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**CO-MANAGEMENT OF GHANA’S GOLD:  
PROPOSALS FOR A POLICY AND  
LEGISLATIVE FRAMEWORK TO  
ADDRESS THE ISSUE OF GALAMSEY**

BY YOLANDA BORQUAYE\*

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## INTRODUCTION

Over the last decade, there has been growing media attention and government discussion surrounding illegal small-scale gold mining in Ghana, or “galamsey.”<sup>1</sup> Reports have exposed the harmful realities of the illegal practice: the many lives that the practice has claimed;<sup>2</sup> the drinking water supplies and large bodies of water that have been contaminated;<sup>3</sup> the farmlands that have been contaminated with mercury and other harmful chemicals; and the many individuals who have been attacked for speaking out against the practice.<sup>4</sup>

In response, the government has vowed to fight illegal small-scale gold mining, deporting over a hundred foreign nationals after they were found guilty of the practice,<sup>5</sup> implementing regulatory

<sup>1</sup> See generally *Dossier: Galamsey Menace*, GHANAWEB, <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/dossier.php?ID=202> (last visited May 16, 2020).

<sup>2</sup> See *4 Killed in ‘Galamsey’ Pit*, GHANAWEB (July 2, 2016), <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/4-killed-in-galamsey-pit-452288>; see also *16 Killed in Ghana Gold Mine Accident*, STRAITS TIMES (Jan. 24, 2019), <https://www.straitstimes.com/world/africa/16-killed-in-ghana-gold-mine-accident>.

<sup>3</sup> See Albert K. Mensah et al., *Environmental Impacts of Mining: A Study of Mining Communities in Ghana*, 3 APPLIED ECOLOGY & ENVTL. SCI. 81, 85–87 (2015).

<sup>4</sup> See, e.g., *Driver Beaten to Pulp for Linking Okyehene to Galamsey*, GHANAWEB (June 6, 2017), <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Driver-beaten-to-pulp-for-linking-Okyehene-to-galamsey-545078>.

<sup>5</sup> See Melvin Tarlue, *Ghana Departs 194 Foreigners for Illegal Mining*, DAILY GUIDE NETWORK (Apr. 25, 2019), <https://dailyguidenetwork.com/ghana-departs-194-foreigners-for-illegal-mining>.

reforms to the mining sector,<sup>6</sup> and creating social programs in hopes of diverting participants.<sup>7</sup> However, scholars have noted that there are potential benefits that could be gained from the practice if the work can be captured under the legalized small-scale mining sector.<sup>8</sup>

Gold is an integral part of Ghana's economy. Currently, it accounts for over 95 percent of the country's total mineral revenue.<sup>9</sup> In 2012, Ghana produced 3.3 percent of the world's gold, boasting total exports worth US \$5.64 billion, making it the second largest gold producer in Africa.<sup>10</sup> In 2017, this number rose to US \$8.35 billion.<sup>11</sup> In 2014, mining comprised over 35 percent of merchandise exports, with large-scale mining (LSM) operations accounting for approximately 65 percent of production. In 2017, gold mining exports made up 49 percent of the country's total export value.<sup>12</sup>

As the artisanal and small-scale mining sector (ASM), also referred to as small-scale mining, expands, scholars have pointed to how it could potentially be a source of growth for the national economy.<sup>13</sup> If regulated effectively, galamsey mining activities could also lead to rural poverty reduction.<sup>14</sup> However, the key issue is that the majority of these miners operate informally, without the

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<sup>6</sup> Benjamin Teschner, *Small-scale Mining in Ghana: The Government and the Galamsey*, 37 RES. POL'Y 308–14 (2012).

<sup>7</sup> See *Galamsey Will Not Stop Because of Poverty, Greed – Group*, GHANAWEB (Apr. 18, 2017), <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Galamsey-will-not-stop-because-of-poverty-greed-Group-529899> (referring to a five-year project to retrain illegal miners and help them locate areas where they can mine under supervision).

<sup>8</sup> See ABDUL-GAFARU ABDULAI, *THE GALAMSEY MENACE IN GHANA: A POLITICAL PROBLEM REQUIRING POLITICAL SOLUTIONS* 1 (2017), <https://ugbs.ug.edu.gh/sites/default/files/public/documents/The%20Galamsey%20Menace%20in%20Ghana-%20A%20Political%20Problem%20Requiring%20Political%20Solutions.pdf>; see generally Kevin Taylor, *Illegal Gold Mining Boom Threatens Cocoa Farmers (And Your Chocolate)*, NAT'L GEOGRAPHIC NEWS (Mar. 6, 2018), <https://news.nationalgeographic.com/2018/03/ghana-gold-mining-cocoa-environment/>.

<sup>9</sup> See JAMES MCQUILKEN & GAVIN HILSON, *ARTISANAL AND SMALL-SCALE MINING IN GHANA: EVIDENCE TO INFORM AN ACTION DIALOGUE* 12 (2016), <https://pubs.iied.org/pdfs/16618IIED.pdf>.

<sup>10</sup> See *id.*

<sup>11</sup> See *Ghana*, OBSERVATORY OF ECON. COMPLEXITY, <https://atlas.media.mit.edu/en/profile/country/gha/> (last visited Mar. 4, 2020).

<sup>12</sup> See *id.*

<sup>13</sup> See ABDULAI, *supra* note 8.

<sup>14</sup> See *id.*

protections or rights afforded by a license or the government. Locally, illegal small-scale mining is popularly referred to as *galamsey* and it accounts for more than half of Ghana's ASM sector.<sup>15</sup>

The Ghanaian government's attempts to curtail illegal mining practices have left much to be desired. The objective of this Note is to highlight how curtailing illegal small-scale mining and achieving its benefits are hinged on management methods that promote regulations to restrict the practice and enforce compliance at every level. This Note supports and defends a co-management framework of the small-scale gold mining sector as an effective way of achieving these ends. Part I discusses and justifies co-management as an effective driver of inclusion, transparency, and accountability. Part II presents the case for applying the co-management framework, first by providing an overview of the management framework for Ghana's gold mining sector, then criticizing this existing framework by identifying key barriers in the small-scale mining sector. Part III provides policy and legislative recommendations based on a co-management framework that would improve regulations, restrictions, and enforcement.

## I. THEORETICAL FRAMEWORK: CO-MANAGEMENT OF NATURAL RESOURCES

### A. Co-Management: An Overview

In its most rudimentary form, co-management regimes are partnerships between local resource users, governments, and other stakeholders for managing natural resources.<sup>16</sup> Co-management proves to be effective when each stakeholder is motivated to participate in the management of the resource.<sup>17</sup> In a typical case, local resource users engage in management because of their direct

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<sup>15</sup> See *id.* at 1.

<sup>16</sup> See CLAUDIA COSTA PEREIRA ET AL., CORAL TRIANGLE SUPPORT PARTNERSHIP, GUIDELINES FOR ESTABLISHING CO-MANAGEMENT OF NATURAL RESOURCES IN TIMOR-LESTE (2013).

<sup>17</sup> See Clara Jamart & Mary Rodeghier, *Sharing Power: Co-management and Effective Governance*, AGTER, [http://www.agter.org/bdf/en/corpus\\_chemin/fiche-chemin-86.html](http://www.agter.org/bdf/en/corpus_chemin/fiche-chemin-86.html) (last visited Apr. 19, 2020) ("The challenge is to create a situation in which the pay-offs for everyone involved are greater for collaboration than for competition". If this equilibrium cannot be reached, then co-management is not possible because "the commitment of most parties in the CM process is a crucial condition for success").

reliance on the resource, while at the same time, governments recognize the benefits of having aspects of management conducted at the local level.<sup>18</sup> Shared responsibility and power between each stakeholder are essential for effective resource management, as each actor is able to exchange information while also gaining knowledge from the other actors.<sup>19</sup> This makes co-management a situation in which social actors negotiate and define amongst themselves an optimal division of management function and responsibilities for a given set of natural resources.<sup>20</sup>

While much of the success of co-management rests on its ability to include local resource users and other social actors in decisionmaking roles surrounding natural resource management, it is imperative to draw a distinction between co-management regimes and other forms of natural resource management like Community Based Natural Resource Management (CBNRM) or state-led natural resource management regimes. Under CBNRM, resources are managed exclusively by local communities,<sup>21</sup> while the government plays a markedly small role or no role at all in managing the resources.<sup>22</sup>

Under state-led regimes, resources are largely or exclusively managed by the central government.<sup>23</sup> The government maintains control over the creation and implementation of regulations without any outside input or representation from local resource users or other actors.<sup>24</sup> Co-management borrows from both of these models but it is exclusively neither of these forms. Instead, co-management exists as a hybrid of the two. Following on from the literature that shows that local communities are not necessarily better positioned for or more effective at managing natural resources,<sup>25</sup> co-management attempts to bolster the effective components of

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<sup>18</sup> Jérôme Ballet, Koffi Kouamékan J.-M. Koffi & K. Boniface Komona, *Co-Management of Natural Resources in Developing Countries: The Importance of Context*, 120 *ÉCONOMIE INTERNATIONALE* 53, 57 (2009).

