Chapter 3
Managing Fish or Governing Fisheries? An Historical Recount of Marine Resources Governance in the Context of Latin America – The Ecuadorian Case

María José Barragán-Paladines, Michael Schoon, Winny Collot D'Escury, and Ratana Chuenpagdee

Abstract The narratives and images about ocean and its resources governance, their use and value have deep roots in human history. Traditionally, the contemporary images of fish and fisheries have been shaped under the cultural construction of power, wealth and exclusion, and also as one of poverty and marginalization. This perception was formed on early notions of natural (marine) resources access and use that were born within the colonial machinery that ruled the world from the Middle Ages until late XVII. This research explores the historical overview of marine resources usage and governance in Latin America, from a 'critical approach to development' perspective, by following a narrative description based on a 'three-acts' format. It illustrates how and to what extent politics, power and knowledge have deeply influenced policies and practices at exploring the marine and terrestrial resources and at managing fish and seafood, historically, and how the fisheries resources' management practices are influenced by principles of appropriation, regulation and usage, put in place already in the XV century that were imposed at the conquering and colonization of the Americas, disregarded previous governance practices. This article argues that fisheries governance cannot be improved without some appreciation for the social, historical, geopolitical, and cultural significance of the fishing resources themselves, of the perceptions of them by humans, and of the interactions Global North-Global South. The analysis also opens the dialogue about

M. J. Barragán-Paladines (✉)
Charles Research Station, Charles Darwin Foundation, Santa Cruz, Galapagos, Ecuador
e-mail: mariajose.barragan@fcdarwin.org.ec

M. Schoon
School of Sustainability, Arizona State University, Tempe, AZ, USA

W. C. D'Escury
Independent Researcher, Leiden, The Netherlands

R. Chuenpagdee
Geography Department, Memorial University of Newfoundland, St. John's, NL, Canada

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what kind of ocean and governance "science" we want, to support decisions, policies and practices regarding fisheries governance. Final thoughts highlight a reflection about whose knowledge is created and used to support decision and policy making in Ecuador.

3.1 Early Images of Fisheries – The Notions of "Fish"

From very early moments in human history, the sea called the fascination and attention of humans, and provided them with food, livelihoods and resources. In fact, the long-lasting relationship between humans and the sea critically defined how humans evolved, where they blossomed and how marine systems became vital for us. Since the emergence of ancestors of *Homo sapiens*, modern humans were already engaged in exploration, discovery, usage, management and governance of the ocean goods and services, at different scales and with diverse formats. Under that line, the sea, the fish and other marine resources that humans have used and taken advantage of since early moments in human history have been associated with the varied meanings and images of the unknown dimension of the 'salty world'. These images, created and recreated along with human existence, were not formed in a vacuum. In fact, they have been shaped by the values, culture, political and social dimensions, circulating around the fish and fisheries, in specific moments of history and under specific circumstances.

The following sections describe two historical moments where the relationship between the humans and the marine resources were shaped under formats driven by politics, geopolitics, economy and varied interests, some of which still are functional. The examples featured fall within two key periods in the human history, and illustrate how the fish and marine resources were imagined and governed along millennia, until our times with deep implications within the historical, geopolitical, social and cultural dimensions.

This chapter starts by presenting an overview of a couple of key narratives that dominated past and recent debates on fish, fisheries and their governance. The analysis reveals how different images (past and current), views and interpretations prevail amongst 'rulers', 'users' and 'experts' about what the governing issues of ocean and marine resources are, and consequently what the solutions addressing these difficulties should be. We then explore how the sustainability idea developed within those narratives and how this notion relates to the question of improved ocean governance. We focus on a description that essentially illustrates the history of marine resources governance and discuss how these formats of appropriation relate to unsustainable fishing and other marine related activities and practices. We conclude with a discussion of the future implications for fish and marine resource governance, of the current governing formats, policies and practices.

For the purpose of this chapter, the story is presented following a 'three-act' structure, based on the historical facts of marine resources usage, management and governance in the past, that fundamentally influenced the way we currently look at

and imagine 'fish' and 'fisheries' and other marine resources. Act I – The '*Discovery*' of the commons; Act II – The '*Appropriation*' of the commons; and Act III – The '*Benefits*' from the ocean commons governance.

3.1.1 Roman Times

One basic idea that has deeply influenced the first notion of the ocean by humans and all that it fosters is the closeness with 'fish' and all the dimensions associated to it. In fact, making a living by the sea, implicitly connected members of those societies to the growing development poles around the known world. Already in 200 d.c., the factories of fermented fish (i.e., "salazón" in Spanish or *garum* in Latin) became an important economic activity, producing a highly valuable commodity, which was traded around the entire Mediterranean (Cayo Plinio II, 23–79, 1999). In those years, the production of *garum*, first mentioned by Ateneo de Naucratis and Dífilo de Sinope (in IV a.C), was described as the "*well known salazón from Sexi, of Hispania*". Already the roman naturalist Cayo Plinio the Second, in his "*Naturales Historine*", mentions the existence of a "*abundant fish in the coast of Sexi*", and related it to the "industry of the Iberian *salazón*", a Hispanic-roman gourmet tradition that used an authentic and expensive fermented fish-based sauce, also called '*garum*' (Bernal et al. 2018), that was produced, exported and traded by the romans within the borders of their imperium (Bernal-Casasola et al. 2016). Other references (Portillo Sotelo et al. 2020) have mentioned *garum* and highlighted the importance of this product in the Mediterranean diet. Within the Roman Empire's economy and industry, *garum* was an important good that, being originated as a fish-based-processed commodity, its production, logistics, and social prestige associated to its usage at a gourmet scale, had great implications within the geopolitics of the largest empire at that time and with the marine resources governance (Asingh and Damm 2020).

3.1.2 Middle Age – Colonial Mindset – Fifteenth Century

During the late Middle Ages, the notions of fish, fisheries, the ocean, and its creatures were imagined as mysterious, ghostly, and even devilish shapes that threatened the spiritual and corporal human wellbeing (Mc Dughann 2002). Along those years, the consumption of fish and fish-related produce was sustained, and some societies privileged some species against others. During those times, the ownership of ships, factories, slaves, or having the 'know-how' to produce *garum* were already representations of diverse formants of marine resource governance, within the entire value chain levels. Additionally, some management tools, that could be seen as 'modern instruments' were already in place on early moments of marine resource governance, such as resource ownership, and areas of exclusion. In fact, at that time,

their design and implementation were not based on scientific knowledge, and neither were they unbiased, objective and impartial technical-driven tools, but rather value laden and interest-based instruments. One illustration of 'marine resource ownership allocation' was presented by Cristobal Colón, on 15th August 1498, when he took possession of the islands Margarita and Cuabagua (in front of the current Venezuela). That strategic movement was driven by the large quantity of pearls in the surrounding waters, which triggered the greed of the conquerors (Arveras 2021).

