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Ocean grabbing

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ABSTRACT

The term "ocean grabbing" has been used to describe actions, policies or initiatives that deprive smallscale fishers of resources, dispossess vulnerable populations of coastal lands, and/or undermine historical access to areas of the sea. Rights and access to marine resources and spaces are frequently reallocated through government or private sector initiatives to achieve conservation, management or development objectives with a variety of outcomes for different sectors of society. This paper provides a definition and gives examples of reallocations of marine resources or spaces that might constitute "ocean grabbing". It offers a tentative framework for evaluating whether marine conservation, management or development is ocean grabbing and proposes an agenda for future research. For a reallocation to be considered ocean grabbing, it must: (1) occur by means of inadequate governance, and (2) be implemented using actions that undermine human security and livelihoods, or (3) produce impacts that reduce social–ecological well-being. Future research on ocean grabbing will: document case studies, drivers and consequences; conduct spatial and historical analyses; and investigate solutions. The intent is to stimulate rigorous discussion and promote systematic inquiry into the phenomenon of ocean grabbing.

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1. Introduction

Ocean grabbing is a relatively new term that is increasingly applied to a wide variety of development, conservation and fisheries management initiatives and transactions [1–6]. The term has emerged following a growing body of literature on land grabbing, which has been used to reference the purchase or expropriation of land (often in distant countries) by transnational or national corporations, governments, individuals or NGOs. These can include 'grabs' of land for fuel, food production, investment, conservation or other purposes e.g., [7,8-14]. In the past few years, the term 'ocean grabbing' has come to broadly reference similar concerns as they pertain to the rights and livelihoods of small-scale fishers and vulnerable coastal peoples. Notably, in 2012, Olivier De Schutter, UN special rapporteur on the right to food, warned: "Oceangrabbing' - in the shape of shady access agreements that harm small-scale fishers, unreported catch, incursions into protected waters, and the diversion of resources away from local populations - can be as serious a threat as 'land-grabbing'" [3]. More recently, several NGOs and the World Forum of Fisher People wrote a report titled "The Global Ocean Grab," which aimed to explore processes

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hgovan@gmail.com (H. Govan), terre.satterfield@ires.ubc.ca (T. Satterfield). URL: http://nathanbennett.ca (N.J. Bennett). of dispossession that are negatively affecting coastal communities and small-scale fishers [5]. The authors suggest that ocean grabbing occurs through "mechanisms as diverse as (inter)national fisheries governance and trade and investment policies, designated terrestrial, coastal and marine 'no-take' conservation areas, (eco)tourism and energy policies, finance speculation, and the expanding operations of the global food and fish industry, including large-scale aquaculture, among others" [5].

Ocean grabbing may well be occurring via these initiatives. For individuals and communities who inhabit coastal regions or rely on marine resources for livelihoods or subsistence, the loss of ocean space or marine resources is a very real and present concern. However, the labeling of all conservation (e.g., marine protected areas) or development (e.g., eco-tourism) initiatives that involve a re-allocation of space or resources as "ocean grabbing" may also be counterproductive. While the term 'ocean grabbing' has seen some use in popular literatures, it has received no focused academic attention and remains poorly defined. It is thus important to provide some basis upon which to judge such initiatives and distinguish detrimental ocean grabbing from initiatives that employ appropriate governance processes and that are considered beneficial by and for local people, society and ecosystems. In what follows, the authors define the term oceangrabbing, characterize initiatives that might be so labeled and present an analytical framework for judging conservation or development initiatives that involve the re-allocation of marine and coastal spaces or resources. In conclusion, the paper proposes an agenda for future

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research on ocean grabbing. The intent is to stimulate a rigorous discussion and promote systematic inquiry into the phenomenon of ocean grabbing.

2. What is ocean grabbing?

Changes in the allocation of ocean territories and resources have occurred throughout human history. Likewise, all forms of development or environmental management in the marine or coastal environs necessarily involve the allocation or re-allocation of rights to control, access, or use ocean space or resources. What then defines an initiative, policy or action as ocean grabbing? What forms might it take? What is being grabbed and driven by what? Who is doing the grabbing? Who is being impacted and how? Who is benefiting? How or what are the processes and actions through which ocean grabbing is occurring?

As a starting place for this discussion, the authors propose the following definition for ocean grabbing:

Ocean grabbing refers to dispossession or appropriation of use, control or access to ocean space or resources from prior resource users, rights holders or inhabitants. Ocean grabbing occurs through inappropriate governance processes and might employ acts that undermine human security or livelihoods or produce impacts that impair social–ecological well-being. Ocean grabbing can be perpetrated by public institutions or private interests.

Following on this definition and the above questions, two physical entities might be "grabbed": resources and spaces. Ocean resources can be living or non-living. For example, ocean grabbing was first used to refer to the capture of fish stocks [3]. Individual species (e.g., whales, seahorses, sea cucumbers) and habitats (e.g., coral reefs, mangroves) might also be taken. Non-living entities might include sand, rocks or substrate minerals and hydrocarbons. Marine and coastal spaces also include zones of the surface of the sea, the sea floor, the water column, beaches, coastal dunes or bluffs, lagoons, coral reefs, mangrove forests or seagrass meadow. These physical spaces can be associated with economic activities or historical use but might also be areas with spiritual or cultural significance [15–17] or resources that are deeply interconnected with customary practices or long-standing governance institutions [18–20].

