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A socio-environmental approach on Coastal Federal Patrimony Management in Brazil

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Abstract

This paper aims to systematize data from legal, governmental and non-governmental actions due to Coastal Management and its interface with Federal Commonwealth heritage Territories managed by the Federal Union Patrimony Secretariat of Brazil called SPU. SPU's mission is to obtain information about public areas, manage federal heritage, ensure and guarantee that each asset and property of the Brazilian population fulfills its social and environmental functions. Some guiding questions led the data organization that facilitates the comprehension of the information related to Coastal Management of public federal domain land and water in Brazil. It also correlates National and international strategic programs, actions and plans regarding these issues, bringing a brief discussion on Marine and Coastal Management.

Keywords

Coastal Management, Federal Union Patrimony Secretariat of Brazil, Marine Spatial Planning.

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1. Introduction

This paper mainly approaches the relation between Integrated Management of Coastal Zones and the Federal Commonwealth heritage Territories that exist in coastal zones, once the Federal Union Patrimony Secretariat of Brazil's mission is to "Know, ensure and guarantee that each property of the Federal Brazilian Union fulfills its socioenvironmental function in harmony with the tax collecting role of SPU in support to the strategic programs delineated for the nation".

The idea is to organize the information about the role and the actions taken by the Federal Union Patrimony Secretariat of Brazil in Coastal Zones, due to the great interaction among the themes which frequently share territorial and ocean assets.

Therefore this paper aims to systematize data from legal, governmental and non-governmental actions due to Coastal Management and its interface with Federal Commonwealth heritage Territories managed by the Federal Union Patrimony Secretariat of Brazil (SPU) with special focus on the socioenvironmental approach of common assets.

The specific objectives of this research were to: (1) Provide concatenated information about the Brazilian heritage Territories and assets due to their great socioenvironmental value; (2) Increase the intelligibility about Union heritage management and SPU's role in coastal zones; (3) Discuss the National and international strategic programs impact, actions and plans over the destination of Federal Patrimony in Coastal areas, rivers, lagoons and the sea; (4) approach some other strategic aspects regarding Interinstitutional and institutional roles and engagement.

The scheme used to achieve the objectives was the formulation of guiding questions that could lead the research and help to systematize ideas.

The results obtained were enough to raise several discussions mainly related to the impact of Plans, Programs and Actions on various administrative acts of management including the destination and allocation of Federal Heritage areas, conservation and asset management as environmental resources and social demesne.

1.1. Development

The methodologies chosen were documental and literature reviews. The documentary review covered the analysis of various types of documents both current and previous that were considered scientifically authentic, and the literature review concerned the reading and compilation of data available in literature.

The research was mainly qualitative and based on reviewing formal documents such as Laws, Rules, Decrees, Ordinances, Books and publications found in journal articles, conference journals, theses, dissertations, manuals and technical standard norms related to Coastal Zone Management and keywords related to this paper.

The main basis of the research was several Federal Brazilian laws and different rules related to both the Coastal Management and heritage and asset Management in Federal Areas in Brazil. The specific references can be accessed at the end of the paper.

The guiding questions led to the collecting of data in order to get concatenated ideas are the ones below:

- Which are the Brazilian Federal Patrimony Assets?
- What's the interaction between Brazilian Federal Patrimony and Coastal Management?
- Who manages the Brazilian Federal Patrimony assets?



- What forms of Destination, Allocation and use of Federal Patrimony occur in Coastal Zones?
- Through which programs, projects, actions and strategies can we optimize the management of the Federal Patrimony assets in a socio-environmental approach?
- If most of the Federal Patrimony assets are in the sea, why are the main actions of Federal Union Patrimony Secretariat's focused towards terrestrial spaces?
- Which International and National actions towards conservation of Coastal and Marine areas support the protection of the goods contained therein?

