

**Table One: Existing Natural Resource Management Mechanisms**

Sector	Union-level laws, policies, regulations and practices	State-level laws, policies, regulations and practices	Key issues with existing mechanisms that need to be addressed
<b>Natural Resource management (general)</b>	<p><b><u>Management mechanisms in practice</u></b></p> <p>In practice, the management of Myanmar's natural resources is highly centralized under the authority of a few very powerful Ministries and government agencies. New investment Laws and other Laws relating to natural resources address this on paper, but the specific rules and procedures have been slow to come into effect. State-owned Enterprises (SOEs) and Military-owned Enterprises (MOEs) remain dominant in most natural resource sectors.</p> <p>The State-Owned Economic Enterprises (SOEE) Law (1989) gives State-Owned Enterprises (SOEs) sweeping authority over the exploration, extraction, and export of the vast majority of Myanmar's natural resources. A 1997 amendment to the SOEE Law opened up these activities to private sector investment. In practice, while the SOEs no longer hold monopolies over</p>	<p><b><u>Overview of management mechanisms / Mechanisms In practice</u></b></p> <p>The current system of State/Region (S/R) governments was created by the 2008 Constitution. At present, S/R governments have only limited authority over natural resource management.<sup>iv</sup></p> <p>The 2008 Constitution outlines the legislative and administrative authorities of the S/R governments in "Schedule Two." Schedule Two does not include authority over the major natural resources: mining, timber, oil and gas, or Hydropower.</p>	<p><b>Long-term natural resource management vision:</b> An overall vision and strategy for the development of all natural resource sectors is needed at both Union and State levels. Interaction between Union and State-level plans will depend on the progress of devolution of authority over natural resources.</p> <p><b>Investment plan for NR revenues:</b> How people in Myanmar want to spend and save natural resource revenues for present and future generations is an important question. Options could include: Sovereign Wealth Fund; targeted budget allocation for education and to develop economic sectors; etc.</p> <p><b>Collection of reliable data on natural resources:</b> There is little reliable data available on levels of extraction, proven and potential reserves, etc. Steps should be</p>

	<p>extraction and export in the natural resource sectors, SOEs and military-owned enterprises (MOEs) remain dominant actors; as permit granting authorities and through production-sharing contracts and collectors of royalties, etc.</p> <p>Detail of specific natural resources sectors will be examined individually below.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>Foreign Investment Law (2012)</b> &gt; Allows foreign investors to fully-own ventures, including in natural resource sectors.<sup>i</sup> &gt; Chapter 2, Section 4 restricts investments which may include the natural resource sector – for example “business which can cause damage to the natural environment and ecosystem” and those within 10 miles of Myanmar’s national borders. &gt; Chapter 2, Section 5 states that these restrictions can be overruled by the Union government “for the interest of the Union and citizens especially people of national races.”</p> <p><b>State-Owned Economic Enterprises Law (1989)</b> &gt; Designates SOEs as the sole entities</p>	<p>Schedule Two 4(b) provides S/R government limited legislative authority over “salt and salt products” and “cutting and polishing of gemstones within the Region or State.”</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>2008 Constitution, Schedule Two (2011)</b> &gt; Allocates authority to S/R governments to manage a limited range of natural resources.</p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p>	<p>taken to develop an agency for the collection and public distribution of this important data.</p> <p><b>State-level governments have very limited authority:</b> States have Chief Ministers and Cabinets full of Ministers, by no real Ministries. At the State-level most administrative functions are the responsibility of the General Administration Department which is subordinate to the Union Ministry of Home Affairs.</p> <p><b>Non-harmonization of laws and regulations:</b> Myanmar’s regulatory framework for natural resource management is often vague and inconsistent. In many cases detailed rules and procedures do not exist. In other cases, rules and procedures contradict each other. All of Myanmar’s laws and regulations concerning natural resource management need to be clarified and harmonized as soon as possible. The drafting of amendments and detailed procedures is on-going, and in many cases has been taking years to complete, leaving a massive legal vacuum.</p> <p><b>Tax-assessment procedures not transparent:</b> Myanmar’s tax laws and collection practices are very opaque, and it</p>
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	<p>authorized to conduct:</p> <ul style="list-style-type: none"> <li>(a) Extraction of teak and sale of the same in the country and abroad;</li> <li>(b) Exploration, extraction, production and sale of petroleum and natural gas;</li> <li>(c) Exploration and extraction of pearl, jade and precious stones and export of the same;</li> <li>(d) Exploration and extraction of metals and export of the same.<sup>ii</sup></li> </ul> <p>&gt; This monopoly was eased with the 1997 amendments (see below) and after, but in practice SOEs and MOEs still dominant the most lucrative natural resource sectors.</p> <p><b>State-Owned Economic Enterprises Law (1997 amendments)</b></p> <p>&gt; Opens the possibility of private sector investments in natural resource sectors by stating: “In order to contribute towards the development of State-economy, to mitigate the expenditure from State finances [...] the Government may [...] enable economic enterprises to be carried out without subscribing from State finances but by causing investment to be made from the funds owned by the relevant employees’ organization.”<sup>iii</sup></p> <p><b>Constitution of the Republic of the Union of Myanmar (2008)</b></p> <p><b>Environmental Policy (1994)</b></p>		<p>is next to impossible to follow the trail of natural resource revenues. This is especially true for the lucrative oil and gas, gem, and timber sectors (see revenue collection section below).</p> <p><b>Overlapping natural resource management mechanisms:</b> In territories controlled by non-state actors (e.g. BGFs, militias and EAOs) parallel and overlapping administrative and governance systems exist (to greater or lesser degrees). In some cases the management mechanisms used by non-state actors may be superior to those of the government. Identifying best practices and merging parallel and overlapping mechanisms will be an important element of political dialogue.</p> <p><b>Illegal extraction and smuggling:</b> Illegal or informal extraction of natural resources has a implications for management, conservation and taxation processes. There is little reliable data on illegal extraction and smuggling (by definition) but it is considered to nearly equal legal extraction and exports of some natural resources, such as jade and timber.<sup>v</sup></p> <p><b>Corruption that enables illegal extraction of natural resources:</b> In addition to stopping the illegal extraction activities</p>
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	<p>no national plan on energy efficiency exists. &gt; Micro-Hydro pilot project developing 3 and 7 kW turbines. &gt; Wind energy pilot project installing 1-3 kW wind turbines, including a 3 kW turbine in Kyaukse.</p> <p><b>ESE (responsible for electricity generation and distribution)</b></p>		<p>distinguishing between technical aspects such as concessions, ownership, revenues, royalties, taxes, and environmental impact is important. The management of resources and resource revenues cannot be done accountable manner unless information about these technical aspects are available to a public who can understand the significance of the information. Public education initiatives on technical aspect of natural resource management would benefit people, and would lead to an increase in transparency overall.</p> <p><b>Avoiding the resource curse:</b> The resource curse is defined as the negative effect on development and economic growth that sometimes results from economic dependence on natural resources.<sup>vi</sup> This is always a risk for people living in natural resource rich territories, and avoiding it requires a strong environmental regulatory framework with transparent revenue/fiscal management by accountable national and subnational institutions.</p> <p><b>Devolution is necessary for local participation and benefit:</b> Devolution of decision-making power and control of revenues is key to ensuring local people benefit from natural resources in Myanmar. In practice, devolution of decision-making</p>
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<b>Land-use / land-</b>	<p><u>Overview of management mechanisms</u></p> <p>According to the 2008 Constitution, all land</p>	<p><u>Overview of management mechanisms</u></p>	<p><b>Customary land ownership rights not recognized:</b> A major shortcoming of the</p>

<p><b>ownership</b></p>	<p>in Myanmar is state-owned, and the government maintains the right to allocate any land for use by state-initiated or private sector uses. This includes large-scale plantations and mega-development projects.</p> <p>That being said, people are able to obtain somewhat secure land-use permissions, including land-use certificates, and community forestry rights.</p> <p>The 2012 Farmland Law, allows farmers to sell, rent, or pawn their land use-rights.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>2008 Constitution (2011)</b> &gt; Article 37 states the Union: (a) is the ultimate owner of all lands and all natural resources above and below the ground, above and beneath the water and in the atmosphere in the Union; (b) shall enact necessary law to supervise extraction and utilization of state-owned natural resources by economic forces.</p> <p><b>Farmland Law (2012)<sup>vii</sup></b> &gt; Chapter Two allows for Land-Use Certificates to be granted to individuals by submitting an application through the Ward</p>	<p>In 2012 a Farmland Investigation Commission was created to investigate and facilitate the return of land confiscated by the Tatmadaw for military purposes. In its first eight months of existence the Commission received over 500 complaints related to approximately 250,000 acres.<sup>xii</sup></p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Local-level Land Use Management Committees</b> &gt; Under authority of Union-level Central Land Use Management Committee &gt; Critics have complained that some local committee members keep disputed lands for themselves rather than return them to their original</p>	<p>2008 Constitution and the related Land Laws is that they do not provide recognition for customary ownership rights. In practice, the majority of farmers in Myanmar do not hold legal ownership of the land they work, leaving them vulnerable to land-grabbing by powerful actors (those connected to the military, crony companies, and foreign investors).</p> <p><b>Customary land management practices not recognized:</b> The 2008 Constitution and the related Land Laws also do not provide recognition for customary land-use systems. In practice, a great deal of land is currently being managed under customary management systems, especially in ethnic areas where upland agriculture is practiced. A way must be found to merge the recognition of customary management systems into the existing laws and regulations.</p> <p><b>Wide-scale land acquisition/confiscation to make way for natural resource extraction projects:</b> According to the 2008 Constitution, the central government can acquire land for any land-use in the national interest. Lack of any meaningful community consultation is the norm.<sup>xv</sup></p> <p><b>Corruption and confusion in land-use</b></p>
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	<p>or Village Tract Farmland Management Body, the Township Land Records Department Office. The Certificate is issued by the Township Farmland Management Body (under the authority of the Union Ministry of Agriculture and Irrigation).</p> <p>&gt; Land covered by Land Use Certificates can be “sold, pawned, leased, exchanged or donated” to any Myanmar national, or foreign individuals and companies with the approval of the government.</p> <p><b>Vacant, Fallow, and Virgin Lands Management Law (2012)</b></p> <p>&gt; Gives the Union government the authority to designate land as vacant, fallow, or virgin; such land can then be developed for domestic purposes or foreign investment with the agreement of the Myanmar Investment Commission (MIC).</p> <p>&gt; Enables land to be confiscated from citizens (with compensation) if natural resource are found (for example, by foreign companies doing exploration) or if designated for a project that is in the “national interest.”<sup>xviii</sup></p> <p><b>Wasteland Instruction (1991)</b></p> <p>&gt; Critics have argued that it promoted access to land for commercial export agriculture.<sup>ix</sup></p>	<p>owners.<sup>xiii</sup></p> <p><b>Farmland Investigation Commission (Parliamentary Land Investigation Commission)</b></p> <p>&gt; Created in 2012 to deal with land confiscation claims where the Tatmadaw is involved.</p> <p>&gt; Grants power to S/R governments to resolve land disputes.</p> <p>&gt; As of 2014, only 307 cases (4.8%) of the open cases had been resolved by regional governments.<sup>xiv</sup></p> <p><b>Township Land Records Department Office</b></p> <p>&gt; Authority to grant Land-Use Certificates to individuals (Farmland Law, Chapter 2).</p>	<p><b>certificate granting process:</b> Township administrators often do not have the capacity to fairly sort-out land disputes. There is currently a rush to register land, and many disputes have occurred. A common story is people go to register their customary land only to find out it has already be registered to someone else. Corruption is a problem here.</p> <p><b>Corruption in the land acquisition / confiscation process:</b> Land-grabbing for private interests is being done in the name of projects of ‘national interest.’<sup>xvi</sup> For example, crony companies conducting logging or contract farming plantations in National Conservation Areas such as the Hukaung Valley Tiger Reserve.<sup>xvii</sup></p> <p><b>“Vacant-land” not actually vacant:</b> The definition of vacant land has been problematic. In many cases, land departments will classify land as vacant which is in fact involved in customary land-use systems. This law has been called the “land grabbing law” as it has enabled private interests to confiscate land currently being used by small-holders. In practice, land being used by small-holders – such as fallow areas in shifting cultivation cycles, community forests where a variety of non-timber forest products are</p>
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	<p><b>National Land Use Policy (currently being drafted)</b> &gt; Critics have argued that the draft policy privileges investors at the expense of local people, especially ethnic peoples'.<sup>x</sup></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Ministry of Agriculture and Irrigation (MOAI)</b> &gt; Responsible for management of agriculture and irrigation issues including those related to energy generation: biofuels and micro-hydro for dual irrigation and hydropower purposes.</p> <p><b>Central Land Use management Committee</b> &gt; A Parliamentary committee. &gt; Has received 14,499 complaints of land-grabs between Nov. 11, 2013, and May 15, 2015, and has handled 7,697 of them and 6,802 remain unresolved.<sup>xi</sup></p>		<p>harvested, and even land under cash crop production – have been classified as “vacant land” and confiscated.<sup>xviii</sup></p> <p><b>Compensation for confiscated land is inadequate and the process is not participatory:</b> Relocation sites are often of lesser quality and do not allow farmers to maintain the same livelihoods as before. Farmers are often compensated not for their lost land (since they don’t legally own it) but simply for the lost crops, for example receiving monetary compensation for the loss of the current year’s crop without recognition of the future loss of livelihood. When farmers are given monetary compensation for lost land, it is often at a value much lower than what could reasonably be considered market value.</p> <p><b>The Tatmadaw continues to confiscate land:</b> Despite the creation of the Farmland Investigation Commission in 2012, the Tatmadaw continues to confiscate land for both military and non-military purposes, following a pattern that has been on-going for decades.<sup>xix</sup> Tatmadaw-supported militias and BGFs also continue to engage in land confiscation.<sup>xx</sup></p> <p><b>Violent crackdowns when people stand-up for their land rights:</b> The growing</p>
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			<p>organization of farmers and land-holders groups is a positive development, but in many cases they are faced with violence and intimidation when they stand-up for their land-rights. In the worst instances, protesting farmers have been murdered or seriously injured by police and soldiers. Plough protests can be an effective method for reclaiming lost land, but can be dangerous when police and soldiers operate without civilian oversight.</p> <p><b>Growth of contract-farming:</b> Myanmar is seeing a rapid increase in foreign investments in large-scale plantations, especially in border areas.<sup>xxi</sup> These types of plantations often have adverse environmental impacts (loss of biodiversity, flooding, high levels of pesticides, etc.), and are connected to land-grabbing. Examples include rubber and oil palm plantations in Taninthryi and Mon States going to Thailand and China; banana plantations in Kachin State going to China; and corn plantations in Shan State going to Thailand and to raise industrial chickens for the Myanmar market. Tanintharyi, Kachin and Sagaing have the largest areas of land allocated for agribusiness concessions.<sup>xxii</sup></p> <p><b>IDPs and refugees are now landless:</b> In some cases refugees who have fled</p>
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<b>Mining</b>	<p><b><u>Overview of management mechanisms</u></b></p> <p>Myanmar's mining sector is currently governed by a number of un-harmonized laws, and the sector is notoriously opaque and controlled by a small number of powerful players. Amendments to the Mines Law are apparently currently underway, so the management of Myanmar's mining sector could look somewhat different in the future.</p>	<p><b><u>Overview of management mechanisms</u></b></p> <p>State parliaments have cabinet posts for Minister of Forestry and Mines, although they are effectively 'Ministers without Ministries' as the Minister is ultimately accountable to the State Chief Minister and Union Ministry of Mines.</p>	<p><b>No reliable data on mining sector:</b> There is no source of reliable data on proven and potential mineral reserves, or of current extraction levels. Some of this information is likely contained in individual contracts, but these are usually not disclosed to the public or even State-level politicians. Union and State-level bodies should strive to collate this information and make it publicly available.</p>