Grabbing itself might be realized through illegal harvest of resources, the dispossession of lands for tourism, the encroachment into areas for resource extraction, the relocation of communities during the creation of MPAs or the dispossession of community lands after natural disasters. It may also occur as a function of change to or insecurity of tenure [6,21], including undesirable change of ownership, loss of tenure or access rights (in the case of unlawful exclusions), and/or any other associated loss of rights to use, harvest, manage or exclude others. This can take place as a result of re-allocations of space from public to private, from private to private, from private to public or between forms of public space - e.g., from common-access public space to limited access public space. In particular, examples of ocean grabbing via space reallocation can happen as a result of environmental or fisheries management policy, wherein marine resources are privatized, or new resource allocations or uses are assigned (e.g., from commercial or food fish to tourism) [22]. Ocean grabbing may also occur in the form of enclosures of spaces - for single or multiple uses or changes in property regimes. Privatization initiatives can, for example, increase private allocations of and control over

Table 1

Means and examples of reallocations of marine resources or spaces that might constitute ocean grabbing.

Means of reallocation	Illustrative examples that might constitute ocean grabbing
Single use enclosure of space	 Creation of marine reserve for conservation leading to exclusion of small scale fishers. Building of tourist enclaves (e.g., resort, hotel) that exclude local people from accessing areas. Public to private leases of mangrove areas for carbon sequestration, shrimp farms or charcoal production. Corporate or individual encroachment on privately held or communal lands. Private purchases or leases of coastal areas that lead to accumulation and exclusion of previous users or stakeholder groups.
Multiple use enclosure of space	 Creation of multiple use marine protected areas for conservation or eco-tourism. Slow enclosure of space through progressive implementation of multiple environmental regulations or development initiatives that overwhelm previous uses and users. Rapid enclosure of marine spaces through implementing the results of ocean zoning or marine spatial planning processes.
Changing property regime	 Privatization of previously commonly held coastal lands through land reform processes. Loss of tenure, management jurisdiction or rights to harvest due to a regulation change. Regulations that provide limited or preferential access to previous common-property areas. Post-disaster (e.g., tsunami) dispossessions of lands from previous inhabitants.
Changing resource allocation regime (i.e., Change in who can use the resource and how much can they use.)	 Fisheries policies or fisheries access agreements that re-allocate fisheries resources to foreign fleets thus reducing the catch of local users. Fisheries policies (e.g., allocation of quotas, reduction in small-scale fishing zones) or government authorized sales or leases that concentrate management or harvesting rights with commercial interests or recreational fishers thus marginalizing subsistence or small-scale fishers. Progressive cumulative authorized privatization, capitalization and centralized accumulation of resource access and harvest rights by elites or corporations leading to lost harvesting opportunities. Unauthorized or illegal harvesting of resources by IUU vessels leading to reductions in catch volumes.
Changing resource use regime (i.e., Change in what the resource is used for.)	 Shifting uses from subsistence or small-scale fishing towards other uses (e.g., diving, bio-harvesting, mining, etc.) that reduce access or harvesting rights. Changes in markets that drive increases in harvesting or that lead to the harvesting of new marine resources - e.g., sea cucumbers - which move resources from being a local food fish to becoming a

commodity.

previously public (open, common-pool or state-owned) fisheries resources [23]. Enclosure also refers to restrictions of access to or use of an area driven by indirect sources such as the pollution of a space (e.g, it becomes toxic and unusable thus leading to a de facto enclosure).

To summarize these possibilities, Table 1 characterizes resource and spatial re-allocations using examples of initiatives or actions that might constitute ocean grabbing. Though the authors of this paper have conducted a broad review and have worked in a number of contexts where such initiatives may have taken place, the paper refrains from singling out specific case studies or locations as the aim is a definitional and exploratory discussion. This also avoids mislabeling specific initiatives as ocean grabbing without fully understanding the context within which they occur. A basis for evaluating if and when ocean grabbing has occurred is covered in the subsequent section.

A variety of actors and organizations with differing motivations might be accused of ocean grabbing via the possible range of initiatives listed in Table 1. The motivation may be based on good primary or stated intentions such as that of some environmental non-governmental organizations (ENGOs), foundations, corporations, private sector investors and individuals and governments who may unwittingly perpetrate "ocean grabbing" in the name of "conservation", "environmental management" or "development". For example, ENGOs might inadvertently facilitate the dispossession of coastal or marine space through the promotion of smaller coastal or large marine protected areas (LMPAs), with the objective of conserving biodiversity or replenishing fisheries. Initiatives might also be profit driven or driven by political aspirations for social or territorial control. National governments may implement land reforms or forcibly evict populations from areas within their own countries or within distant overseas territories, be that through implementing conservation initiatives: putting into production areas heretofore seen as marginal; or developing fisheries resources seen as underutilized or unproductive. Two problematic preconditions or assumptions are that the resources are not already allocated (e.g., to small scale fishers) and that resources are not already overharvested. Governments often implement new environmental policies (ranging from fisheries restrictions to reallocations of fishing rights - e.g., ITQs) that affect marginalized nationals. The actions of the government in one country might also restrict the activities of groups in another country. Corporate or private interests may – through legal means (e.g., negotiation of harvesting quotas or access rights within EEZs, private investment in overharvested fisheries, large scale development projects) or illegal means (e.g., IUU fishing) - displace local groups or undermine the fisheries catches of small-scale fisheries.

