



**Curses, problems, and challenges for local communities that must be resolved urgently as a result of illegal gold mining in Kachin State**



## **Abbreviations**

<b>KIA</b>	- <b>Kachin Independent Army</b>
<b>ERO</b>	- <b>Ethnic Revolution Organization</b>
<b>MRW</b>	- <b>Myanmar Resources Watch</b>
<b>NLD</b>	- <b>National League for Democracy</b>

## List of Figures

Figure (1)	Illegal Gold Mining in Ayeyarwaddy River (Waingmaw) .....	5
Figure (2)	Small-scale Gold Mining in Ayeyarwaddy River (Waingmaw) .....	6
Figure (3)	Illegal Gold Mining in Ayeyarwaddy River (Ka Tat Kyune).....	7
Figure (4)	Illegal Gold Mining with Heavy Machinery in the Ayeyarwaddy River .....	8
Figure (5)	Archives in Ayeyarwaddy River .....	9
Figure (6)	Companies affiliated with U Yau Zau Hkawng .....	10
Figure (7)	Age Ranges of Respondents .....	11
Figure (8)	Male/ Female Response Ratio .....	11
Figure (9)	Literacy level of the Respondents .....	12
Figure (10)	Gold Mining Experience of the Respondents .....	13
Figure (11)	Gold Mining with Heavy Machinery in the Ayeyarwaddy River in Kachin State .....	13
Figure (12)	Authorities and Beneficiaries from Illegal Gold Mining .....	14
Figure (13)	Illegal Gold Mining in Ayeyarwaddy River .....	16
Figure (14)	Illegal Gold Mining in the Mai Kha River .....	17
Figure (15)	Illegal Gold Mining in the Mali Kha River .....	17
Figure (16)	Illegal Gold Mining in the middle of the Ayeyarwaddy River near Myitkyina .....	18
Figure (17)	Comparison Map of Mai Kha River in 2013 and 2023 .....	20
Figure (18)	Comparison of Mercury Concentration in water samples .....	21
Figure (19)	Comparison of Lead Concentration in water samples .....	22
Figure (20)	Comparison of Cadmium Concentration in water samples .....	23
Figure (21)	Comparison of Manganese Concentration in water samples .....	24
Figure (22)	Comparison of P <sup>H</sup> level in water samples (Standard level 6.5-8.5 S.U) .....	25
	(NB. Water in the red areas is acidic)	
Figure (23)	Comparison of Turbidity level in water samples (Standard level ≤ 5FAU) .....	25
	(NB. The water in the red coloured number areas has turbidity)	

## Table of Contents

<i>Abbreviations</i> .....	<b>2</b>
<i>List of Figures</i> .....	<b>3</b>
<i>Executive Summary</i> .....	<b>5</b>
<b>1. Background</b> .....	<b>8</b>
<b>2. Objectives</b> .....	<b>10</b>
<b>3. Study Area, Demographic data of the respondents, Methodology, and Collected Data</b>	<b>10</b>
<b>4. Findings</b> .....	<b>13</b>
<b>(a) Places where Illegal Gold Mining is carried out</b> .....	<b>13</b>
<b>(b) Beneficiaries who permit and profit from Local Gold Mining</b> .....	<b>14</b>
<b>(c) Profit Taking Plan and Fee rate</b> .....	<b>14</b>
<b>(d) Accountability</b> .....	<b>15</b>
<b>(e) Private Business engaged in Legal Gold Mining</b> .....	<b>15</b>
<b>(f) Working Conditions of Workers in Gold Mining</b> .....	<b>17</b>
<b>(g) Local People’s Impacts and losses due to Illegal Gold Mining</b> .....	<b>19</b>
<b>(h) Heavy Metals concentration in Mai Kha, Mali Kha and the Ayeyarwaddy Rivers</b> .....	<b>21</b>
<b>5. Recommendations</b> .....	<b>26</b>

## Executive Summary

In this report, Myanmar Resources Watch (MRW) analysed the illegal and unethical gold mining, beneficiaries of such mining, organizations and stakeholders involved in those mining and environmental and social impacts of illegal gold mining in Kachin State during the military coup.

Illegal gold mining in Chipwi Township, Kachin State, has caused severe and devastating environmental damage. After the military coup in 2021, gold mining increased dramatically, destroying rainforests and changing the May Kha River flow. The local ecosystem has also suffered significant damage. Locals claimed that the current destruction includes not only forests but also agricultural lands, pastures, and streams and that the impact is worse than in prior years. The worst-case scenario involves large-scale illegal gold mining at the confluence of the May Kha and Mali Kha rivers, which is a symbol of the Kachin state and a holy site for the Kachin people. JADE LAND company, controlled by Yau Zau Hkawng, a Khami Khamet (the connection between parents of a married couple) of SAC Kachin State Chief Minister Khet Htein Nan, is currently the largest illegal gold mining company at the convergence of the May Kha and Mali Kha rivers in Myitsone.



**Figure 1: Illegal Gold Mining in Ayeyarwaddy River (Waingmaw)**

The SAC army, SAC government departments, local ethnic armed organizations such as the KIA (The Kachin Independent Army), border guards, people militia, and those in charge of community administration all have earnings from gold mining permits. These organizations collected money or gold from mining companies on an annual or monthly basis. The fees are set based on gold production, extraction location, and machinery utilization, and the

person in charge of the extraction site collects the fees first before transferring them to the organizations via the village heads. The charge ranges from 50,000 to 600,000 MMK per month, and in some cases, nga mutha (8.16466 g) gold in kind is paid as a fee. Following the military coup in 2021, it was discovered that Chinese-owned companies began illegal gold mining along the Ayeywaddy River using heavy machinery and backhoe loaders. Some businessmen bought horticultural (garden) land from locals and mined gold there. Illegal gold mining is carried out by both migrants and local people, with the majority of migrant workers involved in mechanized mining. In manual gold mining, men miners make up the majority of the workforce, whereas female workers are scarce. The children, ages 8 and 15, also mined gold manually.



**Figure 2: Small-scale Gold Mining in Ayeyarwaddy River (Waingmaw)**

Illegal gold mining has a negative impact on the environment of Kachin state, affecting the ecosystem and resulting in the destruction of wildlife and a decline in the population of wildlife species. Rising temperatures and temperature imbalances (the disruption of the heat-cold balance) are negative consequences of environmental degradation, which is causing significant climate change. Climate change is causing droughts and seasonal heavy rains in communities nearby, exacerbating existing challenging situations. Gold mining has had an impact on the community's stability, resulting in disputes and conflicts between workers and local communities. Gold mining has negative effects on the socio-economic of local people such as increasing numbers of drug users, increase in theft and robbery cases, feeling insecure by women, some of the school-age children dropping out the school and going

to gold mining either to support their families or voluntarily to spend more money, some of these children become drug users at a young age, increased drug selling and utilizing in mining sites and some young married women suffer from the destruction of their marriages because of their drug addicted spouses (divorced or widowed).

The immediate and visible implications of the inundation of large holes on locals are obvious, including the deaths of children and cattle, as well as the loss of farmland and houses along the Ayeyarwaddy River. Mercury, lead, cadmium, and manganese concentrations have been discovered in the Mai Kha, Mali Kha, and Ayeyarwaddy rivers, endangering both aquatic ecosystems and posing health risks to communities that rely on these water resources, including neurotoxicity, kidney toxicity, developmental problems in children, and long-term health problems for adults.

This executive summary highlights the importance of institutions that can intervene to address the environmental damage caused by illegal gold mining, emphasizes the urgent need for sustainable practices, and encourages private and international media to monitor and expose illegal gold mining to the public.



**Figure 3: Illegal Gold Mining in Ayeyarwaddy River (Ka Tat Kyune)**

## 1. Background

The gold mining operation in Myanmar's mining sector dates back to the days of ancient Burmese kings and is currently widely practiced in most regions of the country. In Myanmar, gold is mined using two methods: underground and open pits. The latter is a common system.<sup>1</sup> Lately, there has been excavation in rivers, streams, and lakes, as well as excessive mining in the Ayeyarwaddy and Chindwin rivers.

