

Rock Bottom

Modern Slavery
and Child Labour
in South Indian
Granite
Quarries



SCL - Stop Child Labour



ICN - India Committee of the Netherlands

May 2015

Colofon

Authors: Glocal Research (Hyderabad) & India Committee of the Netherlands (Utrecht)

Lay out: Fridy Visser Knof

Photos: D.S.C. Boerema (page 1, 9, 38), Liesbeth Sluiter (page 15) & Glocal Research (page 17, 20, 24, 26, 31)

Acknowledgements

The main focus of this report is the primary data and information gathered from the granite quarry sites, quarry workers and their families. Therefore ICN and SCL would like to thank Davuluri Venkateswarlu, P. Kranthi Kumar and Ravi Raj, for their dedication to investigating the South Indian granite industry. The publishers also would like to thank all 86 quarry workers for their time and the information they provided for this report.

In addition, ICN and SCL colleagues and Meena Varma, Director of the Dalit Solidarity Network in the United Kingdom, deserve special thanks for their contributions to this report.

This publication has been made possible with financial assistance from the European Union. The content of this publication is the sole responsibility of ICN and SCL and can in no way be taken to reflect the views of the European Union.



Published by:



India Committee of the Netherlands

Landelijke India Werkgroep

Mariaplaats 4e

3511 LH Utrecht, The Netherlands

Tel: +31 (0)30 2321340

E-mail: info@indianet.nl

Website: www.indianet.nl



Stop Child Labour

Raamweg 16

2596 HL Den Haag, The Netherlands

Tel: +31 (0)70 376 55 00

E-mail: info@hivos.nl

Website: www.stopchildlabour.org

About the Authors

The India Committee of the Netherlands

India Committee of the Netherlands (ICN) is an independent non-governmental organisation campaigning and doing advocacy work on human rights issues. Central to the work of ICN are the issues of caste-based discrimination, labour rights and child labour & education. ICN co-operates with organisations in India and elsewhere in combating discrimination, poverty, oppression, exploitation and lack of education, focusing on the role of policy makers and companies. ICN is an active member of networks like the Stop Child Labour coalition, the Clean Clothes Campaign, the International Dalit Solidarity Network and the Dutch MVO Platform.

Stop Child Labour

'Stop Child Labour – School is the best place to work' (SCL) aims to eliminate all forms of child labour and to ensure quality fulltime education for all children until the age of 15. Stop Child Labour promotes an area-based approach towards the creation of 'child labour free zones' and 'child labour free production chains'. Stop Child Labour calls on consumers, companies, governments and international organisations to be part of the solution.

Stop Child Labour is a coalition coordinated by Hivos. The coalition consists of four non-governmental organizations and two trade unions based in the Netherlands as well as NGOs and unions in Asia, Africa and Latin America.

Glocal Research

Glocal Research provides multi-disciplinary research and consultancy services to (state) governments, non-governmental organizations, corporate bodies and national and international development funding agencies. The organisation has expertise in the areas of agriculture, child labour, natural resource management, rural development and rural livelihoods. In these areas Glocal Research' multi-disciplinary team of professionals has undertaken several research, monitoring and evaluation studies and facilitates training workshops. Glocal Research is established in 2000 and based in Hyderabad, India.

Over the last 15 years Glocal Research has extensively contributed to policy and academic debates on child labour and agriculture in India. The research carried out by Glocal Research on child labour in cotton production has generated substantial debate among scholars, activists, seed companies and policymakers and contributed to the development of several proactive interventions to address child labour in the seed industry.

Contents

Executive Summary	6
Chapter I: Introduction	9
Context	9
Labour rights violations in sandstone and granite quarries	9
Illegal mining in Tamil Nadu - A political issue	10
Social and environmental risks for natural stone companies	11
Objectives of the field study	11
Methodology	11
Retail of Indian granite in Europe	13
Structure of the report	14
CHAPTER II: GRANITE QUARRYING IN SOUTH INDIA: OVERVIEW	16
Natural stone in India	16
Concentration of production in south India	17
Granite mining - Public and private sector involvement	17
Granite mining and processing	18
Granite export	18
Processing and retail of Indian granite in Europe	18
Granite supply chain	18
CHAPTER III: FINDINGS FROM THE FIELD STUDY	20
Introduction	20
Workforce composition	20
Preference for migrant labour	21
Caste composition of workforce	21
Age and gender composition of workforce	21
Prevalence of child labour	22
Prevalence of debt bondage	25
Non-payment of minimum wage, overtime and social benefits	27
Occupational health and safety	29
Living conditions of migrant workers	29
Informal employment agreements	29
Working conditions in quarries producing for the international market	30
CHAPTER IV: NATURAL STONE COMPANIES' RESPONSIBILITY TO RESPECT HUMAN RIGHTS	31
Methodology	32

Remarks	33
Response of European natural stone companies	33
Companies' efforts towards improved labour conditions in quarries	36
Concluding remarks	37
CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS	38
Conclusions	39
Recommendations	41
ENDNOTES	44
ANNEX 1: IMPORT AND RETAIL OF INDIAN GRANITE BY EUROPEAN COMPANIES	47
LIST OF TABLES AND FIGURES	
<i>Figure 1: State wise and category wise distribution of sample quarries</i>	12
<i>Table 1: India exports of granite and natural stone products</i>	16
<i>Figure 2: International granite chain and trade structure</i>	19
<i>Table 2: Workforce composition in sample quarries</i>	22
<i>Table 3: Activity wise division of labour</i>	22
<i>Table 4: Minimum wage rates for daily wage workers in the granite industry as prescribed by Tamil Nadu and Karnataka state governments (Amount in INR and EU)</i>	28
<i>Table 5: Natural stone companies and their responses</i>	34

Executive Summary

Introduction

This report examines working conditions in 18 granite quarries in 2 South Indian states, Tamil Nadu and Karnataka, producing both for domestic and export markets. The field study identified serious human rights violations including child labour and bonded labour. Furthermore the field study identified a decline in child labour in granite quarries in Tamil Nadu, as a result of increased state government scrutiny on quarries. Through desk research and a review procedure with 26 European natural stone companies, insights were gained in natural stone companies' efforts to improve labour conditions in lower tiers of their supply chains. The findings of the study are presented below.

The South Indian granite industry

India accounts for roughly 20 percent of the worlds' granite resources. India is the second largest exporter of raw granite after China. Major production of granite in raw as well as processed form is presently concentrated in southern states of India: Tamil Nadu, Karnataka and Andhra Pradesh. The granite stone produced in Tamil Nadu and Karnataka is being exported to different countries in the world, among them China, Germany, Belgium, the United Kingdom and the Netherlands.

The majority of the workforce in granite quarries are male workers, out of the total of 705 workers in the 18 surveyed quarries 77 percent are men and 23 percent are women. Women are mainly involved in waste stone processing. Most of the workers engaged in stone quarry work are from backward and scheduled castes (see chapter 3). Furthermore seasonal migrant labour constitutes an important part of the workforce in granite quarries, especially in Tamil Nadu (73 % of the workforce). Often migrant workers are preferred over local workers; migrant workers are more flexible and willing to work longer hours because they have fewer social and family commitments.

Prevalence of bonded labour

In the surveyed quarries in Tamil Nadu and Karnataka, most workers are kept bonded to the quarry through debt. About 54 percent of the local workers and 66 percent of the migrant workers interviewed, reported that they owe large sums of money to quarry owners or contractors. Most of the interviewed workers often have been working in the same quarry for more than three years. Another finding underlining the prevalence of bonded labour is the lack of freedom of workers to leave the quarry and interact with people outside the quarry at one's own choice.

Prevalence of child labour

The research findings indicate that there has been a decline in the magnitude of child labour in granite quarries in Tamil Nadu compared to previous years.¹ Out of the 12 quarries surveyed in Tamil Nadu in 2 quarries direct or indirect employment of children was found. Out of the total of 510 workers in 12 quarries, 1 was a child below 14 years, 5 were in the age group of 15 to 18 years and the remaining workers were adult workers.

In Karnataka the situation is different from Tamil Nadu. Though there is some decline in the incidence of child labour compared to previous years, they still constitute an important segment of the workforce, mainly in waste stone processing. Children were present in five out of six quarries covered in this research. Children accounted for almost 10 percent of the total workforce (4.6 % below 14 years and 5.1 % between 15-18 years). Not much difference in numbers of working children is found between quarries producing for domestic and export markets.

Active intervention from the state government is one of the key factors that has contributed to the decline in child labour in granite quarries in Tamil Nadu. When illegal granite mining became a political issue in 2012, the government appointed special teams to visit all the granite quarries to check illegal mining activities. During the visits labour rights violations such as the presence of children at quarry sites, lack of safety measures and poor facilities for migrant workers were observed as well. The special teams warned quarry owners to address these issues which put pressure on quarry owners not to engage children in quarry operations. Furthermore this resulted in quarry owners asking seasonal migrant workers not to bring their families to the worksite is an attempt to avoid problems related to child labour and poor accommodation for workers' families.

Informal employment agreements

More than ninety percent of the workers in sample quarries are hired on an informal basis without any written contracts. Even in quarries directly managed by the government, written contracts only exist for a small proportion of the workforce who are employed on a regular basis. Without employment contracts it is hard for workers to claim their legal entitlements like minimum wages, overtime compensation and compensation in case of work accidents.

Gender based wage discrimination

Another research finding is the prevalence of gender based wage discrimination. Female quarry workers involved in waste stone processing earn less than the legal minimum wage rates prescribed by the Karnataka and Tamil Nadu state governments for unskilled workers in granite quarries. The daily wage rates paid to male workers may seem at par or even higher than the legal minimum wages for skilled and unskilled quarry labour prescribed by the governments; but if we take the number of working hours into consideration the actual wages fall short of meeting legal requirements. Overtime work is common but paid overtime is almost non-existent.

Poor living conditions and health and safety measures

In most of the quarries workers live in very poor conditions. Workers with families are provided a small hut, while workers without families are housed in a common room without proper facilities. The workers have limited access to healthcare or clean drinking water.

Workplace safety measures are almost always inadequate. Workers are exposed to occupational hazards like silica dust, explosions and moving of heavy stones. Insufficient precautions are taken, personal protective equipment and safety guidelines are often absent.

Review procedure with natural stone companies

Out of the 26 European natural stone companies that were requested to review a draft version of this study report only 12 companies responded. Most companies did not provide substantive answers to the question about their insights in their supply chains at the level of quarries. Eight companies clearly stated that they do not procure granite from the quarries surveyed in this study while only two companies said that they have insight in their supply chain at the level of quarries.

Out of the twelve companies that responded to the request for review, four companies participate in corporate social responsibility (CSR) initiatives (IGEP, TFT RSP, ETI) that aim to improve labour conditions in natural stone supply chains. CSR initiatives claim to have insights in supply chains and adverse human rights impact, but the publicly available information is insufficient to ascertain if and how quarry workers in lower tiers of granite supply chains benefit from these initiatives.

Conclusion and recommendations

The prevalence of modern slavery, child labour and gender-based wage discrimination are serious human rights violations. The United Nations Guiding Principles on Business and Human Rights (UNGP) and the OECD Guidelines for Multinational Enterprises clarify that states have the duty to protect and enterprises have the responsibility to respect human rights.² According to the UNGP, if a government fails to fulfil its duty to protect, this does not exempt companies at the buying side from their responsibility to respect human rights. This responsibility includes performing a proper due diligence procedure which identifies, prevents and mitigates actual and potential adverse human rights impacts. The findings of this report show that to the extent the companies in this research are exemplary for the natural stone sector, the sector fails to live up to this responsibility.

Furthermore in chapter V recommendations are given to natural stone companies and quarries in India, the central government and state governments of India, the European Union and its member states and European natural stone companies for addressing human rights and labour rights violations in the South Indian granite industry.

CHAPTER 1

INTRODUCTION



Context

India is a leading producer and exporter of natural stone in the world. On average 10 percent of the natural stone traded on the world market comes from India. Dimensional stones like granite, marble, slate and sandstone constitute the bulk of India's export in natural stone. India accounts for over 20 percent of the world's granite resources. It is the second largest exporter of raw granite after China and ranks fifth in the export of processed granite (value added finished) products.

Labour rights violations in sandstone and granite quarries

Studies conducted by international and Indian NGOs in the mid-2000s³ on conditions of workers in Rajasthan's sandstone quarries showed serious labour and human rights violations that include child labour, bonded labour, sub-standard wages, wage discrimination, unsafe working conditions

and absence of freedom of association.⁴ Most workers in sandstone quarries were low caste migrants who are indebted to their employers and work under conditions of bonded labour. Child labour was reported as a common phenomenon in sandstone quarries. Children tend to start working in quarries long before they reach the age of 14 and often perform hazardous tasks. Wage discrimination on caste and gender lines was also reported, women received low wages compared to men and children received even less. Legal limits to working hours were not respected and excessive overtime seems to be part and parcel of the way work is organised in quarries.

Till recently most of the research on working conditions of the labourers in the Indian natural stone sector was concentrated on sandstone quarries in Rajasthan. Little was known about the conditions workers face in granite quarries which are largely concentrated in the South Indian states Karnataka, Tamil Nadu and Andhra Pradesh. Many stakeholders in the granite industry maintained that quarrying of granite is more mechanized and less labour-intensive, and therefore not as prone to labour rights violations as sandstone quarrying. In 2007, the Indian granite industry countered allegations in the European media that it is employing child labour in quarries and processing factories.⁵ In order to examine the working conditions in granite quarries a study was carried out in 57 granite quarries in Tamil Nadu in 2009 by a Tamil Nadu based NGO.⁶ This study shows that granite quarry operators in Tamil Nadu treat their workers unethically and in many ways they also violate laws. Workers are paid poorly and receive hardly any legally mandatory benefits. Migrant workers live at quarry sites in small, unsanitary huts and have limited access to healthcare or clean drinking water. Hazardous working conditions are common. Workplace safety measures are categorically inadequate, leading to accidents and chronic disease. Many quarries keep migrant workers confined through unfair wage and lending practices; some even employ young children. Involvement of children was mainly observed in waste stone processing.

