

# GLOBAL GOLD SOURCES TO INFORM THE JEWELRY DEVELOPMENT IMPACT INDEX



APRIL 2021

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## EXECUTIVE SUMMARY

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Gold is the cornerstone of the jewelry market, a billion-dollar industry. Gold mining operations exist on nearly every continent, ranging from large industrial operations to artisanal and small-scale mining. As gold continues to maintain prominence in emerging markets throughout the world, the impact of the gold mining industry on human and labor rights violations as well as potential linkages between gold mining and conflict and violence are of increasing importance to consumers, investors, and stakeholders within the global jewelry industry.

The global jewelry sector requires a comparable tool to measure the socio-economic impact of raw material sourcing and production in a specific country to be better informed when making determinations regarding resource extraction, product manufacturing, and merchandise distribution. The purpose of the [Jewelry Development Impact \(JDI\) index](#) is to provide this information using a qualitative risk rating approach to assess five major categories of risk associated with raw material mining for each country. Through research, government reports, and interviews regarding priority gold mining origin locations identified by the U.S. Department of Labor's Bureau of International Labor Affairs (DOL/ILAB), data were compiled to determine the JDI index rankings of 24 countries for this report.

Overall, JDI index findings indicate that the gold mining industry increases human rights violations and the propensity for conflict. The ability for gold to be mined with limited presence of the state, particularly in rural areas, has created lucrative opportunities for criminal gold mining and illegal gold trafficking to flourish. Without proper governmental regulation of gold mining, criminal and extremist networks will increase conflict and violence in mining regions, furthering violations of human rights. To improve the JDI index's usability, accuracy of the rating produced by the methodology, and consistency when determining linkages between human rights violations and gold mining, it is recommended to include clarifying information, reword reverse-scored questions, and revise the Likert scale. In addition, inclusion of illegal and informal mining sectors will capture key data to aid in making more causal determinations on a country's human rights violations.

The [Zahabu Safi](#) project, a project launched by United States Agency for International Development to promote demand for gold from conflict-free artisanal and small-scale gold mining (ASGM) operations in the Democratic Republic of Congo (DRC), also aims to assess linkages between human rights violations, conflict, and violence and DRC's gold mining communities. To

further improve Zahabu Safi objectives, the following is recommended: sites with known human rights violations should be included in the project, which will garner opportunities to address violations and reduce violence; adapt an intersectional approach to better understand the realities, needs, and opportunities for vulnerable populations in the gold industry; strengthen existing education initiatives, placing emphasis on women, children, and other vulnerable populations; and continue to incorporate COVID-related findings into the project to monitor health.

The data from the JDI index should be an evolving tool for consumers, investors, and stakeholders within the global jewelry industry. Inclusion of legal and illegal small-scale artisanal gold mining will aid JDI index determinations regarding human rights impacts to better inform the global jewelry industry and to promote ethical practices regarding resource extraction, product manufacturing, and merchandise distribution.

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# INTRODUCTION

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This report analyzes the impact of the gold mining industry on human and labor rights violations as well as potential linkages between gold mining and conflict and violence. The analysis was completed using the human rights category ranking rubric of the Jewelry Development Impact (JDI) index, a research project under the *Minerals, Materials and Society* program of the University of Delaware, in partnership with the U.S. Department of Labor's Bureau of International Labor Affairs. The JDI index is designed to be a comprehensive tool used by the global jewelry sector to measure the socio-economic impact of the sourcing and production the components of jewelry have on a particular country. By utilizing a comparative socio-economic performance ranking of material origin sites for jewelry, consumers, investors, and stakeholders within the global jewelry industry can be better informed when making determinations regarding resource extraction, product manufacturing, and merchandise distribution.

The report focuses on 24 gold mining origin countries on the priority list from the U.S. Department of Labor's / Bureau of International Labor Relations (DOL/ILAB). The 24 countries include: Bolivia, Burkina Faso, Colombia, Democratic Republic of the Congo (DRC), Ecuador, Ethiopia, Ghana, Guinea, Indonesia, Kenya, Mali, Mongolia, Nicaragua, Niger, Nigeria, North Korea, Peru, Philippines, Senegal, Sudan, Suriname, Tanzania, Uganda, and Venezuela. The Country Profiles section of this report gives an overview of the human rights category findings for each country to provide an overall recognition of how the JDI index rankings were determined and to help determine linkages between gold mining and conflict and violence. In addition to the JDI index rankings, the data compilation for the Country Profiles gives insights for ways in which the JDI index scoring can be further enhanced.

The JDI index ranking and associated findings for the DRC endorse recommendations for the Zahabu Safi project. Zahabu Safi, also known as the Commercially Viable Conflict Free Gold Project, is led by USAID in partnership with Levin Sources and Global Communities and designed to establish conflict-free artisanal and small-scale gold mining supply chains with the goal to increase demand and export of gold from eastern DRC. The report highlights JDI index findings for the DRC, which can aid the Zahabu Safi project in reducing conflict and addressing human rights in the gold mining sector.

# METHODOLOGY

The JDI index identifies five major categories of risk assessment within the jewelry industry: governance, economy, human health, environment, and human rights. Each major category has subcategories to assess the different levels of risk factors for a country. Different raw materials can be assessed for each country.

As indicated above, this report analyzed the human rights category of the gold mining industry for 24 countries. The human rights category of the JDI index has five subcategories: workers' rights, indigenous people's rights, women's rights, children's rights, and freedom from violence. The developed questionnaires for the subcategories provided the framework from which analysis and data collection were completed. Data on these countries were collected from open-source and scholarly articles, government reports, and interviews.

The JDI index uses a qualitative risk rating approach. Compiled data were incorporated into the responses to the subcategory questions, creating a numeric index value. The Likert scale values were: Not Applicable = 0, Never (None) = 1, Rarely (Very rare) = 2, Occasionally (Rare) = 3,

Value	Ranking	%
Not Applicable	0	0
Never	1	0%
Rarely	2	≤ 20%
Occasionally	3	21-40%
Average	4	41-59%
Frequently	5	60-79%
Very Frequently	6	≥ 80%
Always	7	100%

Average = 4, Frequently (Few) = 5, Very Frequently (Some) = 6, Always (Many) = 7. Because the project outline included 24 countries from three continents, a percentage value was incorporated into the definitions to ensure clarity: Not Applicable = 0, Never (0%) = 1, Rarely (≤ 20%) = 2, Occasionally (21 – 40%) = 3, Average = 4 (41 – 59%), Frequently (60 – 79%) = 5, Very Frequently (≥ 80%) = 6, Always (100%) = 7. To determine the human rights index score for each country, the average score for the five subcategories was calculated. This scoring methodology yielded each of the 24 countries' JDI index ranking for human rights, with 0 being poor and 7 being ideal.

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## LIMITATIONS

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This project revealed four challenges to the data collection for the JDI index ratings. The first challenge was inequity in the quality of data. Some countries with a large INGO presence and well-established international donor organizations in-country had vastly more data and reports to make JDI index determinations, while other countries lacked substantial reporting and information. Countries with more restrictive governments presented questionable or unreliable data in efforts to hide corruption or skew findings presented to the international community.

The second challenge faced when researching data for the JDI index ratings was the limited response rate for expert interviews. Often, experts in the field were reluctant to speak on behalf of an entire series of human rights issues, and declined interviews. Of the experts who we did interview, they could only speak to general aspects of the gold mining industry rather than specific questions related to human rights violations. The information related to human rights violations had to be collected through open-source and scholarly research rather than interviews.

The third challenge we faced was difficulties in finding data specific to gold mining. While mining issues have been somewhat extensively reviewed, gold was not commonly separated from other types of mining, despite its unique outcomes and impacts on populations. Further, we found that illicit and informal gold mining is prevalent in the profiled countries with significant implications for local communities and gold exports, yet information was difficult to confirm. Anecdotal reports conflicted with government-released data, demonstrating a significant gap in data between legal and illegal or informal operations.

The last challenge was the lack of data specific to the JDI index questions on human rights violations. Our research yielded results to determine the existence of violations: the JDI index exposes human rights abuses that are likely to occur in the gold mining industry. However, although correlations were seen, causation cannot be confirmed. In essence, gold mining appears to have an impact on the human rights violations as well as conflict and violence, but there is not enough existing data to confirm gold mining causes such violations.

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# COUNTRY PROFILES

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## » Western Hemisphere «



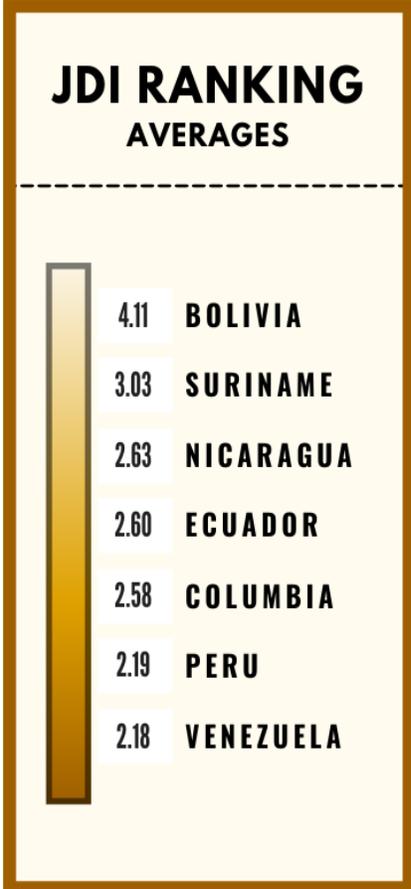
### **Bolivia**

**JDI Index Ranking: 4.11**

Gold is one of Bolivia's main export commodities. Its production serves as a direct source of employment and revenue for 42,000 people and impacts the livelihoods of an additional 250,000 plus people.<sup>1</sup> Most gold mining in Bolivia is small-scale, centered in the northern Amazon region, and under the control of politically powerful mining cooperatives.<sup>2</sup> Notwithstanding its economic benefits, the use of mercury in gold mining presents serious challenges to the environment, miners, and local communities.<sup>3</sup> Bolivia's labor laws and regulations are in line with relevant international standards.<sup>4</sup> The minimum working age is 14 and the work day is limited to eight hours. There are detailed regulations to protect the health and safety of miners, which are in line with industry standards. Among other specifications, mine workers are required to wear special helmets, protective clothing, and safety boots at all times.<sup>5</sup> While such regulations exist on the books, enforcement has been lax, enabling exploitation in several gold mining areas.<sup>6</sup> Bolivia's powerful gold mining cooperatives, which have political and social functions, play an important role in local governance, placing limits on federal authority, including the taking of enforcement actions.<sup>7</sup> Although Bolivia's President,

Evo Morales, advocates for the rights of the majority indigenous population, the biggest conflicts involving gold cooperatives are with indigenous communities over land access and the resulting environmental impacts of mining.<sup>8 9</sup>

Women are involved in the artisanal mining sector, often working alongside men.<sup>10</sup> Many of the women in the gold mining industry are divorced or single mothers who are highly vulnerable and who enjoy limited access to basic services. Twenty-eight percent of these women have access to basic hygiene and sewage services and fifty percent have health insurance.<sup>11</sup> Despite the high risks linked to mining, seventy-five percent of women miners do not wear any personal safety equipment.<sup>12</sup> Human trafficking for sexual exploitation is an increasing problem for women and adolescents in the mining area, particularly along the Peruvian and Brazilian borders; around 2,500 Bolivian minors were trafficked for sexual exploitation to La Rinconada, a Peruvian mining area in the border region.<sup>13</sup> Of the estimated 45,000 people working in illegal gold mining, about 13,500 are children, and about half of these children are not paid for their work.<sup>14</sup> In one mining region, children could be bought for \$3 to \$7.<sup>15</sup> Bolivia is the main hub used by criminal groups to launder contraband gold from Peru. These criminal groups cooperate with other organized crime groups, increasing violence and human trafficking in the mining areas.<sup>16</sup>



