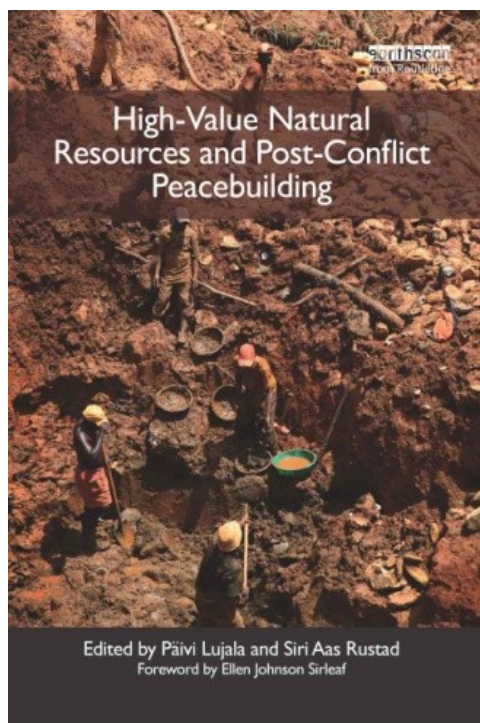


This chapter first appeared in *High-Value Natural Resources and Peacebuilding*, edited by P. Lujala and S.A. Rustad. It is one of 6 edited books on Post-Conflict Peacebuilding and Natural Resource Management (for more information, see [www.environmentalpeacebuilding.org](http://www.environmentalpeacebuilding.org)). The full book can be ordered from Routledge at <http://www.routledge.com/books/details/9781849712309/>.

© 2012. Environmental Law Institute and United Nations Environment Programme.



**Horizontal inequality, decentralizing the distribution of natural resource revenues, and peace**

**Michael L. Ross, Päivi Lujala, and Siri Aas Rustad<sup>a</sup>**

<sup>a</sup>*University of California, Los Angeles (UCLA), Norwegian University of Science and Technology (NTNU)*

Online publication date: June 2012

Suggested citation: M. Ross, P. Lujala, and S. Rustad. 2012. Horizontal inequality, decentralizing the distribution of natural resource revenues, and peace. In *High-Value Natural Resources and Peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.

Terms of use: This chapter may be used free of charge for educational and non-commercial purposes. The views expressed herein are those of the author(s) only, and do not necessarily represent those of the sponsoring organizations.

# Horizontal inequality, decentralizing the distribution of natural resource revenues, and peace

*Michael L. Ross, Päivi Lujala, and Siri Aas Rustad*

High-value resources such as oil and minerals are often unequally distributed within countries. When the distribution happens to coincide with ethnic, religious, or other divisions between groups, real or perceived inequality—known as *horizontal inequality*—may result, creating potential grounds for grievances. In Niger, for example, mineral revenues are siphoned to the capital, and little is invested in the region from which the revenues originate. This practice has created grievances among the Tuareg, the nomadic people whose ancestral lands encompass the mining areas. In other cases, the “aggrieved” parties are privileged groups. For example, Santa Cruz Department—one of the wealthiest states in Bolivia—has sought greater autonomy, out of a growing reluctance to share gas revenues with the poorer states. Unsurprisingly, many resource-rich countries are plagued by secessionist movements pursuing a radical approach to decreasing (or increasing) horizontal inequality.

Decentralization of natural resource revenues has become a common means of easing and preventing horizontal inequality, both within and outside the post-conflict context. In the case of oil and other mineral rents, there appears to be a global trend toward decentralization (Brosio 2003). Decentralization has also gained some momentum in peacebuilding processes, where it is a popular option among policy makers because it is politically feasible and helps to manage regional grievances. In the processes that led to the signing of peace agreements in Sudan, for example, decentralization of revenues played a central role.<sup>1</sup> Nevertheless,

---

Michael L. Ross is a professor of political science at the University of California, Los Angeles (UCLA), and director of the UCLA Center for Southeast Asian Studies. Päivi Lujala is an associate professor of geography at the Norwegian University of Science and Technology and a senior researcher at the Centre for the Study of Civil War at the Peace Research Institute Oslo. Siri Aas Rustad is a researcher at the Centre for the Study of Civil War at the Peace Research Institute Oslo. This chapter was adapted from Michael L. Ross, “How Can Mineral Rich States Reduce Inequality?” in *Reversing the Resource Curse*, ed. Macartan Humphreys, Jeffrey Sachs, and Joseph Stiglitz (New York: Columbia University Press, 2007). The authors would like to acknowledge the assistance of Heather Croshaw of the Environmental Law Institute.