The drivers of ocean grabbing are as diverse as the means through which it occurs. The authors postulate that the main drivers of ocean grabbing are: global demands, development pressures, local demography, financial markets, political processes, global environmental change and environmental declines. Global demands for seafood cause developed countries in Asia, Europe and North America to develop distant water fleets and negotiate leases in foreign waters [24]. Export oriented fish markets in developing countries are often driven by global markets rather than domestic supply [25]. Additional demands (e.g., for food, medicine, resources, tourism and energy) and demographic factors (e.g., in migration and local population increases) can also lead to development pressures on marine resources and spaces. Global financial markets and capital speculation might facilitate marine resource reallocations - particularly through progressive financing of fisheries or creation of ecosystem service markets, which render ocean resources open for investment and trade-able in distant financial markets. Global environmental change and environmental degradation can coalesce with other forms of scarcity - e.g., financial crises, under-development, environmental degradation, resource declines – which might also drive resource and conservation related grabs [26]. Competing narratives of environmental scarcity (overdevelopment) and underutilized resources (underdevelopment) might lead to a progressive enclosure of the commons by a combination of conservation and development initiatives.

A distinguishing characteristic of ocean grabs is that they negatively affect prior resource users, rights holders or inhabitants. Of particular concern are marginalized and vulnerable coastal communities and groups, including small-scale fishers, traditional land-owners, historical tenure holders, indigenous groups and women. Gender considerations are important here since women fishers and gleaners may access and use different areas and resources than men - for example, the foreshore and reef areas situated within sight of communities [27,28]. Ocean grabbing initiatives might also advantage newer populations over long-standing populations or vice versa. Not only local communities and groups but also governments, from national to local scale, might also become disempowered or marginalized from management and decision making when ocean grabbing occurs. Developing countries and small-island developing states might be particularly susceptible to influence and persuasion by external governments, multi-lateral organizations or private sector organizations through such diverse means as political pressure, debt-for nature swaps or coercion. Local governments might also be powerless against decisions made at higher scales within their own countries. A related question is to ask who benefits geographically distant populations, corporate investors, local elites or powerful government bureaucrats? The underlying concern is whether the initiative has or will exacerbate inequities and further marginalize or better the situation of vulnerable individuals, groups or governments.

3. What constitutes ocean grabbing?

Not all conservation or development actions involving a reallocation of space or resources lead to negative outcomes or constitute ocean grabbing. What, then, defines an initiative as ocean grabbing? The extensive critical literature on land grabbing and early discussions of ocean grabbing are instructive here [3–5,7–14,29,30]. For example, these literatures suggest that "grabbing" is facilitated through marginalization of local people, non-transparent or corrupt transactions, subversion of political or democratic processes, physical displacement and violent dispossession, accumulation and exclusion through progressive privatization, producing environmental harms, and undermining food security, among other possibilities. Rather than engage in a lengthy discussion, these critiques are used as an informed basis for evaluating acts as constituting ocean grabbing. There are three overarching considerations that might be used to evaluate whether an initiative is or is not "ocean grabbing": (1) the quality of governance, (2) the presence of actions that undermine human security and livelihoods and (3) impacts generated that negatively effect social-ecological well-being. Each of these considerations are introduced below and specific criteria for each category are summarized in Table 2 – a framework through which initiatives, policies and actions might be evaluated.

First, a fundamental consideration is the quality of governance itself. Governance can be understood as the structures, institutions and processes by which decisions are made and actions are taken [31,32]. It is concerned with the way that power and authority are exercised through economic, political, social and administrative institutions [32,33]. Governance quality – often referred to as the "good"-ness of governance – is a normative social contract between the state, the private sector and civil society about the way that actors should

Table 2

Tentative framework for evaluating initiatives as ocean grabbing.

Consideration	Measures (Concerns)
Quality of Governance	 Contextualized- Are pre-existing national and local laws, governance arrangements and management processes recognized and employed? Is the initiative aligned with local and national aspirations and priorities? Appropriate Decision-Making and Authority – Does the initiative engage contextually appropriate decision-making processes? Have adequate consultations, deliberations and planning processes occurred? Do recognized authorities and constituents have control over decision-making processes and outcomes? Is the initiative being implemented with free, prior and informed consent? Participatory – Are decision-making processes and structures inclusive and participatory? Do constituents have capacity, access to information and adequate resources to participate? Equitable – Are both public interest and local stakeholder perspectives, values and needs taken into account in planning the initiative? Are marginalized groups considered fairly? Are policy mechanisms in place to ensure equitable distribution of costs and benefits and mitigation or compensation for costs of decisions? Transparent – Is the initiative being implemented in a transparent fashion? Is information available and accessible about the rationale for decisions made, who is involved in decision-making and how decisions are made? Accountable – Are promoters, governors and managers held accountable for the process of implementation and impacts of the initiative? Is the initiative being implemented through corruption, coercion or embezzlement? Legitimate – Does the initiative have perceived legitimacy and is it recognized by law? Is the chosen action or policy instrument an effective means to achieve the desired or stated ends? Rights – Is the rule of law recognized and respected? Is the right to seek legal redress guaranteed? Are historical tenure, rights and ownership recognized and outstanding issues resolved?
Human security and livelihoods	 Livelihoods and food security – Does the initiative take away – through enclosure of public spaces or privatization of common-pool resources – the community's means of subsistence production or making a livelihood? Does the initiative take away individual's access to food or other basic needs (water, shelter)? Community Security – Is community security at risk? Is physical displacement occurring? Does the initiative threaten the existence, cohesiveness or cultural identity of a community or an ethnic group? Does the initiative facilitate the destruction of cultural resources or undermine traditional activities or governance processes? Personal security – Is personal safety being threatened? Is violence being perpetrated against individuals? Are human rights being respected and protected?
Social–ecological well- being	 Ecological impacts – Is the initiative producing undesirable ecological outcomes for resource users, rights holders or inhabitants? Does the initiative lead to adverse outcomes for the ecosystem services (e.g., sustainability of resource, fish catches) that local people rely on? Is the area being polluted and the health of the environment being negatively impacted? Are levels of fish or resource harvests impacted? Does the initiative cause irreparable damage to marine habitats or ecosystems that provide safeguards from hazards or social safety nets? Social impacts – Do the ecological impacts of the initiative lead to adverse social outcomes (e.g., on health, livelihoods, food security, poverty/wealth, social and cultural factors, institutions, overall well-being) for local people? Do the social benefits outweigh the costs? Are alternative livelihoods, benefit sharing or compensatory mechanisms in place to offset impacts or damages? Are social–ecological relations and feedbacks being negatively impacted? Are benefits or profits retained by elites or centralized with distant actors or markets?