**Colombia**

**JDI Index Ranking: 2.58**

Whether mined legally or illegally, Gold represents an important resource that significantly impacts the livelihoods for Colombians.<sup>17</sup> Conflict, violence, limited government presence in rural areas, and the international focus on narcotics trafficking has contributed to increases in illicit gold mining and illegal gold trafficking over the past decade in particular.<sup>18</sup> Some analysts believe illegal gold mining has supplanted cocaine trafficking, with statistics indicating 88 percent of the country’s gold production is unlawful.<sup>19</sup>

Colombia's minimum age for work is 15 years, and 18 years for hazardous work.<sup>20</sup> Workers can work 48 hours a week and eight hours per day. Colombia has ratified all key international conventions concerning child labor, but Colombia's legal framework fails to adequately protect children from the worst forms of child labor.<sup>21</sup> Anecdotal reports of children working in illegal mines have been consistent since 2010, with children being exposed to hazardous and unsanitary conditions as well as sexual exploitation.<sup>22</sup> Miners in gold mining regions are often not recognized legally,



**Artisanal Gold Miner in Istmina, Colombia.**  
*Colombia's artisanal gold miners now part of a traceable global supply chain. (2019, December 09). Retrieved from <https://www.mining.com/colombias-artisanal-gold-miners-now-part-of-fully-traceable-global-supply-chain/>*

and have difficulties formalizing their operations; without titles, artisanal miners have no social and legal protections granted by the government.<sup>23</sup> Migrant workers, including minors and women, contribute to a large part of the artisanal and small-scale mining workforce.<sup>24</sup> However, women are relegated to taking poorer-paying positions than men due to cultural norms and Colombian law prohibiting women from doing underground work.<sup>25</sup> The growth of illegal mining activities has drawn women, particularly from Afro-Colombian communities and single mothers, to work in the mines or at makeshift brothels near the mining sites.<sup>26</sup>

More than ten percent of Colombian miners are part of indigenous or minority groups, with approximately 70 percent Afro-descendent and 12 percent indigenous.<sup>27</sup> These groups are often targets of extortion and intimidation by non-state armed groups and criminal organizations<sup>28</sup> and collective lands are often forcefully appropriated by illegal gold miners.<sup>29</sup> Nearly 30 percent of Cauca's 338,000 victims of forced displacement came from the top five gold producing municipalities and are members of indigenous communities.<sup>30</sup> There is lack of coordination, organization, and clarity over regulatory requirements for miners, however, the Colombian government is working to improve practices and regulation.<sup>31</sup>

There is clear evidence in the main gold-production territories that a close connection exists between gold production, armed conflict, social conflict, and environmental degradation.<sup>32</sup> The 1,300-mile border between Colombia and Venezuela has allowed Colombian criminal networks to easily commute between the two countries,<sup>33</sup> causing a gold-rush that negatively impacts artisanal miners.<sup>34</sup> Colombia has experienced an increase of criminal groups' control over land, informal mining communities, and gold mining profits, which has enhanced funding for groups responsible for violence, conflict, sex trafficking, human rights abuses, and crimes.<sup>35</sup> <sup>36</sup> The absence of government oversight in rural areas allows for criminal gold mining to thrive.<sup>37</sup>

## **Ecuador**

### **JDI Index Ranking: 2.60**

Ecuador has an abundance of gold reserves, but its mining potential remains largely untapped.<sup>38</sup> This, coupled with desires from the government to attract mining investment to diversify the oil-dependent economy,<sup>39</sup> bolsters the growing belief that Ecuador's gold mining potential is high.<sup>40</sup> Ecuador's government aims to expand mining exports from \$270 million in 2018 to more than \$2 billion by 2021, which could increase the mining sector's 1.6 percent contribution to Ecuador's GDP to as much as four percent.<sup>41</sup> While illegal gold mining in Ecuador is minimal compared to Peru and Colombia, there is evidence that illegal small-scale mining is taking place in some of Ecuador's most vital and protected regions.<sup>42</sup>

Ecuador's minimum working age is 14 years; however, reports indicate rural children often work in small-scale, family-run brick-making and gold-mining operations.<sup>43</sup> Ecuador's labor laws mandate eight hours per day, 40 hours per week. The labor laws grant rights to employees that cannot be waived, including contracts, holidays, minimum wages, bonuses, maternity leave, unions and collective contracts, strikes and compensation, and social security benefits.<sup>44</sup> Yet, the implementation of policies designed to attract foreign investment, combined with an absence of state oversight of these projects, has given rise to human rights violations by mining companies, prompting national debates on the promotion of large-scale mining.<sup>45</sup>

Indigenous communities have increasing concerns over the risks involved in mining developments. Reports indicate that some water reservoirs on indigenous lands are being contaminated by gold mining activities despite the government's responsible mining policies.<sup>46</sup> Indigenous people have experienced forced labor, forced evictions, harassment, and even murder.<sup>47</sup>

In illegal gold mining areas, people, particularly Colombian refugees, are subjected to human trafficking, slavery-like labor exploitation, debt bondage, and forced dangerous work.<sup>48</sup> While women work in the gold mining industry, they generally take the lowest paying jobs and must settle for only 30 percent of the profits they earn due to their lack of negotiating power.<sup>49</sup> Estimates suggest that only 30 percent of gold produced in Ecuador originates from legal gold mines, with the remaining 70 percent a product of illegal operations.<sup>50</sup> There are around 10,000 illegal miners in Ecuador and many of the illegal gold mines are reportedly controlled by the FARC and other Colombian criminal groups.<sup>51</sup> The presence of criminal groups around the mines has been linked to increased homicide and violence.<sup>52</sup>

## Nicaragua

### **JDI Index Ranking: 2.63**

Gold makes up seven percent of its Nicaragua's exports.<sup>53</sup> The country is known for its three largest gold mines: Bonanza, El Limón, and La Libertad. These three mines make up the "Mining Triangle", which is an underdeveloped, isolated area with extreme poverty and high levels of criminal activity that provides its inhabitants with limited sources of income. The Mining Triangle is linked to drug and arms trafficking and has the second highest homicide rate in Nicaragua.<sup>54</sup> Production from these mines is supplemented by small scale artisanal mining.

The minimum working age in Nicaragua is 14. Unions are able to negotiate wage increases and benefits for legal miners, as well as resettlement compensation plans.<sup>55</sup> However, indigenous people often face violence including seizure of their ancestral lands through the use of force, including murders, kidnappings, rapes, attacks, burglaries, and the burning of homes and crops.<sup>56</sup> While most gold mining jobs are held by men, women are increasingly holding relevant positions in operational areas and underground mining.<sup>57</sup> Data is limited with regard to specific mining linkages, but approximately 320,000 children in Nicaragua are engaged in child labor, with nearly 80 percent working without pay in hazardous jobs, including gold mining.<sup>58</sup>

Foreign mining companies have taken advantage of Nicaragua's socio-political crisis in 2018, negotiating contracts with the government to open new mines.<sup>59</sup> Yet illegal mining operations appear to be growing, with increasing violence in mining communities over land rights.<sup>60</sup> Although the connection between illegal or informal mining and criminal organizations has yet to be widely

documented in Nicaragua, it fits a pattern where regions associated with gold mining also exhibit the prevalence of criminal activity.<sup>61</sup>

## **Peru**

### **JDI Index Ranking: 2.19**

Peru is the sixth largest gold producer in the world<sup>62</sup> with U.S. imports around \$2 billion per year.<sup>63</sup> The region of Madre de Dios is home to one of the largest independent gold mining industries in the world.<sup>64</sup> Government officials estimate that as many as 40,000 people<sup>65</sup> in Madre de Dios maintain their livelihood from the illicit gold mining sector, either directly working as miners or indirectly in supporting roles, such as drivers, security providers, mechanics, food suppliers, bartenders, and sex workers.<sup>66</sup> An estimated 20 percent of Peruvian gold is illegally mined<sup>67</sup> with illicit mining prevalent in all states in Peru.<sup>68</sup>

The minimum working age in Peru is between 12 and 14 years. Market reforms in the 1990s included privatization of state mines which disempowered small miners' associations, focusing instead on large-scale interests.<sup>69</sup> Now, informal mining in Peru is largely fragmented and mining unions are not extensive, strong, or very well organized.<sup>70</sup> However, in 2019, a high-level commission was created aimed at improving mining activities.<sup>71</sup>

The Madre de Dios region has become Peru's prime location for illicit gold mining; mercury poisoning of soil, water, fish and air has been problematic for public health in the region, especially among indigenous peoples, women, and children.<sup>72</sup> The main city of La Pampa has swelled to 25,000 people with reports of organized crime, slavery, human trafficking, and prostitution.<sup>73</sup> Indigenous persons without proper documents are hired to work in the mines under poor working conditions, often have their paychecks withheld, and are sometimes forced to work.<sup>74</sup> Women and young girls, some as young as 12 years old, from all over Peru are trafficked to the mining areas to work in brothels.<sup>75</sup> In some towns, 60 percent of girls forced into prostitution are minors.<sup>76</sup> The women who work in the mines are relegated to less desirable and lower paying jobs due to cultural norms and laws that restrict women from working underground.<sup>77</sup> Women generally take jobs grinding down and extracting rocks with small amounts of gold deposits that are discarded by men from the mines; this decreases their earnings and secures their dependency on men for their discarded rocks.<sup>78</sup> It is estimated that up to 50,000 children work as gold miners in small-scale mines in dangerous and high

risk conditions.<sup>79</sup> Near mining areas, children are also subjected to commercial sexual exploitation, sometimes as a result of human trafficking.<sup>80</sup>

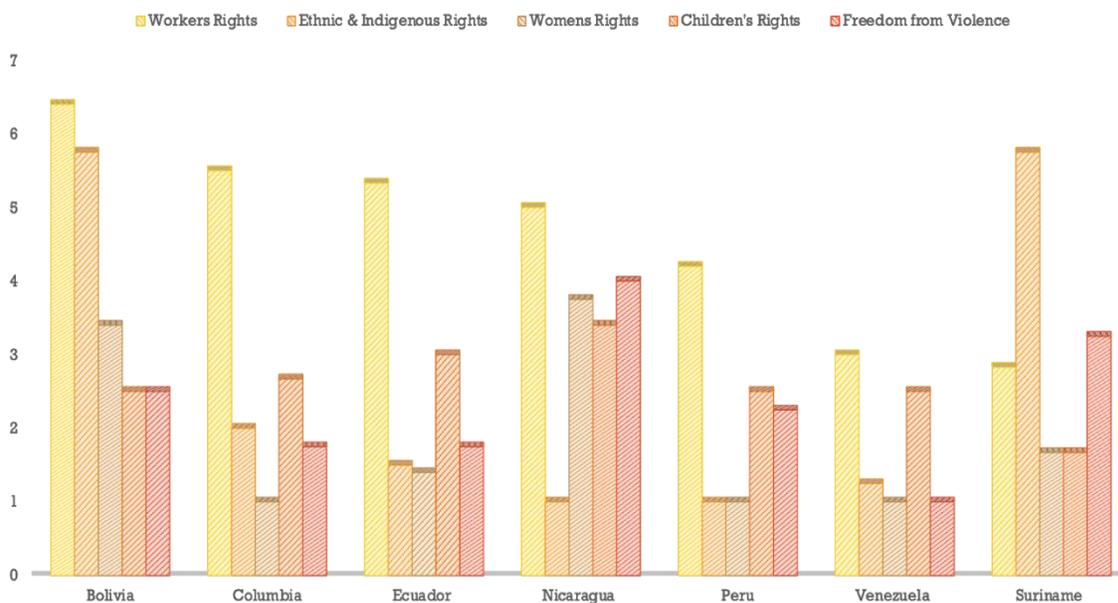
While it has some of the worst forms of human rights abuses linked to its gold mining sector, in 2019, Peru made a significant advancement in efforts to stop crimes associated with the illegal mining industry. The Peruvian government ratified key international conventions concerning child labor; published a law to strengthen penalties for the sexual exploitation of women and minors; and drafted an executive decree to establish a standardized government procedure to register adolescent workers.<sup>81</sup> Operation Mercury, the government’s largest and most sustained effort to crack down on illegal mining to date,<sup>82</sup> was a declared a state of emergency with 1,800 army troops and police sent to stop illegal gold mining in the Madre de Dios region.<sup>83</sup>

## Suriname

### JDI Index Ranking: 3.03

Small-scale mining accounts for two thirds of Suriname’s gold production. While the introduction of large-scale mining has helped the country as a whole, small-scale mining is much better for local communities. Small scale mining creates jobs for locals and allows them to work and inhabit their land. In 2009, it was found that small scale mining was the largest employer in

### JEWELRY DEVELOPMENT IMPACT INDEX (JDI): WESTERN HEMISPHERE



Suriname. On the other hand, large-scale commercial gold mining has displaced communities without compensation, cost them their jobs and homes, and have created significantly more environmental and health damage. Despite the benefits of small-scale mining in Suriname, there are no laws or regulations surrounding the industry, leaving it primarily self-manned. Since there are no regulations for small-scale mining, and mining licenses are rarely given out formally, there are many abuses of miners and locals in mining territory. With no mining codes and no legal licenses, the people in charge of mines are under no obligation to compensate workers fairly, take care of local communities, or follow any kind of safety guidelines.<sup>84</sup> Workers at the Canadian IAMGOLD mine in Suriname unionized and went on strike in 2018 but IAMGOLD took legal action against them because it went against the original agreement they made with employees.<sup>85</sup>

Unfortunately, along with the lack of regulation within Surinamese gold mining, there is also a lack of documentation of issues that occur within them. It can be inferred that due to the lack of legal protection for miners and communities near mines, that significant human rights abuses and violence is present, but a lack of reporting by the government, outsider media, and experts leaves the details of life in the mines a mystery.

