LEGAL REGIMES FOR SOIL PROTECTION IN MADAGASCAR

RAFANOMEZANTSOA Telina Toky[1]

[1] *Lawyer at the Madagascar Bar*

ABSTRACT

The soil constitutes a primary resource for the life of the planet. A resource for food production, support for human activities, source of minerals and construction materials, purification system, water reserve ... the soil is a vital and fundamental element for humanity. It is therefore essential to life and is part of everyday life for men. Yet this resource is currently threatened. The degradation of soils in the world is mainly due to human activities: intensive agriculture, irrigation, deforestation, and overgrazing, industrial pollution. ... Uncultivated soils are already degraded by water or wind erosion, salinization or deforestation. Therefore its protection has become a major global concern. In Madagascar, the protection of this resource is rarely mentioned. The study of the legal regimes in place has shown legal deficiencies in soil protection. In the absence of a specific legal regime for the soil, it is governed by numerous legal texts containing scattered provisions. Surprisingly, when the soil is one of the primary factors in the country's production. Madagascar's economy depends mainly on the products of their soils and subsoils (agricultural resources and mining resources). As a result, the absence of a specific legal regime for the land is not beneficial for the development of the country. The establishment of such a regime requires political will and a deep study of the subject. This article intends to feed into reflections on the establishment of a framework for analyzing the legal situation of soil protection, a pillar of sustainable development.

Keyword: - *Soil, law, Madagascar, protection, resource, sustainable development.*

1. INTRODUCTION

Soils are home to a quarter of the planet's biodiversity (FAO, 2015) [1]. Madagascar is considered to be one of the richest areas on the planet in terms of biodiversity, but also one of the most threatened. Biological diversity or biodiversity is described as "the variability of living organisms from all origins - terrestrial, aquatic or marine". This includes diversity within species (genetic diversity), between species (diversity of organisms) and of ecosystems (ecological diversity). Soils are one of nature's most complex ecosystems, and one of the most diverse habitats on earth: they are home to thousands of different organisms, which interact and contribute to the global cycles that make life possible. Nowhere in nature is the density of species as high as in soil communities (FAO, 2015) [1]. Soil constitutes a major economic asset of prime importance, the resulting protection of which should not be taken lightly. It is therefore important to know the legal regimes for soil protection in Madagascar. By "legal regime" is meant a set of legal rules applicable to an activity, a person, an institution or a thing. The application of a regime supposes that prior to the application of a rule, the operation of legal qualification is carried out. The legal qualification consists in attributing a legal quality to a thing, a person, and an activity. The legal qualification naturally indicates the applicable law regime". So, one can well ask, what qualification gives the right to the soil? What are the existing legal rules in Madagascar that may apply to the soil? Do these existing legal rules guarantee real soil protection? To answer this, the first step will address the notion of soil, the second step will consist in identifying the legal rules applicable to the soil and in the last step will be discussed whether or not these rules guarantee effective protection of the soil. The method used for the three steps adopts a legal reasoning which consists in making logical connections between notions and legal concepts.

Cette étude vise à promouvoir la connaissance du sol à travers les notions scientifiques et juridiques et d'envisager leur complémentarité pour asseoir un fondement juridique de protection des sols. Les résultats attendus se focalisent sur la pertinence de l'analyse des deux notions, utilisées comme outils de qualification juridique.

1.1 Notions of soil

There is no universal definition on the ground, there are only points of view. Three points of view are retained by this study: those of scientists, users, and environmental lawyers. related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work.

1.1.1 From the scientists' point of view:

Some specialists like Claire Chenu, Aubert and Boulaine give a scientific definition of soil: "the soil is the surface part of the earth's crust, loose, in which the roots of plants develop" (Chenu, 2014) [2]., which is "the product of the alteration, reorganization and organization of the superficial part of the earth's crust under the action of life, climate and the exchanges of energy which are manifested there" (Aubert and Boulaine 1967) [3].
The French Soil Study Association (Afes) [4] in 2014 also gave a scientific definition of soil, which is recognized by the community of pedologists: "the soil is a volume which extends from the surface of the Earth to 'at a depth marked by the appearance of a hard or loose rock, little altered, or little marked by pedogenesis. The thickness of the soil can vary from a few centimeters to a few tens of meters, or more. It locally constitutes part of the soil cover which extends to the entire surface of the Earth. It most often comprises several horizons corresponding to an organization of organic and / or mineral constituents (the earth). This organization is the result of pedogenesis and alteration of the parent material. It is the site of intense biological activity (root, fauna and micro-organism) ".related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work Introduction related your research work .
These scientific definitions attribute to the soil its physical and biological character and illustrate the conditions of its formation. By giving these definitions, we can understand the primary interests of soil scientists. The latter seek above all to physically characterize the soil through experimentation and observation and to discover the origin of its formation.
The law should integrate these notions of soil resulting from scientific definitions in order to understand it in its entirety.

