Review Article

Innovativeness in Legislative, Political and Organizational frameworks of Sustainable Land Management in Benin

ABSTRACT

Agricultural lands are increasingly degraded due to various human actions (overgrazing, intensive use of chemical inputs, etc.) and the consequences of climate change. In Benin, 62% of agricultural land were degraded in 2017. In this regard, sustainable land management (SLM) measures are highlighted by various public decisions. This study ~~analysed~~analyzed the political, legislative, and organisational frameworks of SLM in Benin. It was carried out through content analysis of laws, decrees and SLM policy documents in order to highlight the place of innovativeness in institutional and organisational framework in SLM in Benin. Results reveal that the various frameworks analysed are oriented towards developing practice-based innovations through the implementation of SLM measures, support to actors in the implementation of SLM innovations and the monitoring and evaluation of SLM strategies. The capacity to innovate is also promoted through the strengthening of the technical, institutional, material and financial capacities of the actors. On the other hand, the propensity to innovate component of innovativeness is hardly addressed in SLM public policies in Benin. It is therefore necessary to direct agricultural policies towards an institutionalisation of the strengthening of the propensity to innovate of agricultural producers for a long term appropriation of SLM measures in Benin.

Keywords: sustainable land management, legislative, political and organizational frameworks, innovativeness, Benin.

1. INTRODUCTION

Land is a natural resource essential for the development of agriculture, food security and life [1]. However, it is increasingly degraded reducing therefore its availability [2]. The causes of this degradation have anthropogenic origins (intensive agriculture, misuse of inputs, construction of infrastructure, etc.) [3]. These are exacerbated by the effects of climate change (variation in rainfall, drought, etc.) [4]. 90% of the lands has a low to very low fertility level and 62% of degraded agricultural land in Benin [5]. This situation worries actors at various levels such as researchers, land users, and development and political actors [3]. Thus, the government of Benin, through political, legislative and organisational measures, provided a framework for promoting Sustainable Land Management (SLM) [6].

Institutional environment indeed facilitates or may hindered the adoption of Sustainable Land Management measures disseminated [7]. Indeed, in addition to individual, technical and managerial factors, political and regulatory factors influence either the adoption behavior of an innovation or the innovation behavior [7], [8]. Innovative behavior could not arise without the intention to innovate. The latter generally depends on the norms and values that govern its environment [8]. These norms and values underlie the coordination between actors and the whole organisational arrangement [9]. The intention to innovate is the tendency to innovate, or the innovation itself [10]. It relates to innovativeness defined as the sum of the tendency or intention to innovate [10], the capacity to innovate [11], the application or praxis of innovation [12].

Depending on the field, innovativeness can be used to assess behavior in term of an innovation or the speed of adoption of an innovation [13]. Innovativeness is defined as the extent to which an individual accepts new ideas and then adopts them [14]. Contemporary studies of innovativeness define it as a determining factor in the adoption of innovations [15]. Indeed, individuals with high innovativeness are able to effectively adopt the innovations they are exposed to [16]. The adoption of innovations is the decision to accept or reject an innovation and the degree of acceptance of these innovations [17]. In this study, we define innovativeness as the ability to innovate, the propensity or intention to innovate or the praxis (habit of practicing) of innovation.

Innovation is crucial in agriculture to meet the challenges faced by different systems [18]. It is seen as a key that will open the doors to environmentally sustainable agriculture [19]. SLM measures considered as innovations will be adopted by innovative farmers only when necessary, incentive and support measures to strengthen farmers' innovativeness are in place [15], [16]. This study therefore aims at assessing the degree to which innovativeness is considered in political, legislative and organisational frameworks in SLM in Benin.

2. METHODOLOGY

This study is purely qualitative. Data used for this study come from literature review of official documents from Benin's agricultural public policy. It consists in collecting and then analyzing political, legal, institutional and program projects documents related to SLM in Benin. The ~~table~~ Table 1 below presents the list of documents analysed in this study.

