Namibia's Black Gold?

Charcoal Production, Practices and Implications

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LEGAL ASSISTANCE CENTRE

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Abbreviations

AALS	Affirmative Action Loan Scheme
AEA	Agricultural Employers' Association
CBEND	Combating Bush Encroachment for Namibia's Development (Project)
DF	Directorate of Forestry (Ministry of Agriculture, Water and Forestry)
EIA	environmental impact assessment
EMA	Environmental Management Act, 2007 (No. 7 of 2007)
FSC	Forest Stewardship Council
MAWF	Ministry of Agriculture, Water and Forestry
MHSSR	Ministry of Health, Social Services and Rehabilitation
MLSW	Ministry of Labour and Social Welfare
MTI	Ministry of Trade and Industry
NAFWU	Namibian Farm Workers' Union
NAU	Namibia Agricultural Union
NCPA	Namibia Charcoal Producers' Association
NNFU	Namibian National Farmers' Union
NWMC	Namibian Woodlands Management Council

Summary

The charcoal industry is a fairly new industry in Namibia, being an innovative by-product of clearing invader bush. The industry grew significantly in the 2001–2010 period, and has now become an important economic sector. Its development as a labour-intensive industry has in turn attracted indigent and unskilled labourers who, however, fall outside the usual protection of the labour and health and safety laws because the industry itself remains unregulated.

The situation of the workers within the business has been drawing a lot of criticism from various corners. One of the points criticised is the common Namibian practice of treating charcoal workers/burners/cutters as subcontractors. As such, they are not covered by the Labour Act, 2007 (No. 11 of 2007). Government as well as labour representative organisations would prefer a situation of permanent employment, as regulated by the Labour Act, with employment benefits. These include contributions to social security and the provision of housing. Negotiations between the Namibia Charcoal Producers' Association (NCPA), the Ministry of Labour (ML) and the Namibian Farm Workers' Union (NAFWU) have been under way for years. At the time of writing, no final agreement had been reached.

The aim of this study is to make a contribution to a comprehensive picture on the charcoal industry in Namibia. The special focus lies at an assessment of the status of charcoal workers in order to develop recommendations which aim at more regulation in the industry. This should ensure that workers can assert the rights and protections that Namibia's laws afford them, as they would in any other industry, while taking economic as well as environmental sustainability of the sector into account.

In order to truly understand the issues surrounding labour relations, the study looked at the differing – and often conflicting – perspectives of the various stakeholders. In our view, this method is a prerequisite for the development of viable recommendations on applicable legislation and good practices that would aim at improving labour relations within the industry and ascertain the environmental and economic sustainability of the sector. In the preparatory phase, the available literature on the charcoal industry in Namibia was consulted, after which semi-structured interviews were conducted with stakeholders in the industry. Face-to-face interviews were held with producers/farm owners and workers in the main districts where charcoal production takes place, namely Gobabis, Grootfontein, Otjiwarongo, Outjo and Tsumeb (see the map on page x). The research team visited 41 farms in total. All in all, 4 processors, 37 producers (see Annexure 2) and 205 charcoal workers were interviewed.

The report findings point out that regulation of the charcoal industry with regard to labour and environmental issues is overdue.

The report concludes with recommendations for the different stakeholders in the field, which include the following:

Recommendations for Government

- The MLSW should conduct annual inspections at charcoal production sites.
- The Ministry of Education should look into the issue of charcoal workers' children not attending school and take the necessary steps.
- The DF should ensure that cutting and harvesting procedures are carried out properly, that permit requirements are followed, and that inspections take place on every charcoal-producing farm. Given its lack of capacity, the DF should consider outsourcing this task to another institution, possibly the Namibian Woodlands Management Council (NWMC; see 6.8). Alternatively, Government should equip the DF with enough vehicles to conduct inspections and should increase the number of staff where necessary so that proper inspections can be carried out.
- The Environmental Management Act should be implemented.
- A strategic environmental assessment should be conducted on the alternative uses of encroacher bush, e.g. as charcoal, firewood, or wood gasification – as piloted by the Combating Bush Encroachment for Namibia's Development (CBEND) Project – in order to identify the significance and magnitude of the environmental and socio-economic impacts of the industry on local, national, regional and global levels.
- The inclusion of mopane (*Colophospermum mopane*) as a protected species in the Forest Act conflicts with its widespread use in making charcoal. This conflict should be resolved in the legislation, either by removing it from the protected species list or by setting firm criteria for its inclusion in the list, and applying appropriate measures relating to its utilisation. At the moment it is in a grey zone, without clear guidelines as to its conservation and use.[1]

Recommendations for NAFWU

NAFWU should –

- make sure they represent the genuine interests of the charcoal workers in negotiations with the NCPA to reach a collective agreement, as described by the Labour Act
- increase its capacity and visit charcoal workers in different regions on a regular basis to ensure that they present their interests appropriately, and
- distribute information to charcoal workers on the Labour Act and other relevant legislation in order to empower them.

Recommendations for the NCPA

The NCPA should –

- formalise its membership and levy membership fees
- provide compulsory training in safety and fire prevention for charcoal workers
- lobby its members for compliance with labour legislation and environmental recommendations
- organise exchange study visits among its members to learn from the best in the industry

[1] NPCS (2010:99).

- organise training for members as regards the financial and administrative management of a charcoal business
- encourage its members to provide traditional housing to workers
- encourage its members to establish a sound financial management system, to monitor the charcoal quality before the producer sells the charcoal, and to pay when the charcoal is delivered, and
- standardise contracts of employment in accordance with the Labour Act and the collective agreement, and distribute such contracts to producers.

Recommendations for producers

- The producer–worker relationship should be regulated as an employee–employer relationship according to the Labour Act, with certain collective exemptions for the industry, as defined in the collective agreement (see 6.5).
- Producers should register their workers for insurance under the Employee's Compensation Amendment Act, as it provides the framework for insuring employees against loss of earnings resulting from incurring injury or contracting a disease during the course of their employment.
- Producers should register their workers for benefits under the Social Security Act as it provides for the payment of maternity leave, sick leave and death benefits to employees.
- Producers should limit the credit system for food and daily necessities to a minimum, and should provide credit only under exceptional circumstances.
- Producers should provide each worker with protective clothing on the understanding that, if such worker leaves before the end of an agreed period, e.g. six months, the cost of the clothing will be deducted from the worker's final salary, as defined in a work contract or collective agreement.
- Equipment such as axes, files or spades should be provided to workers and returned to the producer upon termination of the workers' employment.
- Producers should be obliged to pay for pre-employment medical examinations, as stipulated in the Health and Safety Regulations of 1997, provided that if a worker should leave within an agreed period, e.g. nine months, as stipulated in a collective agreement or contract, the worker would have to compensate the employer for such costs.
- Producers should monitor the charcoal quality when it is delivered, and should pay workers immediately after delivery.
- The timing and frequency of payment should be transparent and agreed upon, and workers should be told before they start production what the terms of payment are, how often they are obliged to deliver and when they will be paid after delivery in order to facilitate each worker's management of his/her finances.
- The system of payment and the deduction of credit owing should be made transparent to workers.
- Shop prices should not be permitted to be higher than 10% of the wholesale price in the next town.
- The producer should give charcoal workers basic information regarding which trees to cut and which to leave.
- Control mechanisms should be established and regular inspections conducted in the harvesting areas to see if workers comply with regulations as to which trees to cut.
- Producers should attend training courses in financial and administrative management of the charcoal business.

Interviews with charcoal workers, 14 July 2010

Recommendations for collective agreements

Collective agreements should stipulate the following:

- The timing and frequency of payments to workers.
- That protective clothing is provided to workers free of charge, but if a worker leaves before the end of a period accepted by both parties in the collective agreement, e.g. six months, the amount will be deducted from his/her final salary.
- That equipment such as axes, files and spades are to be provided to workers free of charge, provided that they are returned to the producer upon the worker terminating his/her employment.
- That producers are to pay for the cost of a pre-employment medical examination, provided that if the worker leaves within a period accepted by both parties in the collective agreement, e.g. nine months, the worker has to pay such costs back to his/her employer.
- The costs of the pre-employment and periodic medical examinations, since the exemption stated in *Government Gazette* 4459 of 15 April 2010 is only valid for self-employed individuals.
- That producers are entitled to deduct a fee from a worker's salary where s/he cuts down the wrong tree, and that such fee is to be paid to the NCPA to secure funding for training to workers.

Recommendations for charcoal workers

Workers should –

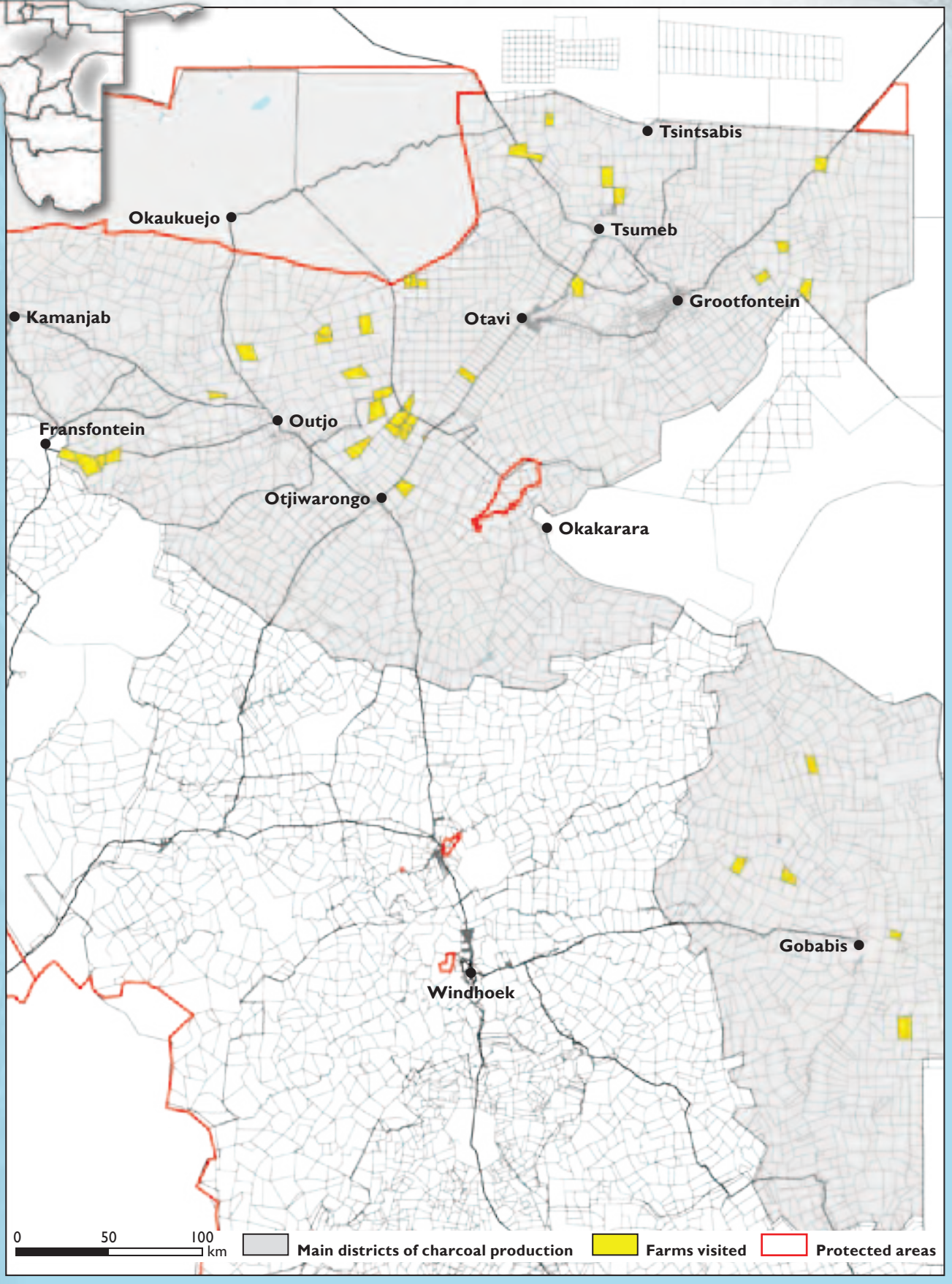
- ask for an employment contract before starting work
- ask to be registered for benefits under Social Security and the Employee's Compensation Fund
- require protective clothing, wear it, and maintain it in order to reduce occupational diseases and injuries
- agree with the producer on the timing and frequency of charcoal delivery, e.g. every six weeks, in order to improve their financial situation
- ask the producer for a list of items and their prices in his/her shop
- get clarity about assistance when s/he falls ill, requires annual leave, etc., and
- elect a delegate at each producer's farm and form a Charcoal Workers' Association to strengthen workers' negotiating power.

Recommendations for all stakeholders

- Institutions should be identified to provide charcoal workers with training in labour issues, financial management, and sustainable harvesting methods.
- Charcoal workers should be assisted with organising themselves to have a voice, e.g. by way of an informal national committee, and to decide on their relationship to NAFWU. Such a committee would be able to feed issues facing charcoal workers to relevant stakeholders. The committee could also represent charcoal burners at various platforms.
- Additionally, as suggested already, the lack of capacity in the DF at present suggests that the establishment of the NWMC should be sped up so that it can facilitate some of the administrative and regulatory responsibilities. Such a measure should be discussed in the interest of preventing the overexploitation of bush resources and ensuring their long-term use. The NWMC has been in the proposal stage for a few years, but has not yet been constituted. In the interim, the Namibia Agronomic Board has a management agreement with the MAWF to administer the funds for its establishment. To prevent the possibly excessive consumption of time and money by committees, this body should work closely with the existing NCPA.[2]

[2] See also NPCS (2010:94).

