

UNIVERSITY OF GHANA, LEGON

FACULTY OF ARTS

DEPARTMENT OF FRENCH

**A TRANSLATION INTO ENGLISH OF: “LA BONNE GOUVERNANCE
DANS LE SECTEUR MINIER COMME FACTEUR DE CROISSANCE EN DRC”**

**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF MA
TRANSLATION DEGREE**

UNDER THE SUPERVISION OF MR. EMMANUEL KOBENA KUTO

BY

CATHERINE ADJAH

(10173181)

29TH SEPTEMBER, 2016

DECLARATION

I hereby declare that this thesis is the result of my project work in the Department of French and Modern Languages and submitted to the University of Ghana, Legon in line with the requirements for the Award of the Master of Art degree in translation. Contributions, ideas of others and quotations used in this research have been duly cited. This work has not been previously submitted, in part or whole, to the University of Ghana or to any university for a Master of Art degree and I remain responsible for any shortcomings that are in connections with it.

Catherine Adjah

(10173181)

(Student)

Mr. Emmanuel K. kuto

(Supervisor)



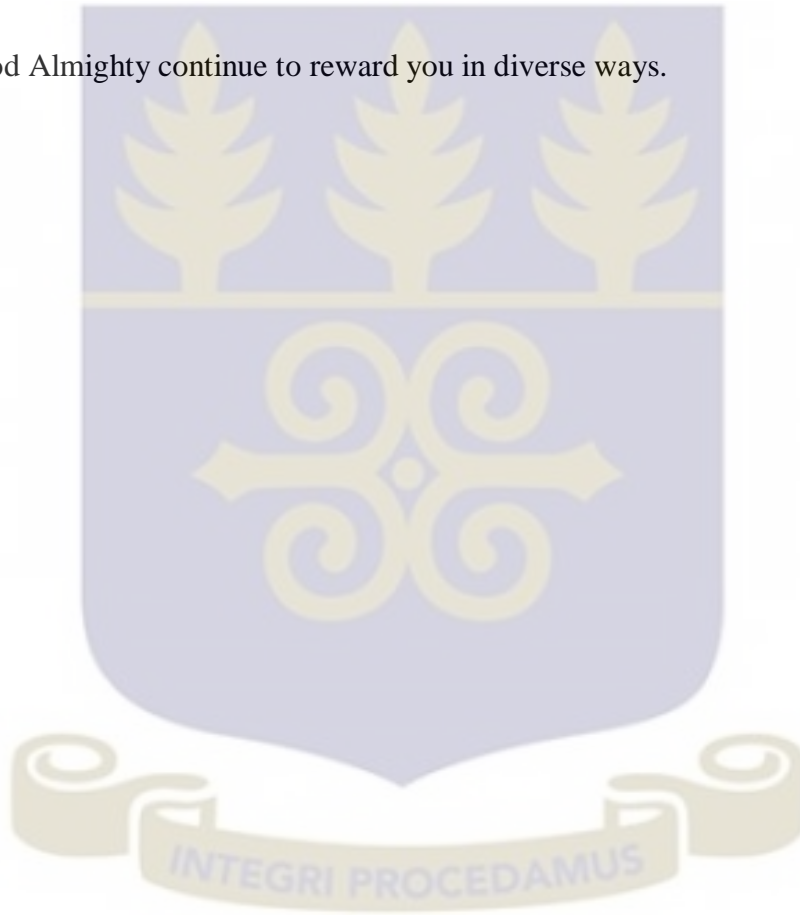
.....
Signature...../09/2016

.....
Signature...../09/2016

DEDICATION

This project work is dedicated to my wonderful mother and siblings, thanks infinitely for your constant support and encouragement. To all members of my family, to all Department lecturers, and Staff of University of Ghana Transbureau for your support.

May the Lord God Almighty continue to reward you in diverse ways.



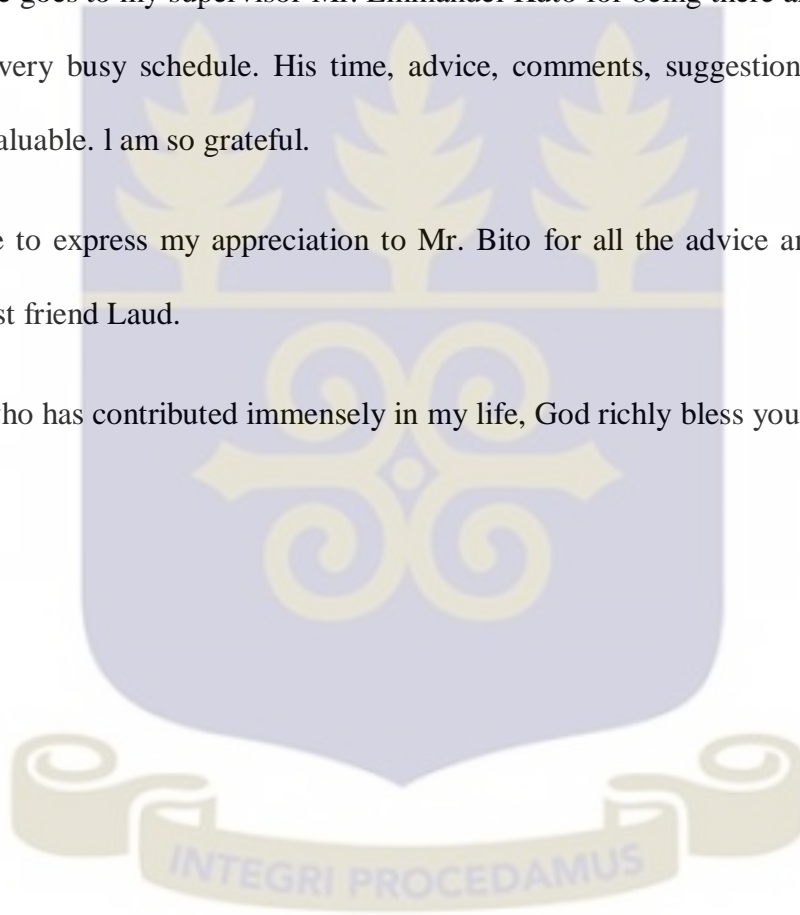
ACKNOWLEDGEMENT

My first and foremost thanks goes to God Almighty. I would like to thank my mother and siblings for their support, their advice and for their prayers.

My next gratitude goes to my supervisor Mr. Emmanuel Kuto for being there anytime I called on him despite his very busy schedule. His time, advice, comments, suggestions and corrections have been so invaluable. I am so grateful.

I would also like to express my appreciation to Mr. Bito for all the advice and counseling not forgetting my best friend Laud.

To anyone one who has contributed immensely in my life, God richly bless you.



ABSTRACT

In translation documents, translators are often confronted with challenges during the process. One of such problems he may face arise from the fact that some words or phrases provide various meanings in different communicating situations and finding equivalence becomes a problem. The purpose of this study is to investigate the issue of grammatical and structural equivalence in translation. A text translated from French into English will serve as our corpus for examining the forms of equivalence. This analysis is done from a linguistics perspective using Gorge Yule (1988) and from a translation perspective using the views of Mildred L. Larson (1984) and Mona Baker (1992, 1998) as a theoretical framework. It includes a main corpus and three control corpora. The study investigates the issue of grammatical and structural equivalence including the findings and recommendations.

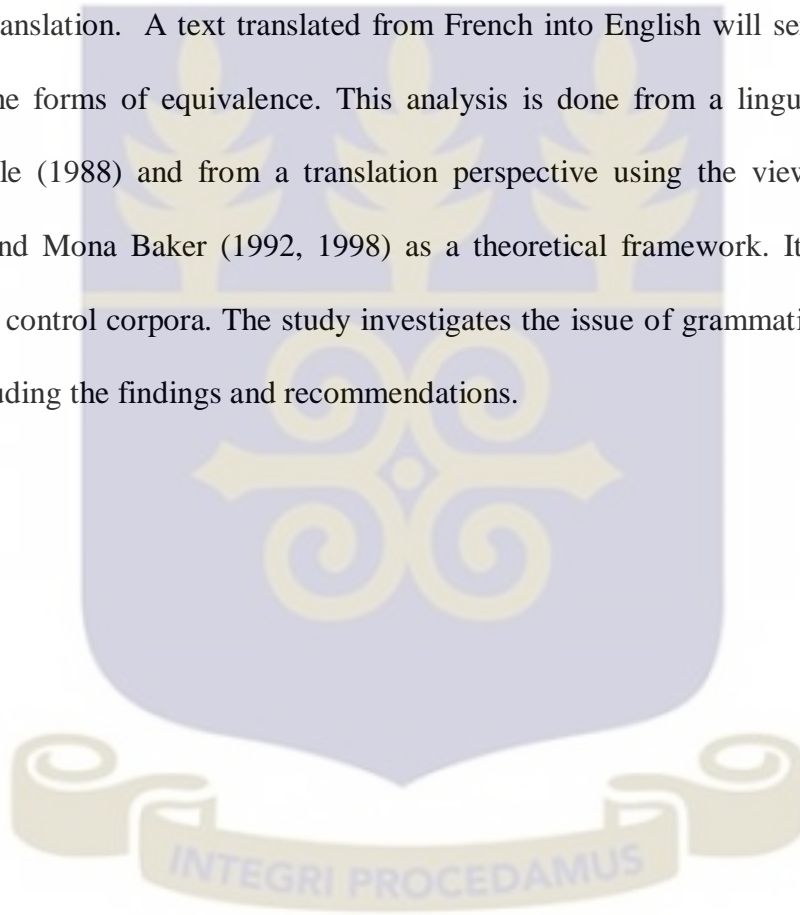


Table of Contents

DECLARATION	1
DEDICATION	2
ACKNOWLEDGMENT	3
ABSTRACT	4
CHAPTER ONE	7
1.0 Introduction	7
1.1 Statement of problem	9
1.2 Research objectives	12
1.3 Relevance of the study	12
1.4 Limitations	12
1.5 Literature review	14
1.6 Methodology	19
1.7 Source text analysis	20
1.8 Organisation of the work	21
CHAPTER TWO	22
Translated text	22
CHAPTER THREE	84
3.0 INTRODUCTION OF CORPUS-BASED ANALYSIS	84
3.1 Analysis of French-English Grammatical and Structure Equivalence	85
3.2 Analysis of the classification of forms of French-English Grammatical and Structural Equivalents	88
3.2.1 Equivalents of Verb + Noun/Adjective Word Combinations	90
3.2.2 Equivalents of Preposition + Noun/Adjective Word Combinations	91

3.2.3 Equivalents of Adjective + Noun Word Combinations	92
CHAPTER FOUR	94
4.0 Findings	94
4. 1 Conclusion	98
4.2 Recommendations	99
BIBLIOGRAPY	101
GLOSSARY	103



CHAPTER ONE

1.0 Introduction

Translation has over the years transfer meaning from the source language text into the target language text. Thus meaning plays a crucial role in translation. (Catford 1960:35) Expressing meaning needs to be done accurately by the translator. He has to relay his message clearly without any ambiguity from the source text into the target language. A translation must therefore carry the same meaning as the original. Larson states that: “The translator’s goal should be to reproduce in the receptor language a text which communicates the same meaning as the source language”¹. In reproducing the message, translators should know what translation entails in order to render the intended meaning of the source language. We will then look at different definitions and views of translation from various authors and theorists in the field.

According to Larson, “Translation consists of studying the lexicon, grammatical structure, communication situation and cultural content of the source language text, analyzing it in order to determine its meaning and then reconstructing the same meaning using the lexicon and grammatical structure which are appropriate in the Receptor Language and its cultural context”². Additionally, Jeremy Munday cites Jakobson as stating that, “Translation is substituting messages in one language not for separate code-units but for entire messages in some other language”³. Echoing on the same view Bell describes translation as, “The replacement of a representation of a text in one language by a representation of an equivalent text in the second

¹ Larson, Mildred L. (1984:3). *Meaning-Based Translation: A Guide to Cross-Language Equivalence*. United States of America: University Press of America.

² (ibid: 3).

³ Munday, Jeremy. (2001: 36). *Introducing Translation Studies: Theories and Applications*. London and New York: Routledge.

language”⁴. Catford asserts that, “Translation is the replacement of textual material in one language (SL) by equivalent textual material in another language (TL)”⁵. From the above definitions, it can be concluded that the authors have different views on translation concerning the messages to be communicated.

However communicating meaning in translation has never being without challenges since translation involves two languages with different grammatical forms and structures. This research examines the study of grammatical and structural equivalence in translation. How is equivalence defined and how important is it in the field of translation? Is equivalence of a specific linguistic unit easily identified in the target language?

Bell states that “To shift from one language to another is by, definition, to alter the forms. Further, the contrasting forms having conveyed meanings which cannot but fail to coincide totally; there is no absolute synonymy between words in the same language, so why should anyone be surprised to discover a lack of synonymy between languages”⁶. What does a translator do when there are no synonyms or words which correspond to the same meaning in the source language? Echoing on the same view Larson examines this when she states that: “In light of the tremendous diversity in the lexicon of various languages, how is it possible for a translator to choose the best lexical equivalent for the translation”⁷? Can a dictionary and other research tools

⁴ Bell, Roger T. (1991: 23). *Translation and translating: Theory and practice*. New York: Longman.

⁵ Catford, John C. (1965: 12). *A Linguistic Theory of Translation: An Essay on Applied Linguistics*. London: Oxford University Press.

⁶ Bell, Roger T. (1991: 35). *Translation and translating: Theory and practice*. New York: Longman.

⁷ Larson, Mildred L. (1984: 45). *Meaning-Based Translation: A Guide to Cross-Language Equivalence*. United States of America: University Press of America.

offer us target language equivalents? From the discussions above it is obvious that a translator should be conscious of the different forms and structures that languages portray in order to render an appropriate target language equivalent. Here we will examine grammatical and structural equivalent which deals with different forms and patterns that can be found across languages. According to Baker grammatical equivalence is the diversity of grammatical categories across languages (1989: 85). This diversity across languages brings about structural changes. These changes vary in languages, for instance word combinations are formed differently in each language making it difficult to arrive at target language equivalents. Additionally these structural changes cause gaps in translation which can lead to loss of information. One of such problems from our corpus is *vendu en contrebände*. Transposition as technique was used to render the meaning and this gave us *illegally sold* as a TL equivalent.

This study seeks to solve these problems posed by the different grammatical structures by analyzing the problems of grammatical and structural equivalence in *La Bonne Gouvernance Dans le Secteur Miner comme Facteur de Croissance en DRC*. It also analyses these structural changes from perspectives of Vinay and Darbelnet, Catford, Mildred Larson and other translation theorists.

1.1 Statement of problem

Grammatical equivalence has been defined with reference to meaning in translation. (Catford 1987:35). A translation must therefore carry the same meaning as the original. Arriving at this stage is very arduous and demanding due to the differences that languages carry. Bell states that, “Languages are different from each other; they are different in form having distinct codes and rules regulating the construction of grammatical stretches of language and these forms have

different meanings”⁸. These differences make it difficult to shift from one language to another as a result of the changes in the structures, the grammatical rules and other factors. Due to these changes and the different forms that languages take, finding grammatical equivalent or one- on - one correspondence in the TL becomes a challenge. The structures of specific linguistic units do not match. How do we reconcile these structures in order to arrive at target language equivalent?

Baker (1990) refers to grammatical equivalence as diversity of categories across languages with translators managing the structures of the source and target languages to arrive at grammatical equivalent. For Baker, in order to arrive at grammatical equivalence the translator has to know the structure because it plays an important role. According to her, “Syntax concerns the grammatical structure of group of words (clauses or sentences), the linear of classes of words (noun, verb, adverb, adjective, etc)”⁹. She adds that the structures normally cause changes in the way the information is carried across and this may pose problems in finding a target language equivalent.

In French and English as in all languages, such structures normally occur as shown by these examples from our corpus *quitte le pays en fraude* and *l’exploitation minière industrielle* can be rendered as *illegally exported outside the country* and *large scale mining* respectively. If the translator fails to reconcile these structures in both languages, rendering a target equivalent can be distorted.

⁸ Bell, Roger T. (1991: 12). *Translation and translating: Theory and practice*. New York: Longman.

⁹ Baker, Mona. (1992: 39). *In Other Words: A Course book on Translation*. London: Routledge.

How then is the equivalence of a specific linguistic unit easily arrived at in the target language? What should the translator do when there are no target language equivalents? Mona indicates that “Equivalence is a negotiable entity with translators doing the negotiation”¹⁰. During such process the translator is required to fully understand the SL in order to render the translation appropriately. As a negotiator, how then should s/he reconcile the two structures in order to arrive at a grammatical equivalent? Should the translator find it difficult to identify these combinations and structures, s/he may render them differently which may distort the intended meaning. What had been identified is that, the structures of the languages are different and there is no one-on-one-correspondence, therefore rendering them pose challenges to the translator. One of such challenges is that, there is loss of information. For instance when there is a combination of a noun + an adjective structure in the source language. How do we manage the two grammars and structures of this combination to arrive at meaning in the target language? What does a translator do when there is no word in the target language which corresponds to the same meaning in the source language? These are some of the challenges translators face in the task of translating while finding appropriate target language equivalents when combining nouns with nouns, nouns with prepositions etc. What strategies do we have to employ to bring out the intended meaning? Transposition and class shifts as well as other techniques were used to resolve such challenges. *Une convention spéciale* is an example of such challenge and transposition as a technique was used to translate it. This was rendered as *a special agreement* in the TL.

¹⁰ Baker, Mona.(1998: 49). *Routledge Encyclopedia of Translation Studies*. New York: Routledge.

Though equivalence is a controversial issue and plays a crucial role in translation, translators should be well equipped to tackle these issues as they come across in translation. The principal aim of this study is to identify the forms of grammatical and structural equivalence according to the views from the theorists in the French-English translation. It will also demonstrate how to overcome these difficulties. Not being able to overcome these difficulties during the task of translating can distort the intended meaning of the source text.