Illegal mining in Tamil Nadu - A political issue

Since 2010 many developments have taken place in the South Indian granite industry, particularly in the state of Tamil Nadu. Illegal granite mining became a political issue in Tamil Nadu in 2012. In the period 2005 - 2010 the export demand of China for iron ore and granite increased massively, among other reasons due to the Beijing Olympics. Along with the increase in demand mining policies became more export oriented.⁷ The involvement of political leaders and government officials in granite and iron ore mining leases increased since the early 2000s. The reason is their influence on granting leases for quarries and the related potential for corruption. These developments lead to illegal mining activities. Subsequently civil society organizations raised concerns about the indiscriminate mining activities. The issue went to the Supreme Court which resulted in a Court order for an enquiry into illegal mining practices. The government appointed special teams to check illegal mining activities.⁸ The licenses of several units found involved in illegal mining operations were cancelled. In Madurai district of Tamil Nadu itself, out of the 175 licensed granite quarries, 94 quarries had violated license norms, while 51 others had committed major violations, including encroaching on revenue (government) land and private land. During this period the quarry owners were alerted about labour related issues as well (minimum wages, child labour, facilities for migrant workers etc.). Special teams appointed by the government noted the presence of children at quarry sites, lack of safety measures, poor facilities for migrant workers and warned the quarry owners to address these issues. The issue of illegal mining also received wide attention and became a political issue in Karnataka. The focus in Karnataka is mainly on iron ore and not on granite mining.⁹

Social and environmental risks for natural stone companies

In 2013 the Dutch government contracted the consultancy firm KPMG to conduct a risk assessment into the main economic sectors of the domestic economy. The report, published in September 2014, has selected 13 priority risk sectors and describes the risks on environmental degradation, labour rights and human rights violations for each sector.¹⁰ In the chapters on the wholesale, retail and building sectors risks in the natural stone industry (including the granite industry) are indicated. These chapters mention high risks for the production of natural stone in India and China. Risks include land rights violations and land grabbing, depletion of natural resources, deprivation of a safe and healthy living environment, labour rights violations including child labour, bonded labour, unlawful wage rates and working hours and unsafe and unhealthy working conditions. Furthermore the chapter on the building sector states that it remains unclear if and how due diligence is conducted by natural stone companies and that there is room for improvement for (natural stone) companies to be transparent about social and environmental risks in lower tiers of their supply chains.

The risk of child labour and other labour rights violations in the Indian natural stone industry are also addressed by the 'The Global Slavery Index 2014' and report on '2013 Findings on the Worst Forms of Child Labour'.¹¹ India ranks fifth in The Global Slavery Index 2014 by prevalence of population in modern slavery. In the country sheet on India natural stone is mentioned as one of the products known to be produced by using modern slavery like bonded and forced labour. The report on the worst forms of child labour indicates the usage of (forced and/ or bonded) child labour in quarrying stones and breaking stones.

In the context of the developments mentioned above, the present study makes an attempt to assess the current situation of labourers working in granite quarries in Tamil Nadu and Karnataka states. This study also aims to explore the current import and retail of Indian granite by European natural stone companies.

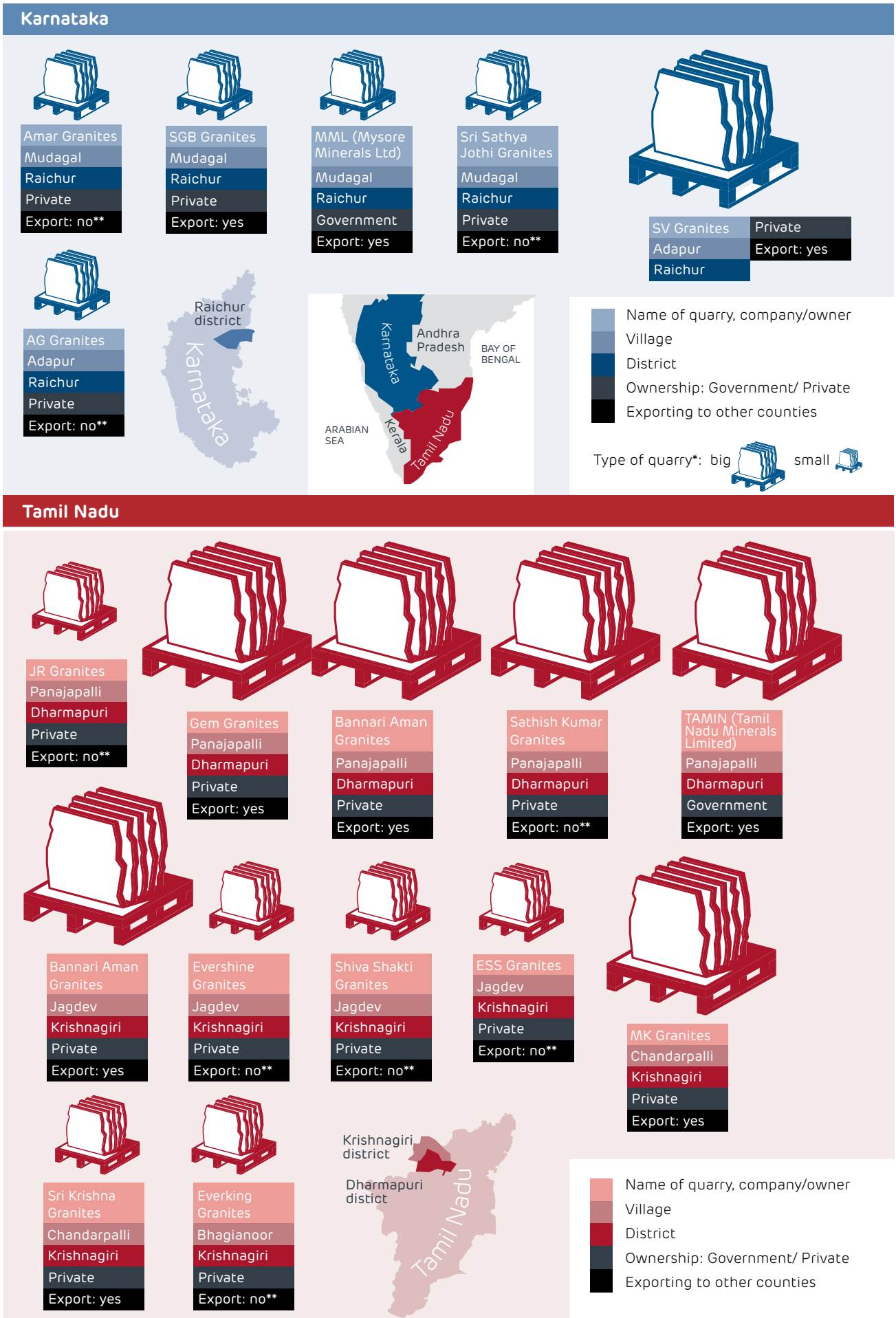
Objectives of the field study

The main objective of the study is to examine the nature and magnitude of child labour¹² in granite quarry operations and processing of waste granite stone into cobbles and blue metal (small pieces of stones crushed/pounded from quarry waste stones which are used as a construction material for buildings and roads). The study will also examine the working conditions (type of labour arrangements, wages and working hours) of adult workers, particularly the migrant labourers whose children are more adversely impacted by the quarry operations.

Methodology

The field survey for the present study was conducted in April and May 2014. The study is mainly based on the analysis of primary data collected through field visits to 18 sample granite quarries in 2 districts (Krishnagiri and Dharmapuri) in Tamil Nadu and one district (Raichur) in Karnataka in India. These 2 states have nearly 30 percent of the total granite reserves in India. Table 1 presents the state wise break up of sample quarries included in the survey. Out of the 18 quarries surveyed, 12 are in Tamil Nadu and 6 are in Karnataka.

Figure 1: State wise and category wise distribution of sample quarries



Notes: * For the purpose of this study quarries with a total number of workers employed below 50 are categorized as small and above 50 workers as big/large.
 **In case of 'no' it is likely that granite produced in these quarries are not entering into international markets. However additional research is required to ascertain this.

As per the information provided by the company management and information published on company websites¹³, 50 percent of the quarries are either directly or indirectly (through exporting companies) exporting their products to different countries, mostly to European countries. The European countries importing granite from Tamil Nadu and Karnataka include Germany, Belgium, Spain, the Netherlands, Poland, Italy and France.

Since the study aims at examining working conditions of labourers in the whole quarrying industry, both public and private quarry operations and small and big quarries were sampled for the study. The public sector quarries are owned, developed and operated by the government under the Tamil Nadu Minerals Ltd (TAMIN) in Tamil Nadu and Mysore Mineral Limited (MML) in Karnataka. Private quarries are also owned by the government but are leased to various private companies who undertake the quarry operations. The categorization of quarries into small and big is based on the number of workers employed by the quarries. Quarries with a total number of workers employed below 50 are categorized as small and above 50 workers as big. Of the total 18 quarries surveyed, 11 are small and 7 are big in size. Considering the difficulties in getting access to quarry sites, while selecting the sample quarries, the issue of feasibility and accessibility was also taken into consideration.

The main source of data for this study is worker interviews. The data on workers' profiles, labour arrangements, wages and working conditions were collected from workers through individual interviews and focus group discussions. In each quarry four to five workers were interviewed. The total number of workers interviewed in all the quarries together is 86. A representative sample of workers was selected for interviews based on factors such as gender, caste, type of activity they are engaged in and migratory status.

This section describes the profile of the workers that were interviewed. Of the total 86 workers interviewed 49 (57 %) are in the age of 19 to 30 years, 25 (29 %) are in the age of 31 to 50 years. The age of 7 workers is below 18 years, 4 under the age of 14 years and 3 in the age group of 15-18 years. The gender composition of workers interviewed is 64 men and 22 women. In most of the quarries in Tamil Nadu the study team did not find any female workers. Most of the female workers interviewed for this study are working in quarries in Karnataka.

The caste composition of workers is 58 % Backward Castes (BCs), 25.6 % Dalits, officially called Scheduled Castes (SCs) and 2.3 % Scheduled Tribes (STs); the remaining 13.9 % are from other castes (Upper Castes). Of the total 86 workers, 50 % (43) are migrant labourers and the remaining 50 % are local workers. The educational background of workers indicates that 42 % are illiterate.¹⁴ The sample covered workers engaged in different types of activities: machine operators, vehicle drivers, stone cutters, stone dressers and waste stone processing workers.

Retail of Indian granite in Europe

To gain insights in the import and retail of Indian granite in Europe, desk research is conducted. At websites of European natural stone companies information is found about granite types, the country of origin of (semi-)finished granite products and/ or information on the import of raw materials and (semi-)finished granite products from India. Based on the desk research 26 European natural stone companies and 3 trade associations for natural stone were approached to review a draft version of this study report that included the results of the field study in Tamil Nadu and

Karnataka. Chapter IV describes the responses of companies and their efforts to improve labour conditions in lower tiers of their supply chains.

The responses provided by the companies and trade associations are reviewed in the context of companies obligations under the 2011 United Nations Guiding Principles on Business and Human Rights (UNGP) and the OECD Guidelines for Multinational Enterprises. The UNGP and OECD Guidelines clarify that states have the duty to protect and enterprises have the responsibility to respect human rights.¹⁵ Performing a human rights due diligence is one of the responsibilities through which companies should identify, prevent and mitigate their potential and actual adverse human rights impacts.

Structure of the report

Chapter II provides an overview of the South Indian granite industry including information on the concentration of granite resources, mining, processing and exporting. In chapter III findings from the field study, like workforce composition, labour conditions and prevalence of child labour and bonded labour in sampled quarries are presented. Chapter IV describes the responses of European natural stone companies to the request for review which includes information on companies insights in their supply chains as well as their efforts to eradicate labour and human rights violations in the natural stone sector. Conclusions and recommendations are given in chapter V.



Granite is used mainly in floor and wall coverings, kitchen worktops and memorials.

CHAPTER II GRANITE QUARRYING IN SOUTH INDIA: OVERVIEW

Natural stone in India

India possesses enormous deposits of all types of dimensional stones like granite, marble, slate and sandstone. India's granite deposits are rich in nature with a wide variety of over 200 shades. With an estimated 42.916 billion cubic meters of granite reserves India accounts for roughly 20 percent of the world granite resources. Granite is an important structural and decorative stone variety. Due to its high compressive strength, longevity and beauty, it is the most preferred stone to be used as building or decorative stone.

India is the second largest exporter of raw granite after China and ahead of Brazil and South Africa. India ranks fifth in the export of processed (value added finished) products. The bulk (90 %) of the Indian granite exports consists of rough granite blocks and only about 10 percent is by way of value added or branded products.¹⁶ During 2012-13 India exported INR 93.196 billion/ EU 1.2 billion worth of natural stone to different countries in the world. Out of this, the value of granite exports accounted for more than 80 percent (INR 75.740 billion/ EU 971 million). See table 1 for an overview of the granite export values.

Table 1: India exports of granite and natural stone products
(Value in million INR and EU)

Description	2000-01		2005-06		2010-11		2012-13**	
	INR	EU	INR	EU	INR	EU	INR	EU
Granite	19540	251	34905	448	53841	690	75740	971
Marbles	2362	30	1668	21	2027	26	3145	40
Other stones	3086	40	9044	116	9998	128	14310	183
Grand total	24988	321	45619	585	65866	844	93196	1200

**Date for 2012-13: Provisional

Source: Ministry of Commerce, Government of India, Export and Import Data Bank.