## **Venezuela**

### **JDI Index Ranking: 1.75**

U.S. sanctions on Venezuela's oil production accelerated Venezuela's gold mining operations in the past two years, as the Maduro government increased the sale of monetary gold as a source of income.<sup>86</sup> Venezuelan syndicates and Colombian armed groups control Venezuela's gold mines, operating with government knowledge, and in some cases even with government involvement.<sup>87</sup> Although the government has announced efforts to curb illegal mining, the vast majority of gold mined in Venezuela is reported to be illegal, with much of the gold smuggled out of the country.<sup>88</sup>

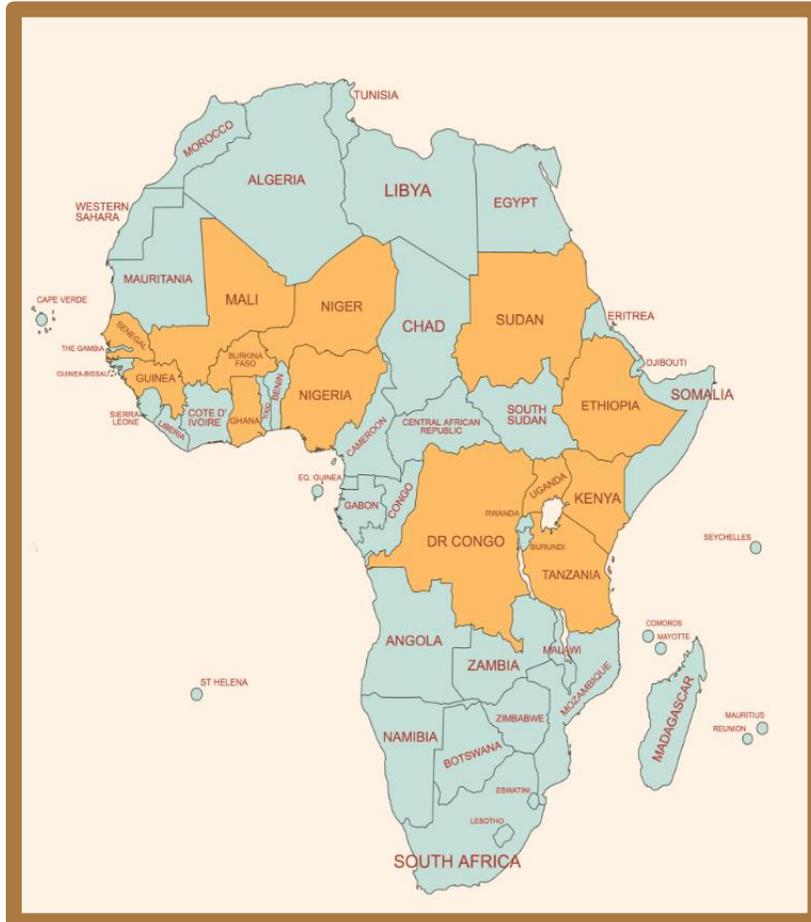
Venezuela ratified the ILO C. 138 and 182, setting its minimum age for work at 14 and minimum age for hazardous work at 18.<sup>89</sup> Despite this, the 2011 census found that approximately 262,000 children between ages 10 and 17 work in Venezuela;<sup>90</sup> approximately 45 percent of gold miners are underage.<sup>91</sup> Reports indicate findings of consistently harsh working conditions in the mines, including 12-hour shifts without any protective gear, poor sanitation leading to outbreaks of

malaria, and punishments for those accused of theft and other offenses, ranging from dismemberment to live burials to public executions.<sup>92 93</sup>

In 2016, the government created the National Strategic Zone of Development of Orinoco Mining Arc to further develop areas for gold, diamond, and mineral mining.<sup>94</sup> The government did not consult with the indigenous people before designating the new mining areas, as Venezuela's constitution mandates.<sup>95</sup> The criminal organizations that run the mines use indigenous people for forced labor,<sup>96</sup> with people from indigenous communities found to have slave numbers tattooed on their shoulders.<sup>97</sup> The high levels of mercury used in illegal and alluvial mining have destroyed territories and natural resources, negatively impacting workers and native communities.<sup>98</sup> Women have been disproportionately affected by mercury poisoning, for whom health risks are higher during pregnancy.<sup>99</sup> Within the gold mining industry, women perform mining jobs as well as engage in prostitution, with exposure to sexual exploitation and trafficking.<sup>100</sup>

The Colombian rebel group National Liberation Army (Ejército de Liberación Nacional, ELN) and other armed groups control the illegal gold mining operations and have caused workers and nearby residents to live in fear.<sup>101 102</sup> Shootouts between Venezuelan security forces and members of Colombian armed groups to gain control of the mines and mining revenue occur, with dozens of people – including women and children – injured or killed.<sup>103</sup> The Organization for Economic Cooperation and Development (OECD) has designated Venezuelan gold mines as “conflict” or “high-risk” areas where armed conflict, widespread violence, collapse of civil infrastructure, and other risks of harm to people are present.<sup>104</sup> The absence of domestic remedies and governmental accountability in Venezuela make Venezuela gold mining among the worst examples of human rights abuses.<sup>105</sup>

## » Africa «



### **Burkina Faso**

**JDI Index Ranking: 4.52**

Burkina Faso heavily relies on its mining industry, specifically its large deposits of gold. Like many others, Burkina Faso has laws outlining minimum working age<sup>106</sup> and maximum working hours<sup>107</sup>, but the government does not properly enforce these laws, especially within the gold mining industry. Gold miners in Burkina Faso lack workplace protections and social protection from the government, and are often left

vulnerable.<sup>108</sup> Compensation and resettlement packages are often left to the private mining companies, rather than institution formal policies for the state government.<sup>109</sup> The largest issue that Burkina Faso faces in regulation of the gold mining industry is the large proportion of illegal and informal mines and workers that do not need to follow any laws and legislation created for mining.

Roughly 20-30 percent of gold miners in the country are female, but despite this high rate of participation, there are many gender inequalities within the gold mining industry.<sup>110</sup> The Labour Act states that females are not to be assigned any activities that can “undermine her capacity of reproduction or, in case of pregnancy, her health or that of her child.”<sup>111</sup> Women are often paid less than men, have less access to job openings, and are not a part of mining decision making. Burkina Faso women usually work on manual ore crushing which exposes them to harmful dust, and the women are exposed to dangerous mercury. This can cause harmful respiratory illnesses and do

damage to women’s reproductive abilities.<sup>112</sup> Research conducted by UNICEF has shown that roughly 37 percent of workers in the Burkina Faso gold sector are children.<sup>113</sup> Children are denied an education because of forced labor in gold mines and are also exposed to physical and sexual violence.<sup>114</sup>

## The Democratic Republic of the Congo (DRC)

### JDI Index Ranking: 3.46

The Democratic Republic of Congo is known to be one of the most resource rich countries on the planet, with large deposits of gold, cobalt, diamonds, and tin. The DRC has legal regulations and protections that outline the minimum working age<sup>115</sup> and maximum working hours,<sup>116</sup> along with protections against forced labor,<sup>117</sup> but the DRC has been widely criticized for its failure to properly enforce both domestic and international labor laws and protections.<sup>118</sup> In 2018, the government passed a new mining code which addresses mineral abuse, revenue use, and environmental and social protections. However, implementing the new code, especially on local levels, has proven to be difficult.<sup>119</sup> The DRC is also lacking social protections for its citizens such as education, health care, public transport, and water and sanitation and has stated its intent to provide these in the future, but has not taken any official action.<sup>120</sup> As of now, it is the responsibility of the mining license holders to provide these protections to employees, without much government regulation to back it up.<sup>121</sup>



Research has shown that in the Democratic Republic of Congo, “women account for 40 percent of the labor force in AMS.”<sup>122</sup> Despite making up such a large percentage of the workforce, women face major inequalities in the gold mining industry. Women are not offered the same access to the numerous jobs within the gold mining sector and often take on jobs related to cleaning, sorting, and crushing the stones. Women are not allowed to mine because of superstitions that they will make the valuable stones disappear. Along with economic and job-related inequalities for women in gold mines, women also face discrimination, and physical and psychological violence from men. For example, protective gear is often given to men rather than women in the mining sites.<sup>123</sup> A 2016

survey given to artisanal and small-scale mining workers in eastern DRC found that “74 percent of women had been subjected to sexual violence”.<sup>124</sup> Children are also victims of violence. Research has found that one in four gold mines in the DRC makes use forced child labor.<sup>125</sup>

The relationship between gold mining and armed violence is well documented by numerous non-state actors and civil society organizations. Mining sites are often the targets of both physical violence and economic exploitation, where workers are forced to pay bribes, or “taxes.”<sup>126</sup> Armed groups take control of gold mining areas, which results in illegal mining practices. These groups are often accused of sexual and gender-based violence, forced child labor, and displacement of civilians.<sup>127</sup>

## **Ethiopia**

### **JDI Index Ranking: 3.96**

Since the early 2000s, Ethiopia’s gold mining industry has been rapidly growing. Despite an increase in investment and participation, Ethiopia still has not created a dedicated official body or department to oversee mining or the rights of miners.<sup>128</sup> Similarly, there is no legislation or legal framework that outlines or protects the rights of miners or their health and safety – it is solely the responsibility of mining license holders to protect these rights. The lack of a government body overseeing the mining industry, both formal and informal, has left room for many human rights abuses to take place.

Ethiopia has general domestic labor laws outlining maximum working hours.<sup>129</sup> Often children are trafficked and forced into labor to support the gold mining industry. Ethiopia’s high rates of school dropout lead children to work in the gold mines to support their families. Prostitution, drug use, and smuggling are prevalent in the mining areas.

The majority of human rights complaints and issues within the Ethiopian gold mining industry can be related back to Midroc Gold.<sup>130</sup> Midroc Gold has admitted to using mercury and cyanide in its gold mining operations, leading to significant amounts of health issues for miners and surrounding communities.<sup>131</sup> Along with this, Midroc’s operations forcefully displaced the Guji people, an indigenous group in Ethiopia, from their land with no compensation. Following the renewal of Midroc Gold’s license in 2018, mass protests broke out across the country against the company and the government’s decision.<sup>132</sup> Grievances surrounding Midroc Gold became so escalated that rebel groups around the country began threatening the most recent presidential election

as a way of protest.<sup>133</sup> Eventually, Midroc Gold was forced to cease operations in Ethiopia late last year.