<sup>1</sup> For a description of these two processes, see Achim Wennmann, “Sharing Natural Resource Wealth during War-to-Peace Transitions,” in this volume.

## 252 High-value natural resources and post-conflict peacebuilding

decentralization can also have serious drawbacks, which should be carefully assessed beforehand.

This chapter focuses on the role of decentralizing natural resource revenues in promoting peacebuilding, particularly where horizontal inequality has played a role in the conflict.<sup>2</sup> Although decentralization can take a number of different forms, the focus in this chapter is on distributing the revenues to the regions from which the resources were extracted. The chapter is divided into three main sections: (1) a consideration of the links between mineral wealth, horizontal inequality, conflict, and peacebuilding; (2) a discussion of the benefits and obstacles associated with various approaches to decentralization; and (3) a brief conclusion.

### RESOURCE WEALTH, HORIZONTAL INEQUALITY, CONFLICT, AND PEACEBUILDING

If producing areas are onshore and concentrated in one or a few parts of the country, a booming natural resource sector may affect the geographical distribution of income. The strength and direction of this effect will depend on three factors:

- Initial incomes in the extractive region.
- The strength of the connections between the resource sector and other economic activities.
- The ability of the subnational government to capture income from the resource sector.

If the producing region is poor, resource wealth can help to close any gaps between that region and the rest of the country; if it is relatively rich, resource wealth can widen gaps. If extraction facilities operate as enclaves and the regional government has no taxing authority, then a booming resource sector may have little or no impact on regional living standards. But if the extractive sector is strongly connected to the local economy or if the local government can tax resource revenues (either directly or indirectly), resource wealth can sharply boost regional employment and wages and increase local revenues.

While an increase in the region's actual income may be good, a disproportionate rise in income *expectations* may pose problems. People are dissatisfied with their income, no matter how large it is, if it falls short of their aspirations (Frey and Stützer 2002); a large gap between real and expected income can thus lead to political and social unrest. Such gaps are exceptionally risky in areas where revenues accrue to the central state rather than to the local government, and the producing regions are geographically peripheral, have little influence over the central government, and are populated by people with a distinct ethnic

---

<sup>2</sup> In a completely centralized system, natural resource revenues are distributed strictly on the basis of various criteria, including needs and national development plans, and producing regions receive no preferential treatment.

or religious identity, as in Niger. In these cases, the discovery and exploitation of natural resources can lead to frustration over unrealized expectations, even if no measurable adverse effects on income or income distribution occur (Østby, Nordås, and Rød 2009; Stewart 2000). As Paul Collier and Anke Hoeffler have noted, the “allure of claiming ownership of a natural resource discovery” can encourage populations in peripheral regions to favor independence (2006, 39).

The notion that frustration over unrealized expectations may spark or facilitate conflict is supported by statistical studies that have found a relationship between the production or export of oil, gas, and precious stones and armed civil conflict.<sup>3</sup> In many cases, such conflicts concern the autonomy of a resource-rich region. Table 1 lists ten examples of violent separatist movements in regions with significant oil, gas, or other natural resource wealth. Although none of the movements developed solely in response to the presence of resource wealth, in each case separatists appeared to believe that resource revenues would increase the benefits, or lower the costs, of independence.

**Table 1. Oil, gas, and mineral resources and secessionist movements**

Country	Region	Duration of secessionist movement	Resources
Angola	Cabinda	1975–2002	Oil
Myanmar	[Hill tribes] <sup>a</sup>	1983–1995	Tin, gems
Democratic Republic of the Congo	Katanga	1960–1965	Copper
Indonesia	West Papua	1969–present	Copper, gold
Indonesia	Aceh	1975–2005	Natural gas
Nigeria	Biafra	1967–1970	Oil
Papua New Guinea	Bougainville	1988–1997	Copper, gold
Sudan	South	1983–2005	Oil
Yemen	East and south	1994	Oil
	Western Sahara <sup>b</sup>	1975–1988	Phosphates, oil

a. The Hill tribes are concentrated in the states of Kachin, Rakhine, and Shan, and the district of Sagaing.

b. Western Sahara is a disputed territory in North Africa. Parts of it have been or currently are recognized by different political entities as (1) the sovereign state of the Sahrawi Arab Democratic Republic, (2) part of the state of Morocco, or (3) a non-self-governed territory.

Just as horizontal inequalities and group expectations regarding “fair” shares of resource revenues motivate and facilitate conflicts, they also play a central role in peace negotiations. Some expectations are unrealistic and cannot be met; others are fair but are not (or cannot be) addressed by the state because of corruption, lack of institutional capacity, or lack of political will. Given the risks associated with horizontal inequality, addressing such inequality, whether real or perceived, is vital for preventing new outbreaks of conflict, particularly where the distribution of natural resource revenues has been one of the driving forces

<sup>3</sup> See, for example, Collier and Hoeffler (2006), Lujala (2010), and Ross (2004).

