

## Political Economy of Natural Resource Management

### 1 Introduction

A large literature associates natural resource wealth with adverse economic and political outcomes.<sup>1</sup> Social science research suggests that there are subtle complementarities between institutional strength and resource dependence. On the one hand, while resources can have an adverse effect on institutions, the effects of natural resources are most detrimental when institutions are already weak --- states that have developed stronger institutions prior to resource discovery often fare better (Robinson et al. 2006). On the other hand while weakened states may become more dependent on natural resource revenues, investments are greater in institutionally stronger environments (eg Cust, James, and Torfinn Harding 2014). This suggests that **a good way to both develop resources and avoid adverse effects is to strengthen the institutional environments more generally**. Even still, there are macro and micro considerations specific to the sector,

**Macro level issues.** Many of the critical decisions around the management of natural resources take place at a high level, in auctioning processes, contract negotiations, expenditure and saving decisions, income smoothing decisions and so on. At this level, political economy considerations suggest putting in place institutional structures that provide incentives to political actors to act in a transparent manner and steer clear of major abuses (see Humphreys, Sachs and Stiglitz 2007). Such innovations are intended to counter incentives for government to spend too quickly, to embezzle revenue or to allocate funds to ensure political survival rather than general welfare.

**Micro level issues.** At the more micro level, specific problems associated with natural resource dependence include:

- Weakened tax gathering, weakened state-society linkages (McGuirk, 2013)
- Local grievances arising from unequal distribution of costs and/or benefits of natural resource production between sub-national regions (Asal et al., 2015).
- Risks of conflict financing, e.g. through illicit mining, “rebel taxation”, bunkering (Fearon 2004)
- Rival service provision by producing companies that may crowd-out the state
- Weakening of legislatures and bureaucracies relative to executives (Besley & Persson, 2010)

Careful micro level research has provided insights on the relationship between natural resources and conflict. For example, studies find strong evidence that oil is more likely to spark conflict when oil prices are high (Dube 2013), when it is found in regions that are poor relative to the national average (Østby et al. 2009) and populated by marginalized ethnic groups (Basedau & Richter 2014), especially when the ethnic group with grievances is highly concentrated (Morelli & Rohner 2014). Micro level research has also been contributing also to broader debates related to oil and governance. For example, Vincente (2010) demonstrates that oil discoveries alter voter beliefs about vote buying and

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<sup>1</sup> We note though that although a large literature points to the problem of natural resources, there is still some disagreement in the literature regarding how real the problem is --- the basic concern being that it may be the case that countries that are weak for reasons unrelated to natural resources are unable to generate economies robust enough to graduate from resource dependency (see Brunnschweiler and Bulte).

corruption, and Broilo et al. (2013) find that fiscal revenue windfall, associated with oil royalties, has increased corruption and rent-seeking at the local level. Finally, Paler (2013) demonstrates experimentally that citizens' demand for transparency is weaker when government revenue is mostly derived from oil as compared to taxes.

**Research on Interventions.** Very little work at either the macro or micro level finds evidence to support particular interventions to address problems associated with natural resources. A disproportionate share of this literature is focused on understanding the effects of natural resources (see for example recent review by Ross 2015). By contrast, only a very small share of the current literature is focused on testing possible solutions. In particular, although 3ie has recently funded research in this area, there are currently almost no experimental or quasi-experimental studies assessing the effects of interventions aimed at alleviating adverse governance effects of natural resource abundance. This lacuna should be addressed by the next generation of research on natural resources and governance.

**SDGs.** There are multiple points of linkage between the problem of sustainably managing natural resources and the SDGs (e.g., Target 12.2 By 2030, achieve the sustainable management and efficient use of natural resources). Within Goal 16 in particular there are obvious links to four targets:

- Substantially reduce corruption and bribery in all their forms
- Develop effective, accountable and transparent institutions at all levels
- Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
- Significantly reduce all forms of violence and related death rates everywhere

## 2 Key Questions

Research on micro level processes suggests a set of questions around possible interventions in this sector.

1. How to strengthen citizen/state linkages and reduce corruption and grievances around the oil sector? What are the effects of greater **transparency** and of different forms of **public engagement in national policy making**?
2. Can **local engagement of stakeholders** (affected communities, oil extraction firms, local government and civil society groups) reduce local grievances?
3. How can the **oversight** role of legislatures and civil servants be strengthened? Does investment in the managerial and planning **skills** of local bureaucracies improve the utilization of oil transfers to decentralized sub-national units?
4. Do **local investments** by firms waylay local grievances, or exacerbate them by (say) creating new benchmarks for service provision quality?
5. Can **direct distribution** of resource revenues (e.g., cash transfers) reduce corruption and popular grievances?

## 2.1 Interventions and outcomes

Research projects addressing these core questions are summarized below. These are nearly all in progress.

Problem	Possible Interventions	Experimental Evidence
1 How to strengthen citizen/state linkages and reduce grievances around the oil sector?	Public engagement in decision making around extraction and compensation	Coleman et al (3ie grant) will assess whether multi-stakeholder consultations improve accountability. (In Progress)
	Deliberation in decision making	Birdsall et al, Vicente et al (In Progress). Humphreys et al (2006), National deliberations produced weak information on citizen preferences and had little impact on national decision-making.
	Better information about oil revenues/contracts, e.g. through training of journalists /NGOs Disseminate information about use of oil revenues	None exists? Inkoom et al (KITE), (3ie grant) will assess the effects on local accountability (In Progress)
2 Can local <b>engagement of stakeholders</b> reduce local grievances and strengthen oversight of corporations?	Provide public with greater information about behavior of firms, including local investments by firms	Sudarshan et al. (3ie grant) will assess the effects of publically disclosing information on firm behavior on firm practices. (In Progress)
		Pellegrini et al (3ie grant) provide communities with information on levels of water contamination (In Progress)
3 How can the <b>oversight</b> role of legislatures and civil servants be strengthened?	Trainings of legislature on oversight of contracting and management	None exist?
4 Do <b>local investments</b> by firms waylay local grievances	Firm investments	Many case studies but no experimental evidence.
5 Does <b>direct distribution</b> of revenues counteract corruption and reduce grievances?	Direct distribution of revenues	None. However there have been many studies on cash transfers with many positive results (Fiszbein, 2009)

Note: Information on the 3ie grantees can be found here: <http://tinyurl.com/3ie-NRW>

## 3 Priorities for Discussion

This is an area where the knowledge base from experimental and quasi-experimental research is weak. This is partly a function of the inadequacy of these tools to assess the effects of institutions and policies that operate at a high level.

**Discussion question #1:** What high level interventions could be examined rigorously? High-level interventions may be hard or impossible to implement with random variation. However, possibilities might include the effects of providing technical support for elaborating natural resource legislation (requires cross country variation), the effects of providing technical support to contract negotiation (cross-contract variation), providing support to enhance sector level transparency (e.g. through the development of national information offices). In principle any of these are possible though they may not all be politically appropriate and many might suffer from weak statistical power.

**Discussion question #2:** What priority micro interventions to focus on? The most innovative interventions, such as the distribution of cash directly to citizens, require government action and could, and should, only be systematically examined in pilot studies. Two types of interventions that could be more easily scaled and tested are interventions to enhance **citizen oversight of extractive firms**, and interventions to **enhance oversight of government**.

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