<sup>19</sup> COSTA PEREIRA ET AL., *supra* note 16, at 14.

<sup>20</sup> See Ballet et al., *supra* note 18, at 56.

<sup>21</sup> See *id.*

<sup>22</sup> See Marco Antonio Quesada Alpizar, *Participation and Fisheries Management in Costa Rica: From Theory to Practice*, 30 *MARINE POL'Y* 641, 642 (2005).

<sup>23</sup> Svein Jentoft, *Fisheries co-management: Delegating Government Responsibility to Fishermen's Organizations*, 13 *MARINE POL'Y* 137–54 (1989).

<sup>24</sup> See *id.*

<sup>25</sup> Ballet et al., *supra* note 18, at 57.

community-based natural resource management. For example, the literature shows that because of their intrinsic knowledge and positions of authority within the communities where resources are being managed, local resource users can manage resources better than central governments.<sup>26</sup> However, unlike CBNRM, co-management recognizes that governments still have a role to play in managing natural resources.<sup>27</sup> In that regard, co-management can be seen as going a step further than CBNRM by positing that framework within a broader governance context that seeks to create partnerships between government, resource users, and local communities.

However, though co-management relies on governments to help manage resources, it is not to be conflated with state-led natural resource management models.<sup>28</sup> As was the case with CBNRM, state-led management is also posited within co-management.<sup>29</sup> Unlike state-led management frameworks, co-management is a genuine sharing of power, authority, and responsibility between each stakeholder.<sup>30</sup> Unlike state-led management frameworks, co-management includes real decisionmaking roles for local resource users and other social actors.<sup>31</sup> Co-management regimes have a measure of delegation and a devolution of power from governments who, under state-led management frameworks, would normally hold exclusive ownership over the resources and actions.<sup>32</sup>

### B. Benefits of Co-Management Systems

Across the world, co-management has been heralded “as one of the most promising solutions to resource decline, regulatory

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<sup>26</sup> See Ballet et al., *supra* note 18, at 56.

<sup>27</sup> See *id.*

<sup>28</sup> See Ryan Plummer & John Fitzgibbon, *Co-Management of Natural Resources: A Proposed Framework*, 33 ENVTL. MGMT. 876, 878 (2004).

<sup>29</sup> COSTA PEREIRA ET AL., *supra* note 16.

<sup>30</sup> See Ballet et al., *supra* note 18.

<sup>31</sup> *Id.*

<sup>32</sup> Ya’el Seid-Green, *Defining Co-management: Levels of Collaboration in Fisheries Management* 11 (2014) (unpublished M.M.A. thesis, University of Washington) (on file with the University of Washington School of Marine and Environmental Affairs), available at [https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/25464/SeidGreen\\_washington\\_02500\\_128.28.pdf?sequence=1](https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/25464/SeidGreen_washington_02500_128.28.pdf?sequence=1).

compliance, and feasibility.”<sup>33</sup> There are numerous benefits to a co-management regime. Co-management regimes integrate a wider variety of actors by incorporating both traditional approaches—implemented by local resource users—and scientific approaches—implemented by governments—into managing the natural resource.<sup>34</sup> The partnership between each of the stakeholders enables a multi-level interaction that can recognize and accommodate the different values, interests, and concerns of those who have a vested interest in the natural resource.<sup>35</sup> Overall, management is strengthened under a co-management framework as the contributions of different stakeholders are improved because they are posited at the levels where they can be most effective.<sup>36</sup> The roles and responsibilities are allocated to resource users at the level where they will be effective—government will administer legislation, community members will use the resources and therefore have innate information about the resources—all of which results in an effective partnership in managing the resources.<sup>37</sup> The mechanisms of a co-management regime that call for communication and negotiation between each of the stakeholders “promote transparency, equity, and justice in natural resource management.”<sup>38</sup> While state and local resource users rely on each other for the management of the resources, informational loops are created, linking the priorities of local and national agendas.<sup>39</sup> However, this is not to state that co-management is a power struggle over interests between governments, local resource users, and other stakeholders. Instead, this is to highlight how co-management calls for better participation of all key stakeholders in decisionmaking on natural resources.

### C. Rights and Responsibilities Under Co-Management Framework

The distribution of rights and responsibilities over natural resources is critical to an understanding and definition of co-

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<sup>33</sup> See Adam L. Ayers, John N. Kittinger & Mehana Blaiçh Vaughan, *Whose Right to Manage? Distribution of Property Rights Affects Equity and Power Dynamics in Comanagement.*, 23 *ECOL. SOC.* 1 (2018).

<sup>34</sup> See COSTA PEREIRA ET AL., *supra* note 16, at 11.

<sup>35</sup> *Id.*

<sup>36</sup> See, e.g., *id.* at 13–14.

<sup>37</sup> *Id.*

<sup>38</sup> See *id.* at 11.

<sup>39</sup> See *id.*

management. Scholars have often attempted to develop a method for understanding the various forms of co-management regimes by placing them along a spectrum from less to more complete in terms of how power and responsibility are shared.<sup>40</sup> These scholars define co-management based on the level of integration between government and resource users.<sup>41</sup> However, in practice, these definitions are difficult to implement as they suggest an infinite variety of arrangements between stakeholders. This is largely because co-management regimes cover a broader spectrum of collaborative decisionmaking than these definitions lend themselves to. Instead, it proves more practical to define co-management more broadly as a type of management system or rights regime. This allows for a conceptualization of co-management that integrates bureaucracy-based, community-based, and market-based systems.<sup>42</sup> Further, it recognizes the spectrum of community types that other definitions attempt to capture by creating typologies of co-management, while also expanding co-management to include actors and knowledge necessary for effective natural resource management beyond the government and local resource users.<sup>43</sup>

Property rights are part of the larger system in which the co-management regime is located.<sup>44</sup> Some authors suggest that it may be easier to create co-management regimes where there is already some element of communal property because the rights to manage resources would be strengthened by the rights to ownership over resources that are found in a property rights regime.<sup>45</sup> In this context, property rights regimes can create conditions that enforce co-management, making it more effective.<sup>46</sup> In a property rights regime, the right to manage, which is strengthened by the right of ownership, is not only part of the relationship between the

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<sup>40</sup> See, e.g., F. Berkes, *Success and Failure in Marine Coastal Fisheries of Turkey*, in MAKING THE COMMONS WORK. THEORY, PRACTICE, AND POLICY, 161–82 (Daniel W. Bromley, ed. 1992).

<sup>41</sup> See COSTA PEREIRA ET AL., *supra* note 16, at 8; see also F. Berkes, *supra* note 40.

<sup>42</sup> See Tracy Yandle, *The Challenge of Building Successful Stakeholder Organizations: New Zealand's Experience in Developing a Fisheries Co-Management Regime*, 27 MARINE POL'Y 179, 180 (2003).

<sup>43</sup> See *id.*

<sup>44</sup> See Jentoft, *supra* note 23, at 141.

<sup>45</sup> See *id.* at 148.