Main charcoal production districts in Namibia and study sites



1 INTRODUCTION

A charcoal worker, 22 August 2006

1.1 Why this study?

The charcoal industry is a fairly new one in Namibia. It is an innovative by-product of clearing invader bush. Its considerable growth since 2000 means it has become a significant economic sector. The industry was said to be worth around N$75–100 million in 2004,[3] and continues to grow. The estimated amounts produced per year are between 50,000 and 60,000 t.[4] The main markets for Namibian charcoal are for the leisure industry in Europe and South Africa, but there is also a large demand from silicon smelters in South Africa. The value of charcoal exports to the European Union market increased from about N$27 million in 2007, to N$59 million in 2008.[5] Its development as a labour-intensive industry has in turn attracted indigent and unskilled labourers who fall outside the usual protection of labour legislation and health and safety laws because the industry itself remains unregulated.

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3 NPCS (2010:19).

4 I Galloway, pers. comm. January 2010; Honsbein et al. (2009:44). The DF's Annual Report for 2008/2009 states that 158,908 t of charcoal were harvested between April 2008 and March 2009 (MAWF 2009). However, no explanation for this huge discrepancy in the production figures could be found.

5 Honsbein et al. (2009:45).

Charcoal production is hailed as a method of combating bush encroachment and, thus, of increasing the carrying capacity for livestock on (commercial) farms. It is also celebrated for its potential to create job opportunities for the unskilled and semi-skilled labour force in particular and, hence, to reduce rural poverty. Furthermore, it offers farmers an opportunity to diversify their livelihood strategies. It is sometimes said to be a business in which quick money can be made. This would offer emerging farmers the potential to acquire capital for investing in livestock in order to establish themselves in the agricultural industry.

A number of different aspects have been the subject of investigation in other studies. These aspects include the economic potential of charcoal production for Namibia and its potential to fight invader bush. However, such studies remain by and large on a macro level. Detailed research both on the environmental impact and on the situation of the labourers within the charcoal business have been lacking to date.

The situation of the workers within the charcoal business has also drawn much criticism from various corners. It is common practice in Namibia that charcoal workers/burners/cutters are treated as subcontractors. As such, they are not covered by the Labour Act, 2007 (No. 11 of 2007). Government and labour representative organisations would prefer a situation of permanent employment, regulated by the Labour Act, with employment benefits such as social security and housing. Negotiations between the Namibia Charcoal Producers' Association (NCPA), the Ministry of Labour and Social Welfare (MLSW) and the Namibian Farm Workers' Union (NAFWU) on these issues have been under way for many years already, but at the time of writing, no final agreement had been reached.

It also goes without saying that the environmental aspects of the industry, the risk of deforestation, and atmospheric pollution as a potential result of charcoal production deserve more attention then they currently receive.

Against this background, the study aimed to contribute towards painting a comprehensive picture of the charcoal industry in Namibia, taking social, microeconomic and environmental issues into account. Special focus has been directed at an assessment of the status of workers in the charcoal industry, in order to make recommendations on how to formalise the sector for the benefit of all, and of the workers in particular, while taking economic as well as environmental sustainability of the sector into account.

1.2 Terminology

In this report, following common practice, a *producer* refers to an individual who buys charcoal by the ton from a worker and sells it on to a *processor*. Thus, producers are not the workers, cutter and burners who actually produce the charcoal: the latter are referred to as *workers* in this report.[6] Some producers prefer the label *cutters* or *burners*, but this is somewhat confusing as some producers assign groups of workers to different tasks within the production process. Farm owners are very often producers, but some producers do not own farms. Also, some producers pay farm owners to use their land/bush for the purpose of charcoal production.

[6] In cases where the production process is separated into cutting and chopping on the one hand, and burning wood to charcoal on the other, the researchers use the term *cutter* and *burner* to specify the agent of the activity.

1.3 Methodology

In order to truly understand the issues surrounding the labour relations in this industry, the study looked at the differing – and often conflicting – perspectives of the various stakeholders. This was regarded as a prerequisite for the development of viable recommendations as regards applicable legislation and good practice that would serve to improve existing labour relations and ascertain the sector's environmental and economic sustainability.

The special focus of this report lies in its assessment of the status of charcoal workers. The report develops recommendations which aim at increased regulation of the industry in order to ensure that workers can assert the rights that the law affords them – as it does in any other industry – while taking economic as well as environmental sustainability of the sector into account.

1.3.1 Methods

In the preparatory phase, the available literature on the charcoal industry in Namibia was consulted. Most research papers dealt with the economic aspects of charcoal production from the producers' or processors' perspective, without addressing labour issues as such. Newspaper articles provided more insight into labour relations issues in the industry. Studies dating back to 2005 and 2008 and the resultant Cabinet directives were also obtained from the MLSW (see Annexure 1). During this phase, representatives of the Namibia Agricultural Union (NAU), the Namibia Agronomic Board (NAB), the Ministry of Agriculture, Water and Forestry (MAWF), Consulting Services Africa (CSA) and the MLSW were consulted.

After the literature review, semi-structured interviews were conducted with various stakeholders in the charcoal industry. These included –

- Mr Franz Holzkampf, Chairman and former Chairman of the Namibian Charcoal Producers' Association (NCPA), and Mr Willem Enslin, former NCPA Chairman
- representatives of charcoal companies, namely Mr Ian Galloway of Jumbo Charcoal, Ms Yvonne Thomas of Invader Bush Charcoal, and Mr Patat du Toit of Super Braai
- representatives of the MAWF's Directorate of Forestry in Otjiwarongo regarding permits, inspections, etc.
- Mr Alfred Angula, NAFWU Chairman, and
- Mr Diamantis Pavlochristos, agent/exporter and importer to his factory in Greece, based at Invader Bush Charcoal factory in Otavi to control quality.

In addition, face-to-face interviews were conducted with producers/farm owners and workers in the main districts where charcoal is produced, namely Gobabis, Grootfontein, Otjiwarongo, Outjo and Tsumeb.

Interview with Alfred Angula, NAFWU Chairman 25 January 2010

After the preparatory phase, a questionnaire was developed for the charcoal workers. It was slightly modified after the first field trip to Outjo. This method was chosen for the workers because a much larger sample than that for the producers was planned. However, it would have gone beyond the scope of the time schedule for the study to conduct, record and transcribe more than 100 interviews with workers. This was exacerbated by the fact that most of the interviewees were only proficient in their mother tongue (mainly one of the Kavango languages or *Oshikwanyama*). Apart from the interviews with individuals, informal group discussions added some more information. Indeed, even with the individual interviews, larger groups of workers often sat and listened, commenting on the questions and answers as well. Thus, the interviewees might have been influenced by comments made by other workers or interviews they had listened to.

The first three field trips were taken as follows:

- Trip 1: Outjo, 1–5 February 2010
- Trip 2: Otjiwarongo, 10–12 February 2010
- Trip 3: Grootfontein and Tsumeb, 23–27 March 2010

A second set of trips were taken as follows:

- Trip 4: Tsumeb and Otavi, 19–24 April 2010
- Trip 5: Khorixas, and then Outjo and Kamanjab, 12–16 July 2010
- Trip 6: Gobabis, 19–23 July 2010

The producers/farm owners were interviewed using semi-structured interview techniques. The interviews were recorded and later transcribed. This method was used due to the sensitivity of the topic (discussed in more detail in 1.3.4 below). It was felt that the formal question-and-answer method, using mainly closed questions and ticking applicable values in boxes – which is a very basic questionnaire tool – would not do justice to the complexity of the topic. However, due to the lack of interviewers in trips 4–6, questionnaires were used as a tool instead.

Interview with producer, 26 March 2010

Interviews with charcoal workers, 3 February 2010

1.3.2 Selection of interviewees

Due to the charcoal workers' conditions of employment in the bush on private farms, the researchers were obliged to approach them mainly via the farm owners/producers. In the selection of producers for interviews, the current NCPA Chairman's advice was

taken regarding potential subjects in Otjiwarongo and Outjo, and the advice of the former NPCA Chairman in respect of subjects in Grootfontein and Tsumeb. In the Otavi area, the Chairperson of the Otavi Charcoal Producers' Association was consulted. Some guidance was also offered by the Chairman of the Tsumeb Charcoal Producers' Association.

A diverse spectrum of individuals active in the charcoal business was interviewed. These subjects included established as well as emerging farmers (both Affirmative Action Loan Scheme and resettled farmers), producers who owned farms, producers who paid other farm owners a fee in order to produce charcoal on their farms or farm camps, male and female producers (although most of the producers were male), producers who engaged in other livelihood strategies and producers who concentrated solely on charcoal.

On the farms visited, the aim was to interview three to five workers where possible. At some farms, up to 15 workers were interviewed. At some farms, interviews with workers were not possible as the producers claimed that they were "too deep in the bush" and not accessible. Thus, the selection of subjects was driven by their availability and experience within the charcoal industry ("Who are the most experienced workers here?").

In all, 4 processors, 37 producers (see Annexure 2.1) and 205 workers were interviewed, while a total of 41 farms were visited.

1.3.3 Representativeness of the sample

It is estimated that there are almost 4,800 charcoal workers nationwide. Given that the 37 producers interviewed engaged about 1,993 workers producing charcoal, this meant that the study represented about 40% of the producers where charcoal workers were productive. However, some producers took on several hundred workers, while others had less than a dozen.

As regards the overall number of about 230 charcoal producers, around 16% formed part of this study.

In terms of charcoal workers, our sample of 4.1% was much smaller, since we interviewed only 205 of the 4,800 workers. However, it has to be borne in mind that the study covered the producers who 'subcontracted' (and rarely *employed*) more than 40% of all the charcoal workers in Namibia. Although there are significant differences between the working conditions prevailing at different producers' production locations, the working conditions at any one particular site do not vary for the workers on that site. Thus, the variables relating to working conditions are more representative than the variables pertaining to personal characteristics (language, education, etc.). However, with regard to personal characteristics, there are indications that the variations among charcoal workers are not very big.

Since the researchers were able to conduct interviews in different districts, it may be possible to draw a fairly representative picture of regional variation as well.

1.3.4 Discussion of the research methods and data

Labour relations within the charcoal industry are a very controversial topic. Workers, producers, processors, the Government – all have different opinions. The same holds true for their interest in the sustainable use of the environment.

On the one hand, producers are aware of the Government's position and its critical attitude towards many producers' way of dealing with workers. When the researchers introduced themselves as staff of the Legal Assistance Centre (LAC), it was sometimes met with some suspicion. Being introduced via the NCPA Chairperson often helped to overcome this initial distrust. The motivation for the study was explained to the subjects as being an attempt to learn about all the different perspectives in order to paint a comprehensive picture. The researchers' interest in the producers' perspectives was stressed, and that the interviews were an opportunity to express their opinions. Many producers tended to shift the blame for all the problems within the industry onto the workers. On the other hand, the charcoal workers often considered the interviews as an opportunity to voice their complaints about their 'bosses': they blamed the producers for all the difficulties they experienced.

Listening to one side alone would clearly have provided a different picture from the one the study obtained by listening to all sides. Furthermore, and not surprisingly, there was a tendency for the two parties (i.e. producers and workers) to use the study for their own purposes. This had to be borne in mind when analysing the data.

All the recorded interviews were transcribed and analysed according to the relevant issues. For the purpose of this study, it was sufficient to enter the questionnaires in an Excel spreadsheet. Multivariate data analysis using SPSS would have gone beyond the scope of the study. The results are presented in Chapter 4.

1.4 Structure of the report

Chapter 2 describes the legal framework for the charcoal industry. **Chapter 3** provides a background of the industry and the negotiations between different stakeholders on labour issues. It also covers certain environmental aspects as well as the concept of Forest Stewardship Council certification[7] and a brief description of the production process. **Chapter 4** focuses on labour issues and presents the results of the interviews. Firstly, the profiles of the workers and producers in the sample are provided. Secondly, the identified critical issues are dealt with by presenting the data and, where applicable, analysing the differing points of view. Critical issues that arose were wages/livelihoods, the regularity and time periods of payments, accommodation, expenses, shops and credit, health issues, protective clothing and equipment, the involvement of women and children, contracts and mobility. In **Chapter 5,** the conclusion of the study is presented, while **Chapter 6** offers recommendations to the various stakeholders in the charcoal industry.

[7] The Forest Stewardship Council (FSC) is an international non-profit, multi-stakeholder organisation to promote responsible management of the world's forests. Its main tools for achieving this are standard-setting, independent certification, and labelling of forest products. This is meant to offer customers around the world the ability to choose products from socially and environmentally responsible forestry.

2 THE LEGISLATIVE FRAMEWORK

Burning wood to produce charcoal, 21 July 2010

It is beyond the scope of this report to present in detail all the legislation that relates to the charcoal industry. However, an attempt has been made to describe the most relevant national laws regarding labour issues and the environment in some detail before listing the applicable international Conventions and Treaties.

