



Natural Resource Federalism: Considerations for Myanmar

Andrew Bauer, Natalie Kirk and Sebastian Sahla
with contributions from
Khin Saw Htay, Ko Ko Lwin and Paul Shortell

JANUARY 2018

ACKNOWLEDGEMENTS

The authors wish to thank Khin Saw Htay, Ko Ko Lwin and Paul Shortell for their support in the research for this report. In addition, we would like to thank Nitish Arora, Aye Kyithar Swe, Sumit Bisarya, Vicky Bowman, Rani Febrianti, Jelson Garcia, Hosana Chay, Rebecca Iwerks, Jeremy Liebowitz, Cielo Magno, Maw Htun Aung, Fikri Muhammadi, Sri Murniati, Dorjdari Namkhajantsan, Matthieu Salomon, Annamari Salonen, Amir Shafaie, Nomuuntugs Tuvaan, Claudia Viale and Tricia Yeoh for their input and guidance.

This report was made possible by funding from the U.K. government, the Australian government, and the United States Department of State. The opinions, findings and conclusions stated therein are those of the authors and do not necessarily reflect those of the above-mentioned organisations.



Contents

EXECUTIVE SUMMARY	4
1. BACKGROUND.....	7
2. CONSIDERATIONS FOR SHARING RESOURCE GOVERNANCE POWERS AND RESPONSIBILITIES.....	16
3. LICENSING.....	18
4. CADASTER AND LAND MANAGEMENT	26
5. FISCAL FRAMEWORKS AND REVENUE COLLECTION.....	33
6. ENVIRONMENTAL MANAGEMENT	43
7. OCCUPATIONAL SAFETY AND HEALTH.....	49
8. LOCAL CONTENT.....	54
9. ARTISANAL AND SMALL-SCALE EXTRACTION	59
ANNEX 1. SUMMARY TABLES	66
ANNEX 2. BIBLIOGRAPHY	70

Executive summary

The management of non-renewable natural resources—oil, natural gas, minerals and gemstones—is a complex job. Governments must draft and implement laws and regulations on an array of matters in order to maximize their contribution to sustainable development, for local communities as well as the broader citizenry. Responsibilities include licensing for exploration and production; land management; fiscal frameworks and revenue collection; environmental management; occupational safety and health; local content; and the governance of artisanal and small-scale extractive activity.

While a vast literature exists on how to manage natural resources, the decentralization of these responsibilities—specifically, which responsibilities fall within the jurisdiction of national vs. subnational institutions, which should be jointly managed and which models are most effective in different contexts—has received far less attention.

This issue is of particular importance in Myanmar. Demands for greater subnational control over natural resources are strong, especially among ethnic armed groups. Furthermore, the ruling National League for Democracy has committed to establishing a federal state that allocates certain responsibilities over the extractive industries to subnational governments. Natural resources are likely to be a central issue in discussions over the country's future, particularly as policy-makers prepare for further rounds of peace talks between the government, military and ethnic armed groups.

Steps have already been taken to decentralize certain aspects of natural resource governance. For instance, the 2008 Constitution allocates environmental crisis response, gems polishing and collection of quarrying fees to state and regional governments. More recently, the national government has begun delegating additional responsibilities to the subnational level, notably licensing and collection of certain revenue streams from artisanal and small-scale activity. Revenue sharing with state and regional governments has also increased over the last few years, rising from 3.4 percent of the annual budget in FY 2012/2013 to 8.7 percent in 2015/2016.

However, increased revenue sharing and allocation of minor responsibilities to state and regional governments—whose officials in many cases remain primarily accountable to Union authorities—may be inadequate to respond to claims for greater control over natural resources. Subnational stakeholders may demand greater influence over how the sector develops, a bigger role in mitigating negative impacts and an increased share in non-fiscal benefits. Therefore, this report presents the different natural resource governance responsibilities that could be allocated to subnational institutions, whether in a federal or decentralized unitary state. Drawing mainly on case studies from the Asia-Pacific region, it offers policy-makers a framework for thinking through which responsibilities could be allocated to national vs. subnational governments and which should be managed jointly.

In the report, the authors also seek to set out the opportunities and risks associated with different models. In some cases, greater subnational influence has been effective at addressing historical grievances and competing demands for control over natural resources, and has led to improved governance. In other cases, it has increased corruption and mismanagement and undermined the investment climate.

Several trends are evident from our case studies:

- **First, it is common that one level of government legislates or sets regulations while another level implements, monitors and enforces those laws or regulations.** For instance, environmental legal frameworks are typically determined by the national government but provide for subnational input in implementation, either by giving subnational governments a formal role in granting environmental approvals or by mandating consultation. In Mongolia, for example, national legislation identifies the governors of a *soum* (district) as the authorities responsible for assessing environmental protection plans for mineral exploration projects. A national law also gives subnational institutions powers to apply penalties in the event of a company's noncompliance with contract provisions. Similarly, national authorities generally write occupational safety and health laws, whereas implementation and monitoring responsibilities are often decentralized. In the Philippines, for example, the monitoring authorities are the regional offices of the Department of Environment and Natural Resources, a national government agency. This arrangement brings monitoring authorities closer to extraction sites, while ensuring those carrying out inspections are accountable to the national government and apply national standards.
- **Second, many countries share responsibilities in certain areas.** For instance, consent for companies to begin onshore oil, gas or mineral production commonly provides for both national and subnational involvement. In the Philippines, for example, minerals licenses are granted by the national government but subject to approval by local authorities and, in some cases, indigenous communities. In Australia, rights to explore and produce offshore oil and gas are granted by the Joint Authority, which is made up of the national-level minister and their state or territorial counterparts.
- **Third, some responsibilities are more commonly allocated to subnational governments.** Environmental monitoring, occupational safety and health monitoring, and licensing of artisanal and small-scale activities are often subnational duties. This may be due to the impacts of extractive projects being felt to a larger degree at the local level and the enhanced access to information available to local officials.
- **Fourth, some responsibilities are more commonly allocated to national governments.** Setting tax and royalty rates, collecting major revenue streams, and negotiating large- and medium-sized contracts with companies are more commonly national jurisdiction. This may be due to the complexity of the tasks and the higher degree of administrative capacity needed to implement them.

There is no one-size-fits-all solution for resolving questions around where natural resource governance responsibilities should lie. Ultimately, the path Myanmar chooses to pursue will need to consider both the demands of different stakeholders and the urgent need to strengthen resource governance in the country. Similarly, the context-specific analysis and decisions that will need to occur in Myanmar on these issues will not necessarily be appropriate for other countries.

Nonetheless, certain principles could underpin greater “natural resource federalism” in Myanmar. These include:

- Clearly defining government roles and responsibilities, regardless of which level they are allocated to.
- Ensuring different levels of government have the capacity and resources to adequately fulfill their responsibilities.
- Maintaining minimum national social and environmental standards despite subnational jurisdiction.
- Creating platforms for discussion and information exchange between levels of government and across jurisdictions.
- Including non-state actors such as local communities in decisions that affect them.
- Promoting transparency over decision-making and outcomes at all levels of government.

1. Background

CONTEXT

Myanmar is going through a transition, both in terms of natural resource governance and the country's broader political, economic and social development. Peace negotiations with ethnic armed groups, which started under the Thein Sein administration in the early 2010s, and which have continued under the National League for Democracy (NLD) elected in 2015, have been a key priority for both successive governments. During the talks, how revenues should be shared between central and local governments, as well as the potential transfer of greater political autonomy to the country's states and regions—including the aim of moving towards a federal union—have emerged as important points of debate.

As discussions around the peace process and the future political structures of Myanmar proceed, the extractive industries are likely to be a key part of the equation. Nearly every state and region in the country hosts oil, gas or mining activity, with the most important onshore interests lying in Bago, Kachin, Magway, Mandalay, Sagaing, Shan and Tanintharyi (see figure 1). Stakeholders from these areas say that they have borne the brunt of the sector's social and environmental impacts for decades while realizing few benefits. In many cases, discussions about control over natural resources are related to broader historical grievances between ethnic areas and the central government. This has led regional and state leaders, as well as representatives of several armed groups, to demand not only greater financial benefits from their natural resources but also more control over the sector as requirements for lasting peace.¹

Some shifts in this direction are already underway. Policy-making and implementation have historically been concentrated with national institutions. However, provisions in the 2008 Constitution were meant to provide a slightly greater degree of legislative and administrative influence over internal affairs to states and regions in several areas.² Natural resource governance responsibilities have largely remained concentrated with the national government, although some influence is shifting to the subnational level, particularly around certain licensing and revenue collection powers. (See box 1.)

Regional and state leaders, as well as representatives of several armed groups, have demanded greater benefits from resources and control over the sector as a requirement for peace.

1 For more detail on revenue sharing in Myanmar, see: Andrew Bauer, Paul Shortell and Lorenzo Delesgues, *Sharing the Wealth: A Roadmap for Distributing Myanmar's Natural Resource Revenues* (Natural Resource Governance Institute, 2016).

2 Republic of the Union of Myanmar, *Constitution of the Republic of the Union of Myanmar* (2008).

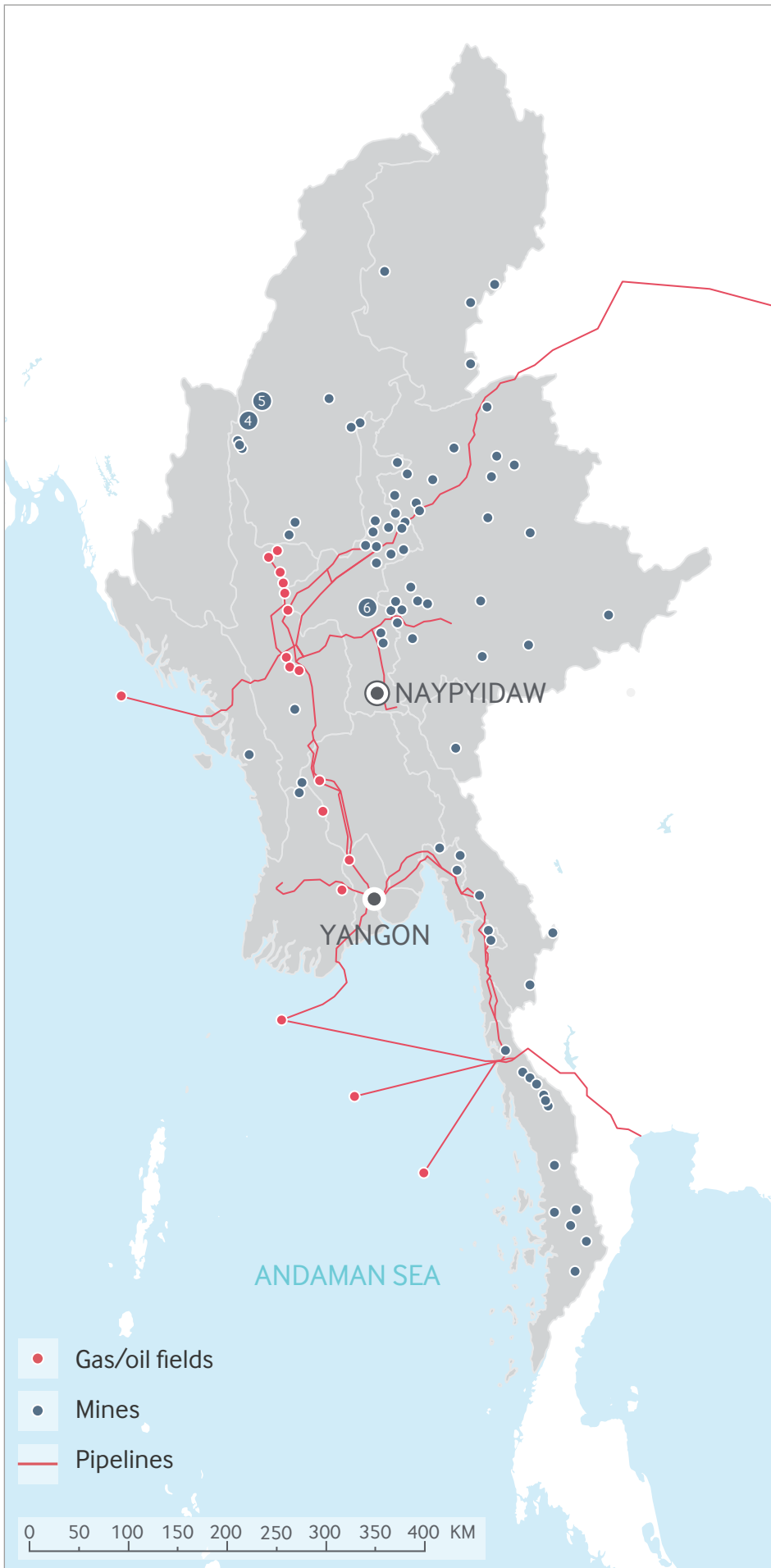


Figure 1. Map of extractive activities in Myanmar

Map: Thet Naing Oo

Box 1. Myanmar’s subnational governance structures

Myanmar is divided into seven states, seven regions, six self-administered zones or divisions and one Union territory containing the capital Naypyidaw and surrounding townships.

States and regions are constitutionally equivalent. Each has legislative, executive and judicial institutions. A chief minister appointed by the Union president from among state or regional parliamentarians leads the local government. Seventy-five percent of local representatives are directly elected, the remaining 25 percent appointed by the military. A cabinet of state or regional ministers supports the executive. These ministers are generally selected by the chief minister and then approved by the Union president. There are a number of exceptions to this. The military appoints the state or region’s minister for border and security affairs. In parliaments where ethnic representatives are present, these members are appointed as ministers for ethnic affairs representing their respective ethnicity. Subnational executive and legislative structures are also heavily shaped by the General Administration Department (GAD) under the Union Ministry of Home Affairs—one of three ministries whose minister is constitutionally appointed from the military. GAD automatically forms the “Office of the Region or State Government” and provides administrative and coordination functions for the subnational government, parliament, as well as Union ministries and subnational departments. The states and regions also have a high court led by a chief justice. The president, in consultation with the chief justice of the Union, selects the chief justice.³

Under Schedule 2 of the 2008 Constitution, states and regions are responsible for legislating on and administering several activities, including small- and medium-sized power production and distribution; local infrastructure (e.g., local ports, roads and bridges); and environmental crisis response. Responsibilities for natural resource governance set out in the constitution were initially limited to legislating on matters related to the cutting and polishing of gemstones as well as salt and salt products.⁴ Following amendments to the constitution in 2015, the national government has begun delegating further responsibilities to states and regions. These include certain licensing and revenue collection rights from artisanal and small-scale production (see section 9).⁵

Self-administered zones and divisions are constitutionally similar to states and regions, and can form their own indirectly elected and appointed “leading bodies.” They are generally controlled by ceasefire groups and govern under conditions described by some observers as “near-devolution.”⁶ Several other governance layers include districts, townships, towns, villages and urban wards.

Despite acknowledging its importance, the process by which the national government is granting greater influence to states and regions has been carried out in a piecemeal fashion, marred by ambiguities and confusion. Influence often only nominally lies with the state or region, while in practice decision-makers answer to national institutions. Though selected from among state and regional legislators, chief ministers are ultimately accountable to the president. In most cases, the influence of subnational legislatures is in practice limited.⁷

As a result of these shortcomings and the depth of historical grievances between ethnic areas and the central government, demands for greater subnational control remain strong, especially among ethnic armed groups. In May 2017, the latest round of peace talks between the government, military and those ethnic armed groups that are signatories to the National Ceasefire Agreement (NCA), led to agreement on 37 principles for a future peace accord, including the provision that Myanmar become a federal democracy.⁸ (See box 2.) However, creating a truly federal state, where sovereignty is genuinely shared by national and subnational governments, is likely to be a complex and slow process.

3 Hamish Nixon, Cindy Joelene, Kyi Pyar Chit Saw, Thet Aung Lynn and Matthew Arnold, *State and Region Governments in Myanmar* (MDRI and the Asia Foundation, 2015).

4 Bauer et al., *Sharing the Wealth*.

5 Republic of the Union of Myanmar, *Law 45/2015* (2015).

6 Nixon et al., *State and Region Governments in Myanmar*.

7 *Ibid*

8 International Crisis Group, *Building Critical Mass for Peace in Myanmar* (2017).

As peace talks continue, the extractive industries should be one of the key topics for discussion for policy-makers and other interested stakeholders. The principles agreed at the 21st Century Panglong do not yet directly address the sector. This is an especially sensitive issue since competition between formal and informal armed organizations over control of natural resources has been an important driver of conflict in many areas. The jade industry for example is widely seen to be linked to the conflict in Kachin State, with allegations that both the Myanmar military and the Kachin Independence Organization (KIO)/Kachin Independence Army (KIA) are earning significant income from the sector. A representative of the KIO/KIA reportedly told Global Witness that when conflict with the military resumed in 2011, the group made it a key strategic aim “to resume control and management of the jade business.” Senior figures within the United Wa State Army (UWSA)/United Wa State Party (UWSP) are alleged to have significant stakes in the minerals and gemstone sector.⁹ Regardless of whether the country formally moves to a federal system or continues the process of piecemeal decentralization, resource governance challenges will remain a salient issue.

Box 2. Myanmar’s peace process

Myanmar has suffered from decades of conflict between the central government and armed groups in ethnic areas. Research by the Asia Foundation estimates that in 2016 at least eleven of the country’s fourteen states and regions were affected by active or latent conflict. The six longest-running subnational conflicts in Myanmar have on average lasted for more than 66 years.¹⁰

Between 2011 and 2013, the country’s previous government signed bilateral ceasefires with several of these groups. This set the basis for the NCA signed in October 2015. The NCA was only signed by eight armed groups, representing approximately one third of organizations engaged in conflict and did not include some of the most powerful actors such as the KIO and the UWSP. Despite its shortcomings, the NCA was the first step towards a comprehensive peace deal and established an intention for Myanmar to become a federal union. However, it provided little detail on what form such a union should take and what powers should be shared between national and subnational governments—in part due to differences in opinion over what federalism should mean. More detailed discussions were deferred to a series of “Union Peace Conferences,” the first of which was held in January 2016.¹¹

With the election of the NLD, State Counsellor Aung San Suu Kyi has prioritized the peace process as a central component of government policy. The conference was rebranded as the 21st Century Panglong—a reference to a conference convened in 1947 in which several ethnic areas agreed to join an independent Burma in return for a form of self-determination. The first 21st Century Panglong was held from 31 August 2016 to 3 September 2016 and was attended by representatives of most ethnic groups. In May 2017, a second round of talks led to an agreement of 37 “principles”—a set of high-level commitments on the future political, economic and social structures of a federal Myanmar. The government intends to hold further rounds of talks every six months.¹²

9 Global Witness, *Jade: Myanmar’s ‘Big State Secret’* (October 2015); see also: Yimou Lee and Joel Schectman, “How a Rebel Myanmar Tin Mine May Up-end a Global Supply Chain,” *Reuters*, 29 November 2016.

10 Adam Burke, Nicola Williams, Patrick Barron, Kim Jolliffe and Thomas Carr, *The Contested Areas of Myanmar: Subnational Conflict, Aid, and Development* (The Asia Foundation, 2017).

11 International Crisis Group, *Building Critical Mass for Peace*.

12 *Ibid.*

WHAT IS NATURAL RESOURCE FEDERALISM?

In Myanmar, as in many other resource-rich countries, the constitution states that the Union (that is, the sovereign state) is the ultimate owner of all lands and natural resources.¹³ However, many countries choose to share the power and responsibility to manage and benefit from natural resources between national and subnational governments via the constitution, legislation or delegation by the national government.¹⁴

Natural resource federalism is the process of conferring some level of responsibility for natural resource governance to subnational institutions. There is no single model for what this should look like. (See box 3.) In some countries, the national government devolves certain responsibilities for legislation, implementation or monitoring to subnational institutions, while pure federalism gives subnational governments constitutional sovereignty in some or all of these areas. Other countries take more tentative steps. This can include conferring some responsibilities to officials accountable to subnational politicians; formally involving subnational institutions in decisions taken by the national level (e.g., through consultations or requirements for subnational consent); or ensuring that national institutions have a local presence and reflect local interests even if officials ultimately remain accountable to national politicians. Many countries pursue a mixed model. Legislative powers may for instance remain at the national level, while implementation and monitoring are the responsibility of subnational governments.

Globally, benefit sharing is often a prominent demand made by subnational stakeholders. In Myanmar, tentative steps in this area have already begun, which were discussed in the Natural Resource Governance Institute's (NRGI) 2016 publication *Sharing the Wealth: A Roadmap for Distributing Myanmar's Natural Resource Revenues*. However, given the complexity and long-standing nature of Myanmar's conflicts, benefit sharing alone may prove insufficient to satisfy the political demands of ethnic representatives and to address some of the drivers of violence. It may also prove insufficient to address the sector's broader governance challenges. As peace talks continue, policy-makers should therefore consider the potential opportunities—but also the risks—associated with giving greater responsibilities for natural resource governance to subnational institutions.

