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Democracy and the environment revisited: The case of African fisheries

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ABSTRACT

This article develops and tests three hypotheses concerning the effects of levels of democracy on levels of overfishing in Sub-Saharan Africa. The results show that the more democratic a country is, the more successful it is in protecting marine environments. However, this effect disappears during turbulent times and periods of rapid political change. The analysis also shows that democracy has a stronger effect on environmental performance than do levels of corruption and government effectiveness.

1. Introduction

In a growing body of literature in the fields of political science, economics, and environmental studies, scholars debate the effect of democracy on environmental degradation. At the core of this debate is the question of whether democracy increases the likelihood of successful collective action outcomes and hence reduces environmental degradation, or rather has negative effects on the environment. Some scholars have been skeptical of the current (liberal) democracy, arguing that it is too strong; i.e., indiscriminately obeying the public's unwillingness to adopt environmentally healthy behaviors [1–4]. Others instead assert that it is too weak in the sense that it is *not* primarily guided by the will of the people but by other (read corporate) interests [5–11]. Yet other theorists claim that liberal democracy may be rather well suited to cope with environmental degradation—especially in cases in which a healthy environment is considered a citizen's right [12–15].

Empirical evidence regarding democracy's vicious or virtuous effects on the environment is conflicting, as some studies find positive effects, others reveal negative effects, and yet others find no effects at all [16–19]. Despite the conflicting results, policy makers and donors have been quick to side with the scholars emphasizing the benefits of democracy. But at the same time, even among policy makers, there are concerns that successful implementation of the instrumental mechanisms of democracy (e.g., multi-party elections) may not automatically be accompanied with the creation or strengthening of the necessary institutions, civil society, political culture, etc., held to be indispensable to foster true accountability and political participation [20–22]. This has in turn motivated a closer look at whether democracy as an ideal should perhaps be more clearly distinguished from the process of democratization. According to such logic, democracy does not have any positive effects until it has consolidated. In fact, we should instead expect that environmental degradation remains more or less equally severe in young democracies as in non-democratic countries. In addition, such findings have influenced research not only to emphasize the *input* side of political systems but also (or in some cases almost exclusively) the *output* side [23,24]. In line with the latter, democracy should generally be expected to have a significantly weaker effect than the quality of government, an impartial bureaucracy, and other *administrative* aspects of the political system.[1]

This article aims to critically examine whether any of these conflicting theoretical and empirical propositions have any bearing on the case of *over-fishing in coastal countries in Sub-Saharan Africa*.

There are several reasons for this particular focus. First of all, when it comes to democracy, many of the African countries have only quite recently undergone a transition from autocracy to democracy. While this has spurred increased optimism about the

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[1] A state normally regulates relationships with its citizens on two dimensions; first, the "input" side, which concerns issues of access to public authority, and secondly, the "output" side, which refers to the way in which that authority is exercised [23].

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environment – at least in policy circles – there is clearly a lack of empirical investigation into what effects the increased levels of democracy have actually had on natural resource management in general and fisheries in particular. Hence, studying these countries over the past decades enables us not only to compare the outcome of democracy with non-democratic alternatives, but also to investigate what happens with environmental quality during such periods of transition. Second, importantly, since the democratic transition has taken place recently, data covering the period of transition are available for detailed analysis. Third, similar to other natural resources, fishery can be seen as an indicator of states' capacities to regulate the use of natural resources and to foster compliance.

More specifically, the aim of this article is thus to study what effects are found of (1) levels of democracy, (2) democratic maturity, and (3) countries' bureaucratic and administrative performance (quality of government) have on levels of overfishing in coastal countries in Sub-Saharan Africa.

The remainder of this article proceeds as follows: The next section presents the review of the political-theoretical literature on the relationship between democracy and the environment more thoroughly. Section 3 presents the time-series cross-sectional dataset used, elaborates the models and introduces dependent and independent variables. Section 4 covers the time-series-cross-section analysis performed and presents the major findings. Section 5 concludes the article by shortly summing up and discussing the main implications of the results.