## Ghana

### JDI Index Ranking: 5.02

Ghana is among Africa's leading gold producers, hosting both big and small mining companies and has a reputation for sound policies, development projects, and lower-cost mining benefits.<sup>134</sup> Gold constitutes 90 percent of the mineral exports that make up 5 percent of Ghana's GDP, competing with South Africa's gold mining industry.<sup>135</sup>

The minimum working age in Ghana is 15 years.<sup>136</sup> Ghana's Labor Act limits the number of working hours to a maximum of eight hours per day or 40 to 44 hours in a week.<sup>137</sup> Workers in the mining industries are unionized by a self-governing and independent body, the Ghana Mineworkers Union, which is regionally integrated to the Ghana Trade Unions Congress and globally integrated to the Global Industrial Union located in Switzerland.<sup>138</sup> The government of Ghana provides compensation, resettlement and relocation programs to individuals affected by the mining activities

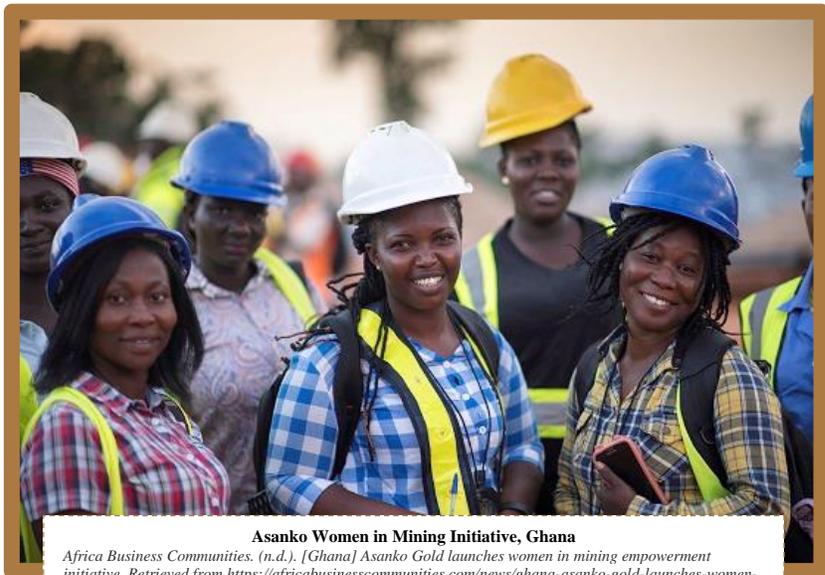
in the mining regions. However, many affected people are not satisfied with the government's means for compensation.<sup>139</sup>

Employees in the mining industries receive government incentives such as social assistance, insurance, care services, and labor market programs.<sup>140</sup> Ghana's Minerals and Mining Act of 2006 added

amendments in 2014 to address illegal gold mining, including

criminalizing illegal mining operations by Ghanaian citizens and foreigners.<sup>141</sup>

Ghana's ethnic and indigenous groups are given equal chances of working in the mining industries. Women's participation in the gold industry is mainly through small scale and illegal



**Asanko Women in Mining Initiative, Ghana**  
*Africa Business Communities. (n.d.). [Ghana] Asanko Gold launches women in mining empowerment initiative. Retrieved from <https://africabusinesscommunities.com/news/ghana-asanko-gold-launches-women-in-mining-empowerment-initiative/>*

alluvial gold mines. Women receive benefits from the gold mining industry; however, they are not at par with men – with the exception that widows of miners are paid compensation. Ghana’s gold industry is a male-dominated industry, and prostitution is frequent in mining towns.<sup>142</sup>

Although Ghana is a signatory to the United Nations Convention on the Rights of the Child and has made it illegal for children under 18 years to work in industries such as gold mining,<sup>143</sup> thousands of children in Western, Central, and Ashanti regions are forced to work in the gold mines.<sup>144</sup> Children, especially between the ages of 15 to 17, often miss school to work in the mines.<sup>145</sup> Ghanaian girls from rural regions are sometimes sold into servitude to atone for the sins of their family members, often subjected to sex trafficking within the country and in the Middle East.<sup>146</sup>

Ghana’s trafficking in persons is supported by, among other industries, the gold mining industry.<sup>147</sup> Domestic violence has increased as a result of the industry because men use the additional income to philander. The government has invested in security infrastructure to keep the mines safe. However, conflicts still exist that threaten the peace of surrounding communities.

## **Guinea**

### **JDI Index Ranking: 4.38**

Gold was the first mineral mined in Guinea with reserves equaling an economic value of \$300 million (2016). The artisanal and small-scale mining sector in Guinea largely operates informally, outside of government mapping or licensing.<sup>148</sup> Guinea has focused on responsible, social, economic, and environmental practices of artisanal and small-scale mining, inaugurating the first mercury free gold processing system in Guinea’s artisanal and small-scale mining sector in 2018.<sup>149</sup>

The minimum age for working in Guinea is 16 years, although the International Trade Unions Federation (ITUF) found that some youths below 16 years work in the mines for 15 hours a day, seven days a week.<sup>150</sup> In the artisanal mines, it is customary for miners to work 10 hours a day, seven days a week. Mineworkers in Guinea are unionized and the union fights for their rights in the industry.<sup>151</sup> Miners have insurance through Overseas Private Investment Corporation (OPIC) and discrimination is highly prohibited.<sup>152</sup>

Guinea labor law prohibits discrimination and provides that all people are given equal chances to work and equal pay.<sup>153</sup> <sup>154</sup> However, in practice this is not observed: ethnic groups are

frequently barred from accessing jobs both formally and informally<sup>155</sup> and women face discrimination in the hiring process and with lower salaries than their male counterparts.<sup>156</sup> Mine expansion has led to loss of land and displacement for indigenous groups.<sup>157</sup> Although children are not allowed to work in the mines, International Labour Organization (ILO) research found that 40 percent of all children work in the mines, with 66.1 percent of these children – aged between five and 14 years – who work under hazardous conditions.<sup>158 159</sup> Children in the mining sites in Guinea are subjected to forced labor.<sup>160</sup> Due to the country's high poverty level, most parents prefer their children to work rather than attend school.<sup>161</sup> Guinea is a transit country for west African children subjected to forced labor in gold mining throughout the region.<sup>162</sup>

## **Kenya**

### **JDI Index Ranking: 4.65**

Kenya's gold mining industry is young, but due to the significant gold reserves discovered in western Kenya – which currently remain under-explored – it has the potential to significantly enhance Kenya's economy, both through artisanal and small-scale mining as well as large-scale commercial mining.<sup>163 164</sup> Most artisanal and small-scale mining operations in Kenya are informal because formalization of the legal framework established 2016 has proceeded slowly.<sup>165</sup>

Gold mining workers often work more than 10 hours of overtime each week, but are only paid for three extra hours.<sup>166</sup> Kenyan law has a compensation plan and resettling package for individuals affected by mining.<sup>167</sup> Although there is no clear program for social protections for gold miners, workers have protections enshrined in the constitution with regard to their safety and security in working spaces.<sup>168</sup> The Mining Act signed in 2016 is seen as progressive legislation for African mining, covering environmental and social protections, transparency, wealth divisions, and mining license regulations, among other reforms.<sup>169</sup>

The mining industry's operations have negatively affected indigenous groups' ability to maintain and practice their culture, with mining communities leading to an increase of alcoholism and prostitution, as well as land displacement and environmental issues.<sup>170</sup> Increased mining operations have caused problems with the benefit-sharing of minerals, creating hostile situations between locals and mining companies.<sup>171</sup> The Kenyan constitution provides that all ethnic groups are treated equally irrespective of their tribe, sex, and race and shall be subjected to equal economic sector opportunities.<sup>172</sup>

Structural and cultural norms hinder the ability of women to work in the gold mining industry as equally as men, particularly since the majority of women are illegal workers. While the 2016 Mining Act implemented changes to enhance the security and inclusion of women in the field<sup>173</sup> and the number of women miners is greatly increasing, women are given low ranking jobs, leading to lower income.<sup>174</sup> Sexual and gender-based violence are the most commonly experienced forms of violence against women within the industry,<sup>175</sup> where women are subjected to prostitution and sex trafficking,<sup>176</sup> with an increase of HIV/AIDS in the mining regions.<sup>177</sup> The Kenyan gold mining industry is directly connected with increased domestic violence due to “hot money” and less women’s empowerment. The Kenyan government often intervenes to prevent the violence resulting from the gold mining industry.<sup>178</sup> In 2019, 40 gold mines were shut down by the government in Migori county due to harsh workspaces, suffering of thousands of workers, and failure to adhere to child labor laws.<sup>179</sup>

The Kenya National Commission on Human Rights found that artisanal and small-scale miners do not adhere to labor guidelines and child labor is a common phenomenon in the gold mining industry.<sup>180</sup> Children as young as 12 work in small-scale artisanal mining, especially in mining sites of western Kenya,<sup>181</sup> and are sexually exploited and trafficked by individuals working near the gold mining regions.<sup>182</sup> Children generally stop going to school once they begin working in the gold mines.<sup>183</sup>

## **Mali**

### **JDI Index Ranking: 3.83**

Gold dominates the Malian mineral industry, representing 95 percent of the country’s mineral production, and is the third largest gold-producing country in the region.<sup>184</sup> Mining serves as the key driver of FDI, exports, and local purchases.<sup>185</sup> Approximately 400,00 people work in the industry, which is primarily informal and village-based.

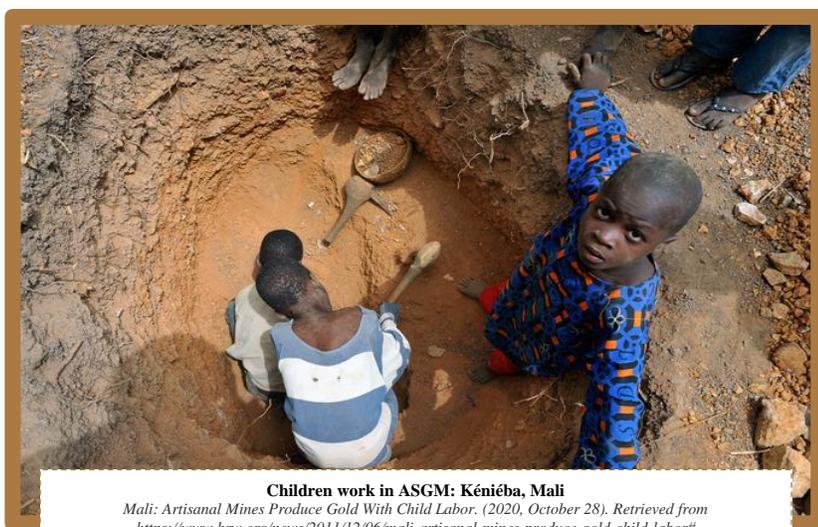
The minimum working age in Mali was raised to 15 years in 2017, after research found that children as young as six years had been working in the mines. Working hours are limited to 45 hours per week, with an additional 10 hours of overtime permitted, but the gold mining industry often has miners working longer hours.<sup>186</sup> The National Union of Malian Workers (UNTM) represents 80 percent of unionized workers in Mali, including gold miners.<sup>187</sup> Mali’s government offers social

protections to formally employed gold miners but not to informal sectors where mining is practiced on a small scale.<sup>188</sup>

Prior to the mining industry, indigenous communities were economically stable, earning livelihoods from agriculture.<sup>189</sup> When gold mining sites began to be established, displacement and environmental pollution of agricultural land reduced certain ethnic groups to poverty.<sup>190</sup> Conflicts occur between industrial gold mines, prospectors, and local Malian communities over land and lack of compensation.<sup>191</sup> Indigenous groups are often excluded from participating in the gold industry.<sup>192</sup>

Women contribute around 30 percent of the total artisanal mining workforce, contributing in minor roles such as crashing, sorting, sieving, and washing.<sup>193</sup> Historical and cultural aspects such

as child marriage and low education opportunities have prevented women from contributing fully to small-scale mining.<sup>194</sup> Mining has caused an increase in domestic violence due to the shift from subsistence to cash economies.<sup>195</sup> Women face violence, sexual violence, and harassment from mine security forces.<sup>196</sup><sup>197</sup>



**Children work in ASGM: Kéniéba, Mali**

*Mali: Artisanal Mines Produce Gold With Child Labor. (2020, October 28). Retrieved from <https://www.hrw.org/news/2011/12/06/mali-artisanal-mines-produce-gold-child-labor#>*

An estimated 20,000 to 40,000 children work in Mali's artisanal gold mining sector, with many of them entering the workforce as young as six years old.<sup>198</sup> More than half of children miners are forced to drop out of school to work in mining fields to help provide household income.<sup>199</sup> Children who cook and clean for people working in mines are subjected to sexual abuse and harassment.<sup>200</sup>

There is a strong relationship between mining and regional conflict, with communities fighting for natural resources.<sup>201</sup> The artisanal gold mining sector is also associated with an increase in domestic and sexual violence, rise in child trafficking, and forced child labor.<sup>202</sup> The government established laws to optimize the economic benefits of mining, control mineral resources, and use forceful interventions to solve conflict and violence arising from the mining industry.<sup>203</sup>

## Niger

### **JDI Index Ranking: 3.06**

Niger, a country facing severe poverty,<sup>204</sup> experienced an intensified gold mining industry in 2014 after gold deposit discoveries were made in the northeast part of the country. The gold rush caused increased security incidents, including banditry, intercommunity rivalries, and tensions with Algeria. While it has offered thousands job opportunities, it has provided grounds for armed rebel and jihadists groups, particularly in the north.