1.2 Research objectives

Objectives are very essential in a research work since they guide the researcher to accomplish the study. The general objective of this research is to examine the issue of grammatical and structural equivalence in French- English translation using *LaBbonne Gouvernance Dans leSsecteur Minier Comme Facteur de Croissance en DRC* as corpus.

Specific objectives include:

1. To translate the text, rendering it in the TL the intended meaning in the SL
2. To identify different levels of grammatical and structural equivalence and classify them;
3. To examine why they are seen as translation problems;
4. To analyse them and find solutions to them;
5. To look for findings, draw conclusions and make recommendations.

1.3 Relevance of the study

Finding grammatical and structural equivalence in translation has always brought about heated debates and problems. The choice of this topic is to examine some of the challenges that

translators face in the course of their task. Translators will also appreciate the fact that structural equivalence can cause a lot of problems in translation due to the negligence of the translator of certain forms and patterns in languages. This project seeks to solve the problems that have been identified during the process of translation i.e. finding appropriate equivalent in the target language. The study is relevant on account of its contribution to available literature on grammatical and structural equivalence.

This research will be useful to teachers and students of translation studies as it will also be an indispensable resource to professional translators and translation researchers. In addition it will help us to identify the challenges involve in transferring meaning into the target language. It is hoped that this study will stimulate more interest in translation. The study will also provide ways of surmounting such challenges identified.

1.4 Limitations

This research is part of the requirement for an MA Translation programme. Though is for the award of an MA, much time was not allotted for it to be accomplished. As a result the research done was limited in scope. The research examines the challenges of grammatical and structural equivalence in a French-English translation that confronts a translator. After reading some few documents, I was inspired with this text which aims at issues in the mining sector. The text enabled me to acquire some skills in translating it and I also learnt some specific terms in the mining field. The text had it own peculiar issues since it focused on mining which expressed some specific linguistic terms in the field of mining. There is a relationship between the study and the chosen text. The challenges identified on the issue of grammatical and structural equivalence were found in the text and this made it possible to translate the text. However the various expressions in the text pose a bit of challenge. The research is therefore limited in scope

and further investigations can be conducted in the near future to give a broader scope of the difficulties relating to grammatical and structural equivalence.

1. 5 Literature review

Although there are a lot of definitions and forms of equivalence by different translation theorists, there is however no acceptable universal definition. These theorists view equivalence in relation to the translation process from different perspectives. The aim of this section is to review some of the definitions and views on the issue of grammatical and structural equivalence.

Mona Baker looks at different forms of equivalence and one of them is grammatical equivalence. For Baker, grammatical equivalence refers to the diversity of grammatical categories across languages. She argues that grammatical rules may vary across languages and this may pose some challenges in terms of finding a direct correspondence in the target language. According to her, “Grammar is the set of rules which determine the way in which units such as words and phrases can be combined in a language and the kind of information which has to be made regularly explicit in utterances”¹¹. How do we combine such rules to arrive at target language equivalence? She adds that the grammatical structures may cause a change in the way the information is carried. She also looks at the syntax which is the structure of a language. Baker states that, “Syntax covers the grammatical structure of group of words (clauses or sentences), the linear of classes of words (noun, verb, adverb, adjective, etc)”¹². The structures normal causes changes in the way the information is carried across and this may pose problems in finding a target language equivalent. She goes further to mention that to arrive at equivalent which is finding meaning, the

¹¹ Baker, Mona. (1992: 83). *In Other Words: A Course book on Translation*. London: Routledge.

¹² (ibid: 83).

translator needs to have a good knowledge and understanding of the structure of both languages and the forms that these languages carry in order to render a target language equivalent. She mentions that the change may cause the translator either to add or to omit information in the target text because of the lack of particular grammatical structure in the target language.

Pertaining to the issue of equivalence, Bell also mentions that it is an impossible idea to arrive at total equivalent because of the different structures that languages carry. He argues that the construction of grammatical elements of different languages may pose a problem in arriving at a TL equivalent. He posits that, “It is apparent, and this has been for a long time indeed that the ideal of total equivalence is a chimera. Languages are different from each other; they are different in form having distinct codes and rules regarding the construction of grammatical stretches of language and these forms have different meanings”¹³. It is observed from his view that languages are arbitrary and this is a cause of variation among them. This arbitrariness poses problems in arriving at meaning that is finding a target language equivalent. By arbitrariness it is meant that there is no one-to-one correspondence between the form of the word and the shape of the object to which the word refers (Yule, 1988:18). These differences in form and structure that languages carry makes it difficult to find target language equivalent for specific linguistic units. He mentions further that, these differences include the form, the structure in which words are combined to form sentences. He states that the translator needs to have a good knowledge and understanding of the different forms that these languages take in order to render a target language equivalent. It is noteworthy to mention that differences in the grammatical structures of both languages can change in the information content during the translation process. This calls

¹³ Bell, Roger T. (1991: 45). *Translation and translating: Theory and practice*. New York: Longman.

for the possibilities of weighing other options before choosing an expression which is appropriate in the TL.

Catford looks at equivalence from different perspectives and one of them is what he refers to as *shifts* in translation. He defines them as “Departures from formal correspondence in the process of going from the SL to TL”¹⁴. He argues that there are two main types of translation shifts namely *level shifts* and *category shifts*. He opines that: “By a shift of level we mean that a SL item at one linguistic level has TL translation equivalence at a different level”¹⁵ and category levels are divided into four types. One of them, *Class-shifts*, is when a SL item is translated with a TL item which belongs to a different grammatical class. That is a verb may be translated with a noun. He mentions that these class shifts are seen as equivalents in the TL. According to him, to arrive at equivalence, translators need to combine words in different forms to make structural patterns in different languages in order to render meaning. If these combinations are done anyhow, it will be difficult to convey meaning.

Vinay and Darbelnet also look at some grammatical structures such as combining nouns with adjectives, verbs with adverbs, nouns with preposition among others which enables one to arrive at equivalence. They argue that equivalent should be achieved in a particular situation that is it should replicate the target language. According to them, “Equivalence is a translation procedure, the result of which replicates the same situation as in the original, whilst using completely different wording”¹⁶. They also suggest that, if this procedure is applied during the translation

¹⁴ Catford, John C. (1965: 49). *A Linguistic Theory of Translation: An Essay on Applied Linguistics*. London: Oxford University Press.

¹⁵ (ibid: 7).

¹⁶ Vinay, Jean P. and Jean Darbelnet. (1995: 89). *Comparative Stylistics of French and English: A Methodology for Translation*, translated by J. C. Sager and M. J. Hamel, Amsterdam / Philadelphia: John Benjamins.

process, it can maintain the stylistic impact of the SL text in the TL text. It is observed from the above definition that, the structure of a language enables the translator to make these choices as well as combine words which results in meaning in the target language. They posit that structural meaning, “normally emerges from the structure created by the lexical elements and the order into which they are put by the rules of grammar”¹⁷. They argue that the grammatical structures put together, form the messages that translators try to find target language equivalents. Further, they also mention that the change in grammatical structure from source language to target language creates problems for the translator because the source language grammatical structure does not exist in the target language. These structures have different variations in both the source and target languages. For instance a structure involving an adverb in the SL can be translated as a verb in the TL. (1959:93). How is the structure managed with other words to arrive at an appropriate target language equivalent? They concluded by saying that transposition is one of the structural changes undertaken by translators to reconcile words in order to arrive at equivalence. In view of that translators face a lot of linguistics constraints and reality to arrive at meaning. They went on to say that, “Though translators recognise the global meaning of the message, for example, *He almost fell*, to be same as *il a failli tomber*, it is observed that the structures vary”¹⁸. They added that the structural elements, their sequence and their associated meanings differ substantially. In the example above the adverb *almost* is expressed by means of the verb *failli*, that is there is a change from one word class to another. This was an example they gave to buttress their point on grammatical and structural differences in both languages.

¹⁷ (ibid: 29).

¹⁸ (ibid: 90).

The structures and forms which enable a translator to reconcile the two grammars are further identified by Larson. She posits that grammatical structure can cause problems for the translator and as a result create gaps in the translation. She argues that, “The translator’s goal should be to reproduce in the receptor language a text which communicates the same message as the source language by using the natural grammatical and lexical choices of the receptor language”¹⁹. She touched on several aspects of equivalence and one of them is looking for equivalent for specific generic term. She explains that because languages vary, a translator needs to know the different generic and specific terms in various languages before an appropriate generic or specific term is used as a target language equivalent. She adds that because the specific term can cause problems in the structure, a translator should be conscious in reconciling words to arrive at equivalence. In her conclusion she echoes that, “It is not simply a matter of different word choices, but of different grammatical structures as well”²⁰.

From the above discussions, it is reveal that since each language is distinct, and having different structures finding target language equivalence becomes a challenge. The notion of grammatical and structural equivalence is one of the most problematic areas in the field of translation as can be observed from the various views from the theorists. These definitions and views in my opinion are relevant to my study in that they stress on the need of arriving at grammatical equivalence by reconciling the structures of both languages.

This study will make use of grammatical and structural equivalence as defined by the authors. Instances of the various views seen so far will form a theoretical framework since they have been identified in my corpus.

¹⁹ Larson, Mildred L. (1984: 67). *Meaning-Based Translation: A Guide to Cross-Language Equivalence*. United States of America: University Press of America.

²⁰ (ibid: 60)

1.6 Methodology

In this study, which is corpus-based, different methods have been used. Data from our corpus will serve as empirical evidence for our discussion in the theoretical framework of Contrastive Analysis. The corpora used in the text include different collections of data. Some of them to be used for this analysis are documentary researches in libraries, internet sources and interviews from professional translators among others. According to Michael Hoey and Dane Houghton “Contrastive Analysis is a linguistic study of two languages, aiming to identify differences between them in general or selected areas”²¹ (cited in Baker, 1998:49). It is observed from the definition that CA involves a study of two languages whose speech community overlap. For instance the two languages to be used are French and English. CA aims to identify the differences in the two languages in general or in a specific field or a selected area where direct translation or a term cannot provide the intended meaning in the target language. It also looks at the structure of a discourse in two different languages.

Some theorists are of the view that CA though extensively used have some limitations in their usage. For instance Hoey talks about some terms of identifying a common ground for comparison and comparing different languages and also considering psycholinguistic and socio-cultural factors. Since it compares two languages it plays an important role in translation. The relationship between CA and translation is bidirectional. The translation of specific pieces of text may provide the data for CA. For our analysis, specific pieces of data from my corpus will provide the data for CA. It is noteworthy to mention that translation goes hand in hand with CA.

²¹ Baker, Mona.(1998: 56). *Routledge Encyclopedia of Translation Studies*. New York: Routledge.

The two are said to be interdependent. This relationship is what will be used to analyze the data in this project. First and foremost we will identify and classify the different forms of equivalents as they appear in the source text. Data from the source text are run in the Corpus Contemporary American English (COCA), the British National Corpus and Corpus Français de Leipzig.

1.7 Source text analysis

The Democratic Republic of Congo is endowed with vast quantities and different types of mineral resources whose extraction has been central to the country's economic growth. However, the challenge has been translating growth in extraction activities into inclusive and sustainable socio-economic development. This problem was as a result of the civil war in DRC and poor mining policies. The government in place implemented a new mining regulation in order to streamline the activities in the sector. Benefits from the sector have largely gone to few people instead of being beneficial to all. Mineral resource extraction has only served to put DRC into the map of foreign capital flows but with limited benefits to the local citizens.

To critically examine the issue, the World Bank conducted a research in 2009 to look at the various policies and measures put in place by the government to regulate activities in the mining sector.

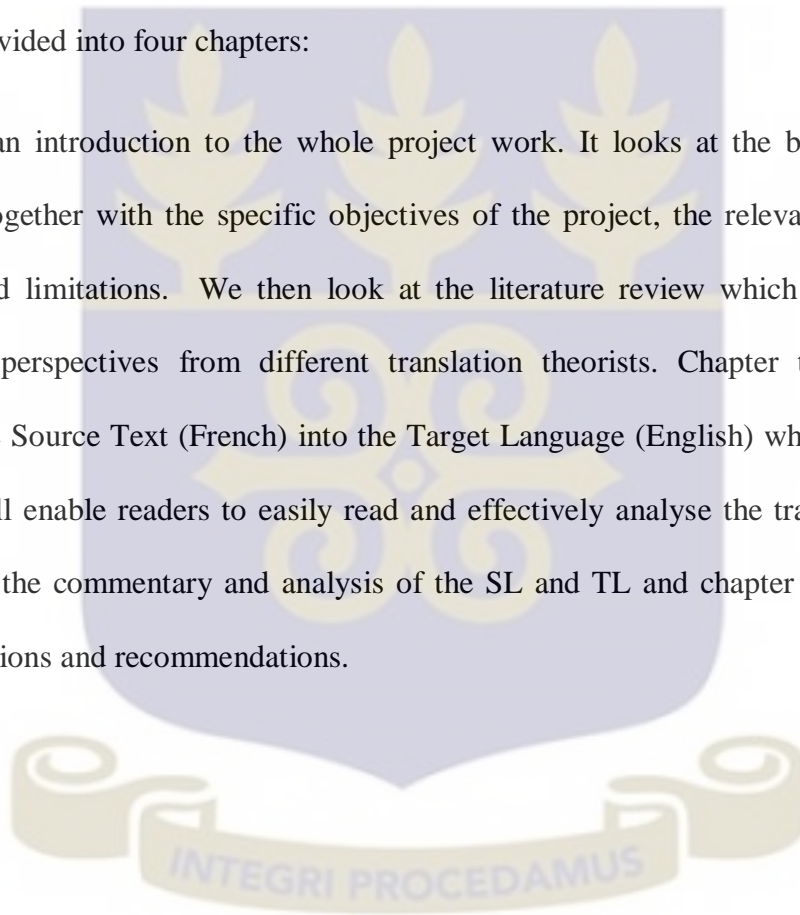
The report is informative and clear. It is easy to understand and it follows the research formats. It has headings and sub-headings which explains the various issues in DRC concerning large scale mining and small scale mining. Despite some specific terms and technical terms that are used, the sentences are straightforward and the message is effectively transmitted to its readers. Additionally it includes policies like changes in the mining registry.

The source text contains seven thousand and eight hundred words. The report is divided into eight chapters and there are different sub headings. It begins with an introduction, an executive summary, a review of issues and mining policies put in place by the government.

1.8 Organisation of the work

This project is divided into four chapters:

Chapter one is an introduction to the whole project work. It looks at the background of the research work together with the specific objectives of the project, the relevance of the study, methodology and limitations. We then look at the literature review which includes various definitions and perspectives from different translation theorists. Chapter two contains the translation of the Source Text (French) into the Target Language (English) which is placed side by side. This will enable readers to easily read and effectively analyse the translation. Chapter three deals with the commentary and analysis of the SL and TL and chapter four contains the findings, conclusions and recommendations.



CHAPTER TWO

CORPORA ALIGNMENT

SOURCE TEXT (FRENCH)

Document de La Banque mondiale

République Démocratique du Congo.

La bonne gouvernance dans le secteur minier comme facteur de croissance en RDC.

Préface

Le présent document examine dans quelle mesure la bonne gouvernance dans le secteur minier peut contribuer à la croissance économique en République Démocratique du Congo. Dans le passé, les mines représentaient le moteur de l'économie congolaise. Mais, au fil des années, les recettes et autres retombées du secteur n'ont pas été utilisées d'une manière rationnelle ou durable, en grande partie du fait de graves problèmes de gouvernance dans le secteur.

TRANSLATED TEXT (ENGLISH)

A Word Bank Document

Democratic Republic of Congo

Good governance as a growth factor in the mining sector in DRC.

Preface

This document examines how good regulation in the mining sector can contribute to economic growth in the Democratic Republic of Congo. In the past, mining represented the backbone of the Congolese economy. But over the years, revenue and other related benefits were not used in a rational and sustainable manner, largely because of serious mining regulations problems in the sector.

Au cours des dix dernières années de guerre et de conflits civils, l'industrie minière, qui était le porte-étendard du pays, s'est effondrée, et les secteurs informel et artisanal se sont considérablement développés. Avec le retour de la paix dans la plupart des régions et l'entrée en fonction d'un nouveau gouvernement élu démocratiquement, le secteur minier pourrait largement contribuer à la croissance économique. Toutefois, pour que la bonne gouvernance mène à la croissance, trois principaux facteurs endogènes et externes doivent être réunis. Le premier concerne les cours internationaux des produits de base, qui échappent largement au contrôle du gouvernement.

Le second est la stabilité politique qui est sans nul doute essentiel pour la croissance du secteur. Elle n'est toutefois pas très approfondie dans cette étude.

Over the last ten years of civil war and conflict, the mining industry, which was the mainstay of the economy collapsed, and the informal and artisanal sectors have developed significantly. With the restoration of peace in most areas and the establishment of a new democratically elected government, the mining sector could contribute significantly to economic growth. However for good regulations to result in growth, three major internal and external conditions should be met. The first is about international commodity prices, which largely is beyond the control of the government.

The second is political stability which undoubtedly is vital for the growth of the sector. However, this has not been elaborated on in this study.

Cours mondiaux des produits de base. Les prix des principaux métaux non ferreux, de l'or et des diamants – Principaux produits miniers d'exportation de la RDC – sont fixés par les marchés internationaux. Pendant les trois dernières années, les prix des produits de base ont connu une progression fulgurante, principalement en raison d'une part de la forte consommation des métaux non ferreux en Chine, en Inde et dans d'autres pays.