2.1 Labour

2.1.1 Labour Act, 2007 (No. 11 of 2007)

As mentioned above, most producers regard men (and women) who are harvesting invader bush or other biomass for the making of charcoal as independent contractors and not as their employees. Where such harvesters are indeed treated as independent contractors and not as employees, the provisions of the Labour Act in respect of employees and the duties of employers do not apply because the Act does not contain provisions relating to contractors. Thus, the producers circumvent the provisions of the Act.

However, efforts from Government and NAFWU to have workers covered by the Labour Act are under way (see 3.2 below). If they are successful in their bid, it may have a major impact on the industry as a whole.

Section 70 of the Labour Act provides for collective agreements. Such agreements are written contracts outlining the terms and conditions of employment or any other matter of mutual interest between the members of any registered trade union that is party to the agreement and the members of any registered employers' organisation that is party to the agreement.[8] For example, the security industry as well as the construction industry have signed written agreements with exemptions regarding the terms and conditions of employment as defined by the Labour Act.

It is currently common practice for some producers to fine charcoal workers who are caught for cutting the wrong trees or for other misconduct. Notably, as regards deductions and other acts concerning remuneration, section 12 of the Act states the following:

> **(1) An employer must not make any deduction from an employee's remuneration unless –**
> **(a) the deduction is required or permitted in terms of a court order, …**
> **(i) required or permitted under any collective agreement or in terms of any arbitration award; …**
> **(5) An employer must not –**
> **(a) levy a fine on an employee unless it is authorised by statute or a collective agreement. …**

2.1.2 Collective minimum wage agreement for employees in the agricultural sector

On 3 March 2009, at MAWF's request, the Agricultural Employers' Association (AEA), the Namibian National Farmers' Union (NNFU) and NAFWU met to review the minimum wage for the agricultural sector. The agreed minimum wage determines the wage for the entry level of agricultural employees in Namibia, including agricultural employees on contract and domestic workers on commercial farms, game and hunting farms, and lodges. The new agreement determined the minimum cash wage for the entry level of agricultural employees at N$2.87 per hour. Should the employer provide the employee with rations or food, the value thereof should not exceed the equivalent of 35% of the employee's basic wage, which is calculated on the minimum cash wage plus the value of the rations or food. Other options are available should the employer not provide rations or food in order to –

- **permit the employee to keep livestock and to cultivate land, and**
- **provide such employee with an additional allowance of at least N$300 per month in lieu of rations.**

The agreement was signed on 5 March 2009 and came into force on 1 June 2009.[9]

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[8] Section 59 of the Labour Act states the following:

> **(1) Subject to any provision of this Act to the contrary, a registered trade union has the right –**
> **(g) in the case of a trade union recognised as an exclusive bargaining agent in terms of section 64 of this Act (representing the majority of employees in an appropriate bargaining unit), to negotiate the terms of, and enter into, a collective agreement with an employer or a registered employers' organisation.**

NAWFU has not registered the majority of charcoal workers as members, however, and the NCPA does not accept NAFWU as its exclusive bargaining unit. Nonetheless, the NCPA is willing to enter into a collective agreement with NAFWU.

[9] NAU newsletter, 16 March 2009; available at http://www.agrinamibia.com.na/index.php?module=News&func=display&sid=22; last accessed 4 August 2010.

2.1.3 Employee's Compensation Amendment Act, 1995 (No. 5 of 1995)[10]

The Employee's Compensation Amendment Act calls for the establishment of an Accident Fund and an Accident Pension Fund, and provides the framework for insuring employees against loss of earnings resulting from employment injuries and diseases contracted in the course of employment. Basic contingencies covered include temporary and permanent disablement, sickness and death resulting from employment-related incidents.

The definitions of *employer* and *employee* under the Act[11] are comprehensive. These definitions do not allow any exemptions for contractors, unlike the definition of *employee* in the Labour Act. Presumably, the provisions of the Employee's Compensation Amendment Act include workers as employees who are contracted by the producer for processing charcoal, on the one hand, and producers as employers on the other (for a discussion see Chapter 5).

Section 96 of the Act prescribes the following:

> **Every employer carrying on business in Namibia shall, within fourteen days of the date of commencement of this Act, or of the date on which he or she commences business, whichever date is the later, in the prescribed manner furnish the Commission with the prescribed particulars of his or her business, and thereafter, within the period fixed by the Commission, with such additional particulars as the Commission may from time to time require. Such particulars shall be furnished separately in respect of each business conducted by the employer. Every such employer shall forthwith inform the Commission of any change in the particulars so furnished.**

In order to claim compensation under the Act, in terms of section 50 the employer has to give written notice of the accident in a prescribed manner as soon as possible after its occurrence. Section 97 dictates that the employer is also obliged to –

> **... in respect of all his or her employees keep records of wages paid, time worked and payment made for piece-work and overtime, and of any other particulars prescribed and he or she shall at all reasonable times produce such records or a microfilm or other microform reproduction thereof, on demand, to any person authorized under section 17 for his or her inspection.**

Section 76 of the Act also provides for an employee to be transported to hospital in the event of an accident:

> **In the event of an accident happening to an employee which necessitates his or her removal to a hospital or his or her residence, the employer of such employee shall forthwith provide the necessary conveyance therefor.**

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[10] Formerly the Workmen's Compensation Act, 1941 (No. 30 of 1941).
[11] Sections 3 and 5, respectively.

2.1.4 Social Security Act, 1994 (No. 34 of 1994)

The Social Security Act was promulgated to provide for –

- the establishment, constitution, powers, duties and functions of the Social Security Commission
- the payment of maternity leave benefits, sick leave benefits and death benefits to employees and to establish for that purpose the maternity leave, sick leave and death benefits funds
- the payment of medical benefits to employees and to establish for that purpose the national medical benefits fund
- the payment of pension benefits to retired employees and to establish for that purpose the national pension fund
- the funding of training schemes for disadvantaged, unemployed persons and to establish for that purpose the development fund, and
- incidental matters.

2.1.5 Health and Safety Regulations, 1997

The Regulations determine that an employer should investigate and identify the hazards attached to any work performed by any of his or her employees, including the risks or potential risks to the health and safety of employees associated with such work, or to the health and safety of any other person who may be affected by such work. The employer is also obliged to assess the hazards and risks identified, and to eliminate such hazards by employing appropriate measures, including the removal of the hazards, or the changing of the organisation or schedules of the work performed. Otherwise, an employer is required to rely on the use of personal protective equipment by employees. An employer is also compelled by these Regulations to provide every employee in his or her employ with training in the tasks that he or she is to perform.

An employer who has entered into an agreement with a contractor to perform certain tasks is obliged to ensure that such contractor complies with the Regulations. All safety equipment and facilities are to be supplied to the contractor free of charge.

Regulation 201(4) deals with thermal requirements. If the time-weighted average according to the wet bulb globe temperature (WBGT) index, determined over a period of one hour, exceeds 30 in the environment in which an employee works, the employer is obliged, at intervals not exceeding one year, to have an employee certified as fit to work in such environment by the appointed occupational health practitioner. In turn, the employee, if found fit to work in such environment, is obliged to be issued with a certificate to that effect by the appointed occupational health practitioner. The employer also has to ensure that any such employee is acclimatised to the working environment in question before he or she is required or permitted to work in such environment by virtue of what is termed a *pre-employment medical examination*. Furthermore, employers are obliged to provide sufficient cool and clean potable water, and to train their employees in the precautions to be taken to avoid acute heat strain or heatstroke.

With regard to manual lifting, an employer has to ensure, as far as is reasonably practicable, that suitable mechanical equipment is provided and used for the handling of heavy and bulky loads.

Regulation 205(1) provides that no employee is required to lift, carry or move loads exceeding 50 kg for a male employee and 25 kg for a female employee. However, a male employee may agree to undertake the manual handling of heavier loads if he is examined by a registered and qualified occupational health practitioner and considered to be fit for heavy manual handling, and he has received specific training in the manual lifting of loads.[12]

2.2 Environment

2.2.1 Constitutional requirements and Vision 2030 guidelines for environmental protection in Namibia

In Namibia, environmental protection is enshrined in the Constitution. Moreover, sustainable development is a cornerstone of Vision 2030. Since 1990, the Namibian Government has adopted a number of policies that promote sustainable development. Most of these have their roots in the following two Articles of the Constitution:

Article 91(c), which defines the functions of the Ombudsman, specifies that this includes –

> **… the duty to investigate complaints concerning the over-utilization of living natural resources, the irrational exploitation of non-renewable resources, the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia … .**

Bags of coal, 3 February 2010

[12] See Regulation 205(4).

Article 95(l) commits the State to actively promoting and maintaining the welfare of the people by adopting policies aimed at the –

> **... maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future; ...**

Thus, the State is committed to actively promoting and maintaining the environmental welfare of every Namibian by formulating and institutionalising policies that will realise the above-mentioned sustainable development objectives. The integration of the principles of sustainable development into national policies in Namibia is supported by various key international, regional and national legal instruments and policy documents. The national and international instruments are outlined below.

2.2.2 Environmental Assessment Policy for Sustainable Development and Environmental Conservation, 1995

Namibia recognises that –[13]

> **... the principle of achieving and maintaining sustainable development must underpin all policies, programmes and projects undertaken within Namibia. In particular, the wise utilisation of the country's natural resources, together with the responsible management of the biophysical environment, must be for the benefit of both present and future generations.**

Policy directives therefore place a high priority on –

- maintaining ecosystems and related ecological processes, in particular those important for water supply, food production, health, tourism, and sustainable development
- observing the principle of optimum sustainable yield in the exploitation of living natural resources and ecosystems, and the wise utilisation of non-renewable resources
- maintaining representative examples of natural habitats, and
- maintaining maximum biological diversity by ensuring the survival and promoting the conservation in their natural habitat of all species of fauna and flora, in particular those which are endemic, threatened, endangered, and of high economic, cultural, educational, scientific and conservation interest.

The Environmental Assessment Policy also provides the guidelines for environmental assessment procedures.

2.2.3 Environmental Management Act, 2007 (No. 7 of 2007)

Once implemented, the Environmental Management Act will replace the Environmental Assessment Policy. In giving effect to Articles 91(c) and 95(l) of the Namibian Constitution, the Act has formulated general principles for sound management of the environment and

[13] Environmental Assessment Policy for Sustainable Development and Environmental Conservation (MET 1995:5).

natural resources in an integrated manner. This resulted in an Environmental Management Act being approved by Parliament in October 2007. It was published on 27 December 2007 as the Environmental Management Act, 2007 (No. 7 of 2007), in *Government Gazette* No. 3966.

Part 1 of the Environmental Management Act describes the various rights and obligations that pertain to citizens and the Government alike, including providing for an environment that does not pose threats to human health, proper protection of the environment, broadened *locus standi* (capacity to appear in court as a party) on the part of individuals and communities, and reasonable access to information regarding the state of the environment.

Part 2 of the Act sets out 12 principles of environmental management, as follows:

(a) renewable resources must be used on a sustainable basis for the benefit of present and future generations;
(b) community involvement in natural resources management and the sharing of benefits arising from the use of the resources must be promoted and facilitated;
(c) the participation of all interested and affected parties must be promoted and decisions must take into account the interest, needs and values of interested and affected parties;
(d) equitable access to environmental resources must be promoted and the functional integrity of ecological systems must be taken into account to ensure the sustainability of the systems and to prevent harmful effects;
(e) assessments must be undertaken for activities which may have a significant effects [sic!] on the environment or the use of natural resources;
(f) sustainable development must be promoted in all aspects relating to the environment;
(g) Namibia's cultural and natural heritage, including its biological diversity, must be protected and respected for the benefit of present and future generations;
(h) the option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term, must be adopted to reduce the generation of waste and polluting substances at source;
(i) the reduction, re-use and recycling of waste must be promoted;
(j) a person who causes damage to the environment must pay the costs associated with rehabilitation of damage and to human health caused by pollution, including costs for measures as are reasonably required to be implemented to prevent further environmental damage;
(k) where there is sufficient evidence which establishes that there are threats of serious or irreversible damage to the environment, lack of full scientific certainty may not be used as a reason for postponing cost-effective measures to prevent environmental degradation; and
(l) damage to the environment must be prevented and activities which cause such damage must be reduced, limited or controlled.

Once the Environmental Management Act is implemented, every farm owner/producer might need to apply for an Environmental Clearance Certificate under section 27. The issuing of such a certificate entails that the farm owner/producer is obliged to conduct an environmental impact assessment (EIA) prior to commencing with charcoal production on his/her land because such production includes the clearance of forest areas, deforestation and afforestation, and may fall under Atmospheric Pollution Prevention Ordinance No. 11 of 1976. The decision to require an EIA or not rests with the Directorate of Environmental

Affairs in the Ministry of Environment and Tourism (MET), and the norm in this regard is that each case is handled on merit. In principle, if a charcoal project is to be located in an environment that is not particularly sensitive (a typical bush-encroached farm), an EIA will probably not be needed. However, if many sensitive species (e.g. protected trees) or habitats (e.g. wetlands or archaeological sites) are situated on the applicant's farm, then a site-specific EIA is likely to be required.[14]

2.2.4 The Forest Act, 2001 (No. 12 of 2001), as amended by Act No. 13 of 2005

The Forest Act, 2001, as amended, is highly relevant to any bush-clearing activities. As stated in section 10.1, the Act is aimed at the sustainable management of forests:

> **The purpose for which forest resources are managed and developed, … in Namibia is to conserve soil and water resources, to maintain biological diversity and to use forest produce in a way which is compatible with the forest's primary role as the protector and enhancer of the natural environment.**

Section 16 of the Act states the following:

> **(1) The Director may enter into a forest management agreement with any person or institution for the creation of a forest management area on land which does not form part of a classified forest, but which land is owned by that person or institution or can be legally used by that person or institution.**
> **(2) A forest management agreement referred to in subsection (1) –**
> **(a) shall include a management plan for the forest management area and that plan may provide for the planting of trees, the management of natural forest and the harvesting practices which are to be followed in the forest management area.**

Section 22 requires anybody who needs to harvest, transport, and export or market forest resources to be in possession of a valid permit issued by the nearest Forestry office.