Niger's legal minimum working age is 14 years, with over 250,000 children who work full or part-time in artisanal and small-scale mining.<sup>205</sup> Working hours in the gold mining industry vary from eight to 14 hours and the miners receive only a small salary from the mining operators.<sup>206</sup> Workers are exposed to the hazardous chemicals used without provision of any basic protection.<sup>207</sup> Artisanal and small-scale mining operations are not well captured in national and international data, and thus infractions are not reported and workers are often not recognized by the government to gain access to social protections.<sup>208</sup> The government does not offer compensation to affected communities that lost access to land due to gold mining.<sup>209</sup> Workers in the gold mining industry arrange strikes collectively, sometimes with support from rebel groups.<sup>210</sup>

The lack of mining education and experience along with competition from workers who migrate to seek job opportunities make it difficult for indigenous groups to work in the gold mining industry<sup>211</sup> despite mining development being located on indigenous people's land. While women participate and play significant roles in Niger's extractive industry, it is male-dominated and women rarely receive the same economic benefits compared to men. Women's participation has increased in the informal sector, further raising risks for women, such as violence, and dispossession of land,<sup>212</sup> rape, and domestic violence with no means to report the incidents. Sex work provides the most lucrative income for women and girls, and the majority of single women who live around the mining towns actively participate.<sup>213</sup> <sup>214</sup> Child labor is common in artisanal gold mining in Niger, with children from low-income households subjected to slavery, exposed to dangerous health and safety conditions,<sup>215</sup> and forced into prostitution.<sup>216</sup> Children are kept out of school to work in the gold mines.<sup>217</sup>

Violence has emerged due to rebels controlling most gold mining sites in Niger. There are cases of arms trafficking in the region, with the Nigerien government closing mining sites because

of banditry<sup>218</sup> and community attacks.<sup>219 220</sup> Human trafficking is rampant between Niger and Libya, with girls being trafficked for prostitution at the mining sites.<sup>221 222</sup> The industry brought social changes in the mining community, but domestic violence is common countrywide.<sup>223 224</sup> The government coordinates attacks against terrorist groups that recruit children in the region, but because of limited resources, it cannot fully intervene in the violence.<sup>225</sup>

## Nigeria

### **JDI Index Ranking: 3.13**

Nigeria's mineral industry accounts for less than 1 percent of its GDP, but informal artisanal and small-scale gold miners produce 80-85 percent of the mining output.<sup>226</sup> Between 2012 and 2018, about 97 tons of gold worth over \$3 billion was illegally smuggled out of Nigeria.<sup>227</sup> In 2019, Nigeria created the Presidential Gold Mining Development Initiative (PAGMI) with the goals of creating over 500,000 formalized mining jobs and registering thousands of artisanal miners in the national identity management system.<sup>228</sup> PAGMI allows artisanal miners to sell gold through the National Gold Purchase Program, supplying the Central Bank of Nigeria with foreign reserves to capture revenue and stop gold smuggling.<sup>229</sup>

The minimum age for Nigerian workers is 15 and the limit of working hours is eight hours per day. Despite these regulations, there are children under 15 who work in the gold mining industry and working hours for illegal mines are unregulated. Workers are rarely unionized; to receive technical assistance and benefits, artisanal miners must form cooperatives.<sup>230</sup> Due to these obstacles, gold miners continue to operate informally.<sup>231</sup> Pursuant to Nigerian law, citizens are able to seek compensation for displacement due to the gold mines.<sup>232</sup> Formally recognized miners have social insurance in the form of a retirement plan with 20 percent income contributions.<sup>233</sup>

Indigenous people are often excluded from participating in the Nigerian gold mining industry, as they are considered unskilled and uneducated,<sup>234</sup> or they are given dangerous work with minimal wages.<sup>235</sup> Due to the expansion of mining activities, indigenous people are forced to leave their land.<sup>236</sup> Women actively participate in the gold mining industry and can occasionally benefit from the industry independent of men, even owning mining sites (although rare).<sup>237</sup> Women do not receive the same economic benefits as men largely due to societal stereotypes.<sup>238</sup> Women and young girls participate in prostitution both forcefully and willingly.<sup>239 240</sup>

The total number of children in mining is estimated to be eleven million as of 2019, with 45 percent under age 15.<sup>241</sup> The children working in the mines do not receive education and are exposed to toxic minerals and chemicals such as cyanide and mercury used in the mining process.<sup>242</sup> The Nigerian government has attempted to curb illegal mining activities and child labor, but there are still reported rising child labor cases in the mines.<sup>243</sup> <sup>244</sup> Child prostitution and sex trafficking are high around the gold mining sites, with over 12 percent of sex workers in mining towns aged between 15 and 19 years.<sup>245</sup>

The region’s mining-related conflicts claimed the lives of 6,139 individuals, with women and children among them.<sup>246</sup> Bandits use women and children for arms smuggling and sex trafficking.<sup>247</sup> The mining industry has a higher domestic violence incidence than the rest of the Nigerian population.<sup>248</sup> Rebel clashes over mining sites have been increasing since 2014. While the government has tried to intervene through banning mining activities in the conflicted areas and deploying soldiers in the region to bring peace, the conflicts are still a problem in Nigeria.<sup>249</sup>

### JEWELRY DEVELOPMENT IMPACT INDEX (JDI): AFRICA



## Senegal

### **JDI Index Ranking: 4.52**

Senegal is home to only one major industrial gold mining project, run by Canadian company Teranga Gold. Senegal's mining sector is less developed than other countries' in the region, but its industry is an attractive investment due to the country's relative political and economic stability. Compared to many other countries covered in this report, Senegal's mining industry has experienced a much more positive reality in terms of regulations and human protections. The people of Senegal have had a positive relationship with Teranga Gold and its gold mines throughout the country, as the company has built new villages, schools, and medical centers for displaced communities, along with employing large numbers of local workers<sup>250</sup>.

Senegal is a member of the International Labour Organization and has ratified over thirty of its labor conventions.<sup>251</sup> Along with this, Senegal has implemented many domestic labor laws including maximum working hours, minimum wage, and a minimum working age. The maximum legal working hours in the country are eight hours per day and forty hours per week,<sup>252</sup> the national minimum wage is 209.10 francs per hour (roughly \$1638 USD per year),<sup>253</sup> and the minimum working age is 15 years old for non-harmful work and 18 years old for potentially hazardous work, including mining.<sup>254</sup> The new Mining Code of 2016 also holds mining permit holders legally responsible for compensating landowners and/or communities living on land that will be used for mining.<sup>255</sup> While these laws and regulations are strictly enforced in the formal sector of gold mining, enforcement and regulation within the informal or illegal gold mining sector is practically nonexistent.

There are high rates of women participating in the gold mining industry contributing to roughly 30 percent of all gold miners in the Kedougou region<sup>256</sup> and Senegal has legally recognized women as equal members of society to men.<sup>257</sup> While legal protections for women have been adopted in Senegal, in practice, traditional family values and poor education for girls have kept women from becoming socially and economically independent.<sup>258</sup> Despite legal protections for women and children in Senegal, sexual exploitation and human trafficking are positively linked to gold mining sites and communities. Quickly growing gold mines in the country have created an increasing demand for sex workers, leading to a human trafficking ring taking girls and women from Nigeria and bringing them to Senegalese gold mines.

## Sudan

### **JDI Index Ranking: 2.44**

Sudan has experienced increased violence in the past decade, specifically with South Sudan's secession. With South Sudan claiming the oil industry, Sudan's gold production industry grew. In 2017, the Rapid Armed Forces (RAF) seized control of the mines and became the main source of gold extraction until 2020. In October 2020, the RAF officially handed over the mines to the government, in an effort to mark a new era of peace in Darfur and increase gold revenue for the country.<sup>259</sup>

Sudan's minimum working age is 14, but more than 600 children between ages eight and 12 work in the gold mines. Although the Sudan Labour Code limits work to seven hours per day, work days are based on pre-developed targets and whether they are met.<sup>260</sup> Workers in the mines are not unionized; those who are part of a union face harsh criticism and treatment from the government and other law enforcement agencies.<sup>261</sup> The government seldomly offers compensation and resettlement packages due to misappropriation of funds. Social protection services for miners are deeply underfunded and lack resources and personnel.<sup>262</sup> There are no laws to protect the rights of workers and ensure safety regulations.<sup>263</sup>

Due to consistent conflict, it is challenging to advance the involved parties' goals and agendas in the gold mining sector.<sup>264</sup> Various groups of people are frequently displaced in order to create more land for mining, causing conflicts between militia groups and indigenous people who claim historical rights on lands that hold gold mines.<sup>265</sup> The limited number of women who participate in the industry do not engage in the high-income generating activities and most of Sudan's recent gold rush has been exclusive to men.<sup>266</sup> Women's exposure to sexual violence and exploitation is higher in regions where the concentration of male workers is high.<sup>267</sup> Children as young as 10 are forced to work in the mines where they face inhumane working conditions such as carrying heavy loads, working at night, working in confined spaces, and being exposed to mercury and high temperatures.<sup>268</sup>

There have been high incidences of violence and conflict stemming from the mining industry, particularly from illegal mining practices, worker protests, and disputes over land rights and mineral ownership,<sup>269</sup> which are often along ethnic and tribal lines.<sup>270</sup> Child trafficking and domestic violence is also associated with the gold mining communities.

## Tanzania

### JDI Index Ranking: 4.02

Tanzania is Africa's fourth largest gold producer and has been working to overhaul legislation to better protect and positively impact Tanzanians through the industry in the past few years. The 2017 mining laws were created to bring more profits and protections to Tanzanians in regard to the mining industry, tightening regulations on international investors and mining companies, limiting the amount of outsourcing they can do, and also increasing environmental protections.<sup>271</sup> Tanzania has relatively strong labor laws with a standard minimum working age,<sup>272</sup> maximum working hours, legal protections against forced labor, and legal protections for unions.<sup>273</sup> According to Tanzanian law, any communities displaced by gold mining are due fair compensation, but lack of enforcement renders this law ineffective. In 2013, a community displaced by a gold mine was forced to live in a makeshift refugee camp after its homes were destroyed and it was forced to relocate. Only after a major legal battle did the company, AngloGold Ashanti, build a new village for the displaced community, but they still were not required to compensate the community for their land and property.<sup>274</sup> Along with this, the Tanzanian Mines, Energy, Construction and Allied Workers' Union has stated that there are roughly 6 million informal miners in Tanzania who are not subject to any legal regulations and are often exploited financially, physically, and sexually.<sup>275</sup>



While there are legal protections against child labor, many children in Tanzania work in gold mines. Many of the children who work in Tanzanian gold mines are orphans with no other way to support themselves, leaving them vulnerable to forced labor and sexual exploitation.