Sécurité et politique. Comme dans tous les Etats post-conflit, la RDC doit rapidement reconstruire son système politique et administratif gravement endommagé ou détruit au cours des 10 dernières années. Après la période de transition et comme prévu par les Accords de Sun City de 2002, un nouveau gouvernement est en place. Il est dirigé par le Président Joseph Kabila qui a été élu à la fin 2006. Toutefois, le processus politique est extrêmement fragile et

International commodity prices of local commodities. Prices of major non-ferrous metals, gold and diamonds – Major export minerals from DRC - are set by international markets. During the last three years, prices of commodities went up rapidly, mainly due to the high demand of nonferrous metals in China, India and other countries.

Security and political issues. As in the case of all post-conflict states, DRC must rapidly rebuild its badly damaged political and administrative system which was destroyed over the last 10 years. After the transitional period and as expected under the Sun City Agreements of 2002, a new government is now in place. It is headed by President Joseph Kabila, who was elected in late 2006. However, the political process is extremely fragile

le nouveau gouvernement s'est installé lentement. La RDC n'a pas une longue expérience de la démocratie, et ses dirigeants ont beaucoup à apprendre sur l'art de gouverner.

and the installation of the new government was very slow. DRC has no long years of experience in democracy, and its leaders have much to learn about governing.

Résumé analytique

La République démocratique du Congo (RDC) regorge d'énormes potentialités minières dont l'exploitation est porteuse de grands espoirs de développement économique, comme cela a été le cas pour tous les pays de tradition minière. Par exemple, le secteur minier congolais pourrait, en dix années, contribuer à hauteur de 20 à 25 pour cent au PIB et d'un tiers au montant total des recettes fiscales. Dans le passé, la RDC n'a toutefois pas été capable de mettre sa richesse minière au service du développement économique. Cela est en partie à une gestion corrompue et à l'ingérence politique dans les sociétés minières parapubliques d'une part,

Executive Summary

The Democratic Republic of Congo (DRC) is endowed with enormous minerals potentials the exploitation of which has great prospects for economic development of the country, as was the case for all countries involved in mining activities. For example, in ten years the Congolese mining sector could, contribute about 20-25 per cent of GDP and a third of total tax revenue. However, in the past, the DRC was unable to use its mineral wealth for economic development. On one hand, this is partly due to a corrupt management and political interferences in the parastatal mining companies and on the other hand,

l'application de politiques inadaptées qui n'a pas encouragé l'investissement privé. Après la chute du régime Mobutu et la période de guerre civile, le gouvernement de transition a pris d'importantes mesures visant à stimuler le développement de ce secteur, notamment la restructuration des entreprises parapubliques et l'ouverture attrayante pour l'investissement privé. L'action la plus importante dans cette dynamique a été l'adoption d'un nouveau code et règlement minier en 2002. Ajoutée à la bonne tenue actuelle des cours des produits de base, cette mesure a permis la relance des investissements dans le secteur minier de la recherche et de l'exploitation. Cette action ne pourra ni avoir des retombées économiques positives, ni améliorer le bien-être des Congolais à cause des dysfonctionnement dans l'administration du secteur – qui est handicapée par des

the application of inappropriate policies which did not attract private investment. After the fall of the Mobutu regime and the end of the civil war, the transitional government took important steps to stimulate the development of this sector, including the restructuring of parastatals and providing opportunities for private investment. The most important action in this activity was the adoption of a new code and regulation in 2002. In addition to the stability of current prices of primary products, this measure facilitates the revival of investment in prospection and in mining exploration. This action will neither have positive economic benefits, nor improve the lives of the Congolese people because of mismanagement in the administration of the sector - which is constrained by weak institutional capacities, persistent political

capacités institutionnelles insuffisantes, l'instabilité politique persistante, la corruption et les défaillances fondamentales en matière de gouvernance. Avec l'assistance des bailleurs de fonds, des entreprises privées et de la société civile, le gouvernement devra entreprendre une série d'actions pour corriger cette situation.

Le présent rapport se termine par un programme stratégique global, à mettre en oeuvre pour une durée de cinq années.. L'objectif général de ce programme est d'accroître la contribution du secteur minier industriel, à petite échelle et artisanal au développement économique en corrigeant les principales défaillances du secteur. *Les entreprises publiques* de RDC, qui étaient de grandes industries minières autrefois, sont presque toutes devenues moribondes et ne réalisent plus qu'une fraction de leur production antérieure. Cette situation est grave non seulement parce qu'elle prive

instabilité, corruption and basic failures in in governance.

With the assistance of donors, private companies and civil society, the government must undertake a series of actions to correct the situation.

This report concludes with a comprehensive strategic program to be implemented over a five year period. The overall objective of this program is to increase the contributions of the large scale and small-scale mining sectors in economic development by correcting the main challenges of the sector. *In DRC, Public mining companies* which were once major mining industries, have almost all collapsed and can only turn out a fraction of their previous production. This situation is serious not only because it deprives the state of revenue, but also because these mining companies can no

l'Etat de recettes, mais aussi parce que ces sociétés ne fournissent plus le même niveau de services sociaux et communautaires dans les zones minières où elles opèrent. Le gouvernement envisage d'adopter une législation particulière pour la restructuration de ces entreprises. Cette législation pourrait encourager les partenariats stratégiques avec des opérateurs privés qui deviendront des actionnaires majoritaires habilités à assurer la gestion de ces entreprises. La réussite d'un tel processus dépend d'une évaluation adéquate des actifs miniers des entreprises publiques et de leur valeur marchande raisonnable calculée suivant une base actualisée. Le gouvernement pourrait aussi étudier la possibilité de lancer des appels d'offres pour certaines composantes constituant le patrimoine minier du pays, bien que cela requiert une préparation minutieuse et une sélection transparente du partenaire au développement.

longer provide the same level of social and community services in the mining areas where they operate. The government plans to enact a special legislation for the restructuring of these companies. This legislation could motivate strategic partnerships with private operators who will become majority shareholders entitled to manage these businesses. The success of such a process depends on an adequate assessment of the mining assets of public mining companies and their significant market value calculated using an up to date basis. The government could also examine the possibility of launching tenders for certain components making up the mining heritage of the country, although that requires careful preparation and a transparent selection of the development partner.

Les entreprises privées sont très impliquées dans les opérations de recherche et d'exploitation, en partenariat ou non avec des entreprises publiques. L'on estime que les sociétés privées et les co-entreprises dépensent au total 60 millions de dollars chaque année pour la recherche, qui est nécessaire pour la découverte de nouvelles réserves minières. Toutefois, de nombreux contrats de partenariat ont été conclus alors que les entreprises publiques rencontraient des difficultés financières.

Secteur minier: Scénarii de croissance:
Croissance du secteur minier et réduction de la pauvreté

L'exploitation minière contribue au développement économique et à la réduction de la pauvreté. Dans de nombreux pays de tradition minière— Chili, Argentine, Botswana, Tanzanie, Afrique du Sud, Australie et Canada par exemple – le secteur

Private mining companies are very much involved in prospection and extraction of minerals and they are in partnership or not with public companies. It is estimated that private companies and joint ventures spend a total of \$ 60 million annually for prospection, which is necessary for the discovery of new mineral reserves. However, many partnership agreements have been concluded while public companies are faced with financial problems.

Mining sector: Growth Scenarios:
Growth of the mining sector and poverty reduction

Mining contributes to economic development and poverty reduction. In many countries traditionally known for mining activities which include Chile, Argentina, Botswana, Tanzania, South Africa, Australia and Canada, for example,

minier contribue énormément à l'économie nationale et régionale. De récentes études du Conseil international des mines et des métaux ont confirmé la capacité de ce secteur à relancer le développement économique. Le cas du Ghana est assez illustratif. La promulgation dans ce pays, d'une nouvelle législation minière vers la fin des années 80, a favorisé l'investissement privé dans le secteur minier. La production de minerais au Ghana, celle de l'or en particulier, a rapidement pris de l'essor au milieu des années 90 et a largement contribué à l'accroissement du PIB par habitant. Toutefois, le défi ultime des Etats est de traduire l'accroissement de la production minière et des rentrées de recettes en une amélioration concrète du bien-être des populations. Dans le cas du Ghana l'amélioration de la santé et du bien-être des habitants des zones minières peut être mesurée, mais cette amélioration s'est

the mining sector contributes immensely to national and regional economy. Recent studies undertaken by the International Council of Mining and Metals have confirmed the ability of this sector to boost economic development. Ghana's case is quite illustrative. The enactment of a new mining law in this country in the 80's, has encouraged private investment in the mining sector. The production minerals in Ghana, in particular that of gold in particular, has quickly in the mid-90s and contributed largely to the increase in GDP. However, the main challenge of the states is to translate the increased mining production and revenue flows into a concrete improvement of the lives of the population. In the case of Ghana, improving the health and lives of people in mining areas can be measured, but this improvement occurred at a slower pace

produite lentement et à la suite d'une masse critique de multiples opérations minières.

Scenarii macroéconomiques de croissance

Considérant les projets en préparation et ceux se trouvant à un stade avancé de planification, on peut estimer que la production minière en RDC pourrait atteindre 2 à 3 milliards de dollars en valeur au cours des 5 à 10 prochaines années. Cela devrait rapporter des recettes fiscales considérables à l'Etat, de l'ordre de 200 à 400 millions de dollars, ou 20 à 40 pour cent du volume actuel de recettes fiscales, toutes sources confondues.

Dans cette étude, nous avons élaboré des scénarii de croissance faible, moyenne et élevée, pour le secteur minier congolais. Ces scénarii ne prédisent pas l'avenir. Ils nous permettent plutôt d'estimer les résultats que l'on pourrait raisonnablement obtenir dans certaines conditions.

following massive multiples of mining operations.

Macroeconomic growth scenarios

Considering the projects to be undertaken/under preparation and those at an advanced stage of planning, it can be estimated that mining production in DRC could reach 2 to 3 billion dollars in value over the next 5 to 10 years. This should bring in significant tax revenue to the state, to the tune of 200 to 400 million, or 20 to 40 percent of the current volume of tax revenue from all sources.

In this study, we constructed weak, medium and high growth scenarios, for the Congolese mining sector. These scenarios do not predict the future. Instead, they allow us to estimate the results that could reasonably be achieved under certain conditions.

Ces scénarii associent la production des opérateurs actuels et le rendement de nouvelles mines industrielles qui entreront en activité au cours des dix prochaines années. La production actuelle comprend les exportations déclarées pour les entreprises publiques telles que MIBA et GECAMINES, ainsi que la production minière artisanale. On considère qu'au cours de la période visée, de petites améliorations seront apportées en termes d'évaluation et de recouvrement des impôts provenant des activités minières réalisées par les sociétés publiques et les exploitants miniers artisanaux.

Description du secteur minier

Les 2,3 millions km² du territoire national regorgent plus de 1100 différentes substances minérales. Quatre régions principales – Katanga, les deux Kasais, le Nord-est du Congo et le Kivu-Maniema – renferment la plupart des ressources

These scenarios are based on the production of current operators and the output of mines that will be activated from new large mines that will be activated in the next ten years. Current production includes exports declared from public enterprises such as GECAMINES and MIBA and artisanal mining production. It is considered that during the period under review, some improvements will be made in of assessment and collection of taxes from mining activities undertaken by public companies and artisanal miners.

A look at the mining sector

The 2.3 million square kilometers of the nation's territory is endowed with more than 1100 different minerals in four main regions. They are Katanga, the two Kasais regions, North-eastern Congo and Kivu-Maniema. These regions contain most of the

minérales connues. Toutefois, d'autres provinces disposent aussi de ressources minérales et/ou d'un potentiel minier, dont une grande partie reste à explorer. Les ressources minérales connues des 10 provinces du pays.

Cadre propice, supervision et bonne gouvernance

Au début de son mandat, le gouvernement de transition avait décidé que l'Etat jouera dans le secteur minier un rôle de régulateur et non d'opérateur. Le gouvernement actuel, issu des élections démocratiques, a confirmé cette décision. Ce changement de rôle représente un changement fondamental de paradigme. Auparavant, ce secteur était dominé uniquement par les entreprises publiques, le secteur privé jouant un rôle limité dans la mise en valeur des ressources minières. Désormais, la priorité sera accordée à la mobilisation du secteur privé plutôt qu'à l'investissement public dans le

known mineral resources. However, other regions also have mineral resources and/or mining potential, much of which remains to be explored. Ten regions in the country are endowed with mineral resources.

Favourable environment, supervision and good mining regulations

At the early stages during its term of office, the transitional government had decided that the state will play the role of a regulator and not an operator in the mining sector. The government did not originate that decision. It merely confirmed a decision made by the transitional government. This change of role represents a fundamental paradigm shift. Previously, this sector was dominated solely by public enterprises, with the private sector playing a limited role in the development of mineral resources. Henceforth, priority will be given to the mobilization of the private sector rather than public investment in the

secteur minier. L'expérience d'autres pays montre que des conditions idoines doivent être mises en place pour attirer l'investissement privé dans le secteur et pour utiliser à bon escient les recettes générées par le secteur. Ces conditions comprennent un cadre propice conforme aux normes internationales ; l'application effective des lois, règlements et impôts par les institutions de tutelle ; et la divulgation, la transparence et la responsabilité totales de l'Etat, des entreprises et de la société civile.

Le cadre propice

Le Code minier de 2002, le règlement minier et le régime fiscal en RDC sont cohérent avec les normes internationales, et fournissent une base pour l'exploitation durable et transparente des ressources minières du pays.

mining sector. The experience of other countries shows that the right conditions must be put in place to attract private investment in the sector and to use wisely the revenues generated by the sector. These conditions include a consistent framework which conforms with international standards; the effective implementation of laws, regulations and taxes by the supervisory institutions; and disclosure, transparency and total responsibility of the state, companies and from the civil society.

A favourable framework

The Mining Code of 2002, the mining regulation and taxation in DRC are in conformity with international standards, and they provide a basis for sustainable and transparent exploitation of the country's mineral resources.

Droits miniers

Selon le Code minier de 1981, les droits miniers ne peuvent être obtenus par des opérateurs privés que sous réserve de la signature d'un accord de partenariat avec une entreprise publique ou d'une convention spéciale avec l'Etat. Dans la mesure où la terre à explorer et/ou à exploiter est disponible, le nouveau Code minier de 2002 permet aux opérateurs privés d'accéder à ces droits directement, sans être obligés de nouer un partenariat ou conclure une convention minière spéciale avec l'Etat congolaise.

Les permis de recherche pour toutes les substances minérales, exceptées les matières précieuses pour lesquelles la durée de validité est de quatre ans, valides pour une période de cinq ans, renouvelable, sont disponibles sur la base du principe du premier arrivé, premier servi, aux personnes morales qui présentent

Mineral Rights

According to the Mining Code of 1981, mineral rights can only be obtained by private operators subject to the signing of a partnership agreement with a public company or a special agreement with the state. So long as the land is available, the new Mining Code of 2002 grants private operators to have direct access to these rights, without having to partner or enter into PG 12 agreement with the Congolese state.

Exploration permits for all minerals, with the exception of precious minerals for which the valid for four years, which last for a renewable period of five years are granted on first come, first served, basis to legal entities with the requisite

capacités financières et des qualifications techniques requises. Aucun détenteur de droits miniers ne peut détenir plus de 50 titres représentant environ 20.000 km² dans le cadre d'un permis de recherche. A l'heure actuelle, 4.353 permis de recherches, 471 permis d'exploitation, 59 permis d'exploitation de petite mine et 476 autres permis / autorisations ont été octroyés par le ministère des mines de la RDC. Sur ce total, 4.246 permis de recherches sont détenus par des entreprises privées sans contrat avec une entreprise publique. Pour obtenir un permis de recherches l'entreprise doit présenter la preuve d'une capacité financière. Elle doit également présenter un plan d'activités pour la période initiale du permis. Par ailleurs, l'entreprise est tenue de soumettre des rapports réguliers au ministère des Mines sur l'état d'avancement des travaux de recherche. Le Ministère doit inspecter et superviser les travaux effectués

financial capacity and technical qualifications. No one entitled to a mining right for exploration purposes shall possess more than 50 titles representing approximately 20,000 km². Currently, 4,353 exploration licences, 471 operating license, 59 small mining operating permits and 476 other permits / authorizations were granted by the Ministry of Mines of DRC. Out of this total, 4,246 exploration permits were granted to private companies without entering into partnership with a public company. To obtain an exploration permit a company must show a proof of financial capacity. It must also submit a business plan for the initial period of the license. Moreover, the company is required to submit regular reports to the Ministry of Mines on the progress of the exploration done. The Ministry shall inspect and supervise the work done

effectués et s'assurer du respect par l'entreprise de la réglementation applicable en matière de sécurité, d'hygiène, de santé et de protection de l'environnement. Les services de la Banque estiment que plus de 60 millions de dollars sont dépensés chaque année par des entreprises privées pour des activités de recherches en RDC, soit de manière autonome, soit en association avec une entreprise publique.

and ensure compliance by the mining company with rules applicable in terms of safety, hygiene, health and protection of the environment. It is estimated from bank authorities that more than \$ 60 million is spent annually by private companies on exploration activities in DRC, either independently or in partnership with a public company.

Autres principes de gouvernance dans le secteur minier

La gouvernance du secteur minier en RDC a besoin d'une amélioration substantielle, en particulier dans les domaines de la participation de l'Etat au capital, la vulgarisation des informations, la transparence des flux de recettes, les conflits d'intérêt et la traçabilité des produits miniers.

Other regulating principles in the mining sector

The regulation in the mining sector in DRC needs substantial improvement, especially in the areas of participation of the state in terms of capital acquisition, dissemination of information, transparency of revenue flows, conflicts of interest and traceability of minerals products.