The requirements for the various forestry permits are as follows:[15]

- *Harvesting Permit:* If the applicant, i.e. the charcoal producer, is not the legal owner of the farm, written permission is required from the rightful owner. In theory, permits will only be issued if an inspection is done on the farm to investigate whether there are the right and sufficient resources available to grant such quantities as those applied for by the applicant. The permit can be obtained for N$15 and is valid for a maximum period of six months, according to the MAWF website. Another inspection should take place after such period expires.
- *Marketing Permit*: The same information is required as for the Harvesting Permit, except that the applicant needs to indicate the marketplaces and the origin of the charcoal to be marketed. A Marketing Permit will only be issued once the applicant submits a Harvesting Permit. This applies in particular to those who harvest in one region and wish to market in another. The permit can be obtained for N$15 and is valid for six months.

[14] See also NPCS (2010:11).
[15] http://www.mawf.gov.na/Services/forestry.html, last accessed 24 August 2010.

- *Transport Commercial Permit:* This permit is required for the sale of charcoal. The important information needed here is the registration number of the vehicle or the name of the transport agent. The fee payable is also N$15, but the permit is only valid for a maximum of 14 days.
- *Export Commercial Permit:* This permit enables the successful applicant to export charcoal as a forest product to other countries. The permit is only valid for seven days. The fee for the permit is based on the weight of the produce, and is calculated as follows: N$5 per (metric) ton for the first 10 t, and N$2 per ton for any additional tons.
- *Export for Own Use Permit:* This permit is also valid for seven days and costs N$5.

Section 23(1) of the Act requires the approval of the DF if a person wants to clear the vegetation on more than 15 ha on any piece of land or several pieces of land in the same locality which has predominantly woody vegetation, or cut or remove more than 500 m^3 of forest produce from any piece of land in a period of one year. Section 23(2) states that the Director may require a person seeking the authority set out under section 23(1) to prepare an EIA before permission will be granted.

However, due to a lack of capacity, in practice, the inspections required in respect of permits issued for farms where charcoal is produced are not carried out regularly. Thus, there are no proper controls as regards what size or species of tree is being cut down.

A number of trees are protected under Namibian legislation (see Annexure 7). Notably, *Colophospermum mopane*, although protected, is also classified as an encroacher (see Annexure 5).[16]

Charcoal worker chopping a tree, 20 April 2010

[16] See also NPCS (2010:51).

2.2.5 Nature Conservation Ordinance 4 of 1975 and Amendments

This Ordinance covers game parks and nature reserves; the hunting and protection of wild animals (including game birds), problem animals and fish; and the protection of indigenous plants.

Section 73 of the Ordinance provides that no person is permitted to pick a protected plant without a permit issued by the Minister of Environment and Tourism. *Pick* is defined in section 1 as including damaging or destroying:

> **(1) No person other than the lawful holder of a permit granted by the Minister shall at any time pick or transport any protected plant: Provided that –**
> **(a) the owner [of] a nursery licensed under section 75 may without such permit pick and transport any protected plant cultivated on the premises of such nursery and cause such protected plant to be picked and transported;**
> **(b) the owner or lessee of land may on that land without such permit pick the flower of a protected plant for use as a decoration in his home;**
> **(c) the owner or lessee of land may without such permit pick a protected plant on that portion of such land –**
> **(i) which he needs for cultivated lands, the erection of a building, the construction of a road or airfield or any other development which necessitates the removal of vegetation; or**
> **(ii) on which such protected plant has been specially cultivated.**

2.2.6 Atmospheric Pollution Prevention Ordinance 11 of 1976

This Ordinance lists various processes to regulate and control noxious or offensive gases. It also deals with atmospheric pollution by smoke. The application of the Ordinance was extended to cover the entire territory of Namibia by the Health Act, 1988 (No. 21 of 1988), as a controlled area for the purposes of this Ordinance.

2.2.7 Draft Bush Encroachment Management Policy

This draft Bush Encroachment Management Policy is based closely on De Klerk's *Encroacher bush in Namibia*.[17] The draft policy was supposed to be submitted to Cabinet in 2005 already. The document was prepared under the auspices of the MET, where it was internally approved. Thereafter, the DF moved to the MAWF, which appears to have derailed the policy's submission to Cabinet.

Although the draft policy has no legal force, it deals vigorously with the problem of bush encroachment and describes the link between bush encroachment and desertification. It goes on to analyse the existing law and policy, and identifies major problem areas. In making these findings, the draft policy recognises that –[18]

[17] De Klerk (2004).
[18] MET (2004:10).

Charcoal production causes atmospheric pollution by smoke, 30 March 2010

> **[a]lthough the abovementioned policies, particularly in the National Agricultural Policy, regard bush encroachment as a serious problem, neither this Policy nor others, nor any available legislation, provide any guidelines on how to deal with these issues. In addition a number of gaps exist in the policies and legislation under discussion.**

In its recommendations, the draft policy[19] also identifies the need to create a socio-economic environment that provides incentives for farmers to improve the productivity of their pastures by controlling intruder bush and preventing reinfestation in an environmentally sustainable way. At the same time, improved pasture management practices need to be encouraged to minimise the risks of future bush encroachment.

Furthermore, the draft policy calls for the formulation and implementation of a policy to manage savannas on both freehold and non-freehold land as a priority. However, the document does not recommend that separate legislation be introduced to deal with bush encroachment and its thinning. Instead, as a prerequisite, the provisions of the Forest Act and the Soil Conservation Act, 1969 (No. 76 of 1969) should be amended to incorporate issues pertaining to encroached savannas that fall outside the definition of *forest* and *classified forest*.[20] In its present form, the provisions of the Forest Act apply to classified forests only. The roles and responsibilities of Ministries that are directly involved in resolving the bush encroachment problem need to be defined in policy as well as in these two Acts. This will ensure the directions that management of all savannas in Namibia will take are much clearer.

Among other species, the draft policy identifies *Colophospermum mopane* as a "problem species".

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19 (ibid.:10).
20 (ibid.:11).

2.3 International Conventions and Treaties

Article 144 of the Namibian Constitution deals with international law. It provides that –

> **Unless otherwise provided by this Constitution or Act of Parliament, the general rules of public international law and international agreements binding upon Namibia under this Constitution shall form part of the law of Namibia.**

Namibia is a party to the international Conventions and/or Treaties below, among others. It should be remembered that the principles contained in these agreements are a major driver for domestic legislation and policy formulation.

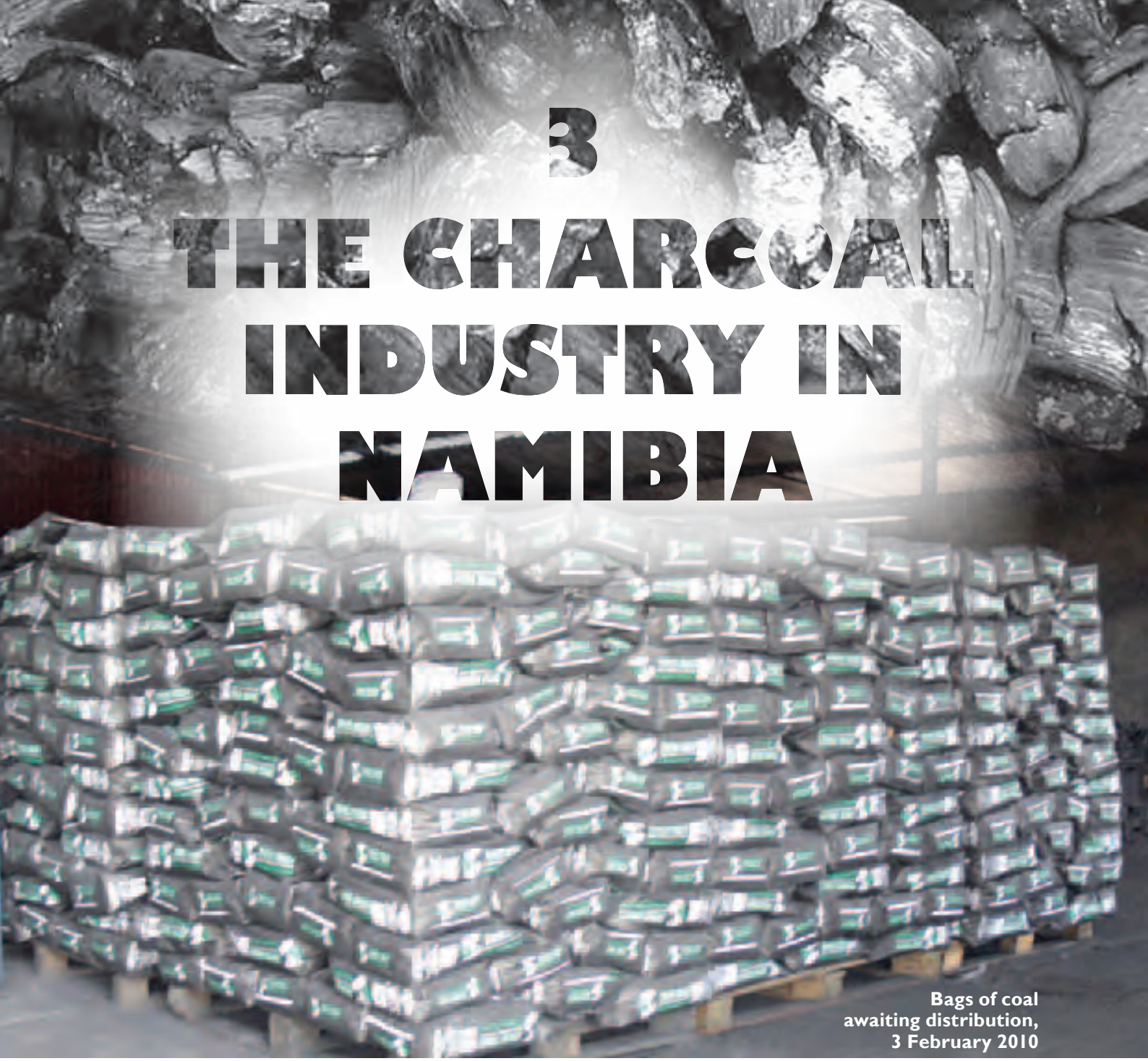
2.3.1 ILO Conventions

- C29 Forced Labour Convention, 1930 (ratified 15 November 2000)
- C87 Freedom of Association and Protection of the Right to Organise Convention, 1948 (ratified 3 January 1995)
- C98 Right to Organise and Collective Bargaining Convention, 1949 (ratified 3 January 1995)
- C100 Equal Remuneration Convention, 1951 (ratified 6 April 2010)
- C105 Abolition of Forced Labour Convention, 1957 (ratified 15 November 2000)
- C111 Discrimination (Employment and Occupation) Convention, 1958 (ratified 13 November 2001)
- C138 Minimum Age Convention, 1973 (ratified 15 November 2000)
- C182 Worst Forms of Child Labour Convention, 1999 (ratified 15 November 2000)

2.3.2 Other relevant Conventions and Protocols

- Convention on Biological Diversity, 1992 (ratified 16 May 1997)
- Vienna Convention for the Protection of the Ozone Layer, 1985 (acceded to 20 September 1993)
- United Nations Framework Convention on Climate Change, 1992 (ratified 16 May 1995)
- Kyoto Protocol on the Framework Convention on Climate Change, 1998 (ratified 4 September 2003)
- United Nations Convention to Combat Desertification (ratified 16 May 1997)
- The Southern African Development Community (SADC) Protocol on Forestry (adopted in 2002)

3 THE CHARCOAL INDUSTRY IN NAMIBIA



Bags of coal awaiting distribution, 3 February 2010

3.1 Regional distribution, and numbers of producers, processors and cutters

The Districts of Grootfontein and Otjiwarongo in the Otjozondjupa Region, Outjo in the Kunene Region and Tsumeb in the Oshikoto Region are the main areas of charcoal production in Namibia. Recently, farmers in the Gobabis District of the Omaheke Region started producing charcoal as well.

The researchers found it impossible to obtain precise data about the numbers of producers or workers in the charcoal industry. This is partly due to the seasonality of production and to fluctuations in the market. However, it is also an indication of the informality of the sector.

The NCPA, which is affiliated to the NAU, acts as the producers' mouthpiece. However, it has no record of official membership. Even so, its membership lists would still not cover all charcoal producers. The former NCPA Chairman[21] estimated that there are currently about 230 charcoal producers in Namibia. About half of these belong to previously disadvantaged population groups, and the trend is rising. As mentioned, he estimated that there were about 4,800 charcoal workers in the country at the time of the study.

