Chapter 22
Exploring the Governability of Small-Scale Fisheries in Ecuador and Galapagos Islands Under the *Buen Vivir* Principle

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Abstract Fisheries in Ecuador and the Galapagos Islands are a very complex, diverse, and dynamic sector. Unfortunately more often than not, policies and practices applied to govern fisheries have proven to be inappropriate. Small-scale fisheries in mainland Ecuador and the Galapagos Islands face multiple challenges mostly linked to the limited governability of the fisheries systems. By using empirical evidence based on triangulation of qualitative open-ended surveys and intensive literature review, this chapter explores the fisheries sector in Ecuador through the lenses of the *Buen Vivir* standpoint, which is the guiding principle of Ecuador's National Development Plan. Under the interactive governance approach, which is used as the primary analytical framework, this chapter examines the challenges encountered in governing small-scale fisheries in both the Ecuadorian mainland and Galapagos Islands. This chapter highlights the coincidences and mismatches between the two normative instruments simultaneously operating in these two regions. Main findings confirm the existence of incongruities between the *Buen Vivir*-inspired national development path and the policies and practices taken to address small-scale fisheries issues. Yet, common grounds between both instruments exist, and they may serve to pave the road for a comprehensive governance model for the national fisheries systems. We suggest that by implementing a comprehensive overarching national policy framework for fisheries, the *Buen Vivir* principle – ruling the national development plan – would be better illustrated. By doing such, the overall governability of fisheries in Ecuador would improve, and thus the sustainability of small-scale fisheries and the viability of fishing communities in both regions would be fostered.

Keywords Small-scale fisheries · Governability · Ecuador · Galapagos Islands · *Buen Vivir*

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22.1 Small-Scale Fisheries in Ecuador and Galapagos Islands: The *Buen Vivir* Principle

In 2008, Ecuador approved its new constitution (Ecuadorian National Constitution 2008), recognizing the rights of nature for the first time ever as a subject capable of enjoying legal rights and protections in the national courts (Berros 2015). This legal mandate was inspired by the Quechua principle of *Sumak Kawsay*, translated as "good way of living," or *Buen Vivir* in Spanish. However, although this legal instrument is recent, *Buen Vivir* is not a new notion: it has remained active, mainly, in the Ecuadorian indigenous population for centuries. The term is derived from an ancient Amerindian cosmovision of equilibrium that recognizes the harmonic coexistence between nonhuman and human actors in nature, while privileging the collective over individuality and solidarity over competition. The concept is defined by Escobar (2015a) as "good living, or collective wellbeing according to culturally-appropriate ways" (p. 25). Similarly, Radcliffe (2012) describes it as a postcolonial, post-neoliberal, and holistic view of life, classifying *Buen Vivir* as a form of life philosophy of indigenous societies that has been eroded by the dominant practices and messages of Western rationality. Since 2008, the *Buen Vivir* principle has become the foundation for the National Ecuadorian Development Plan (PNBV, by its Spanish acronym), which no longer places central focus on the economy (Escobar 2015a) but rather contests the overemphasis on economic growth in previous development model (Lind 2012). This vision, according to Lind (2012), proposes alternative paths to development – which is framed as only a means to an end, rather than an end in itself – and stresses the need for "other" form of development to encompass dimensions like quality, freedom, equal rights, and sustainability.

In the decade since the new constitution was introduced, the Ecuadorian state has been the driving force in achieving social well-being on both the mainland of Ecuador and the Galapagos Islands. The government's efforts, although not completely successful, have paid increased attention to small-scale fisheries, which have been a traditionally under-estimated and marginalized sector in Ecuadorian coastal regions. For the first time in Ecuadorian history, small-scale fisheries have been taken into account alongside other labor-related sectors at the national level in order to improve the working conditions and overall well-being of fishers.

In line with that, although the new Ecuadorian constitution is guided by a comprehensive new paradigm that recognizes the rights of fishing resources to be protected, it still fails to fully acknowledge the rights of fishing people to fish. We argue that fishing families' access to fisheries-derived livelihoods has neither been explicitly accounted for neither clearly articulated to date. Thus, by invoking the notion of *Sumak Kawsay*, we claim that the full incorporation of the idea of Mother Earth into legal instruments should also include the rights of fishing people to access to fish resources.

In recent decades, increasing attention has been paid to the role that critical global issues such as climate change, marine pollution, and more recently ocean grabbing play in the sustainability of fisheries (Bennet et al. 2015). However, despite

this increased research and policy emphasis on sustainable fisheries, this goal has rarely been achieved in practice (Pauly et al. 2002). In Ecuador, the high cultural importance of fish as a food source, a ceremonial asset, and a tradable good since very early stages in Ecuadorian history has been widely demonstrated by historical and archeological evidence (Norton 1982, 1985; Schwarz 1987; McEwan and Silva 1998; Staller 2001; Stothert 2008; Rostworowski 2015). Yet, in recent decades greater emphasis has been placed on research focusing on the biology and ecology of fisheries resources, as well as appropriate managerial practices (Grupo Núcleo 1999; Murillo-Posada et al. 2013), supported by the administrative bodies that govern small-scale fisheries. We posit that ethical and moral factors are also critical considerations for ensuring that small-scale fisheries governance adequately addresses urgent challenges for the sector such as poverty, malnutrition, exclusion, and marginalization. However, the biggest pitfall in this new legal regime is that these considerations, although consistent with the concept of *Buen Vivir*, have been delayed or ignored within the policies and practices framed under the National Constitution and overseen by the PBNV. This failure to recognize the complexity, diversity, and dynamics involved in Ecuadorian small-scale fisheries was evidenced by clashes between policies and practices that were put in place by two coexisting governing systems: the top-down hierarchical approach taken in the mainland of Ecuador and the horizontal co-management model adopted in the Galapagos Islands (Barragán-Paladines 2015).

The haphazardness of the national fisheries policy gave rise to dissonant and incoherent decisions and policies and to inappropriate governing strategies at dealing with fishing resources, which have been viewed purely as fish stocks to be managed. Despite these diverse values and affective bonds existing among fishers and fishing communities, management actions carried out to address small-scale fisheries challenges tend only to consider quantitative attributes of fisheries like quotas, fish landings, and market prices for commercially demanded species. Thus, the prevailing management regime has ignored the wholeness dimension of the *Sumak Kawsay* principle, as interpreted by the PNBV (SENPLADES 2009).

Research on small-scale fisheries in Ecuador has focused on both mainland and Galapagos fisheries. Studies about mainland fisheries have addressed key aspects such as fishing communities (Pollnac et al. 1987), fleet and gears (Gaibor et al. 2001), methods of studying small-scale fishing communities (Pollnac et al. 1987), fisheries development (Allsop 1985), fisheries planning (Arriaga and Martínez 2008), ordering (Beltrán Turriago 2001), local assessment (Coello 1993), and regional assessment (Charles et al. 1994; Tassara 1994). On the other hand, research on Galapagos fisheries has mainly examined environmental issues (Banks 2002, 2007, 2009; Banks et al. 2006; Bustamante et al. 1999a, b; Edgar et al. 2004a, b, 2008; Vinueza et al. 2006); socio-political aspects of fisheries (Ospina 2001; Ospina and Falconí 2007; McDonald 1997; Kerr 2005; Epler 2007; Grenier 2007; Heylings and Bravo 2007; Viteri and Chávez 2007;Taylor et al. 2009), recreational fisheries (Schuhbauer and Koch 2013), and aspects of fisheries management (Reck 1983; Ramírez 2004; Stone et al. 2006; Jobstvogt 2010; Castrejón 2011, Castrejón and Charles 2013; Castrejón et al. 2013).

Despite the diversity of existing research on small-scale fisheries in Ecuador, no studies so far have explicitly demonstrated the connection between the notion of *Buen Vivir* – which is present in all of the objectives of the PNBV – and small-scale fisheries. We identify several potential causes for this oversight. First, the indigenous-derived epistemological dimension of *Sumak Kawsay* has traditionally and intentionally been disregarded by the positivist Western rationality that has dominated the cultural construction of natural resources and their usage since the Spanish conquest of Ecuador. Second, the technocratic species-based discourses for fisheries management put in place during the last decades have underemphasized more holistic or humanistic ways of understanding and governing the environment. Third, the use of the *Buen Vivir* principle as the dominant paradigm in the PNBV is part of a very recent (i.e., since 2008) shift in mindsets, initiated by the current government, that is only beginning to dismantle the traditional notion of development that has held a hegemony over governance in both Ecuador and across Latin America.[1]

The sustainability of small-scale fisheries and the viability of fishing communities are pivotal to securing the human rights to food and livelihoods (Allison et al. 2012). Despite being constitutionally protected, the conservation of fish stocks still is subjected to incongruous management practices that preclude the effective governance of these resources. In general, the singular focus on the nominal economic value of landed fish has largely negated the existence and importance of "other" values derived from fisheries. The result is that small-scale fishers may lose their access to traditional livelihoods and, consequently, the right to fish (Harris 2008). Ultimately, as argued by Pitcher and Lam (2010), this exclusion continues to prevent the implementation of adequate policies and practices regarding small-scale fisheries and fails to secure fishing communities' human right to food security.