	<p>The Ministry of Mines no longer owns any mining operations, and encourages domestic and foreign investors to submit applications for exploration of mineral deposits to be developed for extraction (exploration only, because extraction rights for all major verified mineral deposits are already allocated).</p> <p>The Union Ministry of Mines (MoM) designates mine operations as ‘large’ or ‘small’ in scale. Permits for small-scale mines are given for 5 years, while for large-scale mines the permit is given for 25 years. Large-scale mines are always developed as a Production-Sharing Contract (PSC) between Mining Enterprise (#1, 2 or 3) and a private company. Details of specific PSC contracts vary but the usual split is 30% to the Mining Enterprise and 70% to the company. Small-scale mines pay MoM some set fees upfront (application and land rental fees) as well as applicable taxes and royalties based on the actual amount of minerals extracted.</p> <p>In practice, applications from investors to conduct mineral exploration and/or extraction are approved at the sole discretion of the Ministry of Mines. The application process does not even mention potential environmental impacts and mitigation plans.<sup>xxiii</sup> The Form(1) of the</p>	<p>In practice, there are no State-level Mining departments, although the Department of Geological Survey &amp; Mineral Exploration has offices in some states/regions.<sup>xxvi</sup></p> <p>In practice, there are few State-level mechanisms for the management of mineral resources. The exceptions are for the extraction and production of salt, and to some degree the cutting and polishing of gemstones.</p> <p>The 2008 Constitution Schedule Two 4(b) gives the States/Regions legislative authority over “Salt and salt products.” Since 2011, the operations of the Myanmar Salt and Marine Chemical Enterprise (previously under the Union Ministry of Mines) are overseen by State and Region governments.</p> <p>The 2008 Constitution Schedule Two 4(b) gives the States/Regions legislative</p>	<p><b>No reliable data on concessions and permit holders:</b> Sources of information about concessions and permit holders are lacking; as one research report noted “there is presently no public register of mining permits/concessions in Myanmar and limited information is available on mining permit holders, permit areas and duration of the permits.”<sup>xxx</sup> The creation of such a register would be an important step towards transparency in the concession and permit granting process.</p> <p><b>Authority over mining sector very centralized:</b> Only small-scale and loss-making natural resource sectors have been transferred to the S/R-level. For example, in 2013-14 the Myanmar Salt and Marine Chemical Enterprise reported a loss in seven of the eight States and Regions.</p> <p><b>Royalty/Tax collection procedures are not transparent:</b> The methods used to calculate and collect taxes and royalties are not clear, especially in the jade and precious gems. (See Taxation row below for more details)</p> <p><b>Influence of foreign laws:</b> The policies and regulations for mining sector management should consider the influence of foreign laws on the operations of foreign investors. Some foreign firms may need to comply</p>
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	<p>Foreign Investment Law (2012) does include a section for investors to outline their “Evaluation of environmental impact.”</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p>There are a number of un-harmonized laws dealing with mining:</p> <p><b>Myanmar Mines Law (1994)</b> &gt; Rules for granting exploration permits to private companies.</p> <p><b>Myanmar Gemstone Law (1995)</b> &gt; Authorizes Myanmar Gem Enterprise (MGE) to regulate gems sector under the authority of the Union Ministry of Mines. &gt; Sets royalties in the gemstone sector.</p> <p><b>Myanmar Pearl Law (1995)</b> <b>Foreign Investment Law (2012)</b> <b>Union Taxation Law (2014)</b> <b>Myanmar Mines Rules (1996)</b> <b>Environmental Conservation Law (9/2012)</b></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Union Ministry of Mines (MoM)</b> &gt; Approves permits for mineral extraction.</p>	<p>authority over “Cutting and polishing of gemstones within the Region or State.” Some State and Region governments have passed (Mandalay and Sagaing Regions) or are attempting to pass (Kachin State) gemstone cutting and shaping laws. These S/R laws have the potential to conflict with the Gemstone Law (1995) which stipulates that all jade must be sold at Mandalay or Naypyidaw Emporiums.</p> <p>The Union Ministry of Mines has stated that it “reviews comments” from State and Region governments when issuing mining permits. The depth of consultation seems to vary from State to State, but is clearly lacking any legal or institutional structure. In practice, the consultation does not appear to be deep; with State governments being able to endorse, but not veto, applications.</p> <p>There is some indication that</p>	<p>with their own domestic laws, which could drive greater transparency in the sector. For example, there are revenue reporting rules for US-listed companies; the Kimberley Process for diamonds; and the Canadian Mining code of conduct could be integrated into mining sectors regulations so as to encourage investors and improve transparency.</p> <p><b>Growth of environmentally destructive large-scale mining operations:</b> In the past, mining was predominantly conducted by hand with the shovels, picks and pans. With the entry of foreign investment in Myanmar’s mining sector since the early 1990s, mining operations have shifted to large-scale machinery intensives techniques that cause significantly greater destruction to the environment. For example, open-pit mining and hydraulic-mining significantly alter the landscape, chemicals used in certain mining processes lead to tailings-pools which contaminate local water supply, etc.</p> <p><b>Invitation for “greenfield exploration” applications may contribute to land-grabbing:</b> The Union MoM has authority to approve exploration applications for massive swathes of “previously unexplored land”. This land may</p>
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	<p>&gt; Sets and collects taxes and royalties for the mining sector.</p> <p>&gt; Responsible for mine inspection and safety.</p> <p>&gt; Designates operations as large or small.</p> <p>&gt; There are apparently draft amendments to the Mines Law which create a 'medium' designation and shift authority over 'small' mines to the S/R level (see next column as well as Table 2 for more details).<sup>xxiv</sup></p> <p><b>Ministry of Mines, Department of Mines (DoM)</b></p> <p>&gt; Responsible for formulating mining policy.</p> <p>&gt; Responsible for granting mining permits.</p> <p>&gt; Responsible for coordinating with the Mining Enterprises (#1, 2 and 3).</p> <p>&gt; Responsible for environmental issues at MoM.</p> <p><b>Ministry of Mines, Department of Geological Survey &amp; Mineral Exploration (DGSE)</b></p> <p>&gt; Responsible for mapping, prospecting, and exploration of minerals.</p> <p><b>Myanmar Mining Enterprise #1 (MME1)</b></p> <p>&gt; Responsible for the production of lead, iron, zinc, antimony, silver, nickel, copper and chromite deposits.</p> <p><b>Myanmar Mining Enterprise #2 (MME2)</b></p>	<p>the Mines Law will be amended to transfer authority over small-scale mines to the State/Region-level. (see Mining row in Table 2 for more details)</p> <p>In practice, some State-level politicians have started conducting geological surveys in areas where applications for mining operations are pending with the Union MoM. In January 2015, the Chin State Minister for Forestry and Mining along with other officials began conducting surveys at locations where mining companies have submit applications for exploration.<sup>xxvii</sup></p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>2008 Constitution, Schedule Two (2011)</b></p> <p>&gt; Schedule Two 4(b) gives the States/Regions legislative authority over "Salt and salt products" and "Cutting and</p>	<p>be inhabited or otherwise in use by local people. It is not clear what mechanisms are in place to include local people in the application process.</p> <p><b>Illegal exploitation and smuggling of minerals:</b> It is crucial for any new policies to directly address informal/illegal extraction and export of minerals. In some sectors such as jade, illegal sales are estimated to nearly equal legal sales.<sup>xxxi</sup></p>
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	<p>&gt; Responsible for the production of tin, wolfram, and tin-wolfram-scheelite concentrate deposits. &gt; Responsible for gold and tin refining.</p> <p><b>Myanmar Mining Enterprise #3 (MME3)</b> &gt; Responsible for the production of iron and steel, industrial materials, and dimension stones from granite and marble deposits. &gt; MME#3 was previously responsible for coal; but no SOEs are presently involved in coal production since the privatization of the Kalewa mine in Sagaing Division and Namma mine in Northern Shan State.</p> <p><b>Myanmar Gem Enterprise (MGE)</b> &gt; Grants permits for the sale of gemstones. &gt; Collects royalties based on the value assessed by the valuing body established by MoM. Royalty rates are 20% for ruby, sapphire, jade and diamond, and 10% for other gemstones, with an additional 10% tax based on actual foreign currency sale price<sup>xxv</sup>. According to the Gemstone Law no other taxes or royalties are expected to be collected from companies in the gem sector, but this may conflict with Union Tax Law (see below).</p> <p><b>Myanmar Pearl Enterprise</b> &gt; Responsible for the production of cultivated pearls.</p>	<p>polishing of gemstones within the Region or State.”</p> <p><b>Salt Enterprise Law (1992)</b></p> <p><u><b>Responsible government bodies / key stakeholders / etc.</b></u></p> <p><b>State Minister of Forestry and Mines</b> &gt; State parliaments have cabinet posts for Minister of Forestry and Mines, although they are effectively “Ministers without a Ministry” who work under Chief Minister and Union Ministers. &gt; Mining-related activities conducted under Union Ministry of Mines. &gt; May be responsible for other environmental conversation-related activities.<sup>xxviii</sup> &gt; Party breakdown of current State and Region Ministers of Forestry and Mines: Ayaerwaddy: USDP Bago: USDP Chin: CPP</p>	
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	<p>&gt; Oversees collection of pearl oysters from the sea.</p>	<p>Kachin: USDP Karen: USDP Kayah: USDP Magwe: USDP Mandalay: USDP Mon: USDP Rakhine: RNPP Sagaing: USDP Shan: SNDP Tannintharyi: USDP Yangon: USDP</p> <p><b>Department of Geological Survey &amp; Mineral Exploration (State-level offices)</b> &gt; There is a DGSE office in Tannintharyi.<sup>xxix</sup></p> <p><b>Myanmar Salt and Marine Chemical Enterprise</b> &gt; Oversees and grants permits for the production of various types of salt and related minerals.</p>	
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<p><b>Timber</b></p>	<p><b><u>Overview of management mechanisms</u></b></p> <p>Almost half of Myanmar’s land is covered by some form of forest.<sup>xxxii</sup> Decisions about how to manage this resource is important and will impact large numbers of people across the country. In practice, the management of Myanmar’s timber sector has been highly centralized with Union-level forest Departments and the state-owned enterprise Myanmar Timber Enterprise. This is especially true for high-value hardwoods such as teak.</p> <p>On April 1, 2014 a ban on export of raw timber was introduced; meant to stem rapid deforestation from decades of “legal overproduction” and to increase the prevalence of value-added processes in a sector dominated by crony companies.<sup>xxxiii</sup></p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>Myanmar Forest Law (1992)</b></p> <p><b>Myanmar Forest Policy (1995)</b></p> <ul style="list-style-type: none"> <li>&gt; Responsible for sustainable development of forest resources for “social, environmental, and economic purposes.”</li> <li>&gt; Has six stated goals: protection, sustainability, basic needs, efficiency,</li> </ul>	<p><b><u>Overview of management mechanisms</u></b></p> <p>State parliaments have cabinet posts for Minister of Forestry and Mines, although they are effectively ‘Ministers without Ministries’ as the Minister is ultimately accountable to the State Chief Minister and Union Minister of Forestry and Environmental Conservation.<sup>xxxvi</sup></p> <p>State governments, as well as township and district-level officials, do have the authority to manage and tax the extraction of certain tree species through the MOECAP Notification on State-level timber management. MOECAP has created a list of timber species to be managed and taxed at the State-level, but teak and other hardwood varieties are not included.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p>	<p><b>Highly centralized control over the management of lucrative Teak and hardwood:</b> The Myanmar Timber Enterprise has exclusive rights over teak and other hardwoods.</p> <p><b>Little role for customary forest management knowledge/capacity:</b> In the current system the experience and knowledge of local community in forest management are not recognized. Decisions about the location and scale of large-scale timber operations do not involve much or any local participation.</p> <p><b>Ownership rights lacking for communities who have stewarded forests:</b> Current laws rest management over forests and timber with the government bodies and SOEs with little acknowledgement of the rights of communities who have stewarded forests over the years. Especially touchy in the case of stands of teak that local people have protected over decades, yet are unable to reap any economic benefit if they are felled.</p> <p><b>Land-grabbing to facilitate timber extraction:</b> Some argue that access to forests for the purpose of logging is often a major ulterior motive for government and</p>
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	<p>participation, and public awareness.<sup>xxxiv</sup></p> <p>&gt; States that shifting cultivation should be discouraged through adoption of improved practices for better food production and a better quality of life for shifting cultivators.</p> <p><b>National Forestry Master Plan (2002)</b></p> <p>&gt; Union Ministry of Forestry produced the Plan to guide forestry policy until 2030.</p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Ministry of Environmental Conservation and Forestry (MOECAF)</b></p> <p>&gt; Created in 2011, through an expansion of the Forestry Department.</p> <p>&gt; Oversees everything related to forestry and environmental conservation</p> <p>&gt; Designated as the national authority for the clean development mechanism.</p> <p><b>MOECAF, Forest Department</b></p> <p>&gt; Primary authority responsible for administering Reserved Forest lands.</p> <p>&gt; The Forestry Department also has delegated authority over areas of land classified as Protected Public Forest and Public Forest. The FD is responsible for the protection and conservation of biodiversity and the sustainable management of forest</p>	<p><b>MOECAF Notification on State-level timber management</b></p> <p>&gt; Devolves management and taxation authority to State governments for 104 species of timber and Non-Timber Forest Products.</p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>State Minister of Forestry and Mines</b></p> <p>&gt; State parliaments have cabinet posts for Minister of Forestry and Mines, although effectively a “Minister without a Ministry” as the Minister is ultimately accountable to the Chief Minister and Union Ministers.<sup>xxxvii</sup></p> <p>&gt; Forestry-related activities conducted under Union Ministry of Forestry and Environmental Conservation.</p> <p>&gt; May be responsible for other environmental conversation-related activities.<sup>xxxviii</sup></p>	<p>military land confiscation. Especially touchy in the case of stands of teak that local people have protected over decades, yet are unable to reap any economic benefit if they are felled.</p> <p><b>Timber extraction at sites of infrastructure developments:</b> There have been complaints that profits from logging in areas being cleared for infrastructure development projects are not being distributed transparently. The procedures for this type of situation need to be clarified, and any revenues need to be entered into relevant government accounts transparently.</p> <p><b>Illegal exploitation and smuggling of timber:</b> It is crucial for any new policies to directly address illegal felling and smuggling of timber as at present it is estimated to be larger than legal extraction.<sup>xi</sup> Another issue is what happens to any timber that is seized; this is not transparent at present.</p>
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	<p>resources in the country.<sup>xxxv</sup></p> <ul style="list-style-type: none"> <li>&gt; Previously conducted an annual forest inventory, and created a land use and forest cover database for Year 2000 Forest Resources Assessment.</li> </ul> <p><b>Myanmar Timber Enterprise (MTE)</b></p> <ul style="list-style-type: none"> <li>&gt; Overseen by the Union Forestry Department of MOECF.</li> <li>&gt; Has separate branches for extraction, marketing and exports.</li> <li>&gt; Sub-contracts timber harvesting activities with private companies and semi-government companies.</li> <li>&gt; Responsible for milling, and downstream processing and marketing of forest products.</li> <li>&gt; Holds sole extraction rights for teak (as a 'reserved species').</li> <li>&gt; Approves certification for export of timber.</li> <li>&gt; Functions as the government's agency for wood-processing joint-ventures with private companies.</li> </ul> <p><b>Forest Resource Environment Development and Conservation Association (FREDA)</b></p> <ul style="list-style-type: none"> <li>&gt; Participating forest certification scheme for Myanmar.</li> </ul> <p><b>MOECF, Environmental Conservation Department</b></p>	<ul style="list-style-type: none"> <li>&gt; Party breakdown of current State and Region Ministers of Forestry and Mines: Ayaerwaddy: USDP Bago: USDP Chin: CPP Kachin: USDP Karen: USDP Kayah: USDP Magwe: USDP Mandalay: USDP Mon: USDP Rakhine: RNPP Sagaing: USDP Shan: SNPP Tannintharyi: USDP Yangon: USDP<sup>xxxix</sup></li> </ul> <p><b>State/Region Forestry Departments</b></p> <ul style="list-style-type: none"> <li>&gt; Works under the State Minister of Forestry and Mines as well as under the MOECF Forestry Department.</li> <li>&gt; Effectively a deconcentrated department of MOECF (rather than a devolved department with autonomy).</li> <li>&gt; Operational expenses are covered by MOECF, while salaries are covered by S/R</li> </ul>	
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	<b>MOECAF, Survey Department</b>	<p>Funds.</p> <p><b>Forest Conservation and Management Committees</b> &gt; Formed at all levels of civil administration to plan and monitor deforestation and land-use changes.</p>	
<b>Non-timber forest products (NTFP)</b>	<p><u><b>Overview of management mechanisms / Mechanisms In practice</b></u></p> <p>Collection of NTFP is an important part of the livelihood of many people living in ethnic areas in Myanmar. NTFP are commonly used in many households to supplement diets and for traditional healthcare. Many small-scale businesses are also dependent on harvesting and processing for NTFP.<sup>xli</sup></p> <p>Some of the most common NTFP currently being harvested in Myanmar are:</p> <ul style="list-style-type: none"> <li>&gt; Fuelwood</li> <li>&gt; Pine resin (Chin State)</li> <li>&gt; Mushrooms</li> <li>&gt; Orchids</li> <li>&gt; Honey</li> <li>&gt; Wild game meat and furs</li> <li>&gt; A wide variety of medicinal plants</li> </ul> <p>While hunting for wild game can be</p>	<p><u><b>Overview of management mechanisms</b></u></p> <p><u><b>Laws / Regulations / Policies / Procedures</b></u></p> <p><u><b>Responsible government bodies / key stakeholders / etc.</b></u></p>	<p><b>Need for a comprehensive plan for NTFP conservation and development:</b> Because of the importance of NTFP to local livelihoods, as well as the potential for sustainable economic growth from the sector, comprehensive plans should be created for the management of this often overlooked resource. Mapping of current NTFP harvesting patterns and highlighting areas where small-scale processing of NTFP could be a sustainable locally-led development initiative is crucial. An analysis of the impact of other natural resources projects on the NTFPs is also needed, and should be a requirement in application processes.</p> <p><b>Lack of reliable social and economic data on NTFP sector:</b> At present there is a lack of reliable figures on the estimated the monetary value of the NTFP sector in Myanmar. Figures on the number of</p>