1.1.2 From the users' point of view:

There are as many floor designs as there are user groups.
• For agronomists: "Soil is conceived as a resource constituting a reserve of nutrients for vegetation (cultivated or not) and the place of growth and activity of the roots.
• For archaeologists: "The soil allows to discover in layers of earth, the history of past civilizations.
• For quarry workers or miners: "Soil is the earth that is dug to extract salt, pigments, sand, clay, gravel, and sometimes ores useful for industry.
• For geotechnicians: "the soil is both this volume of earth which concerns the foundations and the material of mixture of earth, stones, gravel and rubble which will constitute a pavement or construction material.
• For planners (community, project owner, etc.): "the soil is designed as a two-dimensional support for development (housing, infrastructure, etc.) in a context of conflict or complementarity of land use.
From these conceptions, one can imagine that the law was built on it to understand the soil. For example, rural law which incorporates the notion of resource and supply (farming, protection against erosion); town planning law for the concept of development; mining rights for minor operators (land use) etc.

1.1.3 From the point of view of environmental lawyers:

Following the example of Professor Philippe Billet, this one highlights the evolution of the perception of the ground: "beyond the dimension which constitutes the land and which is that of the civil code, the ground appears more clearly like environment three-dimensional and as an interface for ecological issues. The notions of land use and use are increasingly superimposed on that of ecosystem services, and soils seem to gain a new legitimacy that allows them to no longer be considered as simple supports of services that the law strives to regulate. By arbitrating between uses, but as ecosystems in their own right, fragile and that must be shared for themselves.

If the definitions vary, specialists from various horizons agree on the need to understand the soil in all its dimensions, the soil "matter", a living environment in interaction with the other compartments of the Earth, and the soil "space". , occupied for various uses enhancing the services rendered by the "material" soil.

This quote calls for a change of perspective on the ground and to change the perception on the ground while becoming aware of the related issues.

It is apparently important to consider the soil not only for its nature but also for all the functions it has, because man is totally dependent on these made goods, the services he renders. Knowledge of the soil in all its dimensions, as a matter, a living environment in interaction with the other compartments of the earth and as a space, occupied for various uses valuing the services rendered by the "material" soil is fundamental. To establish a right of protection.

This observation leads us to ask the following question: "Does Malagasy law consider the soil in all its dimensions? »To answer it, going to see the rules applicable to the ground and then we can answer by negation or in the affirmative.

2. THE RULES OF MALAGASY LAW APPLICABLE TO THE SOIL

In Malagasy law, a legal text specific to the soil is lacking. Thus, the search for the applicable rules is based on the presumption of texts having a link with the soil and likely to be applied there. In other words, there is no general regime that would lay down guiding principles, which would define a general philosophy of soil protection. We will distribute the rules of law applicable to the soil according to a logic of designs. The first conception of the soil as a resource, makes it indirectly governed by rural law, forest law, and mining law. As for the second conception of the ground as being a space, a support, a good, it is presumed that it is subject to land law, town planning law. Finally, for the design of the soil as a natural environment, environmental law and other international rights ratified by Madagascar on biodiversity, on climate change and on the fight against desertification are considered to be applicable.

2.1 The rules of Malagasy law applicable to the soil as a resource

- ***Rural law:***

Rural law is made up of all the rules applicable to farms, to the goods and values that compose them and to the people who live there located in their professional, administrative, economic and geographical environment. Malagasy rural law is made up of the following texts: Law No. 2020-003 on organic farming in Madagascar; Law n ° 66-025, of December 19, 1966, tending to ensure the cultivation of agricultural land

- Law n ° 2020-003 on organic farming:

According to this law, organic farming is "a production system that preserves the environment and natural resources, including soil, water and biodiversity, which today is a rapidly expanding sector at the global level. Since consumer demand for products from this mode of production far exceeds the supply available on the markets".