Concentration of production in South India

State wise breakup of granite resources in India reveals that Karnataka with about 25 percent resources has the highest concentration followed by Jharkhand (24 %), Rajasthan (23 %), Andhra Pradesh (6 %) and Odisha (5 % each). Tamil Nadu has 1.7 percent of the deposits.¹⁷

The major production of granite in raw as well as processed form is presently concentrated in the southern states of India, in Tamil Nadu, Karnataka and Andhra Pradesh. Granite varieties found in these states are of high value and quality and therefore in demand of the international importers. The granite exporting companies in South India are largely concentrated in Tamil Nadu and ship raw blocks and/ or granite products from Chennai (formerly called Madras). Part of the granite exported from Tamil Nadu is imported from other states, like Karnataka and Andhra Pradesh. Important granite producing centres in Tamil Nadu are Dharmapuri, Krishangiri, Erode, Madurai, Salem, Virudhunagar and Vilupuram districts. In Karnataka the production is concentrated in Mysore, Gulbarga, Hassan, Koppal, Raichur and Kolar districts.

Granite mining - Public and private sector involvement

In India the respective state governments are the owners of the minerals within their geographical territory.¹⁸ In Tamil Nadu and Karnataka, the Department of Geology and Mining oversees the administration, licensing and exploration of the mines and minerals. Prospecting is the first step in opening a new quarry. Prospectors can obtain a two-year license to search a new area. If they locate a granite deposit, they can lease the area from the Department of Geology and Mines for a period between twenty and thirty years. The state governments also develop quarries through their own agencies. In Tamil Nadu TAMIN (Tamil Nadu Minerals Ltd) and in Karnataka MML (Mysore Minerals Limited) are state owned agencies which are involved in granite quarrying, processing and

marketing activities. The governments of Tamil Nadu and Karnataka maintain all the legal rights over quarries in their respective states; only operational rights are vested in the lessee. More than 90 percent of the quarries in Tamil Nadu and Karnataka are operated by the private sector (individuals and companies) that takes the quarries on lease from the government. The field study indicated that labour conditions are slightly better in quarries operated by state owned companies; for instance better facilities for workers were observed in state operated quarries.

Granite mining and processing

Once a deposit is located, workers extract the stone. They use drills, chisels, and hammers to mark the dimensions of the stone to be cut from the parent rock. Subsequently explosives are used to separate the marked stone. Then the separated stones are cut into blocks and dressing workers give the stones a fine shape. The stones are transported to processing factories where they are polished and waxed. Waste stone pieces of granite unsuitable for processing are either shaped and sold as one cubic foot bricks or are pounded into granite gravel and sold as blue metal.

Granite export

Granite stone produced in Tamil Nadu and Karnataka is being exported to different countries in the world. Both semi-finished (unfinished blocks and slabs) as well as finished products such as tiles, garden and art ornaments and tombstones are exported. Countries importing granite from Tamil Nadu and Karnataka include China, the United States, United Arab Emirates, Japan, Hong Kong, Taiwan, the Netherlands, Germany, Belgium, Spain, Poland, Italy, United Kingdom, France, Austria and Ireland. Since the nineties China has emerged as the largest importer of Indian granite. Since China is the biggest processor and re-exporter of natural stone, Indian granite is processed in China into finished products and re-exported at the international market. In Europe Italy, Poland, Belgium, Germany and the United Kingdom are the largest importers of raw and processed granite from India. In these countries granite is further processed and/ or retailed for domestic and foreign markets.¹⁹

Processing and retail of Indian granite in Europe

Four key market segments of granite end-users can be distinguished. These include the granite processing industry, building/ construction industry, funeral industry and retail (consumer market). In general semi-finished products are used by the processing industry, whilst the other industries mainly use finished products. The granite processing industry includes companies (wholesalers as well as retailers) involved in cutting to size, polishing, carving and decorating granite. The building industry uses different granite products, including floor and wall tiles for interior and exterior coverings and custom-made products such as kitchen countertops, fireplaces, fountains, balustrades, street furniture and municipal furnishing like setts and curb stones. Granite products sold by the funeral industry are tombstones, gravestones and urns. The retail sector includes garden centres, Do It Yourself (DIY) centres, specialised interior design shops for bathrooms and kitchens, tilers and undertakers that sell or use granite products.²⁰ The by-product, granite waste stone in different sizes, is used as ballast for railway tracks, gravel paving or processed into blue metal chips which is used in concrete or other road construction projects. Government agencies are an important group of customers buying granite and natural stone especially for paving public spaces and public buildings.

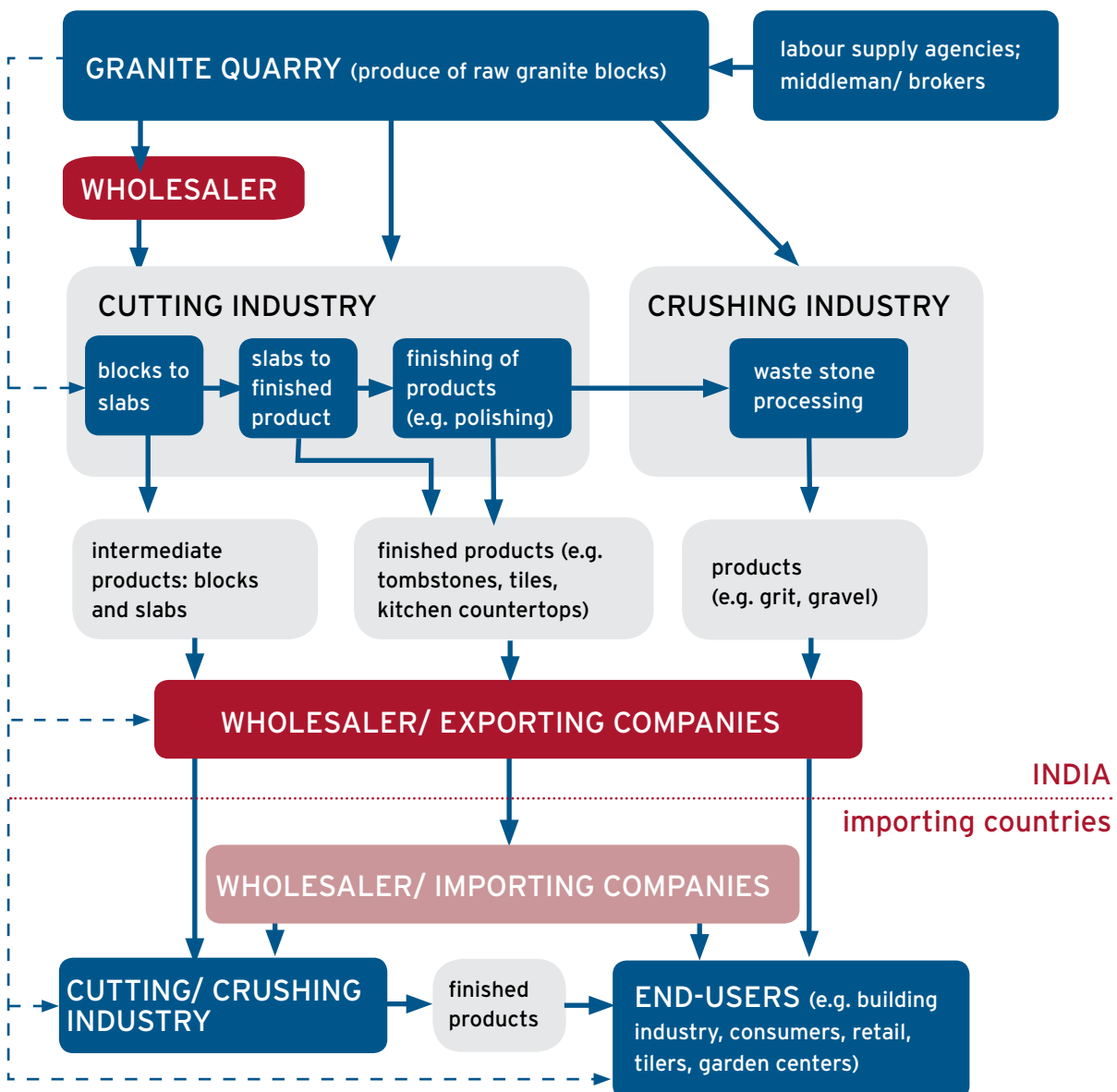
Granite supply chain

Figure 2 illustrates the granite supply chain and its related trade structure covering both India and

importing countries. The figure shows that wholesalers, importers, processors, retailers and end-users are all different entry points to markets of importing countries. Importers and wholesalers of semi-finished and finished granite products in importing countries are the main trading partner for Indian cutting, crushing and exporting companies. Additionally to the wholesale channel, the cutting industry in importing countries also procure semi-finished and finished granite products from Indian trade partners. Furthermore figure 2 shows that the building industry (end-user) may import finished or semi-finished granite products directly as well.²¹

Figure 2 also depicts the involvement of agencies and middleman/ brokers that provide labour for quarry operations. Particularly in government operated quarries labour is hired through labour supply agencies. These agencies are responsible for providing accommodation and food and paying wages to quarry workers. In case quarries are operated by the private sector, quarry owners often work with middlemen/ brokers for labour supply. Middlemen/ brokers are kept responsible by quarry owners for the provision of food, accommodation and wages.

Figure 2: International granite chain and trade structure



CHAPTER III

FINDINGS FROM THE

FIELD STUDY



Introduction

The findings presented in this section are based on the primary data gathered through interviews with quarry workers, management and on site observations from 18 sample quarries in 3 districts in Tamil Nadu and Karnataka states in India. The data on workers' profiles, labour arrangements, wages and working conditions were collected from individual interviews and focus group discussions with workers. In each quarry four to five workers were interviewed. The total number of workers interviewed in all the quarries together is 86. Important findings from the field survey are presented below.

Workforce composition

The granite quarrying industry in Tamil Nadu and Karnataka is labour-intensive. Most of the quarries are under-mechanized and depend upon large amounts of skilled and semi-skilled labourers for carrying out various activities. Jockey drillers, stone cutters, dressing workers,

detonators and other skilled and semi-skilled labourers constitute the bottom of the labour pyramid. Out of 18 quarries visited, only in four quarries the use of tools like compressors, drilling machines, and cranes was observed.

Preference for migrant labour

Seasonal migrant labour constitutes an important component of the workforce in granite quarries in Tamil Nadu. Migrant workers are preferred to local workers. *'Compared to local workers migrants are more obedient, work long hours and do not switch employers frequently. Migrants are able to work flexible and longer hours as they often have fewer social or family commitments'*, says Selvam, a granite company owner in Tamil Nadu. Migrant labourers are brought in to work in the quarries from other areas, often through a labour broker by paying advances. They can be divided into two categories, migrant labourers from within the state and those from outside the state. Those hired within the state are skilled and semi-skilled workers brought in to work in quarries. Those from outside the state are mainly skilled workers brought in to work in the processing factories and they typically come from Andhra Pradesh, Rajasthan and Gujarat.

Compared to Karnataka, the dependence on migrant labour is more common in Tamil Nadu quarries. Migrant labour accounted for 73 percent of the workforce in Tamil Nadu while it is 26 percent in Karnataka. The 12 sample quarries surveyed in Tamil Nadu employed (directly or through contractors) roughly a total of 510 workers for various operations in 2014, out of which 373 were migrants from both within and outside states (table 2). The migrants from outside states are mostly from Andhra Pradesh, Rajasthan and Gujarat. There is a lack of skilled labour to work in granite quarrying and processing in Tamil Nadu. The skilled labourers from Rajasthan, Gujarat and Andhra Pradesh migrate to Tamil Nadu because the wage rates are slightly higher in Tamil Nadu.

Caste composition of workforce

Most of the workers engaged in stone quarry work are from backward castes and so-called scheduled castes ('Dalits'). They account for 77.3 percent in Tamil Nadu and 87.2 percent in Karnataka (see table 2). Stone cutting and processing is a traditional occupation for some of the backward caste groups like Vaddera and Uppara in South India. Especially in Tamil Nadu also a large number of Dalits are involved. Due to the seasonal nature of the work these caste groups keep moving from place to place. A large proportion of workers engaged in stone quarries are from these castes only. *'Stone cutting and masonry is our traditional occupation and primary livelihood. We learn these skills during our childhood. We do not have land and other assets'*, says Basavaraj, a 16 year old boy who stopped his studies to work in stone quarries.

Age and gender composition of workforce

The gender composition of the workforce clearly indicates that a large proportion of the workers involved in quarrying operations are men. Of the total 705 workers, 77 percent are men and 23 percent are women. There is a clear gender division of labour in quarry operations. While men are exclusively employed in the key operations like drilling, cutting and shaping the stones most of the women are employed in waste stone processing. Women are also employed in housekeeping activities such as office cleaning and preparing food for workers. Table 3 gives an overview of the division of labour activities between men and women and local and migrant labourers.