	<p>considered harvesting of NTFP, the hunting of certain endangered species is considered illegal wildlife trade. The hunting of endangered species and illegal wildlife trade happens in all areas of Myanmar; in both EAO and government-controlled areas. Most of this trade is going to China where the market for endangered wildlife is booming. Thailand is also a destination, including for elephants.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law (1994)</b>          &gt; Criminalizes the possession, sale or export of wildlife and/or their parts.          &gt; Created as part of the SLORC government's ratification of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which lists protected wildlife species.</p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Ministry of Agriculture and Irrigation (MOAI)</b></p>		<p>people involved in harvesting NTFPs – for household use or for small-scale businesses – are also not available. This data may be difficult to collect due to the sporadic and dispersed nature of the sector, but attempts to compile this data should be made.</p> <p><b>Sustainable business development and export opportunities:</b> An analysis of potential markets for Myanmar's NTFP should be conducted, to inform the planning of State governments, local administrators and local communities. Also the laws and regulations governing to what extent value-added processing and export of NTFP should be clarified.</p> <p><b>Scope of foreign investment in the sector:</b> As important part of comprehensive plan for the NTFP conservation and development would be the question of the potential for FDI in the sector. Whether and to what extent there is a need or desire for foreign investment in NTFP sector needs to be discussed. Management of NTFP's is suitable to be under the authority of subnational governments as the characteristics of NTFP vary significantly by geography and climate as well as local harvesting patterns.</p>
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			<p><b>Role of customary management practices:</b> Mechanisms to govern the harvesting of NTFP should be designed in close cooperation with local communities. Local harvesting and resource management practices and knowledge should be a key component of any policies and regulations.</p> <p><b>There is little enforcement of illegal harvesting and export of NTFP:</b> There is very little, if any, monitoring and enforcement of illegal NTFP exploitation by government bodies. This could be a role for staff of State-level Environmental Conversation Departments.</p> <p><b>Harmonization with community Forestry regulations:</b> Any new policies or regulations regarding NTFP should be harmonized with community forestry rules, and vice versa. For example, commercial extraction from community forest has not been allowed. There should be discussion about whether to maintain this provision, or if it would make sense NTFP may exempt NTFP in some cases (see below).<sup>xlii</sup></p>
<b>Community Forests</b>	<p><u>Overview of management mechanisms</u></p> <p>The Community Forestry Instructions (1995) were meant to bring more local-level</p>	<p><u>Overview of management mechanisms</u></p> <p>The authority for community</p>	<p><b>Community forests as a channel for locally-lead conservation activities:</b> Forest Users Groups could be instrumental in advocating</p>