If managed well, natural resource federalism could be a means of addressing historical grievances in many of Myanmar's resource-producing areas, with the extractive sector potentially acting as a driver of socioeconomic development that underpins stability. In other countries, conferring greater influence to subnational levels has helped to stave off conflict. In Indonesia, for example, agreements to share natural resource revenues with the regions of Aceh, Papua and West Papua played an important role in ending years of violent conflict.¹⁵ Indonesia's approach extended beyond revenue sharing to shared governance responsibilities. For example, the 2005 memorandum of understanding between the government of Indonesia and the Free Aceh Movement created joint management rights for the oil and gas sector.¹⁶

Natural resource federalism could also have broader positive impacts for resource governance. Decentralizing powers and responsibilities can bring decision-making closer to stakeholders directly impacted by the sector, allowing the government to be

13 Republic of the Union of Myanmar, *Constitution*.

14 Nicholas Haysom and Sean Kane, *Negotiating Natural Resources for Peace: Ownership, Control and Wealth-sharing* (Centre for Humanitarian Dialogue, October 2009); Center for Constitutional Transitions, International IDEA and the United Nations Development Programme, *Oil and Natural Gas: Constitutional Frameworks for the Arab States Region* (2014).

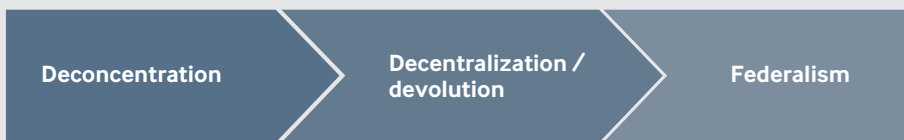
15 Natural Resource Governance Institute (NRGI) and the United Nations Development Programme (UNDP), *Natural Resource Revenue Sharing* (2016).

16 Haysom and Kane, *Negotiating Natural Resources for Peace*.

more efficient and effective. For example, local officials may be better placed to quickly spot and respond to environmental incidents. While this could also be achieved through a local presence of national institutions, officials directly accountable to local voters may feel greater pressure to act. This could be helpful in a country like Myanmar, where monitoring and enforcement capacity among national institutions has at times been limited, particularly in areas that are contested between the national government and ethnic armed organizations. A greater sense of local ownership can also improve the investment climate by bolstering support among local communities for extractive projects, thereby strengthening the “social license to operate” of companies.

Box 3. Spectrum of the division of roles and responsibilities between national and subnational governments

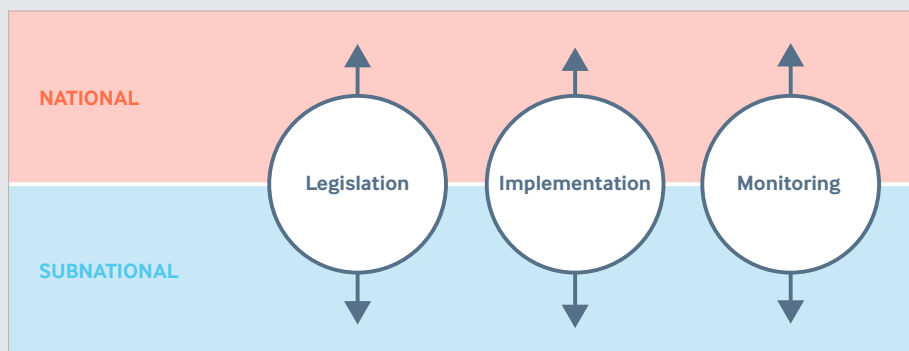
This report uses the term “natural resource federalism” to represent the range of options available to policy-makers to give greater responsibilities to subnational institutions. This terminology has been chosen because of Myanmar’s aspirations to establish a federal union. However, federalism represents the far end of the spectrum of options to shift power from the national to subnational levels.



In broad terms these can be categorized as follows:

- **Deconcentration.** The national government appoints and stations officers at the subnational level who are tasked with implementing national policies. Decision-making and implementation are brought physically closer to subnational stakeholders but accountability ultimately rests with national institutions.
- **Decentralization/devolution.** Decision-making and accountability is transferred to subnational institutions, which select their own leaders and are given authority—by the national government—to make policy decisions in certain areas. This often includes the right to directly collect some revenues and deliver certain services.
- **Federalism.** Sovereignty is constitutionally divided between national and subnational institutions. This means that the national government may be constitutionally prohibited from interfering in some subnational decisions. In a purely federal system, the subnational level has a significant degree of constitutionally ascribed autonomy and responsibilities.

In practice, many countries have a mixed system where some responsibilities are held at the national level and others at the subnational level. Countries may for instance establish minimum national environmental standards but give subnational institutions the right to complement these with more stringent regulations or give them the right to monitor and enforce. Elsewhere responsibilities may be shared. For instance, subnational institutions might have the right to veto licensing decision being made by the national government or may be jointly involved in the negotiation of license terms.



Natural resource federalism can, however, pose challenges. Federal models risk driving up inequalities between resource-rich regions and the rest of a country. This can become a source of political instability as seen in disputes over oil royalties in Brazil. (See section 5 for details.) An overreliance on extractive revenues can also expose subnational governments to boom and bust cycles as commodity prices rise and fall.

Particular challenges can arise when highly technical functions are decentralized in contexts where subnational officials lack the capacity to adequately fulfill their responsibilities. In federal Argentina, weak institutions, unstable tax regimes and inconsistent licensing systems between subnational governments scared off investors in the late 1980s and early 1990s.¹⁷ In situations where transparency and accountability mechanisms are weak, giving greater responsibilities to subnational institutions can also increase corruption risks. In Indonesia, for example, the decentralization of licensing processes contributed to significant governance challenges in the mining sector (discussed in more detail in section 3). In other countries, weak local capacity for monitoring has enabled the industry to circumvent regulations, particularly on environmental matters.

One common challenge arises when there is ambiguity over where ultimate authority lies. Local institutions may for instance exercise *de facto* control over licensing even when the law does not clearly assign this right to them (as is for example the case in the mining sector in some of Myanmar’s states and region—see section 3). In other situations, federalism can inhibit the formulation of a clear national strategy for the extractive sector and risks triggering a “race to the bottom” as states and regions compete for investment.

Myanmar already faces resource governance challenges. This was evidenced by the country’s performance in NRGi’s 2017 Resource Governance Index, which highlighted a series of shortcomings, including a lack of transparency in licensing processes and revenue management, and gaps in the implementation of the legal framework.¹⁸ It is important that discussions around natural resource federalism are conscious of the need to address these constraints and that whichever level of government is responsible for making decisions does so effectively. Decisions around whether to move towards a federal model—and, if so, what degree of federalism to pursue—should be based on careful consideration of potential costs and benefits.

The authors of this report aim to inform policy-makers and interested stakeholders in discussions over the future of Myanmar’s political, social and economic structures—and the role of the extractive industries within them. They do not seek to promote a particular model for the division of resource governance responsibilities but hope to encourage discussion over the risks and opportunities that different approaches could present. Ultimately, the path Myanmar chooses will need to take into consideration both the demands of different stakeholders and the urgent need to strengthen resource governance in the country. Similarly, the context-specific analysis and decisions that will need to occur in Myanmar on these issues will not necessarily be appropriate for other countries.

Challenges can arise when highly technical functions are decentralized in contexts where subnational officials lack the capacity to adequately fulfill their responsibilities.

17 Andrew Bauer, Rebecca Iwerks, Matteo Pellegrini and Varsha Venugopal, *Subnational Governance of Extractives: Fostering National Prosperity by Addressing Local Challenges* (Natural Resource Governance Institute, August 2016).

18 Natural Resource Governance Institute, *2017 Resource Governance Index* (2017).

ANALYTICAL FRAMEWORK

The authors primarily analyze the opportunities and challenges associated with giving greater responsibilities for natural resource governance to Myanmar's states and regions. (See box 1.) This level of government has been selected as the focus of analysis as it is at the heart of recent decentralization efforts and the current federalism debate. However, this is not the only model that could be pursued. The role of township authorities could for instance also be expanded. In addition, giving greater influence to states and regions will not necessarily ensure that the concerns of Myanmar's diverse ethnic and political groups are adequately addressed, particularly those groups who do not control a recognized, demarcated territory. This report therefore also draws on the experiences of other countries in conferring responsibility to lower levels of government or non-governmental stakeholders like indigenous groups to illustrate alternative mechanisms to share resource governance responsibilities.

The report discusses the following responsibilities related to oil, gas and mineral governance:

- Licensing
- Cadaster and land management
- Fiscal frameworks and revenue collection
- Environmental management
- Occupational safety and health
- Local content
- Artisanal and small-scale extraction

The authors selected these issues to reflect a broad range of governance responsibilities and to highlight opportunities and challenges in different areas. Our selection of topics builds on previous work by NRGi on the distribution of resource revenues to subnational jurisdictions, either through intergovernmental transfers or direct revenue collection. The authors do not seek to address in detail the legal mechanisms behind giving greater responsibilities to the subnational level.

The report includes lessons mainly from the experiences of countries in the Asia-Pacific region, namely: Australia, India, Indonesia, Malaysia, Mongolia and the Philippines. The countries were selected to reflect a diverse set of approaches to resource decentralization. It includes examples from unitary countries where decision-making is more centralized, and highly decentralized or even federal countries where the subnational level has almost exclusive control over natural resource management. The selection seeks to reflect successes and failures by including countries where subnational control has underpinned effective resource governance and others where it has undermined the sustainable management of the sector and harmed investor confidence. In some cases, the authors include examples from beyond the region to illustrate specific points. Where relevant, they also seek to emphasize differences in how these issues are addressed between the oil and gas sector on the one hand, and the mining sector on the other.¹⁹

Section 2 sets out general considerations that should be applied across any decision on natural resource federalism. Sections 3 to 9 then address specific resource governance responsibilities. The sections begin with a brief analysis of the opportunities and risks associated with sharing powers and responsibilities in a given policy area, before providing an overview of the current state of play in Myanmar and observations from international practice. Each section concludes with considerations for policy-makers in Myanmar.

¹⁹ The authors do not directly address the forestry sector, though many of the same issues are relevant to it.



Types of governance in sample countries

Map: Free Vector Maps

2. Considerations for sharing resource governance powers and responsibilities

There is no one-size-fits-all solution for resolving questions around where natural resource governance responsibilities should lie. As the following sections of this report demonstrate, countries apply a wide variety of models to confer greater influence to subnational stakeholders. There are major variations in the extent to which these processes have contributed to improved natural resource governance. Ultimately, deciding which powers to grant to subnational institutions is not just a technical decision but is closely woven into political considerations.

Regardless of which model Myanmar chooses to pursue, a set of cross-cutting actions—informed by the experiences of the sample countries analyzed in this report—may be considered to ensure that any moves to empower subnational institutions strengthen natural resource governance rather than undermining it:

- **Clearly define roles and responsibilities.** Clarity on who has ultimate responsibility for legislation, implementation and monitoring is essential. In Myanmar, institutional overlap and ambiguity is already a challenge among national institutions. For example, the legal framework grants responsibilities for environmental management to several entities. This creates the risk of no institution having a full sense of ownership and, as a result, functions not being adequately fulfilled. Regardless of whether roles remain at the national level or are shifted to subnational institutions, it is important that they are clearly defined within the legal framework to ensure accountability and effective implementation.
- **Remain conscious of capacity constraints.** Effective natural resource governance can require large amounts of human, financial and technical capacity. While demands for subnational control are often politically salient, any move to confer responsibilities should be accompanied by a process to ensure subnational institutions are properly equipped to fulfill their duties. In some cases, training and capacity-building—including managerial capacity and systems—may need to precede a transfer in responsibilities. Capacity-building is also important to help to address the power asymmetries that can arise between subnational institutions and companies. Particularly when subnational functions are not yet well established, investors may ignore these institutions and insist on interacting with the national government only. Equipping subnational institutions with the means to enforce decisions can help to address this risk.
- **Maintain minimum standards.** It is important that natural resource federalism does not trigger a “race to the bottom” on social, environmental and governance standards. This is particularly relevant when it comes to environmental management, where poor performance can have impacts beyond subnational boundaries. Many countries manage this risk by setting clear minimum standards at the national level but conferring implementation responsibilities to subnational institutions. Laws and regulations passed by subnational governments can then supplement these standards.

- **Coordinate the roles of different levels of government.** While only one institution should have ultimate responsibility over a given issue, it is critical that national and subnational institutions do not operate in silos. This is particularly important when closely related functions are divided between different levels of government (e.g., Myanmar's delegation of responsibility for small-scale mining and oil to states and regions while maintaining control over larger operations at the Union level). Creating platforms for dialogue and formally involving various levels of government in decision-making can improve coordination.
- **Consider the potential role of non-state stakeholders.** While natural resource federalism discussions typically focus on formal government structures, there may be scope to consult locally based non-state stakeholders (e.g., communities, unions and NGOs) in processes such as licensing, environmental management, health and safety inspections, or local content implementation. This may be particularly valuable in Myanmar where formal political structures may not always represent the interests of minorities. If well defined, the involvement of non-state stakeholders can improve accountability and strengthen implementation. However, this should not be a substitute for the role of well-functioning and publicly accountable institutions. There is also value in remaining cognizant of the concerns of the private sector and considering what kind of arrangements will help to attract high-quality responsible investors.
- **Promote transparency.** Transparency is an important means of building trust between national and subnational institutions. By making extractive sector data readily available, stakeholders can address information and power asymmetries. This is important to give subnational institutions the means to enforce decisions and to have a stronger sense of influence over the full range of decisions being made, including those remaining under the ultimate control of the national government. At the same time, if subnational institutions receive greater responsibilities, subnational accountability mechanisms must also be strengthened to mitigate the risk of corruption or mismanagement.

3. Licensing

WHY IT MATTERS

Licensing is the process through which companies are granted the right to explore and extract. A consistent, well-planned licensing process provides an opportunity to ensure that projects are developed in line with a government's economic, social and environmental objectives. Transparent and efficient licensing is also essential to providing predictability and certainty for investors. Awarding licenses is a two-step process: first, a government decides whether to allow extraction in a particular location, and second, it decides which companies receive the right to operate there. In theory, the decision to extract should precede the negotiation of an individual license though in practice the two are often part of the same process.

Before awarding licenses, governments ideally need to understand the resource base and geological potential, and define subsoil and surface rights. (See section 4 on cadaster and land management.) Governments then need to ensure that they grant licenses to companies with sufficient technical and financial capacity to operate in accordance with operational; fiscal (see section 5); environmental (see section 6); occupational safety and health (see section 7); and broader socioeconomic obligations (see section 8).²⁰ Once the government has awarded a license, it needs to monitor and enforce compliance.

Box 4. Determining company obligations

The rules governing extractive projects are typically defined in both laws and contracts. Many jurisdictions with well-established extractive industries define all major obligations in laws and regulations, with licenses or permits only reinforcing legislation. Other countries define basic principles in laws but describe most of the terms for extraction in individually negotiated contracts. This is often the case in countries with higher levels of political risk, where there may be frequent changes to the legal framework or weaknesses in how that framework is implemented. In such countries, investors will often seek the right to recourse to international arbitration in case of disputes with the government and stabilization clauses to protect themselves from political and legal changes. In contract-based systems, there may be significant variations in the obligations governing different extractive projects. This can make monitoring and enforcement more difficult, increase corruption risks and expose investors to unequal treatment by the government.

Subnational involvement in licensing decisions can be a means of enabling greater input from those stakeholders directly impacted by extractive activity and can help to ensure the sector develops in a manner that is sensitive to local concerns and needs. Involving subnational institutions can confer a sense of ownership of resources. This may be particularly important in contexts where resource extraction has historically been a cause of grievance between a region and the central government.

However, reviewing license applications and, where applicable, negotiating terms, requires significant technical expertise. In many cases, even national governments struggle to effectively manage these processes. If responsibilities are granted to subnational institutions with lower capacity, this problem can be exacerbated, particularly when power imbalances exist between the government and investors related to asymmetries of information or the level of experience in navigating such processes. As a result, governments run the risk of agreeing to a bad deal. Where

²⁰ Licensing for artisanal and small-scale production is covered in section 9.

authorities lack proper systems to record and track applications, the potential exists for overlapping licenses to be issued. (Section 4 discusses this in more detail.) In addition, removing the national government from the licensing process can make it harder to define minimum standards, maintain effective geological databases and optimize the rate and depth of resource extraction.

THE STATE OF PLAY IN MYANMAR

In Myanmar, licensing is based on national legislation and, in the vast majority of cases, responsibility for implementation lies with national institutions. While some provisions exist for increasing the responsibility of states and regions over small-scale and subsistence activity (see section 9), their formal role in granting larger licenses is limited. However, significant *de facto* influence can exist at the subnational level, particularly in the mining sector.

Efficient, transparent and predictable licensing processes are essential to ensure extractive permits are allocated to companies that have the technical and financial capacity to operate in a manner that is beneficial to Myanmar. However, licensing currently faces shortcomings, including vague and outdated permit terms that do not adequately incorporate the technical requirements of modern operations; a lack of clarity on precisely which entities are involved in decision-making; and ambiguities around the relationship between permitting requirements set out in different pieces of legislation. Licensing in the gemstones sector in particular has been marred by challenges, leading the newly elected NLD government to impose a moratorium on new licenses in 2016, pending reforms to the sector's legal framework.²¹

In Myanmar, licensing is based on national legislation and, in the vast majority of cases, responsibility for implementation lies with national institutions.

Overview of key laws governing licensing processes

Licensing in the mining sector is principally governed by the Myanmar Mines Law (1994, amended 2015) and Myanmar Gemstone Law (1995, amended 2003 and 2016). Additional details on the licensing process are found in the Myanmar Mines Rules (1996) and the Myanmar Gemstone Rules (1996). At the time of writing, revisions to the Myanmar Gemstone Law and Mines Rules were under consideration. The Myanmar Investment Law (2016) also includes licensing requirements for investors.

In the oil and gas sector, no unified legal framework defines the licensing process. Sector-specific pieces of legislation, such as the Oilfields Act (1918), the Petroleum Act (1934) and the Myanmar Petroleum Concession Rules (1962) have not been updated for many decades and, as a result, are in practice not applied in licensing processes. Instead, production sharing contracts (PSCs) developed by the Myanmar Oil and Gas Enterprise (MOGE) and the Myanmar Investment Law (2016) are the principal legal points of reference.²²

Several pieces of legislation make explicit reference to the rights of subnational stakeholders to be consulted in licensing processes. The 2015 Protection of the Rights of National Races Law states that “hta-nay tain-yin-tha”—a Myanmar term often translated as indigenous peoples—“should receive complete and precise information about extractive industry projects and other business activities in their areas before project implementation so that negotiations between the groups and the government/companies can take place.”²³ The Myanmar Investment Rules (2017) reinforce this requirement by stating that investments that are subject to the Protection of the Rights

21 Ye Mon and Kyi Kyi Sway, “Jade Mining Permit Extensions Suspended,” *Myanmar Times*, 27 July 2016.

22 Myanmar Centre for Responsible Business, *Myanmar Oil and Gas Sector Wide Impact Assessment* (2014).

23 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment on Limestone, Gold and Tin: Draft for Consultation* (2016).

of National Races Law may be subject to additional consultation requirements.²⁴ (See below.) In addition, the National Ceasefire Agreement states that “planning of projects that may have a major impact on civilians living in ceasefire areas shall be undertaken in consultation with local communities in accordance with the Extractive Industries Transparency Initiative (EITI) Standard procedures and coordinated with relevant Ethnic Armed Organization for implementation,” though it is unclear to what extent this provision is being implemented.²⁵

Overview of licensing authorities

In the mineral sector, the Ministry of Natural Resources and Environmental Conservation (MONREC) issues licenses. For prospecting and exploration, the Department of Geological Survey and Mineral Exploration (DGSE) leads the process. For production, the Department of Mines leads the process. In all cases, input from a range of other government entities is required and, as a final stage, the Union Economic Committee must approve licensing decisions.²⁶ Licenses are typically awarded on a “first come, first served” basis, where the government enters into direct negotiations with the first company to express interest in a given area. A draft of the new mines rules reviewed by NRGJ makes reference to the possibility of allocating rights through auctions but provides little detail on when or how precisely such processes should be applied.²⁷

In the jade and gemstones sector, license applications are reportedly reviewed by the Myanma Gemstone Enterprise (MGE) and approved by an interministerial committee, the exact composition of which is not clearly defined in law.²⁸ Since no new licenses have been granted under the NLD government, and the sector’s new legal framework was still being finalized at the time of writing, it is unclear how licensing for gemstones will function in practice going forward.