It has been recognized that the age of great 'discoveries' in the fifteenth Century, was in essence, the age of the discovery of the sea, where the control of the world trade, and thus the political control, was placed in the hands of a reduced number of states who were able to build enough ships to operate around all the world, simultaneously (Parry 1989). In that sense, Parry notes that the exploration and discovery not only had political and economic interest. It also had other advantages, like access to unexploited fisheries and fertile islands with productive lands, both of which were available for those who wanted to take them (*ibid*). And the travels and explorations of the seas conducted at that time, were not intended to discover the 'unknown'. Instead, they were used as usable maritime routes to link isolated regions that were separated from the inhabited and known world (Parry 1989). Later on, one example of images utilized to appropriate and govern marine resources may well be linked to the 'managerial ecology' notion which could be seen as a modern utilitarian approach to nature, having philosophical roots in the Enlightenment and the revolutionary economic, political and scientific order (Merchant 1980). This approach, he claims, began to emerge in the sixteenth and seventeenth century Europe and later on with the industrial capitalism that dramatically changed human attitudes toward and interaction with nature (Bavington 2005) and its resources.

It is recognized that human values very often focus on the efficiency and returns obtained by the sustained use of nature, for human benefits, which relate and are organized around the dictates and dynamics of the markets (Merchant 1980:238). Since around 1500, the cod represented one of the most important fisheries for the Bretons, Normans, Basques and English fleets, that seasonally harvested this resource in the Western Atlantic between 1500s–1990s (Lowitt 2011). The early fifteenth Century became the time for the recently encountered American territory, with the ambition to fish all the cod fisheries found in the Northeastern Atlantic region of Canada (i.e., Newfoundland). This fishery and the cod abundance in the waters of Newfoundland and Labrador supported the largest ground fishery in the world (Bavington 2005), harvesting approximately 100 million tons of cod between 1500 and 1992 (Rose 2003), an activity that determined the depletion of the great "northern" cod (*Gadus morhua*) and the subsequent fishery collapse. Yet, the cod fishery that had been pursued for over 500 years came to a sudden end when in July second 1992, Canada's Fisheries Minister John Crosbie (a Newfoundlander citizen) announced an immediate cod fishery moratorium (Bavington 2005). With this action, centuries of intensive fishing activities, mostly by Basque and Spanish fleets, were terminated. That moment illustrated the largest industrial layoff the modern fisheries discourse knows (Rose 2015; Thornhill 2020). Yet, after twenty-eight years, this extreme and radical fisheries management action still has large scale

consequences in fishing communities around the entire Newfoundland. Still today, it is possible to witness entire fishing towns that were abandoned (Britain 1979; Haggan 2000), and with them, all the fishing practices, history, and cultures associated with fishing near this island (Butler 1983). This case shows the best example of managerial failure of a marine resource (Finlayson and McCay 1998) under the lenses of the evolution of the cod fishery in Newfoundland, along centuries. This activity changed from a migratory format to a resident (settler) fishery when the moving Spanish fleets stopped coming and after the local or migrant fishers established themselves as the beneficiaries from the cod and from whaling (Cervera 2021). Additional key aspects were the ups and downs of the ever-changing fishing industry; the fiscal and political context when Newfoundland joined the Canadian Confederation, the implications of the responsibility allocated to Canada for the fishery; and when the earliest warning signs of a collapse of the east coast cod fishery were on the horizon (Rose 2015).

Differently to those early images of fish and fisheries, and despite traditional consumption of fish and other seafood sources, some Europeans continued looking at fish and fisheries as an occupation that rhymes with 'poverty' (Bené 2003) and one of last resort (Bené 2004; Jentoft et al. 2011). Since the Renaissance, Western science and political and economic development in the so-called developed world have been closely related and connected. In fact, even sciences considered "unbiased and objective" such as evolutionary biology, have had significant influence from the social and political context (Fichman 1997) to the present. In the context of protected areas, Western science and the generation of scientific knowledge has dominated, since the 1980s, the various management approaches promoted as an alternative to conserve the biological diversity of the so-called "hot sites" of biodiversity and endemism.

3.2 Methodological and Theoretical Approach

This chapter is theoretical in nature and follows a narrative format that seeks to communicate the stories and the meanings associated with the notion of 'fish', 'fisheries' and 'marine resource governance'. It addresses the governance systems of marine resources, following a reflective approach on the history and geopolitics that originated the current governing forms of marine resource usage, management and governance, going from the global to the Latin American and the Caribbean (LAC) scale. The chapter circulates around the idea that the early encounter of those meanings represented a collision of worldviews and a shift in the comprehension of the two ideas we address: "fish" and "fisheries".

This reflective piece is inspired by the 'Critical approach to development' (Escobar 1994, 2008; Gudynas and Acosta 2011; Gudynas and Acosta 2011; Gudynas 2011), that contests the recent and current trend of development that the LAC region has followed in the last decades and the notion of development, linked to the fisheries sector, imposed in LAC by states of the Global North, on early 60s.

The approach also includes, as a key element, the construction of an 'alternative' ideal for development ("*Alternatives-to-development")* that is nicely illustrated by Escobar (2007) in his book '*The Invention of the Third World*'. This conceptual governing format was fostered in some Latin-American countries (e.g., Bolivia and Ecuador) between 2007–2017 and provoked a paradigm shift in the notion of 'development' worldwide. Combined with this approach, we also look at other key aspects in the narrative related to natural (marine) resources usage and governance, especially reflecting in the "*Alternative (South) epistemologies"*, the scholarly work developed by De Souza Santos (2010). Within this perspective, we propose to explore other ways to look at the 'Southern-born world-views' and at the '*Buen Vivir*' paradigm, as strategic approaches to put the 'conservation and sustainability' of marine resources usage and governance, within a broader, more comprehensive and historical-sensitive perspective. We thus, argue that one cannot study 'fisheries' without some appreciation for the historical and cultural significance of the human communities who make a living from fisheries and of the social construction about fisheries that have been shaped during the last century in the LAC region, where the geographical focus of the paper is.