In this sense, we can consider this law as applicable to soil protection. In addition this same law provides in its article 3 that it is of guiding principle: "the principle of health, which states that organic farming is a mode of production which makes it possible to support and improve the health of the soil, of the plants, animals, men and the planet, as one and indivisible ".

This law gives legal value to soil protection by qualifying as a guiding principle the mode of production that supports and improves soil health. Moreover, the binding nature of this law is important to guarantee protection. This law is indeed binding insofar as it contains binding provisions, in particular in its chapter VI entitled: "offenses and sanctions" in its articles 21 to 30.

- Law n ° 66-025, of December 19, 1966, tending to ensure the cultivation of agricultural land:

This law provides in its article 1 that: "The cultivation of land for agricultural purposes being a duty for any owner, in the event of its deficiency, any person who actually puts this land under cultivation under the conditions below ,

has the right to the protection of the law ". The purpose of this law is not the soil itself, but the cultivation of agricultural land. The primary purpose of this law is therefore to ensure compliance with the obligations to cultivate agricultural land. Consequently, the owners are protected from their property rights or sanctioned by forfeiture, as invoked by article 2 of the same law: "any national, occupying de facto land for agricultural purposes belonging to others, whatever the legal regime of appropriation, has the right to remain in the premises under the conditions determined below".

Thus, this law grants indirect protection of the soil for two points, on the one hand, the primary object of this law is not the soil but the cultivation of land for agricultural purposes. On the other hand, it is considered that there is soil protection insofar as the cultivation of land contributes to soil cover and therefore protects it.

This law is considered in this sense as applicable to the ground.

• Forest law

Forestry law is all the provisions comprising the rules relating to the exploitation and protection of forests as well as those regulating the powers of the administration in forests subject to the forestry regime. Malagasy forestry law is made up of the following laws: Law n ° 97-017 of August 8, 1997 revising forestry legislation (OJ n ° 2449 of August 25, 1994, p. 1717); Ordinance No. 60-127 of October 3, 1960 fixing the regime of land clearing and vegetation fires; Ordinance No. 60-128 of October 3, 1960 establishing the procedure applicable to the repression of offenses against forestry, hunting, fishing and nature protection legislation. We will dissect in these laws the provisions likely to apply to the soil.

- Law n ° 97-017 of August 8, 1997 revising forestry legislation (OJ n ° 2449 of August 25, 1994, p. 1717):

The definition of "Forest" by this law makes it possible to establish a certain legal qualification of the soil. This law provides in its first article that "- by forest, within the meaning of this law, we mean all surfaces meeting the following qualifications: surfaces covered with trees or woody vegetation, other than planted for the exclusive purposes of fruit production, fodder production and ornamentation; areas occupied by trees and shrubs located on the banks of rivers and lakes and on eroded land"; then the article. 2 of the same ordinance provides that: "- The following are assimilated to forests: non-wooded areas of forest property such as clearings or areas occupied by forest roads, constructions and installations necessary for forest management". Here the ground is qualified as all surfaces covered with trees or vegetation, and not wooded. In this sense, this law applies to the soil as a support for wooded or non-wooded vegetation cover.

- Ordinance No. 60-127 of October 3, 1960 establishing the regime for land clearing and vegetation fires:

This ordinance announces in a statement of reasons that: "the Constitution of the Malagasy Republic solemnly proclaims, in its preamble, that" every individual must strive to protect, safeguard, improve or exploit to the best of the general interest, the soil under -soil, forests and natural resources of Madagascar ". It is therefore constitutional principle to protect and safeguard the soil. This law is also applicable to the soil. This law provides that:" one of the most serious causes of the degradation and sterilization of Malagasy soils is the reckless practice of clearing with burning (tavy) and vegetation fires (bush fires). "These practices are strongly censored by this text in the interest of protecting the soil.

- Ordinance No. 60-128 of October 3, 1960 laying down the procedure applicable to the repression of offenses against forestry, hunting, fishing and nature protection legislation:

This ordinance contains in its provisions a section of penalties, in which interference with the ground as a "substrate" supporting forest trees) is prohibited. Article 29 provides that: "- On the lands of the national forest domain, the crops, plantations and their hanging fruits, produced on plots illegally cleared, will be confiscated or destroyed by the official of the water and forest service who will note this illegal clearing. Then article 30 of the same ordinance provides that: "- outside the national forest domain, anyone except on a parcel subject to a defined or temporary legal title deed, proceeded or will have carried out a clearing without authorization of the agents of the water and forest service authorized to do so, will be immediately forced to leave the site, and to destroy all works and constructions made by him". This ordinance is more restrictive and applies to the soil in the event of illegal clearing.