preform and actions should occur [34]. For example, it might be agreed that actions that undermine democratic institutions, local customs and rules or pre-existing governance arrangements or that policies that marginalize vulnerable groups are not acceptable and therefore should not transpire.

The term "good governance" was popularized in the United Nations Development Program policy document Governance for Sustainable Human Development, which defined it as "...participatory, transparent and accountable. It is also effective and equitable. And it promotes the rule of law" [33]. According to the Organization for Economic Co-operation and Development, good governance is concerned with "...the environment in which economic operators function...the distribution of benefits...[and] the relationship between the ruler and the ruled" [35]. These and numerous other international policy documents suggest that good governance is essential for effective social and economic development while also being itself a worthy goal. Similar concepts and arguments have emerged in policy documents and academic literatures focusing on the relationship between good governance and environmental management and conservation [31,36,37]. The quality of governance can be judged based on a number of criteria: consideration of context, engagement of appropriate decision-making processes and authorities, attention to equity and a diversity of perspectives, maintenance of rights and rule of law and whether institutions are participatory, transparent, accountable and legitimate. An important aspect of legitimacy is whether the policy or action being implemented is actually an effective means to achieve the desired end goal. Good meta-governance is also a consideration, by which we mean the absence of fugitive corrupting forces (e.g., influential figures) that act on governing in invisible ways; or the normalization of corrupt behaviors [38].

A second consideration is whether the initiative undermines or bolsters livelihoods and human security, particularly of proximal communities or vulnerable groups. Security refers to a state of safety from harm or feeling of freedom from existential dangers or threats to a referent object. The concept of human security is not a defensive or a military concept like national security but rather an integrative concept that takes into account the safety, survival, well-being, livelihoods and dignity of the individual [39–41]. At the core of human security is freedom from wants, fears or harms and liberty to pursue one's aspirations [39]. Similar to good governance, considerations of human security allow us to examine whether actions are morally defensible – or warrant being labeled unjust and unacceptable. The concept also requires that attention is paid to risk assessment, prevention, protection and compensation when damages are assessed [42].

The 1994 *Human Development Report* delineated 7 aspects of human security – economic, food, health, environmental, personal, community and political [41]. Though some have critiqued this definition for being too all-encompassing to be tractable [43], a broad view of human security enables a multi-dimensional evaluation of the suitability of actions [44]. Though numerous categorizations exist see [39], the categories of livelihoods and food security, personal and political security and community security are most useful for understanding what constitutes ocean grabbing. The UNDP concept of human security "…stresses that people need to be able to take care of themselves: all people should have the opportunity to meet their most essential needs and to earn their own living." [41]. Meeting basic and livelihood needs requires capabilities and access to assets [45]. Thus, the enclosure of public spaces or the privatization of common-pool

resources, which are required for livelihoods, income, food or basic needs can be considered a threat to human security. Risks to personal security include those that threaten the bodily integrity, the survival or the dignity of an individual. Political security guarantees that fundamental human rights are protected. Dangers for community security include those that threaten the existence, the functioning or the sovereignty of a geographical community or an ethnic, cultural or livelihoods group.

A third and final consideration is whether the initiative, action or policy produces negative ecological outcomes or direct impacts that affect the well-being of proximal communities or vulnerable groups. Well-being is a multi-faceted concept that includes physical, social, cultural, institutional and economic dimensions [46] – and that has been examined through subjective or objective measures within sustainable livelihoods, poverty, vulnerability, or health frameworks [47,48]. The term 'social-ecological wellbeing' is used here to recognize the linked character of well-being within the coastal social-ecological systems impacted by ocean grabbing [49]. Coastal community development and individual well-being rely on the health of the environment, the abundance of resources and the intactness and productivity of habitats. Development initiatives might cause harms to the health of the environment and thus people - for example, through polluting fresh waters required for drinking, soils used for agriculture, or coastal areas that yield seafood harvests. Overfishing by commercial and distant water fleets or IUU vessels might lead to declines in the sustainability and abundance of fisheries resources essential for local subsistence and livelihoods [25,50]. Intact habitats are required for productive ecosystems and they can provide safeguards from storms or social safety nets for coastal communities [51]. Mangrove ecosystems or coral reefs might be irreparably damaged or degraded through inappropriate development.