In the oil and gas industry, state oil company MOGE is the most important actor in the negotiation and awarding of production sharing contracts.²⁹ Once projects are operational, MOGE generally oversees compliance with license terms.³⁰ This creates a risk of conflicts of interest due to their commercial role as a joint venture partner on the one hand, and their regulatory role on the other. The Ministry of Energy and Electricity’s (MOEE) monitoring role is not clearly delineated.³¹

In addition, all investments with an expected investment value exceeding USD 100 million or those likely to have large environmental and social impacts also need to obtain an investment permit from the Myanmar Investment Commission (MIC) which operates under the Ministry of Planning and Finance’s (MOPF) Directorate of Investment and Company Administration. MIC reviews the financial health of an investor and verifies legal conformity, particularly with the Myanmar Investment Law (2016) and Investment Rules (2017). This includes reviewing whether the investor has demonstrated a commitment to operate in a “responsible and sustainable manner” and will limit adverse environmental and social impacts. For any investments that may be subject to the Protection of the Rights of National

24 Republic of the Union of Myanmar, *Myanmar Investment Rules* (2017).

25 Government of the Republic of the Union of Myanmar and the Ethnic Armed Organizations, *Nationwide Ceasefire Agreement* (March 2015).

26 Stakeholder interview.

27 Allocating licenses by auctions is unusual in the mining sector due to the high levels of geological risk in prospecting and exploration. Industry representatives in Myanmar have expressed concern at the proposed legal changes.

28 Stakeholder interview.

29 Patrick Heller and Lorenzo Delesgues, *Gilded Gatekeepers: Myanmar’s State-owned Oil, Gas and Mining Enterprises* (Natural Resource Governance Institute, 2016).

30 Myanmar Centre for Responsible Business, *Myanmar Oil and Gas Sector Wide Impact Assessment*.

31 Stakeholder interview.

Races Law, MIC may also consider specific consultations with state or regional governments or other stakeholders. However, it is unclear to what extent this happens in practice. Most investments under USD 5 million are in principle dealt with by a state or region committee, chaired by the relevant chief minister. However, given the capital intensiveness of most extractive projects and the exclusion of projects with major potential environmental impacts from these provisions, these committees are expected to only have a limited role in approving oil, gas and mining investments.³²

Across most of Myanmar’s extractive industries, formal input from subnational stakeholders in the process of awarding large-scale licenses is limited (though their influence over small-scale and subsistence permits is expected to increase; see section 9). However, in some cases significant *de facto* power rests with subnational stakeholders. In the minerals sector, license applicants tend to require endorsement from the relevant state or regional government and, in some cases, also from township-level authorities.³³ While this process is not defined in the legal framework, in practice MONREC is understood to be highly unlikely to approve licenses without these endorsements. According to interviewees, this means that some chief ministers can effectively veto licensing decisions. In the past, this has halted permitting processes. In 2016, for example, the government of Tanintharyi refused to endorse applications from ten mining companies citing environmental concerns.³⁴ In the same year, Sagaing’s regional authorities also announced that they would not extend licenses for several mining companies.³⁵ The licensing process reportedly also requires applicants to interact with several district and township-level authorities to collect data (e.g., on land use, agriculture, forestry). According to interviewees, these authorities can stall permitting processes by not making data available. Subnational stakeholders are understood not to have the same degree of influence in the gemstone sector.³⁶

Ethnic armed groups and local officials operating outside the formal system are influential in determining who receives licenses and who has physical access to mining areas.

The role of informal actors

While formal subnational influence is limited, significant *de facto* power is exercised by informal actors. Specifically, ethnic armed groups and local officials operating outside the formal system are influential in determining who receives licenses and who has physical access to mining areas.³⁷ For example, according to research by Thomson Reuters, all companies extracting tin from the Man Maw tin mine, located within the Wa State Self-Administered Division in northeastern Shan State, are owned or controlled by senior figures within the UWSA or the UWSP.³⁸ This mine has not been permitted by Union institutions, demonstrating the challenges facing MONREC in exercising control over licensing processes in certain parts of the country.

In the gemstone sector, military-affiliated companies such as the Myanmar Economic Corporation (MEC) and Union of Myanmar Economic Holdings Limited (UMEHL) are also understood to play quasi-official roles in determining who gets access to mining projects. Often, military-affiliated companies will be allocated mining or gems licenses that are then sold to third parties, with these companies collecting a share of the rents. In some cases they also oversee compliance with license terms.³⁹

32 Republic of the Union of Myanmar, *Investment Rules*; see also: Htin Lynn Aung, “Regions Can Approve up to US\$5m Investments,” *Myanmar Times*, 13 March 2017.

33 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

34 Su Phyo Win, “Tanintharyi Tightens Mining Oversight,” *Myanmar Times*, 17 August 2016.

35 Chan Mya Htwe, “Sagaing Authorities Start Gold Mine Clampdown,” *Myanmar Times*, 23 June 2016.

36 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

37 Paul Shortell and Maw Htun Aung, *Mineral and Gemstone Licensing in Myanmar* (Natural Resource Governance Institute, 2016).

38 Yimou Lee and Joel Schectman, “How a Rebel Myanmar Tin Mine May Up-end a Global Supply Chain,” *Reuters*, 29 November 2016.

39 Heller and Delesgues, *Gilded Gatekeepers*.

OBSERVATIONS FROM GLOBAL PRACTICE

The countries surveyed for this report vary in the degree to which they grant subnational institutions influence over licensing processes. Typically, the legal frameworks governing the allocation of extraction rights are determined and carried out at the national level. Increasingly however, countries have created opportunities for local communities or their elected officials to play a role in determining whether a license should be awarded and, in some cases, selecting the company and deciding on the terms it should operate under.

One reason why countries tend to adopt a single legal framework for licensing even when subnational governments are involved in implementation is to prevent a “race to the bottom,” whereby jurisdictions compete with each other to make terms more attractive to companies. Furthermore, smaller jurisdictions are more likely to suffer from institutional capture by large companies, leading to less beneficial contractual terms for governments. On the other hand, maintaining control over natural resource rights is often a key demand by subnational politicians in federal states. This is because licensing is an important means of influencing whether extractive activity proceeds and under what conditions. As a result, subnational stakeholders often demand the right to be able to veto projects, even if they are not involved in setting the terms of those projects that do move ahead.

Typically, the role of subnational institutions tends to be greater in the mining than in the oil and gas sector.

Box 5. The spectrum of subnational engagement in licensing decisions

The legal framework can protect the right of subnational stakeholders—whether local governments or communities—to influence licensing decisions to varying degrees. The spectrum of subnational influence in processes led by the national government can be broken down into four categories:⁴⁰



- **Inform.** One-way process in which subnational stakeholders are informed of licensing processes and decisions by national institutions.
- **Consult.** Two-way process in which subnational stakeholders are engaged in dialogue around the licensing process.
- **Seek support.** Two-way process in which subnational stakeholders are involved in planning and decision-making.
- **Seek consent.** Two-way process that grants subnational stakeholders the right to give or withhold consent for licensing.

In other cases, subnational institutions may take the lead in making licensing decisions. They may in turn be required to consult with national authorities or neighboring subnational entities.

Licensing responsibilities

When it comes to which level of government has the responsibility to award licenses—and to set the terms of those licenses—there are significant variations in subnational influence. Typically, the role of subnational institutions tends to be greater in the mining than in the oil and gas sector. In Australia and Malaysia—both countries with federal structures—legislation and regulations that inform minerals licensing are determined subnationally, and state governments issue licenses. In

40 Oxfam, *Community Consent Index 2015* (Oxfam Briefing Paper, 23 July 2015).

India, national legislation gives states the right to grant mineral licenses, though the approval of the national government is required and certain terms are fixed in national legislation. In the case of “minor minerals” (e.g., building stones, gravel, clay, sand), concession rules are determined entirely by state governments.⁴¹ In Indonesia, the national government has conferred responsibility for minerals licensing to subnational governments. This has led to a proliferation of sometimes overlapping licenses, increased insecurity of tenure and the abuse of permitting processes for professional or financial advancement by local officials. Early moves to give powers to district governments were particularly problematic. By 2011, Indonesia’s central government estimated that districts had granted around 10,500 mining licenses without information on these being systematically passed on to the national government.⁴² This served as a major obstacle to revenue collection and harmed investor confidence.



Miners at an unlicensed jade mine in Hpakant, Kachin State

Khin Saw Htay for NRGi

In oil and gas, decision-making is often more centralized. In India, despite its federal structure, national legislation—namely, the Oilfields (Regulation and Development) Act 1948 and the Petroleum and Natural Gas Rules 1959—regulates the granting of onshore and offshore exploration, development and production licenses. Under the legal framework, companies submit license applications for offshore blocks to the national government and to the state government for onshore blocks.⁴³ At the most devolved end of the spectrum is Australia, where state and territory legislation governs onshore oil and gas licensing, and states and territories grant licenses. The legal framework is more complex for licenses located more than three nautical miles offshore. These are primarily governed by the national Offshore Petroleum and Greenhouse Gas Storage Act 2006 and granted by the Joint Authority, comprised of the national-level minister and their state or territory counterpart.⁴⁴

41 Government of India, *Mineral Concession Rules* (1960); Government of India, Mines and Minerals (Development and Regulation) Act 1957, amended 2015 (2015).

42 Erin Smith and Peter Rosenblum, *Enforcing the Rules: Government and Citizen Oversight of Mining* (Revenue Watch Institute, 2011); Government of the Philippines, *Indigenous Peoples Rights Act* (1997).

43 Venkatesh Raman Prasad and Abhishek Kumar Singh, “Oil and Gas Regulation in India: Overview,” *Thomson Reuters Practical Law*, 1 November 2016.

44 Andrew Smith, John King and Clayton Utz, “Oil and Gas Regulation in Australia: Overview,” *Thomson Reuters Practical Law*, 1 May 2013.

Subnational input in the decision to award licenses

Even when licensing responsibilities rest with national institutions, many countries provide legal provisions to protect local participation in the decision-making process, though the degree of influence varies (see box 5). In Mongolia, mineral licenses are granted at the national level but the governor of an *aimag* (an administrative subdivision) can oppose the issuing of prospecting licenses (though does not have the power to block production licenses).⁴⁵ For petroleum licenses, governors can only issue an “opinion.”⁴⁶ In the Philippines, minerals licensing is under the authority of the national Mines and Geoscience Bureau (MGB) but subject to approval from local government units.⁴⁷ This has led to *de facto* moratoriums on mining activity in several localities.⁴⁸ In some cases, the threat of withholding consent has successfully been used to change project plans. For example, when Shell and Occidental Petroleum were seeking approval for the Malampaya project, the local government negotiated with the project proponents to ensure a planned pipeline did not traverse an area rich in biodiversity and home to an indigenous community.⁴⁹

One important aspect is the concept of free, prior and informed consent. The UN Declaration on the Rights of Indigenous People states that no indigenous peoples should be forcibly removed from their lands or territories and that no relocation should take place without their free, prior and informed consent and an agreement on fair compensation.⁵⁰ Among our sample countries, legal provisions around this are particularly well developed in the Philippines, where licensing decisions are subject to veto rights under the Indigenous People’s Rights Act.⁵¹ Australia also has stringent provisions to protect the rights of indigenous people. Under the Native Title Act (1993), aboriginal groups have “the right to negotiate” with a company on aspects of proposed developments on their traditional land. Where agreement cannot be reached, the National Native Title Tribunal, an Australian government body whose members are appointed by the country’s governor general, makes the final decision.⁵²

CONSIDERATIONS FOR MYANMAR

As Myanmar studies how to involve subnational institutions in deciding to extract and the terms of extraction, policy-makers may wish to consider the following recommendations:

- **Promote coordination between national and subnational institutions.** Challenges can arise when both national and subnational institutions are vested with the right to issue licenses. Responsibilities can, for example, be split between different types of extractive activity (e.g., mining vs. petroleum; onshore vs. offshore) or different scales of activity (e.g., small scale vs. large scale). In Myanmar, plans to give states or regions the right to grant small-scale licenses could potentially increase the risk of overlapping permits being granted, blur lines of accountability and increase the risk of non-compliance, as the case of Indonesia

45 Government of Mongolia, *The Minerals Law of Mongolia* (2006).

46 Government of Mongolia, *The Law of Mongolia on Petroleum* (2014).

47 Government of the Philippines, *Local Government Act* (1991).

48 Smith and Rosenblum, *Enforcing the Rules*.

49 Varsha Venugopal, *Thinking Locally: Community Consultation in the Philippines* (Natural Resource Governance Institute, 2016).

50 United Nations, *Declaration on the Rights of Indigenous People* (2007).

51 Government of the Philippines, *Indigenous Peoples Rights Act*.

52 Michael Limerick, Kathryn Tomlinson, Rosemary Taufatofua, Rodger Barnes and David Brereton, *Agreement-making with Indigenous Groups: Oil and Gas Development in Australia* (University of Queensland, 2012).

demonstrates. Good coordination and communication with Union institutions will therefore be important (including potentially through a cadaster accessible by national and subnational institutions; discussed in section 4).

- **Ensure local stakeholders are able to participate in the decision to extract.** Laws and regulations need to clearly set out which institutions or communities are involved in the licensing process, at what stage they are brought in and what degree of influence they have. Regardless of where ultimate decision-making power lies, it is important that different levels of government and local communities have input on whether extractive projects are allowed to go ahead. This is an important means of generating broad-based support. Even if Myanmar retains ultimate licensing responsibilities at the Union level, formally drawing subnational stakeholders into decision-making processes would be valuable.
- **Ensure the relevant authorities have adequate capacity to fulfill their functions.** Any moves to give a greater role in licensing to subnational authorities should ideally be preceded by efforts to strengthen capacity. This includes helping officials to better understand the terms of licenses, organize meaningful consultations and implement systems for tracking what rights have been allocated. Giving powers to institutions that lack the requisite skills and resources to negotiate and enforce license terms could increase the chances of corruption and make it harder to secure a good deal from extractive companies.
- **Promote transparency.** Even if local governments or communities do not have ultimate decision-making powers, they should be kept informed of the licensing process and the terms being agreed. Where greater roles are given to states and regions there should be transparency over the decisions they make. This is important to ensure that they act in a manner that is sensitive to local perspectives and helps to guard against corruption.

4. Cadaster and land management

WHY IT MATTERS

When governments allocate licenses for extractive activity, they need to understand and respond to competing claims for ownership and use of surface and subsurface resources. While the national government typically owns subsurface rights, surface rights tend to be highly complex and require systems to record and manage claims. In some cases, effective land management requires governments to identify “no-go” areas for extractive activity, such as national parks, which are set aside for other uses regardless of their resource potential. In the absence of good cadaster and land management, extractive activity risks leading to violations of the rights of formal or informal titleholders, disruptions to agriculture and forestry, and encroachments on environmentally sensitive protected areas. (See box 6.) A lack of security of tenure can also undermine investor confidence.

Box 6. What is a cadaster?

The extractive industries and other land uses generate large amounts of information, which need to be stored in an organized and easily accessible way. The system or systems used to store and organize such information is called a cadaster.⁵³ A good cadaster links parcels of land with information on who owns the surface rights (in the case of a land cadaster) or subsurface resources (in the case of a minerals cadaster). This can include both formal and informal understandings of tenure. Cadasters can also be used to track expired licenses and the payment of license fees, and be used to delineate protected areas.

Cadasters can be paper-based or digitized. The former is currently used in Myanmar, but the global trend is to move towards the latter, as it facilitates the creation of an integrated repository of information, capable of detecting multiple, overlapping or ambiguous claims. (See figure 2 for an example of a digital cadastral map.) Moreover, real-time nationwide updates can ensure that the same information is held at national and subnational levels at all times.

When made publicly available, a cadaster can also serve as a monitoring tool for citizens. By having access to information on who has rights to which plot of land, citizens can better hold their governments accountable. In fact, maintaining a publicly available, up-to-date cadaster of extractive licenses is one of the requirements of the EITI Standard. Myanmar is an EITI candidate country and therefore committed to implementing this requirement.

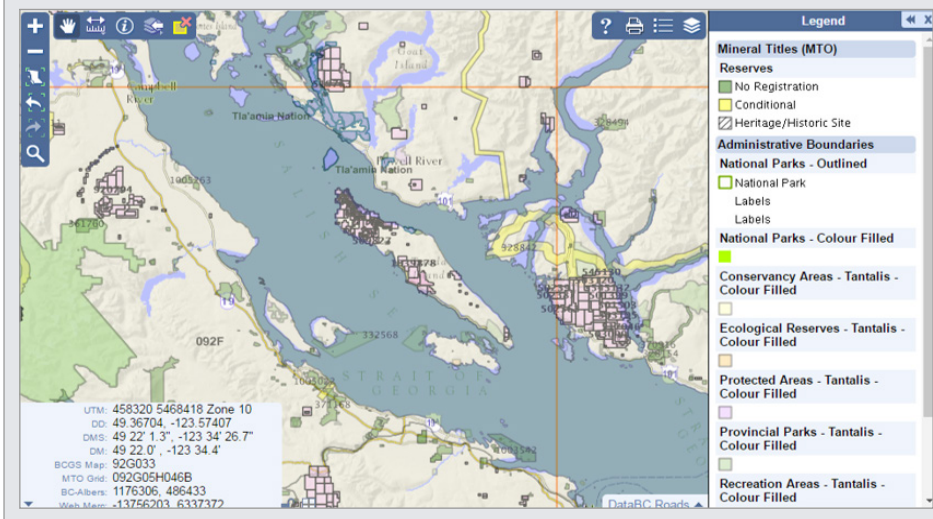


Figure 2. “Mineral Titles Online” cadastral map from the government of British Columbia, Canada

53 A cadaster can also be defined as a public institution that integrates the regulatory, institutional and technological aspects of mineral rights administration. In this report, we use the land information system definition.

One of the challenges is that different government bodies usually administer land management and mineral licensing. At times, responsibility for recording one or the other can lie in different ministries or at different levels of administration (i.e., with national and subnational institutions collecting and storing different kinds of data). Often these institutions do not use the same systems for recording and sharing information, making it harder to easily understand the overlap of land and mineral rights. As a result, clearly defining responsibilities for land management and establishing a clear means of coordination and communication between different levels is an essential component of natural resource federalism and essential to good governance of the natural resource sector.

Conferring some responsibilities to subnational institutions can be helpful in improving the accuracy of recordkeeping, particularly related to informally held tenure rights. Subnational institutions are often better placed to collect information and understand competing land claims. This is because they may be more familiar with the land and its competing uses, more attuned to local culture and customs, and may be more trusted by community members as an authority to record land use information. They can also be involved in the process of identifying “no-go” zones for extractive activity. In Colombia, for example, in 2016 the constitutional court ruled that the national government must reach an agreement with municipal authorities in the definition of such areas.⁵⁴

However, giving subnational institutions the responsibility to record and manage land use also carries risks. If the separation of roles between the national and subnational level is not clearly delineated, ambiguities, poor coordination and inconsistencies can emerge, which can result in overlapping and conflicting claims.⁵⁵ Attempts to strengthen coordination can be hampered by technology constraints. For example, subnational authorities in remote locations may lack reliable electricity or Internet access to be able to input data into a unified digital cadaster.

Land disputes have been a key source of conflict in Myanmar and demands for reforms to land rights are widespread among many of the country’s ethnic groups.

THE STATE OF PLAY IN MYANMAR

According to Article 37 of the 2008 Constitution, the Union government is the ultimate owner of all surface and subsurface resources in Myanmar. As a result, the laws governing land use are determined at the Union level, and Union institutions implement land policy.

Land disputes have been a key source of conflict in Myanmar and demands for reforms to land rights are widespread among many of the country’s ethnic groups. The Karen National Union, for example, published a land policy in December 2015 that demands that ethnic groups be considered the ultimate owners of all lands and natural resources in their areas, and calls for reforms to land tenure rights to better guarantee customary land rights.⁵⁶ The issue is gaining traction in discussions about the country’s future and the principles agreed at the 21st Century Panglong in May 2017 include calls to develop a new national land policy that reduces central government control.⁵⁷

54 Corte Constitucional de Colombia, *Comunicado No. 4: Sentencia C-035/16* (8 February 2016).

55 Enrique Ortega Girones. *Mineral Rights Cadastre: Promoting Transparent Access to Mineral Resources* (World Bank, 2016).

56 Office of the Supreme Headquarters of the Karen National Union, *Karen National Union Land Policy* (Karen National Union, December 2015).

57 Republic of the Union of Myanmar Ministry of Information, *37 Points Signed as Part of Pyidaungsu Accord* (30 May 2017).

Overview of key laws governing land management

The legal framework governing land issues in Myanmar is highly complex. There are currently 73 different laws relating to the ownership, management and control of land.⁵⁸ The three central pieces of legislation are the Land Acquisitions Act (1894), the Vacant, Fallow and Virgin Lands Management Law (2012) and the Farmland Law (2012). The Myanmar Investment Law (2016) also includes provisions on the land use rights of investors.



Mine workers dig a test shaft to find coal in Shan State.

