

**YANGON UNIVERSITY OF ECONOMICS
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**A STUDY ON IMPACT OF CURRENT MYANMAR
LEGAL AND REGULATORY FRAMEWORK ON
GEMSTONE SECTOR**

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EMDevS II-4 (16th Batch)**

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DEPARTMENT OF ECONOMICS/APPLIED ECONOMICS
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**A STUDY ON IMPACT OF CURRENT MYANMAR LEGAL AND
REGULATORY FRAMEWORK ON GEMSTONE SECTOR**

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Master of Development Studies (MDevS) Degree

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This is to certify that the thesis entitled “**A Study on Impact of Current Myanmar Legal and Regulatory Framework on Gemstone Sector**” submitted as a partial fulfilment towards the requirements for the degree of Executive Master of Development Studies has been witnessed by the Board of Examiners.

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ABSTRACT

Extractive industry plays a key role to development aspect. Regardless of the political implications of the country, current Myanmar gemstone legal and regulatory framework contradicts stakeholder concern. The objective of this study dedicates to examine the impact of economic, social, environmental, regulatory and effect of local community that has been practicing in the industry. The descriptive analysis has used while qualitative and quantitative approach are being applied in this study. In most of the case, the finding shows that positive impacts are being made. At some level, it encounters both challenges and opportunities which required to reform and clarify at some level. Given that Myanmar gemstone sector still needed to oversight constantly and modify against the extractive industry good practices and standards. A further study on Myanmar Gemstone Sector bills that enacted in 2019 should be addressed with a proper measurement by allowing a more transparent intervention to stakeholders.

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LIST OF ABBREVIATIONS

ASM	Artisanal and Small-scale Mining
CSO	Civic Society Organization
CSR	Corporate Social Responsibility
EIA	Environmental Impact Analysis
EITI	Myanmar Extractive Industry Transparency Initiative
ENAC	Ethnic Nationalities Affairs Center
FPIC	Free, Prior, and Informed Consent
GDP	Gross Domestic Product
JV	Joint Venture
M&E	Monitoring and Evaluation
MATA	Myanmar Alliance for Transparency and Accountability
MEC	Myanmar Economic Corporation
MEHPCL	Myanmar Economic Holdings Public Company Limited
MEITI	Myanmar Extractive Industry Transparency Initiative
MGE	Myanmar Gems Enterprise
MGJEA	Myanmar Gems and Jewelry Entrepreneurs Association
MoNREC	Ministry of Natural Resource and Environment Conservation
MP	Member of Parliament
MRE	Myanmar Ruby Enterprise
MSDP	Myanmar Sustainable Development Plan
MSG	Multi-stakeholder Group
NEPA	National Environmental Policy Act
NGO	Non-Governmental Organization
NLD	National League Democracy
NRGI	Natural Resource Governance Institute
RIA	Regulatory Impact Analysis
SIA	Social Impact Analysis
SOE	State Owned Enterprise
SPDC	State Peace and Development Council
UMEHL	Myanmar Economics Holding Public Company Limited
USDP	Union Solidary and Development Party

CHAPTER I

INTRODUCTION

1.1 Rationale of the Study

Historically, the contribution of Myanmar gemstone sector to the country's economic is significant. But there are some highlights on the weak point of the gemstone resources governance. These are environmental and social impacts due to gemstone production and revenue are being lost against existing Myanmar governance frameworks. Mining sector plays a key role in national revenue and drives a major force for Myanmar development. Major mainstream of total GDP gains from the mining sector. Gemstone contributes most revenue by its significant nature. However, there has been a voice from local people of the area that they rarely enjoy the benefits for over decades and suffered the result of social and environmental degradation. In 2014, Myanmar became as a country member of Extractive Industries Transparency Initiative (EITI). It is a transparency system of different layers of stakeholder which aims to meet a betterment of natural resource accountability.

Moreover, the lack of international and natural resource economics good practices in gemstone sector hinders Myanmar to move forward and creates unnecessary conflicts. Though it is critical, the regulatory framework has been overlooked in the legitimacy process. In 2019, the new Myanmar Gemstone law had enacted by the Union Government. Many contradictions were attempted since the new law has come up. The new gemstone regulations are under discussion among the stakeholder and had been faced many controversies for the specific terms. Along the pipeline of the regulatory reform, there is a nationwide consultation workshop on policy development which has been conducted in gemstone resources areas. Obviously, the complexity of Myanmar Gemstone sector creates stakeholder unwanted loses in terms of economics, social, environment and peace building process. The new law that released in 2019 was unrealistic with industry good practices, such as providing the size and duration of concession, environment management plan and the representation of

supervision matters and so on. Recently, there was a massive landslide in Phakant mining area, and many were dead as a result of the existing law weaknesses. Again, role of State-owned Enterprise (SOE) and the consultation process does not go in line with the Free, Prior, and Informed Consent (FPIC) policy. Local artisanal and small-scale miner (ASM) are being disadvantaged, the lack of transparency and opportunity for them to get the permit, the influence of larger-scale miners and the association of issues corresponding to complaints among the local people were very obvious. Concession blocks are awarded through a centrally controlled and favors companies connected to powerful figures and high-ranking officials. Regardless of the political implication of the country, gemstone can significantly lead to social and economic development, otherwise, this can lead to conflict, corruption and greater economic disparity if misleading occurred.

1.2 Objectives of the Study

The objective of the study is to examine stakeholders' concern on economic, social, environmental, regulatory impacts and effect of local community based on extractive industry good practices and current Myanmar gemstone sector's institutional framework.

1.3 Method of Study

This study used the descriptive analysis. Collected data are both from primary and secondary sources. Thus, either qualitative and quantitative approach were used since the study also focuses on the expression of stakeholder concerns, feeling and emotions were being counted. For the primary data, a purposive sampling procedure was applied. Secondary data were collected from Ethnic Nationalities Affairs Center- (ENAC, January 2019), Natural Resource Governance Institute- (NRGI, March 2015), Extractive Industries Transparency Initiative-EITI (Bickham, August 2015) report and related stakeholder official source, including government publications and others as appropriate.

1.4 Scope and Limitation of the Study

This survey conducted a total of 105 individuals from the targeted state and region. Specifically, 53 from Kachin state, 37 from Mogok, 13 from Yangon and 2 from other who were working as an independent consultant in the sector. Respondents were

local communities, elected officials and business entrepreneurs who are working in the gemstone extracting and trading area. The study period took over two months from October and November 2020. The survey works had done through the utilization of questionnaire to the selected stakeholders. Survey questionnaire were developed into six sections: socio-demographic of participants, economic impact, social impact, environmental impact and regulatory impact and effects of local community over the sector. This study will not cover other problems that are not considered in the mentioned study objective such as armed conflict, political issues and ethnicity issues. On the other hand, stakeholder which does not fall as part of described stakeholders were counted in the scope of this research.

1.5 Organization of the Study

The study has organized into five chapters. The introduction section includes the rationale and objective of study, method of study as well as scope and limitation of the study and organization of the study that presents in Chapter I. The literature review of the study consists in Chapter 2. This includes a review on other relevant publications and thesis studies. Chapter III comprises of historical or contextual background of Myanmar gemstone sector. In Chapter IV, the study examined the survey analysis of the questionnaire. Chapter V is the conclusion section that included the findings of the study and suggestions for further consideration.

CHAPTER II

LITERATURE REVIEW

2.1 Legal, Policy and Institutional Framework for Natural Resources

There are regulations that regulate the rights and obligations of governments, corporations, and individuals for any project to extract natural resources from the ground. A legal framework, also known as legal architecture, is made up of all of these principles. Who is engaged in the development of these regulations, and what papers are used to establish them, varies by nation? The extractive industries are governed by a larger set of regulations that regulate how the state is organized and how economic activities are conducted. Environmental management; relationships between extractive projects and neighboring communities; the behavior of public officials active in the sector; and a well-designed legal architecture should provide rules for how state institutions are structured, how companies acquire and manage licenses, the fiscal terms governing payments between companies and the state; transparency and accountability of public information; and how the government would handle natural resource income. When firms begin doing business in a nation, they must ensure that they are following all of the regulations set down in the country's legal structure. The constitution, legislation, rules, and contracts are all papers that make up a legal framework (Primer, 2015).

Policy contributes collective action to dominance the rate and manner to which natural resources are used. There are many types of policy approaches that tends to formulate relevant regulatory, each with strengths and weakness. To select among diverse policies for a particular situation, one must have in mind some criteria with which they will be evaluated. No one policy or regulatory approach is likely to be the best for all situations: which one is best will depend on the characteristics of the problem, the presence of appropriate social institutions and infrastructure, the capabilities and objective public officials, and another factor. This study will illustrate the issue of market failure vs. government failure and the appropriate governmental level for addressing particular public policy problem (Field, B.C., 2015). All approaches to resource management contribute collective action of one sort or another.

In certain situations, this entails the development of a communal legal framework with property rights and markets, after which natural resource usage rates are decided by decentralized interactions between buyers and sellers. At the other extreme is direct public production. And there are many types of policy intervention involving combinations of public and public actions. The usual justification for overt public action of one type or another is that strictly decentralized property rights and markets don't give results that are socially equitable and efficient. This is referred to as market failure, and it is generally connected to issues such as externalities, public goods, and current generations' myopia. When these kinds of problems are present, private markets are incapable of operating efficiently and public policy and regulatory framework are called for (Field, B. C., 2015).

However, there is a risk in evaluating alternative policy and/or regulatory intervention only in terms of ideal types, that is, the framework as it would work in theory if it were conducted by completely selfless public servants who always acted in the public interest and used good information on possible outcomes. However, this is never the case. Public policies and regulatory frameworks are often pursued in a highly political atmosphere by public employees who, while generally well-intentioned, have their own perspectives on where the public interest resides and work with information that is sometimes incomplete and prejudiced. This can be described as government failure. Government failure can happen in many ways:

- 1) Regulations are enacted but inadequately enforced.
- 2) Regulations are enacted that create perverse incentives, making situations worse instead of better.
- 3) Laws and regulations are enacted in the name of efficiency but in reality, are redistributive; that is, they are attempts by one group to wrest resources away from another group.
- 4) Laws are enacted in the name of correcting market failures, whereas the real objective is to protect the privileged position of an existing group with respect to the use of a natural resource.
- 5) Laws and regulations are pursued that essentially require information that public agencies do not have and cannot get.

The implications of this are the following: When considering the possibility of public policy, it is more correct to compare the results we are getting from a perfectly designed and implemented public policy. Rather, we must contrast imperfect markets

with maybe equally imperfect government policies. In many situations, determining why markets are not operating effectively and solving that problem may be considerably more successful than engaging in overt interventionist governmental policy. In many cases the opposite will be true (Field, B. C., 2015).

The globe has seen a profusion of new regulations, norms, and benchmarks targeted at enhancing performance in the extractive industry during the previous few decades. Despite their diversity, a number of these initiatives support the hypothesis that more transparency is needed to enhance the quality of governance systems. This raises a number of questions: What are the variables that contribute to the growth of transparency initiatives? What distinguishes them? And, most importantly, what role do they play in improving governance in the extractive industries? Transparency has a unique role in debates about and decision-making in the extractive industry because it may help close some of the governance gaps that are sometimes blamed for the curse of resource riches, or the "resource curse"(Thomas N. H., 2008).

Transparency may disclose flaws and dysfunction in the institutional frameworks that regulate the extractive sectors, which is required for development, as well as positively influence the behavior of sector participants (Bellver and Kaufmann, 2005); (Fung, 2007), (Hale, 2008). Moreover, it can help improve processes and procedures in the extractive industries, such as policymaking and implementation, as well as the way that private institutions operate (Florini, 2007); (Sundaram, 2010). Interest in transparency is ultimately rooted in its functionality, from both a normative and a practical perspective. On the one hand, transparency highlights the potential for consensus rather than underlying conflicts and interests: it is applicable across institutional, organizational, and ideological contexts (Florini, 2007); (Heald, 2006), and thus transcends disciplines and jurisdictional boundaries (Cited in Juan C. V., & Malaika M.,2014).

Moreover, the rise of efforts aimed at improving governance systems shows a fundamental shift in social relations. At the local, national, and international levels, calls for governance reform and improvement emphasize new approaches of engaging stakeholders and establishing standards (Alkoby, 2008), (Sikkink F. a., 1998), (Sikkink K. a., 1998); (Price, 2003). In reality, players with limited clout and exposure in the past, such as the media, nongovernmental organizations (NGOs), private investment funds, and indigenous groups, now have a substantial impact on policymaking. Civil society organizations and private businesses are increasingly collaborating with

governments at the international level, and they are helping to establish new agendas and instruments for sector governance. A variety of global advocacy networks are now influencing the institutional and normative frameworks regulating the extractive industry, including legislation, guidelines, standards, and benchmarks, in addition to traditional domestic social and political activities (Cutler, 1999); (Haufler, 2010), (Palazzo, 2011). These networks, while significant, are not the only ones advocating for reform in the extractive sectors' governance. Governments have enacted substantial reforms aiming at strengthening regulatory and institutional frameworks, such as legislation ensuring information freedom, contract openness, and public engagement in planning and execution. Similarly, private firms have developed new methods for interacting with stakeholders through corporate social responsibility (CSR) initiatives and a slew of procedural changes that will make them more reachable to them. Responding to societal demands has become a fundamental competence for all extractive industry actors: inactivity may jeopardize not just the legitimacy, but also the security and sustainability of choices and investments (Thomson B. a., 2011); (Thomson (. a., 2011) , (Kestler, 2010); (Llorente, 2009). The extractive industries' governance transformation is fraught with difficult decisions (Cited in Juan C. V., & Malaika M., 2014).