Moreover, the simple act of reallocation does not determine whether an initiative is ocean grabbing precisely because actions that involve the reallocation of space and resources are always occurring be they for environmental management, conservation or economic development purposes. Many of these are indeed ecologically and socially beneficial and desired by constituents. Thus deciding whether an initiative is "ocean grabbing" is a normative exercise about what constitutes acceptable processes, actions and outcomes. Three considerations are key here: (1) the quality of governance processes, (2) the presence of acts that undermine human security, and (3) the generation of negative impacts for social-ecological well-being (Fig. 1). So, for example, a marine protected area might be deemed ocean grabbing if (a) free, prior and informed consent is not negotiated or (b) it induces involuntary displacement. Similarly, an aquaculture scheme could be called ocean grabbing if (a) it is built without permission in an area where there is historical tenure. (b) militia use violence to remove previous inhabitants, (c) communities lose access to areas that they rely on for food harvests or (d) it undermines ecological productivity or leads to toxicity in resources. If fisheries resources get re-allocated away from small-scale fishers through a new environmental policy (a) without due process while also (b) undermining livelihoods and food security without an acceptable form of restitution this might be deemed a clear case of ocean grabbing.

4. Discussion and future research

Marine protected areas, rights-based approaches, fisheries policies or leases, coastal development projects and all manner of other initiatives that have previously been labeled ocean grabbing are not ocean grabbing if they are implemented in a respectful manner, if they support local livelihoods and do not undermine human security and if they produce favorable socialecological outcomes. Ensuring that this is occurring will likely require adequate controls including ongoing monitoring and evaluation of process and outcomes. It should be noted that in many cases it will be less clear than in the illustrative examples provided here – such as in the case of marine management or conservation initiatives where the intention may be to increase fish stocks or improve habitats in areas where poor environmental conditions are already impacting local communities or livelihoods. The short-term losses of the initiative may be undesirable but the long-term benefits may far outweigh these. In this case, the governance processes employed needs to be examined as well as the presence or absence of compensatory actions.

The ultimate goal of an exploration of ocean grabbing should be to seek solutions to reduce its occurrence, for example, through developing codes of conduct and best practice documents [52]. This is beyond the scope of the present study and merits a systematic program of research including the documentation of the forms as well where, when, how, why and by whom ocean grabbing is occurring. The following is a list of topics (with related questions contained in Table 3) that might be included in such an investigation:

- 1. Empirical case studies that document ocean grabbing in different locations;
- 2. Drivers of ocean grabbing;
- 3. Spatial analyses and historical accounts of ocean grabbing;
- 4. Consequences of ocean grabbing; and,
- 5. Solutions to avoid or resist ocean grabbing.

There are numerous additional questions that might be asked that defy categorization here. For example, there is a need to grapple with applied ethical and policy questions such as: Who should have what rights to which ocean spaces or resources for how long and for what purposes? Discussions of ocean grabbing also demands the development of adequate analytical tools to assess whether the initiative being promoted ("ocean grab") is really the best method (ethical, effective or efficient) for achieving the desired fisheries, societal, or conservation objective. Answering these questions will require drawing on diverse perspectives and analytical approaches from geography, development studies, anthropology, sociology, ethics, history, political science, economics, political ecology and interdisciplinary social–ecological sciences.

In conclusion, the term ocean grabbing and the evaluative framework offered here may be useful for several reasons.

The first use is to highlight the dangers of ocean grabbing. Government, NGOs, corporations, multi-lateral agencies and global governance initiatives need to heed the critiques and take steps to engage appropriate governance processes, to avoid actions that undermine human security and to produce positive social and ecological outcomes for small-scale fishers, local communities and society at large. This might have the effect of undermining the legitimacy of an initiative or an organization. For example, some large-scale marine conservation and planning initiatives, although well meaning, might easily lead backers and advocates and implementers to forget the social dimensions of conservation and the importance of due governance processes [53]. It is also important to ensure that science or lofty ideals are not used to justify negative policies or actions. Though an idea such as conversation might be worthy in principle, this does not mean it is worthy in practice. Organizations and promoters of an ideal, a policy, a program or an action need to understand the real-world implications of environmental management, conservation and development initiatives. These initiatives impact real people - who are often already members of vulnerable and underrepresented groups in their homes and communities. Promoters of conservation and development should adequately justify re-allocations of space and resources in any case, but this need not be the only step taken.

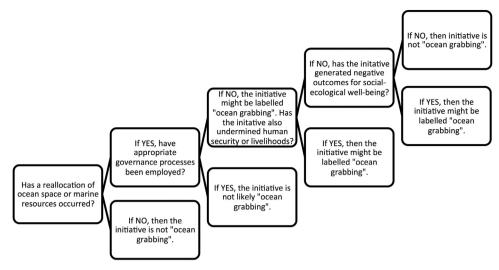


Fig. 1. Deciding whether an initiative is ocean grabbing.

Table 3
Research topics and questions for examining the phenomenon of ocean grabbing.