Les problèmes transversaux de gouvernance

Des problèmes de gouvernance relatifs au secteur minier nécessitent d'être évoqués dans la mesure où on les rencontre partout et ils sont liés à d'autres secteurs économiques. Il s'agit de l'impunité, le rôle de l'armée et celui du parlement. L'impunité réside dans l'incapacité ou le manque de volonté de l'appareil judiciaire ou du gouvernement de poursuivre ou les entreprises pour des allégations de crime économique. Ceci a été identifié par plusieurs observateurs comme un obstacle majeur pour la croissance et la réforme économique. Une attention urgente est requise pour promouvoir la capacité de l'appareil judiciaire à poursuivre les cas de détournements de fonds, combinés à une bonne volonté du gouvernement à résoudre ses poursuites d'une façon satisfaisante. Le rôle de l'armée continue à être un problème sérieux pour le secteur minier,

Cross sectional regulation problems

Regulation problems regarding the mining sector need to be discussed since they occur everywhere and they are related to other economic sectors. These problems include impunity, the role of the army and the parliament. Impunity is the inability or unwillingness of the judiciary or the government to effectively prosecute individuals or companies for alleged economic crimes. This has been identified by several observers as a major obstacle to growth and economic reform. Urgent attention is needed to promote the enforcement capability of the judiciary to prosecute in cases of embezzlement, coupled with a willingness of the government to resolve its legal issues satisfactorily. The role of the army continues to be a serious problem for the mining sector,

comme d'ailleurs pour les autres secteurs de l'économie congolaise. Des allégations d'une evidence crédible, faites par des organisations non gouvernementales et les Nations Unies, ont indiqué que des membres des forces armées congolaises, généralement de haut rang, sont impliqués directement dans le trafic et la contrebande de la production minière artisanale. En outre, l'armée congolaise a été accusée pour des abus contre les droits humains. Le rôle du parlement doit être renforcé dans la gestion du secteur minier de la RDC. Une commission parlementaire, chargée des ressources naturelles et comprenant une souscommission des mines, avait été instituée en 2007. Cette commission, comme d'autres structures parlementaires, peut jouer un rôle crucial dans la surveillance et l'évaluation des activités de ce secteur. Un des principes cardinaux de la bonne gouvernance dans le secteur minier est la

as indeed for other sectors of the Congolese economy. Obviously credible evidence, from non-governmental organizations and the United Nations, indicated that members of the Congolese armed forces, usually of high rank, are directly involved in the trafficking and smuggling of minerals from local mining production. In addition, the Congolese army has been accused of human right abuses. The role of parliament should be strengthened so it can address issues in the mining sector in the DRC. A parliamentary committee in charge of natural resources including the Sub-Commission of Mines was established in 2007. Like other parliamentary bodies, this committee can play a crucial role in monitoring and evaluation of activities in this sector. One of the cardinal principles of good regulation in the mining sector is the

distinction claire entre le rôle de l'Etat en tant que régulateur du secteur et actionnaire éventuel dans des coentreprises. Comme mentionné plus haut, le Code minier requiert que 5 pour cent du capital d'une entreprise qui acquiert un permis d'exploitation soient attribués à l'Etat.

clear distinction between the role of the state as the sector regulator and potential shareholder in joint ventures. As mentioned above, the Mining Code requires that 5 percent of the share capital of a company that acquires an operating license be allocated to the State free of charge.

Exploitation minière industrielle

Large scale mining

Rôle des entreprises parapubliques, des sociétés privées et des infrastructures

Role of parastatals, private companies and infrastructure

Rôle des entreprises parapubliques

Role of parastatals

Les entreprises minières parapubliques, qui avaient longuement dominé le secteur de la production minière en RDC, sont aujourd'hui moribondes et en faillite. Le gouvernement fera face à des défis considérables pour la restructuration de ces entreprises en vue de leur relance.

Parastatal mining companies which had long dominated the mining production industry in DRC are now moribund and bankrupt. The government will have to confront the serious challenges in the restructuring of these companies in order to give them a boost.

Cette restructuration vise l'assurance d'une contribution maximale de leurs actifs productifs à l'Etat, la maintenance des infrastructures de production et l'assurance des services essentiels en faveur des communautés locales.

This restructuring aims at entering a maximum contribution of their productive assets to the state, the maintenance of the production infrastructure and the provision essential services to local communities.

Le secteur minier de la RDC a été longtemps dominé par plusieurs grandes entreprises publiques. Ces entreprises opéraient virtuellement comme des gouvernements dans un gouvernement : – gérant des écoles, des plantations pour la production des aliments à l'intention de leurs employés, des hôpitaux, des centres sociaux, des infrastructures de transport, d'approvisionnement en eau et des centrales énergétiques pour la province. Ce système a fonctionné assez bien pendant la période coloniale. Il a commencé une longue descente aux enfers au milieu de la décennie 70. Le gouvernement de Mobutu a

The mining sector in DRC has long been dominated by several large state enterprises. These companies were virtually operating as governments within a government: - managing schools, plantations to produce food for their employees, hospitals, social centers, transport services, water supply and power plants for the region. This system worked well during the colonial period. In the 70s the system suffered an unbiddled decline. The Mobutu government has

longtemps privé les entreprises, des excédents de trésorerie qu'elles auraient dû utiliser pour l'investissement. Cette pratique s'est poursuivie sous le régime de Laurent Kabila. Vers la fin des années 60, alors que les cours du cuivre étaient élevés, la GECAMINES n'a pas été capable d'utiliser les excédents pour la rénovation des installations existantes ou même investir dans les nouvelles technologies, comme l'avaient fait ses concurrents. Les directeurs et hauts cadres des entreprises étaient désignés par le gouvernement à Kinshasa, sur la base de considérations plutôt politiques que basées sur leurs aptitudes managériales et techniques. Il y a eu des allégations crédibles (Commission Lutundula et d'autres de détournements de fonds et d'autres activités illégales par les anciens directeurs de certaines entreprises. La main d'oeuvre des entreprises était sans commune mesure avec le niveau de

long deprived the companies of cash surpluses which they should have used for investment. This practice continued under the regime of Laurent Kabila. In the late 60s, when copper prices went up, GECAMINES was unable to use the surplus to renovate existing facilities or even invest in new technologies, as was done by its competitors. The directors and senior corporate executives were appointed by the government in Kinshasa on the basis of political considerations rather than on their managerial and technical skills. There have been serious allegations (Lutundula Commission and others) of embezzlement and other illegal activities by former directors of some companies. The labor force of mining companies did not match up with the level of production,

production, avec pour conséquence logique une baisse de la productivité.

A titre d'exemple, les 45,000 employés de GECAMINES ont produit 0,83 tonne métrique de cuivre par employé en 2002, contre 96,42 tonnes métriques par employé de Codelco du Chili (entreprise publique aussi). Les problèmes sécuritaires et les perturbations dans la gestion de la chaîne d'approvisionnement causés par la guerre civile, ont rendu l'accès aux approvisionnements ou aux marchés difficile, créant des ruptures dans la chaîne de production. Tous ces facteurs ont conduit les entreprises minières publiques en RDC à devenir progressivement insolubles. Cette situation a entraîné des répercussions graves pour les employés et les communautés qui dépendent des infrastructures et services de cette société. Aujourd'hui, le défi majeur qui interpelle le gouvernement, est celui de déterminer ce qu'il faudrait exactement faire

and resulted in a decline in productivity.

For instance, the 45,000 employees of GECAMINES produced 0.83 metric tons of copper per employee in 2002, against 96.42 tons per employee of Codelco Chile (also a Public Company). Security problems and disruptions in the management of the supply chain resulting from the civil war made access to supplies or markets difficult thus are creating disruptions in the production chain. All these factors led public mining companies in DRC to become gradually bankrupt. It led to serious consequences for employees and the communities that depended on the infrastructure and services of these companies. Today, the major challenge facing the government is to determine exactly what to do with these

de ces entreprises. L'option devra tenir compte des cas particuliers de la main d'oeuvre existante, des engagements sociaux en cours et des difficultés habituelles liées à la restructuration radical des entreprises publiques dominantes dans les Etats post conflit.

companies. The solution must consider the output of the existing workforce, valid social commitments and the usual difficulties associated with radical restructuring of major public enterprises in post-conflict states.

Rôle des entreprises minières privées

Le Code minier de 2002 a introduit l'innovation selon laquelle les sociétés privées pouvaient détenir des droits miniers pour la recherche et l'exploitation sans être associées à une entreprise publique. Cette approche est porteuse de promesses, à condition que l'Etat fasse montre de vigilance en veillant au respect de la réglementation applicable et des obligations contractuelles.

L'industrie minière est un des secteurs industriels les plus complexes et concurrentiels du monde.

Role of private mining companies

The 2002 Mining Code has introduced a new regulation in which private companies could possess mining rights for the exploration and exploitation without being associated with a public company. This approach is laudable if the state is vigilant in ensuring compliance with applicable regulations and contractual obligations.

Mining is one of the most complex and competitive industries in the world.

En fonction du minerai, la chaîne de production consiste généralement en l'extraction du minerai brut, l'enrichissement et la concentration du minerai, la fonte et le raffinage, la commercialisation et le courtage des produits, et la fabrication des produits finis. A tous les niveaux de la chaîne de production, et particulièrement aux niveaux de la recherche, l'extraction et du traitement, l'industrie est hautement concurrentielle. Cette caractéristique se renforce sans cesse au fil des ans. La division du travail entre les « grandes » entreprises minières et les plus petites - autrement appelées « juniors » - est très intéressante. Chacune de ces catégories d'entreprises a un rôle essentiel et particulier à jouer dans la recherche et la mise en valeur des ressources minières. Les petites entreprises – les juniors – se chargent de la recherche et les grandes sociétés de la mise en valeur et la gestion des mines.

Depending on the type of ore, the production chain generally consists of extracting the ore, enrichment and ore concentration, smelting and refining, marketing and brokerage of products, and manufacture of finished products. The industry is highly competitive at all levels of the production chain, especially at the exploration, extraction and processing levels. This feature is reinforced continually over the years. The division of labor between the "major" mining companies and smaller ones otherwise known as "Junior" - is very interesting. Each of these companies has a key role to play particularly in exploration and development of mineral resources. Small companies - the juniors - are in charge of exploration and large companies are responsible for development and management of mining activities.

En cas de découverte, l'entreprise junior cède le titre minier à la grande société qui va investir dans l'exploitation de la mine.

Les entreprises privées opèrent sur les marchés internationaux, où plusieurs facteurs commerciaux, financiers et politiques influent sur leurs décisions en matière d'investissement dans les pays en développement.

A titre d'exemple : □ Les entreprises se font une vive concurrence pour mobiliser les fonds propres et les capitaux à risque sur les marchés internationaux. Si au cours des trois dernières années, on a observé un accroissement significatif des capitaux de risque mis à la disposition des entreprises minières de RDC, cette embellie ne va pas s'éterniser. A cause de la turbulence financière observée au cours des quatre premiers mois de l'année 2008, la disponibilité du risque capital, devant soutenir

Upon discovery, the small mining company allows the mining rights to the bigger company which in turn invests in the exploitation. Private companies operate in international markets, where many commercial, financial and political factors influence their investment decisions in developing countries.

As an example: □ The companies compete aggressively to mobilize equity and venture capital in international markets. If during the last three years, there has been a significant increase in venture capital available to mining companies in the DRC, this improvement will not last forever. Because of the financial turbulence seen over the first four months of 2008, the availability of venture capital, to support the activities of small mining companies,

les activités des petites entreprises minières, a fortement diminuée.

□ Il est nécessaire de prendre des risques et de conclure des marchés pour assurer la croissance du secteur. L'entrepreneuriat et le désir de s'enrichir font partie de la culture minière. Avec un encadrement approprié de l'Etat et des marchés internationaux de capitaux et de produits de base, il n'y a pas de mal à conclure des marchés sur base des droits miniers. Des pratiques frauduleuses peuvent, toutefois, aisément se développer.

□ La concurrence pour l'acquisition des droits miniers en RDC est de plus en plus vive entre toutes les entreprises.

Rôle des infrastructures

L'absence d'infrastructures est une contrainte majeure pour le développement de l'activité minière en RDC. Enclavé en grande partie, le pays doit dépendre des pays voisins

, has greatly diminished.

□ It is important to take risks and to enter into contracts for the growth of the sector. Entrepreneurship and desire for wealth are part of the mining culture. With appropriate supervision of the State and of international capital and commodity markets, it is good to enter into contracts using mineral rights. Fraudulent practices, however, may easily develop.

□ Competition for the acquisition of mining rights in DRC is increasingly fierce between all companies.

The role infrastructure plays in mining sites in DRC

Poor infrastructure is a major constraint for the development of mining activities in DRC. Largely landlocked, the country depends on neighbouring countries for the

pour l'importation du matériel industriel lourd et l'exportation des produits miniers. L'éloignement des ports marins, associé à l'état déplorable des routes et des chemins de fer (qui parfois n'existent pas) dans les zones de production minière, accroît considérablement les coûts de production. Ceci constitue pour la RDC un désavantage concurrentiel sur le marché international. L'énergie et l'électricité posent aussi des problèmes majeurs. Nombre de centrales électriques au Katanga et ailleurs, sont vétustes et n'ont pas la puissance nécessaire pour produire la quantité d'électricité requise pour l'industrie en expansion. En réponse à cette situation, le gouvernement est en train d'élaborer des plans pour restructurer et/ou privatiser les sociétés publiques des chemins de fer et d'électricité. Un autre problème est celui de l'absence d'un cadre réglementaire pour la gestion des infrastructures lourdes par des

importation of heavy industrial equipment and the export of minerals. The remoteness of ports, combined with the poor state of roads and railways (which sometimes do not exist) in mining areas, significantly increases production costs. This constitutes a competitive disadvantage for DRC on the international market. The supply of energy and electricity also poses major problems. In Katanga and elsewhere a number of power plants are obsolete and do not have the needed capacity to produce the amount of electricity required for the expanding industry. To remedy to this situation, the government is in the process of instituting measures to restructure and/or privatize public railway companies and the supply of electricity. Another problem is the absence of a regulatory framework for the management of heavy infrastructure by private

intérêts privés. L'effondrement du système de transport en RDC est le résultat de la détérioration des infrastructures physiques et des performances médiocres des institutions techniques en charge de sa gestion et son entretien. Aucune de ces institutions n'est suffisamment outillée pour gérer le réseau de transport, et en particulier en assurer l'entretien et la maintenance. Cela est dû en grande partie au manque de ressources financières adéquates pendant toute une décennie. Le secteur du transport en RDC, qui est illustratif de la diversité et de l'immensité du paysage congolais, dépend de différents modes de transport. Le fleuve Congo et ses affluents représentent les piliers essentiels de ce système qui lie l'axe économiquement dynamique de Matadi-Kinshasa aux régions du Nord du pays. Le chemin de fer s'étend vers le sud-Ouest du pays, reliant les régions minières au reste du continent. Dans ce cadre

industries. The collapse of the transport system in DRC is the result of the poor nature of infrastructure and poor performance of technical institutions in charge of its management and maintenance. None of these institutions is sufficiently equipped to manage the transport network, particularly in ensuring care and maintenance. This is largely due to the lack of adequate financial resources over a decade. The transport sector in DRC, which is illustrative of the diversity and immensity of the Congolese landscape, depends on different modes of transport. The Congo River and its tributaries are the essential pillars of this system that links the economically dynamic Matadi-Kinshasa axis to the northern regions of the country. The railway stretches south-west, linking the mining regions to the rest of the continent. In this context of isolated corridors

de corridors de transport isolés, le réseau routier a été conçu pour unifier les régions du pays en reliant l'Est à l'Ouest et le Nord au Sud..

Transport maritime et fluvial. Le sous-secteur maritime est basé sur trois ports maritimes situés à l'embouchure du fleuve Congo (Matadi, Boma et Banana). Matadi est le plus grand port, avec 95% pour cent du trafic (environ 1,8 million de tonnes en 2006). La plus grande partie de son trafic est transférée par route ou par rail à Kinshasa. Le réseau capillaire, de 16.238 kilomètres de fleuves et lacs navigables, n'est pas aussi exploité que la voie maritime. En raison du manque d'infrastructures et d'équipements, seules 4.000 tonnes de marchandises sont passées par les 40 ports fluviaux de RDC en 2004. Celui-ci reste toutefois un lien vital pour beaucoup de provinces éloignées de l'arrière-pays, telles que l'Equateur et le

of transportation, the road network was designed to unify the country by linking the East to the West and the North to the South.

Maritime and river transport. The maritime sub-sector consists of three maritime ports at the mouth of the Congo River (Matadi, Boma and Banana). Matadi is the largest port, with 95% percent of the traffic of vessels (about 1.8 million tons in 2006). Much of its cargo is transferred by road or rail to Kinshasa. The capillary network of 16,238 km of navigable rivers and lakes is not used as much as the Seaway. Due to poor infrastructure and equipment, only 4,000 tons of goods were transported through the 40 river ports in the DRC in 2004. These river ports remain a lifeline to many remote areas of the hinterland, such

Maniema où les habitats sont concentrés le long des cours d'eaux.

Chemin de fer. La RDC dispose d'un réseau ferroviaire vaste et dispersé de 5.033 km, datant pour la plupart de l'ère coloniale. Ce réseau comprend trois sous réseaux : Matadi-Kinshasa au Sud-Ouest, Kilo Moto au Nord et Katanga – Kasai au Sud-Est. Il faut aussi signaler le chemin de fer de Benguela (en Angola) qui a été utilisé comme moyen de transport pour la production minière du Katanga dans le passé. Ce réseau est en train d'être actuellement réhabilité par les Chinois.

Transport aérien. En RDC, le transport aérien se présente comme le meilleur moyen pour relier certaines régions éloignées à la capitale du pays. Il est actuellement un secteur vital pour le commerce intérieur. Le pays compte au total 270 aérodromes publics et privés, dont 5 seulement sont des aéroports internationaux –

as Equador and Maniema where inhabitants live along the rivers.