Suthep Kritsanavarin for NRGi

The Land Acquisitions Act (1894) sets out procedures around land acquisition, including the provision that the Union government can acquire land on behalf of companies when deemed “likely to prove useful to the public.” The law also includes provisions around compensation, objections to acquisition and the right for affected parties to have the “opportunity of being heard.” The ultimate decision in the case of objections rests with the president.⁵⁹

The Vacant, Fallow and Virgin Lands Management Law (2012) facilitates the implementation of government land policies related to agricultural development. The law does not recognize informal land rights, creating the risk of land being classified as vacant, fallow or virgin when in fact it is being used or occupied. The accompanying rules do not contain procedural safeguards whereby impacted individuals can object to an acquisition.⁶⁰

The Farmland Law (2012) addresses ownership and transfers of farmland. As with the Vacant, Fallow and Virgin Lands Management Law (2012), the law allows for the repossession of farmland “for the interest of the state or the public.” The law does not set out procedures for objections or judicial review.⁶¹

A notable development has been the January 2016 adoption of a National Land Use Policy. The policy calls for greater protections of the interests of subnational stakeholders. This includes measures to recognize the land rights of ethnic minorities and to legally register land tenure rights that are recognized by local communities but have not previously been formally recorded.⁶² The policy is intended to lead to the drafting of a National Land Law.⁶³ However, to date implementation has been slow, and the drafting of the law has not yet started.

58 Burma Environmental Working Group, *Resource Federalism: A Roadmap for Decentralised Governance of Burma's Natural Heritage* (2017).

59 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

60 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

61 *Ibid.*

62 Republic of the Union of Myanmar, *National Land Use Policy* (January 2016).

63 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

Land title and cadaster management

Several Union institutions at the national and subnational level store land use and ownership information. MONREC and MOGE keep records of mining and petroleum licenses. Within MONREC, DGSE, the Department of Mines and MGE maintain separate cadastral maps using different systems for recording information.⁶⁴ During licensing (see section 3), they consult with regional, state-level and township authorities to avoid conflicts with existing landowners or users. The absence of a unified cadaster makes this difficult, with land ownership information often stored in paper form at the township level.⁶⁵ Forestry information is kept by township offices of MONREC's Department of Forestry. The department also records information on protected areas. Farmland information is stored at township offices of the Ministry of Agriculture, Livestock and Irrigation's Department of Land Management and Statistics.⁶⁶

The processes for avoiding overlaps are poorly defined, and it is unclear how much influence subnational stakeholders have in case of a conflict. Allegations of land grabs around extractive projects are widespread and have at times led to violent confrontations between community members and the police.⁶⁷ The government has established a Central Review Committee on Confiscated Farmlands and Other Lands to investigate disputes between communities and companies.⁶⁸ However, as of February 2014, only 5 percent of 8,478 cases filed had been settled. Land acquisition for natural resource investments has also contributed to clashes between the military and ethnic armed organizations.⁶⁹

MONREC is working with support from international partners to develop a mining cadaster, which will help to alleviate some of the challenges related to overlapping claims. However, the cadaster is primarily intended to improve oversight of mining licenses rather than strengthening coordination with other government departments. It is therefore unlikely to fully address broader land management challenges.⁷⁰

OBSERVATIONS FROM GLOBAL PRACTICE

When approaching cadaster and land management issues, it is important for countries to set out who decides on the types of land rights that are recognized; who identifies which tracts of land are open to what kind of uses (including areas that are off-limits to extractive activity); who determines legal title for a given plot of land; who keeps track of these titles; and who can access and update land registers or cadasters. The degree of subnational involvement in these processes differs among our sample countries. Almost all have created provisions for subnational involvement but there are significant variations in the degree to which this has contributed to better resource governance.

Legal frameworks for land management

Legal frameworks for land management typically reflect the constitutional structures of the countries in our sample, with unitary states usually maintaining powers at the national level, while federal states grant greater influence to subnational units. For example, in Mongolia, the constitution and relevant laws generally define the

64 Stakeholder interview.

65 Myanmar Centre for Responsible Business, *Myanmar Oil and Gas Sector Wide Impact Assessment*.

66 Shortell and Aung, *Mineral and Gemstone Licensing*.

67 Ei Ei Toe Lwin. "Fury Over Letpadaung Copper Mine Report," *Myanmar Times*, 18 March 2013.

68 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

69 The Asia Foundation, *The State of Conflict and Violence in Asia* (2017).

70 Shortell and Aung, *Mineral and Gemstone Licensing*.

“landowner” as the Mongolian state and, with some exceptions, the state leases the land for different uses.⁷¹ At the other end of the spectrum is Australia, where states and territories constitutionally administer all matters relating to the land.

Poorly defined legal frameworks can undermine resource governance and exacerbate tensions between different levels of government. This was the case in Papua, Indonesia. The Special Regional Autonomy Law for Papua gave authority for licensing and permitting for forests to district and city authorities. However, the province’s Special Autonomy Law placed the same powers at the provincial level. Actors at each level interpreted the legal framework in their own interests, creating coordination challenges between different levels of government.⁷²

Land registration and cadastral surveys

Among the countries surveyed, many have devolved some responsibilities for land registration and cadastral surveys to subnational authorities. However, there have been significant variations in the degree to which this has contributed to more effective natural resource governance. In many cases, the need for a national cadaster to ensure coordination between different levels of government becomes apparent.

In Australia, the federal approach to land management has resulted in the existence of eight separate cadasters and eight land planning and registration authorities. To date, the only comprehensive nationwide cadaster integrating information from all subnational systems has been developed by a private company.⁷³ States and territories are generally seen to manage their cadasters in a systematic and effective way. In New South Wales, for example, the state government has collaborated with industry and civil society to establish the publicly accessible Common Ground database, which allows for easy access to information on mining titles and land rights.⁷⁴ Nonetheless, the Intergovernmental Committee on Surveying and Mapping, which was established by the prime minister, state premiers and the chief minister of the Northern Territory, has started the process of establishing a single, unified national cadaster to make land management more efficient.⁷⁵

While Australia has been successful at attracting high-quality investment despite the existence of multiple subnational cadasters, in other cases decentralization has undermined sector governance. In Indonesia, the decision to give subnational governments the right to issue mining licenses led to an increase in overlaps with other land uses and insecurity of tenure. Research carried out by the Swandiri Institute and Publish What You Pay Indonesia found that in West Kalimantan province, more than 134,000 hectares of mining licenses overlapped with protected forests, while nearly two million hectares overlapped with agriculture or forestry concessions.⁷⁶ Argentina’s experience demonstrates how coordination between subnational and national institutions can help to avoid such challenges. See box 7.

71 Lehman Law, *Basics of Mongolia Land Law* (November 2016).

72 Yuko Kurauchi, Antonio La Vina, Nathan Badenoch and Lindsey Fransen, *Decentralization of Natural Resources Management – Lessons from Southeast Asia: Case Studies under REPSI* (World Resources Institute, May 2006).

73 The CadLite dataset developed by PSMA Australia. Company website, accessed 16 November 2017, <https://www.pasma.com.au/products/cadlite>.

74 See NSW Government, Department of Planning and Environment, “Common Ground,” accessed 16 November 2017, www.commonground.nsw.gov.au.

75 Intergovernmental Committee on Surveying and Mapping, *Cadastre 2034: Powering Land and Real Property* (ICSM, 2014).

76 Rebecca Iwerks and Varsha Venugopal, *It Takes a Village: Routes to Local-level Extractive Transparency* (Natural Resource Governance Institute, February 2016).

Box 7. Cadaster management in Argentina

In the 1980s, the mineral sector in Argentina was experiencing severe challenges with managing conflicting mineral rights. Provincial governments were responsible for licensing land for mineral exploitation and maintaining their own cadasters. However, they had such poor boundary information and generally ineffective systems that insecurity of tenure became a major problem. This deterred investors. It was not until 1993—when the provinces agreed to create a uniform cadaster—that private sector confidence was restored and the country saw an uptick in investment. While decision-making power remained at the local level, a uniform system allowed for more effective coordination and improved sector governance.⁷⁷



In the Philippines, attempts to give greater control over cadastral surveying and land tenure registration to subnational institutions also faced challenges. The Local Government Code of 1991 had tasked local governments with conducting cadaster surveys. However, in 2001 it was found that not a single municipality had initiated its survey due to lack of technical capacity and financial resources. The national government subsequently returned responsibilities to the regional offices of the national Department of Environment and Natural Resources (DENR).⁷⁸

In Malaysia, a mixed system has been implemented. Land registration in Peninsular Malaysia is the responsibility of individual states but governed by the National Land Code of 1965. The Department of Survey and Mapping Malaysia, a federal department, is responsible for undertaking cadastral survey work, resulting in a single map with demarcated parcels of land for the whole of the peninsula. State-level land

⁷⁷ Bauer et al., *Subnational Governance of Extractives*.

⁷⁸ Centre for Spatial Data Infrastructures and Land Administration, *Cadastral Template 2.0: Philippines* (University of Melbourne, 2015).

offices have digital access to the map enabling them to inform their land registration duties. In the states of Sabah and Sarawak, located on the island of Borneo, land management is governed by the Sabah Land Ordinance and the Sarawak Land Code, respectively.⁷⁹ The states each conduct their own cadastral surveys.⁸⁰ This reflects their greater degrees of autonomy from the central government.

CONSIDERATIONS FOR MYANMAR

In determining where responsibilities for cadastral management and land tenure registration should lie, policy-makers may wish to consider the following recommendations:

- **Involve subnational stakeholders in land planning.** Subnational stakeholders should be involved in discussions around land planning and allocation of certain tracts of land for specific uses, including the identification of areas that are off-limits for extractive activity (e.g., protected areas, forestry or agricultural land, etc.). While some degree of subnational input would be valuable, policy-makers will need to decide whether the final say on such matters should rest with the Union or states and regions.
- **Ensure coordination between national and subnational institutions.** Regardless of whether ultimate authority over land management lies at the national or subnational level, the experience of other countries shows the importance of coordination between different levels of government. A nationwide cadaster could be a useful tool. If Myanmar chooses to grant land registration responsibilities to states and regions, subnational institutions could nonetheless be required to input information into a national cadaster as opposed to keeping records only at the subnational level. This could be an effective means of ensuring coordination between national and subnational institutions and between neighboring subnational governments.
- **Ensure coordination between the extractive industries and other land uses.** While MONREC's efforts to introduce a mining cadaster are important in improving sector governance, consideration should also be given to how to improve coordination with other sectors, for example, forestry and agriculture, as well as protected areas. This would be particularly important if different levels of government collect information on different sectors.
- **Adapt subnational processes to capacity and technology constraints.** Any moves to give more responsibilities to subnational institutions should be cognizant of capacity and technology constraints. Particularly if a national cadaster is implemented which subnational institutions feed information into, software could be adapted to ensure it can be used effectively with limited training and despite potentially unreliable electricity and Internet access.
- **Facilitate public access to licensing and land title information.** To ensure transparency and accountability in land management, it could be valuable to ensure that any cadaster being developed is open to the public and user-friendly. The Common Ground initiative in New South Wales provides a useful example of the way in which public information can help to build trust between different stakeholders.

79 FAO (Food and Agriculture Organization of the United Nations), "Gender and Land Rights Database: Malaysia – Land Legislation," accessed 3 October 2017, <http://www.fao.org/gender-landrights-database/en>.

80 Centre for Spatial Data Infrastructures and Land Administration, *Cadastral Template 2.0: Malaysia* (University of Melbourne, 2015).

5. Fiscal frameworks and revenue collection

WHY IT MATTERS

Revenue flows are the principal benefit derived by host countries from the extractive industries. Oil, gas and mining projects can be major contributors to public finances and drivers of socioeconomic development. It is therefore essential to design an appropriate fiscal framework and ensure revenue is collected effectively. Governments need to ensure that they adequately incentivize investment while securing a good deal for the country. Otherwise they could miss an opportunity to convert finite resources into long-term public benefits.

As a first step, governments need to clearly define the fiscal framework, ideally within the country's laws or else in the contracts governing specific projects. Governments have several tools at their disposal, including royalties, taxes, production sharing arrangements and signature bonuses. A well-designed fiscal framework takes into account the finite nature of extractive resources, the uncertainties inherent in their exploration and the government's capacity to manage revenue flows sustainably.⁸¹ Governments then need to ensure that they effectively collect the funds they are due. Given the prevalence of self-reporting by companies to assess fiscal obligations, effective monitoring, auditing and enforcement are essential to avoid underreporting and the loss of revenues.

Revenue is often a focus of discussions around natural resource federalism. Some governments approach this by transferring extractive revenues to subnational governments. Considerations around revenue sharing are discussed in the 2016 NRGi and UNDP publication *Natural Resource Revenue Sharing* and the 2016 NRGi publication *Sharing the Wealth: A Roadmap for Distributing Myanmar's Natural Resource Revenues*.

In other cases, moves towards more federal structures see subnational governments collect revenues directly—and potentially even determine their own tax and royalty rates. This can be a means of compensating local stakeholders for the negative impacts of extraction, mitigating or preventing conflict, and responding to claims of local ownership of resources. In some cases, a middle road is pursued. Argentina, for example, delegates minerals management to provinces but sets a 3 percent cap on the royalties that may be collected by subnational governments.⁸²

Conferring the right to directly collect revenues also has the potential to be a more efficient means of ensuring funds arrive at the subnational level. In many countries, revenue transfers from central government are marked by uncertainty. In the Democratic Republic of Congo, for example, delays to fiscal transfers to the country's provinces have long been a source of tension, particularly in Katanga, which hosts most of the country's mining activity.⁸³ Powers to raise revenues can be a means of financially empowering subnational institutions.⁸⁴

Some of the main arguments against significant tax assignments to subnational entities have to do with local governments' capacities to negotiate and enforce terms, collect revenue and manage funds. Sophisticated tax administrations are typically

81 Natural Resource Governance Institute, *Fiscal Regime Design* (Natural Resource Governance Institute, March 2015).

82 Smith and Rosenblum, *Enforcing the Rules*.

83 International Crisis Group, *Katanga: Tensions in DRC's Mineral Heartland* (3 August 2016); Rebecca Iwerks and Kaisa Toroskainen, *Subnational Revenue Sharing in the DRC after Decoupage: Four Recommendations for Better Governance* (Natural Resource Governance Institute, April 2017).

84 Bauer et al., *Sharing the Wealth*.

required to ensure that the government collects the revenue it is due. For example, production monitoring for the purposes of royalty collection requires high levels of technical and human capacity—even national institutions can struggle with this. Delegating responsibility to subnational institutions could lead to revenue flows not being realized.

Revenue flows can also be vulnerable to politicization and corruption, and subnational institutions might be constrained by fewer oversight mechanisms.⁸⁵ In Nigeria, for example, there is little transparency in subnational revenue management. In one instance in 2011, the state government of Akwa Ibom allocated USD 120 million to the “governor’s office” in the capital budget. In a state where 60 percent of residents live in poverty a lack of public scrutiny over such spending decisions is a cause for concern.⁸⁶



A goldsmith weighs gold nuggets in Kachin State.
Minzayar Oo for NRGi

Depending on the importance of natural resource revenues to public finances, giving subnational governments full control over revenues could drive inequalities between resource-rich regions and less resource-rich regions. In Brazil, for example, arrangements for the sharing of offshore oil royalties led to a major increase in revenues to the states of Rio de Janeiro, Espirito Santo and Sao Paulo following discoveries in 2007. This triggered high profile political campaigns by non-producing states. In 2013, these states succeeded in introducing legal changes to the revenue sharing arrangement. The reforms threatened a sudden budget shortfall in producing states—Rio de Janeiro estimated that it would lose USD 810 million in 2013 alone.⁸⁷

Giving subnational institutions the right to determine their own approach to extractive sector revenues can make it more difficult to develop a coherent nationwide approach to fiscal regime design and broader economic policy. With some taxes imposed nationally and others subnationally, it may be harder to develop an effective approach to the fiscal burden placed on companies. This can harm investor confidence. Such models can also make it more difficult to use revenue transfers to address inequalities. In Bolivia, for example, fiscal transfers to municipalities are in part determined by a formula taking into account local poverty rates.⁸⁸ A more decentralized approach could be an obstacle to efforts to use resource wealth to tackle development challenges in specific areas.

85 *Ibid.*

86 Vanessa Ushie. *Political Decentralization and Natural Resource Governance in Nigeria*, Research Report (The North-South Institute, 2012).

87 Thalito Carrico, “Rio: Loser in Brazil’s Oil Royalty Row,” *FT*, 15 March 2013.

88 NRGi and UNDP, *Revenue Sharing*.

THE STATE OF PLAY IN MYANMAR

Myanmar's fiscal framework is currently determined at the Union level, and the Union government and state-owned economic enterprises collect almost all revenues from the extractive industries. See box 8.

Myanmar's extractive industries generate significant value. According to the country's first EITI report, published in January 2016, the Union government collected approximately USD 460 million in revenues from mining and approximately USD 2.7 billion from oil and gas in 2013/2014.⁸⁹ While these figures demonstrate the importance of the extractive industries to Myanmar's public finances, the complexity of the fiscal framework and weaknesses in revenue collection mean that underreporting, price manipulation and tax evasion are widespread, particularly in the gemstones sector.⁹⁰ As a result, there is a risk of significant revenues going unrealized.

Setting fiscal terms

Revenue streams in the mining sector are primarily governed by the Myanmar Mines Law (1994, as amended) and Myanmar Gemstone Law (1995, as amended) and related regulations. On the basis of these, the Union government sets or negotiates production sharing, state equity participation, royalties and surface fees. In the oil and gas sector, the Union government sets fiscal terms in production sharing contracts. In addition to these sector-specific taxes, extractive companies are required to pay a number of other taxes and duties determined by the Union government, such as corporate income taxes and customs duties.

Box 8. Revenue streams from Myanmar's oil, gas and mining sector

Myanmar's legal framework provides for several potential revenue streams from the extractive industries. The most important of these are:

- **License fees.** One-time payments made by companies to secure a new license.
- **State participation.** Dividends from government ownership share in extractive projects.
- **State share of production.** A proportion of petroleum or minerals received directly by the state through participation in extractive projects.
- **Royalties.** A percentage payment based on the volume and value of production.
- **Corporate income tax.** Taxes levied on the incomes of oil, gas and mining companies.
- **Commercial tax.** Taxes on the sale of oil, gas and mining products.
- **Customs duties.** Special taxes levied on the export of oil, gas and mining products.

Revenue collection by Union institutions

In the oil and gas sector, MOGE plays a major role in collecting revenues and monitoring compliance. Under the model PSC, the state-owned economic enterprise is charged with taking and marketing the state's share of profit oil, though in reality offshore gas is sold by foreign operators and the state's share is paid in cash. Onshore oil and gas production shares are sometimes paid in crude and sometimes paid in cash. MOGE also collects signature and production bonuses, royalties, data fees and training funds. In addition, it is responsible for assessing contractors' valuation of crude oil.⁹¹ Petroleum royalties and bonuses are collected by MOGE and then transferred to MOEE. Corporate income taxes and duties are collected by the Internal Revenue Department (IRD) and the MOPF's Customs Department.

89 Bauer et al., *Sharing the Wealth*.

90 Global Witness, *Jade: Myanmar's 'Big State Secret'*.

91 Heller and Delesgues, *Gilded Gatekeepers*.

In the mining sector, key revenue collection responsibilities are divided between state-owned economic enterprises, IRD and the Customs Department. In the minerals sector, production monitoring is the *de facto* responsibility of state-owned mining enterprises with no formal subnational input, though legislation remains unclear on regulatory responsibilities. In the gemstones sector, the process of calculating royalties allows for some involvement by subnational stakeholders. Royalties are based on a valuation conducted by a body established by MONREC. According to MONREC directives, this body should include representatives from the relevant state and regional government and parliament, as well as township revenue officers. However, ultimate responsibility rests with the Union government. Union institutions collect the bulk of other revenues without subnational input.⁹²

Subnational revenue collection

There are minor exceptions where states and regions directly collect revenues. State and regional governments can collect mineral taxes from gravel and sand producers, as well as some relatively minor non-sector specific taxes, including excise taxes, land taxes, water taxes, and road tolls and taxes. For some of these, subnational governments have the right to set the tax rates themselves, while in other cases they apply rates determined by the Union government. State and regional governments may also sell or lease state or regional government property and can make profits on state or regional government-owned enterprises (though in practice these are understood to be of limited importance in the extractive sector).⁹³

Presently, state and regional budgets—which are used to fulfill a limited set of expenditure responsibilities (see box 1)—depend largely on transfers from the Union government. These transfers tend to be made on an *ad hoc* basis.⁹⁴ This can make budgeting difficult and restrict the ability of subnational governments to make spending decisions that are truly independent of the Union government. As a result, there have been calls for more subnational powers to directly collect revenues. Legislative changes are currently underway which will increase some revenue collection responsibilities of state and regional governments for artisanal and small-scale production in both the mining and oil sector. This is discussed in more detail in section 9. Subnational governments have also been developing means of securing benefits that are not covered by the Union’s fiscal framework. (See box 9.)

While the ability of subnational institutions to collect revenues in the extractive sector is limited, there is significant anecdotal evidence of informal revenue collection by ethnic armed organizations. For example, the KIA is alleged to have established a relatively formalized and sophisticated tax collection system on transit routes from jade mines to the Chinese border.⁹⁵ There are also allegations of the Myanmar military deriving significant informal revenue streams from the sector.⁹⁶

92 Stakeholder interview.

93 Bauer et al., *Sharing the Wealth*.

94 *Ibid.*

95 Bauer et al., *Sharing the Wealth*.

96 Global Witness, *Jade: Myanmar’s ‘Big State Secret.’*

Box 9. Local benefits

Aside from creating obligations for the payment of royalties, taxes and other fiscal revenues, governments can require companies to invest in community development or infrastructure projects. In other cases, companies might make such investments voluntarily as part of their sustainability strategy.