This chapter examines the extent to which the existing legal frameworks in place in both mainland Ecuador and Galapagos reflect (or fail to reflect) the principles of *Buen Vivir* in relation to the small-scale fisheries sector. We assess current trends in small-scale fisheries governance, from the standpoint of both fishing resources (in terms of their right to be protected) and fishers (in terms of their right to fish). This analysis is guided by a varied set of principles derived from resource-based management practices and taken directly from the PNBV and from the normative instruments ruling human's activities in Galapagos.

The guiding research question for this study seeks to understand to what extent the PNVB (as Ecuador's primary set of guidelines for governance) and the notion of sustainable development (as the predominant principle guiding the instruments in place in Galapagos) have led to the achievement of sustainability of small-scale fisheries. The chapter's specific objectives are to (a) explore the commonalities among the normative instruments in both regions and demonstrate how they interact,

[1] At the time of reviewing this chapter, new presidential elections took place in Ecuador. The recently elected government – who belongs to the same political party of the outgoing president – is expected to maintain their vocation, by fostering this national ideal, in the long term. By doing so, the *Buen Vivir* will remain as the guiding national principle, leading the Ecuadorian's development path.

(b) illustrate the mismatching elements between the varied instruments, and (c) analyze the main implications of the commonalities and differences encountered for improved governance. Some concluding thoughts and reflections are presented at the end of the chapter.

22.2 Methodological Approach

Duggan et al. (2014) argue that thinking about fisheries and fishing resources with an adaptive and flexible "fish-shape mentality," by fisheries governing bodies, could enhance the likeliness of the sector to adjust to the high uncertainty of the systems that affect it. According to these authors, this approach would help lead to a better balance between the profitability and sustainability of fisheries and would strengthen the linkages between fishers, the fish they catch, and the overall marine ecosystem. This idea parallels with the crux of the interactive governance approach (Kooiman et al. 2005, Kooiman 2008; Bavinck et al. 2013), which examines fisheries governance by considering the interactions between natural and social systems to be governed and their governing systems. In order to address these multiple dimensions of small-scale fisheries governance, this chapter employs interactive governance approach (Kooiman et al. 2005, Kooiman 2008; Chuenpagdee 2011; Bavinck et al. 2013; Jentoft and Chuenpagdee 2015), with a specific focus on the governability assessment framework (Kooiman 2008; Chuenpagdee and Jentoft 2009; Kooiman and Bavinck 2013). Using these frameworks, we describe how the governance attributes, including the governing system (GS), natural and social systems to be governed (SG-N and SG-S), and their governing interactions (GI), involved in the governability of small-scale fisheries in both mainland Ecuador and the Galapagos Islands are interlinked, as well as how they draw on the current developmental discourse centered around *Buen Vivir* in both regions.

22.2.1 The Study Area

The study area includes two Ecuadorian geographical regions: the coastal mainland and the Galapagos Islands (Fig. 22.1). Ecuador is located in one of ten global conservation priority regions based on the abundance, productivity, and high concentration of terrestrial and marine resources present in the country (Olson and Dinerstein 1998; Olson et al. 2002). This diversity is due in part to the presence of upwelling systems in the Pacific Ocean caused by southeasterly trade winds, which shift relatively cold and nutrient-rich waters to the euphotic zone along the coast (Charles et al. 1994; Hannah et al. 2013). The coastal region of mainland Ecuador is made up of six provinces, five of which have direct access to the ocean.

The Galapagos Archipelago is one of 24 provinces in Ecuador and is the country's only island region. The islands are of volcanic origin, located about 1000 km

Fig. 22.1 Map of Ecuador (mainland and Galapagos Islands) (Source: Modified from ECOLAP and MAE 2007)
*EBM (ecosystem-based management) is placed as a principle acting on both the GS and the SG-N. The rationale for this is that EBM is somehow a form of governance but at the same time, explicitly concerns the SG-N in terms of ecosystems

off the Ecuadorian coast. The archipelago is home to one of the most complex, diverse, and unique ecosystems in the world and is considered a natural laboratory for studying and understanding evolutionary processes (Stone et al. 2006). The high biological diversity, ecosystem richness, and productivity found in Galapagos are due to the islands' geo-biophysical characteristics and the convergence of three major oceanic currents system in this area: the Peru Current, the Cromwell Current, and the Panama Current (Bustamante et al. 1999a, b; Danulat and Edgar 2002; Baine et al. 2007).

22.2.2 Research Boundaries

Understanding the interactions between small-scale fisheries systems in the Ecuador mainland and Galapagos is a daunting task. Therefore, we defined the boundaries for this study around geographic settings, variables, methods, and theory. Although fishing resources in Galapagos are currently governed by policies involving the entire archipelago and the adjacent marine territory (LOREG 2016), the current study focuses on fishing activities conducted by fishers of the community of Puerto Ayora, in the Island of Santa Cruz. Yet, the implications of findings from this case do not represent all Galapagos-based fisheries; they still provide a valuable portrayal of one fishing community on the archipelago. At the ecosystem level, only

coastal marine small-scale fisheries are included; neither aquaculture nor inland small-scale fisheries were taken into account. From a theoretical perspective, the study employs a conceptual framework informed by interactive governance approach and the concept of governability. In this light, governability is understood as the overall governance quality of a system or its capacity to be governed effectively (Kooiman et al. 2005). Governability primarily depends on three factors: the characteristics of the SG, the characteristics of the GS, and the ability of the GS to govern (Song and Chuenpagdee 2010; Chuenpagdee and Jentoft 2013). Within this conceptual lens, this chapter identifies key attributes that affect the governability of both the mainland Ecuador and Galapagos small-scale fisheries systems and explores the normative instruments that govern them.

22.2.3 Data Collection and Survey Methods

Several methods were used in this study, including semi-structured e-mail surveys, open-ended interviews with key informants, informal conversations with key local stakeholders – including community members and government officials – field observations, and intensive review of relevant published documents (including peer-reviewed literature, theses, and gray literature). Purposive sampling was used to identify specific users to be sampled and to select interview participants, who were recruited using e-mail-based communication (Mays and Pope 1995; Teddlie and Yu 2007). This technique enabled the inclusion of a breadth of relevant perspectives (Kerr and Swaffield 2012), allowing the study's findings to reflect the diversity of the target groups within the population in both study regions (Kuzel 1992).

22.3 What Has Been Found? The Evolution of Small-Scale Fisheries in Ecuador

Small-scale fisheries on the Ecuadorian mainland and the Galapagos Islands have experienced very different trajectories during the past few decades (Barragán-Paladines 2015). The former have been part of a long tradition of marine resource usage, which has been mainly subsistence-based in nature, by coastal communities since at least 5000 BCE (De Madariaga 1969; Norton 1985; Staller 2002). Commercial fishing is considered a new phenomenon on both areas, beginning with early commercial fishing activities in the 1960s in the mainland and accelerated by the boom in the sea cucumber fishery in the late 1980s in Galapagos (Barragán-Paladines 2015). In this light, the two regions have taken opposing historical paths and have had divergent experiences with researching fisheries, with differing foci on research objects, target species, and fishing techniques. All of these investigations have focused on differentiated management and/or conservation strategies applied

to small-scale fisheries on both areas. However, none of the development patterns followed by fisheries governance on both areas have been identified to be linked, either directly or indirectly, to any specific overarching paradigm like *Sumak Kawsay* (in form of the PNBV) or to the UN Sustainable Development Goals (SDGs).

22.3.1 Ecuador and Its Fishing Resources

Fishing resources are critical assets to human welfare, serving as major sources of animal protein, essential nutrients, and livelihoods for a large proportion of Ecuadorians (Le Sann and CISP 1997). Additional to the "materiality" of their importance as a source of economic income and nutrition, small-scale fisheries on both the mainland of Ecuador and Galapagos also carry high importance in terms of social, ethical, moral, and justice-related dimensions. When the interviewees were asked about "what does 'fishing' mean to you," one respondent said:

> *It means a lot….especially for me as a user* [fisher]*…means the love that one feels about the job*. (P04, 5 April 2012)

However, these sociocultural dimensions of fisheries have largely been neglected, despite their critical role in the governance of fish stocks threatened by overexploitation (Kahmann et al. 2015). In the case of Ecuador, unfortunately, these affective attributes are almost nonexistent in national-level policy-making and strategies. Despite the ethical and moral significance of this sector, small-scale fisheries have not fully benefitted from the *Buen Vivir* paradigm that the Ecuadorian state has followed in the last decade. As one informant stated:

> *Small-scale fishers are poor, and continue to be poor* (P21, 22 March 2012)

In fact, very little has been done at the national level to bridge, or at least reduce, the gaps that exist between the two normative instruments that oversee fisheries governance in both regions of the country. At the same time, responses to fundamental questions about the future of fisheries in both regions (e.g., "who can fish?," "why?," "how much?," and "for whom?") remain to be provided in a clear way by the governing bodies. Thus, we argue that without the consideration of these sorts of inquiries in management, it is unlikely to scope viable ways to fully define, understand, and address issues concerning small-scale fisheries in Ecuador.