Railway. DRC has an extensive rail network of 5,033 kilometers of railway, dating mostly from the colonial era. This network has three subnets: Matadi-Kinshasa in the southwest, Kilo Moto in the North and Katanga - Kasai in the south east. Worth mentioning is the Benguela Railway (Angola) that was used in the past as transportation for mineral production in Kantaga. The Chinese are currently rehabilitating this network.

Air transport. In DRC, air transport stands as the best way to connect some remote areas to the country's capital. It is currently a vital sector for domestic trade. The country has a total of 270 public and private airfields, only 5 of them are international airports.

Kinshasa, Lubumbashi, Kisangani, Goma et Gbadolite. En dépit du manque de sécurité des compagnies aériennes (toutes les compagnies aériennes du pays sont sur la liste noire de l'UE), de la vétusté des infrastructures et de la gestion déficiente de l'espace aérien, le transport par avion a bénéficié pendant des années du transfert du trafic routier en raison de l'état déplorable de ce réseau.

Transport routier. En dépit du caractère multimodal du secteur du transport en RDC, la route demeure le principal mode de transport du pays. Elle est essentielle pour les corridors nationaux et internationaux auxquels elle fournit un accès vital aux zones rurales. Les 152.400 km de son réseau couvrent la totalité du territoire et peuvent être classés en trois catégories : □□58 385 km de routes nationales, dont seulement 2.801 km sont revêtus le long du corridor Matadi-Kinshasa-Lubumbashi.

They are Kinshasa, Lubumbashi, Kisangani, Goma and Gbadolite. Despite the lack of airline security (all the country's airline companies are on the EU's black list), the dilapidated state of infrastructure and poor management of airspace, the air transport has benefited for years from the transfer of road traffic due to the deplorable state of the network.

Road transport. Despite the multimodal transport sector in DRC, road transport remains the country's main means of transport. It is essential for national and international corridors which provide important access to rural areas. The 152,400 kilometers of its network covers the whole country and this can be classified into three categories: □58 385 km of national roads, out of which only 2801 km of the corridor Matadi-Kinshasa-Lubumbashi are tarred .

Pour diviser les travaux routiers par ordre d'importance, le gouvernement a classé 23.140 km du réseau national comme routes prioritaires, dont 15.871 km sont considérés comme hautement prioritaires. Toutes ces routes diffèrent non seulement par leur catégorie, mais aussi par leur état. Dans l'ensemble, leur état s'est détérioré au point de rendre difficile l'accès aux centres sociaux et économiques. Seules 5 à 10% des routes sont relativement en bon état. Le reste est impraticable, sans signalisation aucune et nécessitant une réhabilitation. Par ailleurs, la plupart des routes, hautement prioritaires, ressemblent aujourd'hui à des routes tertiaires en piteux état. Pour les exploitants miniers industriels, l'absence d'infrastructures routières accroît le coût de livraison du produit des mines à la clientèle et fait courir à l'entreprise le risque de ne pas remplir ses obligations commerciales. Les exploitants miniers artisanaux sont

To categorize the road works in order of importance, the government has classified 23,140 km of the national network as priority roads, out of which 15,871 km are considered high priority. All these routes differ not only by their classification, but also by their condition. Generally, the conditions of the roads are so poor that they do not allow easy access to social and economic centers. Only 5-10% of the roads are relatively in good condition. The rest is impractical without any sign posts and require rehabilitation. Besides, most of the high priority roads which are today like tertiary roads are in poor condition. For large scale operators, the poor road infrastructure increases the cost of delivering the mining products to the customers and constitutes a challenge in meeting commercial obligations. Local miners are

particulièrement dépendants des infrastructures routières appropriées. A l'Est du pays en particulier, le manque de routes viables, desservant les sites d'exploitation artisanale, met souvent les exploitants miniers artisanaux à la merci de divers intermédiaires et milices qui contrôlent les voies aériennes et les autres modes de transport.

Rôle des exploitants miniers artisanaux et ceux de la petite mine

L'exploitation minière artisanale est le secteur le plus important de l'activité minière en RDC, dans la mesure où elle présente le plus d'impact en termes de production et de personnes impliquées. Ce secteur est marqué par des problèmes dans certains domaines, comprenant les rapports entre les exploitants miniers artisanaux et ceux de la grande mine l'exploitation des populations vulnérables ; le rançonnement orchestré par des

particularly dependent on adequate road infrastructure. Especially in the eastern part of the country, the lack of viable roads, connecting the local mining sites, often puts the miners at the mercies of various middlemen and militias who control the airways and other means of transport.

Role of local miners and those engaged in small scale mining activities

Small scale mining is the most important sector of mining activities in DRC, since its impact in terms of production and involvement of people is significant. This sector is confronted with some problems in certain areas, including the relationship between small scale miners and those engaged in larger mining activities; exploitation of the fragile population; organized ransom initiated

responsables publics et des bandes de criminels ; le non respect des mesures sanitaires, sécuritaires et en matière de protection de l'environnement ; une protection juridique inadéquate et une faible assistance de l'Etat aux exploitants miniers.

On estime que 90 pour cent de la production minière en RDC proviennent de l'exploitation minière artisanale. Les estimations divergent quant au nombre d'exploitants miniers artisanaux présents en RDC. Elles indiquent la présence de 50.000 à 2.000.000 de creuseurs, activement et directement impliqués dans l'exploitation minière artisanale. Considérant une moyenne de quatre à cinq personnes à charge de chaque creuseur, le nombre total de personnes, dépendant de cette activité de survivance, atteint 8 à 10 millions. Soit 14 à 16 pour cent de la population totale de la République Démocratique du Congo.

by public officials and criminal gangs; non-compliance with sanitary, and environmental safety rules; inadequate legal protection and lack of support from the state to mining operators.

It is estimated that 90 percent of the mining production in DRC is obtained from small-scale mining. Estimates of small scale miners in DRC vary in number ranging from 50,000 to 2,000,000 miners, actively and directly involved in small-scale mining activities. Taking an average of four to five dependents for each digger, the total number of persons relying on this activity for survival could be between 8 to 10 million about 14-16 percent of the total population of the Democratic Republic of Congo.

Les problèmes liés à l'exploitation minière artisanale intéressent particulièrement la communauté internationale des bailleurs de fonds, en raison de ses liens évidents avec le programme général de réduction de la pauvreté. Un atelier des bailleurs de fond, organisé à Kinshasa en août 2007, avait porté sur les pistes d'intervention possible dans ce sous-secteur. L'atelier a été suivi plus tard dans l'année d'une plus grande conférence, organisée à Lubumbashi, qui a proposé des interventions plus spécifiques à mener par le gouvernement et la communauté des bailleurs dans le sous-secteur de l'exploitation minière artisanale. L'exploitation minière artisanale et celle des mines à petite échelle, sont présentes dans la quasi-totalité des zones de production minière de la RDC.

□ *L'or* est exploité par les exploitants miniers artisanaux principalement à l'Est du pays (Province Orientale, Ituri, Kivus).

The international and the donor communities are particularly concerned with the problems associated with small scale mining, because of its obvious relation with the overall program of poverty reduction. A workshop of donors organized in Kinshasa in August 2007, looked at possible intervention areas in this sub-sector. Later in the year, a high profile conference was organized at Lubumbashi after the previous workshop, which proposed more specific measures to be undertaken by the government and the international donor community in small-scale mining in the sub sector. The local and small-scale mining are involved in almost all mineral production areas in DRC.

□ Gold is extracted by local miners mainly in the eastern part of the country (Province Orientale, Ituri, Kivus).

Dans ces zones, les exportations d'or d'exploitation artisanale sont estimées à 8.000 kilogrammes par an, pour une valeur moyenne marchande de 125 millions de dollars. L'or exploité dans l'Ituri/la province Orientale représente 65 pour cent de la production aurifère totale de la RDC. Si tel est le cas, le pays peut produire jusqu'à 12.000 kilogrammes d'or par an, avec une valeur moyenne marchande (calculée sur la même base) de 187 millions de dollars. On rapporte qu'une grande partie de l'or extrait par les exploitants miniers artisanaux, de l'Ituri et de la Province Orientale, est vendu en contrebande sur la frontière avec La nature de l'exploitation minière artisanale rend difficile l'obtention des informations fiables de ce sous-secteur. Les données relatives à la qualité et à la valeur de la production, ainsi que le nombre des exploitants miniers artisanaux, ont été obtenus à partir d'un certain nombre de comprenant

In these areas, the export of gold from small scale mining activities is estimated at 8000 kg per year, for an average market value of \$ 125 million. The gold mined in Ituri, in the western part of the country Orientale province accounts for 65 percent of the total gold production in DRC. If this is the case, the country can produce up to 12,000 kg of gold per year, with an average market value (calculated on the same basis) of \$ 187 million. It is reported that much of the gold mined by local miners, in Ituri and the Extraction Province, is illegally sold on the border. The nature of this form of mining activity makes it difficult to obtain reliable information in this sub-sector. Data on the quality and value of production, and the number of small scale miners, were obtained from a number of sources, including

les statistiques gouvernementales, les rapports du Conseil de sécurité de l'ONU, les études financées par divers bailleurs de fonds (DFID, USAID), et les études menées par plusieurs ONG telles que Global Witness. Les volumes de production ont été harmonisés avec les statistiques officielles (USGS, BGR) et les éléments de la revue sectorielle de la Banque mondiale (Goossens). Dans le cas de l'or, le prix moyen à l'exportation est de 500 dollars l'once, représentant 85 pour cent du prix international si l'on tient compte des frais de transport, de fonte et de raffinage. En fait, si l'on compare ces chiffres aux statistiques officielles relatives à la production aurifère (autour de cinq tonnes métriques), il semblerait que plus de la moitié de la production aurifère de RDC quitte le pays en fraude. Le revenu moyen annuel de l'exploitation minière artisanale est estimé à 1.600 dollars par an, bien que les coûts

government statistics, the Security Council reports from the UN studies funded by various donors (DFID, USAID), and studies by several NGOs such as Global Witness. Production volumes have been harmonized with the official statistics (USGS, BGR) and the elements of the sector review of the World Bank (GOOSSENS). In the case of gold, the average export price is 500 dollars per ounce, representing 85 percent of the international price taking into account transportation, smelting and refining costs. In fact, if we compare these figures to the official statistics on gold production (around five metric tons), it appears that more than half of the gold production in DRC is illegally exported outside the country. The average annual income of small scale miners is estimated at \$ 1,600 per year, although the costs associated with this

que les coûts associés à cette activité diminuent considérablement le montant effectivement en poche. Ce revenu est moins important que celui des exploitants miniers artisanaux du Katanga.

activity considerably decreases the amount actually pocketed. This revenue is lower than that from the small scale miners in Katanga.

Problèmes

Les conflits entre les exploitants miniers artisanaux et les exploitants industriels sont le talon d'Achille de l'avenir du secteur minier de la République Démocratique du Congo. Au Katanga, des milliers d'exploitants miniers artisanaux ont envahi des concessions appartenant aux GECAMINES et à d'autres sociétés privées. Ils en extraient la meilleure qualité de minerais d'hétérogenite et de cuivre qu'ils vendent à divers intermédiaires et fonderies opérant dans la Province. Beaucoup de projet en cours ou à l'étude doivent examiner le problème de l'évacuation des exploitants miniers artisanaux des zones des

Problems

Conflicts between small scale miners and large scale mining operators are the achilles heels in the future of the mining sector in Democratic Republic of Congo. In Katanga, thousands of local miners have invaded mining concessions belonging to the GECAMINES and other private companies. They extract the best quality of the heterogenite and copper ores which they sell to various middlemen and foundries operating in the region. Many on-going projects or studies should consider relocating the small scale miners from the special concession zones

concessions prévues pour les activités de production industrielle. L'expulsion des exploitants miniers artisanaux des zones de concessions a déjà entraîné de graves conflits au Katanga. Au Kasai, les incursions dans le polygone, la principale concession diamantifère de l'Etat détenue par la MIBA, constitue un problème majeur. Elle a souvent donné lieu à de violentes confrontations entre les forces de sécurité de la société, la police, l'armée, et les exploitants miniers artisanaux. Dans d'autres circonstances, elle a donné lieu à de violents conflits entre les exploitants artisanaux eux-mêmes. Des entreprises telles que DEBEERS et BHPBILLITON, qui mènent des activités de recherche et qui envisagent une exploitation industrielle du diamant au Kasai, s'inquiètent des conséquences éventuelles sur la réputation de leurs activités au niveau international, en cas de conflit avec

meant for large scale mineral activities. The expulsion of small scale miners from the concession constitutes a major problem and has already led to serious conflicts in Katanga. In Kasai, incursions in the polygon, the main diamond concession of the state-owned company, MIBA, constitutes a major problem. It has often created violent clashes between the company's security forces, the police, the army and the small scale miners. In other instances, it gave rise to violent conflicts among local miners themselves. Mining companies like DEBEERS and BHPBILLITON, conducting exploration and intending to engage in activities in mining diamond on large scale in Kasai, are worried about the potential impact on their reputation at the international level in case of conflict

les exploitants miniers artisanaux. Un projet est actuellement en cours de réalisation (sur financement de DFID, l'USAID et quelques sociétés) dans le cadre des questions liées aux droits humains et à la sécurité à l'intérieur et autour des sites miniers. Il s'agit de travailler avec les entreprises dans la mise en application des bonnes pratiques en matière de recasement et gestion des conflits.

Populations vulnérables : femmes et enfants.

On estime que les enfants représentent 40 pour cent des exploitants miniers artisanaux ou sont présents sur les sites d'exploitation artisanale comme membres de famille. Les lois sur le travail des enfants sont en vigueur en RDC, mais elles ne sont pas appliquées (ni applicables dans les circonstances actuelles). En dehors de l'aide qu'ils apportent aux activités d'exploitation minière artisanale, les enfants n'ont pas

with small scale miners. A study is currently underway (with funding from DFID, USAID and some other companies) as part of issues related to human rights and security in and around the mining sites. It will involve collaborating with companies to implement the best practices in resettlement and conflict management.

A vulnerable group: women and children. It is estimated that children account for 40 percent of small scale miners or they are present on local mining sites as family members. There are laws on child labor in DRC, but they are not enforced (nor applicable in the present circumstances). In addition to their contribution to mineral extraction in local mining activities, children have no

d'autres activités qui puissent les occuper. Il n'existe pas d'écoles ou lorsqu'elles existent, elles sont trop éloignées des zones d'exploitation minière. Si tous les membres d'une famille travaillent, alors il n'y a personne pour s'occuper des enfants. Un certain nombre d'ONGs s'attèlent à corriger cette situation. Les femmes constituent environ 20 pour cent de la population existante sur les sites d'exploitation minière artisanale. Elles y vivent avec ou sans leurs époux ou encore avec des parents. Certaines femmes, qui ont perdu leurs conjoints à la suite d'accidents, restent dans les campements miniers parce qu'elles n'ont pas d'autres sources de revenu. Elles sont alors soit engagées dans de petits commerces, soit quelques fois contraintes à la prostitution. Elles sont par ailleurs sujettes à des violences familiales et/ou des abus sexuels.

Les questions de santé, de sécurité et de

other activities to engage in them. There are no schools or even when they exist, they are too far from the mining areas. There is also no one to take care of the children if all members of a family are working. A number of NGOs are working to address this situation. Women represent about 20 percent of the existing population in local mining sites. They live there with or without their spouses or with relatives. Some women, who lost their husbands as a result of accidents, remain in the mining camps because they have no other sources of income. They are either engaged in small businesses, or sometimes forced into prostitution. These women are also prone to domestic violence and / or sexual abuse.

Health, safety and security are the main

sûreté sont les principaux sujets de préoccupation dans les camps d'exploitation minière artisanale, comme dans d'autres pays. Les exploitants miniers artisanaux ont peu ou pas accès aux centres de santé. La plupart des dispensaires se trouvent à plusieurs kilomètres des sites d'exploitation. Les agents de santé publique ne visitent jamais, ou rarement, les sites à cause du manque de moyens de transport ou de problèmes logistiques. L'incidence des maladies sexuellement transmissibles y est élevée parce que les camps sont souvent peuplés de jeunes hommes se déplaçant sans leurs familles. Les camps manquent totalement d'installations sanitaires, d'eau potable, et de conditions d'hygiène nécessaires pour la préparation et la consommation des aliments. Les exploitants miniers artisanaux ne disposent pas de matériels de sécurité rudimentaires tels que les chaussures, les chapeaux, les vêtements

issues of concern in the local mining camps, as is the situation in other countries. Small scale miners have little or no access to health centers. Most clinics are several kilometers away from the mining sites. Public health workers never or rarely visit the mining sites due to the lack of means of transportation or logistical problems. The incidence of sexually transmitted diseases is high because the camps are often populated by young men who travel without their families. There are virtually no proper sanitation facilities, no potable water and poor hygiene conditions for the preparation and consumption of food on the mining sites are bad. Small scale miners lack basic safety equipment such as boots, helmets, work gear

de travail et les lunettes de protection appropriés. Les conditions de travail sont extrêmement dangereuses. Ils descendent dans des galeries souterraines construites sans système de protection ou d'aération approprié. Les éboulements et la suffocation sont à l'origine de nombreux décès, bien qu'il n'y ait pas des statistiques fiables disponibles à ce sujet.

Une journée dans la vie d'un mineur artisanal

Le travail commence tôt dans le camp d'exploitation minière artisanale. Il dure en général 12 à 14 heures par jour, 7 jours par semaine. L'exploitant minier artisanal peut être issu d'un village local (et vit avec ou sans les membres de sa famille) où l'on exploite artisanalement et normalement suivant une base saisonnière pour obtenir un revenu supplémentaire. Un autre exploitant minier artisanal peut

and appropriate eye protection. The working conditions are extremely dangerous. They travel down into underground galleries constructed without proper protection or ventilation system. Although there are no reliable available statistics on this issue, landslides and suffocation cause many deaths.