2. Results

The assets of the Brazilian Federal Patrimony are described in the Brazilian Constitution of 1988 which deals in its Article 20 outlining federal heritage represented by:

- I. the assets that presently belongs to the Federal Patrimony and those who may be assigned to it lately;
- II. the Necessary lands due to the defense of borders, the fortifications and military buildings, the federal routes of communication and environmental preservation, as defined by law;
- III. the lakes, rivers and any water bodies in lands within its domain, or the water bodies that bathe more than one state, the water bodies that serve as boundaries between Brazil and other countries, or extend to foreign territory or arising, as well as the lands and river beaches, such as those rivers and their borders shown in Figure 1;
- IV. the riverine and lake islands in international boundaries or borders; sea beaches, ocean islands and coastal excluded from these, containing the headquarters of municipalities, except those affected areas to public service and federal environmental unit, and referred to in art. 26;
- *V.* the natural resources of the continental shelf and the exclusive economic zone;
- VI. the territorial sea;
- VII.Marine Territory defined by tide influence and marine coastline expansion landfill areas; VIII.the hydroelectric power;
- IX. mineral resources, including subsoil;
- X. the natural underground cavities and archaeological and prehistoric sites (represented in Figure 2);
- XI. the lands traditionally occupied by Native Brazilians.



Figure 1. Representation of Marine Lands that are part of the Brazilian Federal Patrimony emphasizing Costal Areas. Based on SPU/2012 material presented by Ritzel, Louise H. in a speech INDE/Academia - Cadastro do Patrimônio Público da União (RITZEL, 2012) translated and adapted by the author.

Some Federal assets such as sea beaches, caves and marine Islands are shown in Figure 2, the landfills and marine and river beds are shown in Figure 3.

Other than those already cited there are also other Feederal Assets such as the hydroelectric power is represented further on in Figure 4 and the lands traditionally occupied by Native Brazilians, so called indigenous peoples represented in Figure 5.



Figure 2. Representation of Brazilian Federal Patrimony called caves, islands and Territorial sea. Pictures by the author.



Figure 3. Representation of Brazilian Federal Patrimony (Marine Lands and landfills) and private areas Developed over Google Earth image of Itajai-acu river by the author.



Figure 4. Representation of Brazilian Federal Patrimony called hydroelectric power from the Iguaçu Falls Park guiding website at ICMBio http://www.icmbio.gov.br/parnaiguacu/guia-do-visitante.html.



Figure 5. Representation of Brazilian Federal Patrimony (Marine Lands and landfills) and private areas Developed over Google Earth image of Itajai-acu river by the author.

2.1. What's the interaction between Brazilian Federal Patrimony and Coastal Management?

Some Brazilian Federal Patrimony assets are directly related to Coastal Management, others are not as much. Among those which is strongly connected, it is mentioned the lands which are necessary for the environmental preservation, lakes, rivers and any water bodies in lands within its domain as well as the lands and river beaches, the natural resources of the continental shelf and exclusive economic zone, the territorial sea and marine lands that are exposed to tides as well as landfill areas.

As an example of allocation of lands there are those which are essential to the environmental preservation that can be used for the creation of protected areas according to law 9.985/2000 establishing the National System of Units of Nature Conservancy — SNUC.

The law that creates the National System of Units of Nature Conservancy establishes as a strategy for the creation of conservation units in its Article 43 the use of Federal Patrimonial lands for the purpose of environmental preservation stating that "The Government will make the national survey of free public Federal lands, in order to define areas for nature conservation, within five years after the publication of this Law."

Other kind of Federal domain asset often found in coastal zone is the water bodies such as lakes, rivers and also sea beaches, lake beaches and river beaches. In these cases there are a number of legal instruments used by the Federal Union Patrimony Secretariat to temporarily transfer areas on the water surface of lakes and rivers, especially those who suffer influence of tidal oscillation and the allocation of marginal lands.

The Marine land and landfill areas are also types of Federal Patrimony in Brazil that can easily be found in coastal areas. Their allocation follows a series of laws Sheets, Environmental and Territorial Management principles.