<sup>46</sup> Svein Jentoft, Bonnie J. McCay & Douglas C. Wilson, *Social Theory and Fisheries Co-Management*, 22 MARINE POL'Y 423–36 (1998).

management authority and an individual user but also between the variety of resource users as each has a shared dependency on the resource.<sup>47</sup> This shared dependency in turn promotes discipline, but also a degree of mutual vulnerability as resources are held in common by users and can be withheld by other users through group decisions, which function like a sanction against those who may break the established rules of the regime.<sup>48</sup> When rights of management and property are connected, property becomes not only a right but also a responsibility of the collective group as well as of the individual.<sup>49</sup> Without this responsibility, there is no guarantee that there will be a viable form of resource management.<sup>50</sup>

#### D. Defining Community Role in Co-Management

A definition that can encompass both the breadth of regimes and property rights necessary to ensure partnerships is necessary when discussing co-management. Co-management should be understood more broadly as a means to an end, rather than as an end in and of itself. Professor Tracy Yandle's definition of co-management is inclusive of these considerations and as such, is adopted in this Note, with a distinction. She offers that co-management "can be thought of as a spectrum of institutional arrangements in which management responsibilities are shared between the users (who may or may not be community-based) and government."<sup>51</sup> However, unlike Yandle, this Note adopts a definition of co-management that requires users *to also be of the community* in order to ensure that partnership arrangements are inclusive of local knowledge and promote transparency and equity in natural resource management. Here, co-management is defined as a collaborative institutional arrangement for natural resource management where a community of local resource users works together with government, other stakeholders, and external agents to share responsibility and authority for managing a specific area or type of natural resource.<sup>52</sup>

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<sup>47</sup> See generally Jentoft, *supra* note 23.

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> See *id.* at 148. In Japan fishers must be a member of a cooperative while in the United Kingdom, fishers can be members of cooperatives or get individual permits undermining the strength of the cooperative regimes.

<sup>51</sup> Yandle, *supra* note 42, at 180.

<sup>52</sup> See *id.*

In essence, co-management is an effective way of managing natural resources because it creates a balance between the variety of stakeholders needed to conserve resources and enables them to work together in creating policy and monitoring compliance.<sup>53</sup>

## II. MANAGEMENT OF GHANA'S GOLD INDUSTRY

This Part will examine Ghana's gold mining industry, highlighting how gold is both an important cultural symbol as well as a crucial resource for the Ghanaian economy. This Part will then explore the history of gold mining regulation in Ghana, showing the ways in which colonialization and democratization shifted governing responsibilities over the resource and how these shifts have contributed to the persistence of galamsey today.

### A. Overview of Ghana's Gold Industry: Historical Perspective

#### 1. Pre-Colonial Era Mining Practices in Ghana

Gold has been woven into the Ghanaian national identity and economy for centuries. The industry is well over two thousand years old, with ancient accounts detailing how gold mining was "one of the mainstays of the economies of the Asante, Denkyira, Akyem, Wassa and many other Akan states" that make up present-day Ghana.<sup>54</sup> Gold found in the region hastened the development of many successful ancient West African civilizations<sup>55</sup> and later attracted merchants from both the Arab World and Western Europe.<sup>56</sup> The Kingdom of Ghana originated in the eighth century and became an influential regional power towards the end of the fifteenth century, at that time becoming famous and known as "the land of gold" in cities as far as Baghdad.<sup>57</sup>

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<sup>53</sup> See *id.*

<sup>54</sup> See Emmanuel Ababio Ofofu-Mensah, *Historical Overview of Traditional and Modern Gold Mining in Ghana*, 1 INT. RES. J. LIBR. INFO. & ARCHIVAL STUD. 006, 006 (2011); see also Gavin Hilson, *Harvesting Mineral Riches: 1000 Years of Gold Mining in Ghana*, 28 RES. POL'Y 13, 14, 19–20 (2002).

<sup>55</sup> See Stephen H. Hymer, *Economic Forms in Pre-Colonial Ghana*, 30 J. ECON. HIST. 33, 39 (1970).

<sup>56</sup> See *id.* at 39–40; Hilson, *supra* note 54, at 13–14 ("[F]or over 1000 years, the Ancient Kingdom of Ghana, the former Gold Coast Colony, and present-day Ghana, have produced a substantial portion of the world's gold.").

<sup>57</sup> T. Shaw, *The Prehistory of West Africa*, 1 in HISTORY OF WEST AFRICA 48–86 (J.F.A. Ajayi & Michael Crowder eds., 1976).

The methods used for gold extraction between the eighth and fifteenth centuries were extremely simple and much safer for environments and neighboring communities than present day techniques, as they did not rely on harsh chemicals.<sup>58</sup> Scholars have noted that traditional gold mining in Ghana can be best understood through three main categories: alluvial, shallow pit, and deep shaft. Alluvial was the most widespread during this period and was practiced along the banks of some of Ghana's largest rivers.<sup>59</sup> In this type of mining, gold is found along water bodies and sifted through pans in order to be separated from sediments.<sup>60</sup> Shallow-pit surface mining and deep shaft mining were less common and performed throughout the country.<sup>61</sup> Shallow-pit surface mining, which required shallow pits to be dug on "either crests or sides of hills in the sediment valleys of river beds," yielded larger quantities of gold but required a significant number of workers.<sup>62</sup> Lastly, deep shaft mining extracted gold from reefs.<sup>63</sup> Because the reefs were best accessible when the water subsided, deep shaft mining was mainly conducted during the dry season whereas the other two practices could occur all year-long.<sup>64</sup> None of these methods relied on chemicals to extract gold and instead were very labor intensive.

Additionally, these techniques and practices took on cultural significance in different communities. Sites where gold was found were often considered sacred community sites, and gold jewelry and dress became important for different customs and traditions.<sup>65</sup> Ancient accounts chronicle how the kingdom was ruled by "a king who adorned himself, his pages, and court in gold," how communities wore gold-embroidered materials and used gold dust as a form of currency exchange, and how weaponry such as shields and swords were decorated in gold.<sup>66</sup>

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<sup>58</sup> See Hilson, *supra* note 54, at 16, 21; see also Ofose-Mensah, *supra* note 54, at 013.

<sup>59</sup> See Ofose-Mensah, *supra* note 54, at 009.

<sup>60</sup> See Hilson, *supra* note 54, at 16.

<sup>61</sup> See Ofose-Mensah, *supra* note 54, at 009.

<sup>62</sup> See *id.*

<sup>63</sup> See *id.*

<sup>64</sup> See *id.*

<sup>65</sup> See Hilson, *supra* note 54, at 18.

<sup>66</sup> See *id.* at 15.

## 2. Colonial Era Mining Practices in Ghana

When looking to curtail the problems associated with illegal mining, many scholars have argued that the weak governance structure of the extractive sectors, like the gold industry, originated with European colonization, where natural resources and human capital were exploited in order to enrich colonizing powers.<sup>67</sup> By the time Europeans arrived to partake in trading, infrastructures for mining gold in Ghana were already in place, and Ghana was fittingly labeled the Gold Coast.<sup>68</sup> Initial contact occurred at the end of the fifteenth century when Europe was facing a gold shortage that was undermining financial stability in the region.<sup>69</sup> The Portuguese were the first Europeans to arrive in modern day Ghana in 1471.<sup>70</sup> They were greeted with an established trading system that was used for centuries to exchange with the Arab merchants and neighboring kingdoms.<sup>71</sup> Ghana became a highly attractive trading partner, and in exchange for gold, the Portuguese began to introduce new mining technology in order to drastically increase gold production levels.<sup>72</sup> Between 1493 and 1600, Ghana produced 35.5 percent of the world's gold.<sup>73</sup>

During this time, local chiefs largely regulated the trade in gold. Chiefs negotiated with the Portuguese to exchange gold and to determine the circumstances under which coastal forts and warehouses could be built, while communities members managed the gold and minerals.<sup>74</sup> Portuguese traders would attempt to expand their trade from the coastal regions to more inland territories where gold repositories were kept, sometimes seeking to establish gold mines of their own.<sup>75</sup> However, they were always restricted by chiefs to trading out of coastal forts and ships.<sup>76</sup> The success of the chieftaincy during this era was rooted in the power found in their

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<sup>67</sup> See GAVIN HILSON, A CONTEXTUAL REVIEW OF THE GHANAIAN SMALL-SCALE MINING INDUSTRY 3 (2001)

<sup>68</sup> See *id.*

<sup>69</sup> See Hilson, *supra* note 54, at 17.