A working day in the life of a small scale miner

Work begins early in the local mining site lasting generally 12 to 14 hours, 7 days a week. The small scale miner may come from a nearby village (and lives with or without family members) where mining is done manual and they normally operate on a seasonal basis to obtain additional income. Another small scale miner may

venir d'un village lointain. Il s'agit généralement dans ce cas, d'un jeune vagabond qui voudrait faire fortune. Dans la filière diamantifère, les enseignants, les responsables de l'Etat, et les agents de l'armée participent aussi à l'exploitation minière artisanale. Quand l'exploitant minier artisanal arrive sur le site, il rencontre une pléthore de problèmes. Soit les procédures et le matériel de sécurité n'existent pas, soit ils ne sont pas utilisés. Le travail est extrêmement ardu et souvent dangereux. De nombreux décès se produisent dans les puits de mines en raison des éboulements ou du manque d'aération. Il n'existe pas d'installations sanitaires et hygiéniques appropriées et les pratiques en la matière laissent à désirer. Dans beaucoup de cas, l'exploitant minier artisanal doit amener ses enfants sur le site d'exploitation parce qu'ils n'ont nulle part où aller (à l'instar des écoles) et parce qu'une

arrive from a distant village. Usually in this case, it involves a young vagabond who wants to become rich. In the diamond industry, teachers, state officials, and army officers are also involved in small scale mining activities. When the small scale miner arrives on the site, he is confronted with a plethora of problems. Security measures and equipment are either unavailable or are not used. The work is extremely strenuous and often dangerous. Many deaths occur in mine shafts due to landslides or poor ventilation. There are no proper sanitation facilities and there are poor hygiene practices. In many cases, the small scale miners must take their children to the operation site because they have nowhere to go (like schools) and because

paire supplémentaire de petites mains est particulièrement indispensable pour l'accès dans les puits minuscules. Le travail sur le site d'exploitation est hautement spécialisé, avec des creuseurs (hommes), des porteurs, des concasseurs et des laveurs (principalement les femmes et les enfants). Quelques fois, en particulier dans les mines artisanales, le creuseur est un travailleur journalier employé par une société, généralement en violation du code du travail. Le creuseur travaille dans une équipe de 5 à 6 personnes pour réaliser un puit ou une fosse et atteindre la couche minéralisée. Il y a de gros risques de ne pas rencontrer la couche minéralisée. Dans ce cas, l'équipe de creuseurs aura perdu du temps et de l'énergie. Des responsables de l'administration se rendent souvent sur les sites d'exploitation minière pour extorquer de l'argent ou de percevoir des paiements en nature auprès des exploitants miniers

an additional help is particularly needed from these children so that they can work in the tiny wells. Work on the mining site is highly specialized, with miners (men), carriers, crushers and washers (mainly women and children). Sometimes, particularly in the local mines the digger is a laborer employed by a company, usually in violation of the labor code. The miner works in a team of 5 to 6 people to make a well or a pit and reach the mineralized layer. There are serious risks of not discovering the mineralized layer. In this case, the team of miners would have wasted their time and energy. Some administration officials often visit the mining sites to extort money or collect payments in kind from the

artisanaux. A l'Est du pays en particulier, des milices ou des unités de l'armée régulière sont présentes sur les sites pour extorquer des paiements. On rapporte même que des responsables de ces unités sont les principaux intermédiaires de l'exportation clandestine des minerais vers l'Ouganda, le Rwanda ou le Burundi. De ce fait, le prix de vente du produit dont dépendent les exploitants miniers artisanaux pour vivre, doit être suffisamment élevé pour couvrir les nombreux paiements et droits de passage acquittés à la frontière, qui excèdent les montants autorisés en vertu de la loi.

small scale miners. Particularly in the eastern part of the country, militias or the regular army units are present at the sites to extort payments. There are even reports that leaders of these units are the main middlemen in the illegal exportation of minerals to Uganda, Rwanda and Burundi. Therefore, the selling price of the product which the small scale miners depend for a living, must be high enough to cover the many payments and rights of way at the border, which exceed the amounts permitted under the law.

Aspects sociaux et environnementaux

Fourniture de services sociaux aux communautés locales

La faillite des entreprises publiques minières a eu un impact considérable sur les services sociaux et les infrastructures fournis aux

Social and environmental issues

Provision of social amenities to the local

communities, The collapse of the public mining companies had serious consequences on social and infrastructure needs provided

communautés locales vivant dans les secteurs d'activité des sociétés minières. Au cours des nombreuses années d'activité de ces sociétés, des services essentiels étaient fournis aux ouvriers, aux personnes à leur charge et à la communauté locale dans son ensemble. Ces services étaient nombreux et comprenaient le financement des écoles, des installations sanitaires, des installations récréatives, des infrastructures essentielles telles que l'électricité et l'eau, des logements pour les ouvriers et leurs familles, et une aide financière directe à l'exécutif municipal. Ce système a suffisamment bien fonctionné pour assurer aux communautés locales un niveau de vie acceptable pendant la période coloniale et immédiatement après l'indépendance. Cependant, au fur et à mesure que la production et les recettes s'effondraient, la charge de fournir ces services sociaux devenait une lourde contrainte. Cette situation s'est aggravée

to the local communities depending on the mining companies. Over the many years of mining activity of these companies, essential services were provided for the workers, their dependents and the local community as a whole. Many services were provided which included the funding of schools, health and recreational facilities, basic infrastructure such as electricity and water supply, housing for workers and their families, and direct financial assistance to the municipal executive. This system has worked well enough to provide local communities with a decent standard of living during the colonial period and immediately after independence. However, as production and revenues declined, the burden of providing these social services became a serious constraint. The situation worsened

Cette situation s'est aggravée pendant la guerre civile et la période d'instabilité politique. MIBA rapporte par exemple que 40 pourcent de ses charges d'exploitation sont affectées à l'approvisionnement en électricité de la ville de Mbuji-Mayi et ses environs. De même, l'appui apporté par la GECAMINES, aux services sociaux et techniques, est devenu une dépense insoutenable à cause de la baisse de la production et des recettes faibles de l'entreprise. L'entretien des infrastructures et les investissements dans les approvisionnements ont été négligés. Privés du financement des entreprises, les hôpitaux et les écoles ont commencé à exiger des paiements pour leurs services.

Plan global pour une croissance basée sur la bonne gouvernance dans le secteur minier de RDC

Le présent rapport montre que le secteur

during the Civil War and the period of political instability. For instance, reports from MIBA state that 40 percent of its operating expenses are allocated to the supply of electricity in the city of Mbuji-Mayi and its surroundings. Similarly, the assistance provided by GECAMINES, in terms of social and technical services, has become unbearable expenses because of the low production and low revenue from the company. Maintenance of infrastructure and investment services has been neglected. As a result of poor financial assistance, the hospitals and schools have started demanding payments for their services.

Comprehensive Plan for growth based on good regulation in DRC's mining sector

This report indicates that the mining sector

minier en République démocratique du Congo ne pourra contribuer à une croissance durable par la bonne gouvernance, qu'à la condition que certaines contraintes essentielles soient levées. Au cours des dernières années, le gouvernement et les bailleurs de fonds multilatéraux et bilatéraux ont adopté une approche par étapes dans la résolution de certains problèmes. Une approche et un plan généraux, assortis d'objectifs précis, d'indicateurs de performance précis et d'une assistance technique et financière, sont requis. Le présent rapport propose un plan d'action global pour les cinq prochaines années pour l'amélioration de la performance du secteur minier. Ce plan d'action comprend un certain nombre de mesures à prendre à court, moyen et long terme. Même si ces actions doivent être premièrement entreprises par l'Etat, il reste vrai que des progrès en vue d'une croissance durable

in the Democratic Republic of Congo can contribute to sustainable growth through good mining regulation, on condition that some key problems are addressed. During the last decade, the government, multilateral and bilateral donors have adopted a phased approach in solving some of these problems. An approach and a general plan with specific targets, key performance indicators and technical and financial assistance are required. This report provides a comprehensive action plan for the next five years to improve the performance of the mining sector. This action plan includes a number of measures to be taken in the short, medium and long term. Even if these actions should first be undertaken by the state, it is true that progress towards sustainable growth

nécessiteront la participation active des entreprises privées, des organisations de la société civile et de la communauté internationale des bailleurs de fonds. Outre les mesures énumérées dans le plan d'action, des questions liées à la sécurité dans plusieurs sites miniers sont clairement une priorité pour l'Etat et les forces de sécurité de l'ONU.

Améliorer la gouvernance du secteur

Objectifs : Pour s'assurer que (i) le secteur connaît un développement responsable et durable ;

(ii) les interactions entre l'Etat, les entreprises privées, les exploitants de petite mine, les exploitants miniers artisanaux et les communautés locales se déroulent en toute transparence;

(iii) les contrats de partenariats en vigueur et à venir sont conclus dans la transparence, conformément au Code minier de 2002, et les termes des contrats et les faits

will require the active participation of private enterprises, civil society and the international donor community. In addition to the measures listed in the action plan, issues related to security in several mining sites are clearly a priority for the state and the UN security forces.

Improving the management of the sector

Objectives: To ensure that (i) the sector experiences significant and sustainable development;

(ii) the transactions between the state, private companies, small scale operators, local miners and local communities are conducted transparently;

(iii) current partnerships and future contracts are concluded in a transparent manner in accordance with the Mining Code of 2002, and the terms of the

pertinent concernant les entreprises sont entièrement divulgués ;

(iv) les transactions et les états financiers des entreprises et de l'Etat, ainsi que les intérêts des responsables publics dans la gestion fiduciaire et d'autres aspects des compagnies minières ou des consultants/fournisseurs de ces compagnies, sont entièrement divulgués et les conflits d'intérêt éventuels éliminés ; et

(v) les bénéfices sont équitablement répartis, conformément aux principes généralement acceptés dans l'industrie minière internationale.

Produit/résultats: La révision de certains contrats de partenariat, l'accroissement des bénéfices pour l'Etat et des communautés locales, une sécurité foncière renforcée pour les entreprises, et une transparence accrue et un meilleur accès à l'information.

contracts and the relevant facts concerning the companies are fully disclosed;

(iv) the transactions and financial statements of the companies as well as the State, and the interests of public officials in fiduciary management and other aspects of the mining companies or consultants / suppliers of these companies are fully disclosed and potential conflicts of interest eliminated; and

(V) the profits are equitably shared, in accordance with principles generally accepted in the international mining industry.

Outcome/results: The revision of certain partnership agreements, increased profits for the state and local communities, enhanced land security for businesses, and increased transparency and improved better access to information.

Renforcer les institutions de l'Etat et améliorer leurs capacités

Objectif : Améliorer la capacité de l'Etat à superviser, contrôler et évaluer efficacement et effectivement les activités du secteur minier, et à fournir une assistance technique et professionnelle aux exploitants miniers artisanaux. L'Etat doit recruter des cabinets spécialisés et expérimentés pour renforcer rapidement et efficacement ses institutions et améliorer leurs capacités.

Produit/résultats : Amélioration de l'information à la disposition de l'Etat sur la production et les activités minières ; diminution de la spéculation et respect accru des exigences du programme d'activités ; meilleures conditions sanitaires, environnementales et de sécurité au travail sur les sites miniers ; meilleure déclaration des volumes et des valeurs des exportations minières ; capacité accrue d'analyse financière et économique

Strengthen state institutions and improving their Capacities

Objective: Strengthen the capacity of the state to be able to supervise, monitor and evaluate the activities of the mining sector in an efficient and effective manner and to provide technical and professional assistance to small scale miners. The state must employ the services of specialized and experienced consultants and effectively establish its institutions and improve their capacities.

Output/Results: Improved information available to the State on production and mining activities; minimize speculation and increased compliance with the requirements of the programme of activities; better sanitation and environmental conditions and safety at the mining sites; there should be better declaration of volumes and values of mineral exports; increased capacity for financial and economic analysis of

des projets; meilleure compréhension et connaissance du potentiel géologique et de l'aménagement éventuel des terres.

of projects; better understanding and knowledge of the geological potential and possible land management.

Améliorer l'efficacité dans la délivrance et

la gestion des droits miniers. Le Cadastre

Minier doit: Elaborer des critères et directives plus précis sur les délais d'examen des demandes de droits miniers, et mettre ses logiciels et son matériel informatique à jour.

Mener des activités de contrôle et de suivi sur le terrain. En effet, beaucoup de titulaires de droits miniers gèlent leurs droits et n'exécutent pas de véritables activités de recherches ou d'exploitation sur les sites concédés. Le CAMI et les autres services publics issus du code minier, ne disposent pas et des moyens logistiques ou humains nécessaires pour contrôler et évaluer ce qui se passe sur le terrain.

Improve efficiency in the delivery and

management of mining rights. The Mining

Registry must: spell out the criteria and clearer guidelines for the timely review of applications for mining rights and update its software and computer equipment.

Put in place control and monitoring measures. Indeed, many companies with mining rights delay inordinately in commencing prospection or operation on the concessions granted them. CAMI and other public services formed as result of the mining code, do not have the logistics or human resource necessary to monitor and evaluate what is happening on the ground.

2. *Renforcer les bureaux centraux et provinciaux du ministère des Mines et ses diverses unités administratives, services rattachés, ainsi que les diverses commissions (telles que celle du Processus de Kimberley) sous la tutelle du Ministère.*

3. *Fournir une assistance effective aux exploitants miniers artisanaux et de petite mine.* Le SAESSCAM est l'institution publique chargée d'assistance valablement aider à la mise en oeuvre des coopératives minières. Le SAESSCAM serait également, un maillon essentiel de tout système de traçabilité éventuellement mis en place.

4. *Améliorer le contrôle des conditions sanitaires, sécuritaires et environnementales sur les sites miniers.* Un service d'inspection des mines doit être créé et formé, tout d'abord dans la province du Kantaga.

2. *Strengthen the central and regional offices of the Ministry of Mines and its various administrative units, related services, as well as the various committees (such as the Kimberley Process) under the direction of the Ministry*

3. *Provide effective assistance to local miners and those involve in small scale mining activities.* SAESSCAM is the public institution responsible for the assistance and supervision of local and small-scale miners. It may validly assist with the formation of the mining cooperatives. SAESSCAM would also be an essential link in any traceability system to be introduced.

4. *Improve the monitoring of health, safety and environmental conditions at mining sites.* A mining inspectorate must be created first in the Katanga region.

Ce service sera chargé de la surveillance et du contrôle des règles sanitaires, environnementales, de travail et de sécurité au travail. Il assurera la liaison et travaillera en étroite collaboration avec les populations locales, ainsi que l'administration provinciale des mines. Il est recommandé que le gouvernement recrute un cabinet international spécialisé ou une agence de bailleurs pour une période de 3 à 5 ans. Ce cabinet ou cette agence procédera rapidement et efficacement à la constitution et la formation d'une équipe de spécialistes locaux dans le domaine de l'élaboration des procédures, des pratiques et de manuels de procédures pour le service; et de la fourniture d'un appui logistique et matériel.

This service will be responsible for oversight and making sure health rules on the environment, labor and safety at work are adhered to. It will serve as a link as well as ensure closer interaction with local communities as well as the regional mining administration. It is recommended that the government employs the services of a specialized international firm or donor agency for a period of 3 to 5 years. This firm or office will quickly and efficiently proceed with the formation and training of a team of local specialists in the development of procedures, practices and instructional manuals for the service; and the provision of logistics and material support.

Améliorer les conditions de l'exploitation minière artisanale et à petite échelle

Objectif

Improving conditions for local and small-scale mining

Objective

Améliorer la productivité, la sécurité, la sûreté et les conditions de travail des exploitants miniers artisanaux et à petite échelle par l'application d'une législation appropriée (y compris l'interdiction du travail des enfants); la promotion des sources de revenu alternatives et la création des conditions sociales et écologiques durables.

Produit/résultats: Diminution des conflits et des tensions entre les exploitants miniers artisanaux et les exploitants miniers industriels ; la création de zones ouvertes à l'exploitation minière artisanale et de coopératives minières ; l'amélioration des contrôles des règles de sécurité et de santé sur les sites d'exploitation minière artisanale ; la productivité accrue, l'amélioration de la situation des exploitants miniers artisanaux ; la création de sources de revenu et d'opportunités d'emploi alternatives pour les exploitants miniers artisanaux.

Improve productivity, security, safety and working conditions of local and small scale miners through the application of appropriate legislation (including a ban on child labor); the promotion of alternative sources of income and the creation of sustainable social and ecological conditions.

Outcome/Results: minimize conflict and tensions between the small scale and large scale miners; creating open areas for local mining and mining cooperatives; the improvement of safety and health rules and controls on local mining sites; increased productivity, improved the situation of small scale miners; the creation of sources of income and alternative employment opportunities for local miners.

1. *Améliorer la sécurité des titres d'exploitation pour les exploitants miniers artisanaux* en vue de réduire les conflits avec les exploitants industriels. Cela peut se faire par l'affectation de zones ouvertes à l'exploitation artisanale, comme prévu par l'Article 109 du Code minier de 2002. Ces zones devront être potentiellement exploitables artisanalement et assez proches des infrastructures de transport, des cours d'eau et d'autres infrastructures d'appoint telles que les logements, les installations d'hygiène et l'eau. La superficie maximale de chaque zone ouverte à l'exploitation artisanale doit être de 5 carrés (unité de mesure standard du Cadastre Minier) ou de la taille maximale d'un permis d'exploitation de carrières.