Often these kinds of investments are tax deductible, meaning that funds spent on local projects reduce a company's overall tax burden. This represents a shift of benefits from the national government to the local area and can be a means for subnational stakeholders to capture a greater portion of benefits even when the fiscal framework does not give them control over the sector's revenues.

In Myanmar's minerals and oil and gas sector there is no national legislation mandating such community or social investment payments. However, MIC strongly encourages all investors to allocate 1–3 percent of pre-tax profits for corporate social responsibility programs and to make spending decisions in consultation with local communities and authorities.⁹⁷ The 2016 amendments to the Myanmar Gemstone Law stipulate that 2 percent of profits from gemstone projects should "go toward a fund for the development of health, education, transportation and other items," though it is unclear whether these provisions are being implemented in practice.⁹⁸ Social investment obligations can also be required within individual license agreements. For example, following the renegotiation of the Letpadaung copper mine's license, operator Myanmar Wanbao committed to investing two percent of net profit annually into a community development fund.⁹⁹

Subnational governments have been setting some of their own social investment obligations:

- In Shan State, the state government established a "Fund for Poverty Reduction and Environmental Conservation" by decree from the chief minister. As of June 2014, the fund had reportedly raised about 240 million MMK. Under the provisions of the decree, mines paid a flat fee based on the size and type of mine. While the current status of the fund is unclear, it was reportedly used mainly to provide microloans to farmers.¹⁰⁰
- In March 2014, the Kachin State government began requiring gem mining companies to contribute 10 million MMK each for construction of the Moe Kaung-Hpakant road, one of the main roads to the Hpakant jade mines.¹⁰¹



A farmer draws water from a well near the Letpadaung copper mine in Sagaing Region. The mine's license was renegotiated following major community protests. Lauren DeCicca for NRGi

97 Myanmar Centre for Responsible Business, *Myanmar Oil and Gas Sector Wide Impact Assessment*.

98 Republic of the Union of Myanmar, *Myanmar Gemstone Law* (2016).

99 Myanmar Wanbao website, accessed 16 November 2017, www.myanmarwanbao.com.mm.

100 Thet Aung Lynn and Mari Oye, *Natural Resources and Subnational Government in Myanmar: Key Considerations for Wealth Sharing* (IGC, MDRI-CESD and The Asia Foundation, 2014).

101 Lynn and Oye, *Natural Resources and Subnational Government in Myanmar*.

OBSERVATIONS FROM INTERNATIONAL PRACTICE

Among our sample countries, there are variations in the degree to which subnational governments control revenue flows from the extractive sector. In unitary countries tax and royalty rates are typically set and collected by national institutions, though there are often fiscal transfers to subnational institutions. In more decentralized countries, subnational governments may have the right to directly collect some revenues though the rates are determined in part or in full at the national level. More unusual are countries where subnational governments are completely free to determine the rates for major extractives revenue flows.

Revenue collection

In the unitary countries in our sample national institutions typically collect all major extractive sector revenues. Nonetheless, all of these countries have systems in place to redistribute some revenues to subnational governments. In Mongolia, for example, some mining-related revenues are transferred to local governments. A percentage of domestic value added tax, royalties, license fees and local government budget surpluses are pooled into the General Local Development Fund and then redistributed using a formula that takes into account development indicators, demographic factors and local tax generating capacity.¹⁰²

Such revenue transfers can also be tailored to address historical grievances in specific regions. In Indonesia, for example, the central government typically distributes 3.1 percent of total oil revenues to producing provinces, 6.2 percent to producing regencies and 6.2 percent to other regencies in producing provinces. Transfers follow a similar pattern but are slightly higher in the case of gas revenues. By contrast, the regions of Papua and West Papua, which have been home to long-standing conflicts between the central government and separatist groups, receive 70 percent of revenues from oil and gas produced there.¹⁰³

When it comes to the right to directly collect revenues at the subnational level, there are variations, based in part on the type of revenue stream and the nature of extractive activity. Tables 1 and 2 provide an overview of mineral and petroleum tax collection responsibilities in key natural resource-driven economies globally, including our sample countries. In Australia, India, Indonesia and Mongolia corporate income tax rates are collected by the national government only. In the Philippines, local governments can set and directly collect a local business tax, though the central government limits the maximum rate that can be levied.¹⁰⁴

There is even more variation when it comes to royalties. In Indonesia, all royalties from mining and petroleum projects are collected by the national government (though a system for transfers to subnational institutions is in place). In Australia, states and territories collect royalties from onshore resources. Offshore petroleum royalties (which currently apply only to the North West Shelf) are collected by the national government but are then shared with the government of Western Australia.¹⁰⁵ Similarly in Malaysia, mining royalties are collected by subnational governments, while petroleum royalties are collected by the national government. The Malaysian system has been subject to controversy. While states are entitled to royalty transfers from projects in coastal waters, there is disagreement over whether this arrangement also applies to projects located further offshore. In 2000, the federal government

¹⁰² NRGi and UNDP, *Revenue Sharing*.

¹⁰³ *Ibid.*

¹⁰⁴ NRGi and UNDP, *Revenue Sharing*.

¹⁰⁵ Information and Research Services, *Research Note: Crude Oil Excise and Royalties* (Department of the Parliamentary Library, 2000).

stopped royalty transfers to the state of Terengganu and diverted them to a federally controlled fund. The state government argued that this move was politically motivated—having occurred shortly after the opposition party, the Malaysian Islamic Party, unseated the ruling party in state elections—and sued the federal government. The federal government denied the allegations, and the courts eventually ruled in its favor, stating that Terengganu’s rights did not extend beyond three nautical miles offshore.¹⁰⁶

Major revenue streams tend to be collected by the national government, while subnational governments often have rights to collect smaller taxes and fees. In Mongolia, for example, the national government collects royalties and corporate income tax but local governments collect property, land, vehicle and water use taxes, as well as royalties on gravel and sand production.¹⁰⁷ The value of national level revenues far outweighs subnational revenues. In 2015, national agencies collected MNT 1.3 trillion, while subnational entities collected MNT 0.1 trillion.¹⁰⁸

Country	Government structure	Corporate income tax		Royalties		Property/Land taxes	
		N	S	N	S	N	S
Argentina	Federal	X			X		X
Australia	Federal	X		X*	X	X*	X
Brazil	Federal	X		X		X	
Canada	Federal	X	X	X*	X	X*	X
Chile	Unitary	X				X	
China	Unitary	X			X		X
DRC	Unitary	X		X			X
Ghana	Unitary	X		X			X
India	Federal	X			X		X
Indonesia	Regionalized unitary	X		X		X	X
Kazakhstan	Unitary	X		X			X
Kyrgyzstan	Unitary	X		X	X**		X
Malaysia	Federal	X	X		X		X
Mexico	Federal	X		X		X	
Mongolia	Unitary	X		X			X
Myanmar	Unitary	X		X		X	X
Peru	Unitary	X		X			X
Philippines	Regionalized unitary	X	X	X	X***		X
Russia	Federal	X	X	X			X
South Africa	Unitary	X		X			X
Tanzania	Regionalized unitary	X		X			X
UAE	Federal		X		X		X
U.K.	Regionalized unitary	X					
U.S.	Federal	X	X	X*	X		X

Table 1. Mineral tax collection by level of government in selected countries

Sources: *National legislation; PricewaterhouseCoopers country mining tax profiles (2015)*

N – National government;
 S – Subnational government (state, provincial, regional or municipal)
 * – only applicable in federally administered territories;
 ** – Local governments at the *aiyl aimak* level collect “non-tax payments,” which are essentially royalties
 *** – Royalties are only assessed and collected by indigenous groups and some local government units

106 Wee Chong Hui, *Oil and Gas Management and Revenues in Malaysia* (Universiti Teknologi Mara Sarawak).

107 NRGi and UNDP, *Revenue Sharing*.

108 Mongolia Extractive Industries Transparency Initiative, *Mongolia Tenth EITI Report 2015* (December 2016).

Country	Government structure	Corporate income tax		Royalties		Property/Land taxes	
		N	S	N	S	N	S
Australia	Federal	X		X*	X		X
Azerbaijan	Unitary	X		X		X	
Bolivia	Unitary	X		X		X	
Brazil	Federal	X		X			X
Canada	Federal	X	X	X*	X		X
China	Unitary	X		X	X		X
Ghana	Unitary	X		X		X	
India	Federal	X		X**	X		X
Indonesia	Regionalized unitary	X		X		X***	
Kazakhstan	Unitary	X		X			X
Kyrgyzstan	Unitary	X		X			X
Malaysia	Federal	X		X		X	
Mongolia	Unitary	X		X	X		X
Myanmar	Unitary	X		X			X
Nigeria	Federal	X		X			
Norway	Unitary	X		X			
Philippines	Regionalized unitary	X					
South Africa	Unitary	X		X			X
Tanzania	Regionalized unitary	X		X			X
Timor-Leste	Unitary	X		X			
Trinidad and Tobago	Unitary	X		X		X	
UAE	Federal		X		X		X
U.K.	Regionalized unitary	X					
U.S.	Federal	X	X	X*	X		X

Table 2. Petroleum tax collection by level of government in selected countries

Sources: *Deloitte Oil and Gas Taxation profiles (2013)*; *Deloitte Taxation and Investment profiles (2015)*; *EITI Reports (most recent)*; *Fidfinvest AG (2005) Taxation in the United Arab Emirates*; *Mitch Kunze and William E. Morgan (2005) "Taxation of Oil and Gas in the United States 1970–1997."* *Natural Resources Journal* 45(1): 77–101; *national legislation*; *PricewaterhouseCoopers tax summaries (2016)*.

N – National government
 S – Subnational government (state, provincial, regional or municipal)
 * – only applicable in federally administered territories
 ** – only offshore
 *** – Although legally national jurisdiction, subnational governments sometimes collect land taxes

Setting fiscal terms

When it comes to setting fiscal terms, the influence of subnational governments is often more limited. Particularly in the oil and gas sector, within our sample it is rare for subnational governments to determine the rates of sector-specific revenue streams. In India, subnational governments collect onshore royalties but at rates set by the national government. The national government also determines and collects offshore royalties. In Malaysia, royalty rates are determined by the production sharing contracts agreed between the state oil company Petronas, the federal government and relevant producing state governments.¹⁰⁹ Recently the state of Sarawak has been campaigning to increase the share of royalties it receives from state oil company Petronas, but it cannot impose higher rates unilaterally.¹¹⁰

Non-state subnational stakeholders can also be given the right to determine fiscal arrangements. In the Philippines, the national government generally collects royalties in the mining sector, but mining projects located in indigenous areas also agree to a special royalty that is paid into a community trust fund. The Philippine Mining Act states that these royalties need to be equal to at least 1 percent of the value of the resource.¹¹¹

109 NRGi and UNDP, *Revenue Sharing*.

110 Intan Farhana Zainul, "Sarawak to Set Up Own Oil Company Amid Ongoing Talks with Petronas," *The Star*, 5 September 2017.

111 Government of the Philippines, *1995 Mining Act (1995)*.

Production monitoring

A key element of effective revenue collection is production monitoring. This is essential in order to determine accurate royalty obligations. Many countries designate in their legislation the body responsible for receiving production reports from companies but fail to provide specific procedures for the verification of the integrity of reported data.

At the most devolved end of the spectrum is Australia, where state and territory governments collect self-reported production data for onshore operations and calculate royalty obligations.¹¹² State and territory governments are explicitly responsible for ensuring the integrity of the data.¹¹³ In Indonesia, by contrast, the 2009 Mineral and Coal Mining Law states that the responsibility to monitor the “quantity, type and quality of the output of mining businesses” is distributed between national and subnational governments depending on whether the project in question is a domestic or foreign investment. In the Philippines, production reports from mining companies are collected by different levels of the MGB, depending on the type of commodity. MGB’s central, regional and provincial directors all collect different types of reports. However, while operating at the local level, directors are appointed by and directly accountable to the central MGB.¹¹⁴

CONSIDERATIONS FOR MYANMAR

As discussions around revenue sharing continue and more influence is given to state and regional governments, the following recommendations should be considered:

- **Build national consensus around fiscal responsibilities.** Currently fiscal decentralization is occurring in an *ad hoc* manner. Instead, consensus should be built around which revenue streams should be directly set or collected by subnational institutions, and how to ensure equity between states and regions (these considerations are discussed in more detail in the NRGi publication *Sharing the Wealth: A Roadmap for Distributing Myanmar’s Natural Resource Revenues*). If more revenue collection responsibilities are given to states and regions, ensuring coordination between the national and subnational level could be valuable to ensure the full fiscal burden on investors is understood and a clear and coherent fiscal regime is in place across the country.
- **Build capacity for revenue collection.** Particularly when it comes to production monitoring, a relatively high degree of technical sophistication is required. Union institutions tasked with revenue collection already suffer from capacity challenges leading to revenues going unrealized. Plans to give greater influence to subnational stakeholders need to be accompanied by measures to ensure that they are equipped to fulfill their duties.
- **Build capacity for revenue management.** If state and regional governments are to directly collect more revenue in future (or are to receive greater transfers from the Union government), there could be value in building their capacity to manage these funds. In addition, the capacity of regional parliaments to scrutinize spending decisions and hold subnational decision-makers to account could be further improved.

¹¹² Geoscience Australia, *Minerals and Petroleum in Australia: A Guide for Investors* (2015).

¹¹³ Government of Western Australia, Department of Mines and Petroleum, “Petroleum Royalties,” accessed 16 November 2017, www.dmp.wa.gov.au/Petroleum/Royalties-1578.aspx.

¹¹⁴ Government of the Philippines, *The Implementing Rules and Regulations of the Philippine Mining Act of 1995* (2010).

- **Ensure revenues reflect expenditure responsibilities.** The revenues collected by subnational governments should match expenditure responsibilities so as to prevent the risk of wasteful spending on the one hand or poor service delivery on the other. Currently states and regions have limited responsibilities to deliver services, and so any reforms would need to be mindful of not taking resources away from essential services being delivered through the Union budget.
- **Decide on who the recipients for subnational revenues should be.** While regional and state-level authorities might be the most obvious recipients, governments in other countries also make transfers to traditional authorities, municipalities and landowners. Governments can even make transfers directly to citizens. In the case of Alaska, every permanent resident of the state receives an annual dividend from the Alaska Permanent Fund, which is financed by oil royalties. While these are all possible considerations in Myanmar, revenue transfers should only be made to institutions that have the capacity to sustainably manage revenues flows.

6. Environmental management

WHY IT MATTERS

Extractive activity can have major environmental impacts. Particularly in the case of mining, effects on the physical environment are often significant and have the potential to cause serious and lasting damage to human health and livelihoods, as well as harming animal and plant life. It is therefore essential to have measures in place to ensure that companies reduce their environmental footprint as much as possible and—where negative impacts cannot be avoided—take steps to minimize and mitigate them.

In order to be able to responsibly manage environmental impacts, governments first need to establish a strong legal framework defining environmental standards. Once this framework is in place, it should be used as the basis for assessing the potential impacts of extractive activity before granting permissions for projects to proceed. Generally, this is done through the review of environmental impact assessments (EIAs) and associated management plans.¹¹⁵ Once extractive activity starts, governments should monitor compliance with environmental standards and, if needed, apply corrective measures and penalties.

In many countries, there is strong demand for subnational stakeholders to be involved in environmental management. The rationale behind this is that those stakeholders most directly affected by environmental degradation may be well placed to play a role in the process of assessing potential environmental risks before extractive activity commences—and monitoring compliance thereafter. Additionally, it is in the interest of all stakeholders to ensure that local communities feel that environmental management efforts are sufficient to safeguard their health and livelihoods.

However, the devolution of responsibilities also poses challenges. Assessing EIAs and environmental management plans—and monitoring compliance—requires significant technical expertise, which is often lacking at the subnational level. Deferring responsibilities to subnational institutions that are not equipped to fulfill their duties can increase the risk of poor performance. Environmental damage can also cross subnational boundaries (particularly if waterways are polluted) and is therefore often not simply the concern of a single state or region. To mitigate this risk, there must be some guarantee that common standards are applied across a country. Federal structures can also make it more difficult for national governments to be involved in environmental treaties, as they may not have constitutional powers to regulate certain environmental matters.

¹¹⁵ In many countries, these are more broadly defined as environmental and social impact assessments and also include a review of social impacts as well as preparation of corresponding management plans.

THE STATE OF PLAY IN MYANMAR

Myanmar's extractive industries have been associated with serious environmental challenges. Gold mining operations, for example, have contaminated surface and groundwater through the unsafe use of mercury or cyanide.¹¹⁶ The jade sector has witnessed some of the highest profile environmental incidents, including deadly landslides and floods caused by improper mine design and waste management.¹¹⁷

In recent years the Union government has introduced several new pieces of legislation and regulation in an attempt to address these challenges. Under these reforms, the vast majority of responsibilities for setting and enforcing environmental standards remain at the Union level. There is some subnational involvement in implementation, but this occurs primarily on an *ad hoc* basis with little concrete guidance on the precise role to be played by subnational institutions. Implementation of the legal framework remains weak.¹¹⁸



Amber mine in Danai Township, Kachin State
Khun Hlat for NRGi

The environmental legal framework

The Union government is currently at the end of a five-year process of revising its policies and laws on environmental protection. The Environmental Conservation Law was updated in 2012, and MONREC subsequently adopted the Environmental Conservation Rules in 2013, followed by the Environmental Quality Standards (EQS) and the Environmental Impact Assessment (EIA) Procedures in 2016. Together these documents provide detail on:

- Types of activities requiring an EIA and Environmental Management Plan (EMP)
- Types of activities to be assessed in the EIA and accounted for in the EMP
- Noise, air emissions and liquid-type discharge standards
- Procedures for the preparation, submission, assessment and approval of EIAs and EMPs
- Identification of responsible government bodies
- Penalties for non-compliance and disclosure requirements

116 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

117 Global Witness, *Jade: Myanmar's 'Big State Secret.'*

118 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

Environmental approvals

Under Myanmar's environmental legal framework, MONREC's Environmental Conservation Department (ECD) has the ultimate responsibility for giving environmental approvals. This includes the review of Initial Environmental Examinations (IEEs), EIAs and EMPs. ECD is required to make EIAs publicly available and to seek subnational input by organizing consultations at the local level. In addition, Chapter V of the EIA Procedures requires companies to consult with national, regional, state and local level authorities, and community and civil society organizations and to "consider" their views in preparation of the EIA.¹¹⁹ MONREC is currently preparing EIA public participation guidelines, which include specific procedures around consultation in conflict-affected areas.¹²⁰ In practice, however, there are serious shortcomings in the disclosure of EIAs and management plans.¹²¹

Environmental monitoring

Once extractive projects are operating, ECD is mandated to monitor environmental performance. The Environmental Conservation Law and EIA Procedure give ECD the "exclusive authority" to monitor compliance with IEEs and EIAs. This includes reviewing biannual compliance reports prepared by extractive companies.¹²² However, while the government's increased focus on environmental protection is encouraging, implementation to date has faced shortcomings. Interviewees noted that ECD's monitoring capacity is weak. There are reportedly plans for a significant increase in ECD's presence at the state and regional level, including the employment of thousands of new staff across the country. However, interviewees noted that there have been few signs that there will be efforts to increase the technical capacity of ECD staff in a manner that is commensurate with its hiring drive or to prioritize monitoring activities in areas facing the greatest environmental challenges.

Despite ECD officially taking the principal role on environmental issues, there are ambiguities around monitoring responsibilities. For example, drafts of the new mines rules and the new gemstones law reviewed by NRGi identified the director general of MONREC's Department of Mines as the chief inspector of mines, including on environmental matters. It is unclear how this function relates to the duties assigned to ECD (and whether there are plans to clarify this as the law and rules are being finalized). State-owned enterprises can also play an important role. According to interviewees, MGE, for example, maintains a much more noticeable presence in gemstone areas than ECD and has issued a large number of notifications on environmental matters to extractive companies.

There are also reports of state and regional governments assuming some environmental enforcement functions. In 2016, for example, the chief minister of Sagaing ordered the closure of two jade mines citing concern over improper management of mine waste.¹²³ Again however, the legal framework does not clearly spell out how such subnational functions relate to the duties vested in ECD and the Department of Mines.

119 Republic of the Union of Myanmar, *Environmental Impact Assessment Procedures* (2016).

120 Vermont Law School, *Draft Guideline on Public Participation in Myanmar's EIA Process* (31 May 2017).

121 Natural Resource Governance Institute, *2017 Resource Governance Index*.

122 Environmental Conservation Department website, "Monitoring," accessed 16 November 2017, www.ecd.gov.mm/?q=node/387.

123 Kyaw Thu, *Government Official Shuts Down Two Jade Mining Companies in Northwest Myanmar* (17 August 2016).

OBSERVATIONS FROM GLOBAL PRACTICE

Most countries within our survey develop the legal framework for environmental management at the national level. However, there is more subnational input in implementation and monitoring. Particularly during EIA processes, it is common to allocate a formal role to subnational stakeholders so as to ensure local environmental concerns are taken into account.