	<p>participation into forest management, as “it had become increasingly apparent that unless the basic needs of the local forest dependent poor especially the need for wood fuel can be met, sustainable forest management would remain elusive.”<sup>xliii</sup> A key goal was to encourage the use of CFs as a source of fuelwood and to decrease fuelwood harvesting from ‘natural forests’ (the majority of Myanmar’s rural population depends on fuelwood for energy, especially for cooking<sup>xliv xlv</sup>). Community Forest management rights are granted for 30 years, but extendable.</p> <p>At present there are over 570 Forest Users Groups holding certificates, collectively managing over 100,000 acres of forest.<sup>xlvi</sup></p> <p>In many of the ethnic States, communities maintain de facto community forests.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>Community Forestry Instructions (1995)</b></p> <p><b>National Forestry Master Plan (2002)</b> &gt; Calls for the main source of fuelwood to shift from natural forests to community forests between by 2030; with a slight increase in the use of plantations as a</p>	<p>forestry rests at the S/R level as it is overseen by the State Forestry Department (which is in-turn overseen by the S/R Minister for Forestry &amp; Mines, and the State Chief Minister) and is ultimately accountable to the Ministry of Forestry and Environmental Conservation.</p> <p>In the current structure, the authority to manage community forests is de-concentrated rather than devolved, although in practice there is a significant local control over their management.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>2008 Constitution, Schedule Two</b> &gt; Point 4.b gives S/R governments the authority to manage “Village firewood plantations.”</p> <p><b><u>Responsible government</u></b></p>	<p>and implementing customary resource management practices.</p> <p><b>Need to expand influence of community forest managers:</b> Mechanisms for integrating community forest managers into NR decision-making processes at the State and Union level should be developed.</p> <p><b>Bringing existing unregistered community forests into the legal fold:</b> There needs to be a process to gain legal status for existing de facto community forests.</p> <p><b>Mapping:</b> Collaborative mapping of existing and planned community forests is important for solidifying their status. Having detailed maps that have been officially accepted by all stakeholders has been proven to increase the likely hold that the boundaries of community forests will not be violated. Mapping activities should be conducted by joint-groups including representatives of Forest User Groups, Forestry officials, Land Officials, business owners, etc.</p> <p><b>National-level community forest database:</b> A database of all community forests across Myanmar should be developed and made publicly accessible. The database could be aggregated by State and Township, and</p>
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	<p>fuelwood source. &gt; Aims to establish 900,000 hectares of CF by 2030, from about 90,000 in 2015.<sup>xlvii</sup></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p>	<p><b><u>bodies / key stakeholders / etc.</u></b></p> <p><b>S/R Minister for Forestry &amp; Mines, State Forestry Department</b> &gt; Oversees community forestry through the State Forestry Department.</p> <p><b>Forest Users Groups</b> &gt; Local-level group responsible for managing a community forest.</p>	<p>could include maps, location coordinates, etc.</p> <p><b>Ensuring accountable decision-making processes within Forest User Groups:</b> Mechanisms to ensure that Forest User Groups operate transparently and are accountable to the community they are representing must should be strengthened. This could include rotating leadership positions, regular reporting, collective monitoring, etc.</p> <p><b>International support:</b> There are many regional and international groups with expertise in creating and managing community forests. The extent to which the communities and various levels government want to involve this potential international support should be discussed.</p> <p><b>Preventing violations of community forests for economic gain:</b> In addition to collaborative mapping, other steps should be taken to ensure that community forests are not violated by external economic interest. These could include strengthened monitoring mechanisms, clear and effective reporting mechanisms for early-detection, significant legal consequences, etc.</p> <p><b>Commercialization:</b> Commercial extraction</p>
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			from community forest has not been allowed. There should be discussion about whether to maintain this provision, or if providing exemptions in some cases (e.g. for some NTFP) may makes sense from a conservation perspective. (see above)
<b>Hydro-power (&amp; water)</b>	<p><b><u>Overview of management mechanisms</u></b></p> <p>Myanmar's four major river basins - Ayeyarwaddy, Chindwin, Thanlwin and Sittaung - have been estimated to hold 100,000 MW in potential hydropower. To date, MOEP has identified 200 potential dam sites, with a potential generation capacity of 40,000 MW.</p> <p>The Electricity Act (1948) is the official law regulating hydropower electricity generation, but in practice the individual projects are regulated on a case-by-case basis based on the regulations outlined in the contract signed between the Ministry of Electric Power (MEOP) and the private investors.</p> <p>In 2013, a National Energy Policy was established with the aim of modernizing Myanmar's Energy sector based on input from the Asian Development Bank and the government of Norway. The NEP has nine</p>	<p><b><u>Overview of management mechanisms</u></b></p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p>There is an indication that the Electricity Law (10/2014) "gives the MOEP, region and state governments and leading bodies of Self-Administrated Zones (SAZ) and Self-Administrated Divisions (SAD) the power to grant permits to allow persons to engage in electricity related works, including generation, transmission and distribution of electric power."<sup>lvii</sup> The specific rules and regulations stemming from this new Law needs to be clarified.</p>	<p><b>Domestic energy-needs of little importance in existing projects:</b> Despite that hydro being a source of relatively 'green' energy, many of Myanmar's hydro projects are geared towards export rather than domestic consumption.</p> <p><b>Production-sharing ratio not transparent:</b> There is no universal rule governing the domestic allocation in hydropower projects where some portion of the production is to be exported. Specific ratios are contract-specific, and there is no transparency regarding how these ratios are decided upon by the MEOP. State governments and local people have little to no input into the domestic allocation of hydropower generated in their area.</p> <p><b>Revenue collection not transparent:</b> It is not clear how the collection of revenue from the export of electricity from hydropower currently happens or will</p>

	<p>key points:</p> <ol style="list-style-type: none"> <li>1.To implement short term and long term comprehensive energy development plan based on systematically investigated data on the potential energy resources which are feasible and can be practically exploited, considering minimum impact on natural environment and social environment;</li> <li>2. To institute laws, rules and regulations in order to promote private sector participation and to privatize State Energy Organizations in line with State Economic Reform Policy;</li> <li>3. To compile systematic statistics on domestic demand and supply of various different kinds of energy resources of Myanmar;</li> <li>4.To implement programs by which local population could proportionally enjoy the benefit of energy reserve discovered in the areas;</li> <li>5.To implement programs on a wider scale, utilizing renewable energy resources such as wind, solar, hydro, geothermal and bio energy for the sustainable energy development in Myanmar;</li> <li>6. To promote Energy Efficiency and Energy Conservation;</li> <li>7.To establish R, D, D&amp;D (Research, Development, Design and Dissemination) Institution in order to keep abreast with international practices in energy resources</li> </ol>	<p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p>There are no State-level Energy departments, although some state/region governments have bodies dealing with hydropower generation.</p> <p>The new Electricity Law may shift more responsibility over small and medium-sized hydropower dams to S/R governments, but this needs to be clarified.</p>	<p>happen in the future. Rules and regulations from the new Electricity Law will likely shed some light on this.</p> <p><b>Hydro vs coal and oil:</b> Electricity generated from hydropower can be considered a renewable resource. Hydropower generation usually has relatively fewer adverse environmental impacts (notably air pollution and carbon emissions) than other non-renewable sources of energy such as coal and oil and gas. Despite having significant hydropower potential, Myanmar still depends on burning oil and coal for much of its domestic energy needs. The role of hydropower versus coal and petroleum to meet Myanmar's energy needs should be discussed and referred to in all future energy sector planning activities.</p>
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	<p>exploration and development works and to produce international quality products in order to manufacture quality products and in order to conduct energy resources exploration works in accordance with international standard;</p> <p>8.To promote international collaboration in energy matters; and</p> <p>9.To formulate appropriate policy for energy product pricing meeting economic security of energy producers and energy consumers.<sup>xlviii</sup></p> <p>In practice, large-scale hydropower projects in Myanmar are done through joint-ventures between government bodies and foreign investors (often foreign state-owned enterprises). The process for Joint-Venture Agreements is as follows: “For each joint venture, Myanmar is entitled to ‘free share’ and ‘free power’ (equivalent to royalties), in addition to commercial and income tax revenues. Free share and free power are negotiated individually but, as a general rule, free share is not less than 25% and free power is not less than 10%. Myanmar is entitled to buy up to 50% of the generated electricity. The purchase price for electricity is re-negotiated annually during the concession period, which normally has a duration of 30 years. This can be extended for 5 years at a time. At the end of the</p>		
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	<p>concession period, full ownership must be transferred to the government, with the facility in good condition as defined in the JVA. HPGE takes part in the operation of joint ventures, contributing one-third to the operation costs and maintenance staff.”<sup>xlix</sup></p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>Electricity Act (1948)</b> [amended 1967, 1984, and 1987]</p> <p><b>Myanmar Electricity Law (10/2014)</b>  &gt; This new law has been enacted by President Thein Sein in October 2014 in order to update the 1984 Electricity Law.<sup>i</sup>  &gt; Aimed to create a transparent regulatory framework because the lack of one was hindering FDI and private sector investment in the energy sector.<sup>ii</sup>  &gt; It is not clear whether specific new rules and regulations stemming from the new Law are yet to come into force.<sup>iii</sup></p> <p><b>National Energy Policy (2013)</b>  &gt; Aimed at modernizing Myanmar’s Energy sector.  &gt; Drafted with the cooperation of nine Union Ministries.<sup>iiii</sup></p>		
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	<p>&gt; Promotes growth of hydropower, among other energy sources.</p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Ministry of Electric Power (MOEP)</b></p> <p><b>Electricity Regulatory Commission (ERC)</b> &gt; Created by the new Electricity Law (10/2014) to supervise the monopolistic electric power entities.<sup>liv</sup></p> <p><b>Ministry of Electric Power, Department of Hydropower Planning (DHPP)</b> &gt; Responsible for hydropower (and thermal power) project planning: develops a list of potential hydropower projects and then seeks potential investors.</p> <p><b>Ministry of Electric Power, Department of Hydropower Implementation (DHPI)</b> &gt; Responsible for hydropower (and thermal power) project implementation. &gt; Responsible for hydropower dams jointly with Ministry of Agriculture and Irrigation, Department of Irrigation.</p> <p><b>Ministry of Agriculture and Irrigation, Department of Irrigation</b></p>		
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	<p>&gt; Responsible for irrigation reservoirs and irrigation dams (which occasionally include small hydropower generators).</p> <p>&gt; Responsible for hydropower dams jointly with Ministry of Electric Power, Department of Hydropower Implementation.</p> <p><b>Myanmar Electric Power Enterprise</b> (State-owned Enterprise)</p> <p>&gt; Responsible for transmission lines, sub-stations, gas turbine, wind farms, micro-hydropower.</p> <p><b>Hydropower Generation Enterprise (HPGE)</b> (State-owned Enterprise)</p> <p>&gt; Responsible for Hydropower Station, and Coal-Fired (and Thermal) Plant Generation.</p> <p>&gt; Operates 17 hydropower plants with a total capacity of 2,010 MW.</p> <p><b>Electricity Supply Enterprise (ESE)</b> (State-owned Enterprise)</p> <p>&gt; Responsible for electricity distribution outside of Yangon.<sup>iv</sup> Electricity distribution for Yangon is the responsibility of the Yangon City Electricity Supply Board.</p> <p>&gt; Responsible for planning, implementation and operation of small off-grid hydropower and diesel systems.</p> <p><b>Ministry of Industry</b></p> <p>&gt; Responsible for the inspection of electrical</p>		
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	<p>facilities.</p> <p><b>National Energy Management Committee</b> &gt; Coordinates cross-Ministry energy management issues.<sup>lvi</sup></p> <p><b>Privately-owned dams</b> &gt; Mali Stream Hydropower Station is owned and operated by Kachin Independence Organization through the Buga Company, which sells electricity from the Station to the Myitkyina grid.</p>		
<b>Oil &amp; natural gas</b>	<p><b><u>Overview of management mechanisms / Mechanisms In practice</u></b></p> <p>All oil and gas companies operating in Myanmar do so in partnership with Myanmar Oil and Gas Enterprise (MOGE), most in Production-Sharing Contracts (PSCs). Contracts vary, but they are almost always secret. According to an official at MOGE, in the standard contract MOGE owns a 15-20% stake in the project outright. MOGE collects production bonuses and any profits from its 15-20% stake. In addition, it also collects: 12.5% royalty of available petroleum; 25% corporate income tax on net profit; and 20% of contractor's share of profit for petroleum at 90% of fair market price.</p> <p>In some contracts, signing bonuses are</p>	<p><b><u>Overview of management mechanisms / Mechanisms In practice</u></b></p> <p>Authority over the oil and gas sector is highly concentrated in the Union-level MOE and MOGE. There is effectively no State-level governance of the sector.</p> <p>That being said, some on-site taxes collected on the extraction of crude oil are collected by the Township GADs, and entered into the State Fund.</p>	<p><b>Contract transparency:</b> Most oil and gas contracts are negotiated in secret, and remain secret. The terms laid-out in these documents should be made public.</p> <p><b>Revenue transparency:</b> Myanmar's oil and gas sector is subject to a significant number of taxes and royalties. The collection of these different streams of revenue is not transparent. The fact that signing bonuses are now paid to the Energy Planning Department is a good start.</p> <p><b>Local participation in development decisions:</b> As the decision-making power in the sector is centralized in the MOE and MOGE, local people have little, if any, input into the development of oil and gas</p>