Table 1: List of documents analysed

Frameworks	Document titles	Years
Politicy	National Action Plan to Combat Desertification (PAN-LCD: Plan d'Actions National sur la Lutte Contre la Désertification)	1999
	ECOWAS Environmental Policy	2008
	WAEMU Environmental Policy	2008
	Strategic Investment Plan in Sustainable Land Management (PSI-GDT: Plan Stratégique d'Investissement dans la Gestion Durable des Terres)	2012
	National Plan for Agricultural Investment and Food and Nutritional Security (PNIASAN: Plan National d'Investissement Agricole et de Sécurité Alimentaire et Nutritionnel)	2017
	Strategic Plan for the Development of the Agricultural Sector (PSDSA: Plan Stratégique de Développement du Secteur Agricole)	2017
	National Action Plan for Sustainable Land Management (PAN-GDT: Plan d'Actions National pour la Gestion Durable des Terres)	2019
Organisational	Law N°. 97-029 of January 15, 1999 on the organisation of municipalities	1999
	Decree N°. 2O17 -101 of February 27, 2017 confirming the approval of the creation of Territorial Agricultural Development Agencies (ATDA: Agences Territoriales de Développement Agricole)	2017
	DECREE N°. 2019 _ 071 establishing the powers, organisation and functioning of the Ministry of Agriculture, Livestock and Fisheries (MAEP: Ministère de l'Agriculture de l'Elevage et de la Pêche)	2019
	DECREE N°. 2019 _ 547 OF, DECEMBER 11, 2019 relating to the attributions, Organisation and functioning of the Ministry of the Living Environment and Sustainable Development (MCVDD: Ministère du Cadre de Vie et du Développement Durable)	2019
Legislative	Law N°. 87-013 of September 1987 regulating vain grazing, the keeping of domestic animals and transhumance	1987
	Framework law on the environment N ° 98-030 of February 12, 1999	1999
	Law N°. 2007-03 of October 16, 2007 on rural land tenure Republic of Benin	2007
	Law N°. 2010-44 on water management in Benin	2010
	Law N°. 2017-15 of May 26, 2017 amending and supplementing Law N°. 2013-01 on the land and state code	2017
	DECREE N°2019 _ 547 OF, DECEMBER 1, 2019 relating to the attributions, organisation and functioning of the Ministry of the Living Environment and Sustainable Development	2019

Source: The authors

Content analysis was the method of analysis used [20]. In analysis of public policies, three categories of variables are proposed, the idea, the interest and the institution [21]. The analysis of ideas consists of analyzing the different orientations of policies. Through the analysis of institutions, it is necessary to analyze the different measures and rules that define the development of policies. As for the analysis of interests, it involves analyzing the different gains / profits that the actors can obtain after the development of a policy. Our study is based solely on the analysis of the literature, this leads us to analyze the rules and policy orientations on SLM in Benin We analyze how the rules, policy documents and organizations that address SLM in Benin, take into account the components of innovativeness.

3. RESULTS

3.1 ~~Compenents~~Components of innovativeness in the legislative and regulatory framework of SLM in Benin

Benin's legislative and regulatory framework has started highlighting the measures of SLM after the Rio of Janeiro conference in June 1992. Although there is no law specifically on sustainable land management, the latter draws its legislative framework from the environmental law N°98-030 of February 12, 1999. This law in its article 53, promotes land protection actions against humans' behaviours likely to degrade land, and cause desertification and erosion of agricultural land.

> " *When the conservation of the natural environment in the national territory is of special interest and that this environment of any human intervention…. The protection of land against desertification, erosion and the rise of salts, in agricultural land is of public utility.* " (Law N ° 98-030 of February 12, 1999 on framework law on the environment in Republic from Benin, pp 27)

Human actions likely to have an impact on the land are among others, grazing, keeping pets, transhumance. To this end, the Law N°. 87-013 of September 1987 regulating wasteful grazing, the keeping of domestic animals and transhumance is effective for the sustainable management of land.