Illegal mining can be small-scale or large-scale. The majority of mining enterprises operate illegally, with gold mining being the largest illegal industry. For years, the Myanmar government has been unable to manage illegal gold mining, resulting in significant tax revenue losses and damage to the environment.

According to private media reports and self-reports by locals and civil society organizations, illegal gold mining in all gold-producing areas of Myanmar has increased dramatically since the military coup in 2021. MRW (Myanmar Resources Watch) conducted ground checks in Kachin state and collected information to obtain more accurate data. To record the increase in illegal gold mining during the military coup, MRW gathered information regarding those who benefited from this activity, organizations, and the damages caused by illegal gold mining.



**Figure 4: Illegal Gold Mining with Heavy Machinery in the Ayeyarwady River**

<sup>1</sup>VOA – A Glimpse of Myanmar Gold Mining (1,2) (19 February 2018)



Small-scale (manual) gold mining has long been practiced by local ethnic groups in Kachin State. To supplement their income during the off-season (when they were not farming or doing agricultural work), locals would dig for gold by hand on the banks of the Ayeyarawaddy, Mai Kha, and Mali Kha rivers. Manual gold mining did not harm the environment, and the locals could benefit from the resource as it provided them with additional income.

However, around 1990, gold mining in Kachin State was carried out with heavy machinery and gold rafts, resulting in the loss of land and grazing areas for local communities, catastrophic damage to the environment and ecosystems, and threats to local people's socioeconomic status. In addition, manual gold mining, which provided an additional source of income for locals, has disappeared since then. Since then, the indigenous people of Kachin State have suffered from the resource curse. The NLD government tried to eliminate illegal gold mining in Kachin State, but only a small percentage of mining could be managed, and the remainder was completely uncontrolled.

After the military coup in 2021, illegal gold mining has increased in all areas of Kachin State. Armed organizations in the region, including the SAC military, have approved and collected money from these activities, allowing gold miners to dig without regard for anything. There is no way to compensate local residents who live in illegal gold mining regions and are suffering from the consequences of widespread gold mining.



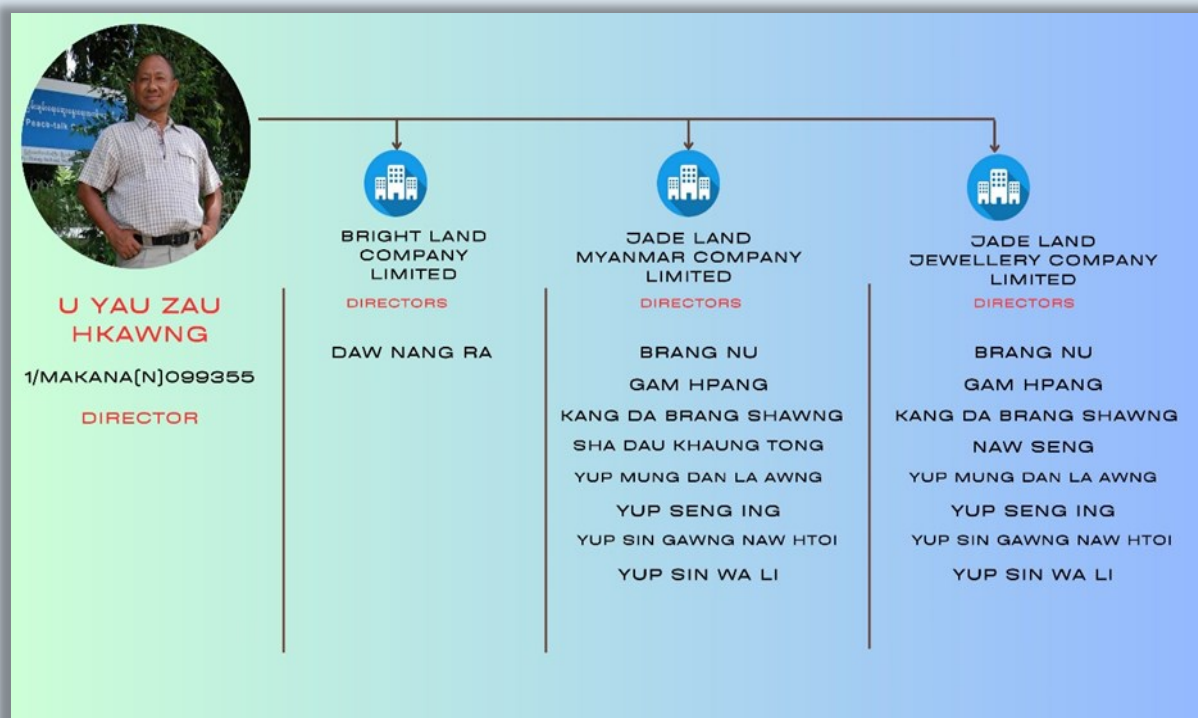
**Figure 5: Archives in Ayeyarwaddy River**

## 2. Objectives

- (a) To investigate illegal gold mining circumstances and miners during the military takeover.
- (b) To identify organizations and individuals who allow illegal gold mining and benefit from it.
- (c) To analyse the environmental and socioeconomic impacts of illegal gold mining in the local community.
- (d) To examine the living conditions of local gold miners who work manually.
- (e) To identify the causes and beneficiaries of illegal gold mining during the military coup, as well as the resulting tensions in local communities, and to propose a collaborative solution to these issues.

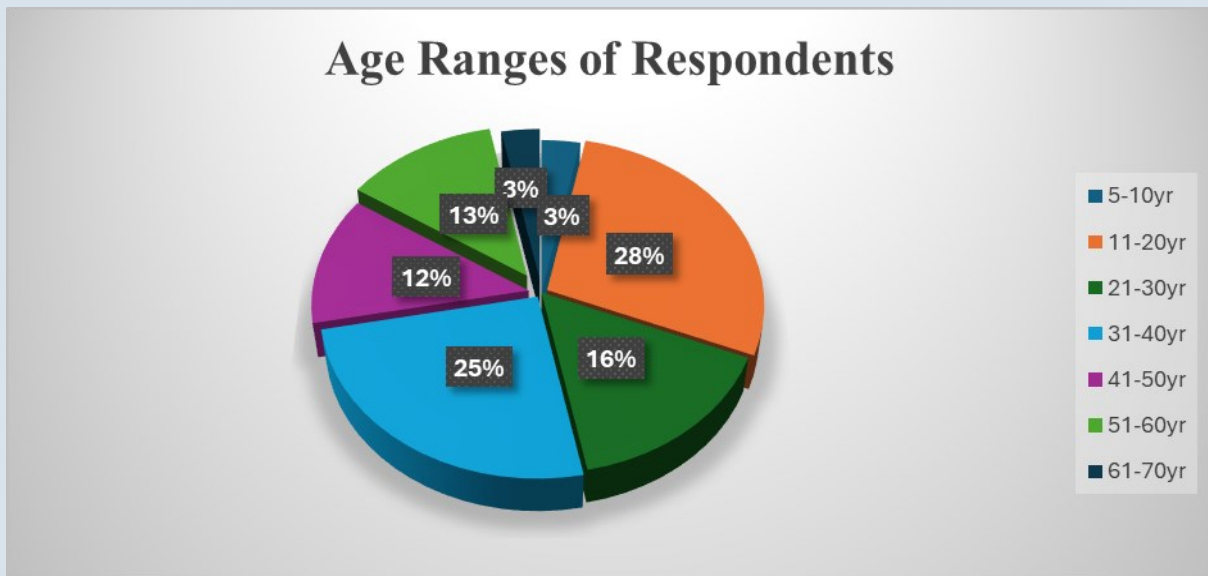
## 3. Study Area, Demographic data of the respondents, Methodology, and Collected Data

This report's data was gathered from 32 respondents who worked in gold mining companies, small-scale gold mining businessmen, artisanal miners (with Honda or Manual) along the Ayeywaddy River, Mai Kha and Mali Kha Rivers, and Myitsone in Myitkyina, Waingmaw, Bhamo, and Chipwi townships, as well as workers (salary and daily wages) and locals from these regions. Due to security concerns, MRW was unable to conduct interviews, visit workplaces, or collect records at U Yau Zau Hkawng and Chinese business sites. We were only able to record statements from adjacent residents.