Other assets to be mentioned are resources that are highly important present over the continental shelf, the exclusive economic zone and the territorial sea itself, represented in Figure 6.

These areas are subject to various uses both social and economic, and these sites are important to ensure good management avoiding overfishing, pollution and other environmental damage to the Federal heritage, especially because of their environmental value.



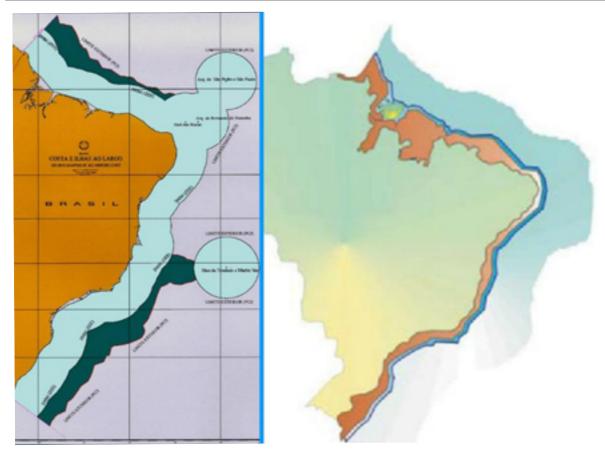


Figure 6. Brazil's coastal zone and Continental Shelf. Sources: Fiatikoski, 2010 and Projeto Orla, 2006.

Other uses of the sea and the continental shelf are those referred to in § 1 of Art. 20 of the 1988 Constitution the [...]

"[...] exploration for oil or natural gas, water resources for generation of electric energy and other mineral resources in their territory, continental shelf, territorial sea or exclusive economic zone [...]" (BRASIL, 19888).

Integrated Coastal Zone Management can improve the quality of Destination and allocation of Water and other federal domain assets improving resources management and planning in these ocean areas. Integrated Coastal Zone and sea Management quality is vital to avoid compromising the environmental function of these public properties, preventing it from suffering damages, including environmental and social losses.

2.2. Who manages the Brazilian Federal Patrimony assets?

The Federal Union Patrimony Secretariat is a part of the Ministry of Planning, Budget and Management that has in each state a Patrimony Superintendence empowered to deal with specific matters of assets in each state of the Brazilian union, such as set by the decree-law 9.760 of 1946.

The Mission of the entire Federal Union Patrimony Secretariat extending their superintendents is to "know, ensure and guarantee that each property of the Federal Brazilian Union fulfills its socioenvironmental function in harmony with the tax collecting role of SPU in support to the strategic programs delineated for the nation". Therefore all of the secretariat and also all Brazilian citizens wish that each property or public demesne fulfills its socioenvironmental function.

The tax collecting role usually stems from the fact that some individuals and businesses use areas that are public which belong to each and every Brazilian. Besides, they pay to use these areas for their own

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benefits. The tax resources go to public funding for the entire nation. Various forms of assets allocation can be optimized if the Secretariat focuses not only in spontaneous demands, but also in those provoked by Programs, Projects, Actions and different strategies that were concatenated with the nations will, since these areas belong to all Brazilian citizens.

Besides The Federal Union Patrimony Secretariat, other agencies and organizations operating in the Federal sphere also directly plan and watch over Federal resources. Some of which are The Ministry of Environment, Ministry of the Navy/Marine, IBAMA (federal Environmental Agency), ICMBio (Federal Protected Areas Management Agency), Federal Attorney General's Office and federal prosecutors Office (AGU and MPF), IPHAN (National Heritage Institute), ANA (National Water Agency), ANTAQ (Water Agency for Aquatic Transportation), SEP (Special Port Secretariat), Brazilian Federal Police, to mention the most involved.

Entities that are mostly devoted to teaching and training, such as Universities, play a crucial role in the generation of data about the assets for better resources managing, especially those included in the Coastal and Marine Zones.