## 254 High-value natural resources and post-conflict peacebuilding

of previous conflict. One strategy for offsetting expected increases in horizontal inequality or mitigating existing inequality is to decentralize resource revenues.<sup>4</sup>

### APPROACHES TO REVENUE DECENTRALIZATION

Subnational governments may receive decentralized mineral revenues in three ways:

- They may levy taxes directly on the resource industry.
- They may receive a direct transfer from the central government that is a defined share of the revenues originating in the region. Each oil-producing state in Nigeria, for example, receives 13 percent of the oil revenues generated in that region.
- They may receive indirect transfers—through the national budgeting process—that reflect preferential treatment for producing regions.

Although all three approaches have decentralizing effects, they vary in the degree of decentralization. In the least decentralized approach, in which the region receives transfers from the central government after the revenues have passed through the national budgeting process, distribution is based on criteria such as population, equity, needs, and the national interest, although the producing area is given preferential treatment. One of the countries in which this approach has been used is Indonesia, which eventually adopted a more direct approach to decentralization. In the more decentralized approaches, local governments may directly tax the mineral industry or may receive transfers of defined shares of the central government's resource revenues, on the basis of a set formula.

The two most decentralized approaches have a number of serious drawbacks:

- If the local economy is overly dependent on its resource base, it may simply be too small to be insulated from the economic impact of sharp and sudden changes in the international prices of raw materials.
- Post-conflict countries often suffer from weak institutions and state capacity. Local institutions in conflict-ridden areas are particularly likely to be weak, which exacerbates the potential risk associated with volatile resource revenues. Specifically, local governments may lack the capacity (1) to implement counter-cyclical fiscal policies—that is, to adjust their economic policies to protect

---

<sup>4</sup> In addition to decentralization, governments can use many other approaches to narrow the gap between actual and expected incomes in resource-rich regions, including creating incentives to hire local workers, restricting the migration of workers to extractive regions, investing in local development, using nongovernmental organizations to mediate between local communities and extractive companies, promoting transparency, and distributing revenues directly to the population. For more information on direct distribution, see Martin E. Sandbu, "Direct Distribution of Natural Resource Revenues as a Policy for Peacebuilding," in this volume.

themselves from boom and bust cycles—and (2) to balance the budget, so that income equals expenditures over time.<sup>5</sup>

- Subnational governments have a lower capacity than national institutions to efficiently absorb the new investments made possible by resource revenues.
- Subnational governments rarely have the administrative capacity to impose taxes and are less able to administer complex types of taxes or to tax large foreign firms.
- When subnational governments impose their own taxes or royalties, they may create inefficiencies by overlapping with national levies.

The least decentralized approach—indirect transfers from the central government—has several advantages:

- The job of handling the transfers could be delegated to a specific ministry whose capacity for dealing with this particular task could be built up.
- Local governments would not have to engage in budgeting, manage spending, or create or strengthen local taxation capability.
- Payments would be stable and able to withstand fluctuations in commodity prices. (For example, the payment could be a fixed annual fee that is corrected for inflation.)
- Particularly in post-conflict settings, transfers could take the form of schools or other infrastructure projects, thus serving as peace dividends.

Nonetheless, a case can be made for the two most decentralized approaches to revenue distribution, particularly in the post-conflict context. Subnational governments are clearly entitled to revenues that would provide compensation for the social, environmental, and infrastructure costs associated with extraction—and in some cases they may even be entitled to compensation for damage caused by conflicts over resources. Moreover, decentralized distribution addresses the issues of self-determination and resource control that concern the inhabitants of some regions, such as Nigeria's Niger Delta.<sup>6</sup> In the short run, the more decentralized approaches may have a political advantage in helping to sustain a peace agreement, as is the case in Sudan. Secessionist movements in particular, which are typically mistrustful of the central government, need reassurance that they will receive the revenues that were promised during peace talks. Granting taxation rights or allowing direct transfers—neither of which have the opacity associated with funds that have been first circulated through the central government budget—may help create such reassurance. In fact, the most centralized option

---

<sup>5</sup> On these points, see Ahmad and Mottu (2003), Bahl (2001), Brosio (2003), and McLure (2003).

<sup>6</sup> For more information on the conflict in the Niger Delta, see Annegret Mähler, "An Inescapable Curse? Resource Management, Violent Conflict, and Peacebuilding in the Niger Delta," in this volume.