2. Democracy and the environment

Within environmentalist circles, the 1960s and 1970s are today often depicted as the "era of the apocalypse" [25,26]. This expression originated from the argument of early vindicators who claimed that, without significant changes in human behavior (e.g., in terms of industrial metabolism, agriculture, exploitation of natural resources, and birth rates), the Earth would more or less collapse within the relatively near future. In 1972, representatives of the influential environmental think tank, Club of Rome, wrote the following:

> "*If the present growth trends in the world population, industrialization, pollution, food production and resource depletion continue unchanged, the limits to growth on this planet will be reached sometimes within the next hundred years*" [27, p. 23].

Environmental politics must thus quickly undergo dramatic shifts toward sustainable development. This will, obviously, require enormous political resources and far-reaching authorities, something that *liberal democracy* – the political system presently dominating the Western (and by far the most resource-demanding) part of world – completely lacks [28–30]. Over the years, therefore, a typical conclusion has been that democracies need to be exchanged for more authoritarian political systems with the capacity to reorient society away from large-scale environmental destruction, something citizens in liberal democracies are incapable of doing if left to act freely [1–4,31,32].

This apocalyptic and authoritarian direction has, however, been challenged by environmentalists who are also critical to liberal democracy but who plead for more rather than less democracy (founded in a genuine belief in ordinary people's willingness to contribute to a healthier environment), typically in the form of decentralized, participatory or deliberative democracy [5–11]. This is because, according to them, the problem with liberal democracy is not that it offers too much liberty for their citizens (and thus presents the option to escape individual environmental responsibility if they choose to), but that the political power within liberal democracies is too inter-connected with industry and trade interests, implying a systematic overlooking of issues such as environmental quality. Instead, a system allowing citizens a stronger political voice is needed, since ordinary people are assumed to care more about the environment than do corporates and other business interests.

There is, however, also a limited group of theoretically oriented scholars who actually *defend* liberal democracy. They argue that liberal democracy certainly can be compatible with environmental concerns and that no other political system is better equipped to guarantee human rights. This is crucial because many of the most fundamental human rights that we associate with democracy (e.g., the right to free speech, the right to a free press, and even the right to a healthy environment) are all argued to be essential building blocks for well-functioning protection of the environment and for the generation of a sustainable development at large [9,12–15,33–36].

These different propositions have, to various degrees and on various levels, been translated into empirically testable arguments. For example, the argument that stronger political voice among citizens and interest groups leads to a better environment has undergone rather thorough empirical investigation. Research on the management of local common pool resources especially has showed that in many (but far from all) cases, increased participation among involved interests tends to result in more sustainable resource management [37–39]. Moreover, a number of macro-oriented studies have investigated the effects of democracy on the environment by using various indices of democracy and measures of environmental performance. Normally, in these large-*N* studies, the dependent variable – the environment – is operationalized as relative resource scarcity or environmental amenities; e.g., safe water [40]. Other scholars instead focus on human activities potentially detrimental to the environment. Li and Reuveny, for example, find a positive effect of democracy on five aspects of human-induced environmental degradation – carbon dioxide emissions, nitrogen dioxide emissions, deforestation, land degradation, and organic pollution in water [41]. On the other hand, using six measures of environmental protection or degradation – carbon dioxide emission, deforestation, soil erosion by water, protected land area, freshwater availability, and soil erosion by chemicals – Midlarsky finds that democracy has a positive effect only in respect to protected land area, whereas the effects on the other dependent variables are either negative or negligible [18].

Taken together, existing empirical studies display an ambivalent position in regard to democracy and environmental performance. Some argue that democracy is a plague for environmental performance, while others consider it a prerequisite. The first hypothesis to test is thus

H1. *The more democratic a country is, the more successful it is in terms of environmental performance.*

The conflicting and puzzling empirical results accounted for above have in turn spurred researchers to, on one hand, distinguish more clearly between democracy as an ideal and the process by which countries move from autocracy to democracy, and, on the other hand, distinguish between the "input" and the "output" side of the political systems.[2] The first strand of research argues that, in newly democratized countries, democracy is in many cases no more than an empty shell lacking the necessary (especially informal) institutional arrangements needed to foster true participation and accountability. Democratization, in terms of the

[2] It should be made clear that these aspects of democracy are completely neglected in the political-theoretical and principally Western-world-oriented literature on democracy and the environment that we accounted for above and could potentially expand on that debate.

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