In the issue of regulating the use and occupation of the Federal Union Patrimony Secretariat and its Superintendences all over the federate states have a greater responsibility because, according to Decree 5300 of 2004, in its Chapter III which mentions the Terms of Use and Occupancy Coastal Zone.

The installation of equipment and use of vehicles on dunes, shall be subject to prior environmental licensing, you should consider the effects of such works or activities on the dynamics of the dune system, as well as the authorization of the Federal Union Patrimony Secretariat at the Ministry of Planning, Budget and Management in the use of public areas for common use. (Art.18 - Decree 5.300/2004).

Regarding the implementation of the Project Orla the Decree 5300/2004 also defines the competence of this project in the Federal Union Patrimony Secretariat and its Superintendence in Art.31. It requires that SPU get involved with state environment to provide information and monitor the actions of training and technical assistance to municipalities and local managers for structuring and implementing the Intervention Plan.

In order to give as much Publicity for this project and expand participation, the Decree 5.300/2004 in article 37 states that different entities are responsible for visibility and advertising Project Orla, so "The Ministry of the Environment, in conjunction with the Ministry of Tourism the Brazilian Tourist Board — EMBRATUR and the Federal Union Patrimony Secretariat, develop, update and disseminate the road map for preparing the Intervention Plan the waterfront."

Another role of the Federal Union Patrimony Secretariat in coastal areas is to guarantee the free access to beaches and public areas, which according to Decree 5.300/2004 should always occur by the public, in accordance with Article 21.

The beaches are public goods of common use, being assured, always free and unimpeded access to them and the sea in any direction and sense, except for the excerpts considered of interest of national security or included in protected areas by specific legislation. (Art. 21 - Decree 5.300/2004).

To ensure that open access to public domain areas the same decree further states that "areas under Federal jurisdiction covered by access roads and facilities to the beaches and the sea will be subject to assignment of using in favor of the concerned municipality".

2.3. What forms of Destination, Allocation and use of Federal Patrimony occur in Coastal Zones?

The Allocation and destination of Federal Public Assets obeys different rules and laws, including

the Law 9.636/98 among others. The idea is to identify the potential and the vocation of each property and public resource and, within those characteristics, prioritize aspects such as the environmental function of the assets and their potential to generate social inclusion, employment and income, economic development, infrastructure improvement and adaptation, land use planning, and finally rational use and improvement of common areas.

In the Coastal Zone some actions of the Federal Union Patrimony Secretariat are more common such as the inscriptions of occupancy, the Building authorizations, the terrestrial and aquatic space cessions and the realty adjustments. There are also cases of actions delivering grants, donations, leases, exchanges, transfers, among other present in Brazilian Patrimonial Legislation.

This allocation and destination takes place both to individuals (whether individual or corporate) and public entities such as municipalities, states, municipalities and philanthropic and charity entities.

One of the most common types of destination, abounding in coastal environments, is the regularization of nautical equipment and the cession and assignment of space in public waters for the implementation or regularization any marine structures that can be described as a set of one or more accessories neatly spread over a determined area, and may include water body adjacent to this, in part or in whole as well as its access by land or water, designed to provide support services to ships and navigation.

The Ordinance that regulates the use of public waters and designates how water allocation for nautical and floating equipment processes will run is SPU/MPOG 404/2012. All water equipments from wharfs to Ports that occur in sea and Rivers, which are federal or in the state domain portion of rivers under tidal influence, shall be regulated or permitted along with the 404/2012 ordinance's rules.

This Ordinance requires in its 10th Article, as a step in the administrative process, the compatibility of the nautical structure with the Integrated Management plan that follows Project Orla (when it exists). Therefore in cities where there is no Integrated Plan the municipal government permit is accepted. Allocation strategies are optimized in the existence of the Integrated Management plan mainly because the plan is prepared with popular participation, unlike other possible situations. The Integrated Management plan assures public will to be addressed more directly than when there is no elaborate plan.