Precise data on charcoal harvesting permits from the DF in the various regions, which could indicate how many charcoal producers are active, are also difficult to obtain. Some offices have compiled lists on computer, while others only have handwritten lists or no accessible data at all. Moreover, it seems that some small-scale producers do not have permits.

According to the permits issued by the DF in Grootfontein, there were 104 producers in Grootfontein, Otavi and Tsumeb in 2009. A handwritten list from the DF in Otjiwarongo, which covered Kamanjab, Khorixas, Otjiwarongo and Outjo, indicated 52 producers, but no time frame was given. However, as the Otjiwarongo–Outjo area is the one where the most charcoal production activities take place, one could assume that there are many more active producers there. In August 2009, the DF in Gobabis listed a total of nine charcoal producers.

As mentioned above, the charcoal sector is one of the least formalised sectors in Namibia with regard to labour and environmental issues. The individual producers differ considerably in dealing with their workers/subcontractors. Among the issues which vary from producer to producer are:

- rates per ton/monthly salaries
- regularity and sequence of payment
- provision of contracts
- provision of protective clothing
- type of accommodation offered
- credit allowed for the purchase of food items
- workers' registration with the Social Security Commission or under the Employee's Compensation Amendment Act, and
- control exercised in respect of trees cut down.

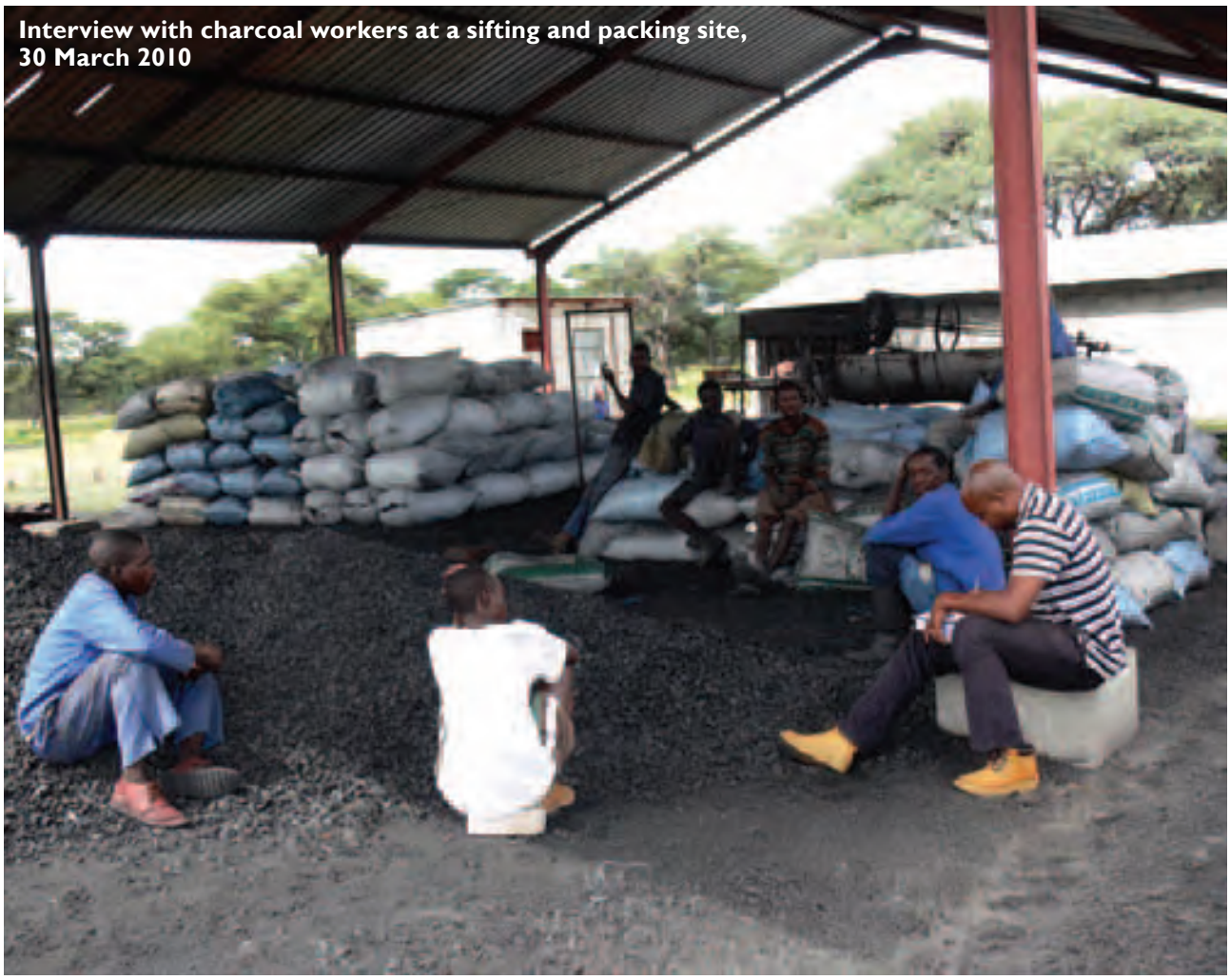
Contributing to the informality of the sector is its relative novelty in Namibia. The industry began around Independence in 1990, but has grown steadily only since 2000.

Another factor might be that the workers are among the country's poorest. Most of them are from the Kavango and Ohangwena Regions. Also, they currently lack a strong voice to present their interests, although NAFWU is trying to act on their behalf.

A third and related factor is the size and dispersed nature of the industry. Individual producers operate on their own terms, often on their own land.

A further contributing factor is the fluctuation in the charcoal market. As charcoal is mainly used in the leisure industry, the European market is highly dependent on weather. European companies buy charcoal and stockpile it mainly from December to April. If the weather is good, they buy again soon; with bad weather, they wait until the next season to purchase.

[21] Pers. comm. W Enslin, 22 March 2010.



Interview with charcoal workers at a sifting and packing site, 30 March 2010

The South African market shows more or less the same tendency. The marketing and production seasons are not synchronic: the top production season is May–October, while the main marketing season to South Africa and Europe is November–April. During the rainy season in Namibia (December–March), the collection of charcoal from the fields by tractor is difficult. Also, there is often no equipment by means of which to dry the charcoal – which is a precondition for selling it. Production decreases by 60% during the rainy season[22] and no stockpiles are available for marketing from January to March. The charcoal shortage leads to a price increase, which leads to increased production, overproduction (because the market season is over), and, eventually, the dismissal of workers. Some suggest that overproduction should be stockpiled in order to exploit the peak demand season.

The NCPA, presenting the interests of the producers, is negotiating with the Government and NAFWU to find a collective agreement. This agreement would clearly contribute to a formalisation of the sector. However, many producers are not members of the NCPA. It remains to be seen, therefore, how such an agreement would be implemented and how non-compliance would be sanctioned. As will become clear in the recommendations later in this report, the proposed agreement would no doubt be a precondition to an improvement of the situation within the industry, but it would not solve all the labour issues – let alone the environmental challenges.

[22] Pers. comm. W Enslin, 23 March 2010.

3.2 Tripartite negotiations

Already in 2003, a fact-finding mission to charcoal areas was undertaken by the MLSW. Difficulties with regard to labour relations, ranging from the unfair treatment of workers, summary dismissals, and disregard of human rights, were reported. Consequently, in August 2005, the former Deputy Minister of Labour and Social Welfare, Petrus Ilonga, led an investigation into the charcoal industry with a special focus on labour conditions. In total, 17 farms were visited by a delegation of 15 people, comprising regional councillors and representatives of the MLSW, the Ministry of Trade and Industry, the MHSSR, the Namibian Police and the NCPA. Their report mainly highlighted the shortcomings on the farms they had visited. These covered issues such as protective clothing, accommodation, sanitation, rates per ton, and rations. Although some insight into the charcoal industry was offered in the report, the information collected was not contextualised, and it was provided rather randomly instead of systematically.[23] Moreover, the information included no quantitative data.

The former Deputy Minister availed the report to the Minister, who submitted it to Cabinet. As a result, at its first session in 2007, Cabinet adopted 15 directives that aimed to improve the workers' fate and to compel producers to comply with the Labour Act. Government preferred the workers to be regular employees and not contracted to the producers, but it still left the second contractual option open (see Annexure 1 for the Cabinet Directives). Nonetheless, these decisions were taken before the new Labour Act – which no longer makes provision for casual employees or contractors – came into force.

A second visit by a Government delegation to 21 farms took place in 2008. The aim was to investigate whether there had been any improvement in charcoal workers' conditions of employment. It has to be noted that the producers were informed beforehand about the visits and thus had time to quickly improve some of the critical conditions (e.g. the provision of protective clothing). At some farms, improvement had taken place, at others no improvement has been observed. The information provided lacked a systematic approach as in the first report.

Since 2007, tripartite negotiations have been taking place between the MLSW, the NCPA and NAFWU in order to reach an agreement with regard to the Cabinet directives. The initial efforts for this were undertaken by Mr W Enslin, the former Chairman of the NCPA.[24]

Critical issues in the agreement over the years have been –

- the status of subcontractor/employee
- the rate per ton (including a rations allowance)
- the timing and amount of paid leave
- the medical examination (as required by law) and the cost thereof, and
- the provision of protective clothes.

The NCPA has written several letters and reports to clarify their position and the difficulties they face, such as unstable markets, following the MLSW's first visit to the farms in 2005.

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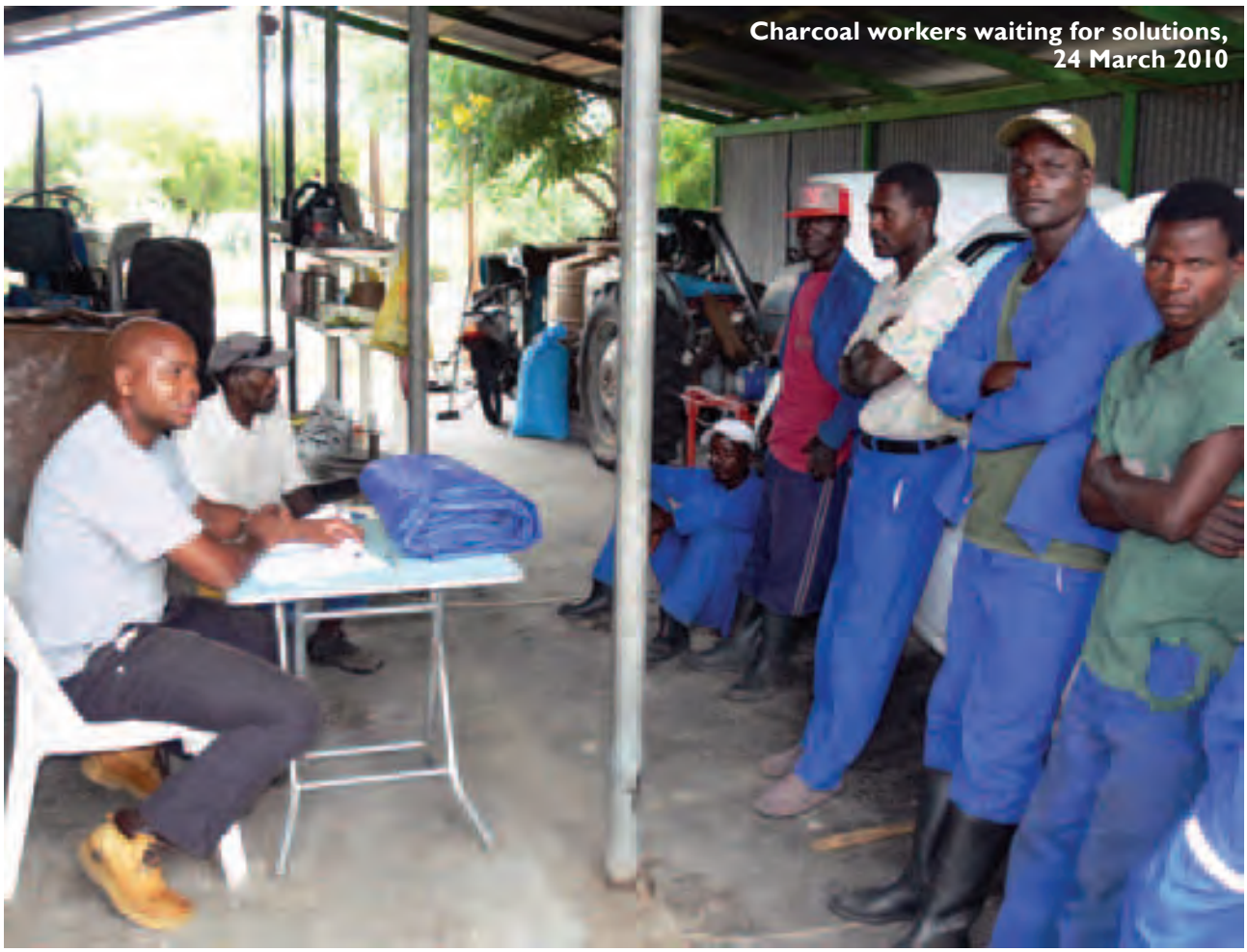
[23] The same variables were not used for every farm.

[24] According to him (pers. comm. 19 October 2010), it was very difficult to organise and hold meetings with NAFWU: they had cancelled arrangements at very short notice several times. This might also be an indication that charcoal workers are not high on NAFWU's agenda.