> " *The empty pasture is the law for a breeder to graze his cattle on natural and unenclosed spaces of others after the harvest*." (Law No. 87-013 of September 1987; pp 1). "*It is prohibiting to carry out all clearing and cultivation within natural pastures*." (Law No. 87-013 of September 1987; pp. 2)

Law N°. 87-013 of September 1987 recommended the practice of SLM measures through the prohibition of land clearing in natural pastures and the promotion of integration of agriculture with livestock. The breeder, who grazes his cattle in search of pasture but also of water. While law n ° 2010-44 on water management in Benin promotes practice through the promotion of management integrated water resources.

> " *The purpose of this law is to determine the conditions integrated management of water resources … To Integrated water resources management is a process of promotion of the development and coordinated management of water, land and associated resources, with a view to maximizing fair, the well-being economic and social results without compromise the sustainability of vital ecosystems...* " (Law No. 2010-44 on water management in the Republic of Benin; pp.1.)

The weak application of the legislative and regulatory texts cited above increases the land tenure insecurity of producers. The land tenure insecurity that has been an obstacle to the application of SLM techniques. Thereby, the Law No. 2007-03 of October 16, 2007 on the rural land tenure system of the Republic of Benin and Law No. 2017-15 of May 26, 2017 amending and supplementing Law No. 2013-01 on the land and public property provide a framework for securing land in Benin.

> " *The soil, the subsoil and the wealth contained therein are, as non-renewable and / or limited resources, of the protected domain of the State. They are managed in a rational and sustainable manner in accordance with the provisions of this code of the specific texts in force.… All Beninese has an equal vocation to access natural resources in general and agricultural land in particular, without discrimination of sex or social group genius under the conditions provided for by the constitution, laws and regulations*." (Law N'2013-01 on the land and state property code; pp.69.)

They offer a common system for rural land management and ensure land security for producers to stimulate investment in production and maintenance of land fertility. Furthermore, the environmental police (under the supervision of the Ministry of the Living Environment and Sustainable Development) is responsible for making producers aware of the existence of the various laws and rules related to SLM. In the event of violations of these rules, it is responsible for making the report and issuing the ticket if necessary.

The legislative framework for SLM is experiencing some difficulties, including ignorance of the various laws by rural populations. This lack of knowledge then contributes to the non-application of the various texts and laws related to SLM. The population is also not aware of the environmental policy, an institution responsible for disseminating and complying with the rules and laws on SLM. Moreover, what are the policies resulting from this legislative framework for SLMs in Benin?

3.2 Components of Innovativeness in the political framework of SLM in Benin

In Benin, SLM policies are perfectly aligned with environmental policies and agricultural development policies which themselves are inspired by regional and international policy frameworks. Benin is based on the various international agreements, and draws up a National Action Plan to Combat Desertification (PAN-LCD: Plan d'Actions National sur la Lutte Contre la Désertification) in 1999. The PAN-LCD defines the strategic orientations and operational actions at national and local levels in the fight against the causes and impacts of desertification. It proposes strategic actions, which aim to arouse the propensity to innovate in local communities and to raise awareness of local communities.

> " ...*Dongive local communities a better perception of the value of trees, forests and forest lands and of the need to ensure their sustainable management … Thus, so that the fight against desertification can ben year of success, it is important to involve the various grassroots actors in arousing and by supporting their initiatives* " (PAN-LCD 1999; pp.50-51.)

PAN-LCD also aims to strengthen the capacity to innovate of actors through the strengthening the technical and financial capacities of grassroots actors Firstly. On the other hand, we also note the strengthening of the praxis of innovation through the promotion of techniques favoring the rational use of natural resources. PAN-LCD aims to:

> " *Strengthening the capacities of farmers at the base for food production based on the vocation of the zones ... The Enhancement degraded areas by promoting arido-cultures… The implementation of certain conservation measures and protection of natural resources as provided for in the National Agenda 21 ... Strengthening of reforestation and agroforestry promotion… Contribution to the enhancement of endogenous drought control methods… Contribution to the promotion of alternative activities likely to replace those which are highly destructive of natural resources ... The promotion of techniques favoring the rational use of natural resources* ..." (PAN-LCD 1999; pp.60.)