Many nautical structures are represented by Figures 7. Figure 7(a) is a marine gasoduct platform that has great size and is located floating in the sea, Figure 7(b) is a small fishing pier by the coast, Figure 7 (c) is a medium Private Marina and Figure 7(d) is a Ship Pier of a great capacity.









Figure 7. From right to left: (a) Assignment of public water bodies/Sea - Gasoduct in a marine platform; (b) assignment of public water bodies/Sea - Fishing pier in Bombinhas [SC]; (c) assignment of public water bodies/Sea - Marina in Balneario Camboriu [SC]; (d) assignment of public water bodies/Sea - ship Pier in Porto Belo [SC], Brazil.

Besides the nautical equipment, the SPU does the allocation of islands opting primarily for the conservation of these since the Law 9985/2000 calls in his article Article 44 that "The ocean and coastal islands are intended primarily for the protection of nature and its allocation for different purposes should be preceded by permission of the competent environmental agency." Some,

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however, may be subject to registration and occupation provided when there is legal support.

Administrative acts called "Deliveries" can be granted to the Federal Agencies that also commit themselves to the objectives of protection, knowledge and care for the sustainable use of coastal and marine assets such as areas for Aquaculture and mariculture that SPU does regularly to the partner Ministry of Aquaculture and Fisheries. Conservation Units of full protection often are delivered to the Ministry of Environment.

Another type of administrative action often granted in Coastal areas is the Building authorizations in federal domain areas. These buildings shall not affect the dominating aspects and the areas that still remain Federal under intervention and after, aiming to contribute to local sustainable development.

Building authorizations are usually a kind of permit given to Public Entities, in some cases given to Private entities that are willing to perform minimal interferences with social characteristics such as revitalization of beach walks and paths around lakes and rivers, building bridges, drainage equipment; pathways; bike paths; ducts for water and sanitation. This mode also includes greater buildings related to dredging of riverbeds or sea and are often linked to actions such as PAC-National Program for Growth Acceleration and actions that are led by the Ministries of Tourism and Cities development. Seawalls and beach filling, landfills and others are subject to this kind of permit as well thus it can influence largely Coastal status.

Figure 8 represents the building of a beach path for vehicles and Figure 9 a seawall. Both are a part of these building authorizations that can be given.



Figure 8. Building authorization for a beach vehicle path (sand) in Garopaba [SC], Brazil.



Figure 9. Building authorization-seawall made of stones in Florianopolis [SC], Brazil.

2.4. Through which programs, projects, actions and strategies we can optimize the management of the Federal Patrimony assets in a socio-environmental approach?

Some legal instruments of the International and Brazilian legislation framework can be applied. Among these legal instruments we can refer to "Marine Spatial Planning" which is a part of the "Ecological-Economic Zoning" created by the Law 6.938/81 and more deeply described by Decree 4.297/2002 in Brazil. Another valuable instrument is the Orla/Seashore Project that uses social participation to build a local Coastal Management plan.

Many regulatory instruments can assist the management of the coastal zone such as Projeto Orla (seashore Project) described in Art.29 Decree 5.300/2004 that defines the territorial boundaries included in the project as the coastal counties and up to 10m of sea water and intertidal area.

The Seashore Project (Projeto Orla) is being implemented in each municipality by a group of stakeholders formed by county managers and federal entities (SPU, MMA - Ministry of Environment). According to the Decree 5.300/2004 "The implementation of management actions on the

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waterfront/seashore in areas under federal jurisdiction, may be entered into agreements or contracts between the Ministry of Heritage and Union Counties, under current legislation, considering the requirement Seashore Integrated Intervention and Management Plan (SIIMP or PGI) and its guidelines." (Art.29 Decree 5.300/2004).

Several actions inside and outside the remit of Federal Union Patrimony Secretariat are aided by the existence of plans such as Seashore Integrated Intervention and Management Plan, specially allocations and destinations of water bodies and their beaches and also Building authorizations in Coastal zones.