<sup>70</sup> See Ofosu-Mensah, *supra* note 54, at 009.

<sup>71</sup> See Hilson, *supra* note 54.

<sup>72</sup> See Ofosu-Mensah, *supra* note 54, at 007, 014.

<sup>73</sup> See Samuel N. Addy, *Ghana: Revival of the Mineral Sector*, 24 RES. POL'Y 229, 231 (1998).

<sup>74</sup> See Hilson, *supra* note 54, at 17–18.

<sup>75</sup> See *id.*

<sup>76</sup> See Hymer, *supra* note 55, at 40; see also Hilson, *supra* note 54, at 18.

governance.<sup>77</sup> Chiefs would work together to keep regional gold deposits and mining warehouses hidden from outsiders, fearing that the outsiders would infringe upon their customs and traditions, many of which were linked to gold.<sup>78</sup>

The ability to control the trade in gold, combined with the limited interference with chieftaincy governance by the Portuguese, meant that chiefs played a central role in governing gold and mining, controlling when and how to extract the resource, the price, and the conditions under which trading could take place.<sup>79</sup> However, the beginning of the sixteenth century and the defeat of the Portuguese by the British and Dutch colonial powers marked a turning point in the management and regulation of gold extraction in Ghana.<sup>80</sup>

Unlike their Portuguese predecessors, both the British and Dutch took on active administrative and territorial responsibilities, limiting the roles of local chiefs or removing them all together.<sup>81</sup> When the British gained power, establishing the Gold Coast Colony in 1874, they implemented a colonial mineral policy.<sup>82</sup> The mineral policy established a legal and administrative framework to facilitate mining operations, created security of tenure for grantees of mineral rights, created a system to manage problems that arose between companies and members of local communities, and obtained revenues for the Royal Government through levying duties or income tax.<sup>83</sup> Much of the substance from this policy regime was later adopted by an independent Ghana.<sup>84</sup>

The British faced challenges in managing conflict between local communities and foreign miners. Rebellions and attacks on British mining sites were common and chiefs would often still

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<sup>77</sup> See generally Francis Botchway, *Pre-Colonial Methods of Gold Mining and Environmental Protection in Ghana*, 13 J. ENERGY & NAT. RES. L. 299 (1995).

<sup>78</sup> See *id.* at 299, 302.

<sup>79</sup> See Hilson, *supra* note 54, at 17–18, 20.

<sup>80</sup> See *id.* at 18.

<sup>81</sup> See Ainsley Elbra, *A History of Gold Mining in South Africa, Ghana and Tanzania*, in GOVERNING AFRICAN GOLD MINING: PRIVATE GOVERNANCE AND THE RESOURCE CURSE 67, 73 (Timothy M. Shaw ed., 2017).

<sup>82</sup> See Fui S. Tsikata, *The Vicissitudes of Mineral Policy in Ghana*, 23 RES. POL'Y 9, 9 (1997).

<sup>83</sup> See *id.*

<sup>84</sup> See Part II.B, *infra*.

attempt to exert their authority over gold deposit sites.<sup>85</sup> The British responded by enacting a variety of ordinances against the local communities. For example, the Concessions Ordinance of 1900 attempted to ease tensions by “providing a security of title to land holders” by routing land concessions through “negotiations with local chiefs.”<sup>86</sup> In light of the British’s active colonial resource policy discussed above, however, it is not difficult to infer that these ordinances did little more than entrench the existing system of oppression.

Under colonialism, a significant amount of British capital was placed in the region. Hundreds of British buyers applied for land concessions and worked with local communities using the British colonial mineral policy frameworks in place.<sup>87</sup> Local communities would sample the land for gold deposits and lead foreigners to previously sacred sites of gold deposits.<sup>88</sup> Conflicts between the groups were managed through negotiations with the chiefs,<sup>89</sup> although the power of chieftaincies was significantly weakened.

Towards the end of the nineteenth century, with the colonial legal framework in place and foreign capital to invest, gold mining in Ghana began to shift from an indigenous livelihood activity to a more large-scale mining venture for the first time, as the British began to create large-scale mines. Throughout the colonial period, when chiefs and local communities grew unwilling to work for Europeans at the larger plants that had displaced many local groups, the British passed ordinances making it illegal for Ghanaians to own minerals like mercury, which was critical to gold production.<sup>90</sup> However, despite those obstacles, local groups continued to engage in small-scale mining activities.<sup>91</sup> Thus, the “informal” mining sector originated in defiance of British rule.

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<sup>85</sup> Nteuwusu, Samuel Aniegye, *A Social History of Gold Mining in Bole, Northern Ghana: From Pre-Colonial to Recent Times*, in TRANSACTIONS OF THE HISTORICAL SOCIETY OF GHANA, 1-26 (2015).

<sup>86</sup> See Hilson, *supra* note 54, at 19.

<sup>87</sup> See *id.* at 19–20.

<sup>88</sup> See *id.*

<sup>89</sup> See *id.*

<sup>90</sup> See *id.* at 22.

<sup>91</sup> See *id.* at 24.

### 3. Post-Independence Era Mining Practices in Ghana

In 1957, Ghana gained its independence. For decades, the entirety of the small-scale mining sector in Ghana operated as an unregulated, informal industry, noted for employing thousands of people who were known to use basic, unmonitored, and uncontrolled practices to mine gold. Prior to the regulation of the 1980s, small-scale mining was illegal across Ghana, just as it was in the colonial era, and miners were subjected to either time in prison or fines, while their machinery and equipment were confiscated and their land was seized.<sup>92</sup>

It was not until the 1980s that ASM activities began to receive support and regulation from the government.<sup>93</sup> Under the guidance of the International Monetary Fund (IMF) and the World Bank, Ghana launched the Economic Recovery Plan (ERP) in 1983.<sup>94</sup> The ERP sought to revitalize Ghana's stagnant economy by reducing national debts and improving its trading position in the global economy.<sup>95</sup> The ERP heavily focused on the minerals sector, which had seen drastic declines in output between 1960 and 1980.<sup>96</sup> The ERP aimed to promote foreign investment by offering "a series of tax breaks and benefits to foreign companies seeking to acquire mineral prospecting licenses in Ghana."<sup>97</sup>

Though these policies largely shaped the LSM sector of minerals industry, the ASM sector was also affected by the ERP. The ERP quantified the potential earnings in ASM, the revenue that was lost under an informal organizational structure, and the amount of additional loss due to smuggling and other avenues of illegal trading.<sup>98</sup> This prompted government officials to consider regulating the small-scale mining sector for the first in the nation's history. While previously the government largely viewed these miners as "criminals, vandals, environmental polluters and self-harmers,"<sup>99</sup>

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<sup>92</sup> See Henry Awinibod Ayamba et. al., *Legalizing Small Scale Gold Mining in Ghana in the Upper East Region, Ghana*, 2 J. AFR. POL. ECON. & DEV. 78, 84 (2017).

<sup>93</sup> See HILSON, *supra* note 67, at 4.

<sup>94</sup> See *id.* at 29.

<sup>95</sup> See *id.*

<sup>96</sup> See *id.*

<sup>97</sup> See *id.*; see also IMF, *Ghana-Enhanced Structural Adjustment Facility*, Economic and Financial Policy Framework Paper at 4 (1998-2000).

<sup>98</sup> See IMF, *supra* note 97.