PAN-LCD then aligns itself with the adoption in 2012 of a Strategic Plan for Investment in Sustainable Land Management (PSI-GDT: Plan Stratégique d'Investissement dans la Gestion Durable des Terres). The PSI-GDT foresees several strategies of propensity stimulation to innovate the actors and the praxis of SLM measures.

> " *Expand creative capacities and exchange of knowledge on the factors of land degradation and possible solutions technically and technologically ; Support the creation of learning spaces and innovation networks within communities with a view to exchanges and dissemination of best SLM practices ; Implement a multi-media communication strategy adapted to the different categories actors and allowing create spaces for learning, exchange and dissemination of best practices in SLM ; Strengthen the processes and actions in progress related to SLM and promote pilot protection and rehabilitation actions degraded land ; Facilitate the availability and access of all categories of actors involved (men, women, young people) to resources productive upstream of SLM ; Promote the valuation of products resulting from SLM practices."* (PSI GDT 2010; pp.37.)

The implementation of the PSI-GDT is also experiencing difficulties in mobilizing resources. To overcome these difficulties, Benin has so defined its Land Degradation Neutrality (NDT: Neutralité en matière de Dégradation des Terres) targets in 2017. Benin therefore wants to achieve land degradation neutrality by 2030. It therefore sets itself the ambition of:

> " *R restore at least 50% (i.e. 1.25 million ha) of degraded land during the 2000-2010 reference period, and limit the loss of non-degraded land (forests and savannas) to 5%, in order to preserve terrestrial ecosystems and aquatic with a net improvement in plant cover of 12%* " (NDT 2017 ; pp. 17.)

Despite all the policies put in place, there is continued land degradation. The National Action Plan for Sustainable Land Management (PAN-GDT: Plan d'Actions National pour la Gestion Durable des Terres) is then drawn up with the aim of changing the SLM paradigm for concrete results. The PAN-GDT contributes through its orientations to the achievement of priority targets linked to the Sustainable Development Goals (SDGs): "Preserve and restore terrestrial ecosystems, by ensuring that they are used in a sustainable manner, sustainably manage forests, against desertification, halt and reverse the process of soil degradation and put an end to the loss of biodiversity". To do this, it provides for the implementation of the SLM paradigm of Benin: " Avoid-Reduce-Restore " through which it will be to avoid the degradation of healthy lands, reduce the degradation of affected lands and restore already degraded lands that still have restoration potential.

> *" Promote an intensification of sustainable and climate-smart agriculture and the upgrading of the scale of proven and appropriate SLM measures, at the level of the 7 development poles agricultural and for all sectors; promote land restoration degraded (agricultural land, protected areas, forests natural areas, mangroves and other wetlands); Scale up the farm and throughout the national agricultural territory, as well than on other land use units, good SLM practices* ". (PAN GDT 2019; pp.13)

PAN-GDT thus promotes application of SLM measures. It also aims to build the capacities of actors. We note the strengthening of technical capacities on SLM of actors but also the strengthening of institutional, legislative and regulatory capacities for the implementation of SLMs. In addition, the PAN-GDT is anchored in the Government's Action Program (PAG: Programme d'Action Gouvernemental) (2016-2021) which makes the agricultural sector a priority. To this end, it is also inspired by the Strategic Plan for the Development of the Agricultural Sector (PSDSA: Plan Stratégique de Développement du Secteur Agricole) and its National Plan for Agricultural Investment and Food and Nutrition Security (PNIASAN: Plan Stratégique de Développement du Secteur Agricole). The PSDSA and PNIASAN globally aim at the implementation of SLM techniques in its component 3.2. Their ambition is to promote the practice of SLM techniques through the large-scale promotion of SLM measures. This translates to objective of promoting agroforestry, integrated management of soil fertility, implementation of CES measures and integrated management of water resources. Institutional capacity building is also aimed in the 2025 PSDSA through the creation of a political, institutional, legal and political framework conducive to the engagement of all stakeholders and the implementation of SLM actions.