As there are many consequences that result from the existence of Seashore Integrated Intervention and Management Plans (SIIMPs / PGIs) it is very important that they are developed in a participatory manner and, not only are published on friendly platforms, but also are accessible to the general public.

As stated by Marinez Scherer (SCHERER, 2013), it is important to note that "even tools designed for beach management in Brazil, such as Project Orla – a governmental instrument, and the Blue Flag – a non-governmental instrument, it is difficult to demonstrate the effectiveness of their application due to lack of institutional / administrative basis in Brazil, besides the lack of financial support". One of the most important topics is the need to improve institutional and Interinstitutional relations and the joint search for financial support.

The instrument named Ecological Economic Zoning Marine areas happens within 12 nautical miles, this marine space can be ordered with specific rules defined in a participatory and ecological Coastal zoning called ZEEC, which happens both in terrestrial areas and aquatic regions.

The ZEEC is a legal instrument that guides the process of land and water use. This instrument is intended to assist in the establishment of the necessary conditions for sustainable development in the coastal zones, in accordance with the guidelines of ecological zoning of the region. These plans serve as a support mechanism for environmental monitoring actions such as licensing, management and supervision. Each ZEEC process may consider some types of ecosystem.

As considered by UNESCO (2009) in publication named "the Marine Spatial Planning: a step by step approach toward ecossystem-based management" written by EHLER, C., DOUVERE, F., Marine spatial planning can contribute to other management measures as seen in Figure 10.

Therefore it may be an important tool for the allocation of public waters and should be taken in Brazil in most areas.

Marine water and land areas such as 12 nautical miles and the marine islands are Marine Federal assets, so their management should follow the federal laws and if there are any Asset Allocations they might happen properly, therefore is of high importance that this allocations use as guidelines a Marine Spatial Plan.

In the ZEEC done for the northern coast of the state of Rio Grande do Norte (CUNHA et al, 2009) we identified three environments: (1) Seashore waterfront (2) River Plains and (3) Highlands. The two most likely to have environmental areas are the domain of the Seashore waterfront and River Plains.

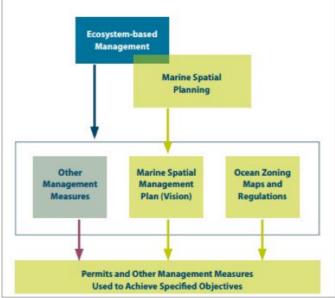


Figure 10. Impact of Marine Spatial Planning and Ecosystem-based management over territorial Management. Source: UNESCO, 2009.

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Both are naturally prone since in seashore waterfront are marine environments inserted as the continental shelf within the limit of 12 nautical miles to the beaches and their landforms (including cliffs, reefs and submerged deposits of sandstone, limestone and beach rocks) also including ridges, deflation plain, marine terraces, and even fields of mobile and fixed dunes by vegetation and paleodunes. The river plain includes the river bed and its associated ecosystems, like the river margins, the riparian vegetation and all wetland and floodplain.

It's relevant for the Federal Union Patrimony Secretariat to be involved in processes such as ZEEC and Marine Spatial Planning in order to understand the subjects that are discussed and also relate several issues that can arise under participatory situations to strive for their actions not to detract from those plans that are ratified by the population.

At the time being the Central Federal Union Patrimony Secretariat participates as a member of the CIRM (International Commission on Marine Resources), but this participation perhaps could be optimized if supported by internal SPU events that count on all superintendents in order to discuss issues facing the sea and SPU's actions along the coast.

The participation of members of the SPU in Management Conservation Councils of Coastal and Marine areas also means that there is a flow of information between the entity and stakeholders involved in local and territorial socioenvironmental management.

2.5. If most of the Federal Patrimony assets are in the sea, why are the main actions of Federal Union Patrimony Secretariat focused towards terrestrial spaces?

Most of the work of Federal Union Patrimony Secretariat is meant for the management of physical spaces with fixed equipment, so, despite the ocean is a great part of the heritage, marine areas can be used by several entities at the same time or at different times for many actions and compatible uses.