Experts emphasize that good governance in the extractive industries sector can turn this curse into a blessing. It is argued that if governments managed the extractive sector more transparently and effectively, the sector could be the basis for successful economic growth and poverty reduction (Pegg, 2006). The majority of research on the institutional elements of the resource curse shows that differences in governance quality are caused by macro-level variables. It presents governance systems as byproducts of countries' relative natural resource endowments, GDP, and levels of foreign direct investment ((Auty, 2006), (Humphreys, 2012), (Isham, 2005).

They call for the development of institutional frameworks that can maximize social welfare while ensuring an environment that is attractive for investment and that facilitates commercial success (Culverwell, 2005) and stress that countries with satisfactory standards of governance and corruption control, complemented by good corporate governance practices, demonstrate better growth and development results. Good governance tends to translate into higher income in most resource-rich countries. The reform of established legal and regulatory mechanisms governing these organizations demands a reallocation of authority and responsibilities among external

stakeholders and among actors within organizations in the extractive industries. Transparency initiatives can take many forms. These include declarations, treaties, conventions, charters, protocols, agreements, model laws, legislative guidelines, international law jurisprudence, accounting and banking standards, practical guidelines, and certification systems. They may prescribe behavior, declare intentions, or simply serve as diagnostic tools to appraise practices and institutions (Cited in Juan C.V., & Malaika M., 2014).

Legal and regulatory frameworks—at the international, national, regional, and local levels—are the formal, normative mechanisms of governance of the extractive industries. These include ratified international agreements and conventions, domestic laws and regulations, and legally binding contracts among stakeholders. Voluntary concepts, norms, and standards are included in self-imposed codes of behavior. They are always self-enforced, even if they are developed, negotiated, and audited by other parties at the international or national level. At the national and municipal levels, stakeholder monitoring programs target specific actors and activities, prescribing behavior based on both legal and economic incentives. Finally, measures and metrics of institutional or national performance are used to analyze the quality of governance through benchmarking and assessment tools to encourage openness. While these tools aid in the evaluation of transparency measures, they also serve as conduits for the disclosure of vital information regarding extractive industry organizations and stakeholders (Cited in Juan C.V., & Malaika M., 2014).

Binding legal and regulatory frameworks often take the form of freedom of information laws, contract transparency regulations, and financial disclosure provisions. They operate at the national and regional levels. They are established as crosscutting legal requirements in certain circumstances, and stand-alone rules in specific normative instruments in others. They frequently serve as a springboard for domestic conversations regarding transparency. While they can sometimes stifle changes, they can also aid in the mainstreaming of subnational transparency rules in complicated legal and political situations and on particularly significant topics. The most significant value added of “hard laws” is that they are authoritative and enforceable by the State: they prescribe compliance through frameworks of legal liability (Cited in Juan C.V., & Malaika M., 2014).

2.2 Uses of Gemstone and Important Issues in Natural Resource Economics

Because of their economic value, gemstones are referred to as precious and semi-precious stones. Although certain precious stones are more expensive than some semi-precious stones in monetary terms, this does not imply that semi-precious stones are of inferior worth, since some semi-precious stones are more expensive than some precious stones. It should therefore be noted that the value of gemstones is determined by a number of factors such as their beauty, size, abundance, cut and popularity. While certain gemstones are stunning, popular, and rare, others appear to be more stunning yet receive less attention since they are less popular and far more common. Because gemstones are precious and some are rare, they are economically significant as well as having a variety of applications, whether by consumers or by companies that employ them as raw materials for the manufacturing of gemstone-based products and by-products. Decorative gemstones are used to create ornamental objects, adornments, and jewelry of various sorts, amounts, and quality, which are sold locally and globally under various brand and trademark names. Gems exist in a variety of shapes and sizes, and they may be used in a variety of ways. Apart from their economic value, gemstones have aesthetic value, and as such, they are an essential element of modern clothes and fashion lifestyles as jewelry, earning them the title of beautiful gems or jewels. Gems are held in such high regard because they are utilized in the manufacture of items that humans use on a daily basis, whether for display of wealth or for a variety of other reasons depending on individual views. Some individuals believe that gemstones may help them cure diseases or improve their health. Gemstones come in a variety of quality, and their quantity and geographic distribution change from country to country (Field, B. C., 2015).

Long-run natural resource adequacy has been a traditional issue in natural resource use. Many people expected resource scarcities would stifle economic progress, but this has yet to happen. Optimists, pessimists, and those in the middle all have different perspectives on when it could happen in the future. The question of whether long-run price rises in natural resources are impending is a significant obstacle to adequacy in natural resource economics. Other resources issues are the shift from extractive to non-extractive forms of natural resources use, the determination of optimal rates of use, the study of policies to bring about these optimal rates, the role of natural resources in developing countries, how basic economic institution such as property

rights regimes affect resource use rates, and international natural resource conflicts (Field, B. C., 2015).

Natural resource economics includes the study of socially optimum natural resource use rates. The term "optimal" refers to the "best" outcome based on a set of criteria. Optimal uses rates depend on many factors, such as the value of the resource in alternative uses, rates of natural replenishment, environmental factors, expected demographic and technological trends, and so on. The challenge to those who would study these matters is to use theories and models that will capture the important complexities of the real world, but give results that are compressible to the average person (Field, B. C., 2015).

Since society composed of many people and groups, and what is the optimal for one may not be so for another. If a decision or course of action is socially optimal, it presumably means that it is the best, taking into account all the expected consequences and implications flowing from the decision or action. (Field, B. C., 2015)

A natural resource is being managed efficiently if it is producing the maximum net value to society. "Production" in this case means more than conventional extractive activities; it also includes values that resources produce when they are not used in traditional ways, but rather are conserved for ecological purposes or other non-extractive roles. A natural resource is being used equitably if the distribution of the net benefits flowing from its use is regarded as fair. Economic analysis can identify situation that are efficient; judgements about what is fair must come from the political system. In a market economy, natural resource mismanagement can arise from two major sources: (1) the difficulties private markets encounter, in some circumstances, of functioning efficiently and (2) misguided public policy and public regulation. So, a mining law, for example, that may have been reasonable when it was enacted over last several decades, has become a means of subsidizing mining operator because conditions in the industry are vastly different now, while the law remains unchanged. And because the subsidies create powerful political constituencies, present-day legislatures are unable to change the laws (Field, B. C., 2015).

Throughout the globe, countries with delayed economies are struggling to push forward the material standards of living of their citizens and the added security and human welfare this implies. Natural resources are necessary for economic growth. But "necessary" in this case does not mean that they be located within the same political unit, since there are many cases where countries without large endowments of natural

resources have had strong growth. But they are not sufficient for economic development, as it proved by examples of resources-rich countries where growth has not been strong. In addition, questions of sustainable natural resources use abound: To what extent should nonrenewable resources be used to spur development? To what extent should the productivity of renewable resources be tapped to support short-run development initiative? Will existing resource consumption habits jeopardize other critical components of the development process? (Field, B. C., 2015).

Important questions like these have to be faced by all developing countries, especially those that relying on natural resource capital to provide a major impetus to development. Natural resource capital such as the oil deposits of the Middle East, and now the Caspian Sea Basin, the timber resources of many South American and Asian countries, the minerals of some African countries, and China's massive coal deposits are all examples of natural resource capital that are expected to fuel economic growth and development. Major questions exit, both as to the extent of the resources and the ways they should be utilized to achieve efficiency and sustainability (Field, B. C., 2015).

2.3 Framework of Analysis: Environmental, Social, Economic, and Regulatory

Impact

Policy decisions need information, and while the availability of excellent information does not necessarily imply that decisions will be beneficial, its lack nearly always contributes to poor judgments. Different abilities and research techniques are required for different frameworks for creating and presenting information relevant to policymakers. Before focusing on benefit-cost analysis, we'll go through the most significant of them. Impact is a broad term that refers to the impacts of any existing or planned policy. There are many distinct forms of impact analysis since there are many different sorts of impacts (Field, B. C & Field, M.K., 2006).

(a) Environmental Impact Analysis

An environmental impact analysis (EIA) is the process of identifying and researching all important environmental consequences of a course of action. These are primarily concerned with the effects that are projected to result from a proposed action, however retrospective EIAs may be useful as well, especially when used to check if prior forecasts were correct. EIAs can be conducted for any type of social action,

whether it is public or private, industrial or residential, local or national. They are largely the work of natural scientists, who focus on tracing out and describing the physical impacts of project or programs, following through the complex linkages that spread these impacts through the ecosystem. They don't address the question of assigning societal values to these effects explicitly (Field, B. C & Field, M.K., 2006).

Many countries have laws requiring environmental impact studies when substantial public programs and projects are under considerations, as well as private projects in some cases. Environmental impact studies are required in the United States under the National Environmental Policy Act of 1970. (NEPA). Natural scientists are the primary authors of the resultant environmental impact statements (EISs), but economics play an important role as well. Environmental effects are disseminated not just through ecological links, but also through economic linkages. Consider the case when a dam is proposed to flood a river valley while also offering additional flat-water recreation opportunities. A substantial part of the environmental impact will stem from the inundation itself and the resulting losses in animals and plants, wild-river recreation, farmland, and so on. But much also could come from changes in patterns of behavior among people affect air pollution and traffic congestion. Recreational activities may promote new housing or commercial development, which might have severe environmental consequences. To investigate the dam's complete spectrum of environmental consequences, researchers must include not just the dam's physical effects and water impoundment, but also how people will respond to and adapt to this new infrastructure (Field, B. C & Field, M.K., 2006).

We can talk about economic effect analysis when we're interested in how a new law, a new technical development, a new source of imports, and so on__ will influence an economic system as a whole or in terms of its various elements. The influence of environmental restrictions on economic development rates is typically of great interest in most nations, especially emerging ones. Occasionally, the focus will be on tracking the effects of a government initiative on certain economic factors that are thought to be particularly significant. One might be especially interested, for example, in the impact of an environmental regulation on employment, the impact of import restrictions on rate of technological change in an industry, the effects of an environmental law on the growth of the pollution-control industry, the response of the food industry to new packing regulations, and so on (Field, B. C & Field, M.K., 2006).

(b) Economic Impact Analysis

At any level, economic effect studies can be conducted. The influence of a wetlands loss on the rate of population growth and tax base in a town may be of relevance to local environmental groups. Regional organizations may be interested in the effects of a national regulation on their own economic situation. At the global level, an important question is how efforts to control carbon dioxide (CO₂) emissions might impact the relative growth rates of rich and poor countries. Whatever the level, economic impact analysis requires a basic understanding of how their various parts fit together (Field, B. C & Field, M.K., 2006).

(c) Social Impact Analysis

There has sometimes been a tendency to regard social impact analysis (SIA) as an add-on or something to be done once a policy has been designed: it is sometimes undertaken in response to a set of standards due to civil society- or NGO-led concerns around social risks, or due to political pressures for win-win outcomes. However, there is a growing recognition that good practice SIA is a self-interest problem since, when done in a participative manner, it may enhance social sustainability, decrease investment risks and transaction costs, inform adaptive management, and promote stakeholder ownership. Participatory SIA is also consistent with a rights-based development strategy, particularly the requirement for free prior and informed consent (FPIC) for natural resource (NR) interventions that damage indigenous or community livelihoods or institutions. It is important to clarify what is meant by 'social impacts' and 'social impact analyses. "All social and cultural repercussions to human populations of any public or private activities that affect the manner in which people live, work, play, interact to one another, organize to satisfy their needs, and generally cope as members of society," according to a reliable definition of social effects. Individuals' standards, values, and beliefs that guide and rationalize their cognition of themselves and their community are affected by cultural influences." (Van-clay, 1996). SIA is defined by the International Association for Impact Assessment (2003) as the process of "analyzing, monitoring, and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change procedures induced by those interventions." The words "outcomes" and "impacts" are interchangeable in SIA. Many monitoring and evaluation (M&E) reports focus on outputs and results, such as a change in income,

since these are easier to identify and measure than longer-term repercussions. Increased income is an outcome that could result in a positive or negative social impact depending on what the increased income is spent on and any behavioral changes arising from it. SIA can be a challenge. Even sophisticated and expensive studies have been shown to be flawed in one way or another (Field, B. C & Field, M.K., 2006).