Table 2: Workforce composition in sample quarries

	Tamil Nadu	Karnataka
Total number of quarries surveyed	12	6
Total number of workers employed in quarries	510	195
Age group		
% of children (below 14) to total workforce	0.20 % (1)	4.62 % (9)
Children 15 to 18	0.98 % (5)	5.13 % (10)
Adults (above 18)	98.82 % (504)	90.25 % (176)
Caste		
Upper castes	19.80 % (101)	10.26 % (20)
Backward Caste	42.75 % (218)	69.74 % (136)
Scheduled Caste	34.51 % (176)	17.43 % (34)
Scheduled Tribe	2.94 % (15)	2.56 % (5)
Gender		
Male	84.51 % (431)	58.47 % (114)
Female	15.49 % (79)	41.53 % (81)
Type of labour		
Local	26.86 % (137)	74.36 % (145)
Migrant	73.14 % (373)	25.64 % (50)

Table 3: Activity wise division of labour

Category of workers/workforce	Gender	Local/Migrant
Supervisors	Men	Mostly local
Machine operators	Men	Mostly migrant
Vehicle drivers	Men	Mostly local
Stone cutters and dressers	Men	Local and migrant
House keeping & watchmen	Men and women	Local
Waste stone processing workers	Mostly women and children	Mostly local

Prevalence of child labour

Child labour is one of the key issues of concern in the granite quarrying and processing industry in India. The Indian Child Labour (Prohibition and Regulation) Act 1986 prohibits the employment of children in hazardous occupations such as mining. However the studies have confirmed the existence of child labour in granite quarries, albeit on a small scale. The previous studies conducted in 2005 in Karnataka and in 2009 in Tamil Nadu reported the involvement of a large number of child workers in granite quarrying activities mainly in the processing of waste stones into cobbles and blue metal chips.²² Though there was no precise estimate available about the total number of child workers in granite quarries the studies do indicate that the number is significant.²³ The 2009 Tamil Nadu study

in 57 granite quarries observed the existence of child labour in most of the quarries. The situation with regard to child labour in granite quarries seems to have improved in recent years, particularly in the state of Tamil Nadu. The data for 2014 gathered for this study indicate that there was a decline in the magnitude of child labour in Tamil Nadu and Karnataka compared to previous years.

Tamil Nadu

Out of the 12 quarries surveyed in Tamil Nadu in 2 quarries direct or indirect engagement of child labour was found. Direct engagement of child labour refers to the engagement of children in core mining operations like blasting, cutting, edging, loading and unloading. Indirect engagement of child labour concerns the involvement of children in waste stone clearing and processing and helping out adult workers in supplying water and tea. Of the total of 510 workers in 12 quarries, 1 was a child below 14 years, 5 were in the age group of 15 to 18 years and the remaining were adult workers. Five out of six children were involved in waste stone processing and one in stone cutting. The interviews with the quarry workers do indicate that there is a decline in the magnitude of child labour in quarry related activities in recent years.

There are two important factors that have contributed to the decline in child labour in Tamil Nadu granite quarries. The issue of illegal granite mining and subsequent government interventions have put the entire granite industry under scrutiny. Illegal granite mining became a political issue in Tamil Nadu in 2012 after which the government appointed special teams to check illegal mining activities. The licenses of several units involved in illegal mining operations were cancelled. In Krishnagiri district where the present study is conducted 30 percent of the quarries were closed down due to illegal mining. During this period all the quarry owners were alerted about labour-related issues as well (minimum wages, child labour, facilities for migrant etc.). The special teams appointed by the government visited all quarries, both legal and illegal, and noted the problems such as the presence of children at quarry sites, lack of safety measures and poor facilities for migrant workers. The special teams warned the quarry owners to address these issues.

The government also put restrictions on processing waste stones, which is the main activity where children/ young workers are involved. Since 2012 quarry owners need permission from the government for processing waste stone. They also have to pay tax over earnings deriving from waste stone processing. In most of the quarries visited the waste stone was dumped in a corner of the quarry site itself and there was no activity to process it. Out of the 12 quarries visited waste stone processing was only carried out at 2 quarries. *'Due to slump in real estate and construction activity in recent years the demand for blue metal has come down. Quarry owners are not showing much interest in granite waste processing as it is not giving much income. We are dumping the waste stone in a corner of the quarry site and it will be used to refill the quarry after the completion of mining'*, says the owner of a granite quarry in Dharmapuri district.

Since two years quarry owners are requesting migrant labourers not to bring their families. They prefer to hire only individual migrant workers. The reason cited by the owners is that if the workers come with their families they need to be provided with proper and separate accommodation for the workers' families. *'We are asking the migrant workers not to bring their families. If they come along with family members including children we need to provide proper facilities to all of them during their stay at the quarry site. In 2012 labour department officials inspected the quarry sites and raised several objections regarding accommodation and (lack of) other facilities (to be) provided to migrant*

worker families. They also raised objections about the presence and movement of young children at quarry sites even though children were not involved in any activity', says the manager of a big granite quarry in Tamil Nadu exporting its products to European countries. The study team observed the presence of seasonal migrant workers in seven quarries and all of them are individuals migrated without their families. This is also one of the important reasons for the low presence of women and child workers in quarry operations in Tamil Nadu.

Karnataka

With regard to child labour the situation in Karnataka quarries is different from Tamil Nadu. Though there is some decline in the incidence of child labour compared to previous years they still constitute an important component of the workforce, mainly in waste stone processing. The study team observed the presence of children in five out of six quarries visited.

Of the total 195 workers employed in six sample quarries in Karnataka, 19 were children under the age of 18 (9 below 14 years and 10 between 15-18 years). Child labour accounted for almost 10 percent of the total workforce (4.6 % below 14 years and 5.1 % between 15-18 years). All the children below 14 years were involved in waste stone processing. The situation here is somewhat similar to the one reported in Tamil Nadu prior to 2012.

Case study of a girl child worker in granite waste stone processing in Karnataka



Mahadevamma, a 14 year old girl, is working in a granite quarry in Mudagal village in Karnataka since one year. She is processing waste stone. She studied up to 7th class and dropped out of the school to support her family to earn additional income. Another important reason for her dropout is her parents' unwillingness to send her to another village for higher education. There is no school after 7th class in her village. For 8th class children have to go to another village travelling 5 kilometers. She has one elder brother who also works along with his parents. The whole family of four members comes to work every day in the waste stone dumping yard from morning to evening and to process a truck of stone for which they get paid INR 700/ EU 8.97. This family belongs to a backward caste known as 'Vaddera' whose traditional occupation is in stone quarry and construction activities.

The daily routine of Mahadevamma starts with waking up early in the morning at 5 and getting ready by 7.30 to go to the quarry site. In the morning she fetches water for daily use and helps her mother with cooking and washing clothes. When she goes to the quarry site with her family she carries a basket containing tools to work and a can of drinking water. The waste stone processing is done

outside the quarry. At the work place the waste stone most of the time has to be brought from the quarry in a basket that is carried on her head. She has to walk down into the quarry and carry the stone up and out of the quarry to the workplace. Sometimes the stone is dumped by a truck. Later she has to sit along with her mother, father and brother to hit big stone pieces to small pieces using a small hammer and a nail. When she was new to work she used to hit the hammer on her own hand and get hurt, now she is perfectly hitting on stones.

While processing the stone, small pieces of stone are produced. After this Mahadevamma picks up her basket and fills it with the smaller pieces of waste stone and carries the basket to another location where the stone is dumped. At the end of the day she has to carry the tools and drinking water can in the basket back home. She returns home along with family members by 6.30 - 7.00 pm.

Most of the children found working in the surveyed granite quarries are school dropouts. The reasons for dropping out of school are many. When parents and children were asked about the discontinuation of education they cited reasons such as poverty, social norms and poor quality of education. Of the total 19 child workers 14 dropped out of school and are fulltime workers. Five were found going to school, but they were very irregular all through the year except during the rainy season when there is little or no waste stone processing activity.

Prevalence of debt bondage

Long term binding contracts through loans and wage advances is a widely prevalent labour hiring practice in the granite quarrying industry in South India. Quarry owners need a secure labour force to carry out different quarrying operations. To ensure such labour they often prefer to make long term arrangements with workers by paying loans and wage advances. Wage advances and loans are used by the quarry owners as a means to bind the workers and curtail their freedom and mobility. The agreements are oral in nature.

Debt bondage is a major issue of concern in most of the granite quarries. Workers are kept subservient to the quarry through debt. Typically, the quarry owners make a small loan to a worker to cover some expenses and then charge such exorbitant interest rates that the worker finds it difficult, if not impossible, to repay the loan. As long as the worker owes the quarry money, he cannot leave and is essentially powerless.

The quarries employing local workers offer loans for a variety of purposes: meeting domestic expenses; paying for weddings, festivals or cultural rituals; or coping with emergencies like illness, accidents or death. However, workers are neither aware of the interest rate, which may be as high as 48 percent per year, nor of the repayment deadline, which is typically sooner than they can pay.

Migrant workers are recruited through labour contractors or brokers. To lure migrant labourers into bondage, quarries grant so-called wage advances. Labour contractors offer families sizable advance payments proportional to the number of workers a family can offer, encouraging struggling families to relocate to the quarry. The amount of wage advances paid for seasonal migrant workers varied between INR 10000/ EU 128 to INR 30000/ EU 385 in Tamil Nadu and in Karnataka INR 10000/ EU 128 to INR 25000/ EU 320 per worker in 2014. Compared to monthly wage rates of INR 10000 - 12000/ EU 128 - 154 for skilled labour and INR 7500 - 9000/ EU 96 - 115 for unskilled labour in

Tamil Nadu and INR 9000 - 10000/ EU 96 - 128 for skilled labour and INR 7000 - 8000/ EU 90 - 103 for unskilled labour in Karnataka, advanced payments are high which makes workers vulnerable to debt bondage.

About 54 percent of the local workers and 66 percent of the migrant workers interviewed reported that they owe large sums of money to the quarry owners or contractors and have been working with the same quarry for more than three years.

Kuncha (45 years): Case study of a migrant labour in Dharmapuri district, Tamil Nadu



Kuncha, a 45 year old seasonal migrant worker, is working in a granite quarry in Dharmapuri district in Tamil Nadu. Since three years he is a skilled helper in stone drilling and cutting. He comes from a small village in Mysore district in Karnataka state and migrated to Tamil Nadu along with 20 others from his village. He explains the living conditions at the quarry and the risk he is facing.

Kuncha was a tenant farmer in his village. He has two sons but after getting married they moved out of his house. Agriculture was Kuncha's main livelihood.

Five years ago when the crop failed Kuncha incurred a substantial debt and he had to repay the outstanding loan to a financier. He decided to quit working in agriculture and look for an alternative livelihood. He approached Mr. Kasu, a broker (manpower supplier) from the same village. Kasu arranges labour for quarry owners. Kuncha initially worked in a quarry near Mysore for two years and later Kasu brought him to Dharmapuri. For three years Kuncha is working at the quarry in Dharmapuri now.

When Kuncha was working in a quarry near Mysore, he lived together with his wife. When he moved to Dharmapuri his wife was not allowed to come with him, Kasu said that it is not permitted to live with family on the quarry site. Now Kuncha is living in a shed that is filled with spare parts of machinery. In each room about eight to ten workers are accommodated and there are no toilets for them to use. Most of their spare time they spend in the open air.

At the worksite workers get covered with dust that comes from the stones during the drilling process. The dust irritates the eyes and therefore Kuncha and his fellow workers requested for

protective glasses to cover their eyes. Glasses were not provided by the management. A first-aid kit is placed at the worksite, but they never used it. When anyone falls ill, Kasu takes them to the local doctor.

The quarry is situated 4 kms away from the village. There is a restriction on the movement of the workers. Without permission they are not allowed to move out of the quarry site. Once a week they are allowed to visit the local market.

The workers do not have any direct agreement with the quarry owners. The owners contract the work on piece rate basis to Kasu (broker) and Kasu pays wages on a daily rate basis to the workers. Kuncha gets INR 400/ EU 5.13 per day from Kasu for his work, out of this INR 50/ EU 0.64 is deducted for food expenses. He is paid for the days that he works. Kuncha took an advance payment of INR 20000/ EU 265.41 from Kasu three months ago and while settling the payment the advance is deducted. The payments are settled once every three months when workers go home for a seven to ten days holiday.

Back at home there is no one to take care of his wife and she waits for Kuncha's return alone. Kuncha says 'living alone at this age is not good for both of us but earning money is also important for me as I have to clear the outstanding debt.'

Kuncha would like to go back to his village and get into agriculture again but his economic situation does not permit him to work at his will. Living away from family is difficult, says Kuncha.

Non-payment of minimum wage, overtime and social benefits

Broadly there are three types of wage payments. Depending upon the nature of the arrangement workers in quarries are paid on monthly, daily or piece rate basis. The permanent or regular workers whose number is very small (less than 5 %) are paid on a monthly basis. The workers involved in stone drilling, stone cutting and dressing are mostly paid on daily rate basis. The workers who process waste stones are compensated by their output. They take stones unsuitable for processing and convert them into bricks or crush them into small pieces for sale. Most of the workers involved in waste stone processing activity are women and children. The per day wage earnings of women workers in waste stone processing activity varied between INR 125/ EU 1.60 to INR 175/ EU 2.24 for eight to nine hours of work. This is below the legal minimum wage rates prescribed for unskilled workers in granite quarries. The children who have some experience also work as intensively as women and earn similar wages.

Table 4: Minimum wage rates for daily wage workers in the granite industry as prescribed by Tamil Nadu and Karnataka state governments (Amount in INR and EU)

Category	Minimum wage Karnataka (31 March 2014)		Wages paid Karnataka		Minimum wage Tamil Nadu (April 2014)		Wages paid Tamil Nadu	
	INR	EU	INR	EU	INR	EU	INR	EU
Highly skilled (machine operators, stone polishers etc.)	262	3.36			410	5.26		
Skilled (stone cutters/ dressers, vehicle drivers etc.)	256	3.28	300 - 350	3.85 - 4.48	360	4.61	350 - 400	4.49 - 5.13
Semi-skilled (assistant operators, stone cutting helpers etc.)	227	2.91			310	3.97		
Unskilled (housekeeping, cleaner, loading/unloading etc.)	216	2.77	200 - 250	2.56 - 3.21	257	3.29	250 - 300	3.21 - 3.85

Note: This wage rate applies to men and women equally. The normal working day is eight hours; for overtime work, the workers are entitled to wages at twice the minimum wage rate.

