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Natural resource management for conflict risk mitigation

Natural resource abundance (and scarcity) has led to violence and instability, with an estimated 40-60% of civil wars after the Second World War having been triggered, funded or sustained by natural resources. Management of natural resources is therefore a critical factor in mitigating conflict risk and increasing resilience. The *Asia-Pacific Countries with Special Needs Development Report 2018*, which examines the multidimensional links between peace and development, highlights that better governance and effective fiscal management, particularly in the context of transparency and accountability in resource management, can result in an upward spiral of durable peace and sustainable development.

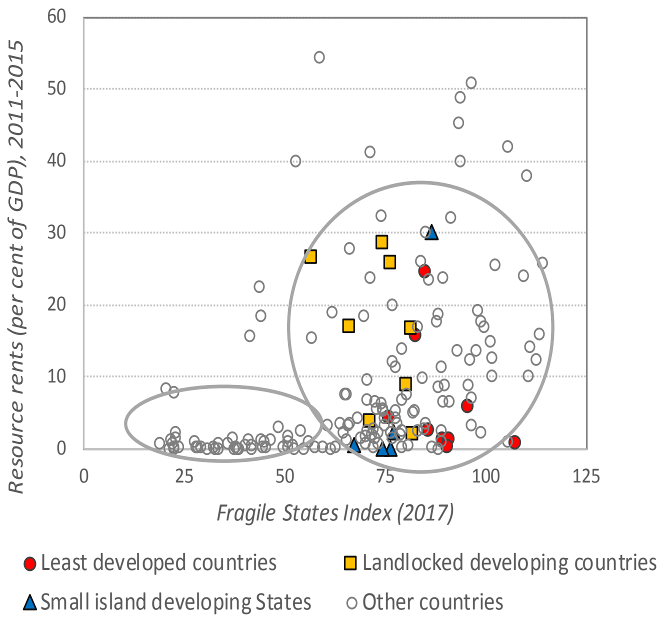
Resource abundance and conflict

The link between natural resource abundance and conflict is multi-layered. On the one hand, resource abundance could foster development due to potential revenue streams and alleviate socio-economic risk factors of conflict such as poverty and unemployment. On the other hand, rich endowments of natural resources can also increase the risk of violent conflict through, for example, competition over access to resources. The poor development performance of resource-rich economies has coined the terms “resource curse” and “natural resource trap”.

It is, however, important to distinguish between resource-dependent and non-resource-dependent countries. Thus, countries that are resource-rich and resource-dependent countries tend to be more likely to suffer from civil conflict than those that are resource-rich but have diversified economies, comprised of strong services and manufacturing sectors.[1] For instance, Australia, Bhutan, Malaysia and New Zealand, which have not experiences violence in decades, are rich in natural resources without excessively depending on them (average resource-rents amount to less than 10% of GDP).

Given the high dependence of some Asian landlocked developing countries on extractive industries, understanding the interlinkages among natural resources, development and conflict is critical. Figure 1 shows a non-linear association between resource rent-to-GDP ratios and scores of the Fragile States Index, which measures a state’s vulnerability to collapse or conflict.[2] It reveals that countries with low fragility scores tend to have low natural resource rents while many fragile States have double-digit rent-to-GDP ratios.

Figure 1. Natural resource rents as percentage of GDP and Fragile States Index



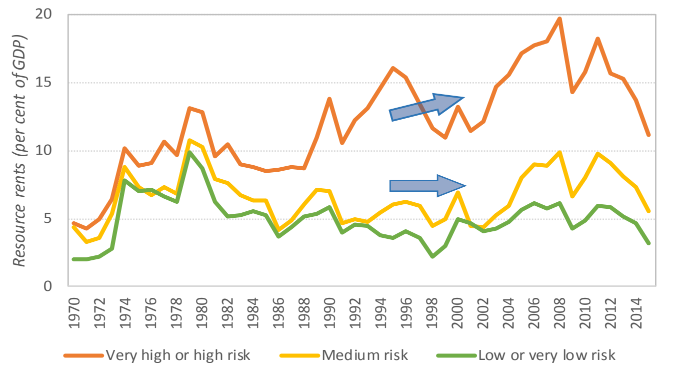
Source: ESCAP, based on resource rents data obtained from World Bank, *World Development Indicators Database*, available from https://data.worldbank.org/products/wdi; and Fund for Peace, *Fragile States Index 2017*, available from http://fundforpeace.org/fsi/. Accessed 20 November 2017.

Note: Resource rents are reported as percentage of GDP and averaged over 2011-2015.