Charcoal workers waiting for solutions, 24 March 2010

More recently, the NCPA agreed that the producer–worker relationship had to be formalised as an employer–employee relationship under the Labour Act, provided that a collective agreement was reached.[25] The latest version of the NCPA's suggestions as regards an agreement which would stipulate exemptions from the Labour Act is dated June 2010, and includes the following obligations and/or conditions of service:

- That NAFWU helps charcoal workers obtain identity documents.
- That NAFWU informs the burners about the collective agreement.
- That NAFWU educates the workers on the Labour Act and the bush harvesting guidelines.
- That workers are remunerated by way of the minimum price per ton according to the area concerned. In Grootfontein, Otavi and Tsumeb, this would be 38% of the selling price for unsifted charcoal, and 40% of that price for sifted charcoal. In the Otjiwarongo and Outjo areas, a minimum price of 35% for unsifted and 37% for sifted charcoal would apply. The difference in the two rates is due to the vegetation and the weight of the wood in the areas in question.
- That the minimum price already includes payment for rations and overtime.
- That paid leave is granted by way of 3% of the selling price. The worker should be entitled to determine when s/he wants such leave, either when providing charcoal or after 11 months of working.

[25] Notably, the AEA, which is affiliated to the NAU, has to sign the contract on behalf of the NPCA since the latter is not a registered employers' association.

- That the producer/employer provides each charcoal worker with the required preproduction and periodic medical examinations at least once a year, and at the producer's own cost.[26]
- That the producer provides material for traditional housing as well as water and sanitation facilities.
- That the workers are provided with a pair of gumboots and an overall annually, as well as a mask every month after the worker has paid a deposit to the producer for these items in the first year of the worker's appointment.
- That the producer sends some charcoal workers to attend a first aid course, and provides a first aid kit and first aid services at the production site.
- That charcoal workers are permitted to determine their production hours and days, and the time and duration of mealtimes.
- That charcoal workers are not entitled to grazing or cropping rights.
- That workers would have to pay for their own equipment. Kilns would be provided upon a deposit of N$50, refundable after the kiln had been returned.

It remains to be seen how the negotiations will develop and what NAFWU's response is to the latest proposals. As will become obvious below, the reality on the ground is far from the conditions proposed in the draft agreement. Nonetheless, it will also become apparent that the agreement – if properly implemented – would still not cover all the current problems in the industry with regard to labour relations.

Despite the NCPA's willingness to make compromises in order to reach an agreement for the benefit of all parties concerned, many charcoal producers are not members of the NCPA, do not attend NCPA meetings, are difficult to reach and, thus, are difficult to influence as regards labour and/or environmental issues.

3.3 Environmental issues

To date, Namibia has lacked comprehensive studies on the impact of the present small-scale charcoal production on the environment. It also goes beyond the scope of this study to provide such a comprehensive environmental assessment. However, various aspects in the charcoal production process affect the environment in ways that should cause concern, and would urgently deserve further investigation. Honsbein et al. (2009) also state that the environmental impact of the charcoal industry is significant as there are no emission controls or safety procedures in place.

3.3.1 Harvesting

Although charcoal production is celebrated as a method of fighting bush encroachment, charcoal producers publicly admit that there is no proper control with regard to the trees

[26] The usual pre-employment medical examination costs amount to N$190, while the annual or periodic medical examination amounts to N$170. *Government Gazette* No. 4459 of 15 April 2010 reduced these costs to N$15 and N$8, respectively, for self-employed State patients, including people involved in the charcoal industry, as follows: "Occupational medical examination for self[-]employed state patients, including people involved in the charcoal industry: This service includes consultation, treatment and special investigations between 07h30 and 16h30 on a week day, excluding a public holiday: Class A: N.A. [Not applicable]. Class B1: N$15, Class B2: N$8." This reduction would obviously not be valid where an employee–employer relationship is entered into as described by the Labour Act as charcoal workers would no longer be regarded as self-employed.

being chopped down.[27] In a report to the MSLW, they also stated the following (on statements made beforehand by NAFWU):[28]

> **Producers believe that charcoal burners do not add to the value of the farm but that they rather increase bush encroachment as they wrongfully chop the big trees and resist to chop the smaller intruder bush. When producers try to force them to chop the intruder bush they run off to other producers that allow them to chop the good trees. Producers have to pay up to 43% to convince the burners to chop the correct bush.**

3.3.2 Combustion

Studies from other countries indicate that the environmental effects of small-scale charcoal production are considerable.[29] The conversion of wood carbon to charcoal carbon is highly inefficient, resulting in products of incomplete combustion (PICs) entering the atmosphere. PICs have a negative impact on both health and the environment. They may cause respiratory infections and, in the long term, cancer. They also have a higher global warming potential relative to CO_2. Although they vary according to the type of kiln used, the average emission factors are fairly significant.[30] This results in charcoal fuel cycles being among the most greenhouse-gas-intensive in the world,[31] even if the wood is harvested renewably.[32]

3.3.3 Bush fires

Fire has traditionally been used as a management tool in hunting, pasture management and the improvement of soil fertility, but uncontrolled and frequent bush fires constitute a regional hazard comparable to drought and floods, with the potential to constrain sustainable development.

Although it was claimed that workers were advised to follow certain safety regulations, such as cleaning the area around the kiln or not packing coal that had not yet cooled down completely, the situation does not seem to be under proper control: fires due to charcoal production constantly occur, destroying large tracts of land and grazing. In 2000, more than 500,000 ha of land was burnt, most of it due to charcoal production. One fire alone consumed an estimated 60,000 ha, and affected at least 14 farms.[33]

All in all, forest and bush fires destroy 3–7 million ha of land annually in Namibia, with most damage done during the dry winter months, according to MAWF officials.[34] It was

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27 *Independent Mirror*, 26 June 2009.

28 NCPA's report-back to the Minister of Labour and Social Welfare on their special meeting held on 27 January 2009; see also workshop feedback on the Combating Bush Encroachment for Namibia's Development (CBEND) Project (NPCS 2010:64).

29 See e.g. Smith et al. (1998); Pennise (2003).

30 See e.g. Smith et al. (1998).

31 (ibid.:3).

32 A farmer in the Outjo area has been raising his concerns about charcoal production on neighbouring farms since 2000 (pers. comm. 10 August 2010). He said that the charcoal dust had affected his own and his wife's health, had impacted on the tourist business on the farm, and was causing air pollution in the whole area (Ugab River). Recently, community members in Otavi complained about a charcoal company established in 2009 causing severe air pollution in the area (Nghidengwa 2010).

33 *Windhoek Observer*, 23 September 2000.

34 Chagutah (2006); Shigwedha (2006); http://www.sardc.net/imercsa/zambezi/Zambezi/eng/documents/v7n1.pdf, last accessed 24 August 2010.


Charcoal production, 20 April 2010

impossible to make out how much damage had been caused by negligence due to charcoal production or other factors. It was also not possible to tell how many fires had been started deliberately.

The fact that the Environmental Management Act has not yet been implemented certainly adds to the environmental challenges resulting from charcoal production in Namibia.

3.4 The Forest Stewardship Council certificate

Forest Stewardship Council (FSC) certification has been emphasised since 1997 as a prerequisite for marketing Namibian charcoal in Europe. In theory, the conditions for certification include principles for the sustainable use of resources as well as social conditions. The criteria for certification, which are above the national standard, are –

- compliance with all applicable laws and international treaties
- demonstrated and uncontested, clearly defined, long-term land tenure and use rights
- recognition and respect of indigenous peoples' rights
- maintenance or enhancement of the long-term social and economic well-being of forest workers and local communities, and respect for worker's rights in compliance with International Labour Organisation Conventions

- equitable use and sharing of benefits derived from the forest
- reduction of environmental impact in respect of logging activities, and maintenance of the ecological functions and integrity of the forest
- an appropriate and continuously updated management plan
- appropriate monitoring and assessment activities to determine the condition of the forest, management activities, and the social and environmental impacts, and
- maintenance of High Conservation Value Forests (HCVFs) defined as environmental and social values that are considered to be of outstanding significance or critical importance.

In addition to compliance with all of the above, plantations are required to contribute towards reducing the pressure on natural forests, and towards promoting the restoration and conservation of natural forests.[35]

Some producers that applied were awarded FSC certification. The certification is monitored by the certifying agency. Some of the factors contributing towards producers' resistance when it comes to applying for such certification is that the South African market does not require it, the requirements are above the usual standards, and the costs and the administration involved are high.[36]

FSC certification, with its application of higher standards than the norm and improved monitoring of charcoal production, could certainly reduce the negative environmental effect of such production and improve the situation of the charcoal workers.

However, when one compares the FCS evaluation reports[37] on certain farms to the current study's observation on those farms, the accuracy of the evaluation reports becomes questionable.[38]

3.5 The production process

As mentioned above, the farm owner has to obtain a number of permits from the DF before commencing with the production of charcoal. In theory, MAWF is obliged to conduct regular inspections on charcoal-producing commercial farms to avoid deforestation. However, the lack of capacity and human resources within the Ministry hampers these regular inspections. There is a shortage of staff and vehicles, so inspections usually occur at random, with a focus on new producers.[39] However, some producers make charcoal without any harvesting permit at all.

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35 http://www.fsc.org/pc.html; last accessed 11 August 2010.

36 IDC (2002:58).

37 Available at http://92.52.112.178/web/sa/saweb.nsf/848d689047cb466780256a6b00298980/3bb3c54f13f41b75802575450048f583?OpenDocument; last accessed 23 November 2010.

38 For one farm, the report read as follows: "There are 500 charcoal workers working on this forest management site. Training has been done regarding the harvesting of encroachment bush. Living conditions on the unit are acceptable with access to clean running water. Ablution facilities are available. There is a first aid kit kept at the farm house. Workers are issued with protective clothing. Transport is regularly at their disposal for education and medical treatment. The nearest town where there is a clinic is at Outjo 5 kilometers [sic] away." (available at http://92.52.112.178/web/sa/saweb.nsf/848d689047cb466780256a6b00298980/3bb3c54f13f41b75802575450048f583?OpenDocument; last accessed 23 November 2010). According to the observations in the current study, the living and working conditions were dire, and workers lived in plastic houses. They were not issued with protective clothing – but it was offered for sale to them. Furthermore, the producer produced charcoal on about 15 farms. Thus, the generalisation of the quoted findings is problematic. Additionally, although minimum wages were quoted for the three farms, it remains unclear how the wages were calculated since the workers were paid per ton.

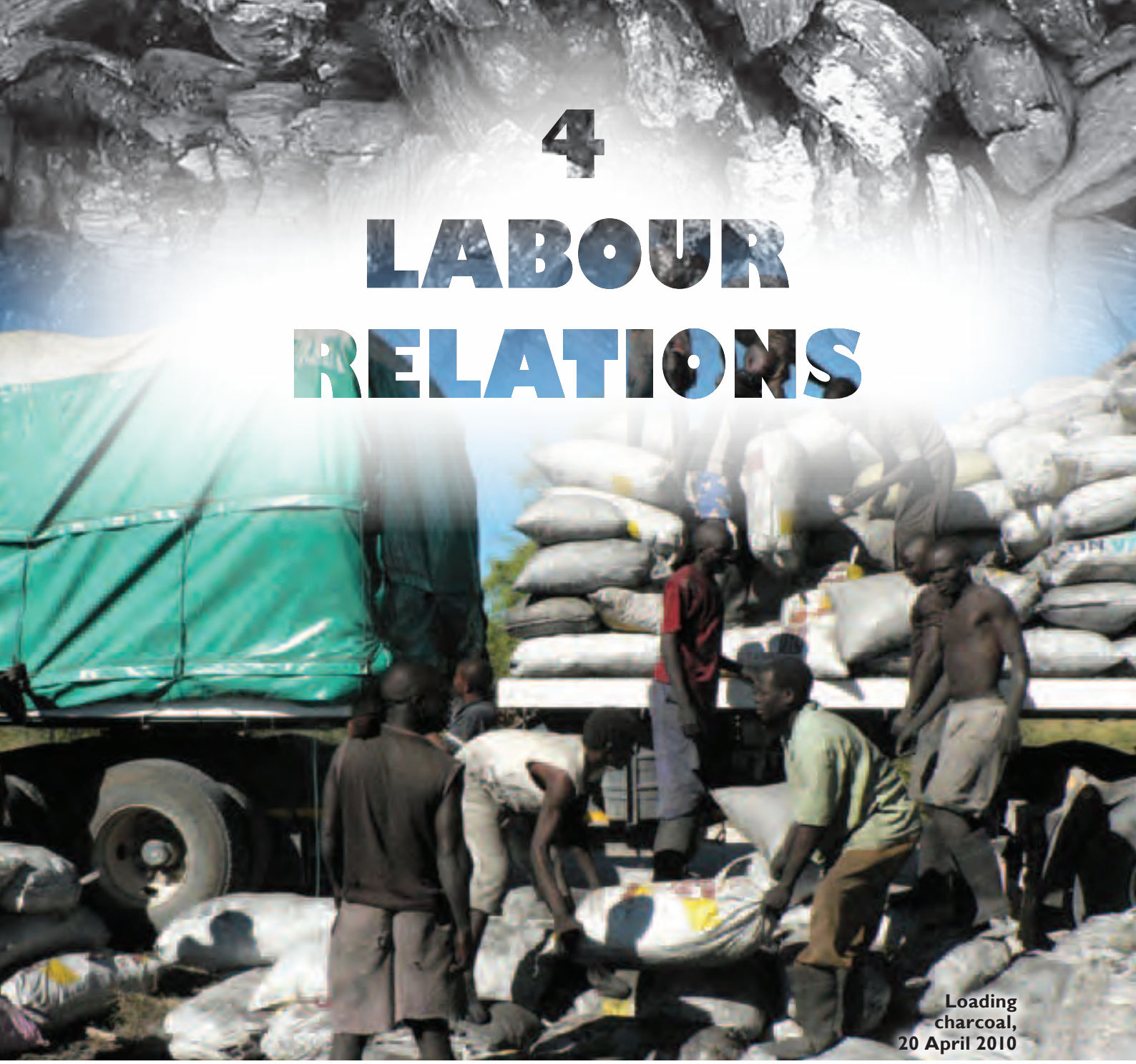
39 Pers. comm., staff members of the DF in Gobabis, Grootfontein and Otjiwarongo, 16 September 2010.