Table 4 presents minimum wage rates for daily wage workers in the granite industry as prescribed by the Tamil Nadu and Karnataka state governments. Compared to Tamil Nadu, the minimum wage rates prescribed for granite quarry workers in Karnataka are low. As per the information provided by the workers the daily wage rates paid to skilled workers who are involved in drilling, stone cutting and dressing activities varied between INR 350/ EU 4.49 to INR 400/ EU 5.13 in Tamil Nadu and INR 300/ EU 3.85 to INR 350/ EU 4.49 in Karnataka. For unskilled workers the daily wage rates varied between INR 250/ EU 3.21 to INR 300/ EU 3.85 in Tamil Nadu and INR 200/ EU 2.56 to INR 250/ EU 3.21 in Karnataka. These rates may seem at par or even higher than the legal minimum wages prescribed by the governments, but if we take the number of working hours into consideration, the actual wages fall short of meeting the legal requirement. The normal working day is eight hours as per the law; for overtime work, the workers are entitled to wages at twice the minimum wage rate. In most of the quarries the normal working day is nine to ten hours. The work begins between 8.00 and 8.30 am and continues till 5.30 to 6.00 pm with one hour lunch break. Overtime work is very common in quarries. During peak production season (summer months) the workers are required to work an additional one or two hour. Overtime is usually not compensated at the legally-prescribed premium of a double wage rate. However, it is normally compensated through incentives such as providing tea and snacks during overtime work or a bottle of local liquor (for men) at the end of the day. Consumption of alcohol is very common among quarry workers. The interviews with workers indicate that they spend significant amount of their earnings (20 - 30 %) on alcohol. 'Stone cutting is very hard work. We get tired by end of the day. We get body pains. We drink liquor to relax a bit', says a quarry worker in Mudagal village in Karnataka. Alcoholism contributes to the indebtedness among quarry workers.

Occupational health and safety

The work in quarries is hazardous in nature. Quarry workers face many occupational hazards like explosions, large moving stones, dust, and backbreaking labour. Quarry workers are especially vulnerable to work-related illnesses. Unsanitary living conditions, malnutrition, lack of clean drinking water and substandard medical care contribute to a poor health, while insufficient protective equipment exposes workers to silica and other dangerous factors.

The law requires quarries to provide appropriate safety equipment to workers - helmet, goggles, boots, respiratory mask, gloves etc. Most of the quarries visited in Tamil Nadu and Karnataka are not following work safety guidelines. Workers were seen working in quarries without any Personal Protective Equipment (PPE). In 30 percent of the quarries (mostly small quarries) workers were unsure if any protective equipment was available at the worksite. 72 percent of the workers interviewed reported they are not provided safety equipment except during labour department inspections.

First-aid boxes are not available at the work site in eight quarries. Children were seen working along with the adults with their bare hands with hammers and sieves. They do not have any safety equipment, do not cover their heads or eyes and work barefooted sitting on the stones.

The absence of safety equipment and guidelines increases the vulnerability of workers to diseases like bronchitis, tuberculosis and silicosis. This is caused by exposure to silica dust emitted into the air during granite mining and processing.

Living conditions of migrant workers

Migrant workers in Tamil Nadu and Karnataka are provided accommodation within quarry premises. They live in very poor conditions. With the exception of Gem Granites, in all other quarries the accommodation provided to migrant workers is grossly inadequate.²⁴ Workers with families are provided a small hut, while workers without families are housed in a common room so small that most workers prefer to sleep outside during warm nights. These common living rooms do not have proper facilities. They provide neither privacy nor protection from the elements. Little or no provision is made for sanitation or safe drinking water. In addition, in some quarries it is observed that there are several restrictions on the movement of workers. There is a 24 hours guard watching the quarry premises. The workers are generally forbidden from interacting with those outside the quarry and can't leave the quarry premises without permission.

Informal employment agreements

More than 90 percent of the workers in the sample quarries, both in Karnataka and Tamil Nadu, were hired on informal basis. There were no written contracts between workers and management. Even in large private quarries and quarries directly managed by the government written contracts exists for only for a small proportion of the workforce who are employed on a regular basis. In government quarries the majority of the operations are subcontracted to contractors on piece rate basis. Except five, none of the 86 interviewed workers reported any formal employment agreements with quarry owners.

Under the law (Industrial Establishments Acts) it is mandatory for businesses employing ten or more

workers, to provide formal employment contracts. However, in the surveyed quarries the official number of workers is reduced by employing them informally without written contracts. Written documentation enables the government to enforce all other acts protecting workers, particularly in the unorganized sector. Without a written contract, workers cannot access government welfare schemes or get compensation in case of work accidents.

Working conditions in quarries producing for the international market

Of the total 18 sample quarries covered in this study 9 (50 %) are either directly or indirectly (through exporting companies) exporting their products to different countries, mostly to European countries. The European countries importing granite from Tamil Nadu and Karnataka include the Netherlands, Germany, Belgium, Spain, Poland, Italy and France. The comparison of working conditions between the quarries that mainly produce for export and those for domestic market do indicate that the situation is slightly better in quarries that produce for the export market. Most of the quarries that are producing for the international market are large in size (area as well as number of workers employed) and have relatively better infrastructural facilities like first-aid boxes, concrete accommodation for migrant workers, accessibility to Personal Protective Equipment etc. Though there is not much difference in per day wages paid to workers. However, compared to quarries producing for the domestic market, the quarries producing for export are more prompt in timely paying wages to workers.

With regard to the situation of child labour there is not much difference between quarries producing for domestic and those for export markets. None of the large quarries both producing for domestic and export markets are employing children directly in any of the main quarry operations. The involvement of children is observed more often in small quarries and mainly in waste stone processing. No child labour was found in the two government operated quarries.

CHAPTER IV NATURAL STONE COMPANIES' RESPONSIBILITY TO RESPECT HUMAN RIGHTS



This chapter describes the level of supply chain transparency of Northern European natural stone companies that, according to their own websites, source granite and/ or other natural stone varieties from India and/ or other Asian countries. 26 natural stone companies and 3 trade associations for natural stone were requested to review a draft version of this report. 12 companies and the 3 trade associations responded. The responses are reviewed in the context of companies obligations under the 2011 United Nations Guiding Principles on Business and Human Rights (UNGP) and the OECD Guidelines for Multinational Enterprises. Under these international standards companies have the obligation to perform human rights due diligence. While eight companies, that replied to the request for review, claim not to source granite from the quarries that were part of this study, the risk of similar human rights violations happening in other quarries cannot be ruled out without a proper due diligence procedure.

Methodology

To gain insight in the import and retail of Indian granite varieties in Europe, desk research was conducted. The desk research focussed on information given on European natural stone company websites. On these websites information about the import, processing and/ or retail of different natural stone varieties and products was found. Several company websites provide specific information about the retail of semi-finished and finished granite products that originate from India. Based on the desk research, 26 European natural stone companies²⁵ providing detailed information on their websites about the import and/ or retail of granite varieties that origin from India (except Bunnik Creations and Van den Ban Steen & Beton who only mention at their websites to import natural stone varieties from Asian countries), were randomly selected and requested to review a draft version of this report. The companies were contacted by e-mail and along with the draft report questions were asked about their insight in the origin of their granite products at the level of quarries in their supply chain and their possible sourcing from quarries included in this research. Companies were requested to reply within two weeks; a reminding e-mail was send to companies that did not respond within the given time period.

Out of the 26 companies, 14 are Dutch, 4 Belgian, 4 British and 4 German. The majority of the companies are importers and wholesalers that have major shares in domestic and European natural stone markets. Also some retailers operating in local European markets are included in the sample. Some wholesalers are involved in cutting raw blocks into slabs but mostly wholesalers and retailers are finishing and installing (polishing, carving and decorating) kitchen countertops, gravestones, ornaments and other natural stone products. Furthermore the companies are operating in different market segments; some companies are focussing on specific products like gravestones, tiles or kitchen countertops while others focus on natural stone materials for the construction of stairs, housefronts and sidewalks. See annex 1 for an overview of the information found on company websites and natural stone products that these companies wholesale and retail.

The draft version of this report was also shared (by e-mail) with one Belgian (Febenat) and two Dutch (VVNI and ABN)²⁶ trade associations for natural stone. The trade associations were asked about the possible initiatives they take towards their member companies to promote corporate social responsibility in the natural stone sector. They were also requested to bring the draft report to the attention of their member companies.

Remarks

There are two important remarks in respect to the companies mentioned in this chapter. First of all the European natural stone companies mentioned do provide some transparency to consumers about the origin of their granite products or import of natural stone varieties by sharing this information on their websites. At websites of other companies that are processing, wholesaling and/or retailing natural stone no information on the origin of their products is provided at all. Secondly, according to the companies (8 out of 12) that reacted to the request for review they cannot be directly linked to the quarries surveyed for this research. Additional research into supply chains is required to gain insights in linkages between European natural stone companies and Indian granite quarries.

Response of European natural stone companies

Out of 26 companies 12 companies responded to the request for review. The companies that responded are listed in table 5. This table also provides an overview of companies' responses to the questions that were raised. Two companies, Nibo Stone and Hardscape, have responded to follow-up questions, three other companies, Michel Oprey & Beisterveld, Holland Graniet and Eck-Stone, did not.

More than half of the companies have not provided any response or comments to the draft report and to the request to give insight in their sourcing or granite from India. The following companies did not respond to the request for review, neither to the first e-mail nor the reminding e-mail: Granito Natuursteen Design, Veenstra Natuursteen, Kluijtmans Natuursteen (Dutch companies); AG Natursteinwerke, Granit Deutschland, Gräf Granit GmbH, KNKE Emsland (German companies); Brachot-Hermant, Stone NV, BMB (Belgische Marmer-graniet Bedrijven), Maris Natuursteen (Belgian companies); Granite UK Ltd., Eurostone, (British companies). Marshalls, also a UK company and Ethical Trading Initiative (ETI) member, acknowledged the receipt of the review request, but has not responded.

All three trade associations responded to the request for review. Febenat reacted that the poor functioning of the Indian government and the caste system, as underlying causes of child labour, cannot be changed by Febenat and its member companies. However in their reaction Febenat also says: *'We want to do anything to improve working conditions in countries where we source. Extending the TFT Responsible Stone Program (TFT RSP) is evidence for this. Not all members are convinced of its impact, since it's not imposing rules to other countries but local governments that will bring change. The positive changes in Tamil Nadu prove this. Therefore we think that negotiations with India at European level, will bring change faster.'* Furthermore in their reaction Febenat states that child labour used to be known in Europe and to combat child labour effectively, education is the only solution.

ABN and VNNI did not provide any substantial response to the request for review and questions raised. In their reaction VNNI states that member companies' Holland Graniet, Bunnik Creations, Norvold International, Michel Oprey & Beisterveld, Eck-Stone, Nibo Stone and Pelt & Hooykaas have informed VNNI that they do not source granite from the quarries mentioned in the report. However only one member company, Nibo Stone, answered the question if they have insight in their full supply chain positive. According to another company, Troupin Natuursteen, ABN should be able

Table 5: Natural stone companies and their responses

Companies	Insights in supply chain at the level of quarries	Procurement of granite from quarries included in this research	Participation in CSR Initiative	Additional information on supply chain shared
Dutch companies				
Holland Graniet	↔*	no	IGEP	Through certification of IGEP (ISO 9001) we can guarantee that our products are child labour free.
Bunnik Creations	↔*	no		Over the past year we did not import granite from India.
Norvold International	no	no		Due to the economic crises and change in trends at the moment we only procure small amounts from Dutch and Italian wholesalers.
Michel Oprey & Beisterveld	↔*	no	TFT RSP	Due to the economic crises in Western countries and the growth of building sectors in emerging economies, natural stone markets in emerging economies have become much more relevant than the relatively small European and irrelevant Dutch natural stone market.
Eck-Stone	↔*	no		Nowadays we only sell granite on demand; we procure from Diamond Spectrum Enterprises and Brachot-Herman. For exterior paving we procure granite from China. At the moment we only procure Indian sandstone and limestone through Arvicon International.
Nibo Stone	yes	no		At the moment we do not procure Indian granite. Through TFT RSP we contribute to CSR in the natural stone sector.
Pelt & Hooykaas Natuursteen	↔*	no		
Steenhouwerij Jongerius	no	don't know		We are a small retailer and only procure semi-finished products from Dutch and European wholesalers. We purchase gravestones made in China through a Dutch intermediary.
Troupin Natuursteen	↔*	↔*		We do not import from India, only from China through an intermediary (Hong Shen Natuursteen BV), however we do trade materials that originate from India.
Van den Ban Steen & Beton	↔*	no		We mainly focus on European materials and procure minor amounts from China but this will end in the near future.
Diamond Spectrum Enterprises	↔*	↔*		We sell semi-finished and finished products that originate from India. The Indian factory we do business with for our memorial stones is ISO 9002 certified. We agree with the response of our supplier (see quote below).
British company				
Hardscape	yes	↔*	ETI	All our supply chains are transparent with ETI.

*↔ = no clear answer to question

to give more insight in natural stone companies that are sourcing from India. Only Febenat has indicated to bring the report to the attention of their members, as per our request.

Out of 12 companies 2 companies, Nibo Stone and Hardscape, responded that they have insight in their supply chains at the level of quarries. Hardscape explained that all their granite and sandstone supply chains are transparent with ETI. Two companies, Norvold International and Steenhouwerij

Jongerius, responded that they do not have insight in their supply chains at the level of quarries. Both companies do not directly import granite from India; they procure finished and/ or semi-finished products from European wholesalers, mainly Dutch or Italian wholesalers. It is noteworthy that Norvold International reacted that they do not have insight in their supply chain at the level of quarries, whereas in the reaction of VNNI it is mentioned that Norvold International does not procure granite from quarries surveyed for this research. Furthermore in their reaction Norvold International mentions that working conditions can be improved but caste discrimination will deter workers to get better jobs.