	<p>included. In the past the payment of these bonuses was far from transparent, but now these are paid to the Energy Planning Department under the Ministry of Energy.</p> <p>The oil and gas sector in Myanmar is organized through the designation of onshore and offshore 'blocks.'<sup>lviii</sup> At present, there are 53 onshore and 51 offshore blocks, of which 35 are in operation and more under exploration.<sup>lix</sup></p> <p>The MOE and MOGE hold the authority to approve the allocation of concession to domestic and foreign investors to operate in onshore and offshore blocks (concessions can cover a single block or cross multiple blocks). At present there are three main types of concessions:</p> <ul style="list-style-type: none"> <li>(i) Exploration and Production and Production-Sharing Contracts (the vast majority of concessions are of this type);</li> <li>(ii) Improved Oil Recovery and Performance Compensation Contracts; and</li> <li>(iii) Reactivation of Suspended Fields.</li> </ul> <p>The oil and gas sector was nationalized in 1963, with little change until after the creation of the Foreign Investment Law (1988) when foreign bids were allowed on 18 blocks. Between 1988 and 2011, while ostensibly open to bidding, the application</p>	<p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Myanmar Oil and Gas Enterprise (MOGE)</b> &gt; Has offices at onshore oil fields in some states.</p>	<p>projects.</p> <p><b>Local allocation of production shares:</b> Electrification levels across Myanmar are low. A greater share of oil and gas production should be allocated for domestic use. Also, cases where the domestic allocation is directed to areas far away from of the area of production have caused resentment amongst residents of these areas.</p> <p><b>Domestic energy-needs of little importance in existing projects:</b> Despite that generating electricity with natural gas can be considered a relatively 'green' and efficient. Both Myanmar's major natural gas extraction projects (Yadana/Yetagun and Shwe Gas) are geared towards export rather than domestic consumption.</p> <p><b>Natural gas vs coal and oil:</b> Electricity generated from natural gas can be considered a relatively clean energy source. Despite having significant natural gas potential, Myanmar still depends on burning oil and coal for much of its domestic energy needs. The role of natural gas versus coal and other petroleum products to meet Myanmar's energy needs should be discussed and referred to in all future energy sector planning activities.</p>
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	<p>and approval process for most concessions was concluded in secret by private negotiations with MOGE. More recently, the bidding process for blocks has been opened to international investors. Since 2011 there have been three open-bidding rounds, in which 54 blocks have been awarded.<sup>ix</sup></p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p>There are five old laws officially still in force, but in practice oil and gas sector projects are regulated on a case-by-case basis. Rules and regulations for each project are based on the contract signed between the investors and the state-owned enterprise Myanmar Oil and Gas Enterprise.</p> <p>The laws on the books are:  <b>Oil-Fields Act (1918)</b>  <b>Oil-Fields Rules (1918)</b>  <b>Notifications under the Oil-Fields Act (1918)</b>  <b>Petroleum Act (1934)</b>  <b>Petroleum Rules (1934)</b></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Ministry of Energy, Energy Planning Department</b></p>		<p><b>Influence of foreign laws:</b> Myanmar's policies and regulations for oil and gas sector management should consider the influence of foreign laws on the operations of foreign investors. Some foreign firms may need to comply with their own domestic laws, which could drive greater transparency and best practice in the sector. For example, there are various international standards that could be integrated into oil and gas sector regulations so as to encourage investment, mainstream best practice and improve transparency.</p>
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	<p>&gt; Consists of MOGE, MPE and MPPE.</p> <p><b>Myanmar Oil and Gas Enterprise (MOGE)</b> &gt; A state-owned enterprise created in 1985, had exclusive exploration, production and distribution rights in the sector until the 1988 Foreign Investment Law which led to the creation of two offshoot SOEs: MPE and MPPE. &gt; Exploration and production of crude oil and natural gas; Transportation of crude oil and natural gas. &gt; Planning activities related to electricity generation: MOGE prepares its production plan and allocates gas for power generation.</p> <p><b>Myanmar Petrochemical Enterprise (MPE)</b> &gt; Operations of 3 refineries, 5 urea fertilizer plants, 3 liquefied petroleum gas plants, and a methanol plant.</p> <p><b>Myanmar Petroleum Products Enterprise (MPPE)</b> &gt; Marketing and distribution of petroleum products.</p>		
<b>Environmental conservation</b>	<p><u>Overview of management mechanisms / Mechanisms In practice</u></p> <p>Mechanisms for environmental conservation in Myanmar have never been fully</p>	<p><u>Overview of management mechanisms</u></p> <p>MOECAP plans to create 14 State-level ECD offices by</p>	<p><b>Environmental Conservation Law has significant gaps:</b> As it is a ‘framework statute’ this Law is light on details. It has been noted that the law lacks “provisions</p>

<p><b>n activities</b></p>	<p>developed and implemented, despite being often mentioned. The 2008 Constitution pays lip-service to environmental protection and conservation, but is light on specifics. The Environmental Conservation Law of 2012 is also light on specifics as it is only a ‘framework statue’ expected to lay the foundation for more specific regulations and procedures to be created later.</p> <p>As in every country, environmental conservation and natural resource exploitation activities often come into direct conflict in Myanmar. For example, in the 1990s the Forest Department (the predecessor to MOECF) created the Natma Taung National Park in the northwest Chin in an area that is now earmarked for exploration and extraction of nickel and related minerals by Chinese investors. {{{double-check}}}} The regulations and legal precedent for dealing with these kinds of conflicts is not clear.</p> <p>One important mechanism for deliberating exploitation versus conservation conflicts is the creation of an Environmental Impact Assessment system for all infrastructure development projects. Myanmar has never had a universal EIA system; regulations and procedures for an EIA system are currently being drafted. The drafting of these</p>	<p>2016. After 2016, the creation of 67 district-level and 336 township-level ECD offices is planned.<sup>lxiv</sup> At this point the responsibilities of these subnational offices, and their relationship to the Union-level office, remains unclear.</p> <p>There does appear to be some space for State governments to initiate their own conservation activities (likely based on Chapter 4, Section 196 of the 2008 Constitution). In one example, the Shan State Chief Minister created a “Fund for Poverty Reduction and Environmental Conservation” into which mining operations pay an up-front flat fee according to the size and type of mine. For a small-scale mine of less than 50 acres the fee is 2,500,000 kyat.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>2008 Constitution</b></p>	<p>on information disclosure, public participation, right of review or appeal, and [...] consideration of regional issues.”<sup>lxv</sup></p> <p><b>Clear rules for Environmental Impact Assessments needed:</b> There is no universal EIA system for infrastructure development projects. To date, there have been little or no independent assessment for most projects. And where there have been independent assessments the process has included little public participation, and the authority to approve the assessment has rested in the relevant Union Ministry without any specific criteria.</p> <p><b>Convoluting laws and policies:</b> There are many laws and regulations that mention environmental conservation, but specific mechanisms for the implementation of conservation activities are few. And the ultimate authorities responsible for different aspects of environmental conservation, as well as their mission and goals, is not clear.</p> <p><b>Lack of human resources in MOECF to effectively conduct conservation activities:</b> Questions have been raised about whether the MOECF Environmental Conservation Department (ECD) has the capacity to achieve its stated goals. The staff now</p>
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	<p>regulations and procedures commenced in 2013, and it has been reported that an official from the Myanmar Investment Commission recently said that the EIA Procedures won't come into effect until 2017.</p> <p>The Foreign Investment Law of 2012, also contains some language on Environmental Impact Assessment. Form (1) "Proposal Form of Investor/Promoter for the investment to be made in the Republic of the Union of Myanmar" includes a section where potential investors must outline plans for determining and mitigating adverse environmental impacts.<sup>lxvi</sup></p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>2008 Constitution</b></p> <p>&gt; Chapter 1, Section 45 states the government "shall protect and conserve the natural environment"</p> <p>&gt; Chapter 4, Section 96 provide powers to the Union Parliament to enact Laws for environmental protection.</p> <p>&gt; Chapter 4, Section 196 provides S/R Parliaments authority to enact Laws for environmental protection but within limits proscribed by the Union Parliament.</p> <p>&gt; Chapter 8, Section 390 states "Every</p>	<p>&gt; Chapter 4, Section 196 provides S/R Parliaments authority to enact Laws for environmental protection but within limits proscribed by the Union Parliament.</p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p>	<p>number over 100 but more would likely be appropriate considering the size of Myanmar's natural resource sector.<sup>lxvi</sup> To give some context to the 100 staff employed by the ECD, the MOECF employs over 65,000 people in the forestry sector alone, with over 45,000 of those working for the Myanmar Timber Enterprise.<sup>lxvii</sup> It is clear where the priorities of the Ministry lay.</p> <p><b>Role of State and district-level ECDs unclear:</b> The relationship between the proposed S/R and district-level ECDs is not clear. The extent of their legal authority and their relationship with the Union ECD are not adequately described.</p> <p><b>Role of international conservation agencies:</b> Often the policy of large INGOs doing conservation initiatives is to cooperate with government agencies rather than directly with local people. This raises the danger of two negative unintended outcomes: that local people and their indigenous natural resource management knowledge are totally excluded, and that the initiatives actually work for external economic or military interests more than for their stated conservation purposes.</p> <p><b>Need for collection of comprehensive</b></p>
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	<p>citizen has the duty to assist the Union in carrying out ... environmental conservation.”</p> <p>&gt; The Constitution lacks environmental-related language common in other constitutions, such as sustainable development and recognition of the rights of civil society such as “freedom of information, participation in natural resource management, customary land ownership, information in local languages, and equitable benefit sharing” and the “right to a healthy environment.”</p> <p><b>Environmental Conservation Law (2012)</b></p> <p>&gt; A framework statute lacking specific rules; these still need to be developed.</p> <p>&gt; States that government bodies must “carry out the conservation, management, beneficial use, sustainable use and enhancement of regional cooperation” regarding natural resources, but does not provide any specific regulations.</p> <p>&gt; Effectively leaves the development of conservation rules to other resource-specific laws.</p> <p><b>Environmental Conservation Rule (draft)</b></p> <p>&gt; Meant to flesh-out the framework provided by the EC Law by creating “corresponding regulations to enact legislation, including regulations and technical guidelines, and creating the</p>		<p><b>environmental data:</b> A national-level database covering all aspects of Myanmar’s natural resources and environment should be created. A good starting point could be the Environmental Performance Assessment published in 2006.<sup>lxviii</sup><sup>lxix</sup></p> <p><b>Need for climate change strategies that are fully participatory:</b> In practice, conservation activities and forest management for climate change mitigation strategies sometimes run the risk of displacing local communities. For example, through re-classifying large swathes of land as conservation areas or cooperating with companies doing commercial logging and timber plantations considered carbon-sinks. State and local-level participation could go a long way to ensuring climate change mitigation initiatives do not cause other problems.</p>
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	<p>enabling conditions for their effective implementation.”</p> <p><b>Environmental Impact Assessment Regulations</b> (still being drafted)</p> <ul style="list-style-type: none"> <li>&gt; Regulations to bring into effect the EC Law’s Environmental Impact Assessment provision were first drafted in 2013, and are still being drafted.</li> <li>&gt; The EC Law requires MOECF to develop an EIA system.</li> </ul> <p><b>Environmental Impact Assessment Procedures</b> (still being drafted)</p> <ul style="list-style-type: none"> <li>&gt; Meant to be a guide to implementing the EIA regulations, these procedures are also being drafted. There have been recent informal statements are that they will not be finalized until 2017, but it is not clear why the process of drafting the EIA regulations and procedures is taking so long.</li> <li>&gt; In theory, the EIA Procedures are the mechanism by which domestic and foreign investments meet the EIA requirements in the Foreign Investment Law.</li> </ul> <p><b>Myanmar National Environmental Policy</b></p> <ul style="list-style-type: none"> <li>&gt; Appears to have been a fairly empty policy used by the SPDC military junta to make it seem that the junta was addressing environmental issues.<sup>lxii</sup></li> </ul>		
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	<p><b>Foreign Investment Law (2012)</b>          &gt; Form (1) “Proposal Form of Investor/Promoter for the investment to be made in the Republic of the Union of Myanmar” includes a section where potential investors outline plans for determining and mitigating adverse environmental impacts.<sup>lxiii</sup></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Ministry of Environmental Conservation and Forestry (MOECAF)</b>          &gt; Created in 2011, through and expansion of the Forestry Department.          &gt; Responsible for environmental policy, and the creation of an environmental protection framework.          &gt; Designated national authority for the clean development mechanism.          &gt; Has four departments: Planning and Statistics Department, Forest Department, Myanmar Timber Enterprise, and Dry Zone Greening Department.</p> <p><b>MOECAF, Environmental Conservation Department (ECD)</b>          &gt; Created in 2012.</p> <p><b>National Environmental Conservation</b></p>		
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	<p><b>Committee</b></p> <ul style="list-style-type: none"> <li>&gt; Created in 2011, to replace National Commission for Environmental Affairs. Chaired by MOECAP, and members include representatives from 19 Union Ministries.</li> <li>&gt; Responsible for developing national environmental and social safeguards requirements, including an EIA rules and procedures for NR exploitation projects.</li> <li>&gt; Responsible for developing a policy on climate change. The GoM ratified the United Nations Framework Convention on Climate Change (UNFCCC) on 25 November 1994. To date, the government has yet to release any formal policy on climate change, and no national strategy or action plans exist.</li> </ul>		
<p><b>Natural Resource Revenue-sharing</b></p>	<p><b><u>Overview of management mechanisms</u></b></p> <p>At present, the Union government collects the vast majority of natural resource revenues. There is very little revenue-sharing with ethnic states, although there has been a short-term upward trend whereby Union budget grants and loans to State/Region budgets increased from 3.6% in 2013-14 to 11.8% in 2014-15.<sup>box</sup></p> <p>In addition to these direct grants and loans, the Union government makes budget expenditures (including revenues collected</p>	<p><b><u>Overview of management mechanisms</u></b></p> <p>At present, state/region governments receive transfers from the Union budget but whether or not these transfers include revenues from natural resources is currently impossible to determine. Revenues collected by the Ministry of Finance from Union Ministries or the Internal Revenue Department</p>	<p><b>Who will receive natural resource revenues?:</b> In any potential future federal Myanmar, which subnational units (e.g. States and Regions, and smaller political units) will be eligible for a share of what natural resource revenues is one of the fundamental questions. Should all states and regions receive an equal share (1 kyat, 1 kyat, etc.)? Or should a separate revenue sharing arrangement be made only involving the ethnic states? What would be considered fair and sustainable? Etc.</p>