It is clear that SLM policies in Benin want to improve the implementation of SLM measures by stakeholders. They aim to adopt the SLM paradigm, implement SLM measures, strengthen the institutional and regulatory framework and then mobilize resources for financing SLM. To do this, these policies therefore improve the practice and ability of actors to innovate to the detriment of their propensity to innovate. After the analysis of the policies put in place, it is advisable to take a look at the operationalization of the different strategies and actions proposed by SLM policies through the analysis of the different organizations in charge of actions on SLM.

3.3 Components of innovativeness in the organisational framework of SLM in Benin

SLM in Benin is characterised by the intervention of several categories of actors. We note organisations from public, private, and civil society sectors.

In the public sector, the Ministry of the Living Environment and Sustainable Development (MCVDD: *Ministère du Cadre de Vie et du Développement Durable*) houses the technical departments (General Direction of Environment and Climate, General Direction of Water, Forests, and Hunting) and supervised structures (Benin Environment Agency, National Environment and Climate Fund, National Center for the Management of Wildlife Reserves, National Center for Remote Sensing and Ecological Monitoring, etc.). These departments are supported by the National Commission for Sustainable Development, the National Committee on Climate Change (CNCC: Comité National sur les Changements Climatiques), and the National Committee to Combat Desertification to work towards sustainable land management.

> "*The mission of MCVDD is to develop and ensure the implementation as well as the monitoring and evaluation of the State's environmental policy and strategies, management of climate change, reforestation, protection of natural and forest resources, preservation of urban planning ecosystems, protection of banks and coasts, land and estates. This ministry facilitates the implementation as well as the monitoring and evaluation of the policy and strategies of the State in matters of natural land resources and the securing of these lands.*" (DECREE N'2019 547 OF, DECEMBER 1 1, 2019 related to the attributions, organisation and functioning of the Ministry of the Living Environment and Sustainable Development); pp. 4.)

In addition, the coordination of the Ministry of Agriculture, Livestock and Fisheries (MAEP: Ministère de l'Agriculture, de l'Élevage et de la Pêche), the Ministry of the Living Environment and Sustainable Development (MVCDD: Ministère du Cadre de Vie et du Développement Durable), the Ministry of the Sustainable Development Plan (MPD: Ministère du Plan du Développement Durable) coordinate the implementation of the various SLM actions. It ensures the mobilization of the

necessary resources but also the monitoring and evaluation of planned SLM actions. This with the support of the Ministry of Foreign Affairs and Cooperation (MAEC: Ministère des Affaires Etrangères et de la Coopération) which coordinates exchanges and partnerships with international and regional institutions on the issue of SLM. Ministry of Water and Mines (MEM: Ministères de l'Eau et des Mines) and Ministry of Energy (ME) also support in the sustainable management of land through the control and monitoring of activities that contribute to land degradation.

At the regional level, it is the Territorial Agencies for Agricultural Development which ensure the coordination and supervision of SLM promotion activities in Agricultural Development Poles (~~PDA :~~PDA: Pôles de Développement Agricole).

> ~~" *The*~~"The *Territorial Agency for Agricultural Development is responsible for… facilitating the access of sector actors to information and innovations, as well as to agricultural advice ; closely follow the actors in the effective application of the innovations introduced ; coordinate the development projects of the agricultural sectors involved in the PDA…* " (Decree N'2O17 -101 of February 27, 2017 noting the approval of the creation of ATDAs ; pp. 3.)

At the municipal level, the town halls have clear powers in the area of land use; the establishment of hydraulic infrastructure and hydro-agricultural facilities; and maintenance of plantations and protection of natural resources. Within the communal councils, there are Communal Forest Management Commissions (CoGEF: Commissions communales de Gestion des Forêts) with Village Sections of Foncier Management (SVGF: CoGEF) avec des Sections Villageoises de Gestion Foncière) as branches to ensure land management. The municipalities through town halls also participate in capacity building by setting up hydraulic infrastructure and hydro-agricultural facilities or even the maintenance of plantations and land protection.