Eight companies stated that they do not source granite from the quarries mentioned in this report. Steenhouwerij Jongerius does not know whether their granite products origin from the quarries mentioned in this report because they do not have insight in their supply chain at the level of quarries. Eckstone and Troupin Natuursteen were most transparent in their response, providing names of the importers where they source granite.

According to Michel Oprey & Beisterveld, Norvold International and Nibo Stone the market for granite collapsed since the economic crisis in 2008. For this reason Norvold International does not directly import granite from India anymore and Nibo Stone removed Indian granite varieties from its assortment. Michel Oprey & Beisterveld states that the domestic markets in emerging economies are far more relevant than the small European and the irrelevant Dutch market. A report of the Centre for the Promotion of Imports from developing countries (CBI) shows that natural stone markets in emerging economies like China, are growing. However the report also states that European Union countries are traditional users of natural stone products and have the highest per capita consumption worldwide. Developing countries account for 54 percent of the natural stone imported into the European Union and the top 10 European Union consuming countries represent 84 percent of the global consumption of finished stone products.²⁷

In their response Troupin Natuursteen, Eck-Stone, Steenhouwerij Jongerius and Van den Ban explain that they procure gravestones, granite tiles or other products directly or indirectly (through wholesalers) from China. It remains unclear whether these products originate from China or are imported from India, processed in China and re-exported. Only Troupin Natuursteen mentions trading materials that originate from India.

Companies' efforts towards improved labour conditions in quarries

Four companies mentioned in table 5 are participating in corporate social responsibility (CSR) initiatives that aim to improve working and environmental conditions in their supply chains. Michel Oprey & Beisterveld participates in the TFT RSP.²⁸ In their response Michel Oprey & Beisterveld mentions that they are aware of labour rights abuses in the production of natural stone and that all involved stakeholders are responsible to improve the situation. Michel Oprey & Beisterveld does not recognise itself in the 'image' that no attention is being paid to labour conditions at their suppliers. For a more substantive response the company refers to the response of the trade association VNNI. VNNI however has not provided any information on this subject. We have inquired with Michel Oprey & Beisterveld on efforts the company undertakes to address labour conditions in its supply chain, but did not receive a response.

In their reaction Nibo Stone mentions to be supporting member of TFT RSP. Nevertheless, at the

CORPORATE SOCIAL RESPONSIBILITY INITIATIVES IN NATURAL STONE

Ethical Trading Initiative (ETI) is an alliance of companies, trade unions and NGOs that promotes respect for workers' rights around the world. By becoming a member of ETI a company commits itself to adopt and implement the ETI Base Code. Furthermore within their program on the sandstone sector of Rajasthan, ETI and nine member companies are working towards improved labour conditions for those working in the export sandstone sector of Rajasthan.

Indo-German Export Promotion (IGEP) was set up in 1988 as trade promotion foundation. In July 2005 IGEP has become a private foundation sponsored by the Ministry of Commerce & Industry of the Government of India. IGEP runs a natural stone certification program that offers certification against child labour and aims at social and environmental standards throughout the Indian natural stone sector.

TFT Responsible Stone Program (TFT RSP) aims to improve working conditions and reduce environmental impact in natural stone quarries and processing factories. Member companies (12) are expected to work towards implementing the RSP standards at all sights in their supply chain. The standards are separated into three levels. The [Dutch] Sustainable Trade Initiative (IDH) is supporting the RSP.

website of the TFT RSP Benelux chapter Nibo Stone is not included in the membership list.²⁹ Furthermore Nibo Stone explains that corporate social responsibility is part of their corporate culture. The company expects a similar vision of suppliers, one that rejects child labour, bonded labour and discrimination. In the past when they sourced larger quantities of Indian stone, they have set up their own factory in order to be able to guarantee that ethical standards were being met. However, production has now shifted to cheaper China, so the factory does not exist anymore.

Holland Graniet states '*child labour cannot be tolerated in any way.*' The company responds that they contribute towards better working and living conditions of quarry workers through their association with the Indo-German Export Promotion (IGEP) Foundation.³⁰ All their Indian suppliers are monitored by IGEP. They explain: '*With the IGEP certificate, we can guarantee that our products are child labour free. [...] We are proud to be the only importing company of memorial stones in the Netherlands that is allowed to use this certificate. We pay 0.75 % of the value of the imported products to IGEP. IGEP is 9001 certified.*'

Hardscape is a member of the ETI Stone Group.³¹ The company states: '*No doubt human and labour rights abuse is prevalent across the Indian sandstone and granite industry. This is one reality why we joined the Ethical Trading Initiative back in 2007 where we work at ground truth level to verify all tiers to our supply chain across the globe.*' Furthermore Hardscape explains that the 9 base code principles of ETI, which are based on international labour rights, are translated into action plans and implemented in all their Indian supply chains.

A quote from an Indian supplier was included in the response of Diamond Spectrum Enterprises: *'The issue of child labour in Indian quarries is going on for centuries (from Taj Mahal days I suppose) and India has been denying it from time immemorial. We believe that whenever these guys (researchers in general) are disturbed from their sleep they wake up suddenly and start blabbering about the child labour in India. Children cannot work in the quarries because it involves heavy duty work and simply they do not have that stamina. Government has put in a lot of restrictions these days and it is difficult for the mosquitoes to hide in quarries. Moreover, there are independent agencies from Germany conducting regular checks at the quarry sites and they are also able to catch only flies.... These people go around shooting videos while the children of the labourers that are playing around the debris (they stay with their parents at the quarry sites). That's about it. Beyond this nothing is going on in the quarries or in the manufacturing units as far as I know (it's my 97th time I am telling this story!!) (Siva Subramanian).'* Diamond Spectrum Enterprises adds that they fully support this statement and that they have never seen any child labour in the quarries, only children who play in the quarries since their families live next to the quarries. The company adds that if *'we [here in the west] would be prepared to pay a x percentage more for our stone products, then producers in India could use some of this money to invest in education and child care for these children.'*

Eck-Stone says it engages in dialogue on labour conditions with its Indian supplier of sandstone and limestone, Arvicon International. Steenhouwerij Jongerius responds that it does not import directly, but sources from importers. The company states that its importer is striving to responsibly source and produce stone. This cannot be verified, since Steenhouwerij Jongerius does not mention the name of its supplier.

Concluding remarks

Eight companies that responded to the request for review did not respond to the question about their insights in their supply chain at the level of quarries. Therefore it remains unclear whether these companies have insight in the working conditions in which their stone is produced. Only two companies claim to have insights in their supply chain at the level of quarries, while eight companies stated that they do not procure granite from the quarries surveyed for this research. As a company, you can only be sure not to source granite from the quarries mentioned in this report if you have insight in your supply chain at the level of quarries.

Furthermore the responses show that companies and trade associations recognize the issue of child labour and poor working and living conditions of workers in the south Indian granite industry. However, they mainly point to structural problems, such as the caste system and failing Indian government and state governments as underlying causes of labour right violations. The companies and trade associations barely mention their own responsibility to respect human rights and perform human rights due diligence as required by the UNGP.

Detailed insights in the achievements of CSR initiatives like IGEP, ETI and TFT RSP, especially in lower tiers of supply chains at the level of individual companies were not shared by the companies and are not available at websites of the companies and initiatives. For this reason it remains unclear to what extent quarry workers at the bottom of granite supply chains benefit from these CSR initiatives.

CHAPTER V

CONCLUSIONS AND

RECOMMENDATIONS



The 2011 United Nations Guiding Principles on Business and Human Rights (UNGP) and the OECD Guidelines for Multinational Enterprises clarify that states have the duty to protect and enterprises have the responsibility to respect human rights.³² This responsibility includes performing a due diligence process in the supply chain. Human rights due diligence is understood as a process through which enterprises actively identify, prevent and mitigate their potential and actual adverse human rights impacts. Furthermore it is expected that companies communicate externally how they address their human rights impact. This study documents violations of the ILO core conventions using a sample of 18 granite quarries in South India. The risk that similar human rights violations exist in other quarries in South India is significant. Therefore it can be expected that natural stone companies sourcing Indian granite follow a proper due diligence procedure. This report aims to find out if European companies live up this responsibility.

CONCLUSIONS

Many labourers in the quarries work under conditions of **modern slavery** as per the ILO convention on all forms of forced and compulsory labour (ILO convention 29).³³ The ILO has formulated indicators of forced labour of which several apply to South Indian quarries. Quarry workers are bonded labourers who are tied to their employers by debts with excessive interests. About 54 percent of the local workers and 66 percent of the migrant workers interviewed, reported that they owe large sums of money to the quarry owners/contractors. They are physically confined to the work location and cannot leave the quarries at will.³⁴

Child labour as defined by ILO conventions on the worst forms of child labour (ILO convention 182) and the minimum age to work (ILO convention 138) has decreased in Tamil Nadu stone quarries. Out of the 12 quarries surveyed in Tamil Nadu in 2 quarries direct or indirect engagement of child labour was found. Out of the total of 510 workers in 12 quarries, 1 was a child below 14 years. However, 5 workers were in the age group of 15 to 18 which due to the hazardous working conditions falls under the worst forms of child labour convention. Hazardous working conditions include heavy physical work like digging, crushing stones and carrying heavy loads and health and safety risks such as falling rocks, inhaling of dust and poor access to clean drinking water.³⁵

In Karnataka child labour is still common, mostly in side activities such as waste stone processing. Children were present in five out of six quarries covered in this research. **Children accounted for almost 10 percent of the total workforce.** No significant difference in numbers of working children is found between quarries producing for domestic and export markets.

The wages male workers earn with skilled and unskilled quarry labour seem to be in par with the legal minimum wages but when taking into account the number of working hours and overtime work, wages fall short in meeting the legal requirements. Wages female workers earn, involved in waste stone processing, are below the legal minimum wage rates prescribed by the Karnataka and Tamil Nadu state governments for unskilled workers in granite quarries. **Gender based wage discrimination** is a violation of the core ILO labour standard on discrimination in respect of employment and occupation (ILO convention 111) and the equal remuneration convention (ILO convention 100).³⁶

Larger quarries have relatively better infrastructural facilities, such as first-aid boxes, concrete accommodation for migrant workers, accessibility to personal protection equipment (PPE) etc., to protect and support their workers. They are more prompt in timely paying wages to workers. There is no significant difference in labour hiring practices, wages and working hours between quarries producing for the export and those for the domestic market.

The Mines and Minerals (Development and Regulation) Act, 1957 (MMDR), and the Mines Act, 1952, together with the rules and regulations framed under them, constitute the **basic laws governing the mining sector in India.** The minor minerals including natural stone come under the purview of the state governments. However, labour laws are basically the same for every state. Some of the laws of particular relevance to workers in granite quarries are:

- The Contract Labour Regulation and Abolition Act, 1970, protects contract labourers. The act makes a number of provisions for the welfare of contract workers including payment of min-

imum wage, social security benefits and others. The government can also decide to prohibit the use of contract labour to complete core activities of the enterprise of perennial nature.

- The Industrial Establishments Acts requires businesses employing ten or more workers at any time to write out formal employment contracts.
- The Interstate Migrant Workmen Act, 1979, concerning migrant workers, prescribes that companies need government documentation and approval to employ migrant workers. The Act allows for payment of migration, payment of travel and/or suitable residential accommodation.
- The Bonded Labour System Abolition Act, 1976, exists to prohibit the practice of bonded labour, where quarry owners may enslave their workers.

As described in the previous chapters, the study shows that (structural) violations of these laws seem to occur in most of the researched granite quarries in Tamil Nadu and Karnataka. The **weak enforcement of law** is a major reason for poor working conditions at granite quarries, especially in Karnataka. More effective law enforcement by the Government of India and state governments will help to improve the situation considerably, as shown by the child labour example. Vigilance of the labour department in Tamil Nadu after 2011 helped to reduce the prevalence of child labour in granite quarries. The state governments of both Tamil Nadu and Karnataka should increase their efforts to combat child labour and bonded labour and implement labour laws in granite quarries.

However, according to the UNGP, the fact that government fails to fulfill its duty to protect, does not exempt companies at the buying end of the supply chain from their responsibility to respect human rights. **Transparency** is an important prerequisite for a proper **due diligence procedure** which identifies, prevents and mitigates actual and potential adverse human rights impacts. The majority of stone companies that have been requested for the review is still reluctant to reveal its supply chain or does not seem to have insight in its supply chain. Out of the 12 companies that responded to the request for review, 8 companies stated that they do not procure granite from the quarries surveyed for this research while only 2 companies said that they have insight in their supply chain at the level of quarries. CSR initiatives claim to have gathered insight in supply chains and adverse human rights impacts, but the publicly available information is too little to ascertain the impact of their work. The lack of transparency makes it hard to assess the effectiveness of corporate actions to mitigate adverse human rights impacts in India.

