriculture Laws; Agriculture Law as an Independent Branch of Law; Environment and Agriculture Law Complementarity. Agriculture Law in Developing Countries

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## INTRODUCTION

Environmental law is a branch of law that dictates the interaction between humans and their environment. Agricultural law is a branch of the law that deals with the infrastructure of agriculture and cover agricultural production, marketing, and distribution. The two branches of law intersect on issues that overlap the two legal spheres. While environmental law regulates agricultural pollution, agricultural law regulates environmental protection. Governments aim to strike a balance between protecting the environment and allowing the agriculture sector to grow and prosper. The right balance delivers optimal environmental and economic outcomes. Political regime influences the government's agricultural policy with democracies appearing to enhance agricultural production compared to autocracies. Continuous globalization increases the importance of international agriculture law, with some countries calling for its internationalization.

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Weak policy, legal, and institutional frameworks is a significant problem facing the agricultural sector in developing countries. Therefore, agriculture law would fit in the practice of law alongside environmental law to address policy and legal issues that hamper environmental conservation in the agriculture sector.

**Environmental law:** Environmental regulation is a topic that spans across all countries in the world. International governments face challenges in coming up with ways to effectively regulation pollution and use natural resources on a global level (Percival *et al.*, 2107). Since environmental regulations can be sensitive issues among local, state, and national governments, environmental management, and the use of natural resources are some of the controversial issues between governments (Portney, 1992). Of the many international summits on environmental issues, one that touches on land use for agriculture is the Rio Declaration (Declaration, 1992). The signatory states stated that the development of the earth by humans should be in a way that meets the environmental and developmental needs of the present and future generations. Environmental law is a branch of law consisting of a set of laws, common law, agreements, and regulations that dictate the interaction between humans

and their environment (Plater *et al.*, 2016). Environmental law aims at protecting the environment and creating rules for how people can responsibly use natural resources. By determining who uses natural resources and on what terms, environmental laws may regulate pollution, mineral harvesting, forest protection, and animal and fish populations (Glicksman *et al.*, 2019). Unlike criminal law that dates many centuries back, environmental laws are relatively new across the globe. In the United States, the passing of environmental laws began in the 20th century. The momentum picked up in the 1960s with most of the environmental laws and regulations formulated since then (Sax, 2000). Nuisance was the first focus of environmental laws, where the courts can step in to stop a person from using their property when the use interferes with another person's use of their property (Bryson & Macbeth, 1972). The development of nuisance laws was via common law decisions in courts. Early environmental laws did not concentrate on protecting the environment entirely, as an individual not personally affected by a polluter could not sue the polluter (Lazarus, 2008). Today, environmental laws cover a broad range of topics, including air quality, water quality, waste management, chemical safety, contaminant cleanup, and hunting and fishing (Glicksman *et al.*, 2019).

Major environmental regulations in the U.S. include the Clean Water Act, Clean Air Act, National Environmental Policy Act, and Resource Conservation and Recovery Act (Gerba, & Brusseau, 2019). While there are various sources of environmental laws, the Environmental Protection Agency (EPA) is the source of many environmental laws, with a majority of the regulations contained in Title 40 of the EPA's Code of Federal regulations (EPA, 2020). Concerning agricultural use of land, the Federal Land Policy and Management Act of 1976 mandates the Bureau of Land Management (BLM) to manage public land resources for a wide range of uses, including livestock grazing (Carver Jr, 1977). The BLM regulates grazing on 155 million acres of land per federal law. The permits and leases issued to public land ranchers by BLM contain the terms and conditions as well as stipulations on forage use and season of use (Torell & Doll, 1991). In Europe, environmental regulations by the European Union (EU) influences farming activity. Most of the influence is regulatory, formulated to regulate negative externalities (Delreux & Happaerts, 2016). EU environmental regulations include biodiversity and nature conservation policy, water pollution and management, climate change, and policy on biotechnology and GMOs.

**Agricultural Law:** Agricultural law refers to the section of the law that deals with the infrastructure of agriculture. Agricultural law covers agricultural production, marketing, and distribution. The law aims at ensuring efficiency in the production and distribution of food and fibers (Alabrese *et al.*, 2017). The broad scope of the industry and the complexity of laws and regulations in this area of law mean that agricultural laws often intersect with other laws such as environmental laws, labor laws, and commercial laws, among others. Persons, institutions, and businesses under agricultural law include farm owners, agricultural equipment manufacturers, and distributors, agricultural finance institutions chemical suppliers, meat, fruit and vegetable producers, and agribusinesses (Kirton & Trebilcock, 2017). Similar to environmental law, agricultural law is also a relatively recent area of law.