Similarly, in countries with high risk of humanitarian crises and disasters as measured by the Index for Risk Management (INFORM)[3], natural resource rents are significantly more important (in terms of percentage of GDP) than in countries with lower risk levels (figure 2). The gap between high-risk countries and medium- to low-risk countries has, in fact, increased over time as high-risk countries have become more natural-resource dependent, whereas the levels of dependency of other countries has remained constant during the past three decades.[4]

Conflict can arise from competition over resources or unfair distribution of rents, while not all types of natural resources are considered equally risky. Insurgencies and intrastate conflicts tend to flourish in countries with rich hydrocarbon or precious metal deposits because of the potentially high returns to winners and the availability of easy finance. This is partly because many resource-dependent countries have weak institutional capacity relative to their levels of per capita income and may not have the institutional mechanisms to distribute their resource rents fairly, thus causing social grievances that lead to armed conflict. Weak governance in some of the resource-dependent countries, especially in terms of accountability, transparency and capability in service delivery, can be traced back to the colonial era when institutions were often set up to facilitate the transfer of resources out of the colonies.[5] Accordingly, they did not introduce much protection for private property, nor did they provide checks and balances against the Government.

Figure 2. Natural resource rents as percentage of GDP, by INFORM risk class, 1970-2015

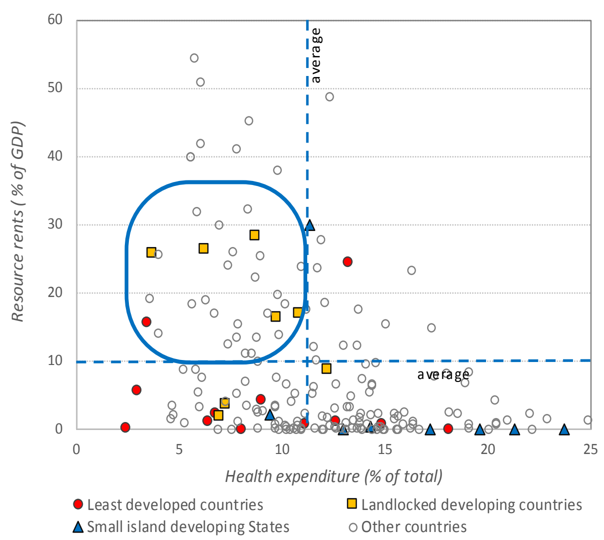


Source: ESCAP, based on resource rents data obtained from World Bank, *World Development Indicators Database*, available from https://data.worldbank.org/products/wdi; the Inter-Agency Standing Committee and the European Commission, *2018 INFORM scores,* available from www.inform-index.org. Accessed 20 November 2017.

Note: Simple group averages are reported. Risk classification is based on the 2018 INFORM scores.

Furthermore, figure 3 shows that Governments in resource-dependent countries tend to spend less on health than do other countries. Most countries with resource rents above the 9% world average have health expenditure below the world average of 11% (the upper-left quadrant of figure 3). Notably, five of the eight Asian landlocked developing countries fall within this quadrant.

Figure 3. Natural resource rents and government expenditure on health



Source: ESCAP, based on resource rents data obtained from World Bank, *World Development Indicators Database*, available from https://data.worldbank.org/products/wdi; United Nations Statistics Division, Global SDGs Indicators Database, health expenditure data, available from https://unstats.un.org/sdgs/indicators/database/

Note: Resource rents are reported as percentage of GDP and averaged over 2011-2015. Health expenditure is reported as a share of total expenditure and averaged over 2011-2015.

The implications of exclusion from benefits, rent-seeking, corruption, poor governance and underdeveloped human capital on social cohesion can be seen in the violent conflicts that have undermined sustainable development. In Timor-Leste, the absence of an effective legal framework to determine land ownership and resource usage rights, among other factors, fuelled communal violence in 2006-2007. In Papua New Guinea, weak governance of resource-based rents has been identified as the single factor most likely to undermine prospects for sustainable growth. In Kiribati, where basic development challenges related to water and sanitation persist, the Government has identified enhancing governance as one of its medium-term development priorities, particularly with greater transparency and accountability in public service delivery.

Resource scarcity and conflict

While resource abundance can be a factor contributing to conflict, resource scarcity also appears to be associated with the potential risk of conflict, particularly over the management of resources indispensable to human life and agricultural production. For example, access to freshwater can risk intra- and interstate conflict. While water-related disputes alone have rarely resulted in violent conflict, rapid population growth and the impact of environmental degradation and climate change have made freshwater scarce to the extent that insufficient water supply could cause social unrest and mass migration in addition to exacerbating the conditions that can lead to violent conflict and may drive people or States to fight over access. Among some of the Asian landlocked developing countries, scarcity and uneven distribution of water has resulted in conflict between upstream and downstream States.[6]

Access to land is also deeply connected to people's well-being and livelihoods, and a land shortage and unequal distribution of access often contribute to tensions in conflict-affected countries. For example, in Timor-Leste, the acute housing shortage for internally displaced persons (IDPs) and returnees contributed to a surge in violent conflict after the peace agreement. In Nepal, grievances over landlessness and unequal distribution were also important factors that disrupted the post-conflict recovery. Competition over land has been further aggravated by environmental degradation, urbanization, population growth and climate change in many countries in the region.