Environmental approvals

Among the countries in our survey, environmental legal frameworks are typically determined by the national government but provide for some subnational input in implementation, either by giving subnational governments a formal role in granting environmental approvals or mandating subnational consultation in those processes. In India, a national-level environmental framework exists, but extractive projects need approval from state-level pollution control boards.¹²⁴ In Mongolia, national legislation identifies the governors of a *soum* as the authority responsible for assessing environmental protection plans for mineral exploration projects. When companies want to move to production, the central government assumes this authority.¹²⁵ In Indonesia, the central government issues the overarching EIA regulation, but at the provincial and district level more stringent EIA regulations can be developed to complement the national rules. District, province and central authorities all have responsibilities for different kinds of environmental approvals in the mining sector.¹²⁶

Australia is a rare example of a country where state governments have almost complete control over environmental regulations and approvals.¹²⁷ While the federal government reserves the right to regulate “matters of national significance” such as issuing environmental permits in natural reserves, it is in the process of devolving a greater set of approval responsibilities to state governments while ensuring minimum standards are maintained across the country.¹²⁸

While legal frameworks often include provisions for subnational participation in environmental approval processes, in practice there are major variations in the degree to which this genuinely empowers subnational stakeholders. In the Philippines, national legislation requires local government approval for all projects with potential environmental impacts.¹²⁹ As noted in section 3, this has had implications for environmental approvals, leading many localities to block licensing processes on environmental grounds. This has in part been blamed on a lack of transparency and poor coordination with national institutions. While approval from local governments was sought in permitting processes, environmental impact statements were confidential to the national government and the investor, making it difficult for subnational institutions to effectively assess environmental risks.¹³⁰

Environmental legal frameworks are typically determined nationally but many countries give subnational governments a formal role in environmental approvals.

124 Government of India, *Air Act* (1981); Government of India, *Water Act* (1974); Government of India, *Environment Act* (1986); Government of India, *Hazardous and Other Waste Rules* (2016); see also: Els Reynaers Kini, Tavinder Sidhu and Surender Pal Bhatia, “Environmental Law and Practice in India: Overview,” *Thomson Reuters Practical Law*, 1 July 2017.

125 Government of Mongolia, *Minerals Law*.

126 Government of Indonesia, *Environmental Permit Regulations* (2012); Government of Indonesia, *Environmental Protection and Management Law* (2009).

127 Geoscience Australia, *Minerals and Petroleum in Australia*.

128 Government of Australia, *Environmental Protection and Biodiversity Conservation Act* (1999); Australian Government Department of Environment. *Fact sheet 1: What is the One-Stop Shop?*

129 Government of the Philippines, *Local Government Act*.

130 Smith and Rosenblum, *Enforcing the Rules*.

Environmental monitoring and enforcement

Monitoring also provides opportunities for subnational input. In the Philippines, Mongolia, Indonesia and Australia, subnational governments are responsible for this. Mongolia is a rare example of a unitary country where subnational institutions can apply penalties in the event of a company’s noncompliance. When a mining company is found to have violated environmental standards, the governor of the relevant *soum* or *aimag* has the right to stop exploration or production activities.¹³¹

Box 10. Participatory monitoring in Peru

Outside the formal framework of government institutions monitoring environmental performance, NGOs, community organizations and individuals can be drawn into these processes too. One option is for government or company environmental monitoring reports to be made publicly available so as to allow for independent scrutiny. It is also possible to directly involve non-governmental stakeholders in monitoring, for example by giving community members responsibility for collecting water or soil samples. In Peru, there have been several examples of “Participatory Environmental Monitoring and Surveillance Committees” being formed to monitor water usage and quality around mine sites. Although these are often voluntary initiatives agreed between mining companies and local communities, the government is increasingly recommending their establishment as a means to stave off social conflict.¹³² The experience of Peru shows that participatory monitoring programs can potentially be a powerful means of building trust in a company’s environmental performance and the government’s monitoring efforts. However, these should not be seen as a substitute for formal, expert-led oversight.



¹³¹ Government of Mongolia, *Law of Mongolia on Environmental Impact Assessments* (2014); Government of Mongolia, *Minerals Law*.

¹³² Andre Xavier, Aldo Leon, Alexandra Carlier, Manuel Bernales and Bern Klein, *The Role of Participatory Environmental Monitoring Committees in Mining Regions in Peru* (Proceedings of the Eighth International Conference on Sustainable Development in the Minerals Industry, 2017).

CONSIDERATIONS FOR MYANMAR

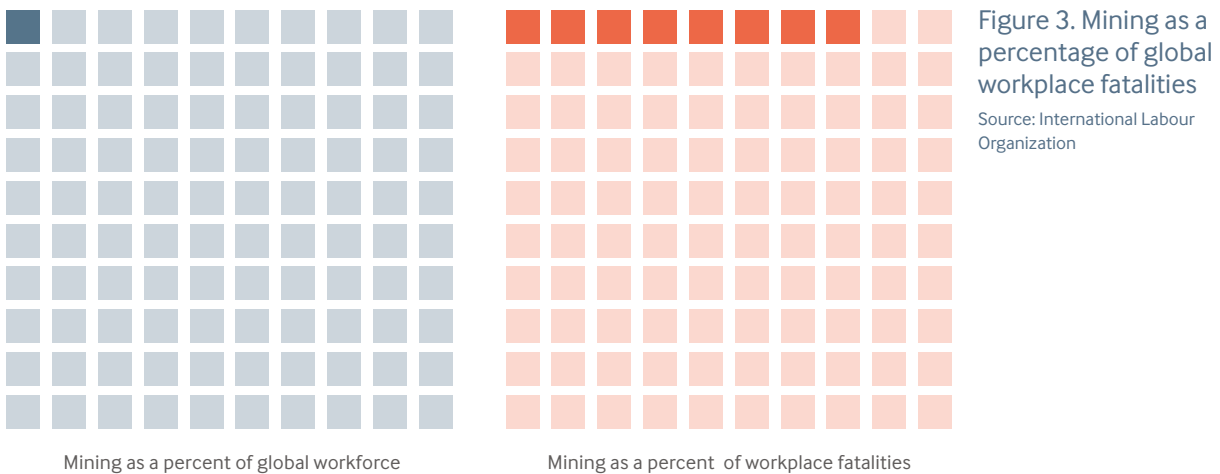
As Myanmar's processes for environmental management continue to evolve, the following recommendations could be considered:

- **Formalize the role of subnational institutions in EIA processes.** While it is encouraging that the new EIA Procedures include provisions for subnational consultation, there would be value in more clearly defining roles and responsibilities. This could include detail on precisely what degree of influence they have in the decision-making process. For example, state and regional government support could formally be a condition for the approval of an extractive project. Subnational governments could also be represented in the EIA Report Review Body. At the same time, it is worth considering that giving veto rights to subnational governments could lead to gridlock in approvals and increase the risk of arbitrary denials if not accompanied by clear processes and rules.
- **Facilitate subnational monitoring while being conscious of capacity gaps.** Due to their proximity to operations and knowledge of the local context, subnational governments could be well equipped to support monitoring activities. However, such a decision would need to be carefully balanced with considerations over technical capacity. ECD already struggles to monitor operations, and it is unclear whether subnational governments would be able to effectively fulfill such a role.
- **Consider what enforcement powers subnational governments should have.** If subnational governments are given monitoring roles, there may also be a case to confer enforcement powers to them. This could potentially speed up the process of acting against non-compliance. However, this would need to be weighed up against the question of whether subnational governments have the skills and capacity to make well-informed decisions and enforce them. Without effective oversight, enforcement powers could also be abused for rent-seeking behavior whereby threats of legal action could be used to extort cash payments.

7. Occupational safety and health

WHY IT MATTERS

The extractive industries—and the mining sector in particular—can provide an important source of employment for host countries and communities. However, where proper safeguards do not exist, these jobs can be dangerous. While only accounting for around 1 percent of the global workforce, the International Labour Organization (ILO) estimates that mining makes up approximately 8 percent of workplace fatalities. Injuries and occupational diseases are also significant risks.¹³³ As a result, it is essential that governments ensure that extractive companies provide safe and healthy work environments for their employees.



To effectively manage occupational safety and health (OSH), governments need to establish clear legal requirements and guidelines. This is typically done through a country’s labor laws or industry-specific legislation and regulations. The review of project-specific OSH plans then often forms part of broader impact review processes. Once projects are operational, governments need to ensure that OSH rules are monitored and enforced.

OSH is rarely high on the priority list of policy-makers in discussing resource federalism. However, it is important to clearly establish which level of government is responsible for legislating and which for implementation and monitoring. There may be value in giving roles to subnational institutions which may, for example, have better access to extractive operations and therefore be well placed to monitor compliance.

However, as with other policy areas discussed in this report, it is crucial that the institutions carrying out monitoring have the technical, financial and human capacity to perform meaningful inspections. If this is lacking at the subnational level, devolving responsibilities could undermine effective oversight. Likewise, developing OSH legislation and regulations requires significant technical expertise. Devolving decision-making could create the space for insufficient OSH standards to be introduced by some subnational governments. While local authorities may in some cases have better access to operations, they may potentially also be more reluctant to take action (e.g., suspending operations) given considerations around local employment and economic impacts.

133 International Labour Organization (ILO), “Mining: A Hazardous Work,” accessed 16 November 2017, www.ilo.org/safework/areasofwork/hazardous-work/WCMS_124598/lang--en/index.htm.

THE STATE OF PLAY IN MYANMAR

In Myanmar, responsibilities for legislating and monitoring OSH issues currently rest with the Union government. However, this system is not clearly defined. A multitude of laws governs OSH and several Union institutions and state-owned enterprises are in principle tasked with monitoring compliance. As a result, performance at extractive projects has often been marred by serious shortcomings, particularly in the minerals and gemstones sector.¹³⁴

Overview of key OSH-related laws

Various laws contain references to health and safety. The 1951 Factories Act includes provisions regarding workplace safety but is not sector specific. Similarly, the 2012 Social Security Law includes some provisions around employee health. In 2012, the Ministry of Labour started drafting an OSH bill, but reportedly this has not yet been passed into law.¹³⁵

In the mining sector, the Mining Law, Gemstone Law and EIA Procedures include some OSH provisions. In addition, a Mines Safety Law was elaborated by the former Ministry of Mines (prior to its merger with the Ministry of Environmental Conservation and Forestry) with the objective of legislating on OSH issues in the sector. Some of its provisions appear to be poorly harmonized with provisions set out in some of the existing pieces of OSH-related legislation. The law's current status is unknown.¹³⁶

In the oil and gas sector, the Oilfields (Labourers and Welfare) Act (1951) sets out a wide range of protective measures around health and safety and employee protection that should be taken by employers.¹³⁷



A gold miner in Mandalay Region holds up an x-ray showing a lung infection which he believes may be caused by dust generated by pneumatic drills used at the mine.

Andre Malerba for NRGi

134 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

135 *Ibid.*

136 *Ibid.*

137 Myanmar Centre for Responsible Business, *Myanmar Oil and Gas Sector Wide Impact Assessment*.

Monitoring and enforcement responsibilities

Under Myanmar's various pieces of OSH-related legislation, different central government agencies are vested with OSH responsibilities. In principle, the Ministry of Labour's Factories and General Labour Laws Inspection Department is tasked with monitoring OSH incidents. In practice, the Ministry of Labour reportedly conducts no inspections in the extractive industries.¹³⁸

Sector ministries and state-owned enterprises play a greater role in monitoring OSH performance. Drafts of the new gemstones law and mines rules reviewed by NRGi designate the Department of Mines' director general as the chief inspector of mines, a remit that includes health and safety inspections. According to an expert interview, MGE in practice conducts OSH inspections at jade and gemstone operations. In the minerals sector, representatives of state-owned mining enterprises also conduct informal OSH inspections.¹³⁹ This can potentially blur the commercial and regulatory functions of such enterprises and risks creating conflicts of interest.

In July 2015, several additions were made to Schedule 2 of the constitution. As a result, state and regional governments can now potentially exercise authority over OSH issues provided this is done in a manner consistent with laws enacted by the Union. This signals a growing willingness to devolve or decentralize responsibilities for implementation of Union legislation though in practice these powers are not being exercised, creating a risk of gaps in monitoring and enforcement.

In Australia, states and territories have their own OSH legislation – but the federal government has acted to improve harmonization across the country.

OBSERVATIONS FROM GLOBAL PRACTICE

The degree of OSH decentralization varies greatly from country to country. In most cases, legislative responsibility rests with the national government, and only implementation and monitoring duties are devolved. In some countries, however, subnational institutions have full authority to legislate on OSH issues.

Legal frameworks for OSH issues

The majority of countries in our sample manage OSH issues through national legislation. An exception is Australia, where virtually all authority has historically rested with subnational governments. Each state and territory has its own general OSH legislation, which is often supplemented by additional laws or regulations applicable specifically to the extractive industries. However, in recent years the federal government has acted to improve the harmonization of laws and regulations across the country through the development of model legislation. Each state government has committed to revising its laws and regulations to be consistent with this model.¹⁴⁰

Implementation and monitoring

While the majority of the countries examined for this report centralize legislative powers over OSH issues, there is a far greater degree of devolution of responsibilities when it comes to implementation and monitoring. In Mongolia, for example, local administrative bodies are responsible for monitoring compliance. In other cases, monitoring responsibilities rest with local representatives of national institutions. In the Philippines, for example, the monitoring authorities are the regional offices of the DENR, a federal government agency. This arrangement brings monitoring authorities closer to extraction site, while ensuring those carrying out inspections are accountable to the national government.

138 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

139 *Ibid.*

140 David Cliff, *The Management of Occupational Health and Safety in the Mining Industry in Australia* (International Mining for Development Centre, 2012).

Giving implementation and monitoring powers to subnational institutions is not without risks. Indonesia decentralized OSH management in 1984. Since then, provincial governments have been tasked with carrying out inspections without close involvement of the central government. This has led to challenges; a 2004 ILO report cited concerns among interviewees that decentralization had undermined standards and increased OSH risks.¹⁴¹ A lack of subnational capacity, including due to insufficient financing or technical expertise, can endanger workers. One means of addressing these gaps is to draw unions into monitoring processes. See box 11.

Box 11. Partnering with unions to improve OSH monitoring in South Africa

Unions can be valuable partners in monitoring operations, particularly with regard to occupational safety and health. Union representatives are usually already present on-site and have an interest in ensuring safer working conditions for their members. At some South African mines, union representatives accompany government OSH inspectors during visits. This helps to provide an additional layer of oversight. However, union representatives are not always able to independently identify safety issues and may not feel empowered to raise concerns to government inspectors if doing so could put their jobs in danger.¹⁴²

Governments can work to realize the benefits of partnering with unions by:

- Training union representatives on health and safety standards, and how to identify potential risks and violations.
- Providing a mechanism for union representatives to report possible violations, and following up by inspecting the reported concerns.
- Protecting union representatives against reprisals for reporting possible violations.



141 Pia K. Markkanen, *Occupational Safety and Health Indonesia* (International Labour Organization, 2004).

142 Smith and Rosenblum, *Enforcing the Rules*.

CONSIDERATIONS FOR MYANMAR

Recent constitutional amendments demonstrate a commitment to devolve some responsibility over OSH to subnational governments. As this process continues, the following recommendations could be considered:

- **Ensure consistent standards across the industry.** Even if the power to legislate on OSH issues is devolved to subnational governments, Australia's experience demonstrates the importance of maintaining a minimum standard across the country. One potential model is to develop basic yet robust national legal standards that subnational governments can supplement with more stringent regulations.
- **Clearly define roles and responsibilities between national and subnational institutions.** Whether at the national or subnational level, a single institution should take ultimate responsibility for OSH inspections to avoid duplicated efforts or gaps in enforcement. This is essential for having clear lines of accountability.
- **Ensure funding and expertise is commensurate with responsibilities.** Whichever institution takes on responsibility for implementing and monitoring OSH compliance should have adequate technical, human and financial capacity to fulfill those functions. Indonesia's experience demonstrates the risks that can arise from devolving responsibilities to subnational units that are unable to perform that role.
- **Consider drawing non-state institutions into the monitoring process.** Partnering with labor unions or civil society organizations to improve monitoring can be effective, particularly when governments face funding or staff shortages that reduce their on-the-ground presence. However, while non-state organizations can play a supporting role, the ultimate responsibility for monitoring should remain with public institutions to ensure accountability.

8. Local content

WHY IT MATTERS

The potential benefits of extractive activity are not limited to revenue flows to national and subnational governments. Oil, gas and mining projects can have broader impacts on local, regional and national economies by creating demand for goods and services, generating employment, developing skills and improving technologies. Together these benefits can represent a significant proportion of the value derived from the sector. (See figure 4 for an estimate of value distribution in the gold sector.)

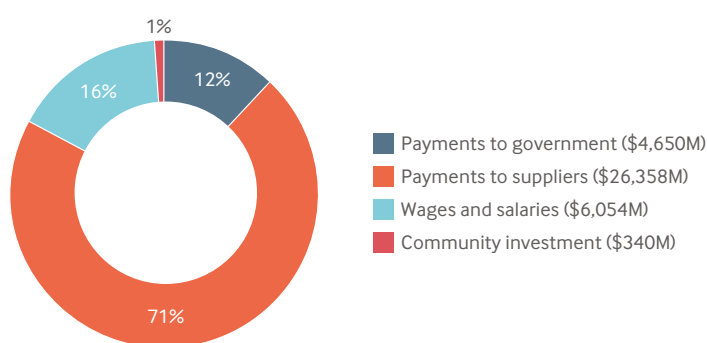


Figure 4. Value distribution at gold mining projects

Source: World Gold Council, *Responsible Gold Mining and Value Distribution, 2013 Data: A Global Assessment of the Economic Value Created and Distributed by Members of the World Gold Council* (2014)

While companies often voluntarily pursue local content strategies, for example by procuring their supplies locally or training local workers, governments can also use legislation or the terms of individual agreements to maximize linkages between extractive projects and the broader economy.¹⁴³ Governments have several mechanisms at their disposal, including targets or quotas for hiring and procurement; training program requirements; mandated support for small businesses; or domestic processing or production obligations.¹⁴⁴ Typically, such policies work best when they incentivize the growth of a diversified and competitive domestic private sector and labor force. On the other hand, overly onerous requirements can lead to non-compliance, impact the cost structures and profitability of operations, or in an extreme scenario deter investment altogether.

Local stakeholders often demand that benefits are channelled to those areas immediately impacted by extractive activity rather than the host country as a whole (see box 12). Employment and procurement can represent a more tangible benefit for local stakeholders than fiscal instruments. This leads to demands for subnational input in determining, implementing and enforcing local content requirements. Involving subnational institutions can help to ensure such measures reach intended beneficiaries and are aligned with local priorities.

However, imposing local content requirements without sufficient oversight mechanisms can drive corruption, with hiring and sourcing used as channels for political patronage. If the government has insufficient capacity for strategic development planning, this can result in missed opportunities to diversify the local economy. Demands for local content can also drive tensions between companies and local stakeholders if expectations cannot be met due to insufficient quantity or quality of local supply. In addition, local content requirements can impact the

143 Ana Maria Esteves, Bruce Coyne and Ana Moreno, *Local Content Initiatives: Enhancing the Subnational Benefits of Oil, Gas and Mining* (Natural Resource Governance Institute, 2013).

144 Natural Resource Governance Institute, *Local Content: Strengthening the Local Economy and Workforce* (2015).

viability of projects—and potentially deter investment. In Brazil, for example, the government is considering easing requirements in the petroleum sector in the hope of reviving projects put on hold as a result of low prices.¹⁴⁵

Box 12. Defining 'local'

What qualifies as local content varies from country to country. Some countries refer to national content to emphasize that the inputs can be from anywhere in the country, while others seek to promote inputs specifically from the region hosting extractive activity. Local stakeholders often demand that hiring and sourcing focus on the communities immediately surrounding a project, even if legal requirements define local content regionally or even nationally. When it comes to procurement, often additional questions emerge about what qualifies as local—is it enough to have a certain percentage of a business owned by nationals? Must the business be registered in the country? What percentage of the workforce or value added must be local? Some countries are explicit about these mandates; others are not.¹⁴⁶

THE STATE OF PLAY IN MYANMAR

Local content issues are beginning to gain traction in Myanmar. At present, the legal framework contains some local content requirements. There are, however, no formal legal provisions for local content to specifically target subnational stakeholders meaning that affected communities often do not enjoy the economic benefits derived from the sector.

Responsibility for legislation, implementation and monitoring rests with the Union government, with only limited subnational input. However, demands for the sharing of non-fiscal benefits have started to form part of the discussions around the management of the sector. This includes demands issued to participants of the 21st Century Panglong by the civil society umbrella organization the Myanmar Alliance for Accountability and Transparency for any agreement to include provisions that provide preferential access to local workers in ethnic areas.¹⁴⁷ Subnational local content is likely to become an increasingly salient political issue.