While farmers have a history of engaging business and real estate contracts, it was until the 1980s that state laws on the production of food and fiber took effect (Schneider, 2009). Today, various federal statutes regulate or pertain to agricultural activity in the U.S. (Gregory, 2018). An example of such regulations is the Agricultural Assistance Act of 2003, which assists producers who incur losses due to weather-related disasters or other emergency conditions. The United States Department of Agriculture (USDA) is responsible for the development and execution of federal government policy on farming, food, and forestry (Schimmelpfennig, 2016). States get the right to pass laws promoting the general health and safety and well-being of the public from the Tenth Amendment of the Constitution. The Tenth amendment forms the basis for the enactment of agricultural laws by states, as long as the laws do not contravene federal laws and regulations (Adragna, 2019).

**Interaction between Environmental and Agriculture Law:** Agricultural policies influence the relationship between agricultural production and the environment (Henderson & Lankoski, 2019). Agroecology often refers to the intersection between agriculture and the environment (McMahon, 2019). Interactions between agriculture and the environment where arising concerns may involve both agricultural and environmental laws include:

**Soil Quality/Sustainability Concerns:** Changes in land-use practices such as overgrazing, farming of uncultivated land, the removal of hedgerows, deforestation, and neglect of soil conservation methods can damage soils (Fernandez *et al.*, 2019). Issues include desertification, erosion, contamination, moisture balance, and nutrient supply.

**Water Quality and Quantity Pollution Concerns:** The use of manure and fertilizer and high levels of production cause a severe problem of ground and surface water contamination, especially in areas of specialized crop and intensive livestock production. In areas where there is an imbalance of water consumption and availability, with use being higher, water quantity problems arise (Mahessar *et al.*, 2017). Issues include water extraction and drainage, leaching of nutrients and pesticides, and flooding.

**Air Quality/Pollution Concerns:** In Europe, agriculture is the source of approximately 8% of total greenhouse gas emissions. It is the primary source of methane (from cattle production) and nitrogen oxide (from grazing livestock), accounting for about 40% of the two gases (Fuzzi *et al.*, 2017). Issues include emissions of ammonia and greenhouse gases.

**Biodiversity/Conservation Concerns:** As agriculture intensifies; species and habitats continue to reduce. Although about two-fifths of Europe's agricultural land remains under low-intensity systems that support semi-natural habitat and wildlife, they face a threat of intensification or abandonment due to projected high food prices. Issues include genetic, species, and ecosystem diversity (Barrios *et al.*, 2018). Economists pay particular attention to this relationship as the environmental impacts of agriculture result in some types of government and market failures. Government failure results from the government providing high levels of assistance to agriculture that distorts farming practices at the expense of the environment (Sumner, 2019).

Market failure results from a shortcoming of markets in providing and safeguarding environmental goods such as unpolluted water.

**Climate Change and Agricultural Policy:** Agriculture relies on a stable and predictable climate. Climate disasters, attributed to climate change, are impacting agricultural activities. Heatwaves and water shortages during droughts negatively impact crops and livestock, while excessive precipitation and floods lead to increased and changing occurrences of weeds, diseases, and pests (Stevanović *et al.*, 2016). Addressing climate change starts with farms around the world, adopting and implementing climate-smart practices and technologies, which require stipulation and facilitation by appropriate environmental and agricultural laws (Kumar *et al.*, 2018). In developing countries, farmers need to be provided with financial means to help them invest in climate-smart practices and technologies (Fellmann *et al.*, 2018). Incorporation, integration, or 'mainstreaming' of climate change adaptation into governments' policy apparatus is vital in making it sustainable and applicable on a broader scale (Bockel & Smit, 2009). A majority of climate adaptation measures closely associate or overlap with existing strategies and programs.