• Mining law

In Madagascar, law n ° 99-022 of July 30, 1999 on the mining code, amended by law n ° 2005-021 of July 27, 2005, governs mining activity. This law is not intended to protect the soil. The purpose of this law is to ensure the proper functioning of mining. Mining involves extracting ores and various metals, which can damage the physical structure of the soil and disrupt its ecosystem. However, this law requires an "Environmental impact study" (: document

bearing environmental commitments of the holder, with regard to the "E" permit, the details of which are specified by regulation) before any operation. In its article 37 this law stipulates that "… the beginning of the exploitation works and, possibly, of new research is preceded by the approval by the competent authority in accordance with the regulations of the sector on environmental protection, of the commitments contained in the environmental impact study document, which is submitted to the service in charge of the mining environment of the Ministry in charge of Mines".

As long as the activity must be carried out on the ground, as in the case of mining, the law governing this activity can be considered to affect the ground indirectly. And the provisions providing for an environmental impact study can be qualified as preventive measures to spare the soil from possible degradation. This law therefore applies indirectly to the ground.

2.2 The rules of Malagasy law applicable to the land as property, space and support

• Land law

Article 552 of the Civil Code provides that: "Ownership of the land takes ownership of the top and the bottom. The owner can make above all the plantations and constructions that he considers advisable, except the exceptions established under the title "Of the easements or land services".

Considering as appropriable, object of property, the soil constitutes an element of land and is governed by land law and the civil code even if these rights treat the land less as an object, than through the property regime herself. Soil protection is therefore subject to the property regime. It is the responsibility of the owner of the property to ensure this protection. In this sense, land law is applicable to the land as a property.

The main laws governing land tenure in Madagascar are as follows:

- Law n ° 2005-019 of October 17, 2005 establishing the principles governing the statutes of land, which, as its name suggests, establishes the general principles governing the various legal statutes of all land on the national territory (whether it concerns land in the public and private domains of the State and decentralized communities, or land belonging to private persons),

- Law n ° 2006-031 of November 24, 2006 setting the legal regime for private untitled land ownership, the objective of which is to solve the problem of the existence of unregistered land, not registered, but occupied, by the 'attribution to occupants of certificates of recognition of the right of untitled private property (or land certificates), which, if it is opposable to third parties until proof to the contrary, has however a less legal value than a real land title,

- Law n ° 2008-014 of 23 July 2008 on the private domain of the State, decentralized communities and legal persons governed by public law, which more specifically defines the legal regime for land in the private domain of legal persons governed by public law , as well as its implementing decree (decree n ° 2010-233 of April 20, 2010),

- Law No. 2008-013 of 23 July 2008 on the public domain, which more specifically defines the legal regime of the public domain of the State and decentralized communities, and

- Ordinance No. 60-146 of October 3, 1960 relating to the land registration regime, which governs land registration issues.

• Town planning and regional planning law

- Law n° 2015-052 relating to Town Planning and Housing

Article 1 of this law determines the general rules relating to the management of space, urban planning and land use. The general rules of land use are provided for in Article 28, which provides that: "The urban plan determines the conditions allowing, on the one hand, to optimize the use of space, to preserve activities. agricultural areas, to protect forest areas, natural or urban sites and landscapes, to prevent foreseeable natural risks and technological risks and on the other hand, to provide sufficient building spaces for economic and general interest activities, as well as for the satisfaction of present and future needs in terms of housing, infrastructure and equipment. The urban plan is a tool for managing urban growth and planning urban spaces ".

According to this article, this law therefore applies to the ground.

- Law No. 2015 - 051 on the Orientation of Regional Planning:

Article 2 of this law provides that: "Within the meaning of this law, land use planning means all public or private actions aimed at the organization, structuring and physical development of the whole of the national territory and oriented towards a forward-looking vision". According to this article, the land is considered as a territory. Then article 3 of the same law is much more precise on this subject by providing as follows: "The State, the Provinces, the Regions and the Communes ensure the measured use of the ground and the separation between the suitable parts and not suitable for development of the territory". But also Article 51 states that: "Town plans determine the general destination of the land". Thus under the terms of these articles, Law No. 2015 - 051 on the Orientation of Spatial Planning applies to the land.