3.2.1 Transdisciplinarity and Knowledge

In the seminal paper written by Rittel and Webber "Dilemmas in a General Theory of Planning" (1973), it is said that the search for scientific bases for confronting problems of social policy is bound to fail, because of the nature of these problems. These problems, these authors argue, are "wicked" problems, whereas science has developed to deal with "tame" problems. Therefore, we claim that the many complex problems of and about fisheries cannot be definitively described nor solved. Within this comprehensive approach to fisheries issues, and within pluralistic societies, we could argue that there are no recipes nor "optimal solutions" for success, nor are there only technical solutions for societal problems in the sense of definitive and objective answers. In fact, our view recognizes that fisheries policies that respond to social problems cannot be meaningfully correct or false, unless severe qualifications are imposed first. Along the lines of this chapter, we tackle complexity and heterogeneity in/of science, problems and organizations, from an historical perspective. This lens looks first at '*knowledge*' as one key attribute in the creation of the 'fish' and 'fisheries' and its quality of hybridity, non-linearity and reflexivity, that transcend any academic disciplinary structure notion, and second at '*transdisciplinarity*' as a way to deal with real-world topics, where those involved have a major stake in the issue, where there is societal interest in improving the situation, and when the issue is under dispute (e.g., mangroves deforestation for shrimp farming, mangrove water pollution, biodiversity loss). Within the small-scale fisheries thus, it becomes especially relevant to articulate between these two dimensions, given the coincidence at generating knowledge and at addressing societal problems that aims to *"bridge the gap between knowledge derived from research and*

decision-making processes in society" (Mollinga 2008). The 'transdisciplinary approach (Bergmann and Keil 2012; Pohl and Hirsch-Hadorn 2007, 2008) that has been used in this study fits with the scale and complexity of the matter under the scope. This case in particular uses the inter- transdisciplinary perspective to illustrate the natural sciences in general and the fisheries research being conducted in Ecuador and Galapagos Islands (History, Anthropology, Sociology, Economy, Biology, and Ecology), as windows through which we can look at such diverse, dynamic, and complex systems.

3.3 Act I: 'The Discovery' – The Wild and "Empty" Space Exploration Under the Colonial Machinery

The arrival of Christopher Columbus to the so-called 'New World', represented a breaking point in the entire cosmovision of the world, until then. The 'landing' of the Santa María, La Niña and La Pinta vessels to a Caribbean island, was set as the illustrating image of the '*encounter of two worlds*'. That image, however, also represented the '*encounter of the images about those two worlds'* which could be counted as the initial mismatch on how the story about marine resources was interpreted by the actors, given the colonial and imperial power-based scope of their enterprises put in place in the late fifteenth Century. At that time, said Bernabéu Albert et al. (2015), "[…] *the geographic colonization, was also an economic and a spiritual colonization, with the domain of the Catholic Church who was concerned about the competing faith, brought by the Anglican Church*". Additionally, these authors mention "[…] *the fragmentation of the Pacific lands, increased the reconnaissance and occupation of neighboring inhabitants and also of European explorers. All this, as a consequence of the colonization of the Pacific territories, by the large imperial powers from XVI onwards*". With that, it started the appropriation and exploitation of people, land, sea, and their resources in LAC, by expanding their geostrategic mechanisms that were successfully applied in other regions of the world, already under their control (e.g., Philippines).

Colonial Machinery and the meanings of small-scale fisheries during the Middle Age was the dominating governing format in the globe. In 1492, the Castille and Aragón Kingdoms, unified under a dominant Christian discourse, and thanks to their support, the 'discovery' enterprise took Cristopher Columbus on a journey that transformed the world. What at the time was called the "*Descubrimiento*" became the strategic movement for one imperial power to dominate the usage, benefits, and profit of the known world at that time, and their resources?

In later centuries, the colonial power executed by Spain, Portugal, England and Germany, paid more attention to the strategic position of LAC and thus promoted, motivated, and financed overseas travels, which significantly contributed to the development of the scientific agendas of countries and regions, to the creation of new livelihoods at a 'globalized mode', and to control the political structures of the

European Colonies in the Americas. Examples of the development of the colonial 'scientific agenda' in LAC, are the expeditions of scientists (mostly white European men), to Ecuador, following certain disciplinary interests that are illustrated by Table 3.1.

During that period, some specific cases were highlighted by the prestige that the scientists got due to their enterprises, or due to the nature of the interests that triggered their expeditions, benefiting the power of elites. In later centuries, colonial powers, this time integrating Spain, Portugal, England and Germany, paid more attention to the strategic position Latin America had and promoted, motivated and financed overseas travels, which produced significant contributions to the development of the scientific agendas, at European scale. Here are some examples:

Samuel Fritz (Czech Jesuit, Missionary, and Geographer) – Period in South America: 1703–1707. This priest was the first to describe, using cartographic-inspired notions, the Amazonas River basin. His maps are the first graphic and officially recognized records of the Amazonas. The original title of his work: "*Cours De Fleuve Maragnon autre dit des Amazones Par le Samuel Fritz Missionaire de la Compagnie de Jesus*" (1707), later published in German-language *Der Neue Welt-Bott*. Augsburg, 1726, I.

Charles Marie de la Condamine – (French Geographer, Astronomist, and Mathematician, Member of the French Academy of Sciences and of the French Geodesic Mission). Period in Ecuador: 1733–1743. Measured the length of a degree latitude at the equator and created the first map of the Amazon region, based on astronomical observations. The other French Scientists accompanying La Condamine were: Godin, Bouguer, and Joseph de Jussieu.

Alexander von Humboldt (German Geographer, Botanist, Volcanologist, Zoologist). Period in South America: 1799–1804. Naturalist who first explored the wilderness of this region with scientific interest. His multidisciplinary training and interests triggered his expedition to South America. He described the first Ecological Altitudinal-based Map, describing Andean ecosystems on the mountain of Chimborazo still serves as a reference for current researchers. Von Humboldt could be considered the first recognized scientist who started making connections ('*cause-effect'*) of biological and ecological phenomena, including Climate Change. Even more, his scientific contributions were also argued to have been instrumental in the awakening of the 'freedom' spirit of the Spanish colonies, as stated by Wulf (2015) ("*[…] it was Humboldt, with his pen, who awakened Latin America", Simón Bolívar*"), which takes his scientific work to another dimension, with political and economic implications.