Overview of the legal framework on local content

The Myanmar Investment Law (2016) states that investors “shall appoint only citizens for works which do not require skill” and provide capacity-building to facilitate the hiring of citizens to managerial and technical roles.¹⁴⁸ However, the corresponding Investment Rules (2017) do not contain any related provisions. The rules do, however, state that the criteria used by MIC to grant tax incentives must “include consideration of whether the investment “will assist with the creation of new employment opportunities. . . and the development of a skilled labor force.”¹⁴⁹

The Union government’s EIA Procedures also contain some local content-related requirements. The procedures require companies to conduct a social impact assessment and design a social management plan. This should include employment and training plans, though the framework provides little additional detail. ECD is charged with

145 Marta Nogueira and Alexandra Alper, “Brazil Mulls Easing Local Content Rules in Older Oil Contracts,” *Reuters*, 18 July 2017.

146 Natural Resource Governance Institute, *Local Content*.

147 Myanmar Alliance for Transparency and Accountability, *The 21st Century Panglong Process Must Set a New Approach for Natural Resource Management* (2017). Published on Facebook.

148 See Republic of the Union of Myanmar, *Myanmar Investment Law* (2016). The law repeals the *Foreign Investment Law* (2012), which had included the more detailed quotas that 25 percent of skilled workers had to be Myanmar citizens within two years, 50 percent within four years and 75 percent within six years.

149 Republic of the Union of Myanmar, *Investment Rules*.

reviewing and approving these plans. In principle, subnational stakeholders are consulted in this process. ECD is responsible for making EIAs publicly available and convening consultation meetings.¹⁵⁰ In practice, however, the government's disclosure of impact assessments and management plans has shortcomings.¹⁵¹

A draft of the amended mines rules, which was being finalized at the time of writing, includes language stating that any permit application should “contain adequate provisions for the employment and training of Myanmar citizens,” as well as a proposal outlining plans for procurement of goods and services in Myanmar.¹⁵² Again, however, no additional detail was provided in the draft reviewed by NRGi.

In the oil and gas sector, the model production sharing contract requires foreign investors to “endeavor to employ qualified citizens of Myanmar to the maximum extent possible.” Additionally, foreign investors must spend a minimum of USD 25,000 per year during exploration and USD 50,000 per year during development and production on training and capacity-building. Companies are also expected to establish a “research and development fund” and to pay 0.5 percent of “profit petroleum” into the fund.¹⁵³

Monitoring of compliance with local content requirements

In principle, MIC oversees compliance with the terms of the Myanmar Investment Law and individual investment permits, though the extent to which this happens in practice is unclear. There have also been shortcomings in ECD's capacity to review impact assessments and management plans, and to monitor compliance. Disregard for the socioeconomic requirements set out in the EIA Procedures is particularly widespread.¹⁵⁴ ECD is currently in the process of setting up offices at the regional and state level, with further offices planned at the district and township levels. This may provide an opportunity to improve monitoring of operations, including the implementation of employment and training plans. However, interviewees stressed the importance of the expansion in ECD's subnational presence to be accompanied by efforts to strengthen its capacity to monitor and enforce compliance.

Where local content obligations are included in company's license agreements, state-owned enterprises also play an oversight role. In the oil and gas sector, for example, MOGE is responsible for ensuring compliance with local content provisions agreed in PSCs.¹⁵⁵

OBSERVATIONS FROM GLOBAL PRACTICE

There is a significant degree of variation among the countries in our sample on where responsibilities for local content issues lie. All of the countries have devolved some responsibilities to subnational stakeholders while retaining other responsibilities at the national level. In some instances, countries that have devolved most decision-making on the extractive industries to the subnational level still maintain central control over local content legislation. Elsewhere, national legislation is supplemented by additional subnational rules or implemented by subnational institutions.

150 Republic of the Union of Myanmar, *Environmental Impact Assessment Procedures*.

151 Natural Resource Governance Institute, *2017 Resource Governance Index* (2017).

152 Republic of the Union of Myanmar, *Draft Myanmar Mines Rules* (2017).

153 Myanmar Oil and Gas Enterprise, *Model Production Sharing Contract*.

154 Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

155 Myanmar Oil and Gas Enterprise, *Model Production Sharing Contract*.

The experiences of the countries in our sample demonstrate how local governments can have better knowledge of local needs and capacities and are therefore well placed to support implementation and monitoring of compliance. National governments, on the other hand, can provide a broader policy framework, integrating individual subnational initiatives and ensuring that opportunities for national economic growth are not jeopardized due to a lack of interstate coordination.

Legal frameworks for local content

In Indonesia, the national government regulates local content through various provisions spread across mineral and petroleum laws. However, there is also a degree of subnational law-making. For example, the regency of Bojonegoro has passed additional regulation on local content for the oil and gas industry. This law goes beyond national legislation by providing direction on ways in which extractive companies are required to facilitate involvement of local businesses and individuals in their operations.¹⁵⁶

In Indonesia, the regency of Bojonegoro has passed its own local content regulation which goes beyond national legislation.

In Australia, state laws primarily govern minerals and petroleum, but the main piece of legislation on local content is the federal Australian Jobs Act (2013), which applies to investments with capital expenditure exceeding AUD 500 million. The Australian Industry Participation Authority supports implementation of the act. By enacting a local content law, the central government, which in general has no jurisdiction over onshore natural resources, exerts some influence on local content in the sector. This division of power arose because migration and industrial development were among the issues which individual states and territories hoped to address by uniting in a federal state, while natural resource management was historically seen as the right of subnational institutions.

Negotiating local content provisions

Responsibility for implementation can vary between national and subnational governments, though there is often a degree of subnational involvement. Among our sample even some unitary countries such as Mongolia and the Philippines have granted the right to subnational entities to participate in the negotiation of contractual provisions on local content.¹⁵⁷ In the Philippines, this right is in part conferred through indigenous people's legislation. In addition to participating in contract negotiation, indigenous people have the right to play a role in implementing local content plans and policies when extractive activities take place in their "ancestral domains." Nonetheless overall responsibility rests with national institutions. As part of the licensing process, companies are required to submit plans to be approved by the regional offices of MGB. While operating locally, these offices are appointed by and directly accountable to the central government.¹⁵⁸

Monitoring compliance

Greater subnational involvement is also seen in monitoring compliance. In Mongolia, for example, local content requirements are legislated and implemented by the national government, but subnational governments are charged with oversight functions. Mining companies are required to cooperate with local authorities on job creation and local communities have the right to elect a representative who monitors the license holder's compliance, though shortcomings in implementation have been reported.¹⁵⁹

¹⁵⁶ Government of Indonesia, *Regulation of Regents No.48/2011* (2011).

¹⁵⁷ Government of Mongolia, *Minerals Law*; Government of Mongolia, *Law on Petroleum*; Government of the Philippines, *Indigenous Peoples Rights Act*.

¹⁵⁸ Government of the Philippines, *Mining Act*.

¹⁵⁹ Government of Mongolia, *Minerals Law*; stakeholder interview.

CONSIDERATIONS FOR MYANMAR

As discussions around how to confer benefits from the extractive sectors to subnational stakeholders continue to be a focus in Myanmar, the following recommendations could be considered:

- **Ensure local content requirements are integrated with broader development plans.** There would be value in national and subnational governments developing a shared vision for broader socioeconomic development and considering how local content could fit into this. A national policy could provide an overarching framework while providing sufficient flexibility to allow for it to be tailored to subnational contexts. These policies could then serve as a point of reference for future local content laws, regulations or contractual agreements with companies.
- **Define what “local” means.** Currently government policy focuses primarily on increasing the employment of Myanmar nationals. To ensure local content requirements specifically benefit the areas around an extractive project—and to respond to the demands of some ethnic groups—policy-makers could consider developing a narrower definition of what “local” means in close consultation with subnational stakeholders.
- **Ensure coordination between national and subnational policies.** If subnational governments were given the power to set and implement regional or state-specific local content provisions, there would be value in ensuring coordination with national policies. National and subnational policies could be informed by consideration of constraints and opportunities in the local economy and should prioritize development of a competitive and diversified private sector.
- **Clearly define the roles of subnational stakeholders.** Provisions for subnational consultation in the development of social management plans under the EIA framework are a step in the right direction. However, the framework could more clearly define roles and responsibilities in the review and negotiation, as well as the implementation and monitoring, of local content plans. As the case of Mongolia demonstrates, looking beyond officials from state or regional governments and involving community representatives could be a means of ensuring local content strategies are rolled out in a manner that benefits those stakeholders most directly impacted by extractive projects and ensure local content requirements do not exist on paper only. Ensuring impact assessments and management plans are easily accessible by the public can help to achieve this aim.

9. Artisanal and small-scale extraction

WHY IT MATTERS

Artisanal and small-scale extractive activity is a major source of employment globally. Artisanal and small-scale mining (ASM) is estimated to provide livelihoods for approximately 100 million people worldwide.¹⁶⁰ The sector can generate significant value—in Mongolia, legal ASM is estimated to have contributed USD 110 million to the country's export revenues in 2014, amounting to 3.3 percent of total export revenue from minerals that year.¹⁶¹

Despite this potential economic importance, much of the sector remains informal and unregulated in most countries. Working conditions are often dangerous, environmental and social management poor, and tax collection weak. Artisanal miners can come into conflict with large-scale mining, which can disrupt operations and lead to outbreaks of violence and human rights violations. While less prevalent globally, artisanal oil production is also an important issue in some countries and often associated with similar challenges.

Recognizing the economic importance of artisanal and small-scale activity and the need to more effectively manage its social and environmental impacts, many governments are increasingly taking steps to regulate the sector by exploring paths towards formalization. As a first step, many countries develop ASM or artisanal oil-specific legal provisions and regulations, often within broader sector laws. However, the high perceived costs of applying for permits, paying taxes, and complying with environmental and social regulations are strong disincentives for formalization and mean that legal changes on their own are rarely successful. Governments need to provide the right incentives for formalization and ensure effective enforcement against individuals continuing to operate outside the legal framework.

Subnational institutions have a potential role in supporting formalization, protecting artisanal producers and preventing conflicts with large-scale operations. Artisanal and small-scale activity is often carried out by marginalized and vulnerable groups whose particular needs are overlooked in the broader national context. Subnational governments are potentially well equipped to identify these groups and take action to effectively include them in the formal framework. Some of the main obstacles to formalization are time-consuming and overly complicated administrative procedures requiring engagement with central government authorities. Devolution can reduce bureaucratic burdens. However, this should go hand in hand with state institutions having the will and capacity for enforcement as well as efforts to educate, incentivize and engage individuals working in the artisanal and small-scale sectors.

¹⁶⁰ These numbers include workers and their families. World Bank, "Artisanal and Small-Scale Mining," last modified 21 November 2013, <http://www.worldbank.org/en/topic/extractiveindustries/brief/artisanal-and-small-scale-mining>.

¹⁶¹ Bolormaa Purevjav, *Human Rights and Mongolia's Small-Scale Mining Sector* (The Asia Foundation, 2014); Calculated as follows: $110m \times 100 / 3,295,381,000$, with data from the World Bank, "World Integrated Trade Solutions Portal," accessed 15 January 2017, <http://wits.worldbank.org>.

THE STATE OF PLAY IN MYANMAR

Artisanal and small-scale extractive activity is a major source of economic activity in Myanmar. (See box 13.) While it is difficult to put precise figures on the number of individuals working in the sector, MONREC estimates that more than 400,000 people work as “hand-pickers” in northern Myanmar’s gemstones tracts alone.¹⁶² The total number of livelihoods dependent on artisanal mining and oil—including the immediate dependents of those working in the sector—is likely to far exceed this figure.

The effective management of artisanal and small-scale operations poses challenges. The sector has been associated with major social and environmental impacts. Under Union legislation legal provisions allow for subsistence and small-scale mining and artisanal oil production, but the barriers to entry are high and few operations have formalized. In part due to the lack of formalization, dangerous working conditions, poor environmental practices and harmful social impacts (including child labor and drug abuse) remain widespread.¹⁶³ Notably, however, the sector is one of the areas in which subnational control is increasing the most, particularly in relation to licensing and revenue collection.

Overview of key laws governing ASM

Artisanal and small-scale extractive activity in Myanmar is governed by Union legislation. The most important laws impacting operations in the mining sector are the Myanmar Mines Law (1994, as amended), the Myanmar Gemstone Law (1995, as amended) and the Environmental Conservation Law (2012). Artisanal oil is primarily governed by a new artisanal oil law, known as the Hand Scooped Oil Well Law (2017). There are no provisions within the legal framework for “hand-pickers” to operate legally despite the prevalence of this kind of extractive activity.

Under new legal provisions, subsistence and small-scale mining licenses in Myanmar will be awarded at the state and region level.

Subnational influence

Under recent amendments to sector legislation, which followed a 2015 amendment to Schedules 2 and 5 of the 2008 Constitution, some licensing and revenue collection duties for ASM are shifting to the subnational level.¹⁶⁴ According to the draft mines rules, regional or state boards will award subsistence and small-scale mining licenses. According to interviewees, these boards are to be formed by MONREC in consultation with the relevant state or regional government. Once established, the boards are expected to be comprised of the state or region’s chief minister, as well as region or state representatives of MONREC, MIC and GAD. License fees are expected to be collected by the subnational government. In the gemstone sector, proposed legal changes to the Gemstone Law are also likely to see licensing decisions made by state or region boards formed and appointed with the approval of the Union government.

Similarly, under the provisions of the Hand Scooped Oil Well Law (2017), licensing and certain revenue collection responsibilities are vested in subnational institutions. License applications are reviewed by the state and regional governments and, if approved, are submitted to MOEE to obtain a permit. State and regional governments are also responsible for collection of royalties and land rental fees. Artisanal producers are required to submit production reports to the Union ministry through the relevant state or regional government and to make payments for social development projects to those governments.¹⁶⁵

¹⁶² International Growth Centre, *Artisanal Jade Mining in Myanmar* (2017), accessed 16 November 2017, <https://www.theigc.org/project/artisanal-jade-mining-myanmar>.

¹⁶³ Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

¹⁶⁴ Republic of the Union of Myanmar, *Law 45/2015*.

¹⁶⁵ Myanmar Centre for Responsible Business, *Comments on Artisanal Oil Production Bill* (2017).

In principle, new environmental procedures for the ASM sector also provide for some subnational input. Under the 2016 EIA Procedures, small-scale and subsistence operations are required to submit an IEE report, which is assessed by ECD. After consultation with stakeholders in the project area and the relevant local government, ECD makes a decision on the issuance of an Environmental Compliance Certificate.

Box 13. Artisanal and small-scale extractive activity in Myanmar

Definitions of small-scale and artisanal activity differ from country to country. In general, it is understood to refer to extractive operations with little or no mechanization and relatively low productivity, often undertaken by individuals or families, who are sometimes organized into cooperatives. In countries with weak government oversight, artisanal operations can be vulnerable to control by criminal or armed groups. Artisanal mining is significantly more prevalent globally than artisanal oil production.

Myanmar defines two categories of legal mining under the 2015 amendment of the Mines Law, which could be classified as ASM: small-scale mining and subsistence mining.¹⁶⁴ The former is defined as commercial production that “does not require substantial investment and expenditure or special technical know-how and methods,” while the latter is defined as production “using ordinary hand tools.”¹⁶⁵ However, defining what is genuinely subsistence or small-scale can be challenging. In some cases, companies acquire multiple small-scale licenses and work them as a single operation to circumvent stricter permitting requirements associated with large-scale licenses.

Beyond these legal categories, significant informal activity also occurs in the country’s mining sector. A particular challenge exists in the jade and gemstones industry, where there are widespread incidents of “hand-pickers” entering larger operations to sort through waste rock piles in search of valuable stones. These individuals often work in highly dangerous conditions.

Myanmar is also unusual in having a large artisanal oil industry, which dates back to pre-colonial times. This involves individuals or small informal enterprises extracting oil often with little more than a bucket and rope, though sometimes it also involves small machinery such as “nodding donkeys.” The sector, which is concentrated in Magway, Sagaing, Ayeyarwady and Yangon regions, has been associated with major environmental damage and dangerous working practices.¹⁶⁶



Hand-pickers search for jade in waste rock piles left by mining companies in Hpakant, Kachin State. Minzayar Oo for NRGi

166 Shortell and Aung, *Mineral and Gemstone Licensing in Myanmar*.

167 Government of the Union of Myanmar, *Myanmar Mines Law* (2015).

168 Htoo Thant and Chan Mya Htwe, “Government to Tighten Licensing Restrictions on Artisanal Oil Drilling,” *Myanmar Times*, 12 September 2016.

Formalization

Despite legal provisions for formalization of artisanal activity, most operations remain informal. Research conducted by the Myanmar Centre for Responsible Business found that every subsistence-scale mine encountered during field research in the limestone, gold and tin sector operated without a permit.¹⁶⁹ Many artisanal producers see the requirements for formalization, including licensing and environmental procedures, as overly burdensome. In the absence of strong enforcement mechanisms, incentives to formalize are low.

At the time of writing, it was too early to tell whether legal changes shifting influence to states and regions would help to address some of these challenges and facilitate formalization. However, both in the mining and oil sector, the Union government is expected to maintain a large degree of *de facto* influence over licensing decisions. Given the fact that chief ministers, as well as subnational ministries, are primarily accountable to the Union government, the legal changes will not necessarily increase accountability to state or region parliaments. In addition, MONREC will maintain direct decision-making power over certain types of small-scale production. Similarly, in the artisanal oil sector, MOEE will maintain ultimate responsibility for issuing permits despite the process being channelled through state and regional governments.

OBSERVATIONS FROM GLOBAL PRACTICE¹⁷⁰

The level of government with responsibility for the sector's broader legal framework typically writes legislation for the management of ASM issues. Within our sample, countries that specifically refer to ASM in their laws and regulations tend to do so at the national level. However, the experiences of the countries reviewed for this report demonstrate the valuable role that subnational institutions can play in implementing efforts to formalize the sector.

Licensing

The legal frameworks of many of the countries in our survey devolve some responsibility for regulating ASM activity to the subnational level. This is, for example, the case in Indonesia and Mongolia where national legislation identifies subnational institutions as the licensing authority for ASM.¹⁷¹ In the Philippines, ASM licenses are awarded by a city or provincial "Mining Regulatory Board." These boards are composed of representatives from the central and subnational government, small and large-scale mining industry and an environmental civil society organization.¹⁷² In Malaysia, states issue ASM licenses under their own State Mineral Enactment.¹⁷³ Bringing decision-making physically closer to artisanal activity can help to reduce the financial and time burdens to formalization (e.g., by making it easier to apply for licenses, pay taxes, etc.) and help to better regulate the sector.

A lack of coordination between the national and subnational level in the management of ASM issues can pose challenges. For example, in 2015 India's National Green Tribunal ordered projects of less than five hectares in the state of

¹⁶⁹ Myanmar Centre for Responsible Business, *Myanmar Mining Sector Wide Impact Assessment*.

¹⁷⁰ Given Myanmar's somewhat unique status as a country with significant artisanal oil production, this section only draws observations from the management of artisanal and small-scale mining in other countries.

¹⁷¹ Government of Indonesia, *Law No.4/2008* (2008); Government of Indonesia, *Law No. 23/2014* (2014).

¹⁷² Government of the Philippines, *Small Scale Mining Act* (1991).

¹⁷³ Government of Malaysia, *Mineral Development Act* (1994), Government of Mongolia, *Minerals Law*.

Rajasthan to obtain environmental clearances. However, the processes for obtaining clearances were poorly defined, and the State Environment Impact Assessment Authority lacked the capacity to review such a large volume of applications. By the end of the year, tens of thousands of small-scale mines faced closure. Concerned with the prospect of large-scale unemployment, state officials pressed the national government to take action. As a result, amendments were made, including clarifying the categorization of small-scale mines, simplifying environmental requirements and mandating the creation of an EIA authority at the district level charged with issuing environmental clearances.¹⁷⁴

Formalization initiatives

Subnational governments can play an important role to ensure effective implementation of frameworks to better regulate the ASM sector. Given the sector's history of informality, incentivizing miners to operate under the legal framework can be challenging even when regulation is accommodating of their needs. To address this problem, the government of South Cotabato Province in the Philippines pioneered a unique identification system for miners, which helped formalize the sector while at the same time addressing some of its main governance challenges (see box 14). In Mongolia, the Asia Foundation initiated a project—in cooperation with province and district governments—to build environmental capacity in the ASM sector. The project's aim was to increase formalization through the development of an economically affordable and ecologically viable environmental rehabilitation method. Through this project, over 900 artisanal miners were involved in the rehabilitation of 143 hectares of mined land. The national government has since expressed interest in integrating the rehabilitation methodology that was developed into national ASM regulations.¹⁷⁵

174 Government of India, *2006 EIA Notifications* (2006); The Times of India, *Amendments in Rajasthan Mining Rules Illegal: HC* (10 April 2015); "Rajasthan: Thousands of Quarries Shut Down as Deadline to Obtain NGT Nod Closes In," *First Post*, 30 January 2017.