2.3 The rules of Malagasy law applicable to the soil as a natural environment

• ***Environmental law***

The purpose of environmental law is to protect the environment. The environment in Madagascar is defined by the Environmental Charter and its amendments (Law n ° 90-033 of December 21, 1990 amended by laws n ° 97-012 of June 06, 1997 and n ° 2004-015 of August 19 2004) as a set of natural, artificial environments including human and socio-cultural and climatic factors that are of interest to national development. Considered as a natural environment, the soil is one of the elements protected and governed by environmental law. The Charter provides in its article. 19 that: "The State, the Decentralized Territorial Collectivities with the support of the municipalities and the Fokonolona, civil society, local communities, the private sector and all citizens, in order to sustainably manage the environment, are responsible for : - Restore degraded ecological habitats; - Carry out in situ and ex situ conservation of genetic resources; - Fight against bush, forest and vegetation fires; - Fight against the conversion of forests into agricultural land, in particular by the practice of slash-and-burn cultivation; - Controlling soil erosion and watershed management ". Currently the environment is governed by Law N° 2015-003 establishing the Environmental Charter. This law is also applicable to the ground as a natural environment.

• International rights ratified by Madagascar in relation to soil:

- Text of the climate change convention:

The UNFCCC or the United Nations Framework Convention on Change is a "Rio Convention", one of three adopted at the "Rio Earth Summit" in 1992. Its sister conventions are the Convention on Biological Diversity (CBD) and the Convention to Combat Desertification (CLD). The three are intrinsically linked. It is in this context that the Joint Liaison Group was set up to strengthen coordination between the three Rio Conventions, with the ultimate goal of developing synergies in their activities on issues of mutual interest. Now it also incorporates the Ramsar Convention on Wetlands. The ultimate goal of the UNFCCC is to stabilize greenhouse gas concentrations "at a level that prevents dangerous anthropogenic (human-induced) disturbance of the climate system". It specifies that such a level should be reached in sufficient time to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to allow economic development to continue in a sustainable manner».

Soils play an important role in mitigating climate change by sequestering carbon and reducing greenhouse gas emissions into the atmosphere. In this sense, this convention is applicable to the soil as a climate change mitigation factor.

- Text of the Convention to Combat Desertification:

Madagascar signed and ratified this Convention in 1997 following Law No. 96-022 of September 4, 1996 and Decree No. 97-772 of June 10, 1997 to deal with desertification and fight against land degradation. According to this convention, the term "land" refers to the terrestrial bioproductive system which includes the soil, plants, other living beings and the ecological and hydrological phenomena which occur within this system. So this convention applies to soils as part of the terrestrial bioproductive system.

- CITES Conventions:

In Madagascar, the protection of biodiversity is governed by Decree No. 2003-984 adopting the National Strategy for the Sustainable Management of Biodiversity. As a biodiversity reserve, soil protection also derives from this agreement. The protection of fauna and flora contributes to the proper functioning of the terrestrial ecosystem, including the soil. In this sense this convention applies to the ground.

- Convention on the Protection of the World Cultural and Natural Heritage:

The Convention for the Protection of the World Cultural and Natural Heritage is a legal text adopted on November 16, 1972 by Unesco. Article 2 of this convention states that: "For the purposes of this Convention the following are considered to be" natural heritage ":

- Natural monuments made up of physical and biological formations or groups of such formations which have exceptional universal value from an aesthetic or scientific point of view,

- Geological and physiographic formations and strictly delimited areas constituting the habitat of endangered animal and plant species, which have outstanding universal value from the point of view of science or conservation,

- Natural sites or strictly delimited natural areas which have outstanding universal value from the point of view of science, conservation or natural beauty.

Soil is a natural formation, an organized environment that is constantly changing under the influence of physical, chemical, biological and human processes. It evolves in time and space. It develops and grows both by its base from the parent rock (mineral matter) and at the same time by its surface made up of organic matter (debris of plant and animal origin). Considering the method of soil formation, this Convention on the protection of the world cultural and natural heritage can be considered applicable to the soil.

- African Convention for the Conservation of Nature and Natural Resources

As a natural resource this Convention is applicable to the soil. This Convention, which is the Algiers Convention in 1968, adopted in Algiers in 1968, was ratified in Madagascar in June 1970. (Law n ° 70-004 of June 23, 1970 authorizing the ratification of the African Convention for the conservation of nature and natural resources, signed in Algiers on September 16, 1968 (OJ of 06/25/70).