**Democracy and Agricultural Law:** Political regime influences the government's agricultural policy. The level of democracy correlates with the likelihood of governments to reduce taxes on agricultural sectors (Harrigan, 2018). Also, industrial subsidies and high and volatile inflation increase the chances of resource extraction from agriculture. The implication is that authoritarian governments tend to discriminate against rural farmers by raising the tax rate, while elected governments tend to reduce agricultural taxes. A report by the World Bank (2008) noted the agriculture sector is fundamental for development in the 21st century, particularly for sustainable development and poverty reduction. In the report, the World Bank argued that strengthening democracy and civil society in many countries would enhance agricultural performance. Democracy is among institutional characteristics that affect political outcomes and policies, hence the expectation that democracy influences agricultural productivity (Lio & Liu, 2008). Besides, most high-income countries are democracies, suggesting a strong link between agriculture production and democracy. Democracy can benefit agricultural production in various ways. First, political bargaining between interest groups results in political outcomes that influence agrarian relations and agricultural taxation, among others (Binswanger, & Deininger, 1999). Democracy can enhance the participation of previously powerless agrarian groups by facilitating the decentralization of political, fiscal, and administrative power (Gilbert, 2015). Second, democracy can create greater stability as the preferences of the average voter prevent radical policies that would adversely affect farmers (Rodrik, 1999). Third, compared to autocracies, democracies tend to have fewer entry barriers as political accountability minimizes the protection of vested interests and is more open to the adoption of advanced agricultural technologies (Hamlett, 2003).

**Application of Agriculture Law in Developing Countries:** An examination of the proposed policy interventions in the agriculture sector in Kenya highlights how agricultural laws would fit in the practice of law in the developing countries

where the law and science, as such, are still at the embryonic stage. Constraints in policy, legal, and institutional frameworks are challenges not limited to Kenya but are also present in other developing nations, albeit at varying degrees (Kherallah & Kirsten, 2002). Agriculture is the bedrock of the Kenyan economy, contributing 26% of the GDP directly and another 25% indirectly. The sector provides more than 18% of formal employment and accounts for 65% of the country's total exports. Agriculture contributes more than 70% of informal employment in rural areas (Government of Kenya, 2010). The vision of the agricultural sector is a food-secure, and prosperous Kenya achieved through its mission of innovative, commercially oriented, and modern agriculture. Despite the growth of the national economy being highly correlated to growth and development in agriculture, there is a need for laws dedicated to regulating and improving agriculture. The country would benefit from the practice of agricultural law alongside environmental law.

The agricultural sector of Kenya formulated the development strategy 2010-2020 that outlined proposed ways to incorporate agricultural laws that also protect the environment. In all the six subsectors of agriculture-food crops, industrial crops, fisheries, forestry, livestock, and horticulture- one issue consistently that came up was the need to establish better policies and legal framework (Government of Kenya, 2010). Lack of capacity and a protracted process hampers the development and drawing up of policies. The Strategy for Revitalizing Agriculture identified reviewing and the legal, regulatory, and institutional frameworks as one of the six interventions to track the economic recovery process fast. Also, Vision 2030 identified agriculture as one of the economic sectors to deliver a 10% annual economic growth. It recognized that to meet this target; there is a need for a transformation of agriculture from smallholder subsistence to modern and commercially oriented. One of the ways to do this by introducing land-use policies for better use of high and medium potential lands. One of the significant challenges facing the agriculture sector is an inappropriate legal and regulatory framework (Government of Kenya, 2010). A fragmented and outdated legal and regulatory framework remains a significant barrier to the development of the sector.

The agricultural sector has experienced an evolution of various and complicated laws that limit private investments. Appropriate policies ought to change the role of the government as a facilitator and regulator of agricultural activities (Government of Kenya, 2010). Inappropriate policy and legal framework inadequately support private-sector-led agricultural development in a liberalized economic environment. In crop production, a serious concern of the government and the public is environmental pollution and misuse and adulteration of agrochemicals and seed. With so many bodies include National Environmental Management Authority (NEMA), the Kenya Bureau of Standards (KeBS), Pesticides Control Products Board, the Kenya Plant Health Inspectorate Service, and the Plant Protection Services, expected to address these concerns, the risk of inefficiency, duplication of effort, and over-regulation of the agriculture sector increases (Government of Kenya, 2010). Remedies include reviewing and enhancing laws that relate to the delivery of plant protection. In livestock production, the policy and regulatory framework must be updated to align with the goals of the sector as well as address challenges in the local,