Children as young as eight years old work in gold mines, starting on weekends and school breaks, but often leading to the absence of

school altogether in order to work.<sup>276</sup> The Tanzanian government has made efforts to combat child labor by legally banning it, but enforcement is flawed and there isn't enough funding and manpower to conduct necessary inspections of mines to identify and address the problem.<sup>277</sup> Due to a lack of effective law enforcement in gold mines, young girls and women are sexually harassed and forced into sex labor. There have even been reports that the few police and security officers stationed on and around the gold mines have been known to sexually assault women and kill locals who try to access the land that was taken away from them.<sup>278</sup>

## **Uganda**

### **JDI Index Ranking: 3.56**

While Uganda's mining industry contributed to a large portion of the country's GDP in the 20th century, its success has dropped since the start of the 21st century. Uganda has legal regulations and protections that outline the minimum working age,<sup>279</sup> maximum working hours,<sup>280</sup> and rights to form and join unions,<sup>281</sup> but like many other countries, the laws and protections are not properly enforced, especially within the gold mining industry. The Ugandan government's mining sector is full of corruption and exploitation. The government fails to protect gold miners and those affected by gold mines. There are no formal laws guaranteeing resettlement packages or compensation from the government for those affected by gold mining and it is assumed that this responsibility falls to the private mining companies on a case-by-case basis.<sup>282</sup> Due to mining codes in Uganda, indigenous groups are often displaced from their ancestral land because law only requires resettlement and land usage negotiations between license holders and legal land owners.<sup>283</sup>

Women face varying levels of sexual and gender-based violence in the Ugandan gold mining sector. It has been reported that women often are subjected to transactional sex and using sexual acts to negotiate access and pricing. Transactional sex can either be initiated by the man or woman, and sometimes can be a 'coping strategy' by the woman. Reports have also found that often Ugandan police and military officers are complicit in the sexual and gender-based violence that takes place at mining sites. Major complaints from women are the lack of safe spaces and unfair pricing of the gold due to their gender.<sup>284</sup> As of 2017, it is estimated that 20-30 percent of gold miners in Uganda are children, mainly being forced into gold mining in order to financially support themselves or their families.<sup>285</sup> Children participating in the gold mining sector are reported to have lower rates of school attendance, and other "undesired negative social outcomes." With this, the children also face serious

health risks, including mercury poisoning, wounds and infections, and fatal accidents. Child laborers face economic exploitation for their cheap labor and human rights abuses including physical, sexual, and psychological violence.<sup>286</sup>

## » Asia Pacific «



### Indonesia

**JDI Index Ranking: 4.65**

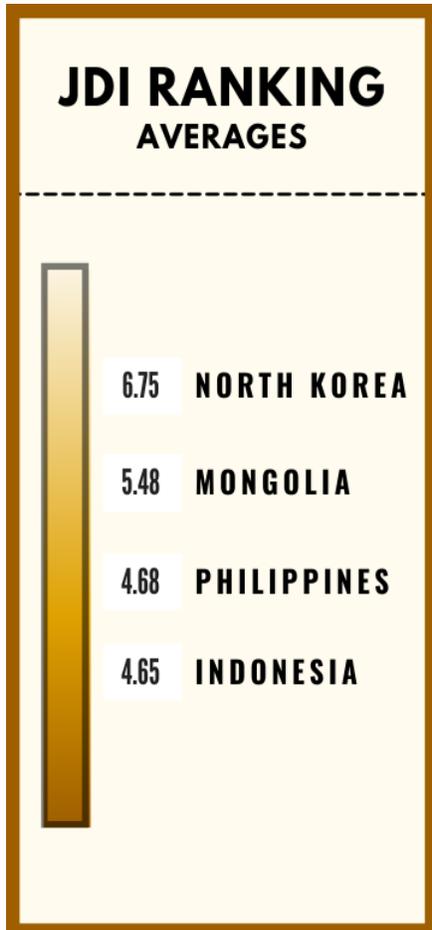
Mining contributes approximately five percent to Indonesia's total GDP, which predominantly consists of gold, tin, and sand.<sup>287</sup> The main areas of improvement remain to be regulation among the ASM mining communities, with high prevalence of illegal mining with little regulation due to the frequent use of bribes to officials, and the continued use of mercury in mining operations.<sup>288</sup> The Indonesian government passed an omnibus bill in 2020 that is widely perceived to

be damaging to laborers' rights as well as environmental protections. The Human Rights Watch commented that this law was "largely drafted by the business community, with little consultation from labor unions and other affected groups."<sup>289</sup> The main changes that came from this bill were less strict regulations on overtime, maximum working hours, and minimum wage, and cause for job termination and severance packages.<sup>290</sup>

Approximately one million children are currently in the mining sector of Indonesia<sup>291</sup> – or 3.7 percent of the population of children from ages 10 to 14 – despite laws stating that the minimum age for work is 15 years old for non-harmful work and 18 years old for hazardous work such as gold mining.<sup>292</sup> In poorer, small mining communities, it is common to bring children to work with the adults in order to be supervised. This set-up typically puts children in positions of mining themselves or working directly with mercury to separate the gold, leading to harmful effects of the substance, such as mercury poisoning.<sup>293</sup> Women who work in the gold mining industry in Indonesia are often tasked with dangerous activities that deal heavily with mercury and other harmful substances. These activities lead to higher mercury levels in women compared to male goldminers.<sup>294</sup> Women also tend to make less money than male counterparts in gold mines as workers are compensated based on the amount of gold they collect and process and most women can only begin to mine after they have taken care of their assumed domestic duties such as childcare and housekeeping.<sup>295</sup>



**Womean Miner in Sumur Mas, Indonesia**  
*Empowering Women Gold Miners in Indonesia. (2019, February 25). Retrieved from <https://www.pureearth.org/blog/helping-women-gold-miners-in-indonesia/>*



## Mongolia

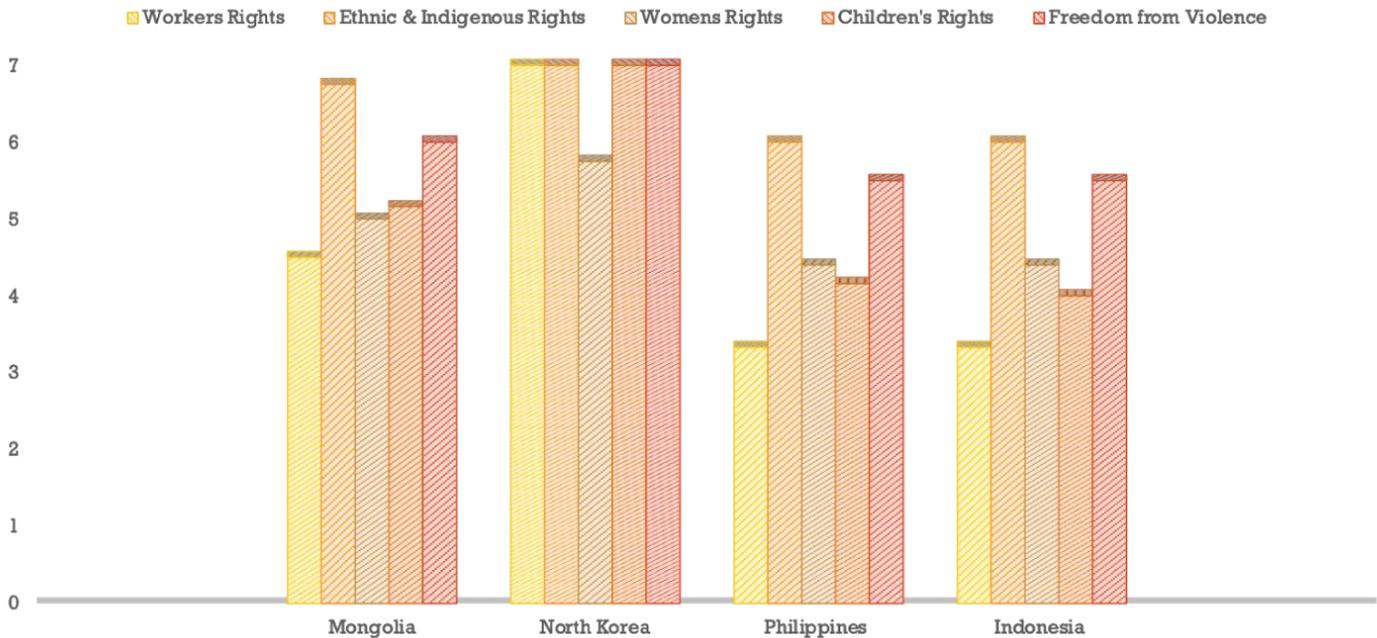
### JDI Index Ranking: 5.48

Mineral mining accounts for 20.6 percent of Mongolia’s GDP, of which gold is the primary mineral mined, and small-scale and artisanal mining accounts for 48 percent of Mongolia’s reserves. While the mining industry is predominantly large-scale, the small-scale sector is highly prevalent, being present in as many as 14 of the country’s 21 provinces, and accounting for 12-20 percent of the rural labor force.<sup>296</sup> Due to the Covid-19 Pandemic, the government has begun to recognize the informal mining sector, adding regulations and legal protections for the workers.<sup>297</sup> Although Mongolia’s Labour Code of 1999 is the most comprehensive set of labor laws in the country, outlining maximum work hours and days, there have been talks about legislative reform specifically for labor rights and laws within the mining industry.<sup>298</sup> The minimum working age in Mongolia is 13 years old for light work, 15 years old for regular work, and 18 years

old for hazardous work such as mining.<sup>299</sup>

Approximately 15-18 percent of Mongolia’s informal miners are children, mostly boys,<sup>300</sup> and the number of child workers tends to double during school breaks. As of 2006, the average age of a child worker was 14, with most children starting at the age of 12.<sup>301</sup> Working conditions for children in gold mines has improved recently as the government works to legalize and regulate small-scale and informal mining by banning the use of mercury and alcohol consumption on mining sites.<sup>302</sup> Alcohol abuse is heavily prevalent in gold mines in Mongolia, mainly to help cope with long cold winters while working in the mines; this habit has shown a connection to increased violence towards children and women in mining communities, although quantifiable cases have not been recorded.<sup>303</sup>

## JEWELRY DEVELOPMENT IMPACT INDEX (JDI): ASIA



### North Korea

#### JDI Index Ranking: 6.75

North Korea is a historically mineral-rich country, with gold mines in Pyongan-do as well as illegal mining efforts on the border of China.<sup>304</sup> Due to the prohibition by the United Nations (UN) of international gold sales from the country, the smuggling of gold into China is a common practice in order to bring foreign currency to the regime. Since North Korea reports no earnings from abroad to appear to abide by imposed sanctions, exact amounts earned are uncertain, but the UN estimated that the regime earns between \$1.2 billion and \$2.3 billion per year abroad.<sup>305</sup> While North Korea technically has labor laws outlined in the Kaesong Industrial Complex IV,<sup>306</sup> they are known to be abused frequently, and it is assumed by the international community that these laws exist only performatively as North Korea is known to rely heavily on forced labor.<sup>307</sup> Based on photographs, it is assumed that mining is typically reserved for men to carry out. Mining labor is primarily reserved for those who have been sent off to prison camps, presumably due to its dangerous nature. There, workers are given little food, little sleep, no access to healthcare, and are often tortured.<sup>308</sup>

The Kaesong Industrial Complex (KIC) labor laws state that the minimum working age is 16, but do not prohibit hazardous work.<sup>309</sup> While children are often forced to work starting from a young age, women and children are not known to work in mines due to their dangerous nature, unless their families have been sent to labor and prison camps.<sup>310</sup> Unfortunately, due to the lack of transparency into the life of North Koreans and the practices of the North Korean government, access to information regarding gold mines and human rights in the country simply does not exist.