3- DISCUSSION

After making an inventory of the legal regimes presumed to be applicable to the soil, it can be seen that the rules applicable to the soil contain scattered provisions. “Land law”, the law that regulates activities on the land, is plural: civil law (property rights, easements), rural law (agricultural exploitation, protection against erosion), and town planning law (allocation of land use), without the existence of a general regime which would lay down guiding principles, which would define a general philosophy of protection. Can we envisage effective soil protection with such a regime?

• Effectiveness of soil protection by the regimes in place

- Concept of effectiveness:

Law dictionaries define effectiveness as the "character of a rule of law that is actually applied" (Hubert Reid, Dictionnaire de droit québécois et canadien, Montréal: Wilson et Lafleur, 1996; Gérard Cornu, Vocabulaire juridique, 2004) [5]. The analysis of the effectiveness of the rules of law concerns the question of their application. In its first sense, is effective what results in real, tangible acts, that is to say what really exists, what is a reality. In this sense, to say that a legal standard is effective is to indicate that it exists in reality, in other words that it is applied in practice. It is this meaning that Jean Carbonnier [6] retains at first glance in his pioneering article published in 1958, where he describes effectiveness as "effective application" (Paul Amselek, 1964) [7] . Effectiveness is then understood as «degree of fulfillment, in social practices, of the rules set out by law” (Pierre Lascoumes, 1993) [8]. The standard is said to be applied - and therefore, according to this reasoning, effective - either when its addressees comply with it, that is to say when they fulfill the obligation to which the rule subjects them, or when the authorities responsible for its implementation, judge included, execute it (Jean-François Perrin, 1977) [9]. in other words when they control and sanction its violations. The theorist Hans Kelsen therefore reserves the expression "application of a norm" only to the hypothesis in which the state authorities order a sanction against the behavior contrary to the norm (Hans Kelsen, 1996) [10]. For Kelsen, the application of a rule of law therefore has a narrower meaning than its effectiveness. But this discrepancy is ultimately only a terminological problem. What matters to us is that, in both approaches, a norm is said to be effective either if it is applied, in the sense in which Kelsen understands this expression, or if it is observed by its recipients, i.e. if the behavior of these corresponds to the meaning expressed in the statement of the command. In this analytical framework, the effectiveness of a legal standard therefore depends on its application in the broad sense, which is to say on its respect

by the individuals for whom it is intended or, in the event of non-compliance, the pronouncement of a sanction against the person who violated it.

Thus, effectiveness is linked both to the behavior of legal subjects - who may or may not model their behavior on what the standard prescribes - and to the occurrence of the sanctioning mechanism, to the application of the sanction. Behind this analytical grid linking the effectiveness of a legal standard to the fact that it is respected or sanctioned in the event of violation, there is implicitly an imperative and repressive conception of the law.

If the rule of law is considered ineffective when the obligation it imposes is not applied for lack of sufficient control, or when its violation is not sufficiently adequately sanctioned, it is because it is understood to be both compulsory and sanctioned by the state.

- The issue of effective soil protection by the regimes in place

The common feature of all inventoried regimes considered applicable to soil is the lack of a legal definition of soil. Because their primary purpose is not the protection of the soil but of another element. Soil being considered as a substrate could not be the primary subject of these legal texts. Can we then say through the definition given for effectiveness that the regimes in place can provide real protection on the ground? It was said above that for there to be effectiveness, a legal text must exist and the prescribed rules must be respected and applied. By analyzing the regimes in place, we see that the word “soil” is rarely invoked in existing texts but it is associated with various terms such as “surface”, “good”, “land”, “site”, “environment”, etc. The legal qualification of the word "soil" is therefore lacking, which makes it impossible for any standard of protection to be effective. In this case, we can only speculate that the regimes in place cannot provide effective protection on the ground.

The consequences of an absence of a specific soil regime

The role of law is to ensure soil protection. A legal status is necessary to establish this protection. Granting this status would:

- to recognize the soil in its qualities and not only in its productivity

- define a repository:

  - ✓ for material protection (removal) and physico-biologico-chemical;
  - ✓ for the determination of responsibility in the event of infringement, criminal as well as civil;
  - ✓ for the determination of attacks on public health making it possible to limit the rights of owners and other users;

- constitute the support for defining an economic value;

- to question the patrimonialization of quality: an appropriate thing linked to the ownership of the land or a common thing (which does not belong to anyone but whose use is common to all), distinct from the ownership of the land, whose owner of the land would only have the enjoyment, on condition of maintaining its quality (Ph. Billet, 2008) [11].