Charles Darwin (English Naturalist, Geologist). Period in Galapagos: five weeks in 1835. His contribution to scientific knowledge made a breaking point in what science was at that time. After his trip around the globe on board the MS Beagle and inspired by his observations in Galapagos Islands, Darwin published his "Evolution Theory based on Natural Selection'' (1859) which became the seminal work for any biological and ecological research until present. At the same time, it was not free of controversy, since it contradicted the postulates of nature, creation and God of religious faiths. Interestingly enough, it is said that Darwin benefited from less known

Table 3.1 Scientists and explorers going to the New World (eighteenth, nineteenth and early twentieth centuries)

Year	Name	Country	Topic
1735–1743	Joseph de Jussieu	France	Geodesic Mission
1711–1786	**Pedro Franco Dávila**	**Ecuador (Paris)**	**Natural history**
1761–1816	Thaddäus Peregrinus Xaverius Hae	Czech (Austria–Hungary)	Botany
1734–1807	Luis Née	France	Botany
1755–1811	Juan José Tafalla	Spain	Botany
1793	Juan Agustín Manzanilla	Spain	Botany
1775–1813	**José Mejía del Valle y Lequerica**	**Ecuador**	**Botany**
?–1807	Anastasio Guzmán	Spain	Chemistry, pharmacy
1769–1859	Friedrich Wilhelm Heinrich Alexander von Humboldt	Germany	Botany, geology
1773–1858	Aimé Jacques Bonpland	France	Botany
1815–1825	Karl (Carl) Sigismund Kunth	Germany	Botany
1771–1816	Francisco José de Caldas	Colombia	Botany
1796–1873	William Jameson	England	Botany
1831–1832	Francis hall	England	Botany
1831–1832	Jameson and Bousingault	France	Geology
?–1861	Richard Brinsley hinds, George W. Barclay, Andrew Sinclair	England	Botany
1825	David Douglas, John Scouler	England	Botany – Galapagos
???	James Macrae	England	Botany
1829	Hugh Cumming	England	Botany
1835	Charles Darwin	England	Natural history
1838	Abel Aubert du petit-Thouars, Adolphe-Simon Neboux	France	Botany
1846	Thomas Edmonton, John Goodridge	England	Botany
1845–1851	Berthold Carl Seemann	England	Botany
1809–1863	William Lobb	England	Natural history
1841–1842	Karl Theodor Hartweg	England	Botany

(continued)

Table 3.1 (continued)

Year	Name	Country	Topic
1844–1856	Gustav Karl Wilhelm Herman Karsten	Germany	Botany
1845–1853	Joseph Warscewicz Ritter von Rawicz	Lituania	Botany (life orchids)
1852	Nils Johan Andersson	Sweden	Botany
1855	Joseph Pitty Couthouy	USA	Malacologist
1856	Jules Ezechiel Rémy	France	Botany
1857–1863	Richard spruce	England	Bryologist
1858–1859	Moritz Friedrich Wagner	Germany	Botanist and zoologist
1862–1865	Juan Isern y Batlló	Spain	Botany
1865–1868	Gustav Wallis	Germany	Botany
1879–1909	Luis (Luigi-Aloisius) Sodiro	Italy	Botany
1870–1874	Alphons Stübel	Germany	Volcanology, botany
1873	Benedikt Roezl	Czech	Botany
1876	Édouard François André	France	Botany
1876–1881	Karl Friedrich Lehmann	Germany (German consul in Popayan)	Botany
1879–1880	Edward Whymper	England	Geography, alpinism, botany
1889–1892	Niels Gustaf Lagerheim	Sweden	Botany
1890–1943	August Rimbach	German	Botany and zoology
1891–1897	Henrik [Heinrich] Franz Alexander baron von eggers	Denmark	Soldier and botanist
1868–1869	A. Habel	Austria	Botany in Galapagos
1872	Franz Steindacher	Austria	Ichthyology
1875	Franz Theodor wolf	Germany	Geology, mineralogy, botany (Galapagos)
1884	Gaetano Chierchia and Cesare Marcacci	Italy	Botany
1898–1899	R. E. Snodgrass (dates/nation. Unknown) and Edmund Heller	USA	Botany
1891	Alexander Emmanuel Rodolphe Agassiz	Switzerland	Botany
???	George Baur	???	Botany
???	Luis mille	Belgium	Botany

(continued)

Table 3.1 (continued)

Year	Name	Country	Topic
1911	**Luis Cordero**	**Ecuador**	**Botany**

In bold: Ecuadorians (3)
Woman: none

explorers, like William Dampier, (Preston and Preston 2010) who authored cartography or batimetry charts that were later used by Darwin. Additionally, it is claimed that Darwin also benefited from the immense volume of work that was produced by Alexander von Humboldt) ("[…] *Darwin would not have been Darwin without Humboldt* […]." Andrea Wulf in the "Invention of Nature – Alexander von Humboldt's New World (2017).

Franz Theodor Wolf (German Theologist, Geographer, Botanist, Geobotanist, Volcanologist, and Mineralogist). Period in Ecuador: 1876–1890. His contributions to the discipline of Volcanology, after his explorations of the volcanoes in mainland Ecuador and in the Galapagos, substantially increased the knowledge and interest of this less-known discipline. His legacy still serves as the basis for much current scientific knowledge about volcanology.

After these few examples of scientific-driven expeditions, we can identify varied interests that were influential at exploring the Americas. It could be claimed that these interests were mostly moved by the intention to collect, describe new species, name them (taxonomically or with other scientifically-accepted format), map, store them in European museums, publish new findings in academic journals, create and be part of scientific associations, academies and disciplines. Interestingly enough, it was not until 1699, when a woman, Maria Sibylla Merian, a seventeenth century entomologist and scientific adventurer, embarked on a purely scientific expedition in history, going to Suriname to illustrate new species of insects (Latty 2019). However, in Ecuador it was not the case. No evidence was found of their involvement, although it could be argued that they were part of such expeditions, but no mention has been made of their presence.

These references and expeditions show to us that during those years, the Western scientific imaginary was inspired by a positivist tradition – which surprisingly, remains to this day, within the most orthodox branches of the scientific agendas. Those images of science promoted and conceived biological and numerical science as the only and/or most important answers of the scientific endeavor. In fact, during this first moment in the exploration of Galapagos by Darwin, both ignorance and curiosity sowed the basis for a science focused on natural objects that did not necessarily recognize, in their development, the influence of the global geopolitical agenda. Yet, despite the role humans played in the dynamics of those early explored systems and the recognized importance of humans effects on the environment, there was an intentional avoidance to address it due to the implicit complexities associated to it ("*You ask whether I shall discuss "man"; I think I shall avoid whole subject, as so surrounded with prejudices, though I fully admit that it is the highest and*

most interesting problem for the naturalist" Charles Darwin's letter to Alfred Wallace, 22nd December 1857 – Source: Tapia et al., 2009).