22.3.2 The *Buen Vivir:* Its Relation to the Fisheries Sector in Ecuador

Poverty and small-scale fisheries are considered to be closely related (Béné 2003), often interacting with precarious living conditions among marginalized groups. The former has recently begun to decrease in Ecuador, a country traditionally labelled

"Third World" that has experienced significant economic and social development in recent years. After tumultuous periods of political negligence, governmental inertia, and corruption, the country finally reached a period of political stability in 2006. Within 10 years, the Ecuadorian state has put in place innovative strategies aimed at advancing social, economic, and political stability and enhancing overall well-being. In so doing, the country has made significant progress toward reducing poverty and decreasing the marginalization of traditionally excluded social groups (OECD 2013a, b). In fact, Ecuador is one of Latin America's fastest growing economies (approximately 6% annual GDP growth) while achieving roughly 80% of its hunger eradication target under the Millennium Development Goals (MDGs) (FAO 2015a, b). This upward trend is seen in the improvement in the quality of life of the most deprived sectors of the population which, according to Escobar (2010), demonstrates an unprecedented "biocentric turn" in the political, social, and economic fabric of Latin America.

Home to some of the most deprived segments of Ecuadorian society, the coastal region of mainland Ecuador has roughly 6.5 million inhabitants, more than 0.4% of whom are directly engaged in fishing activities, equaling an estimated 25,783 active fishers (SRP 2017a). These fishers are located in 175 *caletas pesqueras* (or small-scale fishing villages) (SRP 2017b), as well as other communities where different activities in the fish chain occur, including 2706 middlemen operating at the small-scale and 240 middlemen operating at the large scale (INEC 2010; SRP 2013). Despite their low representation in the overall mainland Ecuadorian population, fisheries are still one of the most important sectors within society in terms of food security, access to livelihoods, and providing local sources of revenue for coastal communities.

A different story takes place on the Galapagos Islands. In the eyes of outsiders, the ecosystems of the Galapagos Archipelago are in good condition, representing what is imagined by Western society as a wild and pristine paradise that is synonymous with wilderness and untouched nature (Broadus 1987; Diegues 2005; Celata and Sanna 2010; Hennesy and McCleary 2011). At the same time, economic indicators suggest that Galapagos' economy is on average twice as high as on the mainland (Jones 2013) in terms of GDP. These economic indicators speak to a high level of economic growth on the archipelago (Hoyman and McCall 2013). This trend is also seen in rising investment in infrastructure, the proliferation of the service industry, and the blossoming of certain sectors (e.g., construction and transportation) that has mainly been triggered by the annual visitation of 180,000 tourists (Denkinger et al. 2013). Tourism in Galapagos is centered around the unique natural systems of the islands.

However, these trends mask the economic difficulties that local fishers have experienced in light of tourism growth. There is no official recognition in either region of the role that small-scale fisheries and fishing people play in meeting societal needs such as poverty eradication, hunger alleviation, nutrition, food security, and food sovereignty. Additionally, there have been very few attempts to identify the problems and conceptualize the most important challenges threatening the sustainability of this sector in Ecuador (Barragán-Paladines 2015). For example, the current

effects of global trends like globalization and mass tourism on this sector – both locally and nationally – are rarely assessed when management programs are designed. This oversight increases the status of invisibility (or reduced visibility) of the entire sector, as highlighted by FAO (2015b). The "low profile" under which the small-scale fisheries sector is seen largely obeys to the failure in addressing small-scale fisheries governance comprehensively (Béné 2009). This perception has deeply reduced the likelihood of fisheries authorities and practitioners to improve fisheries governability in an efficient manner. Other causes for this oversight, as described by Pauly et al. (1998) and Castrejón (2011), include the prevalence of open-access policy regimes for fisheries resources and the proliferation of subsidies that, despite being intended to improve the sector's profitability, have instead led to the overcapitalization of the small-scale fisheries sector and fleet overcapacity.

Another important factor is that science-based decision and policy-making have privileged the technical and scientific dimensions of fisheries management over sociocultural values. Consequently, the "development of fisheries" under the sustainability paradigm has dominated the managerial discourse in Galapagos (Toral Granda et al. 2011). However, limited awareness still exists about the human dimensions implicit in fisheries governance and it has resulted in the inadequate approach towards fisheries in this archipelago. One potential explanation for this failing is the lack of recognition that management and governance are not synonymous, given that the former provides the "what to do" response, whereas the latter answers the "how to" achieve the aims (Chuenpagdee 2011; Armitage et al. 2012). In contrast to a narrow consideration of these management approaches, the broader focus on improved fisheries governance signals that the management age "is over" (Ludwig 2001, p. 758). In fact, too much effort has been spent assessing the effectiveness of management (Toral Granda et al. 2011; Hockings et al. 2012), focusing on the evaluation of traditional parameters such as the allocation and renewal of fishing permits, monitoring and controlling of post-harvest activities, and dealing with other management duties (Hockings et al. 2012). Thus, we confirm the thesis of Bavinck et al. (2013), arguing that while these "first-order" governance tasks are important, they do not fully address the fundamental issues affecting the human and environmental health of small-scale fisheries systems. In fact, these operational considerations do not entirely illustrate the high potential of this sector as a key employment contributor, trade promoter, and food security enhancer (Pauly et al. 2003).

22.4 Exploring the Relationships Between Normative Instruments on the Ecuador Mainland and Galapagos from the Perspective of *Buen Vivir*

Prevailing narratives of Galapagos tend to imagine the region through a homogenous lens of conservation, reproducing a dominant portrayal of the islands as a pristine environment devoid of human influence. On the other hand, mainland Ecuador's communities are commonly portrayed as ignorant of the environmental

threats that challenge their environment. In short, the values and principles that influence the behavior of both regions are portrayed to be different (González et al. 2008), while the dominant narratives, which can act as "enabling force[s], that can inform, empower, and, in the best of all worlds, transform human activity" (Bussey 2014, p. 96), are largely separate between the two regions.

Previous research findings have shown that neither the "conservationist narrative" nor that of "fisheries protection" effectively led to fully successful implementation of marine protection in Galapagos, which has been lauded as one of the most effective marine protected areas (MPAs) in the world (Barragán-Paladines 2015). Instead, public and private interests, ranging from geopolitical forces to tourism development, have played pivotal roles in the administration of this marine reserve.

Therefore, we argue that neither on mainland Ecuador nor Galapagos have key actors shared a unified discourse that has led to improved fisheries governance. This is reflected in part by the dissonant principles that have framed development in both regions, which have followed different orders and priorities. These principles, portrayed within the existing normative frameworks in place in both regions, are shown in relation to their corresponding governability attributes that are addressed under each of them (Table 22.1).

By applying the interactive governance approach, we found that the three attributes of the systems involved in Ecuadorian small-scale fisheries governance (i.e., GS, SG-N, SG-S, and GI) are represented by the principles espoused in the existing normative instruments on mainland Ecuador and Galapagos. However, some differences were found concerning what principles are included and how they are formulated and prioritized in each region. It is important to note that the most important legal instrument in force for Galapagos – LOREG, which was approved in 2015 and came into effect in 2016 – introduces a substantial change into the former horizontal co-management model for marine resources in the archipelago. This instrument signals a shift, in Galapagos, to a more hierarchical governance mode, personified by the Government Council, which oversees natural resources in general, and by the Galapagos National Park, which specifically manages fishing resources (LOREG 2016, Art. 4; J.C.M., Pers. comm., April 2017). Thus, it seems that LOREG – at least in theory – also integrates elements of the *Buen Vivir* principle (Art. 1, Art. 2, and Art. 33) through the principles of the Sustainable Development Plan for Galapagos concerning natural heritage conservation and *Buen Vivir* at large. Yet, the extent to which this regional development plan coincides with the national PNBV, and consequently how these two governing systems align, is still a matter of further inquiry.

Furthermore, our analysis shows that the governing principles – present in the normative instruments in place in both regions – are mainly aimed at addressing human development and usage of natural resources, by allocating equal weight and keeping the "growth" dimension implicit on it. In line with that, we see few spaces for "alternatives to development" on either area against the pleaded sustainable development, sustainable economy, and new productive matrix. Overall, these findings show that existing normative instruments are not aligned to the common intended outcome of *Buen Vivir* promoted at the national scale, thus failing to invoke this principle's departure from the dominant development narrative.