<sup>99</sup> Ayamba et al., *supra* note 92, at 84.

the collected data of the ERP presented a contrasting image that enabled the government to regard small-scale mining as a livelihood activity and as one that needed to be incorporated into the formal economy. By the end of the 1980s, the government enacted a comprehensive scheme to regulate the small-scale mining sector.<sup>100</sup>

## B. Present Day Practices in Ghana

### 1. Large-Scale Mining and Small-Scale Mining

Gold mining in Ghana is a complex system that is broadly divided into two groups: large-scale mining (LSM) and artisanal and small-scale mining (ASM).<sup>101</sup> Large-scale mining practices resemble that of general modern surface and underground mining that are capital intensive, methodologically sophisticated, and rely heavily on mechanization.<sup>102</sup> Small-scale mining is a “collective term [that refers] to low-tech, labor-intensive mineral processing and extraction,” and is typically used “to refer to licensed operations [of no more than] 25 acres” that have met pre-qualifications as legislated by the Minerals and Mining Act of 2006.<sup>103</sup> Contrasting the two, LSM generally contributes significantly to the overall economy through tax revenue, while ASM tends to bring direct income to miners and their families. ASM also stimulates trade and economic growth at the local level as activities related to the practice tend to expand once ASM is introduced to a community.<sup>104</sup>

Over the past two decades, ASM has drastically expanded. “Today, ASM accounts for over 60 percent of Ghana’s total mining labor force, providing direct and indirect employment to over five million people.”<sup>105</sup> Modern ASM is also very productive.<sup>106</sup> In 1989, ASM accounted for only 2.2 percent of Ghana’s total gold production. By 2014, this figure had risen to 34 percent—which equaled the total contribution of the three largest multinational companies in the country.<sup>107</sup> Currently, “its contribution to wealth creation, employment, and the economy makes it one of the nation’s

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<sup>100</sup> See Tsikata, *supra* note 82, at 12–13.

<sup>101</sup> See MCQUILKEN & HILSON, *supra* note 9.

<sup>102</sup> *Id.*

<sup>103</sup> *Id.* at 10.

<sup>104</sup> *Id.*

<sup>105</sup> ABDULAI, *supra* note 8, at 1.

<sup>106</sup> See Hilson, *supra* note 54, at 24.

<sup>107</sup> See ABDULAI, *supra* note 8, at 1.

most important forms of livelihood activities,” particularly for many low-income Ghanaians,<sup>108</sup> who are employed in a variety of roles that range from general laboring to skilled machining, supervising, and bookkeeping.<sup>109</sup>

## 2. Illegal Small-Scale Mining: Galamsey

Though there is “a formalized process for legally engaging” in small-scale mining in Ghana, it is estimated that “85 percent of [all] small-scale miners” are operating illegally.<sup>110</sup> These illegal miners are now referred to as “galamsey” miners, a local term that means to “gather them and sell.”<sup>111</sup> Galamsey miners have attracted significant attention within the past decade:<sup>112</sup> first when the government began to realize the loss of revenue in taxes from the practice; and second when galamsey activities polluted important bodies of water,<sup>113</sup> which resulted in numerous deaths,<sup>114</sup> caused health concerns, and endangered wildlife.<sup>115</sup>

A considerable amount of research explores the question of why galamsey persists when miners have the option to legally mine for gold. Some scholars and policymakers point to the cumbersome and time-consuming process involved in acquiring licenses,<sup>116</sup> while others have pointed to poverty and youth unemployment in rural areas as drivers for galamsey.<sup>117</sup>

While many galamsey miners use simple techniques as a means of preserving local tradition,<sup>118</sup> a recent influx of foreign investors

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<sup>108</sup> See MCQUILKEN & HILSON, *supra* note 9, at 6.

<sup>109</sup> *See id.*

<sup>110</sup> See ABDULAI, *supra* note 8, at 1.

<sup>111</sup> Elizabeth Ohene, *Letter from Africa: Why a New Word for Gold Mining Spells Trouble*, BBC NEWS (June 1, 2017), <https://www.bbc.com/news/world-africa-40092641>.

<sup>112</sup> See *Dossier: Galamsey Menace*, *supra* note 1.

<sup>113</sup> See ABDULAI, *supra* note 8, at 1.

<sup>114</sup> See *4 Killed in 'Galamsey' Pit*, *supra* note 2.

<sup>115</sup> See F. Owusu-Nimo et al., *Spatial Distribution Patterns of Illegal Artisanal Small Scale Gold Mining (Galamsey) Operations in Ghana: A Focus on the Western Region*, HELIYON 3 (Feb. 2018).

<sup>116</sup> See ABDULAI, *supra* note 8.

<sup>117</sup> See Gavin Hilson, *Shootings and Burning Excavators: Some Rapid Reflections on the Government of Ghana's Handling of the Informal Galamsey Mining 'Menace'*, 54 RES. POL'Y 111, 114 (2017).

<sup>118</sup> See Hilson, *supra* note 54, at 16.

has “introduced a higher level of mechanization” to the process.<sup>119</sup> Modern day galamsey relies on excavators, dozers, and other heavy-duty equipment, it is chemically intensive using mainly mercury and liquid hydrocarbons to separate gold from sediments, and it requires an extensive network of infrastructure that often destroys neighboring communities and pollutes the environment.<sup>120</sup>

Modern day galamsey networks tend to be built near already legal mineralized districts in Ghana.<sup>121</sup> As there are more unregistered small-scale operators than there are registered operators, galamsey operators tend to fill in gaps in the supply chain for large-scale mining operations and registered small-scale mining operations.<sup>122</sup>

Unlike LSM operations, which operate according to standardized processes, ASM operations vary widely across Ghana and are often difficult to monitor. For example, Mantey and his co-authors<sup>123</sup> explored how modern day galamsey has evolved in the Western Region of Ghana beyond the three traditional methods of mining gold.<sup>124</sup> Most significantly, modern day galamsey relies on a number of external inputs such as heavy machinery and chemicals that were not utilized in the past.<sup>125</sup>

To that end, modern day galamsey mining techniques create a greater likelihood of health issues, injuries, and fatalities, and can harm and damage host communities, wildlife, and the environment.<sup>126</sup> As such, it has garnered a negative reputation throughout the country, typically associated with the “violent conduct of some illegal mine operators[,] . . . high level of crime within and around” mining sites, and spoiled water supplies and

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<sup>119</sup> GORDON CRAWFORD ET AL., INT’L GROWTH CTR., THE IMPACT OF CHINESE INVOLVEMENT IN SMALL-SCALE GOLD MINING IN GHANA 5 (2015).

<sup>120</sup> See Owusu-Nimo et al., *supra* note 115, at 2.

<sup>121</sup> See *id.*

<sup>122</sup> See Benjamin Teschner, *Small-Scale Mining in Ghana: The Government and the Galamsey*, 37 RES. POL’Y 308, 309, 311–12 (2012).

<sup>123</sup> See Jones Mantey et al., *Operational Dynamics of “Galamsey” Within Eleven Selected Districts of Western Region of Ghana*, 8 J. MINING & ENV’T 11 (2016).

<sup>124</sup> See *id.* at 11, 16, 26, 30–31. Their research looks at 11 galamsey sites in the area and groups their mining activities into five categories. The five categories are alluvial mining, underground mining, mill house mining, surface operations, and pilfering mining.

<sup>125</sup> See generally *id.*

<sup>126</sup> See Owusu-Nimo et al., *supra* note 115, at 3–4.

displacement in neighboring host communities.<sup>127</sup> Oftentimes, these wastelands pose dangers to local residents, do great damage to farm lands<sup>128</sup> and forests, and pollute important bodies of water.<sup>129</sup> Experts have repeatedly found that the negative environmental and socio-economic impacts of galamsey are a result of its informality, which makes it difficult for the government to monitor or enforce best practices.<sup>130</sup>

### C. Policy and Legislative Frameworks Governing Ghana's Gold Industry

Managing the problems associated with galamsey while also maximizing the benefits of the practices has proven to be one of the more significant policy challenges in Ghana today.

There are several laws and institutions that govern the minerals and mining sector in Ghana. At the constitutional level, Article 256 (6) of Ghana's Constitution states: "Every mineral in its natural state . . . is the property of the Republic and shall be vested in the President in trust for the people of Ghana."<sup>131</sup> In practice, this means that although one can own or have access to a piece of land, the minerals that may be found on it or underneath it belong to Ghana. Under this framework, Ghana's Parliament makes specific laws and regulations concerning the rights and interest in minerals.

#### 1. The Minerals Commission

Article 269 of the Constitution of Ghana and the Minerals Commission Act of 1993 (Act 450) establishes the Minerals Commission (MC), the main regulatory body for the minerals sector in Ghana.<sup>132</sup> The MC formulates national policy for mineral use,

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<sup>127</sup> See *id.* at 3–4, 20.

<sup>128</sup> See Taylor, *supra* note 8.

<sup>129</sup> See Mensah et al., *supra* note 3, at 85–87.