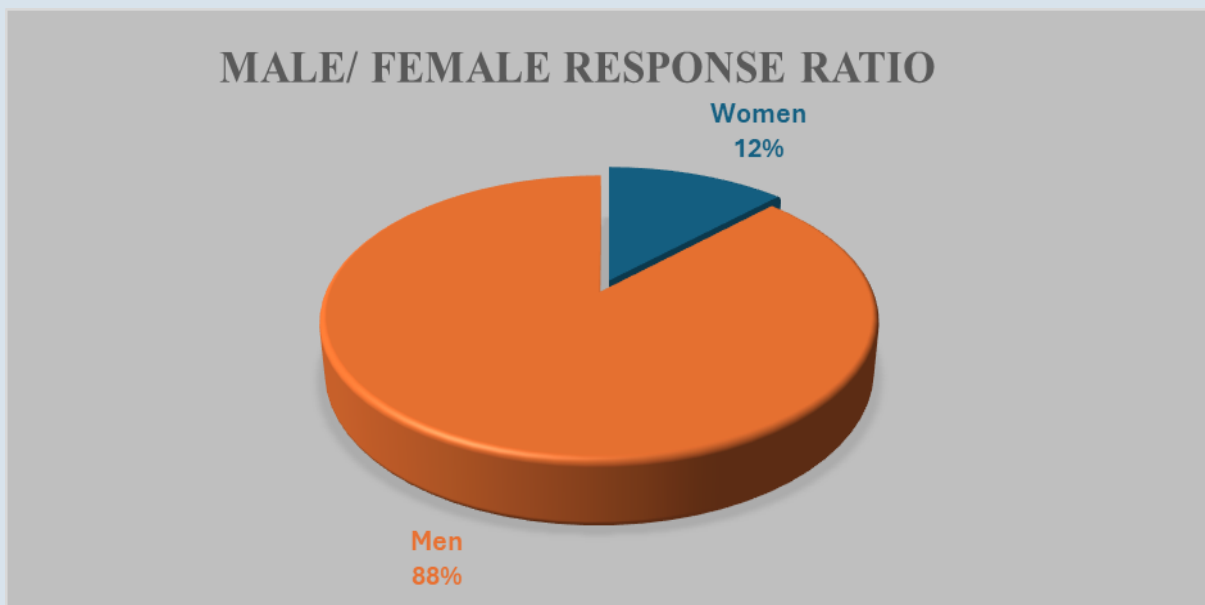


**Figure 6: Companies affiliated with U Yau Zau Hkawng**

Businessmen were asked about mining situations, profit and loss, type of machinery, the number of workers, and tax payment methods (extorted money), while workers were asked about wages, working hours, education, health, and social issues. The questions were asked to one worker aged 5 to 10, nine workers aged 11 to 20, five workers aged 21 to 30, eight workers aged 31 to 40, four workers aged 41 to 50, four workers aged 51 to 60, and one worker aged 61 to 70 years old. There were four female respondents, and 28 male respondents, and female involvement was just 12% of the total. Interviews with residents in this area provided information about the impact of mining on the environment and social life.