Individual workers usually work in their own areas to clear the bush there, but groups of workers are organised into teams that cover farm camps together. Between 3.5 and 4 t of wood are needed to produce 1 t of charcoal, depending on the tree species, the degree of moisture in the wood, and the skills of the charcoal burners.[40] The workers are required to cut the wood into lengths of 750–1,000 mm, and stack the logs in heaps of 3 m x 1 m x 1 m (approximately 1-t heaps). They are left to dry like that for at least two weeks before they are carbonised. Most charcoal is made in a drum kiln, which comprises two sheets of mild steel measuring 3 mm x 2,440 mm x 1,220 mm. The top/lid for the kiln is cut from another half a sheet, and a square measuring 600 mm x 600 mm is cut out of it. The diameter of the kiln is about 1,200 mm. The kilns are usually brought to the heaps of dry wood. The open base is placed on a level patch and some holes are made under the rim for air to enter and circulate. The kiln is filled with wood through the top opening, and it is lit to start a fire. The lid should be placed over the top opening in a half-open position, as the wood should smoke at all times (an open fire would burn the wood to ash). The lid needs to be adjusted at times to allow the fire to smoulder. As the wood is carbonised, it collapses into a pile of coals in the bottom of the kiln. More wood can be fed into the kiln throughout the day. When the smoke changes from dirty white to blue-grey, the lid needs to be closed and sealed with mud or clay. By the next morning, the charcoal should be cold and the procedure begins afresh at the next heap of wood. The average charcoal output is about 2 t per kiln a month. Workers are often provided with three kilns, but this is flexible. When the charcoal has cooled down it is bagged.[41] The workers' spouses often help with packing and sewing the bags. The bags are then transported to where the truck will be loaded. The weighing of each worker's charcoal takes place either before or after its transport to the loading site. Some producers pay the charcoal workers for loading the truck, either in cash or in kind. The quantity of charcoal varies greatly from producer to producer, as do the frequency and regularity with which the producer orders a truck for charcoal to be loaded. Mostly, the charcoal quality is checked by the buyer and the producer is paid afterwards. The producer then pays his/her workers, which usually happens a week after the truck has been loaded.

Namibian charcoal enters the consumer market under more than 15 different brand names, of which only a few are registered in Namibia, e.g. Jumbo, Etosha and Savannah. The rest enters the market through South African trademarks. Thus, agents/distributors play an important role in marketing Namibian charcoal. However, the reliability of these agents/distributors, especially with regard to payment, is sometimes questionable. Some exporters reported that they had incurred big losses due to agents/distributors who disappeared after a few consignments had been sent to them. Usually, the agent/distributor pays to transport the charcoal from Namibia to a distribution point in South Africa.[42]

[40] Pers. comm. W Enslin, 19 October 2010.
[41] CSA (2008:3–5).
[42] IDC (2002:47).

4 LABOUR RELATIONS



Loading charcoal, 20 April 2010

4.1 Profiles of producers and cutters in the sample

4.1.1 Producers

In total, 37 producers were interviewed. Eleven of these belonged to the previously disadvantaged population group, and 26 to the previously advantaged.

Of the previously advantaged producers, 21 owned at least one farm, while 3 were relatives of farm owners and 2 were only renting one or more farms.

Previously advantaged farmer in charcoal production, 24 March 2010

Previously disadvantaged farmer in charcoal production, 25 October 2006

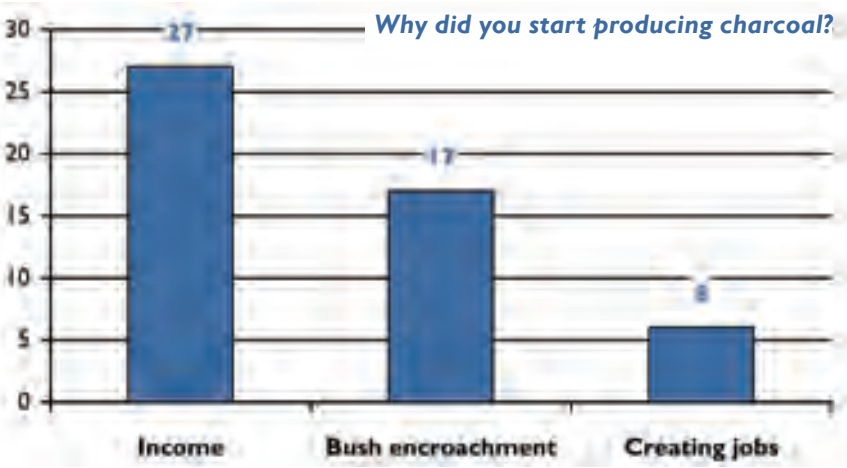
Of the previously disadvantaged farmers, four were resettlement farmers, while the others were either Affirmative Action Loan Scheme (AALS) farmers or had acquired their farms before Independence.

The vast majority of producers started producing charcoal after 2000. Only six started before that. The earliest production began with one producer who started in 1989.

On average, the previously advantaged farmers started production in 2001, while most of the emerging farmers started in 2007.

(a) Motivation

FIGURE 1: **Motivation to start producing charcoal**



While combating bush encroachment is an argument often mentioned in publications about charcoal production, it is not the main motivation expressed to become involved in the charcoal production industry. Most of the producers gave their reasons as being the direct financial advantages derived: additional income, a regular cash flow, etc. Only a few produced charcoal on their own farms in order to fight bush encroachment and thereby increase the carrying capacity of their land for livestock. The latter is an indirect financial reason. For emerging farmers, charcoal production seems a viable option for getting quick cash to invest in the farming business. Some of the farmers saw their own charcoal production as a contribution towards fighting unemployment and poverty.

(b) Diversity of economic strategies

Only three of the interviewed producers survived solely from charcoal production, although two of them were close relatives of cattle farmers. Most of the producers also had at least a few head of cattle and/or sheep and goats. Seven of the 30 producers had an additional source of income outside the agricultural sector. These included income generated from construction, property, a supermarket and a truck.

However, the percentage that charcoal constituted in respect of their total income differed immensely among the producers. Six estimated that around 5–10% of their income was derived from charcoal. The average (out of 29 responses) was just above 50%. A total of 17 producers derived more than 50% of their overall income by way of charcoal production. Only three or four of the producers did not own cattle.

Cattle farming by a charcoal producer, 4 February 2010

(c) Production

Only a few producers burned the wood at a central location, while individual workers were engaged for chopping and burning. In most cases, each charcoal worker produced his own charcoal, from chopping the tree or bush to packing and loading.

While most producers paid their choppers/burners a fixed rate per ton of charcoal produced, five producers had a different method of payment. One producer paid the choppers N$35 per ton of wood chopped, while the burners were paid N$29 per day. Another producer had regular employees for the charcoal production process, and he paid them the minimum wage.

Most producers paid cash to their workers. The cash payout included a deduction for any food or other items bought on credit (see 4.2.6). Very few producers – and, to the researchers' knowledge, only producers with large numbers of workers – provided pay slips which workers then took to the bank in town to get their money.

Charcoal burning at a central point, 26 March 2010

(d) Sale

The majority in the research sample sold their charcoal to the South Africa market. Producers were paid between N$700 and N$1,200 per ton for their charcoal. There are indications that previously advantaged farmers tended to sell to companies where they could get higher prices, but the research sample was not large enough to draw a final conclusion on this issue. The tendency could also be due to the quality of charcoal or their access to markets being superior in comparison with the other farmers.

Production volumes per month varied between 3 and 1,500 t. It is difficult to provide exact figures as some producers calculated their production over six weeks, while others calculated theirs per month. Furthermore, due to the seasonality of the business, the amount produced per month varies enormously throughout the year.

On average, a producer gets about N$861 per ton of charcoal. However, this is just an approximate figure, as some producers sell sifted charcoal, while others sell it unsifted. In addition, some sell at a range of companies and receive different payments accordingly. In calculating the average sale price per ton of charcoal, the amount sold to each company was taken into account.

Taking all the charcoal producers together, a charcoal producer sells about 153 t per month. However, this is a misleading figure, as only 9 producers deliver more than 100 t per month, and two producers produce more than 1,000 t per month. Taking the latter out of the average, the average amount per producer is reduced to 73 t a month.

Ten of the producers stated that they were members of the FSC.

Thirteen producers also stated that they had signed existing or lapsed contracts with some workers. However, the content of such contracts differed considerably. One contract shown to us was only meant to protect the producer: no rights of the burners/choppers were covered.

(e) Recruitment process

The recruitment of workers is effected in a variety of ways. Some producers drove to Kavango or Ohangwena to collect men who were looking for work. Others sent their foremen for this task. Mostly, however, appointments were made as a result of a reputation conveyed by word of mouth. Thus, producers asked reliable workers about people looking for work in their home villages. The producers who were known and established in the business would also get missed calls from people in Kavango looking for work. The producers usually paid for such workers' transport to the production site. Some workers approached the producer directly if they had heard, for example, that s/he paid a fairly high rate per ton. Some applicants had heard other positive things about the producer, such as workers were treated fairly or shop prices were reasonable, or they had friends or relatives working there.

(f) Number of workers

On average, each producer engaged about 55 workers. The producer with the highest number took on a total of 625 workers, followed by a producer with about 400 workers. If one took these two producers out of the calculation, the average number of workers engaged by each producer dropped to 28.

The farmers classified as previously advantaged engaged an average of 72 workers. If one excludes the two largest producers, however, the number of workers engaged on average was about 36.

On average, the previously disadvantaged farmers engaged a significantly lower number of workers, namely 11.

Other measures, such as tons sold per month, also indicated that formerly advantaged farmers were bigger (in terms of quantity of charcoal produced) and more established in the business.

The number of workers taken on during the year varied considerably due to the seasonality of the business and the fact that workers took leave to go home. During the first months of the year, which was when the interviews in the Otjiwarongo and Outjo areas were conducted, the number of workers was mostly lower. Some farmers indicated that only a third or half of the workers they were capable of engaging were actually taken on – depending, for example, on the number of kilns available and the area to be harvested

4.1.2 Charcoal workers

As mentioned above, 205 workers were interviewed working on 39 different farms and for 38 different producers.

(a) Origin and language group

The industry shows an exceptionally high level of correlation to language group and origin. The vast majority of the workers were from either Kavango or one of the four north-central regions, namely Ohangwena, Omusati, Oshana and Oshikoto: more than half of all workers in the sample (113, or 55%) were from Kavango and more than a third (72, or 35%) were from the north-central regions. This implies that the charcoal business is highly dependent on migrant workers. Additionally, four workers from the refugee camp at Osire (one from the Democratic Republic of Congo, who spoke Kiswahili, and three from Angola) and two other Angolans formed part of the sample.

As can be seen in Figure 3, the main languages spoken by the workers are *Rukavango* (116, or 57%) and *Oshiwambo* (70, or 34%). Four workers spoke *Khoekhoegowab* (Nama/Damara/Hai||om), while one person spoke *Kiswahili* as his mother tongue.