RECOMMENDATIONS

TO NATURAL STONE COMPANIES AND QUARRIES IN INDIA

- **Implement Indian labour laws and respect trade union rights**
- **Mandatory written contracts**

The absence of written contracts makes it hard for workers to claim legal entitlements like minimum wages, overtime compensation, government welfare schemes, compensation for work accidents etc. The large quarries, even the ones that are government-owned, are subcontracting most of the operations to labour supply agencies and middlemen who hire workers. The owners of the quarries and importing companies should make sure that written contracts are provided to all workers, including workers employed by middleman and labour supply agencies.
- **Mapping of supply chain and traceability**

Like Western buyers, exporters of granite and other natural stone companies should also map their supply chain, get insight in the supply chain actors and be able to provide full traceability.
- **Transparency**

Be transparent about the full supply chain, actors involved in the supply chain and measures taken to monitor and improve the labour conditions in different levels of the supply chain.
- **Grievance mechanism**

Company level grievance mechanisms are an important way for workers to get their problems heard and remedied. Access to remedy for victims of human rights abuse is an obligation under the UNGP.
- **Cooperation with local government and civil society groups**

Quarries are often located closely together. The issues of poor living conditions and lack of access to healthcare can be tackled at community level instead of quarry level. Access to medical facilities can be facilitated by starting health sub-centers in mining zones. Local governments are responsible for the provision of healthcare services that meet the health-care needs of quarry workers. Mine owners and quarry worker communities can join forces to keep the government accountable for the provision of proper healthcare services. Cheap housing can also be provided with the help of government rural housing schemes. The issue of child labour can be tackled by a combination of strategies that involve all key stakeholders like (local) government agencies, parents, communities, quarry owners, buyers and importers. An area-based approach to tackling child labour (Child Labour Free Zones) is an important example of such an approach. Companies can be expected to play a pro-active role in the above strategies and contribute to its effective implementation.

TO THE CENTRAL GOVERNMENT AND STATE GOVERNMENTS OF INDIA

Ratify and implement all relevant ILO conventions, especially the ILO conventions on child labour and the recently adopted Protocol of 2014 to the Forced Labour Convention, 1930.³⁷

Both ILO Conventions on child labour – ILO Convention 182 on the worst forms of child labour and Convention 138 on the minimum age to work – have still not been ratified by India. The present Child Labour (Protection and Regulation) Act 1986 only (partly) deals with hazardous work under 14. Study reports, like the '2013 Findings on the Worst Forms of Child Labour' and the ILO 'World Report on Child Labour 2013' show that the law is not implemented properly.³⁸ For some years now a new Child Labour Act – reflecting both ILO Conventions – is being considered. India should enact and implement such a law as soon as possible.

On 11 June 2014, the ILO adopted the Protocol to the Forced Labour Convention (1930) that updates a widely ratified, but outdated, treaty. The protocol was developed in order to better address contemporary abuses, including abuses against migrants and in the private sector.³⁹ The prevention measures in the new Forced Labour Protocol include creating national plans of action, expanding labour laws to sectors at risk of forced labour, improving labour inspections, and protecting migrant workers from exploitative recruitment practices. The new Protocol also requires governments to support due diligence by businesses to prevent and respond to forced labour in their operations. The Protocol requires governments to take measures to identify, release and provide assistance to forced labour victims as well as protect them from retaliation. The treaty also obliges governments to ensure that victims have access to justice and remedies, including compensation.

Implement and monitor labour laws

Effective monitoring of the implementation of labour laws is an important means to reduce child labour, bonded labour and wage discrimination. The Tamil Nadu and Karnataka state governments should provide regular labour inspections at quarry level and make sure workers have access to social security benefits.

The Tamil Nadu and Karnataka state government are recommended to follow the example of the Rajasthan and Delhi state governments who have developed laws that extended the age bar on child labour from 14 years to 18 years and prohibits employment of children and youth up to 18 years.⁴⁰ Another example to be followed is the recent decision, taken by the Rajasthan state government, making it mandatory for quarry owners to maintain formal records of all workers in their quarries. With legal employment contracts quarry workers can access social schemes, for instance under the Workmen Compensation Act.⁴¹

Housing

A percentage of the tax paid by quarry owners to the government can be used for improving housing and healthcare facilities for quarry workers.

Education

The state governments should ensure children of quarry workers, also of migrant workers, have access to quality education.

Access to credit

The state government can provide access to low-interest credit. This is a crucial way to prevent bonded labour.

TO EUROPEAN NATURAL STONE COMPANIES

- **Due diligence**
Companies sourcing granite and other natural stone products from Tamil Nadu, Karnataka or other states in India should implement a comprehensive due diligence process as required by the UNGP to find out if and to what extent child labour, bonded labour and other labour rights violations occur in their supply chains. Based on the due diligence companies should make a time-bound plan for addressing actual and potential human rights violations, monitor its implementation and report publicly on this.
- **Create joint leverage and cooperate with stakeholders**
To increase leverage, natural stone companies should work with workers and their representatives to improve working conditions, in line with the UNGP and the OECD Guidelines.
- **Transparency**
Companies should increase the traceability and transparency of their supply chains up to the level of quarries. CSR initiatives should be transparent on their code of conduct, license agreements, procedures, audit manuals, control systems, results etc.
- **Access to remedy**
Companies or CSR initiatives of which they are a member should have a credible grievance mechanism, which is a crucial way for workers to have their problems heard and remediated.

TO EUROPEAN UNION AND ITS MEMBER STATES

- Governments at the buying end, being a substantial buyer, have an important role in driving change in the natural stone sector. Local, national and European government agencies and semi-government institutions should implement sustainable procurement policies and publicly report about its implementation.
- The European Commission should oblige companies to be transparent about their supply chain and to perform a due diligence procedure in line with the UNGP and the OECD Guidelines and report publicly about this.
- In line with the ILO forced labour protocol, European governments should oblige companies domiciled in their countries to do a due diligence procedure, especially small and medium sized enterprises.
- European members states and the European Commission should raise the issue of child labour and forced labour with the Indian Government in order to come to joint solutions for failing implementation of labour rights legislation and UN Guiding Principles. This should include strengthening of the labour inspection, including ex-child workers in formal education and capacity building programs.
- The European Union and its members should urge India to ratify ILO conventions on child labour and the recently adopted Protocol of 2014 to the Forced Labour Convention, 1930.
- The Dutch government is recommended to support a proposal for mandatory due diligence on child labour as has been proposed by the Dutch Parliament.

ENDNOTES

- ¹ For Karnataka see the report "Our mining children: A Report of the Fact Finding Team on the Child Labourers in the Iron Ore and Granite Mines in Bellary District of Karnataka", published in 2005. For Tamil Nadu see the report "Between a rock and a hard place: The exploitation for quarry workers in Tamil Nadu", by People's Watch. Commissioned by the India Committee of the Netherlands (ICN), Dutch Working Group on Sustainable Stone (WGDN) and FNV, 2009 (unpublished).
- ² "Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework", published by the United Nations, 2011 (http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf) and "OECD Guidelines for Multinational Enterprises", published by OECD, 2011 (<http://www.oecd.org/daf/inv/mne/48004323.pdf>).
- ³ Important studies include: 1) Madhavan P. and Raj S., 2005: "Budhpura 'Ground Zero' Sandstone quarrying in India". Commissioned by the India Committee of the Netherlands. 2) "From Quarry to Graveyard: Corporate social responsibility in the natural stone sector": a report published by the India Committee of Netherlands, 2006. 3) "India's Childhood in the 'Pits': A report on the impacts of mining on children in India": a study conducted and published by Samata and HAQ: Centre for Child Rights and Mines, Minerals & People with the support of Terre des Hommes Germany, AEI & ASTM Luxembourg, 2010. 4) "Big pits and cheap lives": fact-finding study on working conditions in the sandstone mines in Kota – Bundi region of Rajasthan by the Centre for Education and Communication, 2006.
- ⁴ Research carried out by Madhavan P. and Raj S. in Bundi district found around 55000 people working in the sandstone mines there. Of these, 85 % were migrant labourers, 94 % were SCs and STs approximately 20 % were children and 43 % were women who had been widowed. In total, around 90 % were in debt to their employers ('contractors'), and so can be considered as 'bonded labourers'.
- ⁵ "No child labour employed in granite industry", by T.E. Raja Simha, The Hindu, October 2, 2007 (<http://www.thehindubusinessline.in/2007/10/02/stories/2007100250100700.htm>).
- ⁶ "Between a rock and a hard place: The exploitation for quarry workers in Tamil Nadu", by People's Watch. Commissioned by the India Committee of the Netherlands (ICN), Dutch Working Group on Sustainable Stone (WGDN) and FNV, 2009 (unpublished).
- ⁷ "Mining in Bellary – A Policy Analyses" by Justice Santhosh Hegde, 2011 (http://adrindia.org/sites/default/files/EPW_Mining_Article.pdf); "Bellary in the pits" by Paranjay Guha Thakurta, Civil Society, February 2011 (<http://www.civilsocietyonline.com/Archive/feb2011/feb1111.asp>).
- ⁸ "The rise and fall of Madurai's Granite Mafia" by Jeeman Jacob, September 2012 (http://archive.tehelka.com/story_main54.asp?filename=Ws140912NADU.asp); "A scam worth 16,000 crores that rests on granite" by Samira Shaikh, August 2, 2012 (<http://www.ndtv.com/article/south/a-scam-worth-16-000-crores-that-rests-on-granite-250382>); "Granite scam in Tamil Nadu" (http://en.wikipedia.org/wiki/Granite_scam_in_Tamil_Nadu).
- ⁹ "Ban on iron ore mining and exports in Karnataka, Goa chokes the industry", published in Business Today, January 3, 2014 (<http://businesstoday.intoday.in/story/ban-on-iron-ore-mining-and-exports-in-karnataka-goa/1/202008.html>); "The mining scam that ROCKED Karnataka", Vikki Nanjappa, June 20, 2012, (<http://www.rediff.com/news/slide-show/slide-show-1-the-mining-scam-that-rocked-karnataka/20120620.htm>).
- ¹⁰ "MVO Sector Risico Analyse, aandachtspunten voor dialoog" by KPMG, commissioned by the Dutch Ministry for Foreign Trade and Development Cooperation & Ministry of Economic Affairs, September 2014 (<http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/rapporten/2014/09/01/mvo-sector-risico-analyse/mvo-sector-risico-analyse.pdf>).
- ¹¹ "The Global Slavery Index 2014" by Walk Free Foundation, 2014 (http://d3mj66ag90b5fy.cloudfront.net/wp-content/uploads/2014/11/Global_Slavery_Index_2014_final_lowres.pdf); "2013 Findings on the Worst Forms of Child Labour" by United States Department of Labour, September 2014 (<http://www.dol.gov/ilab/reports/child-labor/findings/2013TDA/2013TDA.pdf>).
- ¹² Mining is considered as hazardous activity and as per ILO conventions 138 and 182 employment of children below 18 years is prohibited in hazardous activities.
- ¹³ The websites of some of the companies covered in this study are: 1) TAMIN (<http://www.tamingranites.com>), 2) MML (<http://www.mml.kar.nic.in>), 3) Bannari Aman Granite (<http://www.bannari.com/granite.html>), 4) Gem Granites (<http://www.gemgranites.com>) and 5) Sri Krishna Granites (<http://www.srikrishnagranites.com>).
- ¹⁴ As per 2011 census the illiteracy rate in Tamil Nadu is 20 % and 24.5 % in Karnataka.
- ¹⁵ "Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework", published by the United Nations, 2011 (http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf) and "OECD Guidelines for Multinational Enterprises", published by OECD, 2011 (<http://www.oecd.org/daf/inv/mne/48004323.pdf>).