Research topic	Related research questions
Empirical case studies that document ocean grabbing in different locations	What forms does ocean grabbing take? How is ocean grabbing enacted and for what purposes? Which individuals, organizations and alliances are engaged in ocean grabbing? How are they interacting and producing outcomes discursively and materially? What mechanisms, processes and actions allow ocean grabbing to occur? Where and how has displacement occurred? Who is facilitating ocean grabbing? What is the role of the state in enabling or brokering ocean grabbing? Which actors and alliances (e.g., between NGOs, public, private) are facilitating conservation related ocean grabbing? There is also a need to cautiously and thoroughly document cases that involve violent dispossession, financialization and accumulation of common-pool resources, and stealth privatization of public spaces.
Drivers of ocean grabbing	What are the drivers of ocean grabbing in the different locations where it is occurring? How do competing narratives and different physical factors – social, financial, markets (e.g., demands for food, energy), cultural, ecological, climatic and political – interact to produce ocean grabs? How are narratives of current or future scarcity (e.g., food, economic, environmental) and underdevelopment used to justify actions that might be considered ocean grabbing? How do political factors (e.g., geopolitics, conflict, territorial aspirations) and ecological narratives create scarcity and drive ocean grabbing? To what extent are ocean grabs provoked by global flows of capital and investment dynamics? To what extent is marine conservation aiding primitive accumulation and helping to justify ocean grabbing? How do current narratives and frameworks for resource management and conservation lead to policies and programs that might be deemed ocean grabbing? What justifications are being used to promote actions that might otherwise be deemed unacceptable?
Spatial analyses and historical accounts of ocean grabbing	What broad patterns of resource use and ocean spaces are emerging? What broad changes in oceans policy are emerging? What is the global extent of ocean grabbing? Where is ocean grabbing concentrated geographically? What is the extent of sociological differentiation – what populations are most affected? What types of grabs are occurring where? How significant are national vs transnational dynamics in driving ocean grabs? To what extent are ocean grab dynamic driven by North–South, developed-developing, corporate-undercapitalized, and economically powerful-marginal dynamics? Are there historical accounts of ocean grabbing? Have there been historical periods when enclosures and privatization were occurring? How have the drivers and narratives behind ocean grabbing changed over time?
Consequences of ocean grabbing	What are the social, ecological and social–ecological consequences of different types of ocean grabbing? What are the positive and negative outcomes? What are the long-term implications of resource grabbing for the marine environment and small-scale fisheries? What are the long-term implications for environmental policies and ocean spaces? Who is being impacted by ocean grabbing and how are outcomes differentiated between groups (e.g., class, race, gender, livelihoods)? To what extent are ocean grabs reinforcing inequities? Who gains from ocean grabbing? Who wins, who loses and why? What factors are most important – e.g., most important governance variables – for producing more beneficial social and ecological outcomes? How can decisions about trade-offs and compensation be made when re-allocations are deemed necessary?
Solutions to avoid or resist ocean grabbing	What approaches constitute best practices when facilitating legitimate and desirable ocean space or marine resource re-allocations? What are essential elements of a code of conduct? What are the potential contributions and drawbacks of codes of conduct? How do different framings – e.g., rights approaches, market-based approaches, development, private property – influence the implementation of ocean-related policy and programs? What conservation and development models are the most effective at guarding against ocean grabbing? Do externally driven models undermine local mechanisms for managing resources and protecting rights – thus constituting an ocean grab? Who should be able to evaluate what constitutes ocean grabbing? What should be the role of the state, international law and other actors in governing ocean grabbing? How can further investment in already allocated or over-utilized fisheries be avoided? What local, regional, national and international responses and acts of resistance to ocean grabbing can be documented? Which acts of resistance have been successful?

The second use of the above criteria is to increase accountability. The concept of ocean grabbing might be applied to hold governments, organizations and individuals to account for their actions. In the worst cases, this could apply to human rights violations but it could also be used to pinpoint the undermining of food security for small-scale fishers or dubious governance processes (such as back-room deals, corruption or coercion).

A third use is to promote good practice. The ultimate objective is to encourage proponents and implementers of ocean-related initiatives involving re-allocation of space or resources to be mindful and to ensure that appropriate governance processes are followed, suitable actions are taken, and beneficial outcomes are produced. The concern is, regardless, that the worst excesses of "ocean grabbing" primarily impact local and marginalized groups who are further disempowered and negatively impacted.

Finally, to reiterate a point made earlier, while ocean grabbing is a very real threat, there is also a need to be exceedingly cautious about the overzealous and uncritical application of the term to all initiatives that involve some sort of change in the allocations of marine resources or spaces. The labeling of all conservation and development initiatives as "ocean grabbing" would be equally counterproductive, potentially undermining the positive potential of place-based initiatives and also local agency and choice. The definition and framework offered here could help to avoid the mislabeling of initiatives while highlighting the dangers of ocean grabbing, increasing accountability and promoting good practice. The points made here are certainly just the beginning of a much longer dialogue and research agenda on ocean grabbing.