The Galapagos Islands are often called the *'natural laboratory of evolution'*, a phrase that became a powerful metaphor that has shaped the Galapagos territory and its inhabitant's mindset, since the last century. This image, it is said, communicates a way of understanding space through scientific research, conservation and tourism (Hennesey 2018). In this sense, science in the Galapagos has played and continues playing a preponderant role in the communication of the meanings associated with the terrestrial and marine systems, their resource, usages, and governance, which are linked to each sector of Galapagos society and its visitors.

All these examples show that contemporary images of fish and fisheries, and other natural resources, have generally been shaped under the rationalities associated with the knowledge (mostly western-minded) being produced and reproduced by those with access to that, in this case, positivist natural scientific knowledge.

3.4 Act II – The 'Appropriation' of the Commons – By Regulating the Usage and Governance of Marine Resources

Once the 'New World' was 'discovered', the Spanish Crown started to spatialize their new properties, in varied formats, and following geographical distribution patterns that coincided with more-or-less, equitable spaces around the Americas. By conducting this 'spatial' distribution of their 'new properties', the right of usage and profit of those new spaces, automatically became the exclusive right of the Spanish Queen, and, proportionally, of those subjects on site, who were in charge of their control, administration, and trade. The most important administrative unit was the '*Virreynato*', which represented the power and authority of the Spanish Queen in the Americas. The *Virreynatos* were considered the actual representation of the interests of Spain in the colonies, executed by the *Virrey*. Based on those interests, the conquerors, who mainly were Spanish, low socially ranked men, explored the Americas searching for gold and prosperity, knowing that by 'discovering' and 'claiming' the so-called 'new-territories' for the greatness of Her Royal Highness of Spain, they also were granted rights to exploit and benefit from the exploitation of those resources. However, on their way to the 'El Dorado', they also encountered hazards, when the new 'discovered' territory was not the environment they were used to, like the following example illustrates when referring to the mangroves encountered.

> *[….] some knights decided to continue discovering by boat, since the terrestrial route was so arduous, due to the thickness of the mangroves, and also due to the many rivers full of ferocious alligators and mosquitos that tormented them [….]*
>
> Chapter IX:164. Chronicles of Spaniards soldiers accompanying Pizarro in the conquest journey of Peru.

[….] meanwhile, Francisco Pizarro and his pals crossed between those rivers and mangroves, being tormented by the mosquitos, experiencing unbearable efforts and misfortunes, and were tired of being forced to walk in that hell, and they all wanted to go back to Panama [….]

Chapter XII:170. Chronicles of Spaniards soldiers accompanying Pizarro in the conquest journey of Peru.

Ref: Pedro Cieza de León – La Crónica del Perú (1541–1550) the `discovery´ of the Pacific Coast.

Those sorts of difficulties prevented other conquerors from exploring those areas, yet their greed and pursuit of riches moved them to continue exploring even those places considered as 'hellish', which later on, actually represented important harvesting areas for marine resources that produced large revenues for the Spanish Queen. The case illustrated here, tells us the story of the exploitation of pearls, whose harvesting became an attractive business in the Caribbean at that time.

*[….] the interest of the Royal Highness to fish "margaritas" (*sic. for pearls*) and her proposal to colonize the San Diego Harbor* (currently Venezuela) *to harvest them*. (ES.41091. AGI, Archivo General de Indias, 1719-2-18 Madrid).

But the exploitation of marine resources was only possible by granting rights of usage and benefits to specific representatives of the Spanish crown, under the assumption that tributes and taxes would be paid to the Queen based on the marine resources' profitability. One of the strategies to proceed with those 'private rights' allocation, was what could be considered as the first 'fishing rights allocation', to a private user (i.e., by establishing a Fishing Maritime Company) in the early eighteenth Century, for the exploitation of marine mammals.

Request to establish along the coast of the Pacific Ocean, in our Meridional America, a whale fishery and a factory of oil and sperm candles. (Expedient about the establishment of a fishing company, Archivo General de Indias, 1789-7-18).

These references illustrate how and to what extent the conquering and colonization of the Americas and the spatialization of their power were used to impose new legal instruments. These, put in place by the most powerful sector of the societies at that time, also served as ways to disregard previously existing governance practices that dealt with harvest of fish and seafood. We will reflect further on this finding, which has substantial implications in the way marine resources are still managed and governed. The strategies to regulate the usage and harvest of the already 'appropriated' marine resources were, in this case, the design and imposition of a 'management tool' for marine resources, which could be named as the first 'fishing-gear ban' and by its establishment, a sort of a 'protected area' creation. At that time, the Royal Decree issued by the Spanish Crown read *'the prohibition of the use of purse seines'*, in response to his demand to restrict the use of marine resources exploitation in the East Indies (i.e., Caribbean islands). This shows that strategies to 'ensure' certain practices for the 'ocean resources governance', were already in place in the sixteenth Century. This instrument is thought to have been created first, to protect highly valued resources (i.e., pearls), when conducting other fishing practices, second, to gain benefits from any other fishing-related practice conducted in the

harvesting areas of pearls, and third, to make profitable for the Spanish Queen, any business-related activity, conducted by her subjects, in the colonies.

Cédula Real to Fray Tomás de Berlanga, Terra Firme Bishop (1538), in response to his request, as protector of the recently discovered West Indies, to prohibit the usage of purse seiner to fish close to the Pearl Island (sic. Today's Isla Margarita, Venezuela). Registro de Oficio y Partes Tierra Firme, Archivo General de Indias, 1538-6-26, 1542-3-10.

Cédula Real de Oidores de la Audiencia de Tierra Firme: "[….] *for any Spaniard to fish with purse seiner in the Pearl Island, a right which has been granted to the Marquez Don Francisco Pizarro, and if some person would like to do so without him, a license could be conferred, for which a fee (one fifth) should be paid to her Royal Majesty*. Audiencia de Panamá, 235, L.7., F.74 V – 75 R, Archivo General de Indias, 1539.103.

It is then stated the necessity to pay the fee (one tenth) for fish, salt, fruits, vegetables, chickens and other stuff. Archivo General de Indias, Indiferente, 1538-6-26. Registro de Oficio y Partes Tierra Firme, Archivo General de Indias, 1538-6-26, 1542-3-10.