regional, and international spheres. Challenges in water resources and irrigation development include a lack of national plan and policy, legal and institutional framework to guide irrigation development. The consequences include wastage of scarce resources, duplication of effort, and haphazard interventions (Government of Kenya, 2010). Proposed interventions include finalizing and implementing the national irrigation policy and legal framework. On developing Northern Kenya and other arid lands, legal inequalities intertwine with social exclusion and economic marginalization. Proposed interventions include policy, legal, cultural, and institutional issues that derail the development of these areas. On land use, a lack of a comprehensive national policy exacerbated by often incongruent multiple land laws resulting in a breakdown in land administration, and disparities in land ownership. Practices encouraged by inappropriate land-use policies and environmental policies include land fragmentation, retention of idle land, cultivation of riverbanks, an extension of urban development into agricultural land, deforestation, and encroachment into catchment areas and wetlands (Government of Kenya, 2010). The solution includes formulating and implementing appropriate policy and legal frameworks. Proposed interventions include the development and implantation of policy, legal, and institution reforms on land use and development, the security of land tenure, and sustainable conservation of the environment.

Kenya is a water-scarce country with the problem of increasing annually due to factors including the destruction of catchment areas, river-bank cultivation, and poor land practices. Consequences of failures management of the environment and natural resources encroachment and conversion of water catchment areas such as the Mau Complex into agricultural land destroying fragile ecosystems, drying up of seasonal rivers, and reduced water levels in rivers (Government of Kenya, 2010). Proposed interventions include improving environmental conservation, improving the management of pollution and waste, enhancing conservation and management of resources, and implementing the national climate change response strategy. Weak institutional, policy, and legal frameworks also characterize forestry and wildlife resources. Notably, only a few incentives exist to motivate landowners and communities bordering protected forests and wildlife areas to land use practices compatible with wildlife conservation and management (Government of Kenya, 2010). Formulating and implementing appropriate forestry and wildlife institutional, policy, and legal frameworks is the first step in conserving and sustainably managing these resources. Weak policy, legal, and institutional framework is a significant problem facing the entire Kenyan agricultural sector. In all these sectors, a commonly proposed intervention is the formulation and development of robust policy, legal, and institutional framework as such agricultural laws would fit in the practice of law in Kenya, where the law and science as such are still at the embryonic stage (Milligan & Mehra, 2018).

## Conclusion

The importance of international agricultural law increases with the rise in international trade. International environmental law intersects with agriculture in the use and maintenance of international waters, forest resources, and the atmosphere (National Agricultural Law Center, 2020). International

agricultural law is rapidly evolving in response to the evolution of general international law. However, it is a complex branch of law due to the overlap of national and world interests. A notable overlap is seen between international agricultural law and agricultural trade. With continued globalization, international agricultural law continues to evolve and is set to impact every aspect of agriculture. International agreements are part of public international law that constitutes international agricultural law. Various international agreements, also referred to as conventional international law, are relevant to agriculture. The most common are trade agreements that form part of international agricultural law. Examples of trade agreements include the General Agreement on Tariffs and Trade of 1947 (GATT) and Agreement on Agriculture of 1994 (AA) that defined rules governing international agricultural trade (National Agricultural Law Center, 2020). Free trade agreements, issue-specific trade agreements, and bilateral agreements are other trade agreements that form part of international agricultural law. Continental agreements such as European Union agreements, organization of American States agreements, and African Union agreements are some of the supranational agreements that fall within the category of regional international agreements. A further source of international agricultural laws is any agreement involving multiple countries that, in some way, regulates agricultural trade.

Although there are calls to the internationalization of agriculture law, most developing nations are not ready for the adoption of the law (National Agricultural Law Center, 2020). As observed in the case of Kenya, most have a weak policy, legal, and institutional frameworks to support the implementation of international agricultural law. Developing countries need to streamline national policies before considering global interests. Additionally, most developing nations are yet to meet the recommendations made by regional agreements. Bypassing such requirements to meet those of international agricultural trade would be not only sophisticated but also impractical. Therefore, it is not yet time to internationalize international agricultural law. Agriculture law and environmental laws are two distinct branches of laws that interest issues touching both agriculture and the environment, such as pollution and environmental protection. While agriculture law is established in developed nations, it is still at the embryonic stage in developing nations. Incorporating agricultural law alongside environmental laws in these countries would help address weakness in policy, legal, and institutional framework. However, developing nations are not ready for the internalization of international agriculture law.

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