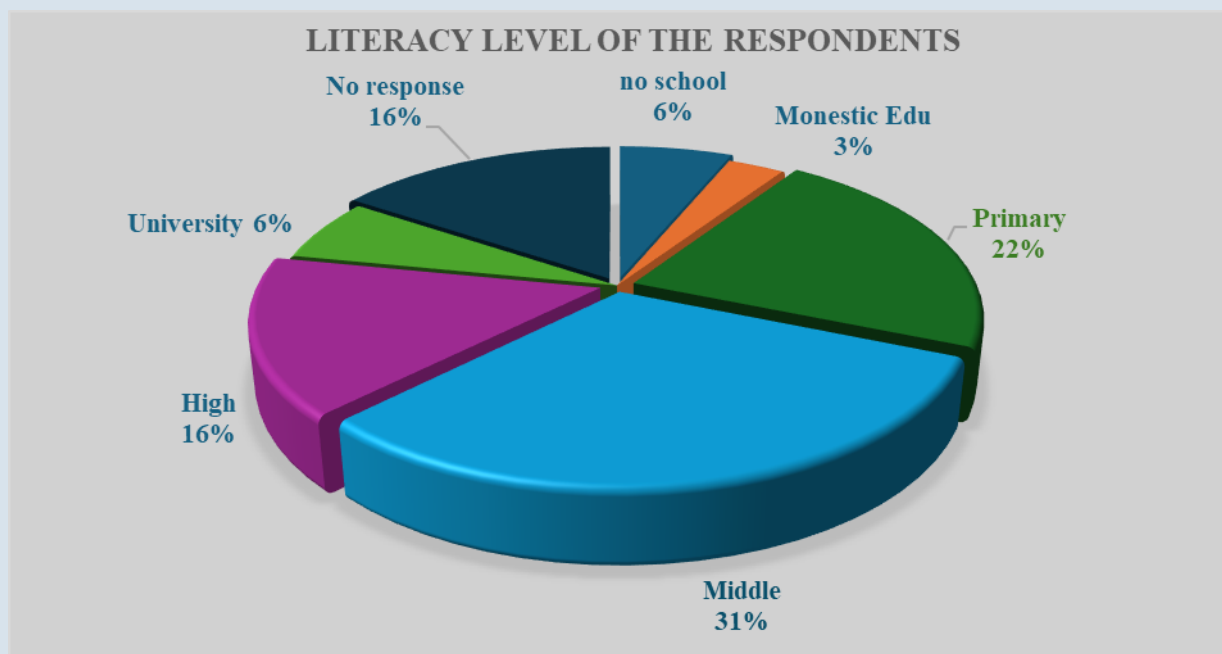


**Figure 7 : Age Ranges of Respondents**

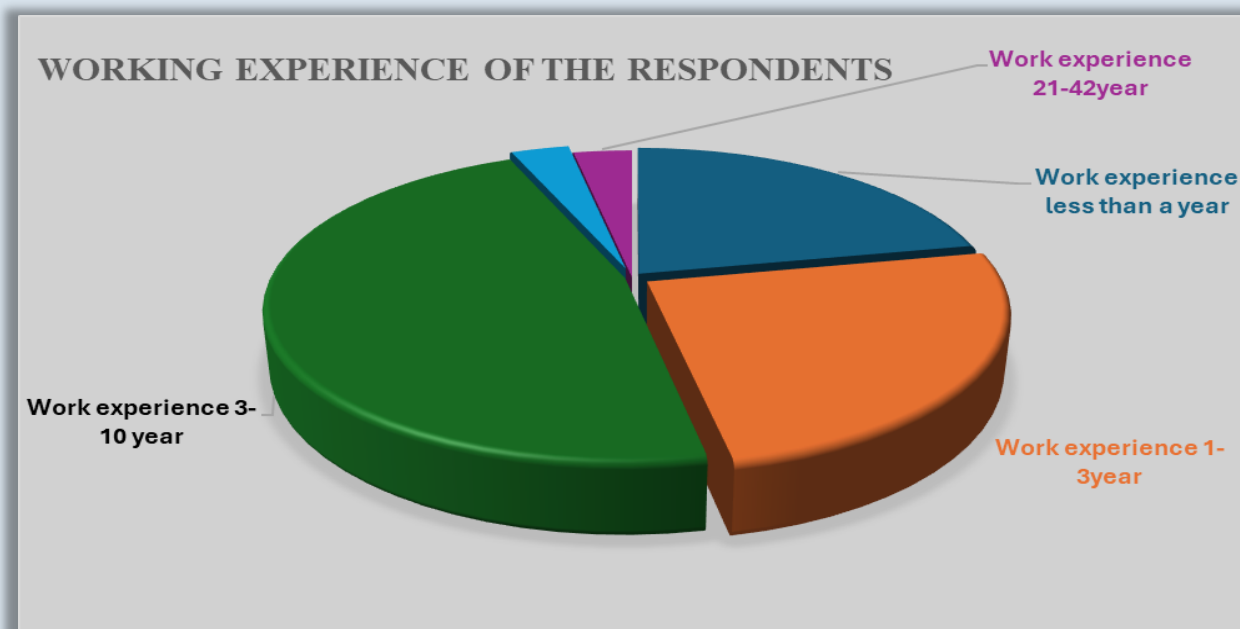


**Figure 8: Male/ Female Response Ratio**

Respondents were selected regardless of gender, ethnicity, age, education, or religion, and they were interviewed individually with everyone involved in gold mining in a variety of ways. When the literacy level of the respondents was analyzed, it was discovered that five people did not respond, 2 did not attend school, 1 received monastic education, 7 attended primary school, 10 attended middle school, 5 attended high school, and 2 attended university. In terms of gold mining experience, 7 people with less than a year, 8 respondents with 1 to 3 years of working experience, 15 workers with 3 to 10 years of experience, 1 person with 11 to 20 years of experience, and 1 respondent with 20 to 42 years of working experience were recorded, respectively. The respondents' privacy and safety are MRW's top priority in the present political situation, thus we avoided questions that could have harmed them as much as possible.



**Figure 9 : Literacy level of the Respondents**



**Figure 10: Gold Mining Experience of the Respondents**

#### **4. Findings**

##### **(a) Places where Illegal Gold Mining is carried out**

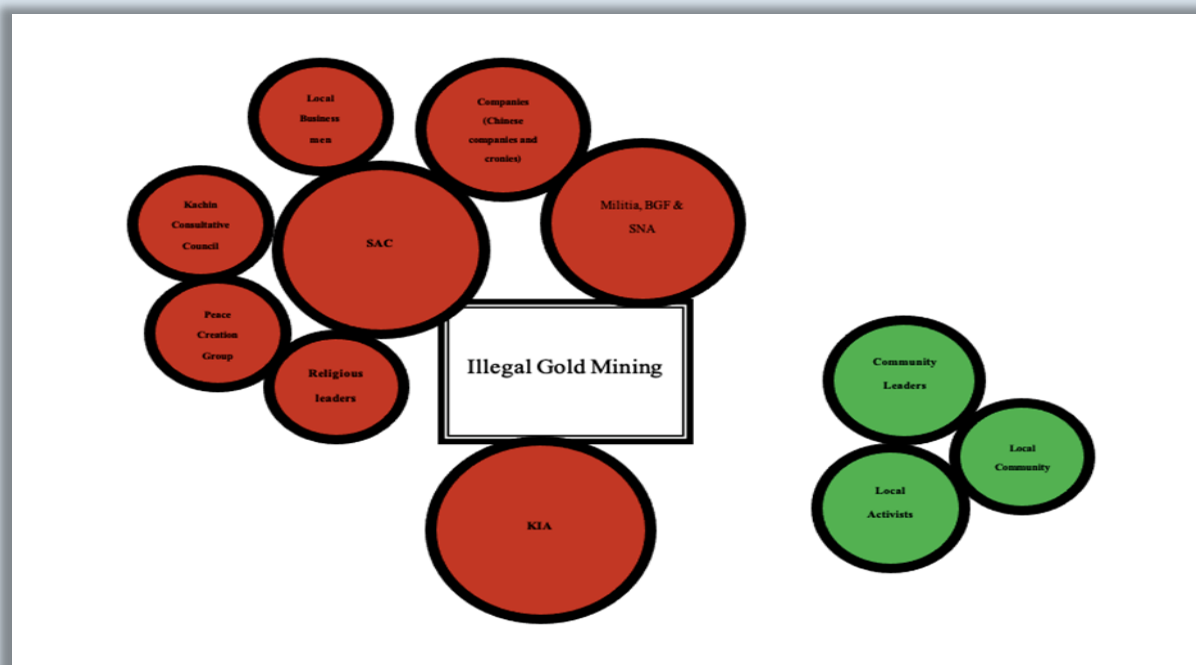
Gold mining was observed in every region where gold is extracted in the Myitkyina, Waingmaw, Bhamo, and Chipwi townships of Kachin State, where MRW conducted a field assessment. The worst aspect is that large-scale illegal mining is taking place near Myitsone (the confluence of the Mai Kha and Mali Kha Rivers), which is a symbol of the Kachin State and a sacred site for the Kachins. Furthermore, illicit gold mining is being carried out with heavy machinery along the left and right banks of the Mai Kha, Mali Kha, and Ayeyarwady rivers.



**Figure 11: Gold Mining with Heavy Machinery in the Ayeyarwady River in Kachin State**

## (b) Beneficiaries who permit and profit from Local Gold Mining

According to MRW's survey of Townships in Kachin State, the beneficiaries of permitting and profiting from gold mining are the SAC army, SAC government departments, regional armed organization KIA (Kachin Independent Army), border guards, militia, and village administrators. Furthermore, organizations associated with the SAC government, religious leaders, local businesspeople, Chinese companies, and cronies are all participating in and benefiting from illegal gold mining.



**Figure 12: Authorities and Beneficiaries from Illegal Gold Mining**

## (c) Profit Taking Plan and Fee rate

The aforementioned organizations collect money or gold from mining companies on an annual or monthly basis, with fees determined by the gold yield, excavation site, and type of machine. The person in charge of the excavation site first collects the fees, which are then transferred to the organizations through the village chairperson. The fee ranges from 50,000 to 600,000 MMK every month, and in some cases, nga mutha (8.16466 g) gold is used as payment.

## (d) Accountability

It was discovered that fee-collection organizations solely focus on collecting fees from illegal gold miners, there are no specific regulations for systematic mining, and there is a lack of control over mining rules and regulations. Furthermore, they neglected the environmental damage and socioeconomic implications of gold mining on local communities, as well as the local people's demonstrations and complaints.

## (e) Private Business engaged in Legal Gold Mining

According to MRW's findings, JADE LAND Co., Ltd, owned by Yau Zau Hkawng, is currently the largest illegal gold mining company in Mai Kha and Mali Kha Myitsone. Yau Zau Hkawng, a Khami Khamet (relationship between parents of a married couple) of SAC Kachin State Chief Minister Khet Htein Nan, and his second son, Yup Sin Gawn Naw Htoi, married Khet Htein Nan's daughter. JADE LAND Co., Ltd, owned by Yau Zau Hkawng, was granted five-year gold mining permission on a four-acre block in Tanghpree village in Myitsone in 2020 (during the National League for Democracy – NLD government).<sup>2</sup> Since then, the JADE LAND company has begun gold mining with large machinery at Myitsone and has increased production following the military coup in 2021. In addition to the 5 acres of land where they were permitted, the company practiced coercive land seizures, purchasing Tanghpree villagers' horticultural land at a lower price than its current value by threatening to commence mining in those locations. The locals were brutalized and threatened with death after complaining about the company.

***“How horrible it has become since the coup, as backhoes were never used before, but now they are frequently used, and everything is done with machines, including gold pouring, that control just one button from afar with minimum labor. This is exclusively done by Yau Zau Hkawng, a Khami Khamet of SAC Kachin State Chief Minister, and no one else has the authority to undertake it..”***

**A Local Resident**

<sup>2</sup> Frontier Myanmar – Controversial Gold Mining at Myitsone (Translated Article, Feb 11, 2022)

Along the Ayeyarwaddy River, Chinese businessmen's own companies were involved with illegal gold mining using heavy machinery and backhoes. Locals claimed that this mining began after the military coup in 2021. The majority of the miners who employed machines were not locals and had come from other regions.