Table 22.1 Principles contained in the different normative instruments currently in force in both areas. Dark fields show the principles involving small-scale fisheries

	Principles guiding each region's legal frameworks				
	Mainland Ecuador	Galapagos Islands			
Systems	National Ecuadorian Constitution (embodied by PNBV)	GMR Management Plan (1999)	GNP Management Plan (2006)	*Capítulo Pesca del Plan de Manejo de la Reserva Marina de Galápagos* (2009)	*Ley Orgánica de Régimen Especial de la Provincia de Galápagos* (LOREG) (2016)
Governing system	1. Consolidation of the **democratic** state and the construction of the people's power	1. "**Allocation**"[a] (top-down format to surveil and control)	2. **Sustainable development** and control (support capacity in the ecosystems)	1. **Sustainable** management	1.**Precautionary principle**
	11. **Sovereignty** and efficiency of strategic sectors for industrial and technological transformation	3. **Adaptive principle**	7. **Precautionary principle** (avoiding harm to environment and ecosystems)	5. **Science-based** decision-making	
	6. Consolidation of **justice** transformation and strengthening of the integral security, strictly addressing **human rights**	4. **Precautionary principle**	8. **Integrated management**	7. Integral **co-management and adaptive management** model	
		6. Integrality			

System to be governed (social)	3. **Quality of life** of the population	10. **Human well-being**	3b. **Sustainable economics** (special models and standards of production, education, training, and employment)	3. **Interdisciplinary** approach	3. **Exclusion**
	4. Strengthening of **citizen capacities** and potentialities		5. **Quality of life** for residents of the Galapagos Province should correspond with the exceptional characteristics of the natural inheritance for humankind	8. **Traditional ecological knowledge**	4. **Differentiated access**
	5. Creation of common spaces to strengthen **national diverse identities**, and the **plurinational and intercultural** state				
	8. **Sustainable** consolidation of the social and solidary **economic** system				
	9. Guarantee of the existence of all forms of **jobs with dignity**				
	10. Transformation of the **productive matrix**				
	12. Guarantee of **sovereignty and peace**				7. **Social and economic development**
System to be governed (natural)	7. Guarantee of the **rights of nature** and the promotion of territorial and global **environmental sustainability**	—	1. Maintenance of **ecological systems and biodiversity** (especially native and endemic)	2. **Fisheries sustainability**	8. **Sustainable use** of natural resources and **ecosystems**
			4.**Reduction of risks** of introduced diseases, pests, and exotic species (plants and animals) to Galapagos	6. **Ecosystem-based management**	

(continued)

Table 22.1 (continued)

	Principles guiding each region's legal frameworks				
	Mainland Ecuador	Galapagos Islands			
Governing interactions	2. **Equality, cohesion, inclusion**, and social and territorial equity	2. Responsibility	3a. **Participation** of local community in development activities	4. **Consensus-based** agreement	2. Citizen **participation**
		5. **Sustainability**			5. **Sustainability**
		7. **Participatory**			6. **Equilibrium**
		8. **Agreement-based** process			
		9. **Consensus-based** process	6. Examination of **existing interactions** between inhabited zones and protected terrestrial and marine zones (by integrated management)		

Sources: PNG (1999, 2006); CTP-JMP (2009); SENPLADES (2009); LOREG (2016)

[a]The original term used to define this principle in Spanish is *Principio de Asignación* (Art. 15 inciso 1, Ley de Régimen Especial de Galápagos) (PM-PNG 1999)

Nonetheless, we identify a handful of common ground among the normative instruments, as well as principles that only concern to one or two of the frameworks examined. Figure 22.2 portrays the dimensions of the systems, as described by the interactive governance approach, in order both to illustrate the governability aspects of the natural and social systems being governed and to systematically analyze the relationships between these legal instruments in both regions. As a general observation, we found that all of the principles present in the five instruments somehow relate to the small-scale fisheries sector (Table 22.1), with virtually none of them being disconnected from the governability of fisheries.

The divergent paths taken in each of the normative instruments examined – whether informed by images of development, conservation, or growth – seem to coincide in a handful of shared principles in both regions (Fig. 22.2). In these areas of common ground, there is some level of coherence displayed between each of the analyzed instruments (e.g., quality of life, sustainable economy). In contrast, the "fisheries" dimension was unsurprisingly only addressed in the "Fisheries Chapter" within the GNP Management Plan (2009). In fact, this document contained the only explicit reference to the sector in all of the normative instruments examined.

Additionally, we found that issues related to the governing systems in both areas are virtually disconnected mainly due to the incompatible governance formats present in both regions. In the case of Galapagos, the necessity (and desire) for fisheries to be managed differently, in acknowledgment of the unique environment in the region, greatly contradicts the intention of the National Constitution to govern the entire nation state under the same plan (PNBV). The latter is consistent with the indivisibility notion espoused by the Ecuadorian State, a principle that also affects small-scale fisheries. Consequently, the consideration in both regions of principles such as development, growth, and economic and social well-being seems rather paradoxical. These findings show that, at least in theory, the *Buen Vivir* principle is recognized by the National Constitution and by LOREG as a fundamental element to the sustainability of the overall fisheries system. In practice, however, it seems that the maintenance and promotion of so-called sustainable development in Galapagos dispels the very notion of *Buen Vivir*. Ultimately, the commonalities and differences encountered between the normative instruments analyzed, has been shown, hardly touch the small-scale fisheries which evidence that small-scale fisheries could be treated either as a factor of sustainability or as a threat to it depending on the paradigm informing each document.

22.4.1 How the Governability of Small-Scale Fisheries Resources Aligns with the Buen Vivir Principle

When included as part of the PNBV, *Buen Vivir* (also translated as *Vivir Bien*) (Albó 2009) was conceived as a "collective construction of a new form of living" (Acosta 2010, p. 7). In that light, the interactions between the natural and social systems being governed are never rendered as competition, but instead as complementarities

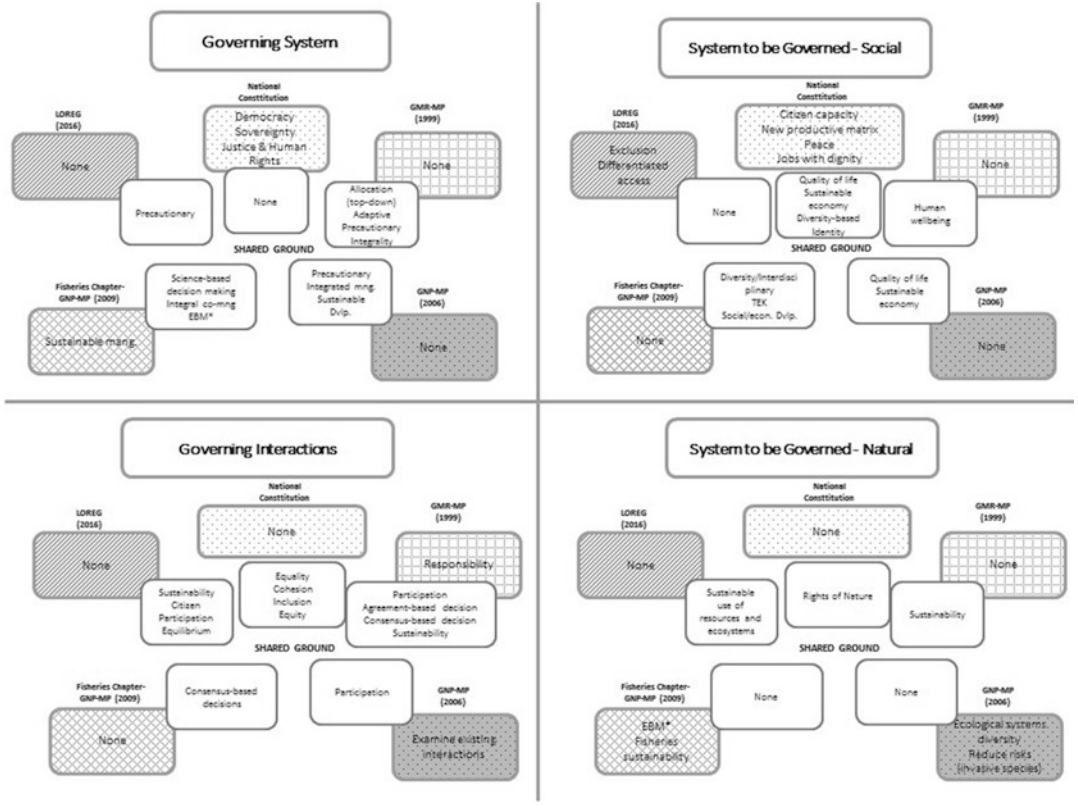

Fig. 22.2 Common and different principles encountered in the normative instruments in place in both regions, according to the governability assessment approach. The only principle that explicitly addresses "fisheries sustainability" is underlined

(Acosta 2012), and are constructed under a communal logic (Escobar 2015b). However, the principles included in the normative frameworks analyzed in this chapter concerning small-scale fisheries governance practices do not fully illustrate that complementarity, only representing this sector in legal terms and addressing fisheries in particular.