In view of the important roles expected of the law in ensuring soil protection, the absence of a specific soil regime can only be harmful. The consequences of such a situation will certainly have impacts on the well-being of man and the entire ecosystem. In particular, it is difficult to monitor the condition of the soil without an enlightened and firm standard describing the soil in all its states, its qualities, its functioning and the valuation of the services it provides. Consequently, the soil would be more exposed to possible degradation (change in the state of health of the soil which leads to a decrease in the capacity of the ecosystem to provide goods and services for its beneficiaries). The soil would therefore be unable to perform its functions and provide services, and will continue to degrade relatively quickly while its formation or regeneration processes are much slower.

Other harmful consequences can result from abuse by owners using their absolute right (real right: usus, abuse, fructus). Ownership of land entitles its holder to confer or maintain the quality of this object of law just as much as to consume it. In this sense, the owner of a soil will be able to decide to exploit and possibly maintain the quality of his soil, just as he will be able to exhaust it. It could therefore destroy the quality of the soil through intensive farming, just as it could maintain or even increase this quality through the same agricultural activity but using other methods (Chabert A., 2017) [12]. The use of a property right therefore constitutes a limit to the protection of the soil as an appropriable good.

In the absence of a regime specific to the soil, the latter becomes a cornered object of the law and finds itself at the crossroads of many legal rules thus preventing effective protection against it.

4. CONCLUSIONS

Soil is fundamental to the services it provides to humans, so its protection is important. The existence of several standards without legal qualification specific to the soil does not ensure lasting protection of this resource. However, can we envisage sustainable development without a soil protection regime, which contributes to the objective of sustainable development which aims to meet the development needs and the health of present generations without compromising the ability of future generations to meet their needs?

5. ACKNOWLEDGEMENT

I thank my family for their support and Mrs. Rasoamalala Vololonirina for her advice in completing this article.

6. REFERENCES

International Year of Soils 2015 Food and Agriculture Organization of the United Nations
Via delle Terme di Caracalla 00153, Rome Italy soils-2015@fao.org [1].
Report, drawn up by Philippe BELLEC, Patrick LAVARDE, Laurence LEFEBVRE and Marie-Laurence MADIGNIER, “Proposals for a national framework for sustainable soil management”, September 2015 Walter C., Bispo A., Chenu C., Langlais-Hesse A. , Schwartz C., 2014 – Services [2].

Aubert and Boulaine 1967 [3].

Association française de l’étude du sol, « Soil, définition »2014 (Afes) https://www.afes.fr/sols-et-definitions/ [4]

Hubert Reid, Dictionary of Quebec and Canadian Law, Montreal: Wilson and Lafleur, 2nd ed., 1996, p. 209; Gérard Cornu, Legal vocabulary, Paris: PUF, 6th ed., 2004, p. 339. [5]

Jean Carbonnier, “Effectiveness and ineffectiveness of the rule of law”, article cited, p. 3; Id., Straight flexible. Pour une sociologie du droit sans rigueur, Paris: LGDJ, 9th ed., 1998, p. 133. [6]

Paul Amselek, Critical Perspectives of an Epistemological Reflection on Legal Theory, Paris: LGDJ, 1964, p. 340. [7]

Pierre Lascoumes, V ° “Effectivité”, in André-Jean Arnaud (ed.), Encyclopedic Dictionary of Theory and Sociology of Law, Paris: LGDJ, 1993, p. 217. [8]

Jean-François Perrin, "The Effectiveness of the Ordinance of March 10, 1975", in Charles A. Morand, Jean-François Perrin, Christian-Nils Robert and Robert Roth, The Compulsory Wearing of the Seat Belt. Hypotheses and data for the study of the effects of a standard, Geneva: CETEL, University of Geneva, 1977, p. 38. [9]

Hans Kelsen, Théorie générale des normes, Paris : PUF, 1996, p. 4. [10]

Ph. Billet- Intervention Séminaire « Sol et sciences sociales »- Dijon, 27 mai 2008. [11]

Cf. Chabert A., Expression combinée des services écosystémiques en systèmes de production agricole conventionnels et innovants : étude des déterminants agroécologiques de gestion du sol, des intrants et du paysage, Th. Toulouse, INPT, 2017. [12]