## **Philippines**

### **JDI Index Ranking: 4.68**

The Philippine's mining industry accounts for 0.89 percent of the nation's GDP and 5.99 percent of total exports and holds the third largest reserve of gold in the world.<sup>311</sup> The Filipino government has made large efforts to regulate the gold mining industry, but a lack of funding for enforcement and the significant amount of illegal and informal mining taking place in the country has curbed these efforts. The Philippine's Bureau of Labor Relations has a labor code that outlines working conditions, hours of work, minimum working age, employee benefits and the right to unionize and participate in strikes, but these laws cannot fully be enforced outside of the legal/formal gold mining sector.<sup>312</sup> The Filipino government has a mechanism of legalizing artisanal and small-scale mining by classifying mines as *Minahand Biyan* - "People's Mining Areas," which gives the government oversight of said areas, reducing health and safety concerns as well as child labor and human rights abuses.<sup>313</sup> The Philippines has also been a part of the Minamata Convention on Mercury since 2013, although the government has not actually ratified the convention.<sup>314</sup>

Women do not participate in mining as freely and as frequently as men due to Filipino culture and norms which require most women to stay home with their children, carrying the weight of significant responsibilities and unpaid labor. Some women work in support roles within gold mining, such as panning and gold separation, leaving them vulnerable to mercury-related health effects.<sup>315</sup> While men are the largest demographic of gold miners in the Philippines, the International Labour Organization found that in 2011, an estimated 19,000 children work in 45 artisanal and small-scale gold mines in the Philippines.<sup>316</sup> In 2013, the Filipino government has reformed their education system to require 12 years of compulsory education from the original 10,<sup>317</sup> however, roughly one third of the children eligible for school do not attend, leaving room for the worst forms of child labor.<sup>318</sup>

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# ANALYSIS OF IMPACT OF CONFLICT AND VIOLENCE ON HUMAN RIGHTS

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The intrinsic qualities of gold make it appealing for illegal extraction and trafficking: gold holds high value, is easily portable, and largely untraceable. Unlike narcotics, gold itself is not illegal, thus differentiation between legally, informally, and illegally sourced gold is challenging.<sup>319</sup> Artisanal and small-scale mining operations, legal or not, can maintain operations undetected from government authorities. In fact, “gold miners in the informal sector will evaporate the mercury in their homes, which is even more dangerous for them, but they do this to hide it since it is illegal” (Interview with Toby Pomeroy, 2021). The ability for gold to be mined with limited presence of the state, particularly in rural areas, has created lucrative opportunities for criminal gold mining and illegal gold trafficking to flourish.

The gold rush in Central and South America has reignited armed conflict in areas with gold deposits and drug trafficking routes. Colombian armed rebel groups such as the ELN and FARC took control the illicit mining industry in many areas, including in Colombia, Venezuela, and Peru, following disruptions to narcotics trafficking operations due to the “War on Drugs.” The increasing involvement from criminal networks has led to increased risks of environmental damage, economic informality, violence, and conflict in mining areas in Latin American countries.<sup>320</sup> In addition, these areas in Latin America face high levels of human trafficking, sexual exploitation, extortion, and vigilante justice.<sup>321</sup>

In places such as Sudan, Niger, Mali, Nigeria, and the DRC, mining pits are often under the control of armed groups in regions where state control is absent or weak, resulting in an increase of conflict and violence within the community. From the 2012 unearthing of a mineral vein starting from Sudan in the east to Mauritania in the west, the artisanal mining of gold has blossomed, both hurting and benefitting the countries in equal measure.<sup>322</sup> Gold mines provide new revenue sources to the armed factions overseeing mining activity, and in some extreme cases, the revenue reaches jihadists and terror cells. The security situation, in turn, provides the platform for the recruitment of child and women soldiers and laborers to the armed groups. There is a strong relationship between transnational crime and violence resulting from gold mining. With the increased involvement of informal smuggling networks, it is difficult to fight the groups controlling mining areas.



**A Gold Mine in the Democratic Republic of Congo**

*Monks, K. (2018, January 02). Why the wealth of Africa does not make Africans wealthy. Retrieved from <https://www.cnn.com/2016/04/18/africa/looting-machine-tom-burgis-africa/index.html>*

Governments are experiencing severe difficulties safeguarding and securing mines in the gold mining regions, with security forces reluctant to deploy to remote and rural areas where they lack of resources. In many African countries, security presence is under constant contest from the armed 'custodians' of the mining pits. As a result, some nations have decided to tolerate – as well as encourage – the establishment of local armed militias. These militias are then informally delegated mine responsibility by the governments. Measures of such extreme action have been proven to hold significant limitations, such as compromising the authority of the state in the mining regions, further limiting the capability of the involved governments to regulate mining areas.<sup>323</sup> In some Latin American countries, governmental authorities are aware of the illegal mining activities and even participate by collecting bribes and engaging with criminal networks to finance operations and remain in power.<sup>324</sup> Venezuela relies on the illicit gold trade to support the Maduro regime. Similarly, due to the prohibition by the UN of international gold sales from the country, North Korea relies on gold smuggling into China in order to bring foreign currency to the regime. This lack of governmental authority – and in some cases, involvement – enables terrorists, criminal networks, and corrupt state enterprises to dominate the gold trade.

In countries involving armed conflict and gold mines, women are at risk of economic or sexual exploitation, trafficking, coerced pregnancies, sexual slavery, systemic rape, land and home displacement, and kidnapping. Victims include migrants, seekers of asylum, and refugees. Despite efforts made by human rights movements to focus on international women's development over several years, girls and women worldwide are still being married at young ages or trafficked into sex and labor slavery in and around gold mining sites. Deaths related to childbirth and pregnancy are high, particularly due to mercury in small-scale mining areas, with women prevented from participating in making personal choices in their lives.

The ongoing terrorist activities within the gold mining regions enable illegal activity undetected or ignored by governments. Mali is experiencing a gold rush in the north where extremists linked to al-Qaeda are active, raising concern that the primary beneficiaries of artisanal and small-scale gold mining might be benefiting the extremists and not the local community economy. Sudan has experienced conflict between rival militias over control of artisanal gold mines, where 800 people were killed in Darfur's Jebel Amer gold mines at the hands of different armed groups. In Niger, the gold rush has created security incidents, including an increase in burglary, civil strife, and occasional clashes with Algeria. The ELN, FARC, and FARC factions are increasing their control as they expand their networks and operations into drug trafficking routes through Central and South America. Indicators are clear: without proper governmental regulation of gold mining, criminal and extremist networks will increase conflict and violence in mining regions, furthering violations of human rights.

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## JDI INDEX RECOMMENDATIONS

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The research team determined the following recommendations to improve the Jewelry Development Impact (JDI) index's usability, accuracy of the rating produced by the methodology, and consistency:

1. *Include clarifying information.* Definitions of terms, specific ways to measure answers, and guidelines for analyzing and scoring data so that the index can be used by multiple parties and researchers will produce more consistent results and eliminate rankings subject to interpretation.
2. *Reword the reverse-scoring questions.* Modifying the wording for reverse-scored questions to create uniformity throughout the questionnaire will aid the methodology as a whole, avoid confusion, and make the index more user-friendly.
3. *Revise the Likert Scale.* Changing the Likert scale from seven to five points and associating percentages will eliminate the vagaries associated with qualitative language.
4. *Incorporate questions to account for illegal mining.* The index is designed to account for legal mining sector laws; however, informal and illegal mining contributes greatly to the gold mining sector with the majority of human rights violations occurring within the parameters of the informal and illegal sector. Incorporating questions that go beyond legal ratifications and the existence of laws will take into account the actual enforcement or success of said laws, creating a more accurate mechanism to measure a country's ranking.

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# RECOMMENDATIONS FOR ZAHABU SAFI PROJECT

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The Democratic Republic of Congo has been a site of conflict and political instability for years. The United States Agency for International Development (USAID) and other international non-governmental organizations (INGOs) have implemented numerous projects in the DRC to work towards peace and stability in the state. The USAID project, Commercially Viable Conflict-Free Gold Project (CVCFG), is commonly referred to as Zahabu Safi, which means ‘clean gold.’ The project aims to promote demand for gold from conflict-free artisanal and small-scale gold mining (ASGM) operations by formal companies and partners in the jewelry industry, with the goal that increased responsible gold exports will lead to positive growth for DRC’s economy. The project began in December 2018 with an \$11.9 million budget which extends into 2023. USAID has partnered with Levin Sources, Global Communities, and Better Chain to achieve the program outcomes and implement due diligence and transparency initiatives. As of April 2021, the Zahabu Safi project has made progress towards its goals, producing various reports and industry partnerships to strengthen ASGM investments.<sup>325</sup> However, human rights violations, conflict, and violence in DRC gold mining communities are still serious concerns, requiring more focus and work.

The scores and findings from the human rights categories of the JDI Index for the DRC can provide recommendations for the Zahabu Safi project on reducing conflict and violence in DRC’s gold mining sector. Research found the DRC to have a low JDI Index ranking for human rights, with women and children severely affected by the gold mining sector in a negative way. Corruption, armed violence, and economic exploitation are common forms of daily conflict within the gold mining areas. This information must be used to continue support and mutual learning for achieving project goals and working to improve the mining industry.

Firstly, Zahabu Safi has created a detailed methodology for selecting gold mining sites to implement project objectives. However, there are shortcomings to the selection process. The process takes into account the security, human rights, civil society, and six other performance indicators. Sites receive scores based on these indicators, therefore sites with violations will be passed over.<sup>326</sup> It is recommended that when selecting mining sites for the project, sites with known human rights violations should not be excluded. Instead, this is an opportunity to provide the mining site with

resources and assistance to address violations and reduce violence. Zahabu Safi will not always be able to help, however, through information sharing and collaboration with the other numerous INGOs in the region, positive progress can be made to work toward finding viable solutions.

Secondly, particularly because the Zahabu Safi team has expressed intent for better data collection,<sup>327</sup> we recommend an intersectional approach to the process. Intersectional data will allow for a better understanding of the realities, needs, and opportunities for vulnerable populations in the gold industry. Communication and active listening with local civilians, especially the most vulnerable, will be necessary for robust data collection. As mentioned above, we recommend that USAID and its partners implement data sharing with other organizations working on these issues for project transparency and to allow those organizations to fill possible programming gaps in the region with better data collection. With numerous organizations working in DRC, data sharing will benefit all stakeholders.

Thirdly, Zahabu Safi has identified the needs and concerns of buyers and participants in the jewelry industry and is working to better educate the sector about the realities of gold mining in the DRC.<sup>328</sup> We recommend strengthening these education initiatives and placing emphasis on women, children, and other vulnerable populations. These education initiatives should also utilize miners' and other locals' voices, giving them a platform to share their experiences. The initiatives should incorporate the JDI Index findings and other forms of data, to provide concerned gold buyers with information to partner with Zahabu Safi for long-term progress and solutions.

Lastly, as the COVID pandemic continues and associated data is collected, we strongly recommend and urge the Zahabu Safi team to continue to incorporate these findings into the project. The COVID pandemic has had adverse outcomes on the DRC conflict and human rights<sup>329</sup>; continued focus and monitoring of the health situation related to gold mining in DRC should be a high priority for Zahabu Safi.

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## CONCLUSION

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Based on the findings of the 24 profiled countries presented above, overall, the gold mining industry increases human rights violations and the propensity for conflict. The differences in findings between the countries varied based on length of established gold mining sectors, cultural norms, and recent conflicts, yet distinct trends were observed to draw these conclusions.

All 24 countries have laws which mandate a limit on working hours to protect gold mining workers. Despite this, findings indicate that work days in the gold mining industry vary from eight to 14 hours. Many gold miners lack access to social protections, particularly when they work in the artisanal and small-scale mining sector. Few of the profiled countries provide compensation, resettlement, and relocation programs to individuals affected by the mining activities. Mercury and cyanide pollution from small-scale mining have negative health and safety risks for all workers, and most governments fail to address these risks to protect workers.

The biggest and most common issues indigenous people face from the gold mining industry are land expropriation and forced relocation due to new mining sites. Rarely do indigenous people receive adequate compensation from their displacement. Often, indigenous people are formally and informally barred from employment in the gold mining industry. Sometimes, they are subjugated to forced labor. Gold mining has also impacted agriculture, affecting indigenous groups in several of the profiled countries. In few countries, indigenous people have protested new mining sites on ancestral lands with success, but this is not the norm.