(d) Regulatory Impact Analysis

Regulatory agencies and others are worried about the wide range of potential consequences of every current or proposed rule. What has developed over time, therefore, is the concepts of regulatory impact analysis (RIA), which is supposed to systematically and comprehensively identify and estimate the impacts flowing from regulations. Many countries have requirements for doing these types of studies, and they differ somewhat in terms of what kinds of impact they focus on the some of the procedures for carrying them out. In the United States, RIAs essentially involve fully benefit-cost analyses of regulatory options. Benefit-cost assessments are performed on two types of public environmental programs:

Physical projects that involve direct public production: public waste treatment plants, beach restoration projects, hazardous-waste incinerators, habitat improvement projects, land purchase for preservation, and so on. Regulator programs that are aimed at enforcing environmental laws and regulations, such pollution-control standards, technological choices, waste-disposal practices, restrictions on land development, and so on (Field, B. C & Field, M.K., 2006).

2.4 Effects of Natural Resources for Local Communities

Natural resource richness has a well-documented influence on macroeconomic results, with the argument focusing on whether resources are good for development (i.e., the phenomenon of the resource curse). However, the impact on communities where such resources are located has received very little attention.

However, there is rising interest in the local impact of resource abundance, which is bolstering a fledgling literature. It will look into whether extractive activities help or hurt neighboring regions, as well as how the advantages or costs are passed on to the local populace. The answers to these questions may help us understand the origins of regional and societal conflicts connected with extractive industries, resulting in

improved outcomes. Local locations and regions may be impacted by at least three broad channels:

- (1) Local demand shock. Demand shock on the local level An rise in demand for locally provided inputs, such as labor or intermediate materials, might be a sign of a resource boom. This should enhance local welfare and decrease poverty through raising salaries and other earnings, expanding job possibilities in the non-extractive sector, and generally improving local welfare and reducing poverty. However, there may be some negative consequences as a result of this. Workers from other districts are frequently attracted to the commencement of an extractive business, such as the opening of a mine. This might dampen wage growth, put a pressure on local services like health and education, and raise the cost of non-tradable goods and services like housing, reducing the real earnings of certain local inhabitants. The market-based transmission routes and probable effects of a natural resource boom are depicted here. The amount of the local demand shock would be determined by the strength of the economic connections between extractive sectors. It should be highlighted that in all developing nation situations, significant backward connections cannot be expected (Punam C-P., & Fernando A., 2015).
- (2) A windfall of revenue for the local government. Natural resources can be viewed as a source of money for local governments, or as a windfall of fiscal revenue. This windfall relieves local governments' tight budget constraints and allows for more public spending. The unexpected income boost might have both good and bad implications for the economy. There is the potential to improve human welfare outcomes, such as health and education, if the windfall is utilized to increase the quantity or quality of local public goods and services, such as roads, hospitals, schools, and housing. Furthermore, a resource boom might boost local income and GDP to the degree that public assets are productive inputs or produce positive spillovers, such as transportation infrastructure. Several assumptions underpin the positive effect of revenue windfalls: local politicians are responsive to the general public, which necessitates well-functioning local institutions and a healthy level of political competition; and local bureaucracies have the technical capacity to provide those public goods and services. The beneficial impact of financial windfalls on public goods provision and local living circumstances may be harmed if local politicians are not receptive to popular demands or if local bureaucrats lack technical capabilities (Punam C-P., & Fernando A., 2015).

(3) Pollution. Mining and oil extraction are examples of extractive industries that have the potential to harm the environment. Environmental pollution has a number of negative externalities, particularly in terms of human health, but it also has an impact on learning and cognition. The loss of agricultural production is another potentially significant pollution externality (Rud, 2014). A decrease in agricultural productivity can have a detrimental influence on agricultural production and, as a result, on farmer and rural population income. When extractive companies are located in rural regions where agriculture is still a major source of income, this externality becomes much more important (Punam C-P., & Fernando A., 2015).

For empirical analysis, this approach has numerous consequences. First, it proposes looking at the impact of resource booms on human health indices including mortality and disease incidence. This can give a more accurate picture of the impact on human well-being than just looking at income or poverty levels. Second, it highlights additional potential consequences of resource booms, including worker productivity, labor supply, and agricultural production. Finally, it points to another route, namely the loss of agricultural production, as a way for resource booms to have a detrimental impact on local income, particularly in rural regions (Punam C-P., & Fernando A., 2015)

The framework also demonstrates how the public sector may assist local people in benefiting from natural resource expansion by increasing expenditure on pro-poor services and infrastructure, as well as controlling any adverse environmental and health consequences of extractive companies. However, in poor institutional environments, converting resource riches into sustainable increases in wellbeing is difficult. While there is limited empirical evidence, several studies (Brollo, 2013) et al.; (Michaels, 2013) suggest that Brazil's oil-based fiscal windfall has benefited local communities little and fostered patronage and political corruption (Punam C-P., & Fernando A., 2015).

2.5 Review on Previous Studies

Thein Shwe (2007), studied a similar title “A Study on the Development of Myanmar Gems Industry” which mainly focus on the Potential and Prospect of Gems Production and Market of Myanmar due to massive environmental changes in extractive industry. The two objectives are: to study the concern on Myanmar Gems Industry conditions and to find out how the sector could create capital flow for the

sustainable development of Myanmar. This paper concluded that natural resources should remain for future generation and should extract them phase by phase. By that the regulators should consider the impact on natural environment and the amount of production should be made in a sustainable basis. As well, the interaction between market and policy intervention should occasionally be monitored and evaluated to adjust social cost and benefit. The participation of communal stakeholders and governments shall involve in the leading role and their intervention should be welcome.

Sanne van der Wal (2010), studies had intended to outline the social, environmental and economic issues present in the colored gemstone supply chain. It offers an overview of the colored gemstone trade, with a specific focus on mining in Africa and processing in Thailand. The study found that there is considerable debate about the contribution of small-scale mining to sustainable development and sustainable livelihoods. Small-scale mining in rural areas, on the other hand, may have a domino effect on the local economy, creating considerable local buying power and increasing demand for locally produced goods and services (food, tools, equipment, housing, infrastructure). Many causes are occurring on illegal artisanal mining or the smuggling out of the products, the income returns to the mining region – be it as cash or goods. Discoveries of gemstone deposits can also provoke sudden and rapid immigration by small-scale miners and entrepreneurs. Civil society groups however continue to emphasize that increased government supervision of the sector is important for the policing and enforcement of environmental standards, health and safety regulations, and for labor relations. Gemstone trade links with terrorism, war economy and suppression- the colored gemstone trade can be linked to support terrorism and suppression in a number of countries, including Tanzania, Ethiopia, Burma, Sri Lanka, Afghanistan and Pakistan. In any case while the specific locations and global networks may differ the social and political issues remain very much the same.

Adesoji Adesugba (2018), studied on the challenges of gemstones artisanal and small-scale mining in Nigeria. The purpose of this phenomenological study was to discover patterns and themes regarding each of their lived experiences in the mining activities. Likewise, to understand the challenges faced in each stage of the sector and proffer solutions that may encourage the development of value-added new businesses in the industry. The study revealed that challenges associated with the gemstones ASM include poverty and lack of alternative economic opportunities, while existing mining and mineral policy drives such challenges. Other challenges identified from the study

included a deficit of capacity development programs in the gemstone industry, the absence of adequate training institutions, as well as the absence of formal buying centers for gemstones marketers and dealers. This study revealed that the government and private stakeholders require substantial efforts to improve business opportunities in the solid mineral sector. Therefore, there is a need for government to enact laws that will support the private sector to institutionalize and formalize sustainable programs that will favor all parties involved in the development of the sector. Likewise, information gap between government and artisanal miners should be bridged; strategies should be developed to address the challenges of ASM as regards environmental, health, and economic policies with appropriate implementation plans. The study revealed that the private stakeholders in the mining industry are eager to contribute their quota in the development of the sector. Therefore, the government should ensure they provide an enabling business environment, which will encourage improved private sector investment in the sector.

CHAPTER III

STATUS OF MYANMAR GEMSTONE SECTOR

3.1 Brief Overview of Myanmar Gemstone Sector

Set of long-term vision for Myanmar Sustainable Development Plan (MSDP, 2018) provided for a peaceful, prosperous and democratic country for a period of 2018 to 2030. The significant of (MSDP) provides a framework for development coordination and cooperation among the ministries of the country, including states and regions. It is such a useful guideline for every stakeholder who contributing in Myanmar. Among the three pillars of MSDP; 1. Peace and Stability, 2. Prosperity and Partnership and 3. People and Plane. This study is most relevant under pillars 3 and goal number 5: Natural Resources & the Environment for National Prosperity, which is about seeking to protect the natural environment and ecosystems through conservation, natural resources distortion, and illegal mining. The MSDP states that natural resources have been a cause of Myanmar's underdevelopment, due to historical mismanagement and opacity. Myanmar necessarily need to create a long-term sustainable land management, protecting, well managing of those resources including forests, rivers, mangroves, mountains, coastal, minerals with minimal requirements of a good practices.

EITI encourages Myanmar in submission of natural resources transparency report in strengthening of the governance and enhance the anti-corruption related matter; its legislation, policy enforcement, transparency and competitive tendering system on natural resources exploration even at sub-national levels. Numbers of state-owned enterprises able to generate sounds revenue. Though, the tall hierarchic of the organization nature as well as the less transparent and mismanagement of those enterprises make fiscal burden and less competitiveness to the private sector. It has been happened in the mining sector a lot and MSDP aims to reform them in some instances. A big challenge of gemstone sector that against natural resources good practices was the "Beneficial Ownership" who control the licenses behind the legal document. There

has been controversial on the number of “Other Account” of those SOEs. Last but not least, in order to transform natural resources value added in the global market, trade policy is being revised in line with international tariffs guidelines. Otherwise, illegal trade could be raising, and economic disadvantages could be occurring.

Among the natural resources, the Republic of the Union of Myanmar is obsessed an abundance of gemstone resources, including jadeite (jade), corundum (ruby and sapphire), spinel, peridot, tourmaline, quartz, diamonds, garnet and more. As at 2013, there were 75 officially recognized gemstone varieties in Myanmar. However, new varieties are occasionally identified and there are also a few extremely rare varieties of gemstone that are unique to Myanmar and have never been found anywhere else in the world. Myanmar gemstone sector is separated out from the mining sector, both institutionally and legislatively. Furthermore, there is additional separation between ‘jade’ and ‘gems’ (where ‘gems’ refers to all gemstones other than jade). However, for the purpose of this study the term ‘gemstone’ is used to refer to the whole subsector, including both jade and gems, unless otherwise stated. Myanmar’s jade, ruby and sapphire are widely considered to be the best and most well-known in the world and is in high demand both locally and internationally.

With refer to EITI latest repost, the extractive sector alone contributed for 4.8% of Gross Domestic Production (GDP), 5.2% of State revenue and 35% of total exports. The worth of diamonds and jade sold through the emporium in 2017-2018 was assessed at EUR 825 167 206, according to the fifth Myanmar EITI Report. However, according to a 2016 research commissioned by Myanmar EITI, 60-80 percent of gemstones produced in the nation are not reported and so avoid the official system (EITI, 2020).

Kachin State is the town that has best quality of jade deposits in the world. World’s largest jade deposits lies in Phakant, located in the northern Myanmar. The extraction of jade industry worth US 31 billion alone in 2014 “Jade: Myanmar’s Big State Secret, (Global Witness, October 2015).” The source mentioned that this figure equals to 48% of country’s official GDP and 46 times of government expenditure on health of 2015. General public accepts jade industry is making huge money than this figure. Kachin is one of the independence states and ruled by their leaders. During British era, it had been divided and separately administrated with the mainland.

Total area of Kaching state is (89,043) sqkm (34,379.2 sqm and it has 4 provinces with 18 townships. According to 2014 household census, there are 1,689,441 population in the region. Beside working in primary sector, people are relying on

mining production. However, the concern has been raised that local community are not benefit as it should in mining sector.

Historically, by the time Kachin leaders ruled the region, there were only small-scale mining production (jade) which is obviously different from today. In 1962 while Gen.Nay Win took the power and then ruled by the Revolution Council in 1963, industries are forced to taken as govern properties. Jade is one of those. It has been operated from (1966-1975) under the rules namely as National Trading Cooperation no. 19 (Gemstone) Department. It then allowed to privatize and join ventured with business enterprises in 1990. The first Gemstone law enacted in 1995 and amended in 2003 by SPDC and 2016 by the NLD government. Large mining operation were started after the law had enacted. Big mining machines are largely starting from 2005. Due to the civil war in the region with KIO, the cease fire agreement has been forgotten, the Union government ordered to stop the mining operation. It was resumed in 2014 and new permit allocation were opened in 2016. To date, the new Gemstone Law 2019 has enacted and the rules are under discussion (ENAC, January 2019).

Mogok has been bekown for its finest gemstones; ruby and sapphire. Its occasional found semi-precious stones such as spinel, peridot, tourmaline, quartz, diamonds, garnet, papis and more. It had frequently referred that about 90% of world's best rubies come from Mogok. Especially, "pigeon's blood" rubies are most precious ruby. Africa and Sri Linka are also a place for ruby sources.