In theory, this new model of development favors solidarity over competition and sustainability and natural and cultural wealth over economic growth (SENPLADES 2009; Lind 2012). In fact, the prevailing principle of *Sumak Kawsay* as a form of "alternatives to development" (Escobar 2012) encompasses critiques of the modern "developmentalist" model that holds a hegemony over development discourses throughout society (Gudynas and Acosta 2011; Altmann 2013). In line with this logic, the interactions between fishing people and nature in both study areas remain linked to the same traditional idea of economic growth and sustainable development driven by existing policies and practices. Moreover, the fisheries sector in both regions has not escaped this rhetoric and is still exposed to governance practices dominated by market-driven initiatives, economic interests, and traditional stock assessment guided by a technocratic rationality. Thus, the challenge remains on how to operationalize the *Buen Vivir* ideal under the two coexisting political and economic models, both of which conceptualize development within the same capitalist lens but to a differing extent.

The incongruences identified between these two governing systems and their corresponding normative instruments reveal the ineffectiveness of governance practices and the barriers to improving the governability of small-scale fisheries at the national level (Barragán-Paladines 2015). The contradiction between the "good way of living" (promoted by the *Buen Vivir* principle) and the "living better" ideal (promoted by mainstream forms of development, including sustainable development) is a core issue in the debate about what "development" is, what it should look like, and, even more importantly, for whom and by whom development should be conducted in both regions.

22.4.2 Implications for Small-Scale Fisheries Governability

The governability analysis of the *Buen Vivir* principle in the context of small-scale fisheries on mainland Ecuador and Galapagos provides an in-depth understanding about the interactions of the two governing systems that, until 2015, existed in isolation from one another. For the first time, in 2014 a minister for the Galapagos Province was appointed by the president of Ecuador, thus empowering the Provincial Government Council of Galapagos (CGG) as the institution fully entitled to plan, execute, control, and monitor policies in Galapagos, including those concerning fisheries resources. This event was an historical cornerstone in the fisheries governance of the archipelago, since the CGG became the responsible governing actor for fisheries for the first time after the implementation of the co-management model in 1998. This action brought the small-scale fisheries sector in Galapagos closer to its counterpart on the mainland.

In light of this transformation of the small-scale fisheries management model, we echo the assertion of Ludwig (2001) by claiming that the notion of management "is over" (p. 758). This conclusion comes in light of the many failings of the mainstream management paradigm when confronted with complex problems, like those encountered in fisheries governance. This cognitive shift from management to governance is also alluded to by Jentoft and Chuenpagdee (2009), who posit that whereas "management constitutes a set of tools applied to solve concrete tasks with measurable outcomes, governance is an iterative, adaptive process involving interactions of stakeholders, as well as the ways in which goals are chosen and management decisions made" (p. 555). Thus, we argue that a new paradigm for fisheries, marked by a shift from management to governance, is needed at the national scale in Ecuador, including differentiated strategies aimed at governing fisheries in both areas under a unified national fisheries policy. This comprehensive instrument would represent coherent policies, practices, and desired goals for effectively governing fisheries resources in both regions, designed by involving all relevant actors in the processes.

If alternative community-based options for fisheries governance are explored in Ecuador, the *Buen Vivir* paradigm, understood as the "opportunity to imagine another world" (Acosta 2012, p. 192), may be bolstered. In other words, by revisiting the *Buen Vivir* ideal as a concept that is intrinsically linked to every stage of fisheries governance, as well as involving markets, state, and civil society, an entire set of opportunities can be found to incorporate new ethical and moral considerations in the governance of fisheries. The advancement of the *Buen Vivir* idea as both a political platform and a way of living could lead to new imaginings of "well-being" that are decoupled from the notions of growth and consumption (Escobar 2015b). Thus, this reconceptualization of the good life could represent a "new form to understand development" which, for the first time, has been incubated in the Global South in order to be exported to the Global North.[2]

22.4.3 Consensus-Based or Top-Down Decision-Making for Small-Scale Fisheries Governance?

Do consensus-based processes guarantee improved small-scale fisheries governance? It can be argued that they do, at least in the case of the Galapagos Islands. Until 2015, consensus-based small-scale fisheries management on Galapagos proved to be an adequate model of fisheries governance according to a number of users within various sectors (Barragán-Paladines and Chuenpagdee 2015). At the same time, the hierarchical governance model used to manage small-scale fisheries on the mainland of Ecuador demonstrates that the top-down approach could also

[2] This idea follows the discussions and reflections during several conversations at the discussion group about the *Buen Vivir* and "Rights of Nature" concepts, hosted by the Rachel Carson Center and led by M.V. Berros and A.L. Tabios between 2015 and 2016 in Munich, Germany.

advance compliance and the organization of the sector. Evidence of these improvements can be seen along the entire fish production chain which, modestly but consistently, illustrates better social conditions and inclusion practices for fishers. Examples of these advances are further explored in the analysis made of the implementation of the *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries* (SSF Guidelines) in Ecuador (Barragan-Paladines 2017).

In Part 2 of the SSF Guidelines, Item 6 refers to "social development, employment and decent work" (FAO 2015b). In this case, the centralized Ecuadorian governance model has greatly contributed to achieving this aim by investing in human resource development and improving living conditions in small-scale fishing communities in terms of health, education, literacy, and digital inclusion. Social security and health insurance coverage for small-scale fisheries-related workers has also been implemented for the first time. This initiative has been coupled with the improvement of working conditions to provide decent work environments, which has positively impacted fishers' well-being in coastal areas. In fact, the people involved in the handling, storage, and trading of fish products have benefited from the construction of 27 new small-scale fishing harbors and related facilities along the Ecuadorian coast, made possible by the investment of roughly USD $100 million (MAGAP 2015). Finally, the Fisheries Authorities have implemented programs that promote alternative income generating activities that support and enhance access to other livelihood sources and stimulate economic diversification (Pers. comm., 8 August 2015).

However, what is still lacking is an integrated perspective for promoting a comprehensive holistic governance model for small-scale fisheries in Ecuador. Additionally, safety-at-sea issues are still aggravated by regulatory loopholes, which have begun to be partially addressed by the usage of new technologies, including an integrated system for aquaculture and fisheries that was launched by the national fishing authorities (SRP 2017c). Yet, the provision of palliative solutions, such as subsidies to fishers who have been victims of robbery at sea, do not fully alleviate deeper issues affecting small-scale fisheries.

In the case of Galapagos, even consensus-based decisions that have been made regarding fisheries-related issues have been affected by conflict and confrontation. While the provisional proposal for the Galapagos Marine Reserve zoning was approved by consensus (Castrejón 2011), there are still discrepancies and competing interests surrounding zones are used by tourism and fisheries simultaneously (Davos et al. 2007). Paradoxically, the participatory nature of the decision-making processes surrounding the reserve has presented both supports and barriers to the achievement of improved governance. As suggested by Suárez de Vivero et al. (2008), the more people that are involved in a decision, the less successful the process seems to be. Contrary to common perceptions, more people do not always imply a more successful process. Instead, according to these authors, the more people involved in MPA-related process, the less likely it is for the elements of the system to interact and for participants to have a meaningful role. The risk, according to Chevalier and Buckles (2000), is that in some contexts the equal participation of all participants is not appropriate due to cultural or environmental considerations. In

short, consensus-based decisions in Galapagos risk devolving to what Thomas et al. (1996 p. 2) describe as "to equate the game field promoting an authentic and equitable dialogue in non-equitable conditions."

22.4.4 Research About Small-Scale Fisheries: Differences Between Galapagos and Mainland Ecuador

Small-scale fisheries governance is messy. Authorities and fisheries governing bodies struggle to keep up with the rapid pace of changes occurring in natural and the social systems. The PNBV, the unified management plan for Galapagos Islands (including terrestrial and marine environments) (DPNG 2014), and LOREG (2016), each of which represents a distinct normative instrument affecting small-scale fisheries, are all informed by the *Buen Vivir* principle. For the first time in history, both the mainland of Ecuador and Galapagos are considered holistically by a normative framework that apparently targets a common set of major goals under a common national vision for improved governance of natural and social systems. Yet, this approach has not fully divorced itself from the still dominant managerial doctrine at work in existing policies and practices, posing a significant challenge for the actual fulfilment of *Buen Vivir*. This goal is required for the improvement of small-scale fisheries governance and the enhancement of the governability of related systems. The extent to which the *Buen Vivir* paradigm will in fact replace the traditional notion of development, as the "alternatives to development" (Escobar 2012, p. 58), is still a matter of theoretical and empirical interest.

Future research regarding the governance of small-scale fisheries in Ecuador must also address the encroachment of sectors that are currently growing (e.g., transportation, construction, and tourism) besides fishing activities. Additional future research opportunities include the investigation of issues of high ethical importance within communities on Galapagos, such as the region's birth rate (currently at 6% per year (INEC 2010), which is one of the highest in Ecuador), and the increase of other socially alarming trends such as criminality, teenage pregnancy, and drug abuse. Furthermore, we posit that the limited access to fish as food imposed by tourism encroachment may compromise local food security and sovereignty, requiring urgent research attention. In conclusion, regardless of the normative instruments used to address small-scale fisheries in Ecuador, neither increased governability nor improved governance will be achieved if, as Harris (2014, p. 150) posits, "we continue facing the ocean, giving our backs to the [coastal] communities."