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References

- [1] Barbesgaard M., Pedersen C., Feodoroff T. Marine protected areas in South Africa – ocean grabbing by another name. The Ecologist 2014, (http://www. theecologist.org/News/news_analysis/2645220/marine_protected_areas_in_ south_africa_ocean_grabbing_by_another_name.html) [accessed 03.12.14].
- [2] Buxton N., Pedersen C., Barbesgaard M.C. Ocean grabbing: a new wave of 21st century enclosures. The Ecologist 2014, (http://www.theecologist.org/News/ news_analysis/2598963/ocean_grabbing_a_new_wave_of_21st_century_enclo sures.html> [accessed 03.12.14].
- [3] De Schutter O. "Ocean-grabbing" as serious a threat as "land-grabbing" UN food expert; 2012.
- [4] Mesmain M. Ocean grabbing: plundering a common resource. In: Wilson HW, editor. U.S. national debate topic, 2014–2015, The Ocean. The reference shelf, 86. Amenia, NY: Grey House Publishing; 2014. p. 56–9.
- [5] Pedersen C, Feodoroff T, Reuter R, Franco J, Buxton N, Barbesgaard MC, et al. The global ocean grab: a primer. The Netherlands: Transnational Institute, Masifundise, Afrika Kontakt and World Forum of Fisher Peoples, Amsterdam; 2014.
- [6] Telesetsky A. Fishing moratoria and securing TURFs: Creating opportunities for future marine resource abundance in the face of scarcity in Western Africa. Ga J Int Comp Law 2014;42:35–67.
- [7] Borras SM, Hall R, Scoones I, White B, Wolford W. Towards a better understanding of global land grabbing: an editorial introduction. J Peasant Stud 2011;38:209–16. http://dx.doi.org/10.1080/03066150.2011.559005.
- [8] Corson C, MacDonald KI. Enclosing the global commons: the convention on biological diversity and green grabbing. J Peasant Stud 2012;39:263–83. <u>http:</u> //dx.doi.org/10.1080/03066150.2012.664138.
- De Schutter O. How not to think of land-grabbing: three critiques of largescale investments in farmland. J Peasant Stud 2011;38:249–79. <u>http://dx.doi.org/10.1080/03066150.2011.559008</u>.
- [10] Edelman M, Oya C, Borras SM. Global land grabs: historical processes, theoretical and methodological implications and current trajectories. Third World Q 2013;34:1517–31. http://dx.doi.org/10.1080/01436597.2013.850190.
- [11] Hall D. Primitive accumulation, accumulation by dispossession and the global land grab. Third World Q 2013;34:1582–604. <u>http://dx.doi.org/10.1080/</u> 01436597.2013.843854.

- [12] Rulli MC, Saviori A, D'Odorico P. Global land and water grabbing. Proc Natl Acad Sci 2013;110:892-7. http://dx.doi.org/10.1073/pnas.1213163110.
- [13] Wolford W, Borras SM, Hall R, Scoones I, White B. Governing global land deals: the role of the state in the rush for land. Dev Change 2013;44:189–210. <u>http:</u> //dx.doi.org/10.1111/dech.12017.
- [14] Zoomers A. Globalisation and the foreignisation of space: seven processes driving the current global land grab. J Peasant Stud 2010;37:429–47. <u>http://dx. doi.org/10.1080/03066151003595325</u>.
- [15] Ban NC, Mills M, Tam J, Hicks CC, Klain S, Stoeckl N, et al. A social–ecological approach to conservation planning: embedding social considerations. Front Ecol Environ 2013;11:194–202. http://dx.doi.org/10.1890/110205.
- [16] Kittinger JN, Koehn JZ, Le Cornu E, Ban NC, Gopnik M, Armsby M, et al. A practical approach for putting people in ecosystem-based ocean planning. Front Ecol Environ 2014;12:448–56. http://dx.doi.org/10.1890/130267.
- [17] Klain SC, Chan KMA. Navigating coastal values: participatory mapping of ecosystem services for spatial planning. Ecol Econ 2012;82:104–13. <u>http://dx. doi.org/10.1016/j.ecolecon.2012.07.008</u>.
- [18] Govan H, Tawake A, Tabunakawai K, Jenkins A, Lasgorceix A, Schwarz AM., et al. Status and potential of locally-managed marine areas in the South Pacific: meeting nature conservation and sustainable livelihood targets through wide-spread implementation of LMMAs. SPREP/WWF/WorldFish-Reefbase/CRISP; 2009.
- [19] Turner NJ, Ignace MB, Ignace R. Traditional ecological knowledge and wisdom of aboriginal peoples in british columbia. Ecol Appl 2000;10:1275-87. <u>http:</u> //dx.doi.org/10.1890/1051-0761(2000)010[1275:TEKAWO]2.0.CO;2.
- [20] Vierros M, Tawake A, Hickey F, Tiraa A, Noa R. Traditional marine management areas of the Pacific in the context of national and international law and policy. Darwin, Australia: United Nations University – Traditional Knowledge Initiative; 2010.
- [21] Allison EH, Ellis F. The livelihoods approach and management of small-scale fisheries. Mar Policy 2001;25:377–88. <u>http://dx.doi.org/10.1016/S0308-597X</u> (01)00023-9.
- [22] Murray G, Johnson T, McCay BJ, Danko M, Martin KS, Takahashi S. Cumulative effects, creeping enclosure, and the marine commons of New Jersey. Int J Commons 2010;4:367–89.
- [23] Wiber MG, Rudd MA, Pinkerton E, Charles AT, Bull A. Coastal management challenges from a community perspective: the problem of "stealth privatization" in a Canadian fishery. Mar Policy 2010;34:598–605. <u>http://dx.doi.org/</u> 10.1016/j.marpol.2009.11.010.
- [24] Gagern A, van den Bergh J. A critical review of fishing agreements with tropical developing countries. Mar Policy 2013;38:375–86. <u>http://dx.doi.org/</u> 10.1016/j.marpol.2012.06.016.
- [25] Pauly D, Watson R, Alder J. Global trends in world fisheries: impacts on marine ecosystems and food security. Philos Trans R Soc Lond B: Biol Sci 2005;360:5–12. http://dx.doi.org/10.1098/rstb.2004.1574.
- [26] Scones I, Smalley R, Hall R, Tsikata D. Narratives of scarcity: understanding the "global resource grab" Future Agricultures and Institute for Poverty, Land and Agrarian Studies; 2014.
- [27] Hauzer M, Dearden P, Murray G. The fisherwomen of Ngazidja island, Comoros: fisheries livelihoods, impacts, and implications for management. Fish Res 2013;140:28–35. http://dx.doi.org/10.1016/j.fishres.2012.12.001.
- [28] Kleiber D, Harris LM, Vincent ACJ. Improving fisheries estimates by including women's catch in the Central Philippines. Can J Fish Aquat Sci 2014;71:656–64. http://dx.doi.org/10.1139/cjfas-2013-0177.
- [29] Borras SM, Franco JC. Global land grabbing and political reactions "from below". Third World Q 2013;34:1723–47. http://dx.doi.org/10.1080/01436597.2013.843845.
- [30] Fairhead J, Leach M, Scoones I. Green grabbing: a new appropriation of nature? J Peasant Stud 2012;39:237–61. http://dx.doi.org/10.1080/03066150.2012.671770.
- [31] Graham J, Amos B, Plumtree T. Governance principles for protected areas in the 21st century. Ottawa, ON: Institute on Governance, Parks Canada, and CIDA; 2003.
- [32] Kaufmann D, Kraay A, Zoido-Lobaton P. Governance matters. Washington, DC: World Bank; 1999.
- [33] UNDP. Governance for sustainable human development: a UNDP policy document. New York, NY: United Nations Development Programme; 1997.
- [34] Elahi KQ, UNDP on good governance. Int J Soc Econ 2009;36:1167–80. <u>http:</u> //dx.doi.org/10.1108/03068290910996981.
- [35] OECD. Participatory development and good governance. Paris, France: Organization for Economic Co-operation and Development; 1995.
- [36] Borrini-Feyerabend G, Dudley N, Jaeger T, Lassen B, Pathak Broome N, Philips A, et al. Governance of protected areas: from understanding to action. Gland, Switzerland: IUCN; 2013.
- [37] Lockwood M. Good governance for terrestrial protected areas: a framework, principles and performance outcomes. J Environ Manag 2010;91:754–66. <u>http:</u> //dx.doi.org/10.1016/j.jenvman.2009.10.005.
- [38] Morrison TH. Developing a regional governance index: the institutional potential of rural regions. J Rural Stud 2014;35:101–11. <u>http://dx.doi.org/</u> 10.1016/j.jrurstud.2014.04.004.
- [39] Alkire S. A conceptual framework for human security. Oxford, UK: Centre for Research on Inequality, Human Security and Ethnicity, University of Oxford; 2003.
- [40] Tadjbakhsh S, Chenoy A. Human security: concepts and implications. New York, NY: Routledge; 2007.
- [41] UNDP. Human development report 1994. New York, NY: Oxford University Press for the United Nations Development Programme (UNDP); 1994.
- [42] King G, Murray CJL. Rethinking human security. Polit Sci Q 2001;116:585–610. http://dx.doi.org/10.2307/798222.