3.5 Act III – The Blessing from Ocean Commons Governance: The Development Ideal

After the Independence wars freed the Spanish colonies in the Americas, between 1809 and 1832, a series of discontinuous, but related events took place. Once the newborn Republics in the Americas became sovereign states, the rules of the game shifted from being led by Spanish rulers to being led by the new *Criollo*-elites, linked to the previous Spanish power, but still, being perceived as the 'new local legitimate' new authorities. From the start of the Ecuadorian Republic in 1832, it was not until the early twentieth Century, when other strata of Ecuadorian society started to become part of the discussion of marine resources usage following a global-driven policy, facilitated by the Food and Agriculture Organization (FAO) in order to start the exploitation of the fishing resources, in the entire LAC.

This global 'development' agenda was mainly influenced by the interest in the economic development of the coastal communities and the development of a promising industry that was increasingly demanded by a global rising economy, awakening after the dark years of WWII. At this point western societies, politicians, businesses, and their scientists were eager to leave behind a season of limitations and scarcity and were motivated to start and/or resume their postponed agendas. This became especially relevant within all the aid initiatives, promoted and carried out by the United States of America, through their global US/AID program, along the varied fronts their geopolitical interests looked at: the post-war Europe, Asia, and LAC. This trend determined that the dominant 'Development Discourses', promoted and fostered between 1950s and 1970s, greatly contributed to the three main phases of fisheries resources harvesting at an industrial level in Ecuador: (1) the installment of political, institutional and technical capacities; (2) training, education and technological advancement of those involved with the fisheries activities; and (3) the application of the fishing and fisheries' 'know-how' from abroad. More or less at the same time when the fishing activities were started regionally, the

agriculture sector also received substantial support, by governments in the Global North, who looked at the Global South as the breadbasket of the world. These large-scale development agendas for both the fisheries and agriculture sectors were critical and influenced how they evolved up to today.

Later, during the 1980s, the second 'boom' of the primary economy in Ecuador began. This followed the initial oil industry success in late 60s-early 70s and the start of banana-export businesses. In 1980–1981, the world's desire to expand their access to global markets, started to demand more and more exotic produce (e.g., bananas, fish, timber) from the Global South. That triggering of market forces pushed the recently launched oil-based economies to expand their offerings and begin exploring other resources that could result in attractive and profitable initiatives for the Ecuadorian state. Additionally, the already developed aquaculture business in Asian countries, that also followed the FAO initiatives for the large-scale production of fishing and other marine resources, showed that the shrimp harvesting industry was a promising one and the idea was imported to Ecuador. With that, a new business landed in a country with 30% of its coastline covered by mangroves and with an economy circulating around oil exports.

The first movement to help the new industry prosper was to enable the existing policy on land property rights and rights of use and allocation to expand into the mangroves areas. Previously, usage and ownership were exclusive rights of the Ecuadorian state. With the arrival of this new business model, the entire image of the mangroves shifted from being the '*hell where humans suffer due to the unbearable conditions*' and was transformed to be '*the frontier to be conquered and the promising wealth coming from its taming*'. At that moment, the technology needed for and associated with the taming of the mangroves was utilized as a means to spatially distribute the shrimp-farming areas in the mangroves, to plan and map the shrimp farms, and to allocate the right of use in those areas under the 'concession' format for one hundred years to the elite, powerful and wealthy, who were already part of the government and business groups. Yet, the image of mangroves, associated with the 'illegal' notion that started when African slaves survived a shipwreck along the Esmeraldas' coast, escaped and hidden on the mangroves of that region, remained. This negative image association was enhanced by the later arrival of guerrillas groups to the mangroves areas in the border region between Ecuador and Colombia.

In the following years (1970s–1990s) and with the arrival to Ecuador of more naturalists and explorers following the 'Darwin legacy', new 'images' about the marine and terrestrial resources and systems were created and introduced. These newly shared 'natural' images coincided with a flourishing industry demanding more and more diverse products to offer their markets: nature-based tourism. It was then, when the idea of nature conservation, in the form we know it now, was developed and promoted as a twofold strategy. On the one hand, it aligned with the recently launched environmental movement that asked for bans in the usage of aerosols, as measures to diminish their negative effects over the ozone layer, and on the other hand, it also highlighted the nature as the product to be sold, by tourism industry operators, for an always growing tourism sector.

By the 1980s and 1990s, scientific interest was mainly focused on the recently described 'hot-spots' of biological diversity, as priority areas for conservation (Olson and Dinerstein 1998; Olson et al. 2002), with a view of conservation that is achieved through the implementation of protected areas and closed areas (Nederveen Pieterse 2010), all under an approach of restriction of use and limitation of access to users. It was during this period that the paradigm of 'sustainability' started to gain currency, and a new notion of conservation began to propagate at a global level, generating novel research approaches towards biodiversity conservation 'with communities' as a strategy to achieve successful conservation initiatives.

Those conservation strategies at that time, were ones influenced by the ideal of 'wilderness' that fascinated the tourism-centered discourse, and at the same time, one of conservation of endangered and iconic species, which originated lines of thought and images still in currency: whales and dolphins in the marine realm, and panda bears and other charismatic megafauna in the terrestrial world. Those species and the images associated with them are still very powerful and influential political and economic discourse on finding the best mechanisms and strategies to improve or change marine and ocean governance policies and practices, worldwide. In parallel with those images, the establishment of protected areas (marine and terrestrial) was also an illustration of ways to enable the conservation initiatives, whereas at the same time, guaranteeing that the natural capital, over which local and non-local actors make a living, would be protected.

Yet despite the 'sustainable development' notion coined in 1997, it took at least ten more years (2007–2010) until this 'sustainability' discourse, actively promoted by grass-roots movements and some academic debate, actually reached the economic and political agendas of states, multilateral agencies, and even business, to finally foster a more economically profitable, socially just, and environmentally friendly global economy. This new approach in sustainable marine resources usage and governance, for instance, could be considered the 'keystone' of the way the 'improved ocean governance' is envisioned. This approach was also reflected in the way 'sustainable development' was promoted in Ecuador, both on the mainland and in the Galapagos Islands. In fact, between the 2000s–2010s, research formats integrated, for the first time, a more holistic approach, contemplating natural and social dimensions, and giving them an equitable value, in the best understanding of the problems that affect the Galapagos (González et al. 2008; Tapia et al. 2009). These new proposals, therefore, highlight the need for integration of multiple disciplinary and methodological traditions, all this, as a more realistic mechanism to understand and mitigate the challenges that the Archipelago is facing. And this also involves the 'fisheries' sector, which until three years ago, was still being looked at only through a 'hard science' lens.