- ¹⁶ Infodrive India, (<http://news.oneindia.in/2010/06/24/graniteexport-from-tamil-nadu-gainingpopularity.html>).
- ¹⁷ "Indian Minerals Yearbook 2012, (Part- III : Mineral Reviews)" by the Government of India Ministry of Mines, Indian Bureau of Mines, February 2014 (http://ibm.gov.in/writereaddata/files/07092014125422IMYB_2012_Granite.pdf).
- ¹⁸ Granite is declared as a "Minor Mineral", under the MMDR Act, 1957 and falls under the purview of the State Governments.
- ¹⁹ 1) K. Agrawal, I. P. Singh Gaharwar, 2013, "A Study on Trend of Export of Natural Stones from India to Various Countries" (<http://www.ijoart.org/docs/A-Study-on-Trend-of-Export-of-Natural-Stones-from-India-to-Various-Countries.pdf>); 2) Infodrive India, Indian Granite Export from India Data and Reports from Infodrive India (<http://www.infodriveindia.com/india-export-data/indian-granite-export-data.aspx>) assessed 10 September 2014; 3) Capexil, statistical profile, March 2011 (http://www.capexil.com/stat_profile.php).
- ²⁰ "From Quarry to Graveyard: Corporate social responsibility in the natural stone sector": a report published by the India Committee of Netherlands, 2006.
- ²¹ "The natural stone and stone products market in the EU" by CBI, 2010 (<http://www.scribd.com/doc/90764196/2010-Natural-Stone-EU#scribd>).
- ²² For Karnataka see the report "Our mining children: A Report of the Fact Finding Team on the Child Labourers in the Iron Ore and Granite Mines in Bellary District of Karnataka", published in 2005. For Tamil Nadu see the report "Between a rock and a hard place: The exploitation for quarry workers in Tamil Nadu", unpublished report, 2009.
- ²³ The 2009 Tamil Nadu study in 57 granite quarries observed the existence of child labour in most of the quarries.
- ²⁴ Gem Granites is one of the leading companies in India involved in quarrying and exporting various types of granite products. The workers employed in Gem Granites quarries are provided accommodation outside the quarries in separate quarters with all the basic amenities. At the quarry site also workers are provided with facilities like resting halls, toilets, drinking water, first aid and a canteen.
- ²⁵ European natural stone company websites: Holland Graniet (<http://www.hollandgraniet.nl/default.asp?ID=4>), assessed 25 September 2014; Bunnik Creations (<https://nl-nl.facebook.com/Bunnikcreationsnatuursteen>), assessed 17 September 2014; Norvold International (<http://www.norvoldinternational.nl/norvold-international/catalogus-ac/099-bordeaux.php>), assessed 25 September 2014; Michel Oprey & Beisterveld (<http://mo-b.nl/language/nl/categories/23/items/i15600>), assessed 9 September 2014; Granito Natuursteen Design (<http://www.granitonatuursteen.nl/granieten-vloertegels.html>), assessed 22 September 2014; Troupin Natuursteen (<http://www.troupinatuursteen.nl/materialen/granietsoorten>), assessed 22 September 2014; Kluijtmans Natuursteen (<http://kluijtmansnatuursteen.nl/bouw/materialen>), assessed 24 September 2014; Eck-Stone (http://eckstone.nl/component/jak2filter/?Itemid=492&jakeyword=India&category_id=&xf_1_txt=&xf_2_txt=&xf_3_txt=&btnSubmit=SEARCH), assessed 22 September 2014; Veenstra Natuursteen (http://www.veenstra-natuursteen.nl/over_ons/import_van_duurzame_materialen/#.VC6p5_mSzTp), assessed 22 September 2014; Nibo Stone (http://particulier.nibostone.nl/natuursteen+vloertegels/budget+collectie/imperial+white%2C+gepolijst?art_code=01070334), assessed 22 September 2014; Pelt & Hooykaas Natuursteen (<http://www.peltenhooykaasnatuursteen.nl/producten/graniet/>), assessed 22 September 2014; Diamond Spectrum Enterprises (<http://www.diamondspectrum.com/materialen-natuursteen/natuursteen-tegels.html?landvanherkomst=108&soort=53>), assessed 25 September 2014; Steenhouwerij Jongerius (<http://www.steenhouwerij.nl/gallery/graniet-materialen/15.html>), assessed 25 September 2014; Van den Ban steen & beton (http://www.vandenban.com/natuursteen_soorten.php), assessed 1 October 2014; Brachot-Hermant (<http://www.brachot.com/Content/productrange/standardgamma/2/index.jsp?act=list>), assessed 29 September 2014; Stone nv (http://www.stone.be/NL/Materialen/Materiaal/Graniet_en_Basalt/Indian_Black_.aspx), assessed 29 September 2014; BMB (http://www.bmb.be/Graniet_2.html), assessed 29 September 2014; Maris Natuursteen (<http://www.marisnatuursteen.be/producten>), assessed 1 October 2014; Granite UK Ltd. (<http://www.graniteuk.com/granite/>), assessed 29 September 2014; Eurostone (<http://www.eurostone.co.uk/Granite/Dark-Grey-Granite-Black-Granite/s-3>), assessed 29 September 2014; Hardscape (http://www.hardscape.co.uk/products-material.php?material_id=4), assessed 29 September 2014; Marshalls (<http://www.marshalls.co.uk/commercial/natural-stone/granite?Page=1>), assessed 1 October 2014; AG Natursteinwerke (<http://www.ag-natursteinwerke.de/katalog/granit?start=60>), assessed 1 October 2014; Granit Deutschland (<http://www.granit-deutschland.net/granit-fliesen-Star-Galaxy-fliesen>), assessed 1 October 2014; Gräf Granit GmbH (<http://www.graef-granit.de/de/pressearchiv/presse/presse-aktuell/grabmale-made-in-germany.html>) assessed 1 October 2014; KNKE Emsland (<http://www.happe-gruppe.de/fileadmin/templates/downloads/knke-emsland-broschuere.pdf>), assessed 3 October 2014.
- ²⁶ Dutch and Belgian trade associations for natural stone: Vereniging van Nederlandse Natuursteen Importeurs (VVNI) (<http://www.vvni.nl/>); Algemene Nederlandse Bond van Natuursteenbedrijven (ABN) (<http://www.abnnatuursteen.nl/>) and Febenat (<http://www.febnat.be/index.php?r=mylang/index&reso=1&width=1280&Height=1024>).
- ²⁷ "The natural stone and stone products market in the EU" by CBI, 2010 (<http://www.scribd.com/doc/90764196/2010-Natural-Stone-EU#scribd>).
- ²⁸ TFT Responsible Stone Program (TFT RSP) (<http://www.tft-earth.org/wp-content/uploads/2015/01/About-the-TFT-Re>

sponsible-Stone-Programme.pdf), assessed 27 March 2015.

²⁹ TFT Responsible Stone Program (TFT RSP), Benelux Chapter website (<http://www.duurzamenatuursteen.nl/wie/>), assessed 27 March 2015.

³⁰ Indo-German Export Promotion (IGEP) (<http://www.igep.org/stone.html>), assessed 27 March 2015.

³¹ Ethical Trading Initiative (ETI) (<http://www.ethicaltrade.org/about-eti>), assessed 27 March 2015.

³² "Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework", published by the United Nations, 2011 (http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf) and "OECD Guidelines for Multinational Enterprises", published by OECD, 2011 (<http://www.oecd.org/daf/inv/mne/48004323.pdf>).

³³ ILO convention 29 (<http://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/forced-labour/lang--en/index.htm>), assessed 27 March 2015.

³⁴ ILO, 2005, A Global Alliance Against Forced Labour, Global Report under the Follow-up to the ILO Declaration on Fundamental Principles and rights at Work 2005 (http://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=OCCeQFjAA&url=http%3A%2F%2Fapflnet.ilo.org%2Fresources%2Fa-global-alliance-against-forced-labour%2Fat_download%2Ffile1&ei=IEURVfzSBMfXap-vgagM&usg=AFQjCNEHWF7cEuytGvgPH_7Ilt5Qg&bvm=bv.89184060,d.ZWU).

³⁵ "Children in hazardous work. What we know, What we need to do" published by the ILO, 2011 (http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_155428.pdf).

³⁶ ILO conventions 100 and 111 (<http://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/equality-of-opportunity-and-treatment/lang--en/index.htm>), assessed 27 March 2015.

³⁷ ILO, Provisional Record, 103rd Session, Geneva, 2014, Text of the protocol to the forced labour convention, 1930, (http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_246615.pdf).

³⁸ "2013 Findings on the Worst Forms of Child Labour" by United States Department of Labour, September 2014 (<http://www.dol.gov/ilab/reports/child-labor/findings/2013TDA/2013TDA.pdf>). "World Report on Child Labour: Economic vulnerability, social protection and the fight against child labour" published by the ILO, 2013 (http://www.ilo.org/ipecc/Informationresources/WCMS_178184/lang--en/index.htm)

³⁹ Human Rights watch, Global Treaty to Protect Forced Labor Victims Adopted, 11 June 2014. (<http://www.hrw.org/news/2014/06/11/global-treaty-protect-forced-labor-victims-adopted>).

⁴⁰ "Child labour age limit raised to 18 years", published by The Times of India, 26 August 2012. (<http://timesofindia.indiatimes.com/india/Child-labour-age-limit-raised-to-18-years/articleshow/15713593.cms>).

³¹ "Mine owners told to maintain record of all workers", published by The Times of India (Jaipur), 4 February 2015. (<http://epaperbeta.timesofindia.com/Article.aspx?eid=31810&articlexml=Mine-owners-told-to-maintain-record-of-all-04022015004020>).

ANNEX 1: IMPORT AND RETAIL OF INDIAN GRANITE BY EUROPEAN COMPANIES

	Company	Type of company	Information on website	Main products	Source
Dutch companies					
1	Holland Graniet	importer/ wholesaler	Importing raw blocks, slabs and (semi-)finished granite products from India and other countries.	gravestones & construction materials	http://www.hollandgraniet.nl/default.asp?ID=4
2	Bunnik Creations	importer/ wholesaler	Importing natural stone varieties from different Asian countries, including India.	tiles	https://nl-nl.facebook.com/Bunnikcreationsnatuursteen
3	Norvold International	importer/ wholesaler	Importing and wholesale of Indian granite varieties.	tiles	http://www.norvold-international.nl/norvold-international/catalogus-ac/099-bordeaux.php
4	Michel Oprey & Beisterveld	importer/ wholesaler	Importing and wholesale of Indian granite varieties. For example Nero Impala Dark.	tiles & moldings	http://mo-b.nl/natuursteen-binnen/vloertegels/nero-impala-dark-(india)-gepolijst.html
5	Granito Natuursteen Design	retailer	Retail of Indian granite products. For example Ghibly, Absolute Black, Black Galaxy, Paradiso Clasic, Kashmir White and India Juperana tiles and countertops.	radiators, tiles & kitchen countertops	http://www.granito-natuursteen.nl/graniet-en-vloertegels.html
6	Troupin Natuursteen	retailer	Processing and retail of gravestones made from Indian granite varieties. For example Indian Aurore Granite, Indian Red Granite and Star Galaxy Granite.	gravestones	http://www.troupin-natuursteen.nl/materialen/granietsoorten
7	Kluijtmans Natuursteen	retailer	Processing and retail of Indian granite products. For example Impala Paradiso, Juperana, Kashmir White, and Indian Red.	gravestones, tiles & countertops	http://kluijtmans-natuursteen.nl/bouw/materialen

8	Eck-Stone	importer/ wholesaler	Wholesale of Indian granite products. For example Indian Black Granite and Merry Gold Granite.	tiles & construction materials	http://eckstone.nl/component/jak2filter/?Itemid=492&jakeyword=India&category_id=&xf_1_txt=&xf_2_txt=&xf_3_txt=&btnSubmit=SEARCH
9	Veenstra Natuursteen	importer/ retailer	Importing of natural stone varieties from India and other countries. Different Indian granite varieties are retailed, for example Indian Aurora and Star Galaxy.	tiles, gravestones, countertops & construction materials	http://www.veenstra-natuursteen.nl/over_ons/import_van_duurzame_materialen/#.VC6p5_mSzTp
10	Nibo Stone	importer/ wholesaler retailer	Importing and retail of Indian natural stone varieties. For example Indian granite garden tiles, black leather finish.	tiles & construction materials	http://particulier.nibostone.nl/natuursteen+vloertegels/budget+collectie/imperial+white%2C+gepolijst?art_code=01070334
11	Pelt & Hooykaas Natuursteen	importer/ wholesaler	Importing and wholesale of Indian granite varieties. Kashmir White, Nero Assoluto India and Star Galaxy.	slabs & tiles	http://www.peltenhooykaas-natuursteen.nl/producten/graniet/
12	Diamond Spectrum Enterprises	importer/ wholesaler	Wholesale of Indian granite varieties. For example Black Galaxy and Juperana.	slabs, tiles & gravestones	http://www.diamond-spectrum.com/materialen-natuursteen/natuursteen-tegels.html?landvanherkomst=108&soort=53
13	Steenhouwerij Jongerius	retailer	Retail of granite products. Different Indian granite varieties are mentioned, for example Juperana and Indian Black.	gravestones, construction materials & kitchen countertops	http://www.steenhouwerij.nl/gallery/graniet-materialen/15.html
14	Van den Ban Steen & Beton	importer/ building industry	Importing of natural stone varieties for paving and construction projects from all over the world, including Asian countries.	gravestones & construction materials	http://www.vandenban.com/natuursteen_soorten.php
Belgian companies					
15	Brachot-Hermant	importer/ wholesaler	Importer and wholesaler of Indian granite varieties. For example Amber Gold, Jet Black, Tan Brown, Ivory Gold and Indian Juparana.	tiles, gravestones, construction materials & countertops	http://www.brachot.com/Content/productrange/standardgamma/2/index.jsp?act=list
16	Stone NV	wholesaler/ retailer	Wholesale and retail of different natural stone varieties. Also Indian granite, for example Indian Black granite tiles.	slabs, tiles & countertops	http://www.stone.be/NL/Materialen/Materiaal/Graniet_en_Basalt/Indian_Black_.aspx
17	BMB	wholesaler	Wholesaler of natural stone varieties including Indian granite. For example Ghibli, Green Rose, Imperial Red, Multicolor Red and Kashmir White.	slabs	http://www.bmb.be/Graniet_2.html
18	Maris Natuursteen	importer/ wholesaler	Wholesaler and retail of Indian granite tiles/ cobbles in colours Manga and Magadi-Light-Yellow.	tiles	http://www.maris-natuursteen.be/producten

British companies

19	Granite UK LTD.	retailer	Retail of Indian granite varieties. For example Kashmir White and Star Galaxy.	tiles	http://www.graniteuk.com/granite/
20	Eurostone	retailer	Retail of Indian granite products. For example Kashmir White and Indian Jet Black.	tiles	http://www.eurostone.co.uk/Granite/Dark-Grey-Granite-Black-Granite/s-3
21	Hardscape	importer/ wholesale	Wholesale of Indian granite slabs. For example Kashmiri White.	slabs, tiles & street furniture	http://www.hardscape.co.uk/products-material.php?material_id=4
22	Marshalls	importer/ wholesale	Wholesale/ retail of different granite varieties. Granite sourced from India and China under the Marshalls Fairstone program.	slabs, tiles & construction materials	http://www.marshalls.co.uk/commercial/natural-stone/granite?Page=1 http://www.marshalls.co.uk/homeowners/shop/fairstone

German companies

23	AG Natursteinwerke	importer/ wholesaler	Wholesale of Indian granite varieties. For example Imperial White, Aurora Indiana, Multi-color Rot India, Tan Brown and Indian Juparana.	tiles & slabs	http://www.ag-natursteinwerke.de/katalog/granit?start=60
24	Granit Deutschland	retailer	Retail of Indian granite products. For example Star Galaxy and Rosso Perla India.	tiles & countertops	http://www.granit-deutschland.net/granit-fliesen-Star-Galaxy-fliesen
25	Gräf Granit GmbH	importer/ wholesaler/ retailer	Importing raw and (semi-) finished materials from India. Wholesale/ retail of different granite varieties.	gravestones	http://www.graef-granit.de/de/pressearchiv/presse/presse-aktuell/grabmale-made-in-germany.html
26	KNKE Emsland	Wholesaler/ building industry	Wholesale of Indian granite paving. For example Granit Rot Indien and Granit Schwartz Indien.	construction materials, tiles & cobbles	http://www.happe-gruppe.de/fileadmin/templates/downloads/knke-emsland-broschuere.pdf