<sup>130</sup> See MCQUILKEN & HILSON, *supra* note 9, at 6, 21; see also Julie Kim, *Troubled waters: Artisanal mining and livelihoods in Ghana*, OXFAM: POLITICS OF POVERTY (Aug. 23, 2016), <https://politicsofpoverty.oxfamamerica.org/2016/08/troubled-waters-artisanal-mining-ghana/>.

<sup>131</sup> CONSTITUTION OF GHANA, Apr. 28, 1992 (rev. 1996), art. 257(b).

<sup>132</sup> See Ayamba et al., *supra* note 92, at 83.

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promulgates regulations, and monitors compliance.<sup>133</sup> One of its functions is overseeing the ASM licensing process.<sup>134</sup>

In order to best perform these functions, the Commission “liaises with other . . . agencies [like] the Geological Survey Department (GSD) and the Environmental Protection Agency (EPA).”<sup>135</sup>

## 2. Legislation for the Legalization of Small-Scale Mining

The Small-Scale Gold Mining Law of 1989 (PNDCL 218) legalized ASM in Ghana for those who purchase a license. PNDCL 218 outlines the registration process for licenses, the conditions under which licenses are to be granted, as well as the sanctions that are to be given to applications that would attempt to breach the process.<sup>136</sup> To register, miners must complete a series of steps and obtain licenses in order to operate on a specific portion of land that has been allocated to them.<sup>137</sup> Under the law, the Commission is able to create District Small Scale Mining Centers, which are tasked with monitoring all small-scale gold mining operations and creating registries of all registered small-scale gold miners as well as prospective miners within the district.<sup>138</sup>

The Precious Minerals Marketing Corporation Law of 1989 (PNDCL 219) created the Precious Minerals Marketing Corporation. The Precious Minerals Marketing Corporation is a source market for small-scale gold that has been mined.<sup>139</sup> PNDCL 219 is a direct response to activities of the 1980s and colonial Ghana; during this time, most of the gold that was mined from

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<sup>133</sup> See Minerals Commission Act, 1993 (Act No. 450) (Ghana).

<sup>134</sup> Additional functions of the MC include creating and recommending national policy for “the exploration and exploitation of mineral resources with special reference to establishing national priorities, having due regard to the national economy;” advising the Minister of Lands and Natural Resources on matters relating to the country’s minerals; receiving and accessing public agreements that are related to minerals and reporting them to Parliament; Securing comprehensive data that is to be collected on national mineral resources and related technology. This data is to be used in national decisionmaking regarding minerals; performing other functions that the Minister may assign. *See id.*

<sup>135</sup> See Ayamba et al., *supra* note 92, at 83.

<sup>136</sup> *See id.* at 85.

<sup>137</sup> *See id.*

<sup>138</sup> *See id.*

<sup>139</sup> *See id.*

small-scale mining sites was smuggled out of Ghana through neighboring countries and sold on the black market.<sup>140</sup> This law allows private gold dealers to register and to acquire a license so that they may purchase gold from small-scale miners.<sup>141</sup> The aim of this law is to curtail smuggling practices associated with small-scale gold, “while also creating a competitive market that keeps prices for gold at market levels.”<sup>142</sup>

Under the Minerals and Mining Act of 2006 (Act 703), citizens of Ghana who are eighteen years or older are allowed to license their small-scale mining operations.<sup>143</sup> Under this law, operations must not exceed twenty-five acres and must follow several other pre-qualifications as legislated by Act 703.<sup>144</sup> In ensuring compliance with these laws, the Commission will investigate the background of applicants, process applications for mineral rights, and recommend the approval for a license or otherwise to the Minister.<sup>145</sup> In 2015, this bill was amended to allow for the Minister of Lands and Natural Resources to prescribe a rate for royalty payments and to enable the confiscation of equipment used in illegal mining operations.<sup>146</sup>

### 3. Collaborating with Government Agencies, Outside Actors, and Laws

Three additional actors collaborate with the Commission to regulate small-scale gold mining activities. Two of these actors—the Ghanaian Environmental Protection Agency (EPA Ghana) and the District Assembly—are formally recognized, while the third actor—chieftaincies—is not recognized by the state but given informal recognition by Ghanaian communities.<sup>147</sup>

EPA Ghana sets environmental standards for ASM operations, reviews and issues environmental permits necessary for ASM

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<sup>140</sup> See Teschner, *supra* note 122, at 311 (“Before the passage of these laws, most gold had been smuggled out of Ghana through neighboring Guinea and Cote d’Ivoire.”); Gavin M. Hilson, *The Future of Small-Scale Mining: Environmental and Socioeconomic Perspectives*, 34 *FUTURES* 863, 867 (2002) (discussing the role of government regulation in limiting the smuggling abroad of mining products).

<sup>141</sup> See Ayamba et al., *supra* note 92, at 85.

<sup>142</sup> See *id.* (internal citations omitted).

<sup>143</sup> See MCQUILKEN & HILSON, *supra* note 9, at 10.

<sup>144</sup> See *id.* at 10.

<sup>145</sup> See *id.* at 20.

<sup>146</sup> See *id.* at 21.

<sup>147</sup> See Ayamba et al., *supra* note 92, at 86.

registration, and conducts site visits to ensure compliance.<sup>148</sup> A permit from EPA Ghana is required as part of ASM registration.<sup>149</sup> If activities are found to be non-compliant or to be harming the environment, EPA Ghana could revoke or recommend the revocation of a mining license.<sup>150</sup>

District Assemblies are local governments that are responsible for granting mining permits within the area in “which [the] applicant for a license wishes to mine.”<sup>151</sup> Overall, the assembly implements the central government’s policies and programs.<sup>152</sup> PNDC Law 218 creates these assemblies and establishes a Small-Scale Gold Mining Committee within each of them.<sup>153</sup> Each assembly is chaired by a political head of the area.<sup>154</sup> The assembly is also responsible for knowing and understanding an area as they work to plan and designate areas for specific mining activities.<sup>155</sup>

In Ghana, traditional authorities like the chieftaincies and priests are believed to be “custodians of culture and traditions.”<sup>156</sup> Since the pre-colonial era, chiefs have been regarded as the “personification of the community” and oftentimes dictate how the community relates to the outside world as representatives.<sup>157</sup> Moreover, they play an important role in governance. Chieftaincies are some of the oldest, most resilient and well-respected governance institutions in Ghana.<sup>158</sup> Their “impact and [spheres of] influence have declined due to colonial rule and democratization,” however, they “still remain [as] very important institution[s] affecting most Ghanaians on a daily basis, especially in rural areas, where [formal] government institutions” tend to be neither present nor trusted.<sup>159</sup> A majority of Ghanaians perceive “themselves as subjects to

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<sup>148</sup> *See id.*

<sup>149</sup> *See id.*

<sup>150</sup> *See id.*

<sup>151</sup> *See id.*

<sup>152</sup> *See id.*

<sup>153</sup> *See Ayamba et al., supra note 92, at 86.*

<sup>154</sup> *See id.*

<sup>155</sup> *See id.*

<sup>156</sup> *See id.*

<sup>157</sup> *See Eric Tamatey Lawer et al., The Neglected Role of Local Institutions in the ‘Resource Curse’ Debate. Limestone Mining in the Krobo Region of Ghana, 54 RES. POL’Y 43, 46 (2017).*

<sup>158</sup> *See id.*

<sup>159</sup> *See id.* at 45–46.

chiefs,”<sup>160</sup> with some surveys highlighting that this figure is closer to 80 percent of the population.<sup>161</sup> Problems arise when government actors do not recognize the legitimacy of chieftaincies.

The “chieftaincy is an . . . indigenous system of governance [found throughout Africa] with executive, judicial, and legislative . . . powers.”<sup>162</sup> Per customary laws, a chief has political, socio-economic, and cultural power in his area of jurisdiction and each of the 100 person groups in Ghana have their own rules regarding chieftaincies. Chieftaincies tend to run parallel with the formal assembly systems, oftentimes handling matters before formal assemblies are even notified.<sup>163</sup> For example, as much as 80 percent of the land in Ghana, including privately owned land, is held by the chiefs in trust for the subjects in the chief’s jurisdiction, or tribe, or in accordance with customary law.<sup>164</sup> This is contrasted with the ten percent that is held by the government for public use and development.<sup>165</sup> When small-scale miners are applying for licensing, they oftentimes will negotiate parcels of land and uses of the land with chieftaincies before following the regulations and requirements of the formal legal system.<sup>166</sup> As the two systems are currently overlaid, they conflict with each other. Despite the government’s claim of being the sole regulator of mining activities, chieftaincies undoubtedly also play a significant role in regulating gold mining practices.