Thus, one use that is occurring in a specific area in the sea does not always "prevent" the use of the same marine areas by other citizens or enterprises, therefore no type of assignment or allocation is required. Figure 11 shows a Boat stop in Florianopolis allocated to the Municipality.



Figure 11. "Boat stop" in Florianopolis [SC], Brazil.

However, it is still very important for the Federal Union Patrimony Secretariat to get involved in planning actions of marine space for their deeds shall be always compatible with what the nation expectations and will towards the ocean and the actions to preserve it.

Another relevant issue is the lack of structure, financial and physical resources and management for this, since the scope of the areas of the union is enormous.

There is also a factor linked to the customs and history of the SPU, which was primarily a tax collection agency belonging to the Economy Ministry, what makes Planning issues a relatively modern agenda and neither the workers nor the public has become used to this changes completely.

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The new vision and public role of SPU will be known on a daily basis rather than automatically. Thus the SPU demands occur basically scattered and not organized territorially, it might be important to review internally the institution in a pursuit of a functional adaptation of entity.

Traditionally the Navy/marine of Brazil, which should be dealing with security sector and is assuming the role of managing and integrating these Coastal and Marine areas, is being very active in CIRM. The Navy does irreproachable job integrating and seeks to reach out from a first sectorial role to a more complex, therefore integrating various sectorial bodies in chairing committees and also has financial resources and ships to monitor the coastal areas.

2.6. Which International and National actions towards conservation of Coastal and Marine areas support the protection of the goods contained therein?

Internationally, the United Nations Convention on the Law of the Sea (UNCLOS) acts to provide Brazil the right to settle around oceanic islands, Territorial Sea, Exclusive Economic Zone and Continental Shelf of its range, namely Atoll das Rocas, the archipelago of Fernando de Noronha and the islands of Trindade and Martin Vaz, because of their recognized scientific and environmental value and strategic relevance.

Also the Convention on Biological Diversity signed by Brazil during the United Nations Conference on Environment and Development — UNCED in 1992 generated a letter of intent to increase protected areas which was ratified in 2006 by Decree 5758/2006 through the Strategic Plan national Protected Areas — PNAP. These areas include actions related to coastal and marine area beyond terrestrial environments. Brazil may shift from 1% of protected areas in the sea to around 10%, needing a lot of work to achieve that.

Nationally, this Strategic Plan provides for the establishment of a more comprehensive system of protected areas that is ecologically representative and effectively managed, integrating land and seascapes wider by 2015 according to the decree 5758/2006.

Another relevant action directed to the National Coastal Zone is the Contemplation of resources in the Pluriannual Financial resource plan PPA 2012-2015 — Sea, Coastal and Antarctica. This program aims to protect the South Atlantic Ocean and Brazilian Tropical and Coastal Zones that are strategic for national security and development. The program objectives are the development of best shipping routes, the understanding about the living and nonliving resources present in the sea.

As knowing the ocean and coast is enough for the preservation and sustainable use of these ecosystems there is a need to act more strategically considering the great extension of Brazilian marine area of about 4.5 million km^2 , known as the "Blue Amazon" aiming to ensure the integrity of this National Heritage in compatibility with the plans of the National Policy for Sea Resources (PNRM, Decree No. 5.377/2005).

A number of policies, programs and plans associated with this item PPA (Plano pluriannual) are being carried out as the National Policy of Antarctic Affairs (Polantar), the Brazilian Antarctic Program (Proantar), the Plan of Survey of the Brazilian Continental Shelf (LEPLAC) the Sector Plan for Sea Resources (PSRM), the National Coastal Management and also Project Orla/seashore previously discussed. The review of VIII Sectorial Plan for Sea Resources CIRM-ministerial committee for Sea Resources for the years 2012-2015 was taken and the actions and topics of interest of this document are (1) environmental conservation and strategic importance of the Oceanic Islands, (2) monitoring of marine living resources and their conservation, sustainable exploration and exploitation, (3) the exploration of coastal and marine biodiversity aiming their conservation and sustainable exploitation, (4) a survey of non-living resources and their potential in the national maritime areas as well as the maritime areas of interest beyond the limits of national jurisdiction, and its sustainable exploration and exploitation, (5) monitoring oceanographic and climate, (6) the recovery and strengthening of maritime mentality in our population, and (7) the continued training of human resources in Science of the Sea

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All these strategies raised seem very positive and necessary for the conservation of environmental assets and sustainable development of the oceans.