The formation of the city is naturally built above 1,170 meters (3840 ft) in elevation with a fairly temperature climate year-round. It is composed of two towns; Kyat Pyin and Mogok which is just four miles in distance and two miles wide. The In the past during British colonial era, those rubies are extract by hand-pickers. Back to three Anglo-Burmese wars (1824-1886), the Burma Ruby Mines Company set up in London. The exclusive operation of that company long lasting over four decades (1889-1931) in Mogok. Over 80 percent of world ruby demand today come up from Myanmar's flourishing ruby. Countries like Tanzania, Madagascar, Tajikistan, Greenland and India are well-known for their fineness rubies too.

Myanmar's excellent rubies smash information at international auctions, but the residents of Myanmar get hold of simplest a fragment of this wealth. capability motives for this consist of the combined effects of tremendous corruption and cronyism; casual and private community-primarily based enterprise practices; a lack of cost-including knowledge; and a coverage surroundings wherein many guidelines are both drastically

absent or prohibitively burdensome. recent tendencies gift new opportunities for Myanmar's ruby area. The primary global markets for Mogok's gemstones appear to be Thailand and China, in particular Hong Kong. From these hubs, rubies input the worldwide market; industry individuals recommend that New York's marketplace may be the principal vacation spot. India is also a key vacation spot united states for Myanmar's rubies, specifically the ones from Mogok, even though regularly at better volumes and decrease features than the opposite locations. Myanmar's gemstone governance additionally makes it difficult for worldwide organizations to legally participate inside the zone.

The Union government agreed to designate the gemstone tracts where gemstones are commercially produced that described in the Gemstone Law. Among the five designated gemstone tracts, there are (2) jade mining areas and (3) ruby mining areas.

- (a) Mogok gemstone area- It has officially designated by Ministry of Mining dated on (18.10.2001) with notification no. 87/2001 by the agreement of Union government meeting no. 40/2001 that dated on (11.10.2001). Though the area is initially designated as 1430.00 square mile (370.68 sqkm, 915200 acre), it partly revoked for (3) times. Current status of the gemstone area is 1414.49 square mile (3663.51 sqkm, 905272 acre). It is located at Mandalay division, Mogok, Thabeik Kyin, Moe Make township and Shan State.
- (b) Mong Hsu gemstone area- It has officially designated by Ministry of Mining dated on (16.7.1992) with notification no. 62/92. The area covers 657.73 square mile (1703.51 sqkm, 420947.2 acre). It is located in Shan State, Mong Hsu and Mong San township.
- (c) Hpakant-Lonkin gemstone area- It has officially designated by Ministry of Mining dated on (18.10.2001) with notification no. 88/2001 by the agreement of Union government meeting no. 40/2001 that dated on (11.10.2001). Though the area is initially designated as 2737.60 square mile (7090.35 sqkm, 1752064 acre), it partly revoked for (3) times. Current status of the gemstone area is 2726.18 square mile (7060.78 sqkm, 1744757 acre). It is located at Kachin State, Phakant, Mohnyin, Karmine and Moekaung township. Though Nanyar Seik region has designated as gemstone tracts according to Upper Burma Ruby Mine Regulation (1894), it was not exclusively designated as a gemstone tract area besides redrawn it within Hpakant-Lonkin gemstone tracts.

- (d) Hkamti gemstone area- It has officially designated by Ministry of Mining dated on (18.10.2001) with notification no. 89/2001 by the agreement of Union government meeting no. 40/2001 that dated on (11.10.2001). Though the area is initially designated as 1163 square mile (3012.16 sqkm, 744320 acre), it partly revoked for (2) times. Current status of the gemstone area is 1161.45 square mile (3007.34 sqkm, 743129 acre). It is located at Sagaing Division, Hkamti township.
- (e) Mawlue, Mawhan gemstone area- It has officially designated by Ministry of Mining dated on (18.10.2001) with notification no. 90/2001 by the agreement of Union government meeting no. 40/2001 that dated on (11.10.2001). The area is 576 square miles (1491.83 sqkm, 368640 acre) wide. It is located at Kachin State, Mohnyin, Sagain Division and Inntaw township. It is locally known as Mohnyin gemstone area (MGE, 2017).

Though, the Myanmar Investment Law somehow prohibits the production of valuable gemstone by foreign investors, Burmese rubies and jadeies command the best quality and rates on international markets. (Global Witness, October 2015) estimated that 90% of jadeite production in global market are sourced from Myanmar.

Technically, MONREC is responsible to designate those gemstone tract and blocks in terms of determining the tenure of permit, floor price of each block and handle competitive bids for the blocks and so forth. Significant types of licenses under current Gemstone Law are Gemstone exaction permit and Trading licenses. There were grievances among local miners due to illegal extraction and trade with neighbor countries. The new law enhanced to minimize smuggling and gears to develop the overall value chain process as well as establish a tracking mechanism. Major clauses that respectively included and different from the new Myanmar Gemstone Law.

In the Title and Definition of the law indicates that medium scale extraction means gem extraction up to three years within a gemstone tract not more than five acres of a block which is potential for a commercial extraction by utilizing techniques of extraction and machinery specified by the rules issued under this Law. Small scale extraction means gem extraction with low investment and expenditure up to two years within or outside a gemstone tract not more than three acres of a block by utilizing techniques of extraction and machinery specified by the rules issued under this Law. Artisanal extraction means gem extraction with Myanmar citizens who have registered with the Region or State Gem Blocks Scrutiny and Allocation Body, up to one year

within or outside a gemstone tract not more than one acre of a block in the allowed area for a artisanal extraction designated by the Ministry in coordination with the relevant Region or State Government under the approval of the Union Government in accordance with terms and conditions; land use permit means a permit for the use of any place in a worksite within the specified period to construct temporary buildings, warehouses and huts for gem extraction, to put vehicles, machinery, extracted rough gem and gem-bearing earth, to rinse loose soil, to crush stones and to dispose loose soil; Artisanal miner means a Myanmar citizen who has registered with the Region or State Gem Blocks Scrutiny and Allocation Body for the artisanal extraction.

And the Objectives are to maintain the development of gem extraction and to promote the laboratory work and research; to minimize impact on the environment due to gem extraction, and to make land repair and rehabilitation after the closure of gem blocks systematically.

Under the clause of permit for Gemstone Mining and Production, The Ministry shall specify the suitable and approved price depending on the location for each gemstone block where medium-scale mining and production is allowed. If submissions of competitive bids for a gemstone Block are solicited, the Ministry shall specify the necessary regulations for selection. A company or society which is in conformity with the right to participate in, compete in and submit bids for gemstone Blocks where medium-scale manufacturing and production is allowed by the Ministry. The Ministry shall implement, for medium-scale mining and production, a system to allot, by percentage, the production done by the permit holder in accordance with the rules under this law. The Ministry: Can issue an order to allow the extension of the term only once for at most 3 years for gemstone production and, if necessary, re-determine the price for each medium-scale mining and production Block for which the term was approved. The Ministry shall, with the approval of the Union Government, after a consultation with the relevant gems producing State/Region governments, form Regional or State Block Allocation Teams with at least 3 local residents nominated by the State or Region Parliament and not more than 9 members. After obtaining the Ministry's permission, the appropriate Regional or State Block Allocation Team can designate a Block from the permitted regions as a small-scale or mid-scale excavation and production site in the gemstone tract or outside the gemstone tract. A Regional or State Block Allocation Team: When extending the term of a permit after its expiry, it shall extend only once with the term (up to two years) of the permit for the small-scale mining and production

and the price. Shall issue each citizen interested in artisanal mining a one-year registration according to the prescribed rules. The Ministry: shall specify the rent and the term of the permit to use land for a place outside the Block for which a [gemstone production] permit was obtained. Can extend the term when the specified term of the permit to use land under sub-section (2) has expired.

Formation of Valuation Team and Duties states that the Ministry, for medium-scale:

(a) Shall form Valuation Bodies comprising gemstone experts, technicians and other suitable people in the required regions.

(b) Can reconstitute the Valuation Body as necessary.

Permit Holders' Rights comprises that A permit holder: Has the right to manufacture jewelry and materials made from gemstones from the finished gemstones which were manufactured by cutting, grinding, polishing, shaping and engraving such raw gemstones. Royalty at Extraction, Tax at Sales, and Fees states that A permit holder shall pay gemstone tax in Myanmar currency according to the following percentages and based on the value specified by the Valuation Body after registering the produced raw gemstones.

(a) 10 percent (before 20%) in the case of a ruby, sapphire, jade and diamond.

(b) 5 percent (before 5%) in the case of a gemstone that is not a gemstone mentioned.

A permit holder selling, in a place where service fees have to be paid, raw gemstones for which gemstone tax was paid under and shall pay 3 percent of the actual sales price as service fees. A permit holder selling finished gemstones made by cutting and grinding raw gemstones for which gemstone tax was paid and, jewelry, or material made from gemstones in a place where service fees have to be paid, shall pay 1 percent of the actual sales price as service fees. A license holder: Selling raw gemstones for which royalty fee was paid under this law in a place where service fees have to be paid, shall pay 3 percent of the actual sales price as service fees. Selling finished gemstones made by cutting and grinding raw gemstones for which gemstone tax was paid under this law, jewelry, or material made from gemstones in a place where service fees have to be paid, shall pay 1 percent of the actual sales price as service fees.

In terms of Central Gemstone Supervision Committee, the Ministry: Shall form Central Gemstone Supervision Committee that comprising of concerned relevant government departments, delegators, gems experts and representatives from Head Association of Myanmar Gemstone Entrepreneurs. Can reconstitute the Central Committee formed under sub-section (a) as necessary.

Inspection section mentions The Director-General of the Department of Mines under the Ministry shall be the chief inspector. Chief inspector shall perform as chairperson of the team together with three officials assigned from the Ministry and one official nominated from Office of Auditor General.

The chief inspector: Can assign any suitable officer from the Myanmar Gems Enterprise or the Department of Mines under the Ministry as an inspector. Can delegate his powers to an inspector. Taking Administrative Actions includes Ministry shall take the administrative action for medium-scale mining, Respective State or Region governments shall take the administrative action for small and artisanal scale or State or Region governments shall take the administrative action for each following administration actions:

- a. Permit to continue the operation after paying `punitive bills.
- b. Suspension of the permit, license, artisanal registration card or land use permit
- c. Revocation of the permits, license and artisanal registration card or land use permit.

Regarding Violation (Offences) and Penalties, found in violation of trading the raw gemstone, finished gemstone and jewelry to other country that opposes this law and rules, orders, directives and regulations of this law shall be imposed not less than five years and more than eleven years in prison and can fine to that person. Anyone who violates in the registration of artisanal mining (non-registration) shall be punished not more than one year and less than t three years and with a fine. Anyone who violates in the small and medium scale permit holding (without holding a permit) shall be punished not more than three year and less than t seven years and with a fine.

In the Miscellaneous section, A permit holder shall: Include extractive industries transparency activities and international good standards when implement the environmental and socio-economic matters, mine closure plan and CSR. Concerned State or Region governments can use the fund by the approval of respective Parliaments at their judiciary areas. An authorized officer of the Ministry shall have the powers of a collector under the laws in force for the collection of money that has to be levied under this law. The Union Government may, in the interest of the State, allow any company, society or individual to prospect and explore in any appropriate area within a region where gemstone may be found by specifying conditions. Permit holder or license holder who has been selling raw gemstone, value added gemstone, jewelry and

materials made from gemstone and paid tax rate under the published Union Taxation law before this law has passed shall need to obey the existing Union Taxation law as soon as this law is effective. Respective State or Region governments Gemstone Allocation Team shall put the money and royalty fees that collected from small-scale and artisanal mining that permitted under this law and fees collected from issuance of license to their respective governments. (Myanmar Gemstone Law, 2019).

3.2 Legal and Regulatory Framework of Myanmar Gemstone Sector

Myanmar conducted stakeholder's consultation both physical and online to construct a national gemstone policy, finding out key priorities for the country best valuable gemstone resources that go in line with Myanmar Sustainable Development Plan (MSDP) from a period of 2017 to early 2019. This stakeholder consultation could be first ever workshop in its kind with the aim to shape the revision of legal and institutional framework at gemstone production and trading area: Kachin, Mogok and Mandalay. A national gemstone policy should contribute and inject meaningful changes to the Myanmar Gemstone Law. The formation of the committee is well representing multi-stakeholder from private sector, civil organization, government agency by the mandate of the Ministry of Natural Resource and Environmental Conservation (MoNREC). The working process will be most benefits to the industry as a whole since it is closely consult with legal experts and review by the Union parliament.

The Myanmar Gemstone Law (1995; amended 2003 and 2016) is still severely defective, and new revisions now being debated in the Union Parliament will do nothing to solve major flaws in the regulatory framework. Historically, the government has relied on rules, internal directives, and contracts to create essential policies; however, none of these have been made public.

The Myanmar Gems Enterprise (MGE) needed to reform as international institute for good agency. As a state-owned enterprise, MGE participates in joint venture for the state, overseeing gemstone emporiums while serving as the major regulator for the industry. This highlighted the ambiguity of its roles, mandate, overlap in conflict of interest. In terms of license allocation, the lack of transparency on bidding process and its competitiveness are key issues to be discussed.