> " *The municipality takes care of the protection of natural resources, in particular forests, soils, fauna, hydraulic resources, groundwater and contributes to their better use ... The municipality gives its opinion each time the creation is considered. on its territory, any project likely to harm the environment. It takes into consideration the protection of agricultural land, pastures, green spaces, the water table, surface water bodies and rivers in the establishment of the various public or private projects*." (Law No. 97-029 of January 15, 1999; P.21.)

In the private sector, we note the indisputable support of International, Regional and National non-governmental Organisations which provide technical and financial support through projects and programs (For example Projet de Protection et de Réhabilitation des Sols dégradés pour améliorer la sécurité alimentaire (ProSOL), Programme de productivité agricole de l'Afrique de l'Ouest (PPAO), Projet d'Adaptation de l'Agriculture au Changement Climatique (PACC)…). The latter initiate consultation frameworks with all stakeholders to facilitate the implementation and coordination of SLM actions. The main projects and programs working for SLM aim to strengthen producers to implement efficient soil practices. These projects and programs provide producers with agents specializing in SLM who are responsible for supporting producers in putting into practice the various SLM measures disseminated. While in some cases these agents are not available and the producer must tap into his knowledge to find a solution to his land degradation problem.

There are several concrete actions to disseminate and scale up SLM techniques through national and international projects and programs. For example, the ProSOL project has trained and supervised more than 34,000 producers in the implementation of SLM measures. The provision of 462 agricultural technicians and advisers previously trained in SLM by ProSOL, consists of capacity building in human resources. Technical capacity building is supported by building the material and input capacities of producers. These include, among other things, the distribution of seeds for improving plants, hoes, tricycles, boots or financial resources.

There are many actors in charge of the design, coordination, implementation and financing of SLM actions in Benin. It is important to ensure the synergy of these actions through regular consultation of all stakeholders. The implementation of the various planned actions generally encounters a problem of delay due to the politicization of all actions and administrative slowness. We must not forget the low mobilization of the necessary resources which hamper the implementation of the various plans. The establishment of a multi-actor financing mechanism is essential to support the sustainable management of land in Benin. In addition to the funding which is essential for the operationalization of SLM actions, it is necessary to take a critical look at the rules and laws that govern sustainable land management in Benin.

3.4 Components of innovativeness in the legislative, political and organizational frameworks of SLM in Benin

The legislative framework for SLM through laws and regulations is the one that sets out the rights and duties of the population on issues related to SLM in Benin. It guarantees populations the right to rational land management through the promotion of actions likely to protect and restore land and the application of SLM techniques / measures in Benin. This framework under the control of the environmental police also prohibits users from any action likely to degrade the land. We note then that the legislative aims, through these various elements, to develop the praxis of innovation by the different users of the land. Thus, the Government of Benin proposes policies, action plans, national strategy ... to serve as a guide in the interpretation and application of the laws and regulations developed.

It is clear that beyond the development of the praxis of innovation by actors, the SLM policy framework also aims to develop capacity (establishment of the inputs necessary for the application of SLM measures) and the propensity to innovate of the actors. Indeed, policies adopt a sustainable vision of SLM with long-term objectives because they are designed to be implemented over several years. Operationalisation of the different strategies and action plans developed by the politicians goes through different organizations.

The organizational framework for SLM in Benin mainly targets the application of SLM measures. To do so, the various organisations are responsible for disseminating SLM techniques / measures but also for putting in place the various inputs necessary for the application of these SLM measures. Since organization's objectives are to obtain immediate results, they will focus on promoting the praxis of innovation in order to obtain immediately measurable results.