#### 4. The Persistence of Galamsey: Barriers to Formalization in the

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<sup>160</sup> See *id.* at 46.

<sup>161</sup> See *id.* (citing Abotchie C. et al., *Perceptions of Chieftaincy*, in *CHIEFTAINCY IN GHANA: CULTURE, GOVERNANCE AND DEVELOPMENT* 103–44 (K. Odotei & A. Amedoba eds., 2006); see also Ivor Agyeman-Duah, *Chieftaincy in Ghana: Culture, Governance and Development*, 106 AFR. AFF. 730–731 (2007) (book review).

<sup>162</sup> See James Bofo et al., *Illicit Chinese Small-Scale Mining in Ghana: Beyond Institutional Weakness?*, SUSTAINABILITY, Nov. 1, 2019, at 6.

<sup>163</sup> See Agyeman-Duah, *supra* note 161; R. KASIM KASANGA & NII ASHIE KOTEY, *LAND MANAGEMENT IN GHANA: BUILDING ON TRADITION AND MODERNITY* 26 (2001).

<sup>164</sup> See KASANGA & KOTEY, *supra* note 163, at 13.

<sup>165</sup> See Bofo et al., *supra* note 162, at 6.

<sup>166</sup> See Lawer et al., *supra* note 157, at 45. The current dueling systems of local chieftaincies and regional government authorities parallel the historical conflict between tribal leaders and colonial regimes, discussed above in Part II.A.

## Legal Framework

Galamsey mining has continued to flourish despite the government's efforts to regulate the sector, so the question scholars ask is why compliance remains so low. In answering the question of why, scholars have looked at the licensing process, the role of law enforcement, and the role of chieftaincies. Research into this question highlights institutional capacity constraints, a lack of accountability, and a lack of transparency. Here, institutional capacity is taken to mean the ability of an institution to respond to and manage a variety of social and environmental challenges through the decisionmaking, planning and implementation processes.<sup>167</sup>

### i. Barriers to Registration: Licensing Process

Policy analysts have long pointed to the licensing process as a barrier to compliance by galamsey miners.<sup>168</sup> The Minerals Commission created the decentralized network of District Assemblies whose mandate is to provide local governance, support, and expertise to current and prospective miners.<sup>169</sup> In theory, these authorities should be able to expedite and oversee the licensing process. In practice, however, they have no real power.<sup>170</sup> District officers are not able to make decisions to award a license—this power is reserved for the Commission that is located in the capital city of Accra—they simply oversee the application process.<sup>171</sup>

The process for acquiring a license for small-scale mining takes a long time.<sup>172</sup> First, applicants must identify an area of interest for their mining site and then, develop a site plan. These are to be approved by the district officials of the Minerals Commission and the District Assemblies.<sup>173</sup> The proposals are checked to see whether

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<sup>167</sup> See Merritt Polk, *Institutional Capacity-Building in Urban Planning and Policy-Making for Sustainable Development: Success or Failure?*, 26 PLAN. PRAC. & RES. 185, 187–88 (2011).

<sup>168</sup> See MCQUILKEN & HILSON, *supra* note 9, at 6, 20–21. See also generally Nathan Andrews, *Land Versus Livelihoods: Community Perspectives on Dispossession and Marginalization in Ghana's Mining Sector*, 58 RESOURCES POL'Y 240 (2018).

<sup>169</sup> See *supra* notes 132–134.

<sup>170</sup> See MCQUILKEN & HILSON, *supra* note 9, at 20.

<sup>171</sup> See *id.*

<sup>172</sup> See Bofo et al., *supra* note 162, at 8.

<sup>173</sup> See MCQUILKEN & HILSON, *supra* note 9, at 20.

they overlap with current mining grants and if cleared, the application is sent to the national level of the Minerals Commission where the proposed plan is georeferenced against existing concessions maps of Ghana. If approved, the proposed site plan is recommended and forwarded to the Ministry of Lands and Natural Resources for a license.<sup>174</sup> “If there [is] any issue with the licensing process, applicant[s] may be invited to Accra to meet with the Commission to provide” necessary information, which can prove difficult for applicants who live in regions far from Accra.<sup>175</sup>

The formal process for acquiring a license holds a variety of barriers to entry for the average local small-scale miners, who academics have identified as “families and individuals trying to earn enough to survive, young students funding their school and university education, and farmers supplementing their income to larger labour groups of women and children.”<sup>176</sup> The costs associated with preparing a successful application as well as the lack of necessary social capital among small-scale miners have also been identified as barriers.<sup>177</sup> With these barriers, many miners have indicated that they would rather negotiate prices and parcels of land with chiefs, who would also have to be consulted before using the land even with a license,<sup>178</sup> than go through the difficult formal process.<sup>179</sup>

## ii. Law Enforcement

“Scholars who study Ghana’s small-scale mining sector” have also consistently pointed to “a lack of effective law enforcement” as a source for the persistence of the state’s illegal mining issues.<sup>180</sup> The underlying theory behind these arguments assumes that the government is “unable to effectively broadcast its power to rural areas.”<sup>181</sup> Other scholars claim that these arguments are insufficient, pointing to how galamsey miners and other illegal actors in the

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<sup>174</sup> *See id.*

<sup>175</sup> *Id.* at 20–21.

<sup>176</sup> MCQUILKEN AND HILSON, *supra* note 9, at 6.

<sup>177</sup> *See id.* at 20.

<sup>178</sup> *See* Boafo et al., *supra* note 162, at 8.

<sup>179</sup> *See* MCQUILKEN & HILSON, *supra* note 9, at 22.

<sup>180</sup> Teschner, *supra* note 122, at 312 (citing GAVIN HILSON & CLIVE POTTER, AFRICAN DEVELOPMENT BANK, WHY IS ILLEGAL GOLD MINING ACTIVITY SO UBIQUITOUS IN RURAL GHANA? 250–51 (2003)).

<sup>181</sup> *Id.*

sector do not hide their work such that it has become tolerated.<sup>182</sup> Typically, galamsey mining is done in public, even in cities; often times, casual observers will see galamsey activities and not even realize that they are illegal operations.<sup>183</sup> Police officers have also been accused of ignoring illegal mining activities in exchange for bribes, with scholars remarking at how police corruption may be at the center of law enforcement leniency.<sup>184</sup> In response to this, the government has created a joint security task force aimed at flushing out illegal mining operations. The task force has employed the use of military forces to cease illegal mining activities,<sup>185</sup> however, when military forces arrive, they have been met with fierce opposition, demonstrations and conflict with local communities<sup>186</sup> which also weakens their enforcement efforts.

### iii. Customary Law and Chieftaincy

The chieftaincies' role in local governance and culture oftentimes results in a parallel system of governance that creates ambiguities—mainly in the form of land tenure practices—around what is required of galamsey miners.

Many of these ambiguities are legacies of colonialism. After gaining independence, subsequent presidencies have attempted to either limit or define the autonomy of chiefs in order to maintain a unified Ghana through drastic laws that have barred chiefs from active politics. For example, Kwame Nkrumah's<sup>187</sup> Convention People's Party government attempted to set up urban and local councils that would take over power and responsibilities from chiefs

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<sup>182</sup> See *id.*

<sup>183</sup> See *id.*

<sup>184</sup> See *id.*

<sup>185</sup> See Paul Mensah, *Uncontrolled and Illegal (Galamsey) Mining Activities in Africa: An Increasing Threat to Water and Food Security*, AFRICA UP CLOSE (Feb. 1, 2018), <https://africaupclose.wilsoncenter.org/uncontrolled-and-illegal-galamsey-mining-activities-in-africa-an-increasing-threat-to-water-and-food-security/>.

<sup>186</sup> See, e.g., *Reports: Ghana Soldier's Lynching Tied to Illegal 'Galamsey' Gold Mining*, AFRICA TIMES (May 30, 2017, 9:39 PM), <https://africatimes.com/2017/05/30/reports-ghanaian-soldier-lynching-tied-to-illegal-galamsey-gold-mining/>.