1. *Improving the security of operating licenses for local miners* in order to minimize conflicts between these miners and industrial operators. This can be done by allocating open areas for small scale mining activities, as stipulated by Article 109 of the Mining Code of 2002. These areas will be potentially exploitable by the local community and closer to means of road transport, waterways and other infrastructure such as housing, sanitation and water facilities. The maximum area of each zone open to small scale mining should be 5 squares (standard measuring unit of the Mining Register) or the maximum size of a quarrying permit

2. *Adopter une réglementation spécifique et des critères pour l'exploitation minière à petite échelle.* Certains gisements sont trop petits pour être exploités de manière

2. Adopt specific regulations and criteria for small-scale mining activities. Some mineral deposits are too small to be extracted

industrielle, et trop grands pour être efficacement mis en valeur par des exploitants miniers artisanaux. Le Code minier prévoit des permis d'exploitation de petite mine. Malheureusement, les critères applicables à ce type de permis restent à définir convenablement. Le gouvernement devra recourir à une expertise technique et juridique pour l'élaboration de ces critères et règles.

3. Améliorer l'enrichissement des minerais par les exploitants miniers artisanaux et divers intermédiaires. Cela pourrait se faire par la mise en place d'installations pilotes d'enrichissement et d'amélioration de la valeur ajoutée dans les grandes provinces minières. Si elles sont efficaces, ces installations pourraient être reproduites par des investisseurs privés dans d'autres zones de production. Conjointement avec ce

on large scale, and too large to be effectively mined by small scale miners. The Mining Code has made provision for small scale mining operating permit. Unfortunately, the criteria for this type of permit need to be defined properly. The government will have to resort to technical and legal expertise for the development of these criteria and rules.

3. Improve enrichment of minerals by local miners and various middlemen. This could be done by setting up pilot enrichment facilities and improvement of the added value in major mining regions. If implementing them becomes effective, private investors could replicate these facilities in other mining areas. In conjunction with this

programme, le gouvernement devra veiller à l'application de l'interdiction de l'exportation de tous les minerais à l'état brut, en commençant par la province du Katanga. Cette mesure aurait pour avantage, entre autres, de contenir la contrebande et d'encourager la transformation et l'enrichissement des minerais bruts. Ce qui permettrait d'améliorer la qualité et d'accroître la valeur en faveur des exploitants miniers artisanaux. Le gouvernement pourrait envisager la création de centres de coupe et de polissage des diamants et des pierres précieuses, et faciliter le financement des programmes de formation. Une attention particulière devra toutefois être accordée aux coûts et avantages de cette approche, compte tenu de la position dominante sur le marché de tailleurs de pierres et polisseurs d'autres pays.

programme, the government will have to enforce the ban on the export of all minerals in the raw state, beginning with the region of Katanga. This action among others will help to curb smuggling and encourage the transformation and enrichment of raw minerals. This would improve the quality and increase the value for the local miners. The government could consider the establishment of centers of cutting and polishing of diamonds and precious stones, and establish funding training programs. Particular attention should however be given to the costs and benefits of this approach, considering the dominant position by the cutters and polishers of precious minerals from other countries.

L'exploitation minière artisanale

L'exploitation minière artisanale en République Démocratique du Congo est devenue une activité généralisée d'importance économique capitale pour les populations locales. Le nouveau Code Minier a essayé de contrôler cette activité, mais dans beaucoup d'autres pays, cette occupation qui emploie des centaines de milliers d'habitants, reste le plus souvent illégale et anime le secteur informel. Les compagnies minières font face à d'énormes problèmes sociaux et environnementaux à la suite de cette activité illicite de l'exploitation minière. Dans les années 80, l'extraction artisanale était principalement axée sur le diamant. Les fouilles primitives, et employant des pelles à main écrans comme les seuls outils, ont été concentrées le long des vallées fluviales. Un modèle standard de l'organisation a mis au point, une forme

Small scale mining

Small scale mining in Democratic Republic of Congo has become a widespread economic business of capital importance to the local communities. The New Mining Code has managed to regulate this form of mining activity, but in many other countries, this occupation which creates employment to thousands of people, this remains mostly illegal and boosts the informal sector. Mining companies are confronted with serious social and environmental problems as a result of this illegal mining activity. In the 80s, small scale mining was mainly focused on diamond extraction. The use of primitive excavations and hand shovels screens as the only tools were concentrated along the river valleys. A standard model of the organization has developed

d'équipe des creuseurs de 3 à 6 hommes travaillant dans une fosse. Ils le font de leur propre lavage. Les diamants sont ensuite vendus à un marchand intermédiaire, dans le même temps, il fournit à l'avance de la nourriture et un logement temporaire et est remboursé pour ces services. À la fin des années quatre-vingt-dix, un boom temporaire pour la période artisanale Colombo tantalite tantalite (coltan) a été observé au Nord-Est du Congo, lorsque le prix du tantale avait atteint de nouveaux sommets. Aujourd'hui, l'exploitation minière artisanale a étendu son activité dans le secteur minier de l'or, du cuivre, du coltan ainsi que du cobalt (dans les régions riches en minerai de la RDC). Le Nord du Congo, ainsi que les provinces du Maniema-Kivu ont connu une forte invasion des "orpailleurs" non seulement pour l'exploitation minière

a team of miners from 3 to 6 men working in a mining pit. They wash the diamond by themselves. The diamonds are then sold to an intermediary trader who, at the same time, provides in advance, food and temporary accommodation and is reimbursed for his services. In the late nineties, a temporary boom period for local Colombo tantalite tantalite (coltan) was found in the north eastern part of Congo, when the new price of tantalum went up. Today, small scale mining has extended its activity to the mining of gold, copper, coltan and cobalt (in regions rich in mineral ore in DRC). The northern part of Congo as well as the regions of Maniema-Kivu experienced massive invasion of "gold diggers" not only for the mining of alluvial

des dépôts alluvionnaires, mais aussi pour les zones aurifères en terrasses, riches en veines de quartz. Les sociétés agréées font face à d'énormes problèmes sociaux, parce que ces "exploitants miniers artisanaux" sont réticents à quitter leur seule source de revenus. Les affrontements entre ceux-ci et la police des mines sont fréquents. Des programmes d'exploration et de développement sont souvent retardés par ces activités illégales. Dans la dernière décennie, le prix élevé du cobalt et, plus récemment, avec la soudaine augmentation spectaculaire du prix du cuivre au Katanga connaît également un afflux massif de 100.000 exploitants miniers artisanaux des minéraux d'oxyde de cuivre et de cobalt.

deposits, but also for gold mines in terraces rich in quartz veins. The registered companies face huge social problems,

The registered companies face huge social problems, because these "small scale miners" are reluctant to leave their only source of income. There are frequent clashes between them and the police in charge of mines. Exploration and development programmes are often delayed by these illegal activities. In the last decade, the high price of cobalt and more recently, the sudden increase in the price of copper in Katanga also resulted in a massive influx of 100,000 local miners of copper and cobalt oxide.

CHAPTER THREE

CORPUS BASED ANALYSIS

3.0 Introduction

This chapter analyses our corpus with a view on grammatical and structural equivalence in French-English translation. Bell states that, “To shift from one language to the other is, by definition to alter the forms. Further, the contrasting forms convey meanings which cannot but fail to coincide totally; there is no absolute synonym between words in the same language, so why should anyone be surprised to discover a lack of synonym between languages”²²? Larson affirms that: “It is not simply a matter of different word choices, but of different grammatical structures as well”²³. These differences in structures and forms pose challenges in translation. With this in view the purpose of this section is to analyse the challenges associated with the translation, identification and classification of some word combinations in the source text and their grammatical and structural equivalents in the target language. The Contrastive Analysis model as already discussed is employed. From our corpus we had different forms of word combinations and one of such example is a word combination of a noun + an adjective in the SL which was translated as an adjective + a noun word combination in the TL. This example can be cited *une législation particulière* which is a word combination of a noun + an adjective in the SL and was translated as an adjective + a noun combination in the TL. This was rendered as *a special legislation* using transposition as a technique.

²² Bell, Roger T. (1991: 34). *Translation and translating: Theory and practice*. New York: Longman.

²³ Larson, Mildred L. (1984: 98). *Meaning-Based Translation: A Guide to Cross-Language Equivalence*. United States of America: University Press of America.

3.1 Analysis of French-English grammatical and structural equivalents

In this section we will analyse the problems concerning the translation and identification of some French word combinations in the source text and their grammatical and structural equivalents in the target language. In his analysis of equivalence Catford affirms that a class shift: “Occurs when the translation of equivalent of a SL item is a member of a different class from the original item”²⁴. Meaning, there is a change of class from one grammatical structure to another.

An example from our corpus is a verb + a noun combination in French which is *quitte le pays en fraude* and this would give us an adverb + a noun combination in English as *illegally exported outside the country* to affirm what Catford states as class shifts.

As has been discussed already, CA is the method being used in the analysis. In addition we will establish this analysis on transposition by Vinay and Darbelnet which is in line with the definition of class-shifts by Catford. Vinay and Darbelnet argue that transposition can be used to solve such problems identified. They are of the view that in the encounter of two languages the same meaning can be conveyed through a process called transposition. They posit that, “Transposition consists of replacing one class of words by another without changing the meaning”²⁵. Further, they also note that the structural elements of languages differ. They concluded by saying that transposition is the most common structural change that translators undertake (Vinay and Darbelnet 1995; 94:34). Still on transposition, Henry Van Hoof, states that, “La transposition est le procédé de traduction indirecte le plus commun. Elle opère sur les

²⁴ Catford, John C. (1965: 45). *A Linguistic Theory of Translation: An Essay on Applied Linguistics*. London: Oxford University Press.

²⁵ Vinay, Jean.P. and Jean Darbelnet. (1995: 12). *Comparative Stylistics of French and English: A Methodology for Translation*, translated by J. C. Sager and M. J. Hamel, Amsterdam / Philadelphia: John Benjamins.

espèces grammaticales en substituant une partie du discours à une autre sans rien changer au message global”²⁶. These definitions reveal that there is always a change in structure but not in meaning. Translators often weigh the various possibilities before finally deciding on the best option to produce the target language equivalent. To further explain the process of transposition and how such word combinations are arrived at, Yule recognises that different categories in languages such as nouns, adjectives and nonlexical words such as determiners need to be respected in the formation (1989:35). It is observed that not just combination of words can result in a well-formed linguistic unit such as a phrase. Forms and structural changes of both languages must be respected. In such instances a well-formed combination is assured. Here is another example from our corpus to buttress our point on transposition. *à l’origine de nombreuses décès* which was translated as *caused many deaths*. Looking at the structure here the French version has a preposition at the beginning of the extract with English opting for a verb to render the meaning in the TL. This word combination seems most appropriate in both languages. The preposition cannot be translated since it cannot give the correct sentence in the TL.

Vinay and Darbelnet cite the following examples of structural changes to buttress their point. *Dès son lever* becomes *As soon as he gets up* as a target language meaning, where an adverb + a noun word combination can take the form of an adverb + verb combination in the target language. Instead of using a synonym, meaning is rather conveyed through words which are the structural language equivalents. An example from our corpus is *la gestion déficiente* which is a noun + an adjective word combination and was rendered as *weak management*. This is seen as an

²⁶ Hoof, Van H. (1989: 118). *Traduire L’anglais: Théorie et Pratique*. Belgique: Les Presses Duculot.

adjective + a noun word combination in the TL. Larson states that: “It is meaning which is being transferred and must be held constant. Only the form changes”²⁷. From the foregoing, it is realized that if language is to express complex thoughts and ideas, grammatical structures of languages have to be respected. This means that there has to be a way to combine words to form sentences in respect to grammatical rules and structures. Hence, these structures have to be adhered to in rendering target language equivalents.

The following examples of some specific linguistic units and their related equivalents have been cited. On page 38 paragraph 3, we had to contend the equivalent of this lexical item *l'appareil judiciaire*. A literal translation gave us *judicial appareil* and *judicial instrument* and on page 34 paragraph 3 *l'exploitation minière industrielle* gave us *industrial mining exploitation*. These renditions sounded awkward as equivalents in the target language. It did not also express meaning in a natural way and as such did not reflect the structural form of the target language. What may be accepted as equivalents would be *judiciary* and *large scale mining* respectively basing on transposition and CA. Apart from the two examples given, other difficulties were encountered. For instance on page 34 paragraph 2 the word combination *en vertu de la loi* gave the literal translation as *as expected by law*. What will be admissible as equivalent in English would be *as required by law*. Furthermore, on page 35 paragraph 4 the following word combinations *une convention spéciale* and *enclavé en grande partie* also pose some challenges. Literally we had *a special convention* and *landlocked greatly* respectively. What will sound more

²⁷ Larson, Mildred L. (1984: 34). *Meaning-Based Translation: A Guide to Cross-Language Equivalence*. United States of America: University Press of America.

acceptable and natural to the target audience and at the same time bring out the structure of the target language would be *special agreement* and also *largely landlocked* respectively.

Another difficulty encountered is seen on page 45 paragraphs 1 and 2 which was baffling and constitute a subject of debate in looking out for the equivalents. These were *nouer un partenariat* and *se font une vive concurrence*. A literal rendition gave *to tie a partnership* and *compete strongly*. What will sound more natural and admissible in English will be *to enter into partnership* and *stiff competition* respectively. To confirm its authenticity, a sample was run in the British National Corpus (BNC) and the Corpus of Contemporary American English (COCA) and was found to be valid.

The following were run *a special agreement* (appeared 19 times in COCA), *ideal condition* (appeared 99 times in COCA), and *favourable environment* (appeared 33 times in COCA).

The following were also run in BNC *as required by law*, *stiff competition*, (appeared 35 times), *large scale mining* (appeared 23 times) respectively. The following equivalents which were not confirmed in BNC included *compete strongly*, *artisanal mining exploitation* and *to tie a partnership*. Hatim and Manson mentioned the problems above and stated that translators should have a better judgment of a text before rendering them (Hatim and Manson 1989:180).

3.2 Analysis of the classification of forms of French-English equivalents

In this section we will analyse the classification of specific linguistics units identified in the SL and their equivalents in the TL. As previously discussed, equivalence is finding expressions or combinations which produce the same meaning in the target language. If a specific linguistic unit

in the source language carries the same intended meaning in the target language, then these two units are considered to be equivalent. In her analysis of equivalence, Susan Bassnett affirms that: “Equivalence in translation, then, should not be approached as a search for sameness, since sameness cannot even exist between TL versions of the same text, let alone between the ST and TL”²⁸. She emphasises on the need of looking out for the grammatical structures of the target language which will enable a translator to convey meaning. It is noteworthy to mention here that, the translator should not always look out for one-to-one correspondence units in the TL as equivalents. From the foregoing it is observed that it is difficult to find TL equivalents due to the different patterns and structures of languages.

We will go further by analysing one of the equivalences that Catford identifies as “Class-shifts” in translation. He affirms that a class shift: “Occurs when the translation of equivalent of a SL item is a member of a different class from the original item”²⁹. This means that a source language is translated with a target language item which belongs to a different grammatical class; i.e. a verb may be translated as an adjective and so on. There is therefore a change of grammatical class which does not provide sameness in the TL equivalent as have been propounded by Susan Bassnett but rather meaning is conveyed by using the target language structure (1982:23). Catford also posits that, “An SL and TL texts *group* may have a TL *clause* as its translation equivalent, and so on”³⁰. With the above definition we will base our classification and analysis on class shifts as defined by Catford as well as other translation theorists.

²⁸ Bassnett, Susan. (1980: 45). *Translation Studies*. London: Routledge.

²⁹ Catford, John C. (1965: 78). *A Linguistic Theory of Translation: An Essay on Applied Linguistics*. London: Oxford University Press.

³⁰ Catford (ibid: 78)

3.2.1 Equivalent of verb + noun/adjective word combinations

Source language

Target language

Page 58..paragraph 3.. <i>quitte le pays en fraude</i>	<i>illegally exported outside the country</i>
Page 46... paragraph 2... <i>se font une vive concurrence</i>	<i>stiff competition</i>
Page 34 paragraph 3 <i>vendu en contrebande</i>	<i>illegally sold</i>
Page 45 paragraph 3 <i>enclavé en grande partie</i>	<i>largely landlocked</i>

There are a lot of examples in the source text but these few ones are what will be examined.

From the examples above, the French verb + noun combination *quitte le pays en fraude* has a change of form which becomes an adverb + a verb in English. In rendering it, transposition as a technique has been employed. To add to that as a rule in French grammar the verb needs to be placed before the noun in this instance to express it correctly in the TL language. As such in the TL it needs to be rendered as *illegally exported outside the country*. The following examples *vendu en contrebande* and *enclavé en grande partie* are other examples of the verb + noun word combination which were rendered as *illegally sold* and *largely landlocked* respectively. For the word combination *se font une vive concurrence*, it was translated as *stiff competition* and it has the form of an adjective + a noun in the TL. The rendition which is more acceptable is *stiff competition* as compared to *compete aggressively*.

Using CA as a methodology, *quitte le pays en fraude* is accepted as an expression in French but the same linguistics resource cannot be employed to render the meaning in English. Hence *quitte le pays en fraude* cannot be rendered as *quit the country* or *leave the country by fraudulence means* but rather the meaning should be rendered as a TL equivalent which would sound natural

to the target language audience. The translation is also based on transposition as a technique and class shifts as propounded by Vinay and Darbelnet as well as Catford respectively.

With the expression *stiff competition* as the TL equivalent, the adjective *stiff* appears first to modify the noun *competition*. Here a pre modifier is needed to qualify the noun and therefore expressing it cannot be *competition stiff* but rather *stiff competition*. From the examples above, the French verb + noun combination has a change of form.