Risk mitigation policies

Mitigation of conflict risks requires better governance, particularly in the context of transparency and accountability in resource management. Governance in resource-rich countries can be strengthened by, establishing fiscal rules to report, manage and use revenues from natural resources, giving special attention to mitigating the social and environmental impacts of extractive projects. Publication of financial reporting, open access to fiscal information – such as resource revenue received – and timely audits of Government entities responsible for the delivery of public services, including state-owned enterprises, can contribute to greater transparency. Governments may also benefit from taking part in the global norm-setting efforts, such as the Extractive Industries Transparency Initiative (EITI), an agency to promote open and accountable management of natural resources. In the long-term, a conflict risk arising from natural resources can be mitigated by reducing resource dependency. Strategic diversification through the selective promotion of new economic activities with targeted industrial, infrastructural, trade and investment polies may be required if market incentives alone are inefficient to foster diversification.[7]

In countries with a shortage of resources that are vital to the lives of people, good governance through development and enforcement of legal frameworks and a transparent process for defining property rights and access to resources is critical. A system of checks and balances within Governments can also ensure enforcement of commitment decisions by state institutional intertemporally. Thus, if a State decides not to follow a previously agreed resource management scheme due to a change in that country's policy interests and economic priorities, the natural resource risk could then lead to violent conflict. If risk factors are already present, benefit sharing is a solution to overcome the contentious issue related to property rights. While operationalization of actual benefit sharing will require a combination of negotiations, cooperation and agreements, conducting a comprehensive analysis on benefits and costs of benefit sharing is a first step towards operationalization.[8] Negotiations may involve an issue-linkages strategy, under which shared benefits of resources are linked with non-resource-based issues and negotiated as a package deal. The linkages can be made in relation to financial resources, energy resources, political and other trade linkages that will encourage positive-sum solutions.

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[1] Paul Collier, Lani Elliott, Håvard Hegre, Anke Hoeffler, Marta Reynal-Queral, and Nicholas Sambanis. "Breaking the conflict trap: Civil war and development policy", *World Bank Policy Research Report,* (Washington, D.C.: World Bank, and Oxford University Press, 2003).

[2] The Fragile States Index is a measure of vulnerability of States to collapse, published by the Fund for Peace on an annual basis, based on indicators that can be broadly categorized into social, economic and political factors. See fundforpeace.org/fsi.

[3] Published and managed by the Inter-Agency Standing Committee and the European Commission, the Index for Risk Management (INFORM) measures the risk of humanitarian crises and disasters occurring by tracking the three conceptual dimensions of risk-exposure, vulnerability and coping capacity. See www.inform-index.org.

[4] This increased dependence on resources can further increase their vulnerability to humanitarian crises and disasters. Furthermore, the resource sector is usually capital-intensive and does not necessarily generate adequate decent jobs to gainfully employ the youth, which could also feed into the risk of conflict.

[5] Daron Acemoglu, Simon Johnson and James A. Robinson, "The colonial origins of comparative development: An empirical investigation", *American Economic Review*, vol. 91, No. 5, pp. 1369-1401 (2001).

[6] Zulfiya Suleimenova, "Water security in Central Asia and the Caucasus – A key to peace and sustainable development", Background paper prepared for the Asia-Pacific Countries with Special Needs Development Report 2018 (Bangkok: ESCAP, 2018).

[7] United Nations, Economic and Social Commission for Asian and the Pacific (ESCAP), *Asia-Pacific Countries with Special Needs Development Report 2015: Building Productive Capacities to Overcome Structural Challnges*, Sales No. E.15.II.F.9 (Bangkok: ESCAP, 2015).

[8] See endnote 6.

The MPFD Policy Briefs aim at generating forward-looking discussions among policymakers, researchers and other stakeholders to help forge political will and build a regional consensus on needed policy actions and pressing reforms. Policy Briefs are issued without formal editing. The content of this issue, prepared by Yusuke Tateno, is in part based on material from the Asia-Pacific Countries with Special Needs Development Report 2018: Sustainable Development and Sustaining Peace (Sales No. E.18.II.F.15). This policy brief benefited from comments by Nyingtob Norbu and Oliver Paddison, under the guidance of Hamza Ali Malik. For further information on this issue, please contact Hamza Ali Malik, Director, Macroeconomic Policy and Financing for Development Division, ESCAP (escap-mpdd@un.org).

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