Another important step toward Brazil's development was the creation of INPOH National Institute of Oceanic Research and Waterways, which occurred on May 2013. This Institute will have considerable impact on the planning and research conduction at sea and coastal areas and their publication.

Marine Spatial Planning included in the ZEEC, can also be considered a very powerful tool in the management of public water bodies, since they are carriers of high ecological diversity and environmental resources many, but they are fragile and can suffer from interference resulting from anthropogenic uses. Many ZEECs have been conducted in Brazil as well as research on the topic which is very relevant as marine spatial planning is perhaps one of the most powerful ways to manage the Oceanic Federal assets.

The research points to the need of including a topic in the discussion about Marine Spatial Planning, which is the use of three-dimensional views instead of bidirectional. This three-dimensional view is current in ecological studies done in aquatic environments. One of the studies reviewed (CARVALHO, 2007), the author states that the zoning of marine two-dimensionally leaves gaps in relation to the distribution of roles in the Marine Ecosystems, which suggests that a three-dimensional zoning is more appropriate, since it is ecosystem based and matches real situations.

Carvalho (2007) also indicates the need for the creation of protected areas mosaics. The mosaics concept is compatible with the multiple water uses and public spaces, and therefore relevant.

3. Conclusion

The review led to the conclusion that Brazil is more open to the purpose of knowing, ensuring and managing the coast line and the sea than it was in the past. However, some strategies are essential to the gathering of political forces to generate a new momentum in which the "rules and normatives" cross the barrier of law reality and can actually make a difference in the real world. Some of the strategies that can make management more effective are: interinstitutional articulation, enhancing the publicity of data and documents produced, stakeholder involvement in local and regional planning, the continuation of federal investments on federal patrimony management including sea and coastal areas and the empowerment of human resources that deal with coastal zone and marine environment management to make teams more stable and avoid management ruptures.

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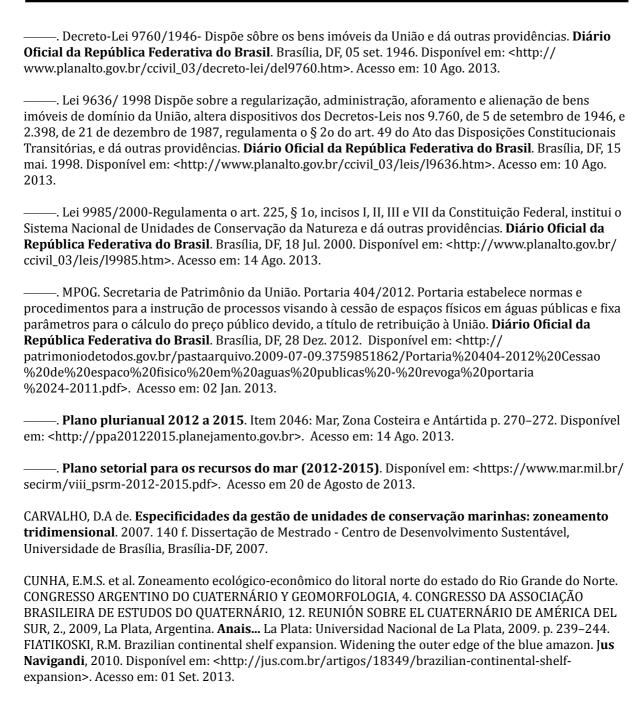
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