<sup>187</sup> Kwame Nkrumah was Ghana's first president and independence leader. See Kwasi Konadu & Clifford Campbell, *Introduction*, in *THE GHANA READER: HISTORY, CULTURE, POLITICS*, at 1 (Kwasi Konadu & Clifford Campbell eds., 2016).

in local communities.<sup>188</sup> Subsequent laws like the Stool Lands Control Act, 1960 (Act 79), the Administration of Lands Act, 1962 (Act 123), and the Concessions Act, 1962 (Act 124) appropriated land rights to the government, further weakening the legally recognized power of chiefs during that era.<sup>189</sup> However, the 1992 Constitution of Ghana sought to reverse this trend of removing the chieftaincy entirely and instead just limited their power in order to strengthen the central government.<sup>190</sup>

Although rights to “minerals are formally vested in the President in trust for the people,” chiefs, as curators of the lands, have a strong influence over land and land practices. Each chief’s land is referred to as their “stool.”<sup>191</sup> Articles of the Constitution have provisions for stool lands,<sup>192</sup> stating that “all stool lands shall be vested in the appropriate stool or skin on behalf of, and in trust for, their respective subjects in accordance with customary law and usage.”<sup>193</sup> In practice, often times, chiefs operate in a fashion that suggests they own the land. This has resulted in two parallel systems of licensing: the first system is formal where licenses are granted by the state, the other is informal and licenses are granted primarily by chiefs to small-scale mining operations, independent of government regulations.<sup>194</sup> Chiefs gain royalties and other returns in exchange for the land, and the land and its operations go unregulated by the government as it has never been formally registered.<sup>195</sup> Rather than functioning like regulators working alongside the government to enforce the legal practices, chiefs operate like brokers for the day-to-day transactions at the local level,<sup>196</sup> as well as adjudicators when conflicts arise. The result is that these practices go unreported and unnoticed by the central government, which is often too far from these sites in the current small-scale mining licensing process.

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<sup>188</sup> See Boafo et al., *supra* note 162, at 6.

<sup>189</sup> James Boafo, Sebastian Angzoorokuu Paalo & Senyo Dotsey, *Illicit Chinese Small-Scale Mining in Ghana: Beyond Institutional Weakness?*, 11 SUSTAINABILITY 5943 (2019).

<sup>190</sup> See *id.*

<sup>191</sup> See ABDULAI, *supra* note 8, at 2.

<sup>192</sup> See *id.*

<sup>193</sup> Boafo et al., *supra* note 162, at 6–7.

<sup>194</sup> See ABDULAI, *supra* note 8, at 2.

<sup>195</sup> See *id.* at 2–3.

<sup>196</sup> See MCQUILKEN & HILSON, *supra* note 9, at 21.

Each of these barriers highlights deficiencies in the current regulatory framework that are limiting overall management capacity. In turn, limited management capacity weakens the ability for the government to effectively regulate illegal mining.

By not incorporating chieftaincies and other actors into the decisionmaking process at the policy design level, the central government is unable to compete on the ground in local communities. As the framework currently exists, there is little space for interactions at the local-level or for knowledge acquired at the local-level to help adjust the system to meet the local-level realities of galamsey. As such, there is little accountability for the central government to curb the practice as they are unable to regulate activities of illegal miners or miners registered through local chieftaincies. This is where a co-management structure could be used to integrate the variety of actors who already have roles in the resource use into the process for effective management.

#### D. Applying a Co-Management Framework to Address the Problems of Galamsey

Co-management can serve as an effective way of maximizing institutional capacity in order to better regulate ASM activities.

For emphasis, co-management is not being proposed as a panacea to the problems associated with galamsey; rather, it is being projected as a means to an end, as it has the potential to facilitate more effective management of Ghana's illegal gold mining industry by crafting a framework for management that is rooted in inclusivity, accountability, and transparency, all of which can bolster regulatory compliance.

##### 1. Creating a Co-Management Framework for Galamsey

As it stands, the Ghanaian framework more closely resembles that of a traditional state-led management regime where the government maintains control over the creation and implementation of regulations without any outside input or representation for local resources users or other actors.

As the regulatory system is now, decisions and actions are being deployed under two parallel and distinct systems: the central government system and the chieftaincy system. Both are attempting to govern the resource and achieve the respective goals of their regimes, but neither is communicating with the other, resulting in deficiencies that promote galamsey. For example, both the

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government and local chiefs are creating processes and regulations that restrict access to land in an effort to limit mining activities so that they can be monitored. Both have systems in place intended to enforce rules and adjudicate conflicts. The two systems operate over the same sphere but are disjointed. This reality, coupled with chieftaincy proximity and their unconstrained access to land, and thus resources, means that illegal miners are often given sites for mineral prospection through the chieftaincy without passing through the requisites required by the government.

By coordinating the roles and mandates of local chiefs with that of the government, policymakers would be better positioned to tackle the problem of galamsey. Co-management would be able to facilitate this coordination, bringing together the parallel and disjointed systems under one larger regime.

To better envision the feasibility of this, below are a list of roles and responsibilities that a group of stakeholders working towards co-management of the ASM industry could implement. Some of these roles and responsibilities would be formalized through legislation, while others would have to be based on mutual understandings and consensus agreements.

The role of central government would be to provide legislation that authorizes and legitimizes a more collaborative framework like co-management, to determine how management roles will be allocated between the government and the chieftaincy, and to provide provisions for decentralization of the management process that would vest shared responsibility in the chieftaincy. In theory, divestment of power by the central government for these roles and responsibilities is possible. In practical terms, this would require the government to give legitimate authority to the chieftaincy. This could be achieved either by affording them power to grant licenses for permits in exchange for the cooperation enforcing compliance with environmental regulations surrounding mining practices, or by moving power from the Commission based in Accra to the local District Centers, who would then work with local chieftaincies.

The local community authorities and chiefs, as the ones who have access to these resources and are aware of what is happening on the ground, would be able function as gatekeepers between galamsey miners and government bodies who fail to act upon their responsibilities. Chieftaincies would no longer be able to independently provide concessions for land use, but instead would coordinate with the government. Chieftaincies would additionally

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support community involvement in management, approve local regulations and ordinances when necessary, enforce these local regulations, communicate, advise, and cooperate with all the various actors involved in the management process; and manage conflicts as they arise.

## 2. Moving Toward a Co-Management Framework for Artisanal and Small-Scale Mining Sector Regulation

The process of establishing a co-management framework is not necessarily linear. In fact, implementation of necessary field activities and establishment of co-management principles in practice require an organic approach. This means that stakeholders and practitioners must be flexible as there is no one-size-fits all or step by step approach to implementing a co-management regime.

An effective and practicable co-management framework for the ASM sector in Ghana should be comprised of strong institutional and legal foundations, transparent reporting practices, safeguards and quality controls, and strong community organization. The strength of a co-management regime for Ghana's illegal mining sector is that many of these are already in place through the two parallel systems that the government and chieftaincy currently operate. The chieftaincy provides for strong community organization at the local level and much of the regulation in place through the Minerals Commission provides for strong institutional and legal foundations. The goal of co-management for ASM would be to enforce these laws and provisions.

### CONCLUSION

The key feature of co-management that distinguishes it from other systems of natural resource management is that it strives for equity. Whereas CBNRM or state-led management systems privilege controlling or protecting a set of natural resources by one group, co-management requires inclusivity and, in turn, more equitable management. Under co-management, the interests and concerns of various actors with respect to the same resources are considered. Since the concerns and interests of actors vary in terms of quantity as well as quality, it is not the case that each social actor is given the exact same entitlement to the resource.<sup>197</sup> Instead, what

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<sup>197</sup> See Ballet et al., *supra* note 18, at 63.

co-management requires is that the interests and concerns of even the weakest actors be expressed, recognized, negotiated, and protected.<sup>198</sup> Communities, government officials, and galamsey miners must openly engage on how to succeed together and on what sacrifices that success would require. As it stands now, this is what is missing from the top-down governance approach to galamsey.

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<sup>198</sup> See Jamart & Rodeghier, *supra* note 17.