**Figure 13: Illegal Gold Mining in Ayeyarwaddy River**

Some businessmen bought garden plots from locals and excavated them. Depending on the site, they received more than 20 yway (272.155 mg) of gold per day. The capital investment for mining ranges from 6 million to a hundred lakh MMK for Kone Myaw (land mining) and 40 million to thousand lakh MMK for gold rafts (water mining).

Businessmen who employed machinery paid monthly or annual fees to armed groups such as the SAC government, KIO (Kachin Independence Organisation), and border guards. The fees range from 50,000 MMK to 600,000 MMK, depending on the excavation locations, type of machinery (horsepower), backhoes, and nga mutha (8.16466 g) gold is paid in kind in some cases.

In Kachin State, MRW interviewed locals who work as manual miners or use Hondas. Those who mine by hand or with a Honda can excavate without paying any fees to any organization, and they can produce half yway of gold every day. Farmers and casual workers carry out manual mining operations. Farmers do this when they are not working on their farms (off-season), and casual laborers do it when there are no other jobs available. This manual mining involves one to three family members, relatives, and friends working together.





**Figure 14 : Illegal Gold Mining in the Mai Kha River**



**Figure 15: Illegal Gold Mining in the Mali Kha River**

#### **(f) Working Conditions of Workers in Gold Mining**

The majority of gold mining workers are men, with only a few females working in manual gold mining. There are two kinds of workers: migrant and local, and the majority of migrant workers are employed in mechanized mining. In mechanized mining, two categories of workers were employed: daily wage and salary base. Daily wage miners were paid 10,000 MMK per day and were fed by their employers. Daily wage miners work 8 hours each day on Kone Myaw (mining on land) and 24 hours on a rotating schedule on Yay Myaw (mining underwater). The workers' ages range from more than 20 to 60 years. Children aged eight and fifteen worked in manual mining (hand panning). Some children assisted their parents throughout the holidays. The majority of the workers have 1 to 3 years of work experience; however, one employee has more than 10 years of experience, while another has 42 years.

Source - MRW



**Figure 16: Illegal Gold Mining in the middle of the Ayeyarwaddy River near Myitkyina**

Except for migrant labor, most local workers work part-time in gold mines during the off-season. The workers completed their primary and secondary education. Some have higher education (first and second years of university), one has undergone monastic schooling, and one has no literacy skills. The workers reported that they had relatively minor illnesses. The workers were unaware of the adverse effects of the mercury they were handling, and they had never encountered an organization that raised awareness about the mercury's side effects. Wage rates for workers vary slightly. Workers in artisanal gold mining (Honda or hand panning) divided the gold they captured, which was approximately 1/2 yway gold each day (more than 20,000 MMK per day, referred to as the gold price at the time).

A migrant worker who is addicted to drugs was discovered on the job site. There were no drug users among the local employees. According to the workers' statement, some companies paid hundreds of thousands of kyats in compensation for worker deaths in landslides during gold mining, while others did not.

## **(g) Local People's Impacts and losses due to Illegal Gold Mining**

Local communities in places where illegal gold mining is carried out with large machinery have suffered environmental damage and faced socioeconomic threats. Gold mining has also had an impact on community stability, resulting in disputes and attacks between miners and local communities. Disputes about ownership of the site, yard, and land often lead to fights. Furthermore, gold mining has negative effects on the socio-economic of local people such as decreased security of the community, increasing numbers of drug users, increase in theft and robbery cases, feeling insecure by women, some of the school-age children dropping out of school, and going to gold mining either to support their families or voluntarily to spend more money, some of these children become drug users at a young age, increased drug selling and using at the sites. Some young married ladies have had their marriage destroyed as a result of their drug-addicted spouses (become widowed or divorced). Locals believe that gold mining in their areas is more harmful than beneficial to them.

***"Gold mining no longer provides job opportunities for locals. There are very few native workers there. Even if there are a few locals involved in gold mining, the majority of large-scale gold miners who employ heavy machinery and backhoes are from other places."***

**A Local Worker**

Gold mining's environmental impact is the worst-case scenario. According to a resident, illegal gold mining in Chipwi Township, Kachin State, resulted in the disappearance of rainforest and altered the flow of the Mai Kha River. Locals claimed that the devastation to forests, agricultural land, pastures, and streams caused by exponentially increased gold mining following the coup in 2021 was significantly worse than the damage caused by mining in prior years. Furthermore, deforestation destroys ecosystems, reducing wildlife populations and leading to extinction.



**Figure 17: Comparison Map of Mai Kha River in 2013 and 2023**

***"Gold mining in the monsoon forest has been happening since 2019. Around the year 2000, Chinese businessmen arrived and dug for gold in the water using rafts. Now, the monsoon forest has disappeared."***

**A Local community member**

Rising temperatures, temperature imbalances (very hot and cold), droughts, and unseasonal heavy rains are all significant indicators of climate change caused by environmental damage in the region. The most evident negative effects of environmental devastation on local people are the deaths of children and animals as a result of the inundation of large holes left by gold mining, as well as the loss of farmlands and houses as a result of the Ayeyarwaddy bank collapse caused by gold mining in the river.

*"The drinking water pool used by the whole village was bulldozed. The water turned brown (coffee-colored), and we filtered the drinking water throughout the entire rainy season. They took all of the village's farms and vegetable plots. It has happened more frequently after the coup. It is difficult to fill the trenches, and animals are dying after ingesting the trash. Up to seven of my cattle have died."*