## 256 High-value natural resources and post-conflict peacebuilding

is likely to work only where there is a high degree of trust, which is in short supply in many post-conflict situations.

Of course, establishing a distribution system that is based on a specific revenue-sharing formula or on the right to levy taxes does not guarantee its success. In the years following the 2005 peace agreement in Sudan, southern Sudan was entitled to 50 percent of revenues from oil wells located in southern Sudan; suspicions remain, however, that the sums allocated to the region have not followed the formula laid out in the peace agreement (Global Witness 2009). Nor does decentralization guarantee peacebuilding success: according to Binningsbø and Rustad (2010), wealth-sharing arrangements do not increase the likelihood of long-term peace.

Bargaining with subnational governments about the size of transfers can also be an arduous process. The division of oil revenues is a zero-sum game in which every state and local government wants as much as it can get: there is no allocation formula that everyone will think is just. Accommodating the claims of some groups may increase the inequality of distribution between groups or strengthen group identities, sowing the seeds of new or renewed conflict. Finally, if it becomes clear that pressing a claim is effective, other groups in other regions may be encouraged to press theirs as well, in order to gain a higher share of the resource revenues originating in their area.

Ahmad and Mottu (2003) have argued that in the case of oil, the best arrangement is centralization of all revenues, with carefully designed transfers to subnational governments. Recognizing that this arrangement is often politically unattainable, their second-best alternative is to allow subnational governments to levy relatively small, stable types of petroleum taxes—such as production excise taxes—while the national government levies taxes and royalties that capture more volatile forms of revenue.<sup>7</sup> Ahmad and Mottu prefer this approach to direct transfers—which, in their view, allow subnational governments to avoid accountability, complicate macroeconomic planning, and fail to provide subnational governments with stable financing for local public services, all of which are relevant concerns in the peacebuilding context.

Brosio (2003), in contrast, views direct transfers as the second-best alternative to centralization of oil revenues, arguing that the process of collecting and administering taxes makes it more difficult to equalize revenues across subnational jurisdictions; impinges on national energy policy by affecting production decisions; and is too complex for most subnational governments to carry out, at least in developing states. And since the taxation capacity of local governments in a war-torn region may be nearly nil, taxation may not be an option at all.

Although centralized distribution may be the best choice, particularly over the long term, it may be untenable in post-conflict settings because of lack of trust and willingness on the part of producing regions. In such cases, the government

---

<sup>7</sup> Production excise taxes are based on the volume of production, rather than on profits or level of exports—and are hence easier to calculate and to collect.

should try to adopt a more decentralized distribution system that addresses the challenges discussed earlier in the chapter. Specifically,

- The system should be designed to minimize the volatility of subnational revenues and should be based on a formula that is stable over time, so that the issue of distribution will not be constantly revisited.
- The revenues should be accompanied by expenditure responsibilities, so that the additional revenues are directed toward public goods.
- Measures should be taken to limit inefficiencies created by overlapping tax bases.
- The revenue flows should be publicly announced, fully transparent, and regularly audited to increase scrutiny and reduce opportunities for corruption.
- To build trust and avoid disillusionment, both the national and local governments should be held accountable for the receipt and use of the funds.
- The system should not exacerbate existing regional inequalities.

Whichever decentralization method is chosen, it is important to ensure that the agreed-upon sums are in fact transferred and that the receiving local government is accountable for their use. All stakeholders can play a role in making the revenue distribution successful, particularly in the areas of transparency and trust building. In particular, national and international NGOs can serve as monitors, as pressure groups, and as sources of independent statistics on transfers that may inspire greater confidence, among members of local communities, than the data generated by the government. Extractive firms, for their part, can promote transparency by publicly releasing the amounts they pay to the government. Finally, humanitarian and development agencies, international financial institutions, multinational corporations, and UN peacekeeping missions can also help promote transparency and accountability.

Lack of trust between national and subnational governments can undermine the negotiation and implementation of revenue decentralization. At the local level, the national government can build trust by addressing the concerns of local stakeholders. Mining communities, in particular, are deeply affected by mineral extraction and, in some cases, by associated violent conflict. All stakeholders should be compensated for the social and environmental costs of mineral extraction, and possibly for damage caused by conflicts over resources. Local and indigenous peoples, who live on the land where extraction is occurring, deserve consideration—beginning with full recognition as stakeholders whose concerns must be addressed. Ensuring that the negotiation and design of the revenue-sharing plan take account of the needs of both subnational governments and local communities is a step toward building trust.

