

## ***Interactive comment on “The nexus of oil, conflict, and climate change vulnerability of pastoral communities in Northwest Kenya” by J. Schilling et al.***

**J. Schilling et al.**

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Authors: We thank the Reviewer for her positive and constructive comments and suggestions.

Reviewer: 1) The article is good in bringing out most of the issues that could be conflictive in relation to the development of oil in Turkana. It perhaps stresses the negatives and does not explore potential positives that much.

Response: We thank the Reviewer for acknowledging the paper's contribution to identifying the conflictive issues associated with the oil development. The (potentially) positive aspects of oil, including employment opportunities, improved water situation for the

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communities (at least in the short term), new and improved infrastructure, investments into education and cash payments to the communities are mentioned and discussed (see sections 1, 3.1.1, 3.1.3 and 4). In the conclusion section “new economic opportunities and infrastructure improvements” (p.1185, l.20) are particularly stressed including the potential “to reduce the vulnerability of communities to climate change” (p.1185, l.21). A statement by the Member of Parliament for Turkana South has been added in section 3.1.3, stressing the potential of oil to act as a “boost” for the economy. We hence believe that the (potentially) positive aspects and opportunities of the oil development are now sufficiently covered in the paper.

Reviewer: On the latter, the article could benefit from addressing two issues: 1) the recent discovery of water in Turkana; 2) the ongoing process of Devolution in Kenya and how that is affecting/will affect Turkana.

Response: These are indeed relevant issues. To 1): During interaction with the communities the discovery of the aquifers did not come up. However, they were mentioned at the county government level. We have now included a paragraph on the aquifer based on our interview with the Governor of Turkana County and consulted secondary sources to describe the potential of the aquifer and the latest status of its exploration (see end of section 3.1.1 and Conclusions). To 2): A paragraph on devolution has been added to the section on adaptive capacity (3.1.3) and the issue has again been addressed in the Conclusions.

Reviewer: On the discovery of water reservoirs in Turkana, the Sensitivity section of the article talks about the potentially negative effects of oil discoveries on water. Maybe there should be a line or two about the new reservoirs, this is a positive development. Linking the new oil and the water discoveries, would open up questions that the article could explore, or at least mention, such as: In the process of developing the infrastructure to produce the water: would there be room for thinking of adopting contingency measures for preventing oil spills from contaminating the water? Is anyone thinking about this?

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Response: A paragraph on the aquifer has been added to the section on sensitivity (see also response above). The issue of oil pollution has now been addressed in a paragraph on the national environmental policy in Kenya (see 3.1.2). The paragraph shows that the government is recognizing this issue but that it has not taken specific measures (such as developing a national policy on toxic and hazardous substances).

Reviewer: On Devolution: Kenya is now trying to address many of the institutional failures which the article mentions. Turkana has been long forgotten by the government as the article rightly says. But Kenya is trying to address this issue through Devolution. In 2013- 2014, the first year of the implementation of Devolution, Turkana received the third largest transfer of devolved funds from the central government. During the second year of Devolution, Turkana is expected to also be among the most benefited counties. This is because Devolution is aimed at making the system more equitable by benefitting counties which, like Turkana, have been historically forgotten. So the main issue now in Turkana is not so much if they have resources, but why aren't these being distributed more equitably among the population?. There is a problem with resource allocation, which is also trying to be addressed through Devolution and it is hoped will be improved throughout the years as Devolution is further perfected.

Response: A paragraph on devolution has been added to at the end of section 3.1.3 (Adaptive capacity). The paragraph mentions the financial benefits Turkana has been and will be receiving from the county devolution fund. Implications of those benefits are briefly discussed.

Reviewer: 2) Perhaps the report could talk a bit about communication and transparency issues. It addresses the problem of high expectations among the Turkana population. They expect to get jobs from the oil industry. But the oil industry is not labor intensive. Has anyone told them this? Tullow says they have. Is the oil company the right stakeholder to inform the population about issues of such importance? What about the government? Tullow says they are very open and transparent: does this show from talking to Turkanas?

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Response: Indeed communication and transparency issues are central to the conflict dynamics between the communities and Tullow. We have discussed both issues, mainly in section 3.2.1. For example we discuss the role of the community liaison officers and the limited transparency Tullow shows when communicating official employment figures. We have added a sentence stating that neither Tullow nor representatives of the Kenyan government have clearly told the communities about the limited demand for unskilled labor (see 3.2.1, end of second paragraph after Table 1).

Reviewer: 3) The article could benefit from including a discussion on two other sources of conflict related to oil: weapon proliferation and geopolitical differences. IN the first case, the Small Arms Survey has done some research on the proliferation of weapons Northern Turkana. On the geopolitical issue, Somalia shares its sea platform with Kenya and there are differences between the two countries on the location of deep water resources.

Response: Weapon proliferation makes the existing communal conflicts more violent but we do not see this as a cause of conflict itself. We have now mentioned the issue of gun proliferation in section 2.1 (first paragraph), giving reference to the latest Small Arms Survey. We believe that the geopolitical dimension between Kenya and Somalia is beyond the scope of this paper and would hence suggest to not include it explicitly. We however point to the geopolitical dimension as part of the new paragraph on the LAPSSSET project (section 2.1).

Reviewer: 4) I have attached an article I wrote in 2013 that brings out some of these issues: Patricia I. VASQUEZ, 'n Kenya at a Crossroads: Hopes and Fears Concerning the Development of Oil and Gas Reserves 'Zz, *International Development Policy | Revue internationale de politique de développement* [Online], 4.3 | 2013, Online since 12 November 2013, connection on 08 September 2015. URL : <http://poldev.revues.org/1646> ; DOI : 10.4000/poldev.1646

Response: We thank the reviewer for pointing us to this very interesting and relevant

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article. It has been incorporated into the discussion of the results and cited several times in the manuscript (see for instance sections 1, 3.1 and 3.2).

Reviewer: 5) On page 1175, there is a reference to black smoke caused by oil extraction". But oil extraction has not yet started in Turkana. You may need to double check what this refers to.

Response: This has been corrected to "oil exploration site".

Reviewer: The article links oil developments with "direct" employment in several parts (see page 1173). Again, I'd be cautious in making this linkage because the oil industry is not labor intensive. There are many indirect sources of labor.

Response: The manuscript clearly states that "the direct employment of Turkana in the oil sector has been minimal" (page 1179). The statement on page 1173 has been revised.

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