- [43] Paris R. Human security: paradigm shift or hot air? Int Secur 2001;26:87–102.
- [44] Tadjbakhsh S. In defense of the broad view of human security. In: Martin M, Owen T, editors. The Routledge handbook of human security. New York, NY: Routledge; 2013.
- [45] Sen A. Resources, values, and development. Boston, MA: Harvard University Press; 1984.
- [46] Biedenweg K, Hanein A, Nelson K, Stiles K, Wellman K, Horowitz J, et al. Developing human wellbeing indicators in the Puget Sound: focusing on the watershed scale. Coast Manag 2014;42:374–90. <u>http://dx.doi.org/10.1080/ 08920753.2014.923136</u>.
 [47] Weeratunge N, Béné C, Siriwardane R, Charles A, Johnson D, Allison EH, et al.
- [47] Weeratunge N, Béné C, Siriwardane R, Charles A, Johnson D, Allison EH, et al. Small-scale fisheries through the wellbeing lens. Fish Fish 2014;15:255–79. http://dx.doi.org/10.1111/faf.12016.
- [48] Armitage D, Béné C, Charles AT, Johnson D, Allison EH. The interplay of wellbeing and resilience in applying a social-ecological perspective. Ecol Soc 2012;17(4):15. http://dx.doi.org/10.5751/ES-04940-170415.
- [49] Donatuto J, Grossman EE, Konovsky J, Grossman S, Campbell LW. Indigenous community health and climate change: integrating biophysical and social science indicators. Coast Manag 2014;42:355–73. <u>http://dx.doi.org/10.1080/</u> 08920753.2014.923140.
- [50] Jacquet J, Pauly D. Funding priorities: big barriers to small-scale fisheries. Conserv Biol 2008;22:832–5. http://dx.doi.org/10.1111/j.1523-1739.2008.00978.x.
- [51] Hutchison J, Spalding M, zu Ermgassen P. The role of mangroves in fisheries enhancement. The Nature Conservancy and Wetlands International; 2014.
 [52] Borras Jr S, Franco J. From threat to opportunity—problems with the idea of a
- code of conduct for land-grabbing. Yale Hum Rights Dev J 2010;13:507–23. [53] De Santo EM. Missing marine protected area (MPA) targets: how the push for
- [33] De santo EM, Missing manne protected area (MrA) targets, now the push for quantity over quality undermines sustainability and social justice. J Environ Manag 2013;124:137–46. <u>http://dx.doi.org/10.1016/j.jenvman.2013.01.033</u>.