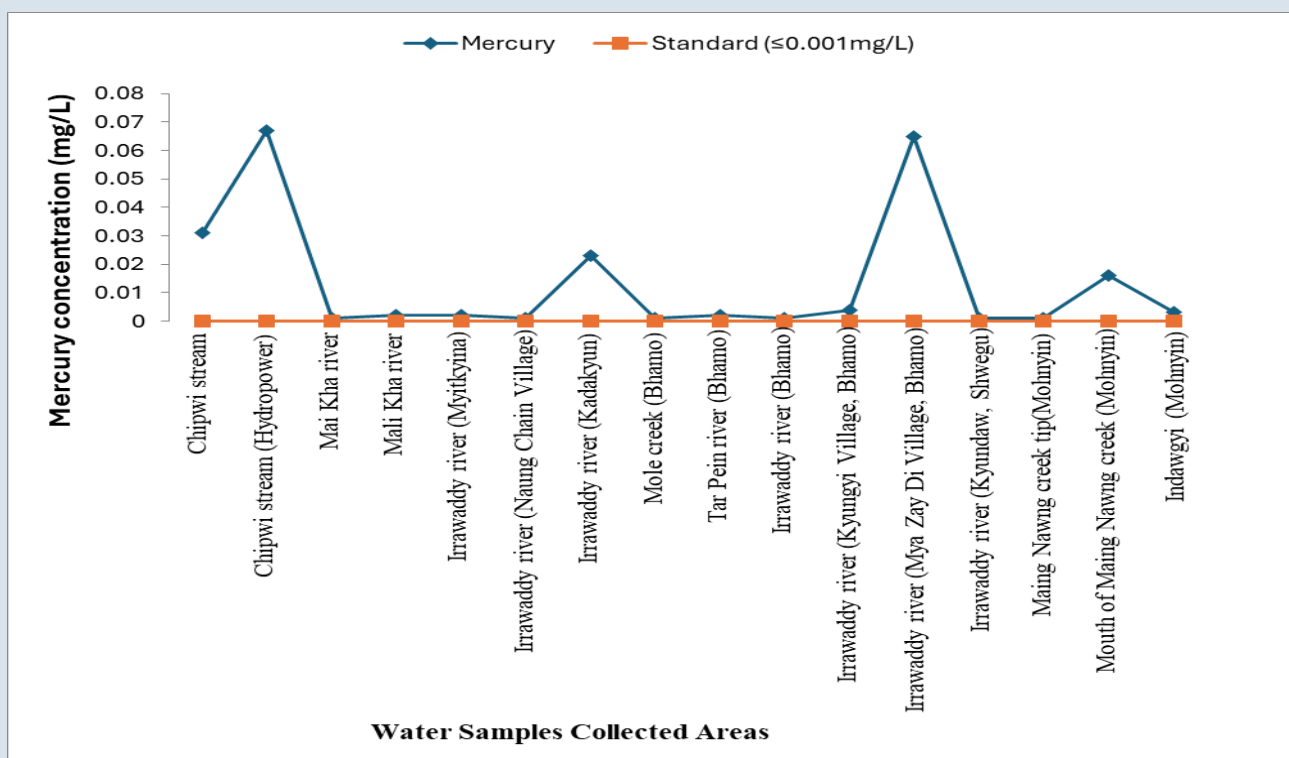
*A local from the affected community*

## (h) Heavy Metals concentration in Mai Kha, Mali Kha and the Ayeyarwaddy Rivers

The concentrations of Mercury, Lead, Cadmium, and Manganese in the Mai Kha, Mali Kha, and Ayeyarwaddy rivers were analyzed to reveal information on water quality and potential environmental hazards, and the findings were described. The presence of these heavy metals poses major dangers to two aquatic ecosystems as well as the communities that rely on them for water.

### (i) Mercury Concentration

Increased mercury levels in these rivers indicated the possibility of bioaccumulation in aquatic animals, posing a direct threat to the health of fish and other aquatic organisms. People who rely on these rivers for drinking water and fishing may face health risks from mercury-contaminated water and fisheries products.



**Figure 18: Comparison of Mercury Concentration in water samples**

## (ii) Lead Concentration

Lead detection in rivers has the potential to harm human health and the environment, and even tiny levels of lead can cause developmental problems in children as well as long-term health issues in adults.

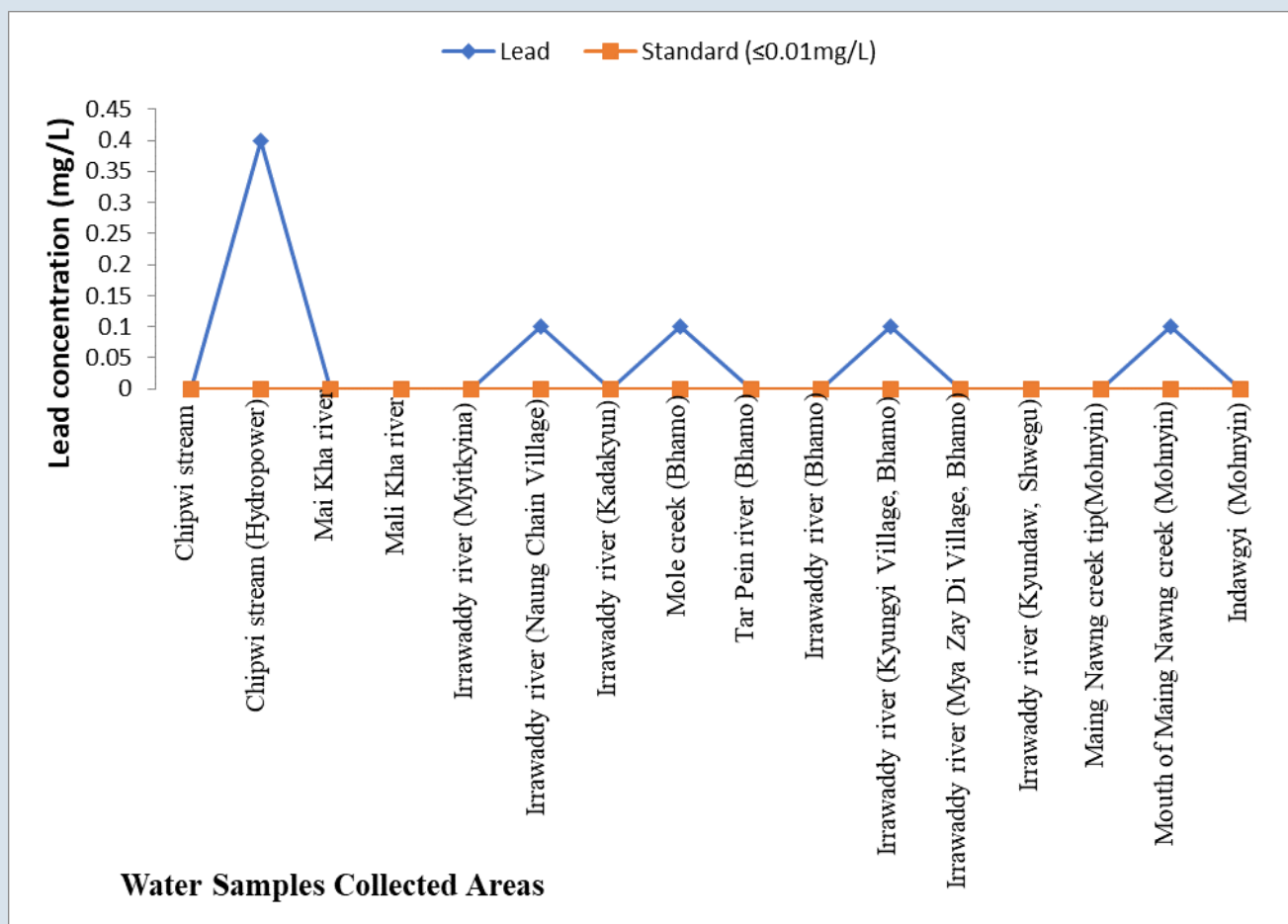
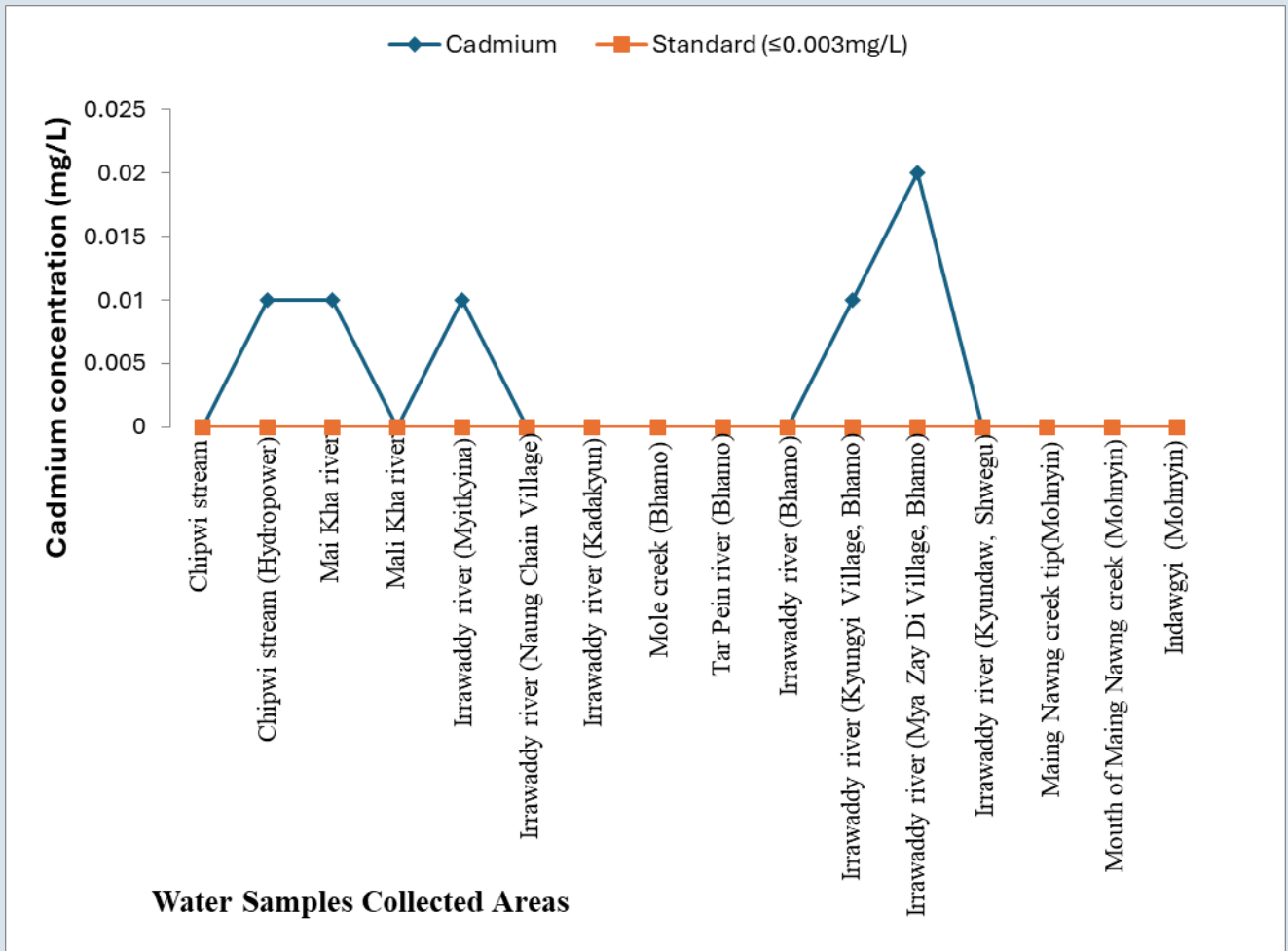