The mechanism to monitor the activities, the violations of permit terms by the private enterprises and foreign companies are beyond the government capability. A fast-moving business environment requires modern techniques and industrial good

practices both socially and environmentally. However, the law has prohibited foreign investment which can be a best source for access to finance and technology. It is also contradicted with Foreign Investment Law which allows foreigner to participate up to 35% shares value.

The incidence of corruption by companies are increased though the taxes in the sector are significantly higher than others while the comparison exist but it is still underreporting. Particularly, the revenue gain from the sectors are license fees and related administrative fees. This is also known as signature bonuses in the country. Myanmar collect royalties at rates 2 to 20 times greater than those in most countries, and also collects high commercial tax on the sale and trading of gemstones. This can be a big burden for local miners, which lead to generate on tax collection. particularly, the sharing percentage of state JV is 25% for particular companies, 20% royalties from the rough value, 5 % on commercial tax add another 15% as special commodity or 5% commercial tax for the polished one. Another common tax is corporate income tax which is 25% for national companies. The value of rough gemstone is assessed by valuation bodies that consist of officials from MGE, government agency, member of MGJEA and additional external expert. It is being said that there is a weak point occurring between MGE, the Internal Revenue Department, and other agencies involved in revenue collection.

In order to meet certain standards, for instant, those mining fields that without using of women, child or forced labor, unsafe working environment, effect on significant environment damage, religious area, indigenous groups or other vulnerable communities critically important. International has accused that Myanmar gems are bloody one. These are overseeing and traceable by professional bodies. This can be a great impact for the whole sector and bad consequence to the gems markets and the whole supply chain. Myanmar neighbors such as China, India and Thailand are among the world's biggest market leaders for gemstone value addition. Myanmar need to have a strong based economic foundation and policies in order to take over the world market.

As well, Myanmar shall use a single mining code (comprising minerals, jade and gemstones). Myanmar separates those laws, regulations, and rules for jade and gemstones aside from minerals unlink other countries. This has made unnecessary legal status, higher challenges, and needed additional effort to govern the sector. These reverse effects would inherent international investors to come into the country and makes local enterprise a heavy burden.

The Myanmar Gemstone Law, including recent and proposed regulations, do not go in line with gemstone or mining policy or insufficiently address the existing implementation process that are facing on the real situation such as anti-corruption measure, transparency, accountability, community grievance mechanisms and hand-pickers problems. A proper consideration shall go in line with other law and directives, including environmental conservation, investment, land, labor, taxation and industrial good practices like oil and gas.

The most relevant concerns are that the opaque and authority remains between MGE's responsibilities and those of the Department of Mines, Department of Geological Survey and Mineral Exploration, Environmental Conservation Department, Central Gemstone Central Supervisory Committee and the Working Committee for Issuing Permits, Inspecting and Supervising Gemstone Blocks. The scope and limitations of MGE's authority should be clearly defined in law, and steps should be taken to separate its business activities as a joint venture partner from its regulatory responsibilities. Conflict of interest could be attempted as it allocates the seats for private enterprise on the Gemstone Central Supervisory Committee, as reserving them as the valuation body for auction, overseeing the emporium and so forth. This shall call the attention of policy maker and legislator to review both the law and regulations that recently published. On the other hand, MGE official expressed that they just employ approximately half of the number that it should be hire. Most officer have limited experience related to the sector requirement. Though some international assistance enhances the enterprise to be in line with international best practices, the reluctance for change stagnates those good approaches. Thus, to increase institutional capacity is one of the most priority work for the sectoral reform.

Equal treatment of the citizen mining should be allocated in a clear, open, and competitive manner. This can be based by filing the beneficial ownership of the bidding companies that is beyond the legal documents. Citizen should be able to guess who is the real owner and their historical activity, and record of contract violation and related grievances. It has been accused that Myanmar governing framework obviously excludes concerns communal from the sectoral reform. Local community most relies on the mining activities. There shall be a law that secure their lives by formulating rules that align with their capabilities. This consideration will effectively impact citizen miners; by permitting artisanal mining license which can be worked by a small group of people for a small lot of mine size. In other country countries, there is a web-based

mining registration system (mining cadastre) for mining companies. This indicates who owns what specific tracts of the mining area depending on geological map.

Operation tenure enacted in the law for a smaller scale only grants for one acre for one and shorter tenure (normally three to five years in other country) which causes the concession holder lack of ownership and no rights over the concession. The contract terms shall be balanced to encourage the mining activity at a proper time with a sufficient investment, to rehabilitate the environment, social and health impacts, including waste dump rock, disposal and the contribution of citizen miners.

There is disadvantage on export tariffs because of liberal trade policies and lacks of specific tax breaks, heavy reliance on rough gemstone sales and oversea market expansion. By that Myanmar lost an opportunity for technology transfer as value added processing operation depend on foreign countries. Myanmar should disclose gemstone mining contracts not just publishing the laws like most other countries that are producing the gemstone including issue certification for those value-added gemstones and a mechanism for traceability. Since Myanmar involve in the Extractive Industries Transparency Initiative (EITI), it shall expand the public disclosures of the extractives sector. Of course, the participation of multi-stakeholder group in this process critically important to enhance the works. Only 30 companies were contributed in EITI first report among the 900 active companies in the sector. The remaining task shall be carries out to support the ongoing reform processes, independent supervision, and access to public accountability (NRGI, Paul Shortell & Emma Irwin, 2017).

Contribution of Gemstone Sector in GDP (at Current Price) is shown in the Table (3.1).

Table 3.1 Contribution of Gemstone Sector in GDP (at Current Price)

Year	Gross Domestic Product (Million Kyats)	Gemstone Sector Contribution on GDP (Million Kyats)	Gemstone Sector Contribution on GDP (In Percentage)
2005-06	12,286,765.4	23,810	0.19
2010-11	39,776,764.9	9,207	0.23
2014-15	65,262,092.5	11,037	0.17
2015-16	72,780,464.5	13,482	0.18
2016-17	79,760,096.5	10,147	0.13
2017-18	90450949.1	6,949	0.008
2018 (Apr-Sep)	32,522,818.1	3,767	0.01

Source: Central Statistical Organization Myanmar, CSO 2019

According to Table (3.1), the contribution of Gemstone Sector in GDP was significantly increased during the year of 2010-2011. Increase in GDP means increase in demand while the gemstone sector boost national revenue, related sectoral growth to the country economy. The figures played slightly low since then and its significantly decrease in 2017-2018. Especially, in the period of 2018 (April-September). This happened due to the fact that the Union Government announced to suspend the mining permit which was not to renew license for the gems when they expire. At the same time, the new Myanmar Gemstone Law had been under development and will only consider issuing new permit once by-by laws to the Myanmar Gemstone Law have been passed.

3.3 Key Stakeholders Participating in Myanmar Gemstone Sector

With the aim to develop a policy and new regulatory frame based on the enacted law, the consultation workshop has held in concerned area; Kachin, Mogoke and Mandalay in late 2017 follow by public discussion and several events both in Yangon and Naypyitaw. Events were mandated from Union Government; led by Myanmar Gemstone Enterprise (MGE). Member of that Steering Committee comprises government officials (MGE), civil society representatives Myanmar Alliance for Transparency and Accountability (MATA) for Artisanal and Small-scale Mining (ASM) and business enterprises representative The Myanmar Gems and Jewellery Entrepreneurs Association (MGJEA). Of course, developing agencies were standing in the supporting role. Parliament Natural Resources Committee take a role to oversight over mineral extraction nationwide, to halt illegal activities and to ensure compliance with environmental and social standards. The Extractive Industries Transparency Initiative (MEITI) representing on the joint cooperation of multi-stakeholder concerns and drives Myanmar to meet the international standard specifically in extractive industry. There shall be several events conducted in regional level; specific area, community and departments. Identified stakeholders representing those diverse agencies at regional level which not limited to individual input and concerned as well.

Obviously, department of Mines is a central authority business enterprise under Ministry of Natural Resources and Environment Conservation (MONREC) that holds highest duty to govern gemstone assets on behalf of the State and set up in 1948 seeing that after Myanmar independence. Elected authorities administrates those mineral sources production and buying and selling over the years based on structural exchange of cooperation, agencies and departments which are operating under Ministry of Mines.

The new elected government merged the previous Ministry of Mines who administrated mining industry relating from under the surface and forest from above the surface with former Ministry of Environmental Conservation and Forestry, growing a brand new, unified Ministry of Natural Resources and Environmental Conservation. Later on State/Region level Ministry of Natural Resources and Environmental Conservation has formed at their judiciary areas with the goal to intently administrate those gemstone resources.

(1) Ministry of Natural Resources and Environment Conservation and Myanmar Gemstone Enterprise

MONREC and its state-owned corporation MGE are accountable for administration, policy and regulatory subjects relating to Myanmar's gemstone sector, as well as being joint venture partners in many mining matters. MGE is responsible for all features regarding gemstones, such as permitting, licensing, the regulatory framework, production/joint venture manufacturing partnerships with private companies, collection of royalties, production monitoring, oversight and marketing of jade and gemstones in Myanmar. MGE's primary roles, consistent with the MONREC internet site are: Designation of gemstone blocks at the gemstone tract area, Issue gemstone production permits to country wide outlets, Impose tax under the gemstone regulation for gemstone production and Valuation of rough gemstone, finished gemstone or jewelry, Administrate the gemstones emporium under the supervision of Ministry of Mines. At the local level, MGE is quite important. In Mogok, for example, it is involved in:

- a) inspection of mines
- b) collection of tax and royalties which are then transferred to Nay Pyi Taw
- c) local valuation committees
- d) meet regularly to value declared stones and calculate royalties
- e) provision of daily reports to MGE in Nay Pyi Taw

MGE is also accountable for the gemstone emporiums. In 2015 one main global emporium, and one smaller nearby emporium have been held in Nay Pyi Taw. As is the case with state-owned businesses (SOEs) in many countries, there's an inherent conflict of interest between MGE's position as policymaker and regulator but also as owner. It is crucial that any authorities concern of institutional reform in Myanmar's gemstone sector hold this as a key issue to be addressed.

(2) The Myanmar Gems and Jewellery Entrepreneurs Association

The Myanmar Gemstone Industry Association (MGJEA) is a trade association that represents Myanmar's gemstone industry. Its initial purpose to develop the gemstone and jewelry markets in Myanmar. There are 10,000 MGJEA members, including gem miners and investors, jewelers-shop owners, and gems and jewelry traders. Yangon, Nay Pyi Taw, Mandalay, Sagaing, Mogok, Myitkyina, and Hpakant are among the MGJEA's regional offices.

The objectives of MGJEA as stated on its website are: to establish, modernize and develop a gemstone and jewelry market within the country in respect of gemstones produced in Myanmar. Awareness raising, access to international markets - to actively cooperate with government to promote Myanmar gemstones and jewelry in international markets. Collaboration with the government to eliminate illicit gemstone manufacturing within the nation and to prohibit illegal gemstone transit and sale outside. It collaborates closely with the government and acts as a conduit for communication and discussions between the government and its constituents. It assists members with concerns pertaining to rule and regulation implementation and strives to improve the value-added market for gems in Myanmar.

The MGJEA has an Executive Committee (comprising 91 members from across the country) and a Central Executive Committee (comprising 41 members) located in Yangon. The MGJEA's principal decision-making body is the Central Executive Committee. There are 5 Vice Chairmen on the Central executive committee, each representing one of the 5 regional offices. MGJEA has more than ten committees in total, together with a transparency committee established in 2014. MGJEA is in the process of restructuring to become additional democratic and clear. Anybody with a gem production permit or a gem trading license can become a member and thirty fifth represent colored stones. The MGJEA plays a very important role at the Gems Emporium, supporting government and monitoring the Emporium. The Gems Emporium Central Committee is primarily made up of MGJEA members, although there are also some government representatives. MGJEA is responsible for sending invitations to the Emporium and ensures government representatives are invited 'to minimize risk'. The MGJEA is also a member of the Central Gemstone Supervisory Committee and plays a significant part in the Emporium's appraisal (which is also the main valuation body). A number of gem traders consulted for this study reported that

the benefits of MGJEA membership to ordinary small and medium-sized companies are negligible.

(3) National Resources and Environmental Conservation Committee

The new member of Amyotha Hluttaw Natural Resources and Environmental Conservation committee were announced in Feb 2016 in the Parliament. The reformed composition of the committee comprised 11 of NLD MPs, 1 from military MP, 1 USDP MP, 1 Arakan National Party MP, and 1 Ta'Ang / Palaung MP respectively. The committee work over the comments of public opinion and develop bills within the parliament. The working draft that came up from stakeholders submitted to concerned Ministry such as MOREC and Union Attorney Office for technical inputs and then will go through under the committee supervision before it passes the Union parliament.