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References

Acosta A (2010) El Buen Vivir en el camino del post-desarrollo. Una lectura desde la Constitución de Montecristi, Fundación Friedrich Eber. Quito: FES-ILDIS

Acosta A (2012) The Buen Vivir: an opportunity to imagine another world. In: Heinrich Böll Foundation (ed) Inside a champion: an analysis of the Brazilian development model. Publication Series on Democracy. Grupo Smart Printer, Berlin, pp 192–201

Albó X (2009) Suma Qamaña: El buen convivir. Revista Obets 4:25–40

Allison EH, Ratner BD, Åsgård B, Willmann R, Pomeroy R, Kurien J (2012) Rights-based fisheries governance: from fishing rights to human rights. Fish Fish 13(1):14–29

Allsopp WHL (1985) Fishery development experiences. Fishing New Books Ltd., Farnham

Altmann P (2013) Das Gute Leben als Alternative zum Wachstum?: Der Fall Ecuador. Sozialwissenschaften und Berufspraxis 36(1):101–111

Armitage D, de Loë R, Plummer R (2012) Environmental governance and its implications for conservation practice. Conserv Lett 5:245–255

Arriaga L, Martínez J (2008) Plan de Ordenamiento de la Pesca y Acuicultura del Ecuador. Informe de Consultoría. Subsecretaría de Recursos Pesqueros-Ministerio de Comercio Exterior, Industrialización, Pesca, y Competitividad. Convenio de Préstamo BIRF-No. 43-46 EC. Gobierno de Ecuador, Quito

Baine M, Howard M, Kerr S, Edgar G, Toral V (2007) Coastal and marine resource management in the Galapagos Islands and the Archipelago of San Andres: issues, problems and opportunities. Ocean Coast Manag 50:148–173

Banks S (2002) Ambiente físico. In: Danulat E, Edgar C (eds) Reserva Marina de Galápagos-Línea Base de la Biodiversidad. Parque Nacional Galápagos, Puerto Ayora, pp 22–37

Banks S (2007) Estado de especies y hábitats marinos en Galápagos. In: Danulat E, Edgar C (eds) I Reserva Marina de Galápagos- Línea Base de la Biodiversidad. Parque Nacional Galápagos, Puerto Ayora, pp 122–127

Banks S (2009) Galapagos and climate change. Final technical report from the Charles Darwin Foundation to CI and WWF Galapagos. January 1 – June 30, 2009. Charles Darwin Foundation, Puerto Ayora

Banks S, Vera M, Toscano M, Ruiz D, Tirado N (2006) Monitoreo ecológico de la zona costera para la evaluación de la zonificación provisional consensuada (ZPC). Fundación Charles Darwin, Santa Cruz, Galápagos, Ecuador

Barragán-Paladines MJ (2015) Two laws for the same fish: small-scale fisheries governance in mainland Ecuador and Galapagos Islands. In S. Jentoft & R. Chuenpagdee (eds) Interactive governance for small-scale fisheries: global reflections. MARE Publication Series 13. Springer, Heidelberg, pp 157–178

Barragán-Paladines MJ, Chuenpagdee R (2015) Governability assessment of the Galapagos Marine Reserve. Maritime Stud 14:13. https://doi.org/10.1186/s40152-015-0031-z

Bavinck M, Chuenpagdee R, Jentoft S, Kooiman J (eds) (2013) Governability of fisheries and aquaculture: theory and applications. MARE Publication Series 7. Springer, Dordrecht

Barragán-Paladines MJ (2017) The Buen Vivir and the small-scale fisheries guidelines in ecuador: A comparison. Chapter 33 In S. Jentoft et al (eds) The small-scale fisheries guidelines, MARE Publication Series 14, https://doi.org/10.1007/978-3-319-55074-9_33

Beltrán-Turriago CS (2001) Promoción de la ordenación de la pesca costera. Aspectos socioeconómicos y técnicos de la pesca artesanal en El salvador, Costa Rica, Panamá, Ecuador y Colombia. FAO Circular de Pesca. No. 957/2. FAO, Rome

Béné C (2003) When fishery rhymes with poverty: a first step beyond the old paradigm on poverty in small-scale fisheries. World Dev 31(6):949–975

Béné C (2009) Are fishers poor or vulnerable? Assessing economic vulnerability in small-scale fishing communities. J Dev Stud 45(6):911–933

Bennet JB, Govan H, Satterfield T (2015) Ocean grabbing. Mar Policy 57:61–68

Berros MV (2015) The constitution of the republic of Ecuador: Pachamama has rights. Environment & Society Portal, Arcadia, Article 11 http://www.environmentandsociety.org/arcadia/constitution-republic-ecuador-pachamama-has-rights
Broadus JM (1987) The Galapagos marine resources reserve and tourism development. Oceanus 30(3):9–15
Bussey M (2014) Extending the scenario horizon: putting narratives to work: essay. J Futures Stud 18(3):95–100
Bustamante R, Collins KJ, Bensted-Smith R (1999a) Biodiversity conservation in the Galápagos Marine Reserve. Entomol Suppl 68:45–52
Bustamante R, Espinoza E, Nicolaides F, Murillo JC, Chasiluisa C, Ruttemberg B, Andrade R, Torres S, Toral MV, Barreno J, Piú M (1999b) Fishing in Galapagos: a summary of the main indicators for 1998. In: Galapagos Report 1998–1999. Fundación Natura & World Wildlife Fund, Quito, pp 35–49
Castrejón M (2011) Co-manejo pesquero en la Reserva Marina de Galápagos: Tendencias, retos y perspectivas de cambio. Tinker Foundation/ECCD/Kanankil, Mexico
Castrejón M, Charles A (2013) Improving fisheries co-management through ecosystem-based spatial management: the Galapagos Marine Reserve. Mar Policy 38:235–245
Castrejón M, Defeo O, Reck G, Charles A (2013) Fishery science in Galapagos: from a resource-focused to a social-ecological systems approach. In: Denkinger J, Vinueza L (eds) The Galapagos Marine Reserve: social and ecological interactions in the Galapagos Islands, 3rd edn. Springer, New York, pp 160–185
Celata F, Sanna VS (2010) Ambientalismo y (post-) política en un espacio de reserva: El archipiélago de las Galápagos. Scripta Nuova, 14(331), Article 62
Charles AT, Brainerd TR, Bermudez MA, Montalvo HM, Pomeroy SR (1994) Fisheries socio-economics in the developing world: regional assessments and an annotated bibliography. Ottawa, International Development Research Centre (IDRC)
Chevalier JM, Buckles D (2000) El manejo de los conflictos: Una perspectiva heterocultural. In: Buckles D (ed) Cultivar la paz: Conflicto y colaboración en el manejo de los recursos naturales. IDRC, Ottawa, pp 15–46
Chuenpagdee R (2011) Interactive governance for marine conservation: an illustration. Bull Mar Sci 87(2):197–211
Chuenpagdee R, Jentoft S (2009) Governability assessment for fisheries and coastal systems: a reality check. Hum Ecol 37:109–120
Chuenpagdee R, Jentoft S (2013) Assessing governability – what's next. In Bavinck M, Chuenpagdee R, Jentoft S, Kooiman J (eds) Governability of fisheries and aquaculture: theory and applications. MARE Publication Series 7. Springer, Dordrecht, pp 335–349
Coello S (1993) Diagnóstico de la actividad pesquera en la zona de influencia del Parque Nacional Machalilla: Estudios en áreas protegidas, vol 5. Fundación Natura, Quito
Comisión Técnica Pesquera – Junta de Manejo Participativo (CTP-JMP) (2009) Capítulo pesca del Plan de Manejo de la Reserva Marina de Galápagos. Unpublished document. CTP-JMP, Puerto Ayora
Danulat E, Edgar G (eds) (2002) Reserva Marina de Galápagos: Línea base de la biodiversidad. Fundación Charles Darwin & Servicio Parque Nacional Galápagos, Puerto Ayora
Davos CA, Siakavara K, Santorineou A, Side J, Taylor M, Barriga P (2007) Zoning of marine protected areas: conflicts and cooperation options in the Galapagos and San Andres archipelagos. Ocean Coast Manag 50:223–252
De Madariaga JJ (1969) La caza y la pesca al descubrirse América. Editorial Prensa Española, Madrid
Denkinger J, Parra M, Muñoz JP, Carrasco C, Murillo JC, Espinosa E, Rubianes F, Koch V (2013) Are boat strikes a threat to sea turtles in the Galapagos Marine Reserve? Ocean Coast Manag 80:29–35
Diegues AC (2005) El mito moderno de la naturaleza intocada (Edición revisada). Núcleo de Apoio à Pesquisa sobre Populações Humanas e Áreas Úmidas Brasileiras (NUPAUB) & Center for Research on Human Population and Wetlands in Brazil (USP)