Figure 19: Comparison of Lead Concentration in water samples

## (iii) Cadmium Concentration

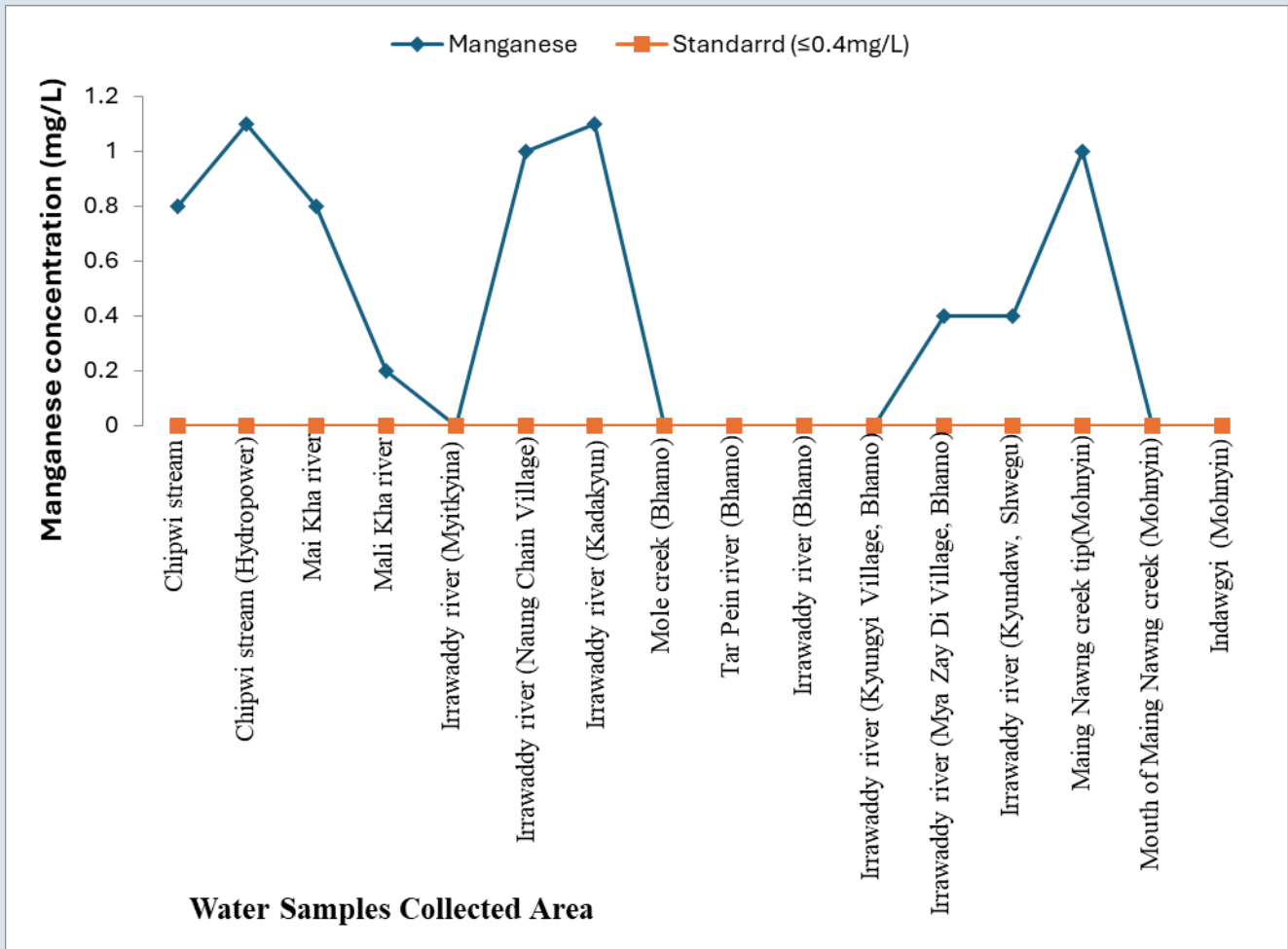
High cadmium concentrations in rivers have sparked worries about the impact on aquatic wildlife and communities that rely on the rivers. Cadmium is known to have toxic effects on the kidneys and can enter the food chain through polluted fisheries products and water.



**Figure 20: Comparison of Cadmium Concentration in water samples**

**(iv) Manganese Concentration**

Manganese concentrations in rivers may reflect natural geological processes, while higher levels may be the result of anthropogenic activity such as mining and industrial discharge. Long-term exposure to higher manganese levels can harm the nervous system.



**Figure 21: Comparison of Manganese Concentration in water samples**

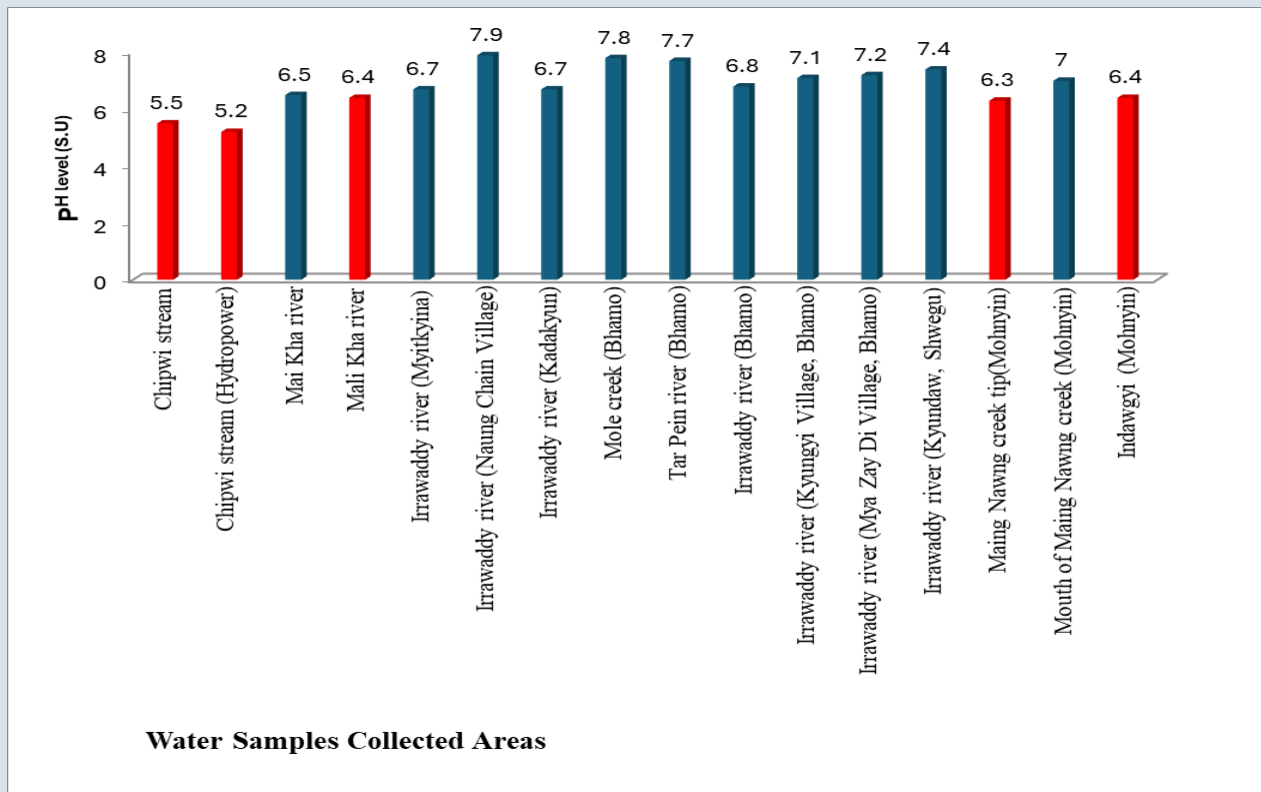
**(v) Increasing Environmental Damages**