(4) Myanmar Alliance for Transparency and Accountability

MATA is a civil society alliance that works with civil society actors in Myanmar to fight for openness and accountability in all sectors. Such mining, forest, coal power plant and etc. Over 400 civil society organizations and individual across the country participates in MATA as concern stakeholder/member. MATA was established as a tool for civil society coordination with the EITI process.

In 2013, an inclusive course was initiated to make sure that that civil society representatives had been elected for EITI's MSG (except Karen State) to represent wide concerns throughout the country. Civil society essential to grow and shall elect its representatives via a well-informed, inclusive and transparent with a purpose to make a collective decision. A comprehensive State and regional workshops were held to select 15 to 25 persons from each region. Among of them, 5 representatives were selected to join the national civil society EITI working group and one of them shall perform as a focal person. MATA was formed to facilitate in collaboration of elected actors and institutions that following democratic selection criteria in Myanmar. With refer to their website, the mission, key activities and objective of MATA are

- 1) To advocate for transparency and accountability by government, elected representatives, companies, donors and civil society.
- 2) To promote the freedom of public participation in, and scrutiny of, Myanmar's legal frameworks and guidelines relating to resources.

Partnership Development and Coordination for Advocacy:

Internal coordination between MSG Civil Society Representatives, Technical Support Group, National Civil Society Working Group, and State/Regional Working Groups.

- a) External coordination between donors, International Organizations, INGOs, Private Sector and Government.
- b) Advocate for transparency and accountability in the management of natural resources by Government, private sector and civil society organisations.
- c) Raise awareness of the importance of transparency through education and training sessions.
- d) Build partnerships with INGO, NGO, Government, CSOs and other stakeholders.
- e) Strengthen the capacity of CSO and communities to improve Natural Resources Governance.
- f) Increase freedom of information, monitoring mechanisms and the accessibility of data.
- g) Promote the freedom of CSO participation in Myanmar.

(5) Artisanal and Small-scale Mining

This known by its abbreviation ‘ASM’, or subsistence mining, is widely practised in the poorest parts of the world, by those who normally have few livelihood alternatives. Current law and regulations do not permit any rights for ASM. The representation of ASM were fall into CSO categories of each gemstone mining region. Their voice are mainly came from representative of MATA’s regional members. ASM usually entails one or two individuals, up to entire families or small groups of people, digging holes for minerals using the most basic tools and procedures. It frequently falls outside of the boundaries of legal and regulatory systems, making it unlawful. It is common for entire families to work at an ASM site, with men, women and children each having their own designated roles and responsibilities within the ASM site structure. ASM is characterized by very dangerous working conditions, a lack of understanding of health and safety regulations, and a high prevalence of significant events, including deaths. Due to the lack of institutional backing for ASM in the majority of countries where it occurs, accurate figures on how many individuals are participating are unknown. Across 13 million individuals are believed to be small scale/artisanal miners in roughly 30 countries around the world, with up to 100 million

people relying on ASM for their living. Women are estimated to constitute approximately 30% of the sector, and the International Labour Organisation (ILO) estimates that approximately 1-1.5 million children are currently employed in ASM, with the numbers increasing rapidly.

The bulk of artisanal and small-scale miners are drawn to gold, diamonds, and gemstones. It is estimated that 75% -80% of all gemstones, 20-25% of gold and 15-20% of the total global mineral supply are from ASM sources; a strong indicator of the importance of ASM to the global minerals market. There is very little available information about ASM of colored gems or jade in Myanmar. On the other hand, ASM gold mining is still quite widespread in Myanmar, with hundreds of thousands of people estimated to be participating. However, the increase in larger scale mechanized gem production over the past few years, together with tighter government control of gem-producing areas, has left little room for informal subsistence miners to operate.

Subsistence miners, also known as ‘hand pickers’ or ‘scavengers’ in Myanmar, sift through the waste material dumped by larger scale mining operations, usually in extremely dangerous conditions and with no protective equipment. Many site managers have informal arrangements with hand pickers, and while they generally just find enough to get by, higher grade gems are occasionally discovered, and they can find up to USD 10 worth of stones every day. In the case of rubies and other colored gems, the word commonly applied for these hand pickers or subsistence miners is ‘Kanase’ although in practice there are actually two kinds: The same customary practice exists in the jade mining areas, where the hand pickers or subsistence miners are called ‘Ye Ma Say’ (‘no water wash’). However, unlike the Kanase or Khesar, the Ye Ma Say subsistence jade miners are usually men, and women are not at all involved. Only women and children have traditionally been allowed to hunt for gems in this manner, but males are increasingly becoming engaged, and entire families are sometimes sifting through waste dumps together. Men generally only get engaged in the following process, the breaking up of the stones, once the ladies have retrieved an actual or potential gem.

(6) Myanmar Extractive Industries Transparency Initiative

Myanmar government announced its intention to involve in the Extractive Industries Transparency Initiative (EITI) in the concern of introducing transparency in

revenue management and the strengthening of natural resource governance in December 2012. Myanmar became an EITI Candidate in July 2014 and after an oversight work over year and a half. As the result, the first EITI report came out in January 2016. Implementation of EITI enables a country to have a better understanding about how its resources are administrated, and to better manage and track the revenues related to those resources.

Due to its especially opaque character, there is a lack of public knowledge of how Myanmar's gemstone business operates, which fuels conjecture and ambiguity about how the sector is controlled. It's also commonly assumed that the gemstone trade is one of the country's most profitable industries. More regulation and monitoring of the industry are being called for, and pressure is mounting on the new administration to address these concerns. EITI improves access to information for civil society organizations, as well as providing an extra high-quality channel for advocacy and, in certain countries where this is otherwise unheard of, prestige and access to a seat at the top table. It provides an opportunity for holding government and companies to account for how resource-related revenues are generated and used and, increasingly, for the integrity of the agreements on which such payments are based. Of course, within the spectrum of CSOs there are also many other motivations including, for some, the hope of using EITI to promote established campaigning goals in areas like human rights or the environment.

3.4 Transition and Key Changes in Myanmar Gemstone Regulatory Framework

In 1989, State-Owned Enterprises Law grants the Union Government the 'sole right' to carry out business in certain sectors. This covers mining exploration, extraction and export of minerals, metals, pearl, jade and precious stones. Private enterprise and investors contributed in the mining sector through contracting with the Government or by having joint venture agreements with the relevant State-Owned Enterprise. Military holding corporations, such as Myanmar Economics Holding Public Company Limited (UMEHL) and Myanmar Economic Corporation (MEC), have a long history in Myanmar's economy, particularly in the energy, mining, and gems industries. These two companies which report to directorates of the Defense Services that established under laws which provide protections and privileges to state-based companies. By the time of privatization and the shift to a socialist command economy, MEHPCL had been founded in 1990 under the Special Companies Act as the Burmese military's economic

power. UMEHL was established to initiate profits from light industry and the trading of goods. In the mid-2000s it expanded into services and trading activities. MEHPCL subsidiaries include Myanmar Imperial Jade Company and Myanmar Ruby Enterprise, that extract mines at Mogoke, Mongshu, Nayar, Mawchi and Thabeikkyin. Some of these operations are subcontracted to other domestic companies which is a big deal of challenge while reforming the overall sector. List of Myanmar Ruby Enterprise Limited subsidiaries are: Kayah State Mining Co., Ltd., DuWun Star Gems and Jade Co., Ltd., Thein Nget Star Gems and Jade Co., Ltd., Sait Taya Star Gems and Jade Co., Ltd., Dana Thedi Star Gems and Jade Co., Ltd., Thit Sar Pan Gems and Jade Co., Ltd., Pone Nyat Gems and Jade Co., Ltd., Sabal Gems and Jade Co., Ltd., Myanmar Imperial Jade Gems and Jade Co., Ltd. List of companies that MEHPCL holds shares are: Myawaddy Trading Limited, Shwe Gradamar International Trading Limited, Adipati Agricultural Produce Trading Limited, Ngwe Pinlae Livestock Breeding and Fisheries Co.,Ltd, Myanmar Ruby Enterprise Limited Myanmar Ruby Enterprise (MRE) is in the gems and jade business. Myanmar Imperial Jade Gems and Jade company limited is solely operate the exploration and production of gems and jade. The percentage of ownership is the same as Myanmar Ruby Enterprise.

Unlike other countries, Myanmar gemstone sector separated from Mining Law since 1995. Back then, the State Peace and Development Council (SPDC) enacted Myanmar Gemstone Law under State Peace and Development Council notification no. (8/95) on (29.9.1995). The amendment of the Myanmar Gemstone Law enacted by the State Peace and Development Council government under State Peace and Development Council notification no. (8/2003) on (16.6.2003). In order to align Myanmar Gemstone Law with various changes of Myanmar, the second amendment law had enacted by the Union government on (29.1.2016) with notification no. 23 due to the effort of former Ministry of Mining (Ministry of Natural Resource and Environment Conservation) and different discussion at parliament. The significant changes in the second amendment are categorizing gemstones into rough, cut and polished and jewelry and products made with gemstones. The 1995 Myanmar Gemstone Rules supported Myanmar Gemstones Law and technical guidance and procedures were illustrated. MGE is responsible for drafting rules and regulations (EITI Myanmar, 2017-2018).

The gemstone law, regulations and enacted law and regulations:

- a) Myanmar Gemstone Law (29 September 1995)
- b) Myanmar Gemstone Rules and Regulations (4 October 1995)

- c) Myanmar Gemstone Law, 1st amendment (16 June 2003)
- d) Myanmar Gemstone Law, 2nd amendment (29 January 2016)
- e) Myanmar Gemstone Law (30 January 2019)
- f) Myanmar Gemstone Rules and Regulation (Draft) (2020)

CHAPTER IV

SURVEY ANALYSIS

4.1 Survey Profile

The profile of current Myanmar legal and regulatory framework of gemstone sector has built into 6 sections: including the survey design and key results of data analysis and information from various stakeholders. Questionnaire were developed and collected over a period of October 2020 to November 2020. Since survey area was designated in gemstone extraction and trading regions mainly in Kachin, Mandalay region, Yangon and others, it obviously focuses on local community, small owners, business enterprise, artisanal miners and few other groups in development sector via online and personal interview. Total number of 105 respondents were purposively selected by inquiring their industry knowledge, number of events they had attended and associations they have been involved. As noted, 53 from Kachin state, 37 from Mogok, 13 from Yangon and 2 were independent consultants. Characteristic of each respondent showed in the socio-demographic section. Of course, a telephone conversation had widely used and followed up through a recommended interviewee. This survey intended to assess awareness, economic, social, environmental, regal and community problems and concerns that highlights the issues.

4.2 Survey Design

In order to meet the study objectives, the survey employed qualitative method. Total numbers of 105 individuals were conducted. The initial sampling size of the population was 144 which designated 95% for confidence level and 5% for marginal of error by using Slovin's formula. The participants for key informant interviews were selected from various targeted stakeholder group with the aim to gain a diverse perspective and to ensure a well-informed analysis. Finding of this study could be used as the baseline of future consideration of Myanmar gemstone legal and regulatory frameworks development and formulate appropriate intervention measures. Before the exploratory qualitative phase, the following activities were carried out: organizing

literature review from government agencies, various development agencies/ focus group such as MGE, MEITI, NRGI, MATA, ENA, MGJEA and other essential documents. Attending 4 consultative meetings in American Center, UMFCCI and MGJEA office in Yangon and an even in Mandalay regions. Findings of these activities were used to finalize a detailed work plan of the survey and devise a questionnaire.

Findings of above data collection enabled the study to compare and contrast similarities and differences. On a Likert scale ranging from highly agree, agree, neither agree nor disagree, disagree or strongly disagree, there are sections of the questionnaire spanning from socio-demographic in Part I to social, economic, environmental, legal, and community implications in Parts II to V. Besides, strengths, weakness, opportunities and limitations of the existing law and law enforcement to protect the attract the investor could be seen.

4.3 Analysis of Survey Results

The targeted questionnaire was collected and analyzed by using descriptive analysis that consists of frequency distribution, means and ranges where applicable. This section provides the results of respondents' opinion on the impacts of current legal and regulatory framework of Myanmar Gemstone sector. Since the questionnaire used a 5-point Likert scale, it represents strongly agree and straggly disagree from I to V. This obviously should be noted the positive impacts has scored between IV to V and III to IV should be noted moderately high and which are positive. The result between II and III is moderately low, and less II should be noted as a negative or relatively low result. By comparing these mean values, the most significant and the least significant for the respondents are explored. With the sense to conceptualize despondences' perspective on each categorized impact, an open-ended question has provided.

4.3.1 Socio-Demographic of Respondents

A descriptive analysis of demographic factors of the 105 respondents in the survey has used, number and percentage distribution on age, marital status, education background, type of organizations being employed, position hold, residential/ region and knowledge access to the sector were demonstrated.