	<p>from natural resources) at the State/Region-level, and these do not appear in State/Region budgets, making it difficult to follow the revenue trail. Transfers from Union-level Ministries to the operating budgets of their State/Region Departments are not currently disaggregated; they may be small or large but at present everything appears in the Union budget.<sup>lxxi</sup></p> <p>Besides, this kind of ‘fiscal decentralization’ should not really be considered revenue-sharing because the decision-making authority for these expenditures does not rest at the State/Region-level.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p>	<p>are not currently disaggregated by origin, meaning it is impossible to follow the trail of natural resource revenues through the fiscal structure from the Union to the State/Region-level.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p>	<p><b>Type of revenue-sharing mechanism?:</b> Will all subnational units in a federal system receive an equal share (<i>vertical sharing</i>)? Should revenue be shared through equalization payments where the amount received is based on level of need (<i>horizontal sharing</i>)? Should individual citizens receive a share (<i>direct distribution</i>)? Should the region where resource extraction happens receive special consideration (e.g. <i>tax-base adjustment</i>)?</p> <p><b>Type of revenue to be shared?:</b> Should taxes and royalties from specific natural resources be earmarked for specific purposes? For example, timber royalties being used for reforestation initiatives or hydropower revenues going towards building electricity grid infrastructure.</p> <p><b>Type of state-level distribution mechanisms?:</b> It is important to decide how natural resource revenues will be distributed at the state-level. Should the all revenues go into annual state budgets? Into a state-level sovereign wealth fund or Resource Fund? Be divided and paid directly to each resident of the state? Or a mix of distribution mechanisms?</p> <p><b>Methods to ensure local benefit:</b> Emphasis may want to be placed on ensuring that</p>
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			<p>people living in the geographic areas generating natural resource revenue receive additional benefits since they will be the ones directly suffering any adverse environmental impacts. It should be kept in mind that 'compensation' (for land acquisition, etc.) is meant to make-up for a loss, whereas providing additional benefit would require more than just compensation. Examples of additional benefit include guaranteed local employment and improved local infrastructure.</p> <p><b>Protecting budgets from fluctuations of global commodity markets:</b> If states become highly dependent on revenues from only one natural resource, any fluctuation in the global price of that resource will have a significant impact on their annual budgets. In cases of global price increases, budgets will go into surplus, and decisions will need to be made how to spend the surplus (for example: saving it in a Resource Fund, paying it out to state residents, paying-down debt, etc.) On the other hand, if the global price drops then budgets will go into deficit, and decisions will need to be made about how to fill the gap (for example: drawing on the Resource Fund, increasing other sources of revenue such as taxes or payments from the central</p>
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			government, going into debt, etc.).  <b>Planning for depletion of natural resources:</b> What should be done in a situation where a state has depleted its exploitable natural resources?
<b>Natural Resource Revenue-transparency &amp; contract transparency</b>	<p><b><u>Overview of management mechanisms</u></b></p> <p>In general, tax revenue in Myanmar is collected by the Internal Revenue Department, but in the case of natural resource exploitation projects the way that revenues are collected is not transparent. Sometimes, natural resource revenues are collected by line Ministries or State-owned Enterprises as royalties, fees, shares, etc. There are so many exceptions that it would be difficult to say that a unified natural resource revenue collection system exists at present.</p> <p>In practice, most contracts for large-scale natural resource projects are negotiated in secret, and are never made available to the public once signed. Due to this contract secrecy tracking the path of all natural resources revenues is next to impossible.</p> <p>Myanmar has engaged with an international framework aimed at increasing natural</p>	<p><b><u>Overview of management mechanisms / Mechanisms In practice</u></b></p> <p>In practice, there is very little revenue transparency at the S/R level. This is a function of the centralized structure for revenue collection (see below), but requests for access to information made by S/R level stakeholders are often not adequately addressed. For example, MPs in the Kachin State parliament requested information on the mining sector in their state. The Ministry of Mines provided some information on revenue collection and permit approval, but left out the crucial jade and gems sectors.<sup>lxxiii</sup></p>	<p><b>Lack of comprehensive data on natural resource revenues:</b> There should a database containing detailed information about all natural resource revenues collected, disaggregated by sector and state.</p> <p><b>EITI has a limited scope:</b> EITI only deals with company payments made to government, not the actual government expenditures of natural resource revenues. EITI is not able to prevent natural resource revenues from becoming lost in Myanmar's non-transparent fiscal system. Payments to contractors or other entities are not covered by EITI either.</p> <p><b>Low rank on NRG Index:</b> Myanmar maintains a very low rank on Natural Resource Governance Institute's Resource Governance Index.</p>

	<p>resource revenue transparency called Extractive Industries Transparency Initiative (EITI). Myanmar submitted an application to become an EITI candidate country in May 2014.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>Framework for Economic and Social Reform (2012)</b> &gt; Commits the Myanmar government to undertake transparent, competitive and non-discretionary procedures for the award of exploration, development and production rights and ensure that future concession agreements meet high social and environmental standards as well as delivering a transparent and equitable sharing of financial benefits.<sup>lxvii</sup></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>EITI Multi-stakeholder Group</b> &gt; The EITI-MSG consists of representatives from government, industry and civil society.</p>	<p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p>	<p><b>Lack of transparency in contributions to national budget:</b> Contributions to the national budget from Ministries and State-Owned Enterprises are not disaggregated by sector or area.</p> <p><b>Lack of transparency in tax collection:</b> Corporate income taxes collected by the IRD are not disaggregated by revenue stream; so it is next to impossible to follow the natural resource revenues in tax payments made by SOEs and private companies involved in multiple sectors. Natural resource revenues collected from SOEs and private companies by Union Ministries or the IRD are not disaggregated by location of extraction, adding another barrier to revenue-sharing. The IRD collects taxes in the township in which the company is registered rather than the site of extraction.</p> <p><b>Secret contracts with unique revenue collection arrangement bad for transparency:</b> At present much of the natural resource revenue collection is done on a case-by-case basis based on secret contracts. Contracts for mega-development projects are kept secret to the top-level of the military and Union government; even state governments and MPs are often not able to view these contracts.</p>
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			<p><b>Lack of confidence in current Union-led system at subnational level:</b> If the collection of natural resource revenue and contracts were more transparent at the Union level, local stakeholder might be more confident that affairs were being conducted fairly and in their interest. Devolution may not be necessary in all areas as long as there is transparency for state-level stakeholders.</p>
<p><b>Collection of Natural Resource revenues</b></p>	<p><u><b>Overview of management mechanisms / Mechanisms In practice</b></u></p> <p>Parliamentary oversight of budgets and the creation of State/Region budgets (separate from the Union budget) are two key provisions in the 2008 Constitution impacting the collection of natural resource revenues. Since the creation of a civilian government in 2011, the number of agencies involved in fiscal matters has expanded. These changes represent a slight degree of decentralization from the days when all fiscal power was concentrated in the military junta.</p> <p>Despite, these initial movements towards deeper decentralization and devolution, much of the revenue collected in Myanmar</p>	<p><u><b>Overview of management mechanisms / Mechanisms In practice</b></u></p> <p>In practice, State and Region government have very limited to no scope for the collection of revenues from natural resources. As outlined in Schedule Five of the 2008 Constitution, States/Regions collect some limited taxes related to land, as well as limited revenues from some timber species and the production of salt.</p> <p>Extractive Industry companies, like other businesses, are</p>	<p><b>No real devolution of revenue collection authority:</b> The 2008 Constitution created separate State/Region budgets, but did not provide for significant devolution of revenue collection authority. In practice, State/Region governments have very limited to no revenue-collection ability in natural resource sectors.</p> <p><b>Potential for greater devolution as institutions strengthen:</b> Because Schedule Two and Five are so vague, there may be space for devolution of revenue collection authority to increase over time. As State/Region governments slowly increase the scope of their practical involvement in natural resource management; these strengthened State/Region institutions may</p>