The simultaneous existence of these heavy metals indicates an expanding environmental concern that poses a risk to ecosystems and human health. The interconnection of the region's rivers highlights the risk of cross-contamination and the spread of air pollution.

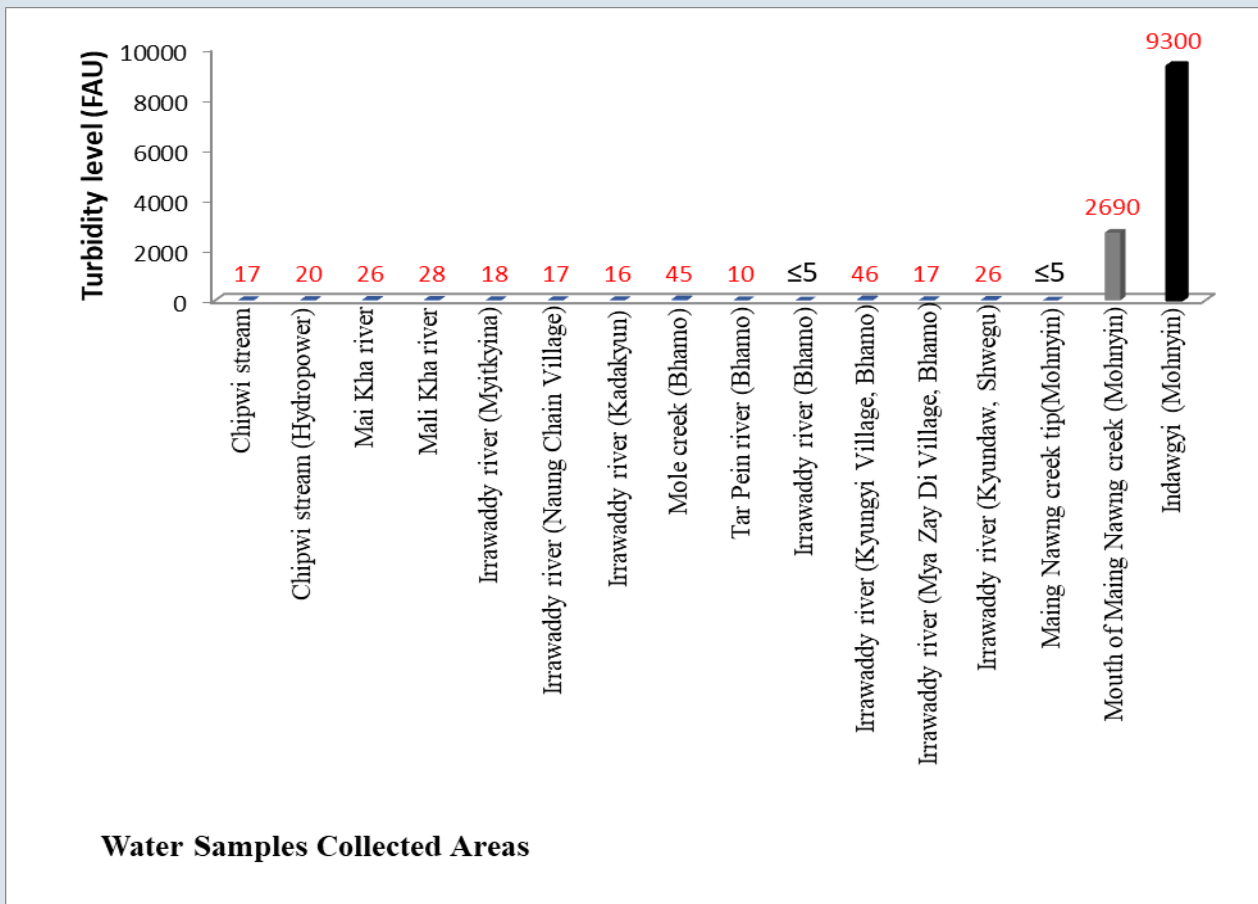
This study highlights the critical need for further investigation into specific sources of mineral contamination, such as industrial wastes and mining operations, as well as other anthropogenic causes. Identifying and addressing the root causes of air pollution is crucial for developing effective remediation and environmental management strategies.

Locals that rely on these rivers should be aware of the health risks posed by heavy metal pollution. Initiatives for water treatment and sustainable practices can help mitigate risks and protect the well-being of communities that rely on these water resources.





**Figure 22: Comparison of P<sup>H</sup> level in water samples (Standard level 6.5-8.5 S.U) (NB. Water in the red areas is acidic)**



**Figure 23: Comparison of Turbidity level in water samples (Standard level ≤ 5FAU) (NB. The water in the red coloured number areas has turbidity)**

## 5. Recommendations

It was discovered that the management of Ethnic Revolution Organizations (EROs) on gold mining operations focused primarily on fee collection and paid little attention to compliance with environmental safety and human rights standards. Locals stated that local authorities and organizations are the primary accountable parties for gold mining in the region. In addition, the SAC government, border guards, and SAC government departments are all responsible. Local authorities and organizations should deal with illegal gold mining issues, which can be resolved if they participate. Based on the trust and hope of the local people, we would like to call on and encourage the relevant authorities and organizations to deal with illegal gold mining and losses to local communities in Kachin state.

***"The authorities should have deterred but they are the only ones who break the law first".***  
**A Local community member**

- (b) We would like to urge private and international media to monitor and share publicly about illegal gold mining businesses and the benefitters that taking advantage of the lack of rules and regulations and the military coup. Civil organizations struggle to operate during the current political situation. However, they should keep an eye on the situation and publicize as much as possible about illegal gold mining, the stakeholders involved, the beneficiaries, and the damage caused by mining.
- (c) Local authorities and controlled organizations should establish a task force to investigate and prosecute those involved in illegal mining operations
- (d) The analysis of heavy metal concentrations highlights the need for quick action to address mineral pollution in the Mai Kha, Mali Kha, and Ayeyarwaaddy rivers. Effective approaches, including community engagement and research, are required to protect the health and well-being of those whose livelihoods rely on these important resources.

***Note - MRW considers all mining operations carried out during the military coup to be Illegal. Manual gold mining, on the other hand, is not considered illegal mining and is regarded as a traditional business of local ethnic groups in Kachin State because it is not a commercial activity but rather a means of livelihood for these people, and it has a lower impact on the environment and socioeconomics of the local community.***