It should be kept from this analysis that there is not a perfect alignment between the ambitions of the legislative framework, the political framework and the organizational framework of SLM in Benin. These three frameworks all aim at the praxis of innovation of actors through the promotion of the application of SLM measures. The political framework for its part also gives a place to the promotion of the propensity to innovate of the actors (development of the curiosity of the actors on SLM, encouragement to the spontaneous search for solution) and the reinforcement of the capacity to innovate (Implementation place of inputs). The reinforcement of the capacity to innovate is also advocated within the organizational framework. The main ideas observed by component of innovativeness are presented in the ~~table~~ Table 2.

Table 2: Ideas by component of innovativeness

Variables	Components	Ideas
Innovativeness	Propensity	Encouraging spontaneous search for a solution
		Development of curiosity
	Capacity	Capacity building to find solutions
		Setting up inputs
	Praxis	Diffusion of innovations of SLM
		Prohibition of actions likely to degrade the earth
		Promotion of the application of innovations
		Promotion of SLM actions

Source: The authors

Figure 1 presents a summary of the distribution of the components of innovativeness in the legislative, political and organizational frameworks of SLM in Benin.

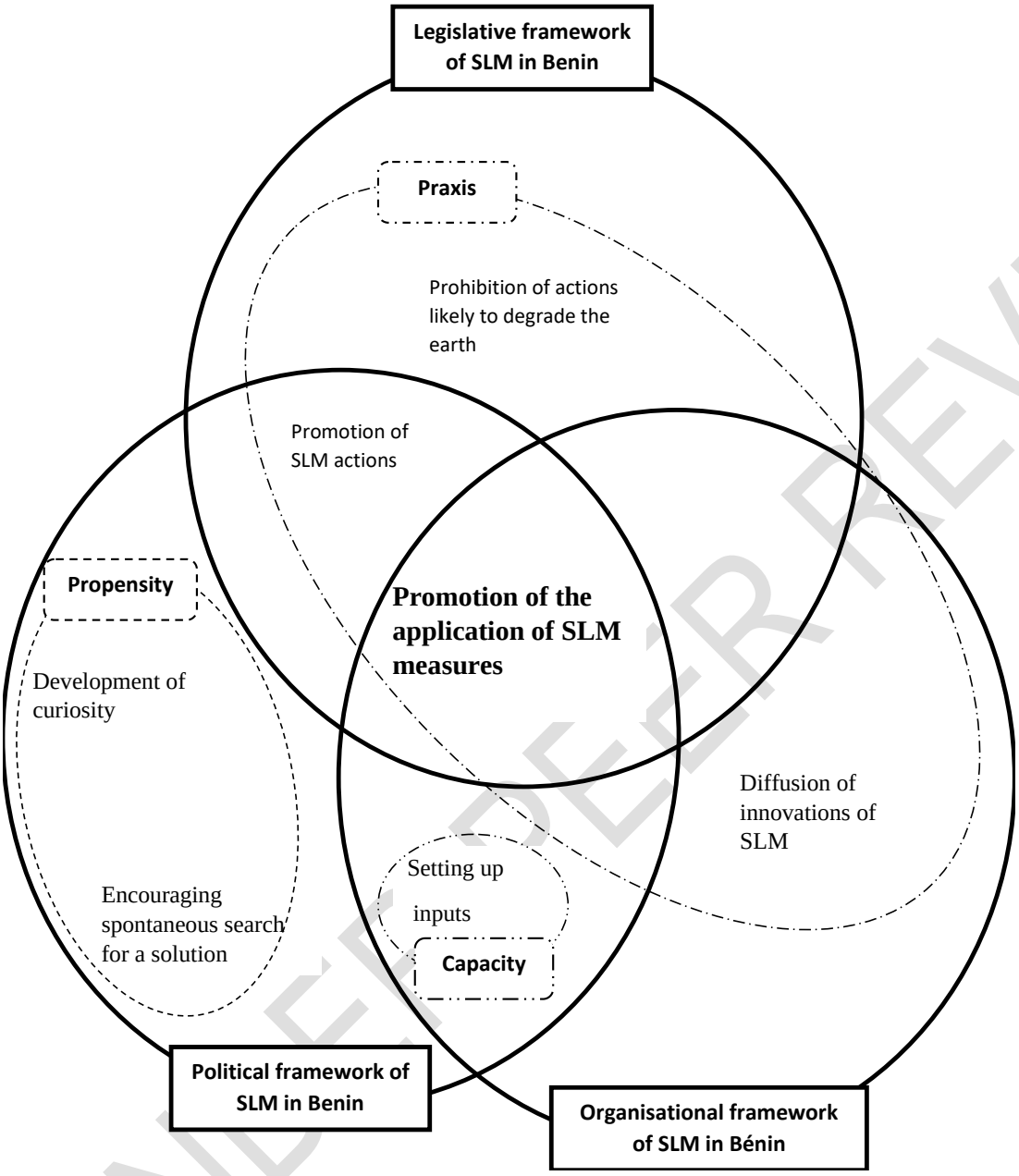

Fig. 1. Distribution of the components of innovativeness in the legislative, political and organizational frameworks of SLM in Benin *(Source: the authors)*

4. DISCUSSIONS

Public policy decisions increasingly influence the behavior of individuals [22]. Thus, the development of agricultural activities is influenced by all public policies having an effect on agricultural production. We also noted the introduction of

agricultural innovations for the development of the sector. It was then that SLM measures were introduced to producers with the aim of mitigating the effects of climate change on Benin's agriculture.

In general, the adoption of an innovation is conditioned by the characteristics of the individual, while these are themselves influenced by institutional factors [23]. More specifically, the policy, institutional and legislative framework for SLM facilitates the adoption of SLM measures [6]. This through policies and regulations related to land tenure security, the dissemination of SLM techniques, the implementation and funding of SLM actions [23], [24]. While Bouzid and al., [7] show that financial capacity building policies and land insecurity hamper the adoption of innovations. This relationship is on the other hand nonlinear, because innovativeness plays a mediating role between the factors and the adoption of innovations [25]. Innovativeness is a variable made up of the propensity to innovate [10], the capacity to innovate [11], and the praxis of innovation [12].