	<p>(including from natural resources) is not transparently entered into the Union budget. For example, in 2012 there were over 13,000 “other accounts” across the public financial management system, with the majority of these accounts in military hands.<sup>lxxiv</sup></p> <p>The current fiscal management regime in Myanmar is in transition and is thus very convoluted and full of inconsistencies and contradictions. A full overview of the place of natural resource revenues in this system is beyond the scope of this research.</p> <p>That being said, a brief overview of some of the current practices for natural resource revenues collection is shown by sector below.</p> <p><u>Gemstones</u></p> <p>For domestic sales, most minerals are taxed at 5% of the sale price; unpolished jade, ruby, sapphire, emerald, diamond and other precious stones are taxed at 30% of the sale price; and polished jade, ruby, sapphire, emerald, diamond and other precious stones and Jewellery are taxed 15% of the sale price. For commercial exports, jade, rubies, sapphires, and other gems are taxed at 30% of the sales price; and jewellery made from jade, rubies, sapphires, and</p>	<p>required to pay land tax, which is collected at the State/Region level. Revenue collected for the harvesting of some species of timber (not teak or other hardwoods) go to State/Region government funds.</p> <p>Schedule Two of the 2008 Constitution does not clearly outline the responsibilities of States/Regions related to revenue collection, expenditure, and public service delivery.</p> <p>At present, natural resource revenues collected by S/R governments are insignificant.</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>2008 Constitution, Schedule Five</b></p> <p>&gt; Lists the natural resource related tax-collection authority of S/R governments; which includes timber, salt, land and dams.</p>	<p>become more involved in the collection of natural resource revenues.</p> <p><b>Potential for conflicts and overlap in revenue collection mechanisms:</b></p> <p>There are a number of areas of potential conflict and overlap regarding natural resource revenue collection. The Myanmar Foreign Investment Law provides for a 5-year tax holidays for new investments, including in the natural resource sectors. In the timber sector, 2-3 year tax holidays may be given to enterprises doing wood processing (but not extraction) by the Myanmar Investment Commission. The Gem Law states that after paying royalties to the Myanmar Gem Enterprise, companies are “exempted from payment of taxes under any other existing law in respect to the sale of said gemstones.”<sup>lxxvii</sup> But this conflicts with the 2014 Union Tax Law, which stipulates that commercial taxes be paid on jewellery, gems and jade.</p>
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	<p>other gems are taxes at 10% of the sale price. The local General Administration Departments collects certain taxes which are termed 'mineral taxes' on less valuable materials.</p> <p><u>Coal</u> The average coal production PSC provides 30% of profits for the government and 70% for the private contractor. In addition to this profit-sharing, there is a 3% royalty levy, a 5% commercial tax, and a 2% income tax.</p> <p><u>Timber</u> The 2014 Union Tax Law sets commercial tax on 'teak lots and sawn teak timbers' at 25% for domestic sales and 50% international sales. Revenues from Myanmar Timber Enterprise wood-processing joint-ventures vary contract to contract (mostly secret), but a 10% tax is collected on income at final harvesting from mature (25-35 year old) commercial hardwood plantations.</p> <p><u>Hydropower</u> Revenues from hydropower project vary from contract to contract (most contracts are kept secret). The Ministry of Agriculture and Irrigation collects an irrigation tax from dams and reservoirs, some of which may be dual-purpose irrigation/hydropower (these would represent a very small value when</p>	<p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p>	
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	<p>compared to mega-hydropower projects).</p> <p><b><u>Laws / Regulations / Policies / Procedures</u></b></p> <p><b>Foreign Investment Law</b> &gt; Authorizes the Myanmar Investment Commission to grant tax holidays for new investments on a case-by-case basis, including in the extractive sectors.<sup>lxxv</sup></p> <p><b>Farmland Law (2012)</b> &gt; Article 12(b) states that Land Use Certificate holders must pay “land-tax and other taxes in respect of farmland assessed by the Ministry of Agriculture and Irrigation.”<sup>lxxvi</sup></p> <p><b><u>Responsible government bodies / key stakeholders / etc.</u></b></p> <p><b>Internal Revenue Department</b></p> <p><b>Ministry of Finance and Revenue</b></p> <p><b>Ministry of Planning and Economic Development</b></p>		
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<sup>i</sup> <http://www.moj.go.jp/content/000101544.pdf>

<sup>ii</sup> <http://www.burmalibrary.org/docs12/SOEAct.pdf>

<sup>iii</sup> [http://www.burmalibrary.org/docs15/1997-SLORC\\_Law1997-06-The\\_Law\\_Amending\\_the\\_State-owned\\_Economic\\_Enterprises\\_Law-en.pdf](http://www.burmalibrary.org/docs15/1997-SLORC_Law1997-06-The_Law_Amending_the_State-owned_Economic_Enterprises_Law-en.pdf)

<sup>iv</sup> “State and region governments consist of a partially elected unicameral hluttaw, an executive led by a Chief Minister and cabinet of state/region ministers, and state/region judicial institutions. The hluttaw (is composed of two elected members per township, representatives for “national races”, and appointed military representatives equal to one quarter of the total. The Chief Minister is selected by the President from among elected or unelected hluttaw members, and confirmed by the hluttaw. The Chief Minister selects the civilian ministers from among hluttaw representatives or other candidates, and these are assigned portfolios by the President.” <https://asiafoundation.org/resources/pdfs/StateandRegionGovernmentsinMyanmarCESDTAF.PDF>

<sup>v</sup> <http://www.irrawaddy.org/burma/5-7bln-timber-smuggled-burma-illegal-logging-rampant-report.html>

<sup>vi</sup> For more on the concept of the ‘resource curse’ see <https://www.oxfam.org/sites/www.oxfam.org/files/bp134-lifting-the-resource-curse-011209.pdf> and [http://www.un.org/esa/desa/papers/2010/wp93\\_2010.pdf](http://www.un.org/esa/desa/papers/2010/wp93_2010.pdf)

<sup>vii</sup> Myanmar Farmland Law (2012) [unofficial English translation by UN Habitat] <http://faolex.fao.org/docs/pdf/mya139026.pdf>

<sup>viii</sup> ALTSEAN Burma. “LAND CONFISCATION IN BURMA: A THREAT TO LOCAL COMMUNITIES & RESPONSIBLE INVESTMENT” 5 May, 2014.

[http://www.altsean.org/Docs/PDF%20Format/Thematic%20Briefers/Land%20Confiscation%20in%20Burma\\_5%20May%202014.pdf](http://www.altsean.org/Docs/PDF%20Format/Thematic%20Briefers/Land%20Confiscation%20in%20Burma_5%20May%202014.pdf)

<sup>ix</sup> [http://www.greengrowthdialogue.org/sites/greengrowthdialogue.org/files/publication\\_docs/Land-Core-Group-presentation-for-Green-Lotus-Meeting.pdf](http://www.greengrowthdialogue.org/sites/greengrowthdialogue.org/files/publication_docs/Land-Core-Group-presentation-for-Green-Lotus-Meeting.pdf)

<sup>x</sup> “Indigenous Rights Coalition in Burma Plans UPR Submission,” 21 July 2015. The Irrawaddy.

<http://www.irrawaddy.org/burma/indigenousrightscoalitioninburmaplansuprsubmission.html>

<sup>xi</sup> <http://www.irrawaddy.org/burma/land-dispute-resolution-plagued-by-graft-lawmakers.html>

<sup>xii</sup> <http://www.irrawaddy.org/human-rights/military-involved-in-massive-land-grabs-parliamentary-report.html>

<sup>xiii</sup> <http://www.irrawaddy.org/burma/land-dispute-resolution-plagued-by-graft-lawmakers.html>

<sup>xiv</sup> DVB “Land disputes must be solved right and fast: Dr Thaung Htun,” 9 September 2014 <https://www.dvb.no/interview/land-disputes-must-be-solved-right-and-fast-dr-thaung-tun-burma-myanmar/43676>

<sup>xv</sup> <http://www.khrg.org/sites/default/files/losinggroundkhrg-march2013-fulltext.pdf>

<sup>xvi</sup> ALTSEAN Burma. “LAND CONFISCATION IN BURMA: A THREAT TO LOCAL COMMUNITIES & RESPONSIBLE INVESTMENT” 5 May, 2014.

[http://www.altsean.org/Docs/PDF%20Format/Thematic%20Briefers/Land%20Confiscation%20in%20Burma\\_5%20May%202014.pdf](http://www.altsean.org/Docs/PDF%20Format/Thematic%20Briefers/Land%20Confiscation%20in%20Burma_5%20May%202014.pdf)

<sup>xvii</sup> <http://www.kdng.org/tiger-reserve.html>

<sup>xviii</sup> “There is no voice of real farmers,” Mizzima, 9 December 2014. <http://archive-3.mizzima.com/opinion/features/item/15677-there-is-no-voice-of-real-farmers/15677-there-is-no-voice-of-real-farmers>

<sup>xix</sup> As just one example, between 1995 and 2014, more than 18,000 acres of land have been confiscated by the Tatmadaw in Mon State.

<http://www.irrawaddy.org/burma/indigenousrightscoalitioninburmaplansuprsubmission.html>

<sup>xx</sup> <http://www.khrg.org/2015/06/with-only-our-voices-what-can-we-do-land-confiscation-and-local-response>

<sup>xxi</sup> Chao, Sophie. “National Updates on Agribusiness Large Scale Land Acquisitions in Southeast Asia - Brief #8 of 8: Union of Burma”

<http://www.forestpeoples.org/sites/fpp/files/publication/2013/08/briefing-8-8-burma.pdf>

<sup>xxii</sup> [http://www.greengrowthdialogue.org/sites/greengrowthdialogue.org/files/publication\\_docs/Land-Core-Group-presentation-for-Green-Lotus-Meeting.pdf](http://www.greengrowthdialogue.org/sites/greengrowthdialogue.org/files/publication_docs/Land-Core-Group-presentation-for-Green-Lotus-Meeting.pdf)

<sup>xxiii</sup> According to a 2012 presentation by U Win Htein, Director General of the Ministry of Mines titled “Investment opportunities in Mining Sector” [retrieved from [http://www.slideshare.net/yph1969/investment-opportunities-in-mining-sector-in-myanmar?qid=2f6555b6-1801-4d58-8f75-346ec091c33c&v=qf1&b=&from\\_search=27](http://www.slideshare.net/yph1969/investment-opportunities-in-mining-sector-in-myanmar?qid=2f6555b6-1801-4d58-8f75-346ec091c33c&v=qf1&b=&from_search=27) on 21 July 2015]

<sup>xxiv</sup> <http://www.mining.gov.mm/DGSE/Default.asp>

<sup>xxv</sup> Myanmar Gemstone Law (1995), Chapter IX. ‘Payment of Royalty’

<sup>xxvi</sup> It is difficult to figure out which states and region have DGSE offices, but there is an online phone-listing for a DGSE office in Tanintharyi at [http://www.myanmar.dir.com/other\\_gov.php?tsp=KAWTHAUNG](http://www.myanmar.dir.com/other_gov.php?tsp=KAWTHAUNG)

<sup>xxvii</sup> Oo, Tin Maung. “Mining Surveys Underway in Chin” 4 January 2015. Myanmar Business Today: Volume 2, Issue 51.

<http://www.mmbiztoday.com/articles/mining-surveys-underway-chin>

<sup>xxviii</sup> The Shan State Minister for Forestry and Mining U Sai Aik Paung gave a speech on behalf of MOECAF at the Opening Ceremony of Knowledge Sharing Workshop on Lake Conservation Management Practices at Taungyi on 10th June 2013.