Table 4.1 Socio-Demographic of Respondents

Descriptions		Respondents				
		Male	Female	Total	Percentage	
Age in Years	25-34	27	3	30	28.3%	100% of 105
	35-44	19	2	21	19.6%	
	45-54	42	4	46	43.5%	
	55-64	8	1	9	8.7%	
Marital Status	Single	34	3	37	34.8%	100% of 105
	Marriage	63	6	68	65.2%	
Education	University Graduate	46	4	50	47.8%	100% of 105
	High School	25	2	27	26.1%	
	Middle School	16	1	17	15.2%	
	Primary School	10	2	12	10.9%	
Organization type	Color-stone broker	44	4	48	45.8%	100% of 105
	Private	20	2	22	20.8%	
	Focus group	12	1	13	12.6%	
	Local/CSO	10	1	11	10.4%	
	Others	10	1	11	10.4%	
Designation	Owner/Founder	38	3	41	39.6%	100% of 105
	Others	22	2	24	22.9%	
	Ordinary worker	18	2	20	18.8%	
	Below Manager	18	2	20	18.7%	
Region	Kachin	48	5	53	50.0%	100% of 105
	Mandalay	34	3	37	35.4%	
	Yangon	12	1	13	12.5%	
	Others	2	0	2	2.1%	
No. of event attended	1~3	34	3	37	34.9%	100% of 105
	3~6	18	2	20	18.6%	
	6~9	11	1	12	11.6%	
	12~15	11	1	12	11.6%	
	15 and above	22	2	24	23.3%	

Source: Survey Data, November 2020

The survey findings disclosed that above 90% of respondents were male and 8.5% were female. Over half of respondents age were ranging from 45 to 64, below half were from 25 to 44 years old. Among them, 65.2% are marriage and 34.8% are single.

Approximately three-fourth of respondents was university graduate and completed high school. One-fourth of them were completed primary and middle school. Over 45% of respondents were working as color-gemstone brokers, almost one-fourth

of them were from private sector and focus groups. Then, local community and other stakeholder respondents represented equally which is about 10% each.

Forty-one in hundred and five respondents (39.6%) were owner/founder of private companies and about 18% of total respondents equally represented ordinary worker and below manger. Other's designation of respondents illustrated about 22.9%.

The exact number of respondents represented Kachin state were 50%, 35.4% from Mandalay, 12.5% from Yangon and rest of them were from other regions which is 2.1%.

Mainly, about 35% of respondents had opportunities to attend relevant events from 1 to 3 times, about 19% attended from 3 to 5 times, 12% of them attended from 6 to 9 and 12 to 15 equally. Lastly, about 23% of them attended for over 15 times.

(i) Economic Impacts

Table 4.2 Economic Impact

No.	Descriptions	Mean	Standard Deviation
1.	Individual household income is being improved by the new Myanmar Gemstone Law changed.	3.0	2.68
2.	The new gemstone regulatory affect the poverty reduction of the region.	2.93	2.62
3.	The legal changes of the sector would ease of doing business for citizen miners. (Getting permit, taxation, tenure/size and transportation)	3.32	2.96
4.	The legal status of the current gemstone sector provides ease of doing business for foreign investors.	3.23	2.85
5.	The legal status of the current gemstone sector enable access to modern technology and financial.	3.10	2.75
6.	The participation of MEITI works in Myanmar feasibly enhance the sector development.	3.25	2.81
7.	Gemstone value-added industry has better income generation after the new law and enacted.	3.39	3.06
8.	Average mean value	3.17	

Source: Survey data, November 2020

Table 4.2 shows the economic impact of the sector. The overall mean level economic impact of the sector is 3.17 and this indicates the majority of respondents agreed that the legal and regulatory framework had a positive economic impact to the sector. The highest mean shown 3.32 and followed by the statement that “The legal changes of the sector would ease of doing business for citizen miners” and had resulted with 2.93 mean that “The new gemstone regulatory may significantly affected the poverty reduction in the region.”

4.3.2 Comments from Open-ended Question on Economic Impact

Based on the open-ended questionnaire, there are many meaningful comments which were backed and forth by saying that “It would be more convenient for ethnic entrepreneurs to hold local exhibitions of mined stones.” “The current law still has many requirements. The role of manual workers needs to be added.” “There are even operation stops due to Gemstones law introduction, mainly impractical on size and technically not feasible, and permit process takes long.” Another respondent added “EITI might help this sector, however, in terms of transparency, Myanmar has a long way to go.” A local miner stated that “it is important that the government rewrite its regulations. The requirements of the law are to provide the government with the utmost access to state-of-the-art technology to ensure that the public interests (public = artisan, entrepreneur, employer, employee, etc.) are empowered.” “Some laws are not practical. If the smuggling can be stopped in accordance with the law, it will greatly contribute to the economic impact of the country. Local business owners want to crack down on illegal smuggling and believe the economy will improve if the law is enforced.”

(ii) Social Impact

Table 4.3 Social Impact

No.	Description	Mean	Standard Deviation
1.	The government enforce legal actions to resettle communities affected by mining activities such as land slide and pollution.	3.25	2.86
2.	Authority properly deals with artisanal and small-scale mining in fulfilling its mandate.	3.27	2.90
3.	The entitled to labor rights and grievances relating to health, livelihood security are considered.	3.26	2.92
4.	The legal status of the gemstone sector encompasses the integrity of culture, cultural and natural heritage.	3.27	2.90
5.	In practice, authorities enforce population settlement and acquisition of land.	3.19	2.83
6.	Access to education of mine workers' children is equal to the other.	3.20	2.84
7.	Average mean value	3.89	

Source: Survey data, November 2020

Table 4.3 presents the social impact of the sector. The overall mean level social impact of the sector is 3.89 and this indicates the majority of respondents agreed that the legal and regulatory framework had a positive social impact to the sector. The two highest mean results 3.27 and followed by the statement that “Authority properly dealing with artisanal and small-scale mining in fulfilling its mandate.” And “The legal status of the gemstone sector encompasses the integrity of culture, cultural and natural heritage.” The rest of the mean resulted around 3.0 value which were moderately high in terms of ranking scale.

4.3.3 Comments from Open-ended Question on Social Impact

Following up results of the social impacts questionnaire shown that there were several concerns of the respondents quote “Consideration should be given to locating local businesses and small-scale handicrafts. It would be great if the mining industry

could work in partnership with the state in a transparent and honest manner.” “The current law does not explicitly state social implications. Specific to Hpakant, lack of law enforcement, death toll rises shows that this law does not give positive impact or even no effect.” A local CSO responded that “That might be good if could consider some more highlight points for social impact and local people who suffer the impacts.” “The effects of the narcotics associated with jade mining will continue to plague the people who are currently suffering from natural disasters. People need peace and believe that social life will improve if the law is enforced.”

(iii) Environmental Impact

Table 4.4 Environmental Impact

No.	Description	Mean	Standard Deviation
1.	Procedures for environmental assessment report to government agency are concise.	2.89	2.55
2.	Environmental Management Plan (EMP) including exploration, mine planning and mine closure that instructed by the regulator achievable.	2.52	2.24
3.	Environmental conservation of the sector is sufficiently competitive with other law and directives. (e.g National Environmental Conservation Policy, the National Environmental Conservation Law, Rules and Procedures)	2.55	2.28
4.	Permit/license holders are contributing sufficient capital investment on ensuring workplace security and safety in the gemstone mining areas.	3.35	3.01
5.	In practice, the renewal of the production permit is considered based on the applicant’s track record of implementing the mining plan and its environmental impact assessment.	3.23	2.89
6.	The mine closure budgets are adequate enough for a proper environmental rehabilitation program.	3.33	2.98
7.	Being allocating small size and short tenure can prevent from massive environmental distortion.	3.28	2.94
8.	The Free Prior Informed Consent (FPIC) procedures were used in the community.	2.89	2.55
9.	Average mean value	3.00	

Source: Survey data, November 2020

Table 4.4 demonstrates the environmental concerns from the stakeholders. The average mean value of the survey found 3.0 which is still moderately high and have positive. The highest value results 3.35 following by “Permit/license holders are contributing sufficient capital investment on ensuring workplace security and safety in the gemstone mining areas.” There were mixed mean value that playing around 3.23 to 3.33 on the statements of “In practice, the renewal of the production permit is considered based on the applicant’s track record of implementing the mining plan and its environmental impact assessment.” “Being allocating small size and short tenure can prevent from massive environmental distortion.” And “The mine closure budgets are adequate enough for a proper environmental rehabilitation program.” respectively. A mixed result on the assessment report procedures, its competitiveness with other law and directives and environmental management plan (EMP) were ranged from 2.52 to 2.89 respectively.

4.3.4 Comments from Open-ended Question on Environmental Impact

Following above statements, stakeholder among the sector provided their comments as “The ability to repair damaged natural lands; local losses should be taken into account.” “The current law still contains many unrealistic provisions. It need to act in accordance with the law Comments on EMP prepared by Coffey Valentis is purely technically follow able, but government needs to have the will and capacity to enforce it.” “EMP locally prepared is only meant for permits not practiced on the ground. “The death case from landslides in Hwekha Maw is such a significant problem,” says the report. “Mine operators' knowledge is insufficient to perform mine planning and mine closure. In Hpakant specifically, it do not have space to contain environmental impacts due to tenure duration and concession size. People need the awareness training of the environment maintenance.” “Transparency is not strictly adhered to by the government and the business community.” And “Following the law will be good for the environment. Laws should be enacted to regulate the waste land from the Mogok excavation.” and so forth.

(iv) Regulatory Impact

Table 4.5 Regulatory Impact

No.	Description	Mean	Standard Deviation
1.	Number of government officials, private sector, ASM/ CSO participated on the gemstone sector regulatory development process are well represented.	3.00	2.67
2.	Small-scale miners able to coexist with other mining activities. (Emporium, trade fair and additional exposure)	3.23	2.86
3.	Gemstone law that creates perverse incentives, making situations worse instead of better.	3.00	2.61
4.	The Gemstone Regulations Bill attempts by one group to wrest resources away from another group.	3.32	2.91
5.	The scope and limitation of authority in different branches are clearly defined.	2.93	2.61
6.	The new law enhanced transparency and accountability in line with international good practices.	3.06	2.73
7.	The role of each departmental agencies is clearly stated in the gemstone rules.	3.00	2.63
8.	Average mean value	3.08	

Source: Survey data, November 2020

Table 4.5 implied the regulator impact of the sector. Again, the average mean of the sector's regulatory impact still positive and moderately high valued for 3.08. Except the statement "The scope and limitation of authority in different branches are clearly defined.," which is valued for 2.93, rest of the measurement and mean of gemstone sector regulatory impact are valued for 3.0 to 3.32 which were moderately high.

4.3.5 Comments from Open-ended Question on Regulatory Impact

Though the survey collection result moderately high, there were in depth discussion on regulatory impact of Myanmar gemstone sector. A local stakeholder among the respondent claimed that “There is a lack, clear and sound laws, and poor planning for the future.” In practice, the big business owners are influencing the concession of other organizations and producing more. It will be difficult for local entrepreneurs and small business owners to get the right to do so due to the competition of tenders for the right to operate under this law.” As well as comments like “There is another pound in the waist. The current law still contains many unrealistic provisions” are being said.

(v) Effect of Local Communities

Table 4.6 Effect of Local Communities

No.	Description	Mean	Standard Devastation
1.	Non-extractive sectors are being improve and able to fulfill their basic needs.	3.00	2.66
2.	Positive relationships have built with mine workers from other regions.	3.04	2.68
3.	Revenue gains from the sectors significantly spent for public good/local infrastructure.	2.70	2.49
4.	Number of accidents are being minimized over a course of these years.	2.64	2.35
5.	Safety status of the regions are in a high risk.	3.66	3.32
6.	Average mean value	3.01	

Source: Survey data, November 2020

Table 4.6 illustrates the overall impact of the respondents on effect of local communities were moderately high and positive which accounted for 3.01 of average mean. The highest mean was 3.66 following by “Safety status of the regions are in a high risk.” The question of impact of residential needs and relationships among mine workers mixed value 3.0 and 3.04. However, there were two results that moderately

low which should be noted as a negative or relatively low result valued 2.64 and 2.7 respectively.

4.3.6 Comments from Open-ended Question on Effect of Local Communities

The opinion of the respondents being said that “Consideration should be given to the livelihoods of local people and small and medium-sized businesses.” “When the site is located, it has good transportation links and is convenient for locals, as well as locals and long-distance workers.” Gem’s sector is pretty at a mess. Cadastre might help or government should reposition their stand against their gems policy. For example, less production but more value-added business. In this way, there will be longer positive contribution to the socio-economic situation of the locals and the government. Ignoring the local people and the working people.” One respondent said it is the “Failure of Federalization.”

CHAPTER V

CONCLUSION

5.1 Findings

This survey discovered that only one out of nine respondents provided their responses. Most were aged from 45-54 years; university graduated and works in the gemstone trading sector. Majority of targeted respondents are from Yangon, Mandalay and Kachin state. Both qualitative findings and quantitative corroborated and expand to each finding. Though respondents are working in the same industry, results gained from the same questionnaire were vary based on the nature of the organization they are representing. Respondents did not have common belief on each impact and effect of the sector. Moreover, some of them did not aware the potential impact of the new enacted gemstone laws, regulations bill.