Gender inequalities are prevalent for all of the profiled countries. Women rarely benefit from the gold mining sector compared to men, earning significantly lower wages. Women are often relegated to domestic work, such as cooking or cleaning at the mining sites, or using mercury to separate the gold. Women often have to bring their children to work because they lack childcare. Furthermore, women in all 24 countries are subjected to physical or sexual violence. Prostitution and sex trafficking is widespread at all gold mining sites in all profiled countries. In some countries, women face stereotypes, superstitions, and taboos related to gender.

Several of the profiled countries have ratified international conventions concerning child labor, yet child labor is frequent in each country. Children are often sold into slavery, used for forced labor, or trafficked. Children are exposed to health threats in the mines, including mercury, which

can harm children's brain development. Children who work in the gold mining sector are reported to have lower rates of school attendance. Several of the profiled governments have made efforts to combat child labor, but enforcement is flawed, funding is limited, and manpower is difficult to obtain to conduct necessary inspections of mines to identify and address these problems.

There is a strong connection between human trafficking, sex slavery, and forced labor in gold mining. In the profiled Western Hemisphere and African countries, armed militias and cartels exploit governance gaps at mining sites. As discussed in the Analysis of Impact of Conflict and Violence on Human Rights section, without proper governmental regulation of gold mining, criminal and extremist networks will increase conflict and violence in mining regions, furthering violations of human rights.

While the most severe human rights violations are associated with informal and illegal small-scale artisanal mining, the JDI index exposes human rights abuses that are likely to occur in the gold mining industry writ large. Furthermore, although large scale mining tends to have more protections in place to reduce human rights violations, artisanal and small-scale gold mining plays a significant role in the livelihoods of many populations. Therefore, inclusion of legal and illegal small-scale artisanal gold mining is necessary to make JDI index determinations regarding human rights impacts to better inform the global jewelry industry and to promote ethical practices regarding resource extraction, product manufacturing, and merchandise distribution.

# APPENDICES

## Appendix I: 24 Country Rankings

Country	Workers' Rights	Ethnic/Indigenous Rights	Women's Rights	Children's Rights	Freedom from Violence	Total
DPRK	7.00	7.00	5.75	7.00	7.00	<b>6.75</b>
Mongolia	4.50	6.75	5.00	5.17	6.00	<b>5.48</b>
Ghana	6.33	6.00	4.20	4.17	4.40	<b>5.02</b>
Philippines	3.33	6.00	4.40	4.17	5.50	<b>4.68</b>
Indonesia	3.33	6.00	4.40	4.00	5.50	<b>4.65</b>
Kenya	5.67	5.00	4.00	4.00	4.60	<b>4.65</b>
Burkina Faso	3.83	6.50	2.60	3.67	6.00	<b>4.52</b>
Senegal	5.67	5.25	3.60	3.60	4.50	<b>4.52</b>
Guinea	5.50	4.50	4.00	3.50	4.40	<b>4.38</b>
Bolivia	6.40	5.75	3.40	2.50	2.50	<b>4.11</b>
Tanzania	5.17	5.33	4.40	3.20	2.00	<b>4.02</b>
Ethiopia	3.67	5.75	4.00	3.40	3.00	<b>3.96</b>
Mali	5.33	4.00	3.40	3.83	2.60	<b>3.83</b>
Uganda	3.67	4.75	2.20	3.17	4.00	<b>3.56</b>
DRC	3.83	4.75	2.20	3.00	3.50	<b>3.46</b>
Nigeria	5.00	3.00	2.40	2.83	2.40	<b>3.13</b>
Niger	3.50	3.75	2.80	2.67	2.60	<b>3.06</b>
Suriname	2.83	5.75	1.67	1.67	3.25	<b>3.03</b>
Nicaragua	5.00	1.00	3.75	3.40	4.00	<b>2.63</b>
Ecuador	5.33	1.50	1.40	3.00	1.75	<b>2.60</b>
Colombia	5.50	2.00	1.00	2.67	1.75	<b>2.58</b>
Sudan	2.83	2.50	2.00	2.67	2.20	<b>2.44</b>
Peru	4.20	1.00	1.00	2.50	2.25	<b>2.19</b>
Venezuela	3.00	1.25	1.00	2.50	1.00	<b>1.75</b>

## Appendix II: Scope of Work\*

### AMERICAN UNIVERSITY SCOPE OF WORK FOR RESEARCH TO BENEFIT THE PUBLIC PRIVATE ALLIANCE FOR RESPONSIBLE MINERALS TRADE (PPA)

PPA GOVERNANCE COMMITTEE MEMBERS, U.S. DEPARTMENT OF LABOR/ BUREAU  
OF INTERNATIONAL LABOR RELATIONS (DOL/ILAB), USAID, AND THE UNIVERSITY  
OF DELAWARE (UD)'s *Minerals, Materials and Society* (MMS) Program  
A RESEARCH PROJECT ON GLOBAL GOLD SOURCES  
TO INFORM THE JEWELRY DEVELOPMENT IMPACT INDEX  
SPRING 2021

In collaboration with the Governance Committee (GC) members of the Public Private Alliance for Responsible Minerals Trade ([PPA](#)): DOL/ILAB, USAID, UD's MMS program and other GC members, and American University (AU), AU graduate students in the International Peace and Conflict Resolution program will conduct a research project to focus on human and labor rights and conflict-related impacts of gold mining on countries under DOL's List of Goods Produced by Child Labor or Forced Labor ([TVPRA list](#)), via the Human Rights category ranking rubric of the [Jewelry Development Impact Index](#) (JDI). The JDI is an ongoing project to give consumers, investors, and a range of stakeholders in government and industry a comparative ranking of material origin sites for jewelry. The JDI rubric has developed through the input of graduate students at American University over the past seven semesters. Students in the current semester will be asked to use that rubric to gather additional data from secondary research on the 24 gold mining origin locations on the priority list from the U.S. Department of Labor's ILAB:

Country/Area	Good	Child Labor	Forced Labor
Bolivia	Gold	X	
Burkina Faso	Gold	X	X
Colombia	Gold	X	
Democratic Republic of the Congo (DRC)	Gold	X	X
Ecuador	Gold	X	
Ethiopia	Gold	X	
Ghana	Gold	X	
Guinea	Gold	X	
Indonesia	Gold	X	
Kenya	Gold	X	
Mali	Gold	X	
Mongolia	Gold	X	
Nicaragua	Gold	X	
Niger	Gold	X	
Nigeria	Gold	X	
North Korea	Gold		X
Peru	Gold	X	X
Philippines	Gold	X	

Senegal	Gold	X	
Sudan	Gold	X	
Suriname	Gold	X	
Tanzania	Gold	X	
Uganda	Gold	X	
Venezuela	Gold		X

Research will include the following: a review of the TVPRA list’s bibliography, articles, indices, and online reports related to human and labor rights violations and compliance metrics; interaction with USAID’s gold project in the DRC, *Zahabu Safi* and review of research documents generated by the project; and interviews with stakeholders to inform the ranking. Existing indices such as the [Natural Resource Governance Index](#), the [Universal Human Rights Index](#) from the United Nations, the [World Bank’s Delve database](#), and the [Verité Responsible Sourcing Tool](#) can be used as a starting point, but sharper information on the gold sector itself will be required. Students will utilize the JDI scoring mechanism to determine the ranking for each country (attached).

The project will be guided by PPA’s GC members DOL/ILAB, USAID, Global Communities, UD’s MMS program, and possibly additional PPA GC members. The proposed research project is in line with the 2021 PPA priorities regarding data collection and information sharing and can contribute to achieving expected outcomes and sub-outcomes included in the PPA’s results framework. PPA members who participate in this initiative will:

- Provide input on the research project’s methodology and sources of information for desk review or interviews.
- Participate in check-ins with AU graduate students to learn about the progress of their research.
- Participate in a discussion with AU graduate students on research findings.

**Expected deliverables of the AU researchers are:**

- A ranking of the countries utilizing the JDI methodology scoring/rubric for the Human Rights category, including labor rights.
- An analysis of the impact that conflict and violence have on the Human Rights categories covered within this project.
- Specific recommendations to USAID/Global Communities *Zahabu Safi* team to reduce conflict and scale responsible gold exports from the DRC.
- Specific recommendations to improve the JDI scoring mechanism to enhance analysis of conflict-affected factors in the scoring rubric.
- A PPT presentation/synopsis (maximum 45-minute presentation plus 15 minute Q&A) of their research results to PPA members and DOL/ILAB, USAID and UD guests.
- A detailed written report, including an executive summary of research results and appendices of resources, questions, and other indices and resources utilized.

**\*Scope of work document was initially developed by Professor Gregorian, University of Delaware, and DOL/ILAB.**

## Appendix III: JDI Index Human Rights Category Questions\*

### Worker's Rights

1. Is there a minimum working age in the industry?
2. Is there a limit of working hours in the industry?
3. Are workers unionized and/or have they organized strikes collectively?
4. Does the government provide compensation and resettlement packages as prescribed in the law to individuals/families affected by mining?
5. Do workers have any access to social protections, i.e., social insurance, assistance, safety nets?
6. Do the workers have legal protections from the government?

### Indigenous / Ethnic Group Rights

1. *Is indigenous and /or ethnic groups' ability to maintain and practice their culture negatively affected and or inhibited by the presence of operations of the industry?*
2. *Are certain ethnic and/or indigenous groups excluded from participating in the industry?*
3. *Are indigenous and/or ethnic groups being displaced from their land by the industry?*
4. *Are indigenous and/or ethnic groups barred from employment in this industry, formally and informally?*

### Women's Rights

1. Are women able to participate in this industry equally to men?
2. Do women receive economic benefits from this industry equal to men, e.g., in terms of wages or resettlement compensations?
3. Are women free from violence in association with the industry?
4. Are women able to profit from the industry independently of men?
5. *Are women/girls sexually exploited in direct or indirect connection, e.g., concentrated presence of miners in mining towns, within the industry?*

### Children's Rights

1. *Are children subject to forced labor in the industry?*
2. *Are children denied education because of this industry?*
3. *Are children's health or mental well-being threatened in some way because of this industry?*
4. Does the government have laws to protect children's rights in general and/or specific to the industry?
5. *Are children's physical rights violated because of the industry? (including harmful practices based on tradition, culture, religion, or superstition)*
6. *Are children sexually exploited in direct or indirect connection to the industry?*

## **Freedom from Violence**

1. *Has violence/conflict emerged as the result of the industry, e.g., from worker protests, illegal mining, etc.?*
2. *Has human trafficking increased as the result of this industry?*
3. *Has domestic violence increased as the result of this industry, e.g., as a result of male miner's behavior at home and with 'hot money'?*
4. *Do communities in or around industry mining sites feel less secure?*
5. *Does the government actively intervene to prevent or mitigate violence resulting from the presence of the industry?*

\*Copy of questions that were created by and shared by the University of Delaware's Minerals, Materials, and Society Program

\*\* The reversed questions are italicized for reference

## Appendix IV: Methodology Breakdown

### 7-Point Likert Scale

0	1	2	3	4	5	6	7
Not Applicable	Never (none)	Rarely (very rare)	Occasionally (rare)	Average	Frequently (few)	Very Frequently (some)	Always (many)
N/A	0% of the time*	≤ 20%	21% - 40%	41% - 59%	60% - 79%	≥ 80%	100%

\*These percentages were created by the AU research team with guidance and support from the JDI Index officials. It was decided these percentages were needed for clarification and to ensure all researchers are scoring on the same scale as not to skew any results.

## Appendix V: Interviews

### **Interviews conducted via phone\*:**

Mathew Chambers, Chairman of Chambers Federation

- Conducted by Sarah Al Hasawi on April 4, 2021

Toby Pomeroy, Mercury Free Mining

- Conducted by Caroline Villegas on March 15, 2021

Guillaume de Brier, IPIS

- Conducted by Darren Villalobos on March 11, 2021

### **Responses to Survey Monkey form\*:**

Comfort Odor, Beyond Conflict UK on March 18, 2021

Oumar Yelemou, United Nations on March 24, 2021

Sasha Lezhnev, The Sentry

*\*Interview and survey questions were the 26 JDI Index Human Rights Category questions found in Appendix III*

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