DPNG (Dirección Parque Nacional Galápagos) (2014) Plan de Manejo de las Áreas Protegidas de Galápagos para el Buen Vivir. Gobierno de Ecuador, Puerto Ayora/Galápagos

Duggan GL, Green LJF, Jarre A (2014) 'Thinking like a fish': adaptive strategies for coping with vulnerability and variability emerging from a relational engagement with kob. Maritime Stud 13:4. https://doi.org/10.1186/2212-9790-13-4

ECOLAP & MAE (Instituto de Ecología Aplicada & Ministerio del Ambiente de Ecuador) (2007) Guía del Patrimonio de Áreas Naturales Protegidas del Ecuador. ECOFUND, Fondo Ambiental Nacional, Darwin Net, & Instituto Geográfico Militar, Quito

Ecuadorian National Constitution (2008) supra note 5, at art. 71

Edgar GJ, Banks S, Fariña JM, Calvopiña M, Martínez C (2004a) Regional biogeography of shallow reef fish and macro-invertebrate communities in the Galapagos Archipelago. J Biogeogr 31:1107–1124

Edgar GJ, Bustamante RH, Fariña JM, Calvopiña M, Toral-Granda MV (2004b) Bias in evaluating the effects of marine protected areas: the importance of baseline data for the Galapagos Marine Reserve. Environ Conserv 31(3):212–218

Edgar GJ, Banks S, Bensted-Smith R, Calvopiña M, Chiriboga A, Garske LE, Henderson S, Miller KA, Salazar S (2008) Conservation of threatened species in the Galapagos Marine Reserve through identification and protection of marine key biodiversity areas. Aquat Conserv Mar Freshwat Ecosyst 18:955–968

Epler B (2007) Tourism, the economy, population growth, and conservation in Galapagos. Fundación Charles Darwin, Puerto Ayora

Escobar A (2010) Latin America at a crossroads: alternative modernizations, post-liberalism, or post-development? Cult Stud 24(1):1–65

Escobar A (2012) Encountering development: The making and unmaking of the Third World. Princeton University Press, Princeton

Escobar A (2015a) Thinking-feeling with the earth: territorial struggles and the ontological dimension of the epistemologies of the south. Revista de Antropología Iberoamericana 11(1):11–32

Escobar A (2015b) Degrowth, postdevelopment, and transitions: a preliminary conversation [special feature – review article. Socially sustainable degrowth as a social-ecological transformation]. Sustain Sci 10:451. https://doi.org/10.1007/s11625-015-0297-5

FAO (Food and Agriculture Organization of the United Nations) (2015a) Regional overview of food insecurity – Latin America and the Caribbean: the region has reached the international hunger targets. FAO, Rome

FAO (2015b) Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication. FAO, Rome

Gaibor N, Rosero J, Altamirano M (2001) El impacto de la migración humana en las artes de pesca artesanales y semi-industriales utilizadas en los Parques Nacionales Galápagos y Machalilla. Informe Técnico de consultoría para the Nature Conservancy y Fundación Natura. La Union, Guayaquil

González JA, Montes C, Rodríguez J, Tapia W (2008) Rethinking the Galápagos Islands as a complex socio-ecological system: implications for conservation and management. Ecol Soc 13(2):13

Grenier C (2007) Conservación contra natura: las Islas Galápagos. Abya Yala, Quito

Grupo Núcleo (1999, 20 Abril) Plan de Manejo de Conservación y Uso Sustentable para la Reserva Marina de Galápagos. Registro Oficial no. 173. Quito. Unpublished document

Gudynas E, Acosta A (2011) La renovación de la crítica al desarrollo y el buen vivir como alternativa: Utopía y praxis latinoamericana. Revista Internacional de Filosofía Iberoamericana y Teoría Social 16(53):71–83

Hannah L, Ikegami M, Hole DG, Seo C, Butchart SHM, Townsend Peterson A, Roehrdanz PR (2013) Global climate change adaptation priorities for biodiversity and food security. PLoS One 8(8):e72590

Harris DC (2008) The Boldt decision in Canada: aboriginal treaty rights to fish on the Pacific. In: Harmon A (ed) The power of promises: rethinking Indian treaties in the Pacific Northwest. University of Washington Press, Seattle, pp 128–153

Harris (2014, 29 August) Integrating voluntary family planning services with coastal resource management in Madagascar: Interview with Alasdair Harris. Marine Ecosystems and Management (MEAM) – News and analysis on ocean planning and ecosystem-based management, 7(6). www.MEAM.net. Accessed 29 Aug 2014

Hennessy E, McCleary AL (2011) Nature's Eden? The production and effects of 'pristine' nature in the Galápagos Islands. Island Stud J 6(2):131–156

Heylings P, Bravo M (2007) Evaluating governance: a process for understanding how co-management is functioning, and why, in the Galapagos Marine Reserve. Ocean Coast Manag 50:174–208

Hockings M, Valenzuela S, Calvopiña M, Chamorro S, León P, Bucaram S, Villalta M (2012) Galapagos Marine Reserve management effectiveness assessment. Galapagos National Park Service & World Wildlife Fund, Galapagos

Hoyman MM, McCall JR (2013) Is there trouble in paradise? The perspectives of Galapagos community leaders on managing economic development and environmental conservation through ecotourism policies and the special law of 1998. J Ecotourism 12(1):33–48

INEC (Instituto Nacional de Estadísticas y Censos) (2010) Censo Nacional de Población y Vivienda. http://www.ecuadorencifras.gob.ec/censo-de-poblacion-y-vivienda/. Accessed 10 Dec 2013

Jentoft S, Chuenpagdee R (2009) Fisheries and coastal governance as a wicked problem. Mar Policy 33:553–560

Jentoft S, Chuenpagdee R (eds) (2015) Interactive governance for small-scale fisheries: global reflections. MARE Publication Series 13. Springer, Dordrecht

Jobstvogt N (2010) Fish stock assessment of top-predator wahoo, Acanthocybium solandri, in the Galapagos Islands (Bachelor thesis). Department of Biology, Chemistry & Pharmacy. Freie Universität Berlin

Jones PJS (2013) A governance analysis of the Galapagos Marine Reserve. Mar Policy 41:65–71

Kahmann B, Stumpf KH, Baumgärtner S (2015) Notions of justice held by stakeholders of the Newfoundland fishery. Mar Policy 62(2015):37–50

Kerr S (2005) What is small island sustainable development about? Ocean Coast Manag 48:503–524

Kerr GN, Swaffield SR (2012) Identifying cultural service values of a small river in the agricultural landscape of Canterbury, New Zealand, using combined methods. Soc Nat Resour 25(12):1330–1339

Kooiman J (2008) Exploring the concept of governability. J Comp Policy Anal 10(2):171–190

Kooiman J, Bavinck M (2013) Theorizing governability: the interactive governance perspective. In: Bavinck M, Chuenpagdee R, Jentoft S, Kooiman J (eds) Governability of fisheries and aquaculture: Theory and applications. MARE Publication Series 7. Springer, Dordrecht, pp 9–30

Kooiman J, Bavinck M, Jentoft S, Pullin R (2005) Fish for life: interactive governance for fisheries. Amsterdam University Press, Amsterdam

Kuzel AJ (1992) Sampling in qualitative inquiry. In: Crabtree BF, Miller WL (eds) Doing qualitative research. Sage, London, pp 31–44

Le Sann A, Commitato Internazionale per lo Sviluppo dei Popoli (CISP) (1997) Del norte al sur: Pescar para vivir. Impreandes Presencia S.A, Bogota

Lind A (2012) Contradictions that endure: family norms, social reproduction, and Rafael Correa's citizen revolution in Ecuador. Pol Gend 8(2):254–260

LOREG (Ley Orgánica de Régimen Especial de la Provincia de Galápagos) (2016) Ley 0, Registro Oficial Suplemento 520 de 11 Junio 2015

Ludwig D (2001) The era of management is over. Ecosystems 4:758–764

MacDonald T (1997) Conflict in the Galapagos Islands: analysis and recommendations for management. In: Report for the Charles Darwin foundation (working paper). Harvard University, Cambridge, MA

MAGAP (Ministerio de Agricultura, Ganadería, Acuacultura y Pesca) (2015) Inversiones en la pesca artesanal. Gobierno del Ecuador. www.magap.gob.ec. Accessed 9 Sept 2015

Mays N, Pope C (1995) Rigour in qualitative research. Br Med J 311:109–112

Mc Ewan C, Silva MI (1998) Arqueología y comunidad en el Parque Nacional Machalilla. In: Josse C, Iturralde M (eds) Compendio de investigaciones en el Parque Nacional Machalilla. Informe de la Fundación Natura & Centro de Datos para la Conservación (CDC-Ecuador). Nuevo Arte, Quito, pp 20–30