## **CONCLUSION**

This chapter argues that one key to success in post-conflict settings is the careful management of the impact of natural resource revenues distribution. Of the three



## 258 High-value natural resources and post-conflict peacebuilding

approaches to distributing such revenues, the two most decentralized approaches—granting taxing authority to subnational governments and transferring an appropriate share of resource revenues to local governments—have serious drawbacks; nevertheless, these approaches may be necessary to address conflict-related issues (particularly if the conflict was partially caused by perceived or real inequality in revenue or income distribution). Although the best approach is for the central government to collect all revenues and make allocation decisions, this strategy is effective only if local and regional authorities have the opportunity provide input, in order to increase accountability, transparency, and trust between institutions. In many cases, however, local communities and rebel movements are reluctant to agree to central collection and allocation of revenues, leaving the more direct approaches as the only viable alternatives.

In resource-rich regions such as Aceh, Indonesia, revenue-sharing arrangements have sometimes been important components of broader policies to reduce secessionist pressures. In such cases, some degree of decentralization may be politically necessary and desirable, but it must be accompanied by checks and balances that address the accompanying drawbacks. A less risky approach would be to adopt policies that narrow the income gap between the extractive region and the rest of the country, in conjunction with policies that reduce the gap between real and expected incomes within the extractive region. Such measures include full revenue transparency, the promotion of good corporate citizenship, restriction of migration to the extractive region, fostering the role of NGOs, and curtailing predation.

The case for giving subnational governments taxing authority or a direct share of resource revenues would be strengthened if there were evidence that these measures could help avert secessionist movements or prevent relapse into conflict, but few systematic analyses of this issue have been undertaken.<sup>8</sup> Clearly, the decentralization of natural resource revenues is a contentious and challenging issue that deserves more scholarly attention, particularly in the post-conflict setting.

## REFERENCES

- Ahmad, E., and E. Mottu. 2003. Oil revenue assignments: Country experiences and issues. In *Fiscal policy formulation and implementation in oil-producing countries*, ed. J. Davis, R. Ossowski, and A. Fedelino. Washington, D.C.: International Monetary Fund.
- Bahl, R. 2001. Equitable vertical sharing and decentralizing government finance in South Africa. Georgia State University International Studies Program Working Paper 01-6. Atlanta: Georgia State University. <http://aysps.gsu.edu/isp/files/ispwp0106.pdf>.
- Binningsbø, H., and S. A. Rustad. 2010. Sharing the wealth: A pathway to peace or a blind alley? Working Paper. Oslo: Centre for the Study of Civil War, Peace Research Institute Oslo.

---

<sup>8</sup> The few exceptions include Binningsbø and Rustad (2010); Hartzell and Hoddie (2007); and Mattes and Savun (2009).

- Brosio, G. 2003. Oil revenue and fiscal federalism. In *Fiscal policy formulation and implementation in oil-producing countries*, ed. J. Davis, R. Ossowski, and A. Fedelino. Washington, D.C.: International Monetary Fund.
- Collier, P., and A. Hoeffler. 2006. The political economy of secession. In *Negotiating self-determination*, ed. H. Hannum and E. F. Babbitt. Lanham, MD: Lexington Books.
- Frey, B. S., and A. Stützer. 2002. *Happiness and economics: How the economy and institutions affect well-being*. Princeton, NJ: Princeton University Press.
- Global Witness. 2009. *Fuelling mistrust: The need for transparency in Sudan's oil industry*. London: Global Witness.
- Hartzell, C., and M. Hoddie. 2007. *Crafting peace: Power-sharing institutions and the negotiated settlement of civil wars*. University Park: Pennsylvania State University Press.
- Lujala, P. 2010. The spoils of nature: Armed civil conflict and rebel access to natural resources. *Journal of Peace Research* 47 (1): 15–28.
- Mattes, M., and B. Savun. 2009. Fostering peace after civil war: Commitment problems and agreement design. *International Studies Quarterly* 53 (3): 737–759.
- McLure, C. E. 2003. The assignment of oil tax revenue. In *Fiscal policy formulation and implementation in oil-producing countries*, ed. J. Davis, R. Ossowski, and A. Fedelino. Washington, D.C.: International Monetary Fund.
- Østby, G., R. Nordås, and J. K. Rød. 2009. Regional inequalities and civil conflict in 21 sub-Saharan countries, 1986–2004. *International Studies Quarterly* 53 (2): 301–324.
- Ross, M. 2004. What do we know about natural resources and civil war? *Journal of Peace Research* 41(3): 337–356.
- Stewart, F. 2000. Crisis prevention: Tackling horizontal inequalities. *Oxford Development Studies* 28 (3): 245–262.