In recent years, after a decade of political turns towards the leftish-minded social agendas in some South American countries, in 2018 the development paradigm in several countries in the region changed back to a conservative position. The new government of Ecuador, representing the traditional bank-and-business oriented policy and economy, allocates to the governance of marine resources (especially the tuna-fish large scale fisheries industry and the shrimp industry of Ecuador, which

significantly contribute to the national economy), high relevance and political attention. Thus, deep and responsible discussions and reflections are needed regarding which of the current development formats (i.e., more socially-oriented policies or business-minded schemes) are desired, all this, for an equitable, fair and sustainable economic recovery after the so-called "lost decade" of the 2010s.

3.6 Discussion

3.6.1 Ocean Governance – Inter & Transdisciplinary Approach

Governance of marine and ocean resources demands a substantial amount and quality of knowledge. We have been told that decision and policy making should be done based on 'sound scientific evidence'. It may, however, be useful to open the dialogue to what kind of "science" we want and what we need. By opening the door to other ways of knowing (traditional knowledge of local fish users, for instance), a transdisciplinary approach would enable the integration of diverse epistemological formats that can provide us with lights to understand "local" realities and "local" views. One critical part in fisheries research, for instance, has been and still is the 'technologies'. In fisheries research, currently going on in the Galapagos, for instance, for the first time, a reconciliation of diverse formats of knowledge has been achieved, by integrating an interdisciplinary perspective. One example is the use of high-tech lab equipment, to study otoliths and larvae, as part of the fisheries biology section, whereas, at the same time, focus groups and participant observation are also used to describe and better understand the fisheries sector dynamics and complexities. In that light, the search for classical scientific bases for confronting problems of social policy is bound to fail because of the nature of these problems. They are "wicked" problems, whereas science has developed to deal with "tame" problems. This is a challenge with the reductionist approach to science, which works well in trying to advance foundational scientific explorations as in particle physics. It works poorly, however, in understanding wicked problems, which fundamentally require a holistic approach that classical science is unequipped to perform. Policy problems cannot be definitively described nor solved. Moreover, in a pluralistic society there is nothing like the indisputable "truth" and there is no objective definition of "equity".

3.6.2 Policy for Governing the Marine Resources

Policies respond to societal problems yet, they cannot be fully nor meaningfully correct or false since the so-called "optimal solutions" still are value, power and knowledge influenced. In fact, the potential "solutions" for these 'wicked' scenarios

within ocean and marine resource governance, are not definitive and objective answers to those problems. Rather, they are instruments, created within a specific context, that need to be prioritized, discussed and negotiated. And this iterative negotiation is the space where the values, principles, interests and power behind the policies are made evident. It is here when the meanings the actors involved allocate to critical notions like "improved governance", "wellbeing", "development", "sustainable", "prosperous", "growth", are known. This article has shown that oceans and marine resources governance has historically been implemented by biased strategies and practices. Thus, we argue that improving the governability of oceans and seas requires the encounter of common grounds about those dimensions, and that should be placed over the "differences" that block the negotiation process. Within this scenario, aspects like relevance, urgency, priority, equity and equality, the rule of law, legitimacy of actions, transparency, accountability, social responsibility, holistic interactive governance, economic sustainability and social viability, should be placed as conditions *sine qua non*, actions, policies and practices are conducted. This, certainly will enable the promotion of a 'new era' for fisheries and marine resources governance, since it would foster the negotiation, going along mandatory guiding principles: human rights and dignity, respect of cultures, non-discrimination, gender equality and equity (Jentoft et al. 2017).

3.6.3 From Society-Driven to Enterprise-Focused Marine Resources Governance

The plurality of the consumer society, and of consumers, customers, citizens are fundamental in achieving and creating a new (improved) governance for fisheries and other marine resources. The desired change, could, for instance be triggered by a "*smart governance approach*" (G. Krause, comm. Pers., 18.09.2017) also in LAC context. Hence, under the *Buen Vivir* approach, the existence of societal institutions–fostering reciprocity, cooperation, and solidarity–is envisioned, also in the form of responsible markets, as key means to promote the good way of living that this concept involves. Seen as an ancient ontological notion that has been recently recovered (Viveiros de Castro 2004; Haidar and Berros 2015b), the *Buen Vivir* constitutes "*an alternative approach to development, and as such represents a potential response to the post development*" need (Gudynas and Acosta 2011; Acosta and Martínez 2009).

This notion involving fair, responsible, and sustainable markets, are driving forces for a new trade format that balances the dominant role that the western science-based and technocratic perspective of marine resources governance, has put in place together with political and managerial agenda, as has been illustrated by different cases of natural resources management (e.g., oil palm, shrimp, and soy monocultures) (Escobar 2016) in the Latin American context. Findings in this chapter evidence the relationship between conquering and colonizing the Americas, the

spatialization of the ruling power, the value-laden scientific endeavors conducted in LAC and Ecuador, and their consequences for marine resources. Additionally, we have seen that imposed regulations for ocean and marine resources were unsuccessfully applied since they disregarded previous governance practices linked to fish and to seafood, locally. This imposition, we claim, has had large implications on how resources were and still are perceived, imagined, used, and governed, given the broken relationship between former and current users and the resources. This artificial and violent suppression of traditional policies and practices and their replacement by some new strategies, brought from abroad, has greatly influenced the perception of governing rules as 'impositions' from abroad, which for practical purposes, facilitates either the active opposition or the passive ignorance of regulations that blocks and even boycotts successful ocean and marine governing practices.

3.6.4 The New Ecuadorian Constitution – Still Useful?

In 2008, for the first time ever, the Ecuadorian Constitution (2008) granted inalienable rights to nature and recognized nature as a subject that enjoys juridical protection, at both Constitutional and legal levels (Berros 2015). In the preamble of this normative instrument, the Ecuadorian Nation State is defined as "*constitutional, rights and justice-based, social, democratic, sovereign, independent, unitary, intercultural, plurinational and secular*". Additionally, it is said that this constitutional law operates as an integrative and conciliation strategy to *"*[i]*ntegrate the diversity of peoples, cultures, notions* (i.e., Mother Earth or *Pachamama* and the *Sumak Kawsay") at all dimensions of National interest (e.g., economic, politic, financial, cultural and environmental*)." As a social bonding instrument, the 2008 Constitution successfully recovered and integrated multiple constituents of Ecuadorian society which greatly enhanced Ecuadorians' national pride, identity, and self-esteem. Since its approval, this Constitution proclaims high levels of symbolism illustrated by practices that have been recovered after their replacement by western-based habits over the previous centuries (e.g., traditional food and garment). This instrument has embraced in a rather tacit manner the nation's ancient heritage and has pleaded against discrimination of traditionally marginalized groups. In the end, and at least in theory, this constitution can be seen as a successful example of a participatory process useful to "redeem the past" of this nation state (Acosta 2009; Acosta and Martínez 2009).