[http://www.mm.undp.org/content/dam/myanmar/docs/Documents/UNDP\\_MM\\_ENV\\_Minister\\_speech\\_inle\\_speech.pdf](http://www.mm.undp.org/content/dam/myanmar/docs/Documents/UNDP_MM_ENV_Minister_speech_inle_speech.pdf)

<sup>xxix</sup> Telephone listings for Kawthaung. [http://www.myanmar.dir.com/other\\_gov.php?tsp=KAWTHAUNG](http://www.myanmar.dir.com/other_gov.php?tsp=KAWTHAUNG)

<sup>xxx</sup> MDRI-CESD report - According to Tun, M. (2014). ‘The Extractive Industries Transparency Initiative in Myanmar: Legal review report.’ Baker and McKenzie

<sup>xxxi</sup> <http://www.ibtimes.com/half-myanmars-jade-worth-billions-dollars-each-year-smuggled-china-without-taxes-1412960>

<sup>xxxii</sup> “About 47% of the country’s total area (31.77 million hectares) is covered by different types of forest (Forest Resource Assessment 2010): (i) permanent forest estates—which are reserved forest and protected public forest—cover about 24% (162,523 km<sup>2</sup>) of the total land area; and (ii) protected area systems cover almost 6% (37,895 km<sup>2</sup>) of the total land area, primarily serving as havens for the country’s rich biodiversity and for protection of the environment. An additional 7,213 km<sup>2</sup> (1.07%) has been proposed under the protected area systems.” (ADB Energy Assessment)

<sup>xxxiii</sup> <http://www.reuters.com/article/2014/03/20/us-myanmar-forests-idUSBREA2J27K20140320>

<sup>xxxiv</sup> These are: 1. Protection of soil, water, wildlife, bio diversity and environment; 2. Sustainability of forest resources to ensure perpetual supply of both tangible and intangible benefits occurred from the forests for the present and future generation; 3. Basic needs of the people for fuel, shelter, food and recreation;

4. Efficiency to harness, in the socio-environmentally friendly manner, the full economic potential of the forest resources; 5. Participation of the people in the conservation and utilization of the forests; 6. Public awareness about the vital role of the forests in the well being and socioeconomic development of the nation.

<sup>xxxv</sup> UN-REDD Programme. “Myanmar REDD+ Readiness Roadmap” July 2013.

<sup>xxxvi</sup> See “Figure 7. Forestry administrative structure” in MDRI-CESD report.

<sup>xxxvii</sup> See “Figure 7. Forestry administrative structure” in MDRI-CESD report.

<sup>xxxviii</sup> The Shan State Minister for Forestry and Mining U Sai Aik Paung gave a speech on behalf of MOECAF at the Opening Ceremony of Knowledge Sharing Workshop on Lake Conservation Management Practices at Taungyi on 10th June 2013.

[http://www.mm.undp.org/content/dam/myanmar/docs/Documents/UNDP\\_MM\\_ENV\\_Minister\\_speech\\_inle\\_speech.pdf](http://www.mm.undp.org/content/dam/myanmar/docs/Documents/UNDP_MM_ENV_Minister_speech_inle_speech.pdf)

<sup>xxxix</sup> <http://www.altsean.org/Research/Regime%20Watch/Executive/DivisionsStatesAdmins.php>

<sup>xl</sup> <http://www.irrawaddy.org/burma/5-7bln-timber-smuggled-burma-illegal-logging-rampant-report.html>

- <sup>xli</sup> For research on the role of NTFP in Indonesia see Lyons, A.L. "Importance of non-timber forest products to local livelihoods and conservation in the Sebangau Catchment, Central Kalimantan, Indonesia" (Bsc dissertation, January 2003) [http://www.outrop.com/uploads/7/2/4/9/7249041/nat\\_for\\_products\\_al Lyons.pdf](http://www.outrop.com/uploads/7/2/4/9/7249041/nat_for_products_al Lyons.pdf)
- <sup>xlii</sup> See FLEGT (2011) page 13.
- <sup>xliii</sup> "Community Forestry in Myanmar: Progress & Potentials" <http://www.burmalibrary.org/docs13/Community+Forestry+in+Myanmar-op75-red.pdf>
- <sup>xliv</sup> "THE NATIONAL TRAINING WORKSHOP ON WOODFUEL TRADE IN MYANMAR" <http://www.fao.org/docrep/006/ad606e/ad606e00.pdf>
- <sup>xliv</sup> "Study on consumption of fuel wood and its impacts to forest resources in Taungyi District" <http://globalscienceresearchjournals.org/full-articles/study-on-consumption-of-fuel-wood-and-its-impacts-to-forest-resources-in-taungyi-district.pdf?view=inline>
- <sup>xlv</sup> Kyaw Tint et al. (2011). 'Community Forestry in Myanmar: Progress & Potentials.' <http://www.burmalibrary.org/docs13/Community+Forestry+in+Myanmar-op75-red.pdf>
- <sup>xlvii</sup> [http://www.apafri.org/activities/Myanmar2015/Day%201/Day1\\_Nyi%20Nyi%20Kyaw\\_Forests%20and%20Forestry%20in%20Myanmar.pdf](http://www.apafri.org/activities/Myanmar2015/Day%201/Day1_Nyi%20Nyi%20Kyaw_Forests%20and%20Forestry%20in%20Myanmar.pdf)
- <sup>xlviii</sup> "Announcement of National Energy Policy" (Nay Pyi Taw, 6 January 2013) <http://www.myanmarpresidentoffice.info/en/?q=issues/energy/id-4827>
- <sup>xlix</sup> ADB EA point 116
- <sup>i</sup> A draft version of the new Electricity Law can be viewed here [http://www.burmalibrary.org/docs18/2013-Electricity\\_Bill-en.pdf](http://www.burmalibrary.org/docs18/2013-Electricity_Bill-en.pdf)
- <sup>ii</sup> The Electricity Law was updated with the support of the ADB and the government of Norway to ensure it "reflects current international standards, and creates the right conditions for establishing an electricity regulator, expanding rural electrification, and promoting offgrid solutions [and] gradually unbundle generation, transmission, and distribution subsectors; allow private sector participation in power generation; establish rules and regulations for small independent power producers to promote offgrid electrification; implement rural electrification programs; and establish an electricity regulator consistent with internationally recognized best practices." "ADB, Norway to Help Update Myanmar Electricity Law" <http://www.adb.org/news/adbnorwayhelpupdatemyanmarelectricitylaw>
- <sup>iii</sup> <http://www.dfdl.com/resources/news/942-myanmars-new-electricity-law>
- <sup>iii</sup> International Symposium "Energy Policy Development in Myanmar" Report [http://pari.u-tokyo.ac.jp/eng/event/smp150206\\_rep.html](http://pari.u-tokyo.ac.jp/eng/event/smp150206_rep.html)
- <sup>iv</sup> <http://www.dfdl.com/resources/news/942-myanmars-new-electricity-law>
- <sup>iv</sup> Electricity production and distribution continues to expand in wattage and area of distribution. Previously, small isolated and localized grids from diesel generators and some micro-hydro, since the 1960s grids have expanded from covering urban centres Yangon and Mandalay and Naypyidaw to reaching into rural areas. Since then, more hydropower plants have come online and overtaken diesel-fired plants overall. Coal-fired plants have started to be used, and depending on policy priorities may become more prevalent. At present there are over 30 power plants, but generation capacity fluctuates over the years, with higher capacity during the monsoon season from May to October. As of 2012, hydropower account for 75% of annual electricity generation, with gas-turbine and coal-fired plants accounting for 22% and 3% respectively. All electricity distribution is overseen by ESE, with the exception of the 10MW Buga plant supplying the greater-Myitkyina area, which is run by the KIO's Buga Company.
- <sup>vi</sup> International Symposium "Energy Policy Development in Myanmar" Report [http://pari.u-tokyo.ac.jp/eng/event/smp150206\\_rep.html](http://pari.u-tokyo.ac.jp/eng/event/smp150206_rep.html)
- <sup>vii</sup> <http://www.dfdl.com/resources/news/942-myanmars-new-electricity-law>
- <sup>viii</sup> See map at <http://consult-myanmar.com/wp-content/uploads/2014/10/Myanmar-oil-gas-block-map-deep-sea-shallow-water-RakhineMoattama-Tanintharyi-ConsultMyanmar-4Oct2014.jpg>

<sup>lix</sup> “No more bidding on oil and gas blocks planned until at least 2016, says senior MOGE official,” 11 May 2015, Myanmar Times

<http://www.mmtimes.com/index.php/business/14386-no-more-bidding-on-oil-and-gas-blocks-planned-until-at-least-2016-says-senior-moge-official.html>

<sup>lx</sup> “No more bidding on oil and gas blocks planned until at least 2016, says senior MOGE official,” 11 May 2015, Myanmar Times

<http://www.mmtimes.com/index.php/business/14386-no-more-bidding-on-oil-and-gas-blocks-planned-until-at-least-2016-says-senior-moge-official.html>

<sup>lxi</sup> The plans are to be written in Form (1) point 13 “Evaluation of environmental impact”:

(a) Organization for evaluation of environmental assessment; (b) Duration of the evaluation for environmental assessment; (c) Compensation programme for environmental damages (d) Water purification system and waste water treatment system; (e) Waste management system; (f) System for storage of chemicals.

See: Foreign Investment Law (2012) <http://mcanberra.com.au/wp-content/uploads/Foreign-Investment-Law-20121.pdf>

<sup>lxii</sup> “Environmental Governance in SPDC’s Myanmar” (chapter) <http://press.anu.edu.au/wp-content/uploads/2011/03/ch0919.pdf>

<sup>lxiii</sup> The plans are to be written in Form (1) point 13 “Evaluation of environmental impact”:

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See: Foreign Investment Law (2012) <http://mcanberra.com.au/wp-content/uploads/Foreign-Investment-Law-20121.pdf>

<sup>lxiv</sup> (MRDI-CESD pg 22)

<sup>lxv</sup> (MRDI-CESD report pg 22)

<sup>lxvi</sup> Researchers have suggested here is a need for ECD to strengthen its “capacity in environmental law and policy development, implementation, monitoring, and enforcement.” (MRDI-CESD pg 22)

<sup>lxvii</sup> UN-REDD Programme. “Myanmar REDD+ Readiness Roadmap” July 2013: page 14.

<sup>lxviii</sup> Myanmar National Commission for Environmental Affairs, Myanmar: National Environmental Performance Assessment (EPA) Report, GMS, Bangkok, 2006.

<sup>lxix</sup> In 2006 and Myanmar National Environmental Performance Assessment (EPA) was published as part of the ADB-led National Performance Assessment and Strategic Environment Framework of Greater Mekong Subregion. The EPA collected important environmental data, but has been criticized as glossing over many of Myanmar’s most pressing environmental conservation concerns.

<sup>lxx</sup> Nixon et al. (2013). ‘State and Region Governments in Myanmar.’ MDRI-CESD and the Asia Foundation. [asiafoundation.org/publications/pdf/1249](http://asiafoundation.org/publications/pdf/1249)

<sup>lxxi</sup> “The deconcentrated channel of funds for states and region departments of union ministries are not presented in national budget documents; the parent union ministry is the primary budget unit, and there is not currently a secondary budget classification that clearly breaks out state/region spending at union level. Together, these factors mean that it is currently very difficult to answer the most basic question about fiscal decentralization: how much of Myanmar’s public spending is decentralized, and to what levels?” (Nixon and Joelene, 2014)

<sup>lxxii</sup> [http://www.themimu.info/sites/themimu.info/files/documents/Ref%20Doc\\_FrameworkForEconomicAndSocialReform2012-15\\_Govt\\_2013%20.pdf](http://www.themimu.info/sites/themimu.info/files/documents/Ref%20Doc_FrameworkForEconomicAndSocialReform2012-15_Govt_2013%20.pdf)

<sup>lxxiii</sup> MDRI-CESD pg 27

<sup>lxxiv</sup> World Bank (2013): 42.

<sup>lxxv</sup> Foreign Investment Law. Pyidaungsu Hluttaw Law no 21/2012. [http://www.dica.gov.mm/includes/FIL%20English%20Version\\_2029-1-2013\\_.pdf](http://www.dica.gov.mm/includes/FIL%20English%20Version_2029-1-2013_.pdf)

<sup>lxxvi</sup> Myanmar Farmland Law (2012) [unofficial English translation by UN Habitat] <http://faolex.fao.org/docs/pdf/mya139026.pdf>

<sup>lxxvii</sup> Myanmar Gemstone Law (1995) Chapter IX, 27 b.