The economic impact of the sector falls into a positive impact by the majority of the respondents who were participated in the survey. First, amongst the questions that answered, “Gemstone value-added industry has better income generation after the new law and enacted.” has greatest impact. Second, “The legal changes of the sector would ease of doing business for citizen miners. (Getting permit, taxation, tenure/size and transportation).” Third, “The participation of MEITI works in Myanmar feasibly enhance the sector development.” The additional comments from this economic impact highlights that the current law still need to be amended due to the outdated clauses and requirements. Particularly, those section that greatly contribute to the smuggling and causes the local business owners economic crack down.

The finding on the social impact of the sector implies that public perspective of the sector is being positive. First, the impact on “Authority properly deals with artisanal and small-scale mining in fulfilling its mandate.” falls at the highest impact while “The legal status of the gemstone sector encompasses the integrity of culture, cultural and natural heritage.” falls as a second highest. And “The entitled to labor rights and grievances relating to health, livelihood security is considered.” remain as a third highest impact. Comment of several respondents indicates that the current law needed to take into account the dramatic effect of the social in a transparent and honest manner

and it needs to enforce the law that brings peace and a betterment of social life at some point.

Respondents view on the environment impact being positive since they believe that miners put proper resources in the cultivation of the extraction activities. For instance, “Permit/license holders are contributing sufficient capital investment on ensuring workplace security and safety in the gemstone mining areas.” shows as highest impact among the measurement. The statement of “Mine closure budgets are adequate enough for a proper environmental rehabilitation program.” and “Being allocating small size and short tenure can prevent from massive environmental distortion.” Comes out as a second and third highest impacts respectively. A respondent even highlights that the regulatory body should have a desire to follow the Environmental Management Plan while enforce miners to have mines planning and closure plan. Small size and short tenure put pressure on miners to follow the good practices in ground.

The outcome of the survey shows that the positive impact of the regulatory issues has taken place orderly that: “The Gemstone Regulations Bill attempts by one group to wrest resources away from another group.” places at the highest impact. Second, “Small-scale miners able to coexist with other mining activities. (Emporium, trade fair and additional exposure).” Third, “The new law enhanced transparency and accountability in line with international good practices.” In the other words, the result indicates majority of the respondents benefit from the current regulatory in their respective business environments. Nevertheless, few respondents amongst the local stakeholder expressed that the lack of clarity and poor planning of the sector will still be dominated local small and artisanal miners. At some point, the current regulatory need to be realistic with a practical sense.

The effect of the local communities of this survey alerts the needs of local security and safety become a big matter since “Safety status of the regions are in a high risk.” has the highest impact. Second, “Positive relationships have built with mine workers from other regions.” which is a good impact to all parties. Third, “Non-extractive sectors are being improve and able to fulfill their basic needs.” which brings a positive sign to the industry. It however states that local communities are being minimized over a period of time. It can be said that the more the intervention of the governing body or international practices are being used, the lower risk are being addressed to the local community. Different background of respondents has common opinion over the effect of the local communities such as concern regarding the

livelihoods, socio-economic conditions and general development of the regions are found in this survey.

Overall, quantitative results of the study shown that the value of impact that had been assessed were moderately high and positive in all areas of examining. The quantitative shown each impact had accounted for over 3 mean values. These quantitative results are majorly responded by colored-stone traders and brokers existing in the targeted regions. However, the additional comments received for qualitative results came from private business owners and local CSO who provided insight thought, feeling and own experiences were highlighted the weak point of the sector. The qualitative results shown that local business owners and communities faced unwanted impacts which were more likely realistic and widely spoken in the physical environment. Local community, development agencies as well as business enterprise highlighted the weakness of Myanmar gemstone legal and regulatory framework overtime.

5.2 Suggestions

The needs to reform Myanmar Gemstone legal and regulatory framework has been controversial. Generally, stakeholder in the sector diverted into two groups who had seen the institutional framework of the sector itself impact both in positive and negative ways. In the other hand, this can be said that the institutional and regulatory framework of the sector encounters both challenges and opportunities. Thus, the following suggestion are made in light of above of findings. In order to have a better impact of the area that had examined; the economic, social, environment, regulatory and effect on local communities, authorities required to oversight and take necessary action constantly.

In the economic impact, major respondents believed that the new gemstone regulatory affect the poverty reduction of the region which need to be carefully maintained. A work condition that provides the insufficient of income should be addressed and fulfill the basic needs of those residential communities. Following to additional comments, challenges in infrastructure occurs trade illicit and smuggling in the region. Given that border trade safeguard should need to be oversight since its greatly lead to the black market which breakdown local market mechanism.

In the social impact, authorities enforce population settlement and acquisition of land were being weak which result the people in the area in turn and a need to improve for Environmental Management Plan (EMP) including exploration, mine planning and mine closure that instructed by the regulator are needed to be achievable. More importantly, the protection of rights to utilities, social norms and access to education should be in place. A strategic plan to make that happen needs to be consult and implement accordingly with the external resource intervention.

Back to the environmental impact, sufficient amount for mine closure or management plan should be set aside and deposited. The cause of environmental damaging and accident from waste dump work should be eliminated by taking a serious action. The Natural Resource Committee shall review both legislation and implication of the regulations in terms of awarding the concession and permit allocation. In terms of political economy approach, the revenue leakage from the gems trading should be properly monitor and carefully managed. Those revenue gained from trading should spend for sector reform and declared transparently in a way to promote the economic impact. The budget allocation for region development is being low and this hinder local development. A fascial federalism shall establish while high-ended technology and enable business environment are considered. The mechanism to oversee the traceable activities, the smuggling rough gemstone at border trade area and producing areas must establish. An infrastructure that enables a modern business environment, a technique for competitions and sounds production shall develop across the regions. Due to the size and duration of concession is restrictive and this may not achieve the good environmental outcomes. This shall be extended and make the system properly constructed.

In the regulatory impact, the need to clarify the scope and limitation of authority in different branches were being poor and this required to improve both in the law and regulation of the sector. Most important issue that has been occurred in every gemstone extraction was number of accidents that causes miners lives and possesses. These shall immediately need to improve and give prior concern by all stakeholders. Authorities has the most power to initiate while its related government agencies have responsibilities to implement them. On ground inspection should be conducted while the reinforcement of the regulatory put in priority. To be able to resolve this, a comprehensive policy, regulatory and legal framework is needed to maximize the Myanmar gemstone sector at the Union level. If one of them cannot correspondent all

aspects of the industry needs, this should be reviewed and revised by taking stakeholder consultation and their representation. Otherwise, the collaboration remains a major barrier. Restrictions that against international standards should be removed including logistic wide, trading and value-added processing.

To be able to resolve the needs of local community's security and safety matter, it is critically to bring both small, medium and artisanal miners to construct a more structured and commercially viable institutions since their felt the treatment were not being equal. Government agencies is the key player in this regard. The Law enforcement should be carried out in fair and consistent manner to sector wide and apply equally to those communities. While doing so, the representation of each stakeholder group and committee that has been set up to oversight the sector shall be hired among the concerned stakeholders. This had been questioned among stakeholder consultation meetings and still poorly identified.

Finally, natural resources including gemstone are universally recognized as important to country development. The reform in gemstone legal and regulatory framework should be polished and developed over time alongside the country economic and politic transaction of Myanmar.

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APPENDICES

Survey Profile

This survey aims to measure how current Myanmar legal and regulatory framework of gemstone sector impacts concerned stakeholders; business enterprise including, artisanal and small-scale mining (ASM), local community, community-based organization (CSO)/focus group in the specific area and government official are being counted.

Data gain from survey intends to examine gemstone sector's stakeholder concern on current Myanmar legal and regulatory framework that impacts the social, economic and environment against industry good practices and to access knowledge of the local how the extractive activity effects the regions.

You have been selected in this study. This survey shall take less than 20 minutes to complete. And your answers will be used for an academic purpose only and the responses will be kept strictly confidential. I shall be greatly appreciated for your support.

Section I. Demographic Information

1. Name..... (Optional)

2. Age?
 Under 18-24 25-34 35-44 45-54 55-64 Above 64

3. Sex?
 Male Female Other.....

4. Marital status?
 Single Married Divorce

5. Highest education level?
 Middle school High school College Graduate
 Post-graduate Doctorate Other

6. Sector/Type of Organization?

- Government sector Private sector; Small/Medium

(Please cycle one)

Please specify name of the organization (Optional)

.....

- Local/Civil Society Organization

Please specify name of the organization (Optional)

.....

- Artisanal and Small-scale Mining (ASM)

- Development Agency/Focus Group

Please specify name of the organization (Optional)

.....

- Mine worker

- Color-stone broker

- Other.....

7. Designation?

- Ordinary worker Below manager Manager or equivalent

- Snr. Manager or equivalent Director or equivalent

- Snr. Director or equivalent Owner/Founder/Chairman

8. Region?

- Yangon Kachin Mandalay/Mogoke

- Other.....

9. Number of event attended; meeting, discussion, workshop, seminar and/or emporium relating to gemstone sector?

- 1-3 3-6 6-9 9-12

- 12-15 Above

SURVEY QUESTIONS

Instructions:

Please answer all questions based on your experience and knowledge by putting a rank on a scale (Strongly Agreed, Agreed, Neighed Agreed nor Disagreed, Disagreed or Strongly Disagreed).

Section II. Economic Impacts

No.	Questions	Strongly Agreed	Agree	Neither Agreed or Disagreed	Disagreed	Strongly Disagreed
1.	Individual household income is being improved by the new Myanmar Gemstone Law changed.					
2.	The new gemstone regulatory may significantly affect the poverty reduction of the region.					
3.	The legal changes of the sector would ease of doing business for citizen miners. (Getting permit, taxation, tenure/size and transportation)					
4.	The legal status of the current gemstone sector provides ease of doing business for foreign investors.					
5.	The legal status of the current gemstone sector enable access to modern technology and financial.					
6.	The participation of MEITI works in Myanmar feasibly enhance the sector development.					
7.	Gemstone value-added industry has better income generation after the new law and enacted.					

Please provide your comment your most concern on economic impact for the sector.

Section III. Social Impacts

No.	Questions	Strongly Agreed	Agree	Neither Agreed or Disagreed	Disagreed	Strongly Disagreed
1.	The government enforce legal actions to resettle communities affected by mining activities such as land slide and pollution.					
2.	Authority properly deals with artisanal and small-scale mining in fulfilling its mandate.					
3.	The entitled to labor rights and grievances relating to health, livelihood security are considered.					
4.	The legal status of the gemstone sector encompasses the integrity of culture, cultural and natural heritage.					
5.	In practice, authorities enforce population settlement and acquisition of land.					
6.	Access to education of mine workers' children is equal to the other.					

Please provide your comment your most concern on social impact for the sector.

Section IV. Environmental Impacts

No.	Questions	Strongly Agreed	Agree	Neither Agreed or Disagreed	Disagreed	Strongly Disagreed
1.	Procedures for environmental assessment report to government agency are concise.					
2.	Environmental Management Plan (EMP) including exploration, mine planning and mine closure that instructed by the regulator achievable.					
3.	Environmental conservation of the sector is sufficiently competitive with other law and directives. (e.g National Environmental Conservation Policy, the National Environmental Conservation Law, Rules and Procedures)					
4.	Permit/license holders are contributing sufficient capital investment on ensuring workplace security and safety in the gemstone mining areas.					
5.	In practice, the renewal of the production permit is considered based on the applicant's track record of implementing the mining plan and its environmental impact assessment.					
6.	The mine closure budgets are adequate enough for a proper environmental rehabilitation program.					
7.	Being allocating small size and short tenure can prevent from massive environmental distortion.					
8.	The Free Prior Informed Consent (FPIC) procedures were used in the community.					

Please provide your comment your most concern on environmental impact for the sector.

Section V. Regulatory Impact

No.	Questions	Strongly Agreed	Agree	Neither Agreed or Disagreed	Disagreed	Strongly Disagreed
1.	Number of government officials, private sector, ASM/ CSOs participated on the gemstone sector regulatory development process are well represented.					
2.	Small-scale miners able to coexist with other mining activities. (Emporium, trade fair and additional exposure)					
3.	Gemstone law that creates perverse incentives, making situations worse instead of better.					
4.	The Gemstone Regulations Bill attempts by one group to wrest resources away from another group.					
5.	The scope and limitation of authority in different branches are clearly defined.					
6.	The new law enhanced transparency and accountability in line with international good practices.					
7.	The role of each departmental agencies is clearly stated in the gemstone rules.					

Please provide your comment your most concern on regulatory impact for the sector.

Section VI. Effects of Local Communities

No.	Questions	Strongly Agreed	Agree	Neither Agreed or Disagreed	Disagreed	Strongly Disagreed
1.	Non-extractive sectors are being improve and able to fulfill their basic needs.					
2.	Positive relationships have built with mine workers from other regions.					
3.	Revenue gains from the sectors significantly spent for public good/local infrastructure.					
4.	Number of accidents are being minimized over a course of these years.					
5.	Safety status of the regions are in a high risk.					

Please provide your comment your most concern on effects of local communities in the sector.