3.2.2 Equivalents of preposition + noun/adjective word combination

Source language	Target language
Page 64...paragraph...3 <i>à l'origine de nombreuses décès</i>	<i>caused many deaths</i>
Page 42...paragraph...3 <i>sans commune mesure</i>	<i>did not match up with</i>
Page 34...paragraph...2 <i>à bon escient</i>	<i>wisely</i>

The following example can be cited from our corpus, *à l'origine de nombreuses décès* using transposition as a technique to render the meaning. Looking at the structure here, the French version has a preposition at the beginning of the extract with English opting for a verb to give the meaning in the TL. This word combination seems most appropriate in the SL. The preposition *à* cannot be translated since it cannot give the correct sentence in the TL. By their nature prepositions are added to the phrase due to syntactic requirements in the SL and this in turn contributes to the meaning of the phrase or sentence in the TL. In addition due to their nature, prepositions are colorless if not attached to a noun or any other word class. In such instance they do not render meaning. For instance *à* cannot give any meaning if not attached to *l'origine de*

nombreuses décès. Among the possible choices, we had literal translations like *at the origin of many deaths* and *at the beginning of many deaths*. However, *caused many deaths* was most suitable as a TL equivalent.

Another example is *Sans commune mesure* which could mean *out of all proportion, without common measure* and as stated earlier the preposition is added due to syntactic requirements in the SL. With the above phrase it is noteworthy to analyse the whole unit and to have a more precise meaning and not isolating *sans* from the noun. The preposition *sans* cannot be detached from the noun otherwise it will be meaningless when translating it. *Sans commune mesure* could give us various options such as *out of all proportion* and *without common measure*. Considering deverbalization as propounded by Marianne in which she elaborates the fact that a translator should decode the meaning to render a target language equivalent, it was then rendered as *did not match up with*.

The word combination *à bon escient* is also translated by means of transposition. Due to their nature, *à* has been added to *bon escient* which in context is *wisely*. The word combination which includes a preposition + an adjective in the SL gives us an adverb in the TL. This is as a result of the context. However, this cannot be rendered as *good ecient* since this will not be most appropriate in the TL, as such, it will be difficult to understand the word combination *à bon escient* from its individual components. *Wisely* which gives a more natural flow of speech in the TL was more appropriate.

3.2.3 Equivalents of adjective + noun word combinations

Source language

Target language

Page 41...paragraph...3 <i>longue descente aux enfers</i>	<i>suffered an unbridled decline</i>
Page 79...paragraph...3 <i>petite mine</i>	<i>local mining</i>
Page 62...paragraph... 3 <i>sujettes à des violences familiales</i>	<i>prone to domestic violence</i>

In the document *La Bonne Gouvernance Dans le Secteur Minier Comme Facteur de Croissance en DRC* the sentences express the same content but differ significantly in terms of form and structure in both languages. For instance *Sujette* is the feminine form of the adjective *sujet* and that's account for the reason why *sujettes* is in the plural form in the SL. Though it is an adjective in the SL, in translating we had a verb which includes possibilities like *subjected to*, *undergo domestic violence* or *prone to* in the TL. Transposition as a technique was used here to express the acceptable sentence in English which is from an adjective to a verb. In addition the adjective in the SL is seen here as an attributive element. Therefore the phrase in the SL will change and be rendered as a verb in the TL which gave us *prone to domestic violence*.

Une longue decsente aux enfers is another word combination of an adjective + a noun from our corpus. With the above word combination, the literal meaning gave us various options as *descent into hell*, *a downward spiral*, *suffered a long wreck*, and *suffered an unbridled decline*. The SL employs an adjective + a noun word combination which was rendered as a verb + noun combination. Class shifts as discussed by Catford was employed in this instance to render the translation in the TL. Hence in context, *suffered an unbridled decline* was most appropriate and acceptable in the TL.

The analysis revealed that equivalence is a pivotal concern. With regard to the above extracts from our corpus, the translator privileges transposition and class shifts as techniques where the translator sticks closely to the target text lexis and syntax.

CHAPTER FOUR

This chapter deals with the findings, the conclusion and recommendations of the study.

4.1 Findings

Translation of a text has never been without challenges. A translator is grapple with many obstacles as a result of the nature of a text that is translated. A translator's job is to surmount such challenges in order to arrive at an acceptable TL equivalent. It is observed that the difficulties related to the translation, identification and classification of specific linguistics units and their equivalents are due to some factors. One issue paramount here is that grammatical structures and forms differ from one language to the other. Thus there are variations in languages. These variations and forms of languages play crucial role in translation. According to Damodar Thakur, "Form is the internal structure of a phrase or a clause"³¹. This must be respected in order to render a target language equivalent. One of such challenges found in translating *La Bonne Gouvernance Dans le Secteur Minier Comme Facteur de Croissance en DRC* was characterised by the translation of specific mining expressions. Terms such as *les concasseurs, les tailleurs de polissueurs, les substances minerales* among others were found in the text. Such terms were translated according to the classification of these expressions. One of such classification was a noun + an adjective word combination which was rendered by means of an adjective + a noun word combination. *Un cadre regulataire* in the SL is expressed by means of another word combination which becomes *a regulatory framework*. Additionally, the word combination of a preposition + a noun happens to be another finding in the course of translation.

³¹ Thakur, Damodar. (1998: 3). *Linguistics Simplified: Syntax*: Bharati Bhawan Publishers and Distributors.

When prepositions are not attached to a noun or another word class, translating them will be meaningless thus the prepositions alone become colorless. The examples from our corpus are not colorless since they were attached to a noun and other word class. These were rendered in the TL which gives meaning to the target language audience. This example can also be cited from our corpus *à bon escient* . The French expression when translated into English becomes *good escient*. This does not sound natural and is not grammatically acceptable. Moreover it does not give us the same meaning in English and therefore cannot be accepted as an equivalent. Rather in English one would say, *wisely* which bring out the intended meaning

Lexical sets is another finding discovered in the course of translating. These lexical sets are linguistic units based on the mining code in DRC. Examples of such lexical sets include *sous la réserve de la signature*, *nouer un partenariat* and *les permis de recherche*. These extracts from our corpus emerge as some specific terms associated with the legal field. To render meaning an attempt was made to achieve a natural flow of speech by restructuring the phrase in the TL. As such *subject to signing*, *to enter into partnership* and *research license* respectively were most appropriate in the receptor language.

Another finding is the context of a document which affects the translation of a specific linguistic unit. From our studies it has been observed that a dictionary does not really render contextual meaning. In looking out for meaning from a dictionary there is always rigidity of meaning. This makes it difficult to get the full import of a particular term or linguistic unit. Meaning can therefore be achieved through linguistic context. George Yule asked this question in relation to context. “How do we usually know which meaning is intended in a particular sentence? We

usually do so on the basis of linguistic context”³². His view on the issue above goes to emphasise the point of arriving at meaning within a context. As such the inability to identify a phrase and render it in context can distort the meaning. For example *l'entrée en fonction* is a specific linguistic unit in French which must be identified and understood in context so as to render a target language equivalent. In this case the meaning of the identified grammatical structure in French must not be translated out of context otherwise it will distort meaning. The above example when translated out of context will be *to enter into function* and *to function* which are inadmissible. After identifying the grammatical structure and having understood it within the context *established* is more acceptable as a target language equivalent. Another example is *mène à la croissance* which in context was translated as *brought about growth*.

Another finding worth mentioning is structural adjustment which refers to a change in the grammar from SL to TL. In this instance there is an alteration and reconstruction of the sentence in the target language. The alteration of form may mean changes of categories such as word classes. One main reason for this adjustment is to enable the form of the message to conform to the requirements of the structure of the receptor language. An example from our corpus is *combiné avec* which as a result of structural adjustment was rendered in the TL as *coupled with*. This is also done to produce semantically equivalent structures as well as stylistic effects.

From our discussions so far, it is observed that the views and theories discussed apply to the challenges identified in translating the text. These various views from authors like Vinay and

³² Yule, George. (1988: 30). *The Study of Language*. Cambridge University Press.

Darbelnet, Larson Mildred, Roger Bell among other were seriously considered in the study and these ideas were mostly applied to resolve these translation challenges identified in the text.

Another idea worth mentioning is Mona Baker's view on lexical sets which was most appropriate in resolving some of these challenges. Some examples are *les tailleurs et les polisseurs* and *les connaisseurs*. These word combinations are very specific in the field of mining.

One other technique that worked well was deverbalisation in which the translator decodes the meaning first. Marianne Lederer theory applies to this study. She argues that: "The permanence of language signs on paper makes things difficult for those who have not become fully aware of the need to deverbalise. Either they write their translation without taking their eyes of the original or else they do not formulate their sentences fully before putting them down"³³. She concludes by saying that, "The result is always far more clumsy than if they had expressed the idea in complete freedom from the constraints of the original language"³⁴. For instance, *combiné à une bonne volonté* cited from our corpus would be rendered literally as *combined with a good will*. In view of deverbalization it was rendered as *coupled with a willingness*.

The findings so far reveal that it is important that every translator should be conscious of the different forms and structures found in languages. This is because languages vary and therefore the form of a target language may be different from a source language structure. Thus the form of a language covers linguistic units such as morphemes, words, phrases, clauses, and proverbs.

³³ Lederer, Marianne. (1994: 12). *Translation: The Interpretive Model*. United Kingdom: St. Jerome Publishing.

So finding the structures and forms to arrive at equivalence becomes a problem. In order not to distort meaning translators should be competent in both the SL and TL structures.

4.2 Conclusion

Translating documents has always been associated with challenges of which the grammatical structure of both the SL and TL languages cannot be overlooked. The issue of grammatical and structural equivalence has been analysed, evaluated and extensively discussed and has been approached from different perspectives. In our document *la Bonne Gouvernance Dans le Secteur Minier Comme Facteur de Croissance en DRC*, we were confronted with some challenges which concern the field of mining. Grammatical and structural Equivalent was the challenged identified and has been seen so far from the perspectives of different theorists as the differences between the SL and TL forms. These differences which include the structure of languages are unavoidable in the process of translation. From the discussions so far, it is obvious that the issue of grammatical and structural equivalent is a controversial one and a pivotal concern. Though its definitions and views vary they are different perspectives from various authors however these authors express the same reality at arriving at target language equivalents. Their views also reflect the nature of finding grammatical equivalence.

In view of the above, Susan argues that, “Equivalent is not sameness”³⁵. Meaning one cannot use the same forms or structures from the source language to convey the same meaning in the target language. From the above it is observed that meaning of a text is always transferred and must be held constant. (Larson 1984:3). This makes the notion of equivalence a controversial

³⁵ Bassnett, Susan. (1980: 34). *Translation Studies*. London: Routledge.

and a debatable issue in translation. It is seen that the variations in languages pose a lot of challenges to the translator.

These variations sometimes cause confusion in translation and translators constantly face such challenges. To surmount this problem and to render a satisfactory translation, the translator needs to be acquainted with the structures and forms of both SL and TL in order to find equivalents which convey the author's intended meaning to the TL audience.

Thus it is conforming to the stylistic demands and grammatical conventions of the target language, which brings about structural adjustment in translation. As such, a translator's knowledge of the grammatical forms and structures is very essential in rendering an appropriate target language equivalent.

4.3 Recommendations

This study has revealed that one's ability to translate in relation to grammatical and structural equivalence is a challenge. What could be the cause of this challenge and how can they be overcome? Could it be that structures which form an integral part of languages are not taken seriously by students? A study of some of the courses indicate that students are taught the languages with little emphasis on forms and structures. There should be an intensive teaching on forms and structures of both languages which will enable students to overcome such challenges whilst translating.

Looking at the importance of the subject of grammatical and structural equivalence and being familiar with the challenges, I would like to humbly make the following recommendations to be

considered by translation researchers and lecturers of the University of Ghana, Legon.

- For a translator to find equivalents of different linguistics units, different semantic fields should be taught at all levels. The structural forms and patterns have to be taught and students should be encouraged to do extensive research on both languages.
- The importance of structures plays a crucial role in translation and students must be required to buy more books on that to gain more understanding and insight into structures and forms in both languages.
- The University of Ghana must provide appropriate infrastructure for translation students. This may include computers which will enable translation students to easily access the internet.

When published it is my fervent hope that this research will encourage lecturers to teach students to acquaint themselves seriously with the grammatical structures of both languages in order to avoid the mistakes and problems associated with these structures and forms. As such they will overcome this problem and render a satisfactory and appropriate translation.



BIBLIOGRAPHY

- Baker, Mona. 1992. In *Other Words: A Course book on Translation*. London: Routledge.
- Baker, Mona. 1998. *Routledge Encyclopedia of Translation Studies*. New York: Routledge.
- Bassnett, Susan. 1980. *Translation Studies*. London: Routledge.
- Bell, Roger T. 1991. *Translation and translating: Theory and practice*. New York: Longman.
- Catford, John C. 1965. *A Linguistic Theory of Translation: An Essay on Applied Linguistics*. London: Oxford University Press.
- Hatim, B. and Mason, I. 1990. *Discourse and the translator: United States of America*: Longman.
- Hoof, Van H. 1989. *Traduire L'anglais: Théorie et Pratique*. Belgique: Les Presses Duculot.
- Larson, Mildred L. 1984. *Meaning-Based Translation: A Guide to Cross-Language Equivalence*. United States of America: University Press of America.
- Lederer, Marianne. 1994. *Translation: The Interpretive Model*. United Kingdom: St. Jerome Publishing.
- Munday, Jeremy. 2001. *Introducing Translation Studies: Theories and Applications*. London and New York: Routledge.
- Thakur, Damodar. 1998. *Linguistics Simplified: Syntax*: Bharati Bhawan Publishers and Distributers.
- Vinay, Jean.P. and Jean. Darbelnet. 1995. *Comparative Stylistics of French and English: A Methodology for Translation*, translated by J. C. Sager and M. J. Hamel, Amsterdam / Philadelphia: John Benjamins.
- Yule, George. 1988. *The Study of Language*. Cambridge University Press.

Online Resources

1. www.linguee.com
2. www.reverse.net

3. www.wordreference.com

4. www.bab.la.fr

Dictionaries

1. Dictionnaire, Universel 5e Edition (French Dictionary), 1994

2. Petit, Robert. (French Dictionary), 2007

3. Petit Larousse, (French Dictionary), 2007



GLOSSARY

	GLOSSARY	MEANING
1	A bon escient	Wisely
2	Actifs minières	Mining assets
3	Actionnaire	Shareholder
4	Activités	Activities
5	Activités illégales	Illegal activities
6	Activités minières	Mining activities
7	Activités de recherche	Research activities
8	Appareil judiciaire	The judicial system
9	Arrière pays	Countryside
10	Bailleurs de fonds	Donors
11	Bien-être	Lives of the population
12	Cadre propice	Favourable framework
13	Cadre	Framework
14	Capitaux	Capital
15	Changement fondamental	Paradigm shift
16	Co-entreprises	Joint ventures
17	Commerce intérieur	Domestic trade
18	Conclure des marchés	Enter into contracts
19	Conditions idones	Best conditions
20	Conditions meilleure	Best conditions
21	Convention minière	Mining agreement
22	Convention	Agreement
23	Convention spéciale	Special agreement
24	Couche minéralisée	Mineralized layer
25	Couche	Layer
26	Détournements de fonds	Embezzlement of funds
27	Différentes substances minérales	Different mineral resources
28	Embouchure du fleuve	Mouth of the river
29	Encadrement	Supervision
30	Enrichissement et la concentration	Enrichment and ore concentration
31	Entreprises minières	Mining Companies
32	Excédents	Surplus
33	Exploitants miniers artisanaux	Small scale miners
34	Exploitation minière	Mining
35	Exploitation minière artisanale	Small /local scale mining
36	Exploitation minière industrielle	Large scale mining
37	Exploitations minières activités	Mining activities
38	Extraction et du traitement	Extraction and processing
39	Faillite des entreprises	Collapse of companies
40	Fondries	Foundries

41	La raffinage	Polishing
42	Fundamental de paradigme	Paradigm shift
43	Gestion déficiente	Weak management
44	Industrielle minière	Large scale mining
45	Institutions	Institutions
46	Lancer des appels d'offres	Invite tenders
47	Législation particulière	Special legislation
48	Longue descente aux enfers	Long wreck
49	Manque de volonté	Unwillingness
50	Métaux non ferreux	Non ferrous metal
51	Mines artisanales	Local mining sites
52	Mise en valeur	In the development
53	Nouer un partenariat	Enter into partnership
54	Nouer un partenariat nouveau	New partnership
55	Nouveau code	New code
56	Nouvelle législation minière	New mining law
57	Nouvelles minères réserves	New mining reserves
58	Opérateurs privés	Private operators
59	Pays en développement	Developing countries
60	Permis de recherche	Research permit
61	Porteuse de promesses	Great prospects
62	Potentiel minier	Mining potential
63	Principale diamantifère	Main diamond industry
64	Pris de l'essor	New turn
65	Production actuelle	Current production
66	Production	Production
67	Production aurifère	Gold production
68	Production minière	Mineral production
69	Production minière activités	Mineral production activities
70	Production minière artisanale	Small scale mining production
71	Production artisanale	Small scale
72	Puits minuscules	Tiny wells
73	Quitte le pays en fraude	Illegally exported
74	Recettes fiscales	Tax revenue
75	Régime fiscal	Taxation
76	Règlement minier	Mining regulation
77	Ressources minières	Mineral resources
78	Role de régulateur	Regulatory role
79	Sans commune mesure	Did not match up
80	Scénario de croissance	Growth scenario
81	Secteur minier	Mining sector
82	Secteur minière industrielle	Large scale mining
83	Sites d'exploitation artisanale	Local mining site
84	Sous réserve de la signature	Subject to signing
85	Sous-secteur maritime	Sub marine sector

86	Tonnes métriques	Metric tons
87	Turbulence financière	Financial turbulence
88	Valeur moyenne marchande	Average marketed value
89	Voudrait faire fortune	To become rich
90	Vendu en contrebande	Illegally sold
91	Vienes quartz	Quartz veins
92	Volumes de production	Production volumes
93	Zones aurifères	Gold mines
94	Zones de concessions	Mining concessions
95	Zones d'exploitation	Mining concessions
96	Zones	Sites
97	Zones minières	Mining concessions
98	Zones diamantifère	Diamond concessions
99	Zones minerais	Mineral sites
100	Zone de production	Production areas