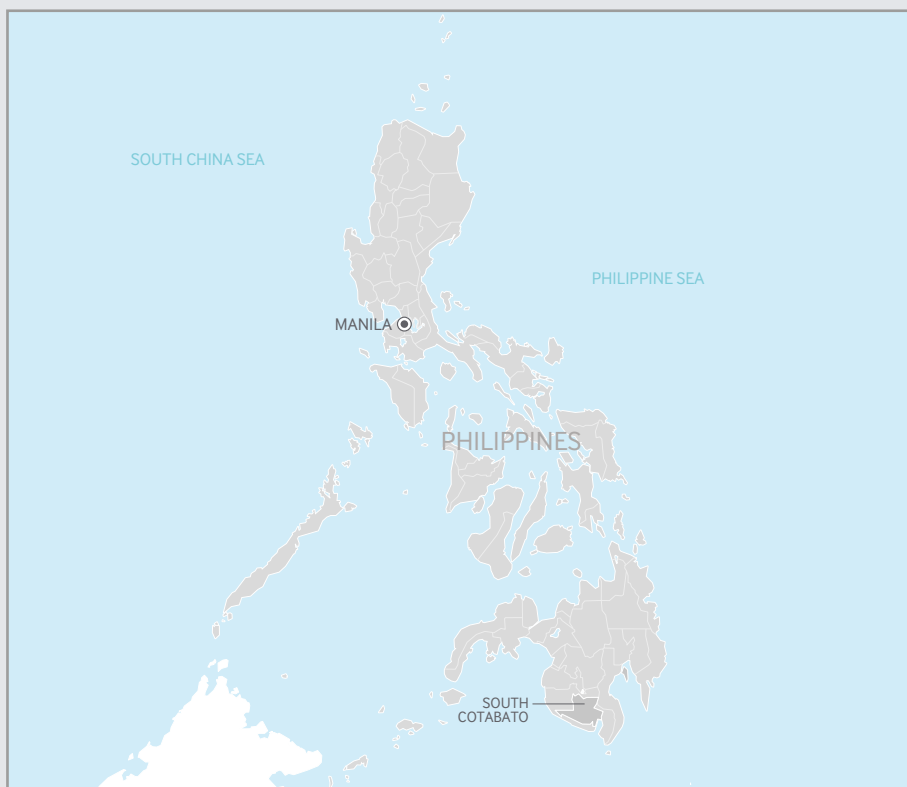
175 Bolormaa Purevjav and Jonathan Stacey, *Mongolia's Small-Scale Miners Play Critical Role in Safeguarding Natural Resources* (The Asia Foundation, 2016).

Box 14. ASM governance in South Cotabato Province, Philippines¹⁷⁶

Despite the national government’s commitment to formalizing the ASM sector, the Philippines continue to face widespread informal mining. To counter this, the provincial government of South Cotabato initiated the Minahang Bayanihan program. The program mandates an identification system for all individuals engaged in small-scale mining and quarrying. As a prerequisite for registration, miners are required to undergo training on issues such as mine safety, first aid, waste management, disaster risk reduction, and health and sanitation. These trainings are delivered by the provincial government together with partners from the national government and civil society. By 2015, about 1,700 workers had been registered and the program was working with a further 1,300 workers.

The program has had a wide range of positive outcomes. Licensing and revenue collection have been improved through computerization of the permitting system. Monitoring has been strengthened, including with the aid of camera surveillance. South Cotabato now has the largest number of registered small-scale mining operations on the island of Mindanao. In 2014, local tax revenues from ASM amounted to PHP 1,065,685 (equivalent to about USD 21,362). In comparison, local tax revenue in the Province of Benguet was only PHP 153,435 (about USD 3,076)¹⁷⁷ for the same period, despite mining being the second largest economic activity in the province and local buying stations registering the highest sales of gold in the country.

The program has also helped to address some of the sector’s social and environmental impacts. For example, the identification process has reduced the number of child laborers. Additionally, the program improved environmental standards, resulting in increased use of mercury-free methods and post-mining rehabilitation. The program earned the South Cotabato government the Galing Pook Award, a national prize designed to promote innovation and excellence in local governance.



176 Philippine Extractive Industries Transparency Initiative, *Volume II of the PH-EITI Country Report 2015* (2015).

177 Both USD values are calculated with P/USD values of 1/0.02 on 18 January 2016.

CONSIDERATIONS FOR MYANMAR

In recent years Myanmar has taken important steps towards greater involvement of subnational governments in the governance of subsistence and small-scale mining and artisanal oil. As this process continues, the following recommendations could be considered:

- **Formalize the input of subnational stakeholders.** Anticipated legal changes appear to shift authority to locally based officials who are primarily accountable to the Union government. This is a useful step in the right direction by reducing physical barriers to formalization and facilitating oversight. However, greater effort could be made to ensure permitting boards are accountable to locally elected representatives. The case of the Philippines shows how involving local industry and civil society in the process could be considered as a means of ensuring broad-based buy-in for the decision-making process. There may also be value in further devolving certain responsibilities to the township level so as to further reduce the burden of formalization (e.g., reducing the distance that must be travelled to submit a permit application).
- **Ensure coordination with policy on large-scale activity.** There are risks associated with Myanmar's move to parcel out licensing for artisanal and small-scale activity to subnational institutions while maintaining responsibility for larger-scale operations at the Union level. If not managed well, this could lead to overlapping licenses being issued and weak monitoring driving insecurity of tenure and revenue losses. If responsibility is shifted to institutions that are genuinely accountable to subnational governments rather than Union ministries, new coordination mechanisms will be required. This could include the shared use of cadaster systems (see section 4).
- **Ensure maintenance of minimum standards.** As with many issues related to natural resource federalism, some minimum standards must be applied across a country even if ultimate responsibility for implementation rests at the subnational level. This is particularly relevant in the case of ASM, where miners are often highly mobile and willing to cross subnational boundaries in search of economic opportunities. They may be drawn to states or regions that provide the right incentives for formalization—or alternatively those states and regions where informal activities can proceed with impunity. The negative impacts of artisanal activity can cross subnational boundaries, particularly if waterways are polluted. Minimum national standards, which can be adapted to subnational contexts, are a useful means of avoiding this risk.

Annex 1. Summary tables

SETTING FISCAL TERMS

	Direct payments								Other revenues			
	Royalty		Tax on resource income or profits		Resource-specific commercial, customs or excise tax		Surface fee		Production share		Equity share	
Oil and gas	N	S	N	S	N	S	N	S	N	S	N	S
Australia	X*	X*	X		X				X*			
India	X						X		X			
Indonesia	X								X		X	
Malaysia	X		X		X				X		X	
Mongolia	X								X			
Myanmar	X				X				X		X	
Philippines									X			
Mining	N	S	N	S	N	S	N	S	N	S	N	S
Australia	X	X										
India	X				X		X					
Indonesia	X						X					
Malaysia		X										
Mongolia	X										X	
Myanmar	X				X		X		X		X	
Philippines	X	X			X				X			

ENVIRONMENTAL MANAGEMENT

Country	Legislation	Description of relevant articles
Legal framework design		
Australia	Environmental Protection and Biodiversity Conservation Act, 1999, and The Commonwealth of Australia Constitution Act	Interpreted as giving power to state and territory governments to legislate on environmental matters other than those of “national environmental significance,” such as uranium mines and national heritage sites.
	State environmental legislation	Provides detail on legal obligations and procedures relating to environmental management in a given state or territory.
Indonesia	National EIA framework	The Ministry for Environment is responsible for overseeing the EIA system. It issues the overriding EIA regulation. At the provincial and district level, more stringent EIA regulation can be developed to complement the national rules.
Environmental assessment		
Indonesia	Environmental Protection and Management Law, 2009	The EIA shall contain the suggestions and inputs of affected communities.
Mongolia	Law of Mongolia on Environmental Impact Assessments	Requires companies to include in their EIAs “notes of consultations made with local authority and community likely to be affected by the proposed project.”
Philippines	PD 1586 (also known as Law Establishing an Environmental Impact Statement System Including Other Environmental Management Related Measures and for Other Purposes), 1978, and accompanying rules and regulations	Extractive companies are required to follow a complex EIA process. The EIA submitted by the company must contain results of public consultation and social acceptability statements. Local government units are responsible for facilitating community participation through public outreach or consultation.

Deciding to extract: EIA review and contract negotiation		
Australia	Native Title Act, 1993, and state and territory legislation on indigenous people	Indigenous people's consent is required before any extractive activities can be carried out on land that they traditionally occupy. Indigenous people have the right to impose conditions and require commitments under licensing contracts and other agreements.
Philippines	Indigenous People's Rights Act, 1997	Indigenous people have the right to negotiate the terms and conditions of natural resource licenses for the purpose of ensuring ecological and environmental protection and conservation measures.
	Local Government Act, 1991	Prior consent from local governments is required for all projects with potential negative environmental impacts.
India	Air Act, 1981; Water Act, 1974; and Hazardous Waste Rules, 1989	Extractive projects need state level approval from the state Pollution Control Board. However, the EIA process and matters relating to forest management are under the jurisdiction of the national government.
Indonesia (mining)	Environmental Permit regulations, 2012, and Environmental Protection and Management Law, 2009	Decision-making on EIAs is decentralized. District, province and central governments are all responsible for EIAs within their jurisdictions. At each level, there is an EIA Appraisal Committee in which affected communities and environmental organizations are represented.
Malaysia	Environmental Quality Act, 1974	The states of Sabah and Sarawak have a special provision for being represented in the Environmental Quality Council. Other states are not represented in the council. The council's purpose is to advise the Department of Environment on environmental matters relating to this act, which includes the assessment of EIAs.
Mongolia	The Minerals Law of Mongolia, 2006	Environmental protection plans for mineral exploration are submitted to, and assessed by, the governor of the <i>soum</i> (district) where exploration takes place. For mineral exploitation licenses the central government assumes this authority.
Monitoring		
Indonesia (mining), Australia	EIA legislation	Subnational governments have significant control over mineral licensing and as part of this are also mandated to perform environmental oversight.
Philippines and Mongolia	Legislation regarding the environment and local governments	Subnational governments have the responsibility to jointly monitor compliance of companies with environmental standards and obligations. Subnational authorities also have the duty to verify that all relevant projects within their jurisdiction have completed the EIA procedure.
Penalties		
Mongolia	Law of Mongolia on Environmental Impact Assessments, 2014, and the Minerals Law of Mongolia, 2006	The governors of <i>soums</i> and <i>aimags</i> have the right to withhold environmental reclamation deposits for exploration licenses in the case that the licensee fails to fulfill their environmental obligations. Governors of <i>soums</i> and <i>aimags</i> also have the right to halt exploitation projects if the operator fails to transfer the annual environmental reclamation deposit. Finally, governors of <i>soums</i> or <i>aimags</i> have the right to halt both exploration and exploitation activities if they find that the license holder fails to honor their environmental obligations.

LOCAL CONTENT

Country	Legislation	Description of relevant articles
Legal framework design		
Indonesia	Regulation of Regents No. 48/2011	The regency of Bojonegoro has passed its own regulation on local content for the oil and gas industry. This law goes beyond the national legislation (which provides the main local content framework) by providing directions on ways in which extractive companies are required to facilitate involvement of local businesses and individuals in their operations.
Philippines	Indigenous People's Rights Act, 1997	Indigenous people in the Philippines have the right to participate in the development and implementation of development plans and policies both at the national and local levels.
Implementation: Local content plan and contract negotiation		
Australia	Native Title Act, 1993; state and territory legislation on indigenous people	Indigenous people's consent is required before any extractive activities can be carried out on land that they traditionally occupy. Indigenous people have the right to impose conditions and require commitments under licensing contracts and other agreements. In practice the conditions imposed under this law are mostly related to local content.
Philippines	Indigenous People's Rights Act, 1997	Indigenous people have the right to negotiate the terms and conditions of natural resource licenses on their ancestral land.
	DENR Administrative Order No. 2000-99, the Revised Implementing Rules and Regulations of Republic Act No. 7942, otherwise known as the Philippine Mining Act of 1995	Regional offices of the Mines and Geoscience Bureau are directly appointed by the central MGB and are responsible for review and approval of the social development and management programs (SDMP) within their area.
Mongolia	The Law of Mongolia on Petroleum, 2014	Local content provisions in petroleum contracts are negotiated jointly by the central government and by the governor of the <i>soum</i> or <i>aimag</i> .
Monitoring		
Philippines	DENR Administrative Order No. 2000-99, the Revised Implementing Rules and Regulations of Republic Act No. 7942, otherwise known as the Philippine Mining Act of 1995	Regional offices (RO) of the Mines and Geoscience Bureau (directly appointed by the central MGB) with the help of the host and neighboring communities shall periodically monitor the implementation of the SDMP. The RO submits monitoring reports to MGB for auditing. A Community Relations Officer (CRO) shall be appointed by the company in order "to establish linkages among the host and neighboring communities in the implementation of [the] SDMP." The law does not state that the CRO has to be a local resident.
Malaysia	National Mineral Policy, 2009	Gives loose guidelines on training local workers. In general state governments are responsible for monitoring the implementation and assessing the effectiveness of national policies.
Mongolia	The Mineral Law of Mongolia, 2006	The license holder "shall work in cooperation" with local government bodies on issues related to local content. Citizens are to elect a representative who will monitor the license holders' activities.
	Law of Mongolia on Petroleum, 2014	The Petroleum Authority at the national level and the governor of the <i>soum</i> (district) at the local level have joint responsibility over monitoring local content compliance.
Indonesia	Mineral and Coal Mining Law, 2009; Decree 31 of the Ministry of Energy and natural Resources, Law on Local Government, 2014	Local content provisions in mining are spread across these laws and the authority to supervise compliance is in the hands of ministers and governors according to their respective mandates under the Law on Local Government 2014.

ARTISANAL AND SMALL-SCALE PRODUCTION

Country	Legislation	Description of notable provisions
ASM licensing authorities and relevant legislation in selected countries		
India	Indian Constitution; The Mines and Minerals (Development and Regulation) Act, 1957, amended 2015	India has not yet adopted any formal definition of ASM. No separate legislative provisions have been developed for ASM with regards to licensing. ASM is implicitly administered under the general mining legislation; therefore licenses are awarded by states with the prior approval of the central government.
Indonesia	Mining Law, 2009; Government Regulation No. 22/2010 on Mining Areas	Regents and mayors are authorized to issue ASM licenses and decide on areas designated for ASM.
	Law on Local Government, 2014	The Law on Local Government is in conflict with the Mining Law by granting licensing powers for mines located entirely within one province to provincial governors, without mentioning regents and mayors. This law was adopted after it became apparent that regents and mayors managed licensing poorly. At the time of writing, the conflict between the laws has not been resolved.
Malaysia	State Mineral Enactments (SMEs)	States issue licenses for small-scale mining operations under their individual SMEs. Small-scale mining is defined as mining of alluvial sediments with no set limitations on the size of the mining plot.
Mongolia	The Minerals Law of Mongolia (as amended in 2010); Regulation on the Extraction of Minerals from Small Scale Mines, 2010	Artisanal and small-scale miners must organize themselves into partnerships of no less than five people in order to apply for a license. District governments select areas designated for ASM and grant mining licenses.
Philippines	Small-Scale Mining Act, 1991 (RA7076), Indigenous People's Rights Act, 1991	Provincial/city mining regulatory boards award ASM licenses in provinces and independent cities. Boards are composed of the MGB regional director (centrally appointed) as chairperson, representatives of the governor or independent city mayor, representatives of the mining industry (small and large scale) and a representative of an environmental non-governmental organization as members.
Environmental monitoring of ASM in selected countries		
India	EIA Notifications 2016 (as amended in January 2016)	Environmental clearances (EC) for the mining of building materials (classified as "minor" minerals in Indian legislation) on plots of less than 5 ha are issued by the District Environmental Assessment Authority (DEIAA). ECs for all non-coal mining projects of less than 50 ha (Category B projects under EIA framework) are issued by the State DEIAA.
Indonesia	Environmental Permit Regulations, 2012; Environmental Protection and Management Law, 2009	District, province and central governments are all responsible for assessing EIAs and issuing certificates on projects situated within their jurisdictions. At each level, there is an EIA appraisal committee, where affected communities are represented.
Mongolia	Law of Mongolia on Environmental Impact Assessment (as amended in 2011); Regulation on Extraction of Minerals from Small-Scale Mines (2010)	All EIA certificates, including for ASM, are issued by the central government. District governors have the responsibility to evaluate the rehabilitation measures and to manage environmental restoration funds held under the EIA law.
Philippines	Implementing Rules of the Small-Scale Mining Act of 1991 (RA 7076)	An environmental compliance certificate is required for small-scale mines and is issued by the DENR regional executive director. The regional executive director is appointed by the central DENR office.
	Local Government Act, 1991	Prior consent from municipal governments is required for all projects with potential negative environmental impacts.

Annex 2. Bibliography

- Anderson, George. *Oil and Gas in Federal Systems*. OUP Canada, 2012.
- Bauer, Andrew, Paul Shortell and Lorenzo Delesgues. *Sharing the Wealth: A Roadmap for Distributing Myanmar's Natural Resource Revenues*. Natural Resource Governance Institute, 2016.
- Bauer, Andrew, Rebecca Iwerks, Matteo Pellegrini and Varsha Venugopal. *Subnational Governance of Extractives: Fostering National Prosperity by Addressing Local Challenges*. Natural Resource Governance Institute, August 2016.
- Burke, Adam, Nicola Williams, Patrick Barron, Kim Jolliffe and Thomas Carr. *The Contested Areas of Myanmar: Subnational Conflict, Aid, and Development*. The Asia Foundation, 2017.
- Center for Constitutional Transitions, International IDEA and UNDP (United Nations Development Programme). *Oil and Natural Gas: Constitutional Frameworks for the Arab States Region*. 2014.
- Cust, Jim and Claudia Viale. *Is There Evidence for a Subnational Resource Curse?* Natural Resource Governance Institute, April 2016.
- Esteves, Ana Maria, Bruce Coyne and Ana Moreno. *Local Content Initiatives: Enhancing the Subnational Benefits of Oil, Gas and Mining*. Natural Resource Governance Institute, 2013.
- Global Witness. *Jade: Myanmar's 'Big State Secret.'* October 2015.
- Haysom, Nicholas and Sean Kane. *Negotiating Natural Resources for Peace: Ownership, Control and Wealth-sharing*. Centre for Humanitarian Dialogue, October 2009.
- Heller, Patrick and Lorenzo Delesgues. *Gilded Gatekeepers: Myanmar's State-owned Oil, Gas and Mining Enterprises*. Natural Resource Governance Institute, 2016.
- International Crisis Group. *Building Critical Mass for Peace in Myanmar*. 2017.
- Iwerks, Rebecca and Varsha Venugopal. *It Takes a Village: Routes to Local-level Extractive Transparency*. Natural Resource Governance Institute, February 2016.
- Kurauchi, Yuko, Antonio La Vina, Nathan Badenoch and Lindsey Fransen. *Decentralization of Natural Resources Management – Lessons from Southeast Asia: Case Studies under REPSI*. World Resources Institute, May 2006.
- Lynn, Thet Aung and Mari Oye. *Natural Resources and Subnational Government in Myanmar: Key Considerations for Wealth Sharing*. IGC, MDRI-CESD and The Asia Foundation, 2014.
- Myanmar Centre for Responsible Business. *Myanmar Mining Sector Wide Impact Assessment on Limestone, Gold and Tin: Draft for Consultation*. 2016.
- Myanmar Centre for Responsible Business. *Myanmar Oil and Gas Sector Wide Impact Assessment*. 2014.
- Natural Resource Governance Institute and the United Nations Development Programme. *Natural Resource Revenue Sharing*. 2016.
- Natural Resource Governance Institute. *2017 Resource Governance Index*. 2017.

Nixon, Hamish, Cindy Joelene, Kyi Pyar Chit Saw, Thet Aung Lynn and Matthew Arnold. *State and Region Governments in Myanmar*. MDRI and the Asia Foundation, 2015.

Oxfam. *Community Consent Index 2015*. Oxfam Briefing Paper, 23 July 2015.

Shortell, Paul and Maw Htun Aung. *Mineral and Gemstone Licensing in Myanmar*. Natural Resource Governance Institute, 2016.

Smith, Erin and Peter Rosenblum. *Enforcing the Rules: Government and Citizen Oversight of Mining*. Revenue Watch Institute, 2011.

The Asia Foundation. *The State of Conflict and Violence in Asia*. 2017.

Venugopal, Varsha. *Assessing Mineral Licensing in a Decentralized Context: The Case of Indonesia*. Natural Resource Governance Institute, 2014.

Venugopal, Varsha. *Thinking Locally: Community Consultation in the Philippines*. Natural Resource Governance Institute, 2016.

The Natural Resource Governance Institute, an independent, non-profit organization, helps people to realize the benefits of their countries' oil, gas and mineral wealth through applied research, and innovative approaches to capacity development, technical advice and advocacy.

Learn more at www.resourcegovernance.org