3.6.5 The Buen Vivir *Principle*

The *Sumak Kawsay* (in Quechua language) paradigm, translated as "Good way of living" or "*Buen Vivir* "in Spanish is not a new notion. It has been present in ancient Amerindian discourses and indigenous Andean cosmovisions (or non-dualistic

philosophies, Escobar 2016) that illustrate a comprehensive way of understanding life. This idea retrieves and articulates broader ontologies and epistemologies about humans, animals, and environment, and operates as an alternative construct of life. These visions, as have been said by Berros (2015), nicely align with newly-grounded ideas that currently belong to environmental- and animal-ethics fields and which are present in the juridical field (Haidar and Berros 2015a). The *Sumak Kawsay* discourses circulate around the equilibrium and the harmonic coexistence of beings – from social and natural realms – privileging the collective over the individual and solidarity over competition. *Buen Vivir* is a category in the Andean life philosophy of the indigenous societies that has lost ground due to the effects of Western rationality's practices and messages (Viveiros de Castro 2004; Duarte and Belarde-Lewis 2015) mainly due to the discredit given to this way of thinking in front of most dominant currents (e.g., the church and religious ways of thought) (Haidar and Berros 2015a).

Since the 2008 Constitution approval, the *Buen Vivir* principle has ruled the National Ecuadorian Plan for Development (or *Plan Nacional del Buen Vivir – PNBV* in Spanish), which questions the traditional notion of development focused on economic growth (Lind 2012). In contrast, it proposes sustainable development only as an interim goal on the way toward a paradigmatic shift in the development notion that encompasses dimensions like happiness, freedom, and equal rights, as well as sustainability (Gudynas 2011; Escobar 1996; Acosta 2008; among others). Acosta and Martínez (2009) propose to promote "alternatives for development" instead of models for "alternative development". Operating under this perspective, between 2007–2017 the state has played a critical role as a driving force for achieving social well-being in Ecuador. In that regard, policies, programs and practices constituting the full public agenda, have given the *Buen Vivir* principle an influential role within the national strategic development plan.

3.6.6 Governing Marine Resources – From Past to Now

Historically, fishing has been an important cultural, social and, only recently, economic role in Ecuador. There is evidence of pre-Hispanic communities fishing, consuming, and trading fish products at a low to mid-scale, locally and regionally (Baumann 1978; Norton 1985; McEwan and Silva 1998) even by practicing very complex fishing strategies[1] and by using diverse gears (e.g., nets, lines, and hooks) (De Madariaga 1969). In most recent times, small-scale fisheries in Ecuador used only subsistence practices until the early 1950s, when fishing started to develop as a commercial sector, mainly aided by international bodies (e.g., FAO) (Allsopp 1985; Williams 1998). Since then, small-scale fisheries have been identified as

[1] The Spanish conquerors recorded fishing scenes of South American indigenous tribes who used a "hunter fish" to catch bigger prey, even sharks. For a detailed description of these practices, see De Madariaga 1969:116–130).

critical for the economic growth of fishing communities in the Ecuadorian coasts, besides construction and tourism. On the contrary, the relevance of fish, first as a food source, and second as a cultural and identity-linked asset in Ecuador, has only been referred to by scattered research conducted by scholars who described very early stages of Ecuadorian's history (Norton 1985; McEwan and Silva 1998) and recounted their use of marine resources (Baumann 1978; Rotsworowski 2005).

Bolstered by the cultural construction of fisheries (Finley 2009) and due to the prevailing doctrine of free trade and markets which look at fish only as goods to trade with, the fish produced by small-scale fisheries in Ecuador has remained unnoticed under different lenses. In fact, historical, cultural, and spiritual dimensions of fisheries within fishing communities have remained unnoticed under the current governing practices developed to achieve the *Buen Vivir* paradigm in Ecuador. We claim that fisheries have not been treated according to the new constitution perspective mainly due to the incongruities and dissonant approaches in governing fisheries and other resources, at national scale (Barragán-Paladines 2015, 2017).

3.7 Science for Marine and Ocean Governance in the Future

We argue that the boundaries of interdisciplinary research are shown to be under constant negotiation, and are still far from mutual understanding or consensus, which in fact explains the often uneasy negotiations. We posit that the increasing prominence of the difficulties encountered in achieving the so-called 'sustainability' partly relies on the inability (or unwillingness) to deal with boundaries (of many sorts) and how to overpass them. Furthermore, it is here shown, how the circuit of knowledge production about fisheries in Latin America is deeply influenced and informed by history, by power, by academic research, by publishing, and by the imposition of one dominant ontological agenda for fisheries' and other marine resources appropriation, exploitation, and usage, and even by putting fish and fisheries as object of conservation practices and economic wealth. In order for us to reverse this circle of inadequate and unsuccessful ocean and marine resources governance, that has historical origins, we rather look at the positive outputs of governing interactions that strengthen and facilitate the negotiation of the principles that mobilize and enable improved governance policies and practices.

We have seen the account of the long history of the relation between human practices and marine resources, which in the last centuries has been shaped under a dominionist and colonial principle of appropriation and control. The 'modern' development notion, thus, also obeys to a contested spirit of continuous growth based on accumulation of goods, which, in the case of the marine resources, has been illustrated by fisheries. Fish and fisheries are described as marine resources that started to be governed through management instruments already in the sixteenth Century. Therefore, the conversion of fisheries, from being a subsistence-based activity until becoming a highly valued good, nicely illustrates the transformation of the meaning of fish within different contexts and moments in

human history. We claim that alternatives to this notion of development are needed. It also is desirable to have a more comprehensive approach to look at fisheries, as well as coherent and fair policies and practices. A "one-fits-all' approach to deal with governability matters in fisheries needs to be revisited, and more diverse lenses to look at it need to be found. One strategic move could be, for instance, to reconcile the discussion and negotiation of competing claims of knowledge and power and to install continuous reflection processes not only about "what" development, but even more important, "whose" development do we want.

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