Murillo Posada JC, Alvarez-Arce C, Oviedo-Pincay M, Delgado-Bone A, Montesdeoca, J. (2013). Evaluación de la factibilidad del co-manejo pesquero en el estuario del Río Cojimíes. Informe Final. Centro de Transferencia y Desarrollo Tecnológico, Universidad Estatal Península de Santa Elena & Vice Ministerio de Acuacultura y Pesca, Santa Elena

Norton P (1982) Preliminary observations on Loma Alta, an early Valdivia Midden in Guayas Province, Ecuador. In: Marcos JG, Norton P (eds) Primer Simposio de correlaciones antropológicas Andino – Mesoamericano. Escuela Superior Politécnica Del Litoral (ESPOL), Guayaquil, pp 101–119

Norton P (1985) Boletín de los Museos del Banco Central No.6. Simposio 45 Congreso Internacional de Americanistas. Universidad de los Andes, Bogotá

OECD (Organization for Economic Co-operation and Development) (2013a) Growth in Latin America. http://www.oecd.org/general/focus/growth-in-latin-america.htm. Accessed 7 Nov 2013

OECD (2013b) Latin America: Economic outlook 2014. Logistics and competitiveness for development. OECD Publishing. OECD, United Nations, Economic Commission for Latin America and the Caribbean, & Latin American Development Bank, Paris

Olson DM, Dinerstein E (1998) The global 200: a representation approach to conserving the earth's most biologically valuable ecoregions. Conserv Biol 12(3):502–515

Olson DM, Dinerstein ED, Wikramanayake ND, Burgess GVN, Powell EC, Underwood JA, D'Amico I, Itoua HE, Strand JC, Morrison CJ, Loucks TF, Allnutt TH (2002) The global 200: priority ecoregions for global conservation. Ann Mo Bot Gard 89:199–224

Ospina P (2001) Identidades en Galápagos: El sentimiento de una diferencia. Trama, Quito

Ospina P (2007) In: Falconí C (ed) Galápagos: migraciones, economía, cultura, conflictos, acuerdos. Universidad Andina Simón Bolívar, Sede Ecuador, Programa de Naciones Unidas para el Desarrollo, & Corporación Editora Nacional, Quito

Pauly D, Christensen V, Dalsgaard J, Froese R, Torres F Jr (1998) Fishing down marine food webs. Science 279:860. https://doi.org/10.1126/science.279.5352.860

Pauly D, Christensen V, Guénette S, Pitcher J, Sumaila UR, Walters CJ, Watson R, Zeller D (2002) Towards sustainability in world fisheries [Insight review]. Nature 418:689–695

Pauly D, Alder J, Bennett E, Christensen V, Tyedmers P, Watson R (2003) The future for fisheries. Science 302:1359. https://doi.org/10.1126/science.1088667

Pitcher TJ, Lam ME (2010) Fishful thinking: rhetoric, reality, and the sea before us. Ecol Soc., http://www.ecologyandsociety.org/vol15/iss2/art12/, 15

PNG (2006) Plan de Manejo. Quito: Ministerio del Ambiente, Parque Nacional Galápagos. Arte Digital, Puerto Ayora

PNG (Parque Nacional Galápagos) (1999) Plan de Manejo de Conservación y Uso Sustentable para la Reserva Marina de Galápagos. Unpublished, Puerto Ayora

Pollnac RB, Poggi JJ, Fierro M (1987) Enfoque teórico y metodológico para el análisis de las comunidades pesqueras. In Centro Ecuatoriano de Planificación del Estado (ed) La pesca artesanal en el Ecuador. Escuela Politécnica del Litoral, Centro Ecuatoriano de Planificación del Estado, & Instituto Latinoamericano de Investigaciones Sociales, Quito, pp 141–154

Radcliffe SA (2012) Development for a postneoliberal era? Sumak kawsay, living well and the limits to decolonisation in Ecuador. Geoforum 43:240–249

Ramírez J (2004) La pesca artesanal en la Reserva Marina de Galápagos: dinámica laboral y conflictos socio-ambientales (Disertación de Licenciatura). Pontificia Universidad Católica del Ecuador, Quito

Reck GK (1983) The coastal fisheries in the Galápagos Islands, Ecuador: description and consequences for management in the context of marine environmental protection and regional development (Doctoral Dissertation). Christian-Albrechts-Universität, Kiel

Rostworowski M (2015) Recursos naturales renovables y pesca, siglos VXI–XVII: curacas y sucesiones, costa norte (Obras completes IV). Instituto de Estudios Peruanos, Lima
Schuhbauer A, Koch V (2013) Assessment of recreational fishery in the Galapagos marine reserve: failures and opportunities. Fish Res 144:103–110
Schwarz FA (1987) Prehistoric settlement pattern in the Valdivia Valley, southwest coastal Ecuador (Unpublished M. A. Thesis). University of Calgary, Calgary
SENPLADES (Secretaría Nacional de Planificación y Desarrollo) (2009) Plan Nacional para el Buen Vivir 2009–2013: Construyendo un estado plurinacional e intercultural. República del Ecuador. Plan Nacional de Desarrollo. Versión Resumida, Quito, SENPLADES
Song AM, Chuenpagdee R (2010) Operationalizing governability: a case study of a Lake Malawi fishery. Fish Fish 11:235–249
SRP (2017a) Flota artesanal: Número de pescadores artesanales. http://www.viceministerioap.gob.ec/flota-pescadoresar-artesanales0.html. Accessed 15 May 2017
SRP (2017b) Flota artesanal: Número de caletas pesqueras. http://www.viceministerioap.gob.ec/flota-artesanal0-flota-pesquera-artesanal.html. Accessed 15 May 2017
SRP (2017c) 'Herramientas para combatir pesca ilegal en Ecuador fueron presentadas' http://wwwviceministerioapgobec/subpesca3113-herramientas-para-combatir-pesca-ilegal-en-ecuador-fueron-presentadas-a-periodistashtml. Accessed 15 May 2017
SRP (Subsecretaría de Recursos Pesqueros) (2013) Flota artesanal: comerciantes. http://www.subpesca.gob.ec/subpesca. Accessed 04 Oct 2013
Staller JE (2001) Reassessing the developmental and chronological relationships of the formative of coastal Ecuador. J World Prehist 15(2):193–256
Staller JE (2002) A multidisciplinary approach to understanding the initial introduction of maize into coastal Ecuador. J Archaeol Sci 29:33–50
Stone S, Viteri C, Conrad J, Nøstbakken L, Franklin H (2006) Fisheries management in the Galapagos Marine Reserve: a bioeconomic perspective. Region 3 Barbados, Colombia, Ecuador, Guyana, Jamaica, Peru, Suriname, The Bahamas, Trinidad & Tobago, Venezuela, Economic and Sector Study Series. Inter-American Development Bank, Washington, DC
Stothert K (2008) Valdivia y el proceso civilizador del tercer milenio A.C.Nayra Kunan Pacha-Revista de Arqueología Social, 1(1), 1–18
Suárez de Vivero JL, Rodríguez Mateos JC, Florido del Corral D (2008) The paradox of public participation in fisheries governance: the rising number of actors and the devolution process. Mar Policy 32:319–325
Tassara E (ed) (1994) Pesca artesanal, acuicultura, y ambiente: experiencia y perspectivas de desarrollo. Memorias del Seminario Internacional Las Políticas de Desarrollo de la Pesca Artesanal en América Latina y el Caribe. Ministerio del Ambiente, Comisión Europea, y la Oficina Cooperación Italiana en Colombia. EcoEdiciones, Bogotá
Taylor JE, Hardner J, Stewart M (2009) Ecotourism and economic growth in the Galapagos: an island economy-wide analysis. Environ Dev Econ 14:139–162
Teddlie C, Yu F (2007) Mixed methods sampling: a typology with examples. J Mixed Methods Res 1:77. https://doi.org/10.1177/2345678906292430
Thomas G, Anderson J, Chandrasekharan D, Kakabadse Y, Matiru V (1996) Leveling the playing field: promoting authentic and equitable dialogue under inequitable conditions. Presented at the global e-conference on addressing natural resource conflict through community forestry. Forests, trees and people Programme of the Food & Agriculture Organization of the United Nations. March-April 1996, Rome
Toral-Granda V, Hearn A, Henderson S, Jones PJS (2011) Galapagos Marine Reserve – governance analysis. In: Jones PJS, Qiu W, De Santo EM (eds) Governing marine protected areas: getting the balance right. Technical Report to Marine & Coastal Ecosystems Branch, United Nations Environment Programme Vol. 2. Publishing Services Section, UNON, Nairobi, pp 97–104
Vinueza LR, Branch GM, Branch ML, Bustamante RH (2006) Top-down herbivory and bottom-up El Niño effects on Galapagos rocky-shore communities. Ecol Monogr 76(1):111–131
Viteri C, Chávez C (2007) Legitimacy, local participation, and compliance in the Galapagos Marine Reserve. Ocean Coast Manag 50:253–274

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