SLM policies aim to improve the praxis of disseminated innovations and provide producers with the necessary resources to develop their capacity to innovate. On the other hand, the propensity to innovate is neglected in these policies. Whereas the propensity (intention) to innovate is an essential factor in the process of adopting innovations [15]. It conditions the adoption behavior of innovations [26]. The propensity to innovate allows the producer to draw on his knowledge acquired during praxis and use his capacities to innovate to solve problems [10]. Because faced with environmental and social changes, the producer must innovate [27]. This propensity component of innovativeness depends on the institutional environment that can promote policies to encourage innovation. Legislative, policy and organizational frameworks should promote the propensity to innovate as much as the ability to innovate and the practice of innovation. Because it is a combination of these three components of innovativeness that could facilitate the adoption of agricultural innovations [28].

5. CONCLUSION

Benin’s political, organisational and legislative frameworks on agricultural production deal with SLM. Indeed, the state plays a leadership role by adopting policies and strategies that are translated into actions on the ground, and the latter carried out by several organisations (public organisations, NGOs, research centers, etc.). Their goal is to develop appropriate policies, promote and implement SLM measures, strengthen the institutional and regulatory framework and then mobilize the financial resources necessary to carry out these actions.

Innovativeness, an important variable in the adoption process of SLM measures, is considered in these different frameworks. We note the consideration of the praxis and the capacity to innovate by the legislation, policies and organisations. On the other hand, the propensity to innovate is only addressed in SLM policies. This situation facilitates the implementation of SLM measures but not an appropriation of these measures for long term usage. It is the appropriation of SLM measures that will facilitate the sustainable adoption of SLM measures by stakeholders. That implies that beyond reinforcement the capacity of actors and the promotion of SLM measures, policies and laws should trigger curiosity and creativity of actors in testing and sustainable adoption of SLM.

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