FIGURE 2: **Workers' places of origin**

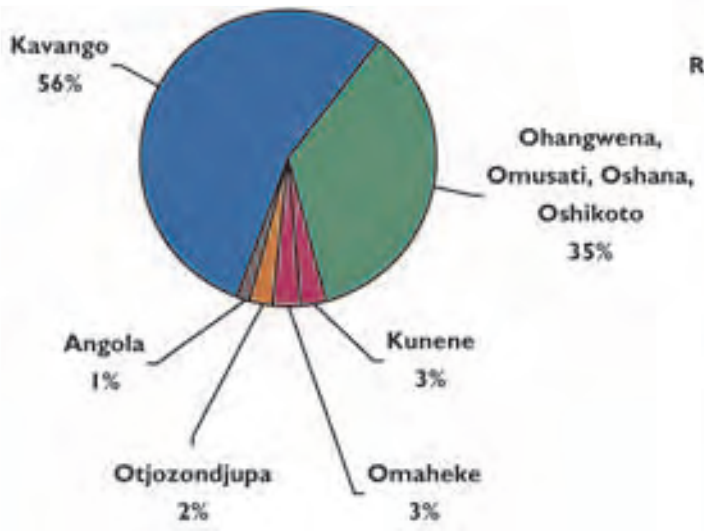
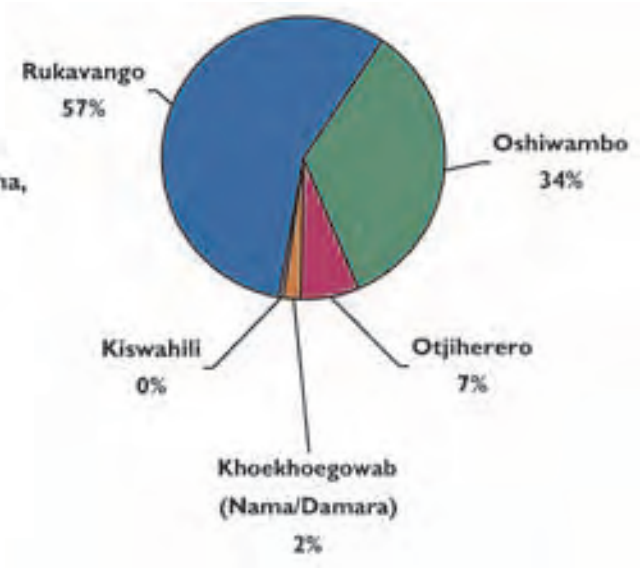


FIGURE 3: **Language groups**



One reason for this trend – at least one which the producers often stress – is perhaps that *Rukavango* and *Oshiwambo* speakers are familiar with this type of work because they practise subsistence crop farming in their regions of origin. The cultivation process involves bush clearing and burning or simply slash and burn. Another reason could be the lack of education, marginalisation, or poverty, which have led to the lack of better job opportunities elsewhere.

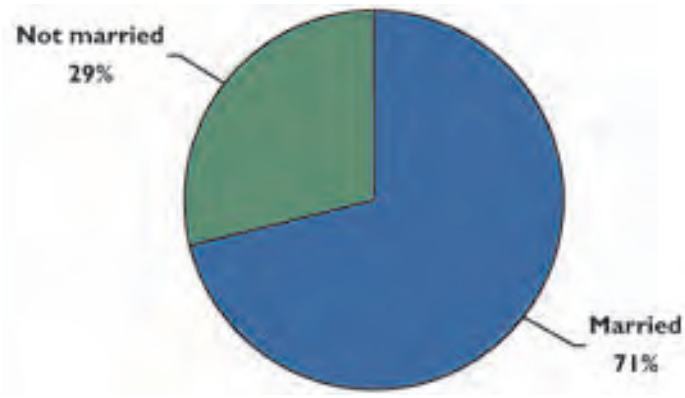
In this regard it is important to note that the *Rukavango*-speaking groups' human development index (HDI)[43] is the second lowest (just after the Khoisan) in Namibia, registering at 0.449.[44] Namibia had an overall HDI of 0.557 in 2001–2004.[45] In 2001, this group, together with the Caprivians, had the lowest life expectancy at birth, namely 43 years. The annual average adjusted per capita income was N$4,137.[46] It is also worth mentioning that the highest incidence of poverty is found in the Kavango Region, where 56.5% of the households are classified as *Poor* and 37.7% as *Severely poor*.[47] The Kavango Region is also home to the highest number of poor households in Namibia, namely 17.8%.[48]

Taking these figures into account, it becomes obvious that working in the charcoal industry might be one of the few job opportunities for the people from the Kavango Region.

(b) Marital status and dependency

It is important to clarify the definition of *marriage* used in the study. It was understood here not only in its official sense, i.e. where people have marriage certificates from courts, churches, or from Traditional Authorities, but also in a more comprehensive culturally sensitive sense, i.e. including boyfriends or girlfriends. The reason for this broad definition was to look into the issue of dependency and family support.

FIGURE 4: **Marital status of the charcoal workers interviewed**



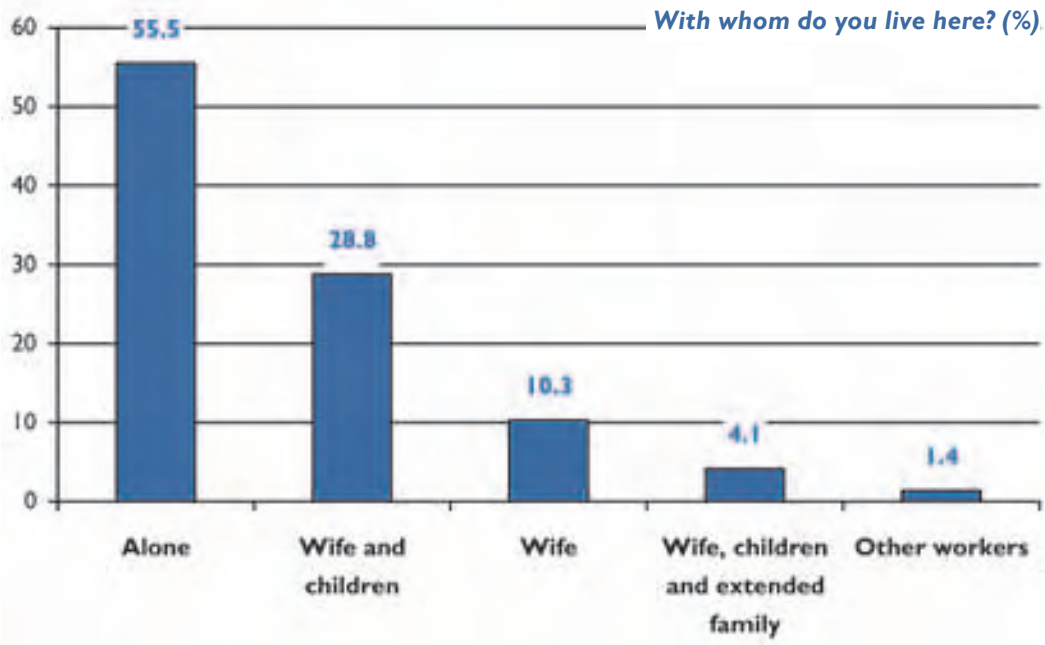
The findings show that 71% (146) of the interviewees were married, while 28% (59) stated that they were not. This might indicate that the majority of workers would, at least in theory, have to take responsibility for dependants as well.[49]

The question about household composition at the workplace illustrated the migrant tendency within the industry (see Figure 5). More than half of the married workers came alone (81, or 55.5%), 45 (28.8%) came with their wife and children, and 15 (10.3%) came with their wives. Six workers lived at the workplace with their wife, their children and their extended family, while two lived with other charcoal workers.

43 Out of a range of 1.
44 UNDP (2007:16).
45 (ibid.).
46 (ibid.:16).Namibia's per capita income was N$10,358 per annum in 2003/4 (UNDP 2007:5).
47 NPC (2008:10).
48 (ibid.:11).
49 This criterion is not exhaustive, as some of the workers might also have to take care of parents or other relatives.

According to the study data, only 17 (11.6%) of the 146 married workers brought their wives and all their children to the workplace.

FIGURE 5: **Household composition at the workplace**



Charcoal worker living on-site with his wife and child, 14 July 2010

(c) Education

The charcoal workers interviewed often cited their reason for entering the industry as being a lack of better employment due to poor education levels. This is what Bene (2003) in his study on fisheries calls the "open-access of a resource", which allows people to enter the industry while their access to other activities or resources is economically or institutionally limited or impeded.[50] In the study reported on here, the workers' average level of education was very low (see Figures 6 and 7).

Of the 205 charcoal workers interviewed, 65 (31.7%) had never received an education. A total of 43 (21%) had not gone further than Grade 4, i.e. between Grades 1 and 4. This entailed that more than 50% of the sample had not attended school beyond Grade 4. Only four (less than 2%) of charcoal workers had completed Grade 12.

FIGURE 6: **Charcoal workers' level of education (%)**

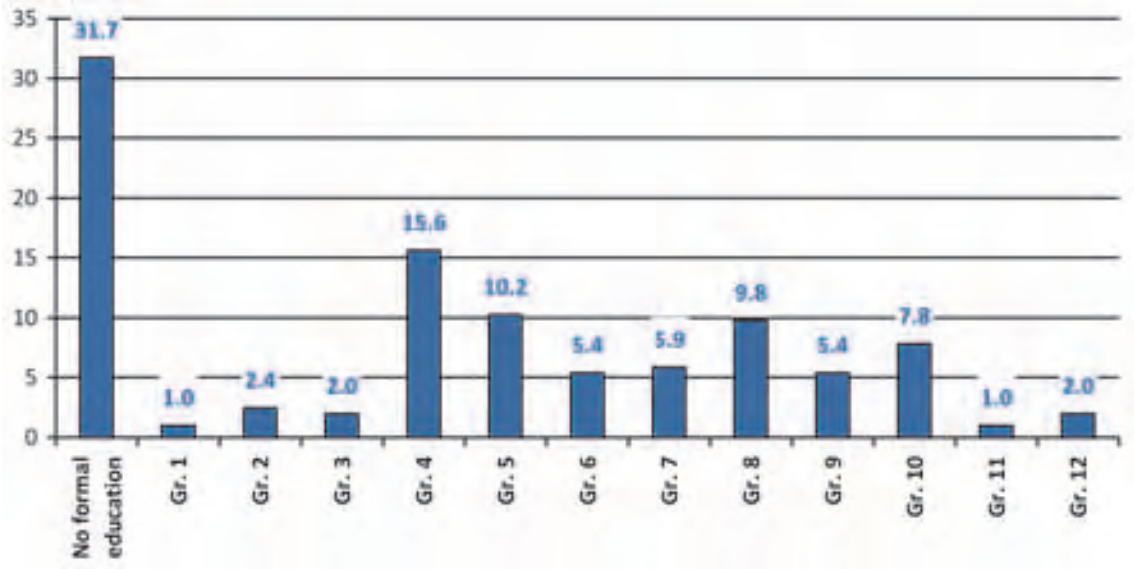
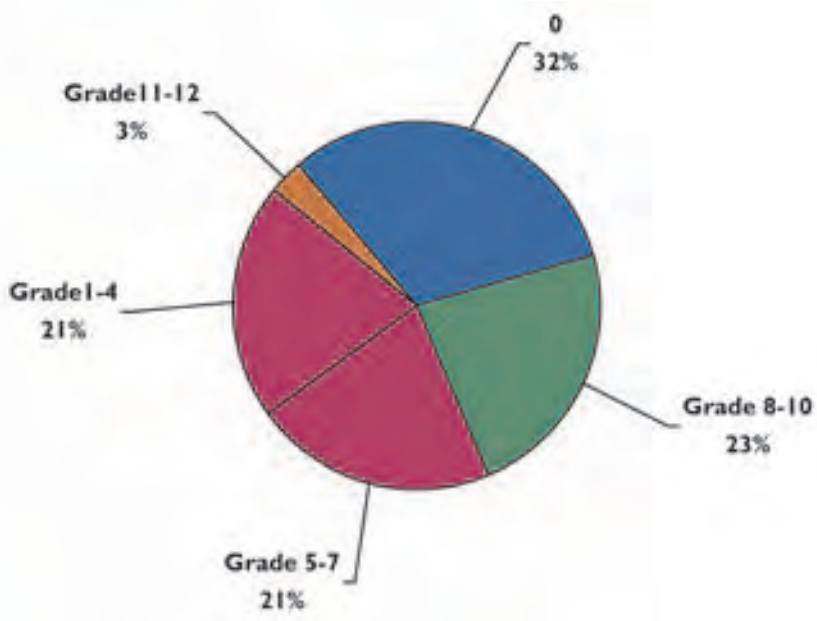


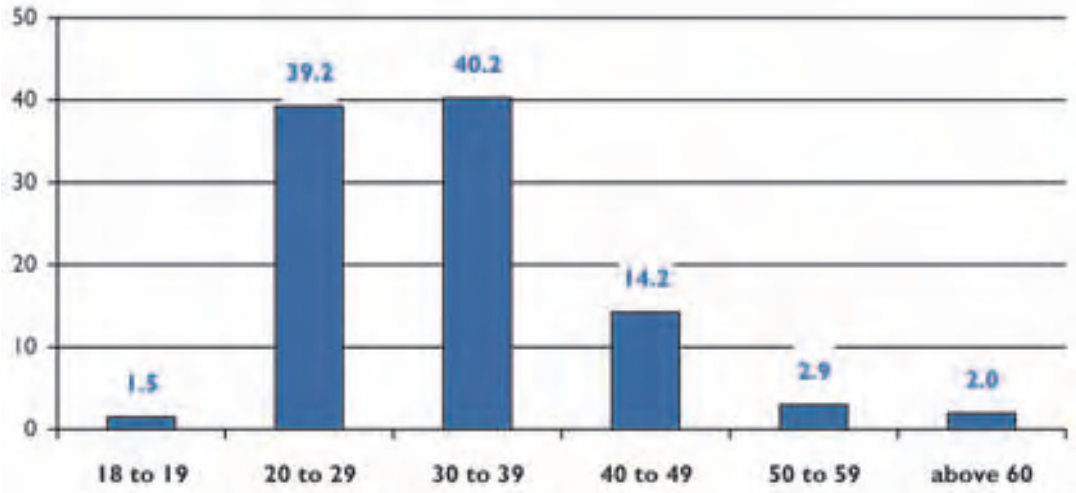
FIGURE 7: **Workers' level of education (grouped)**



[50] See also Bene (2003:7).

(d) Age

FIGURE 8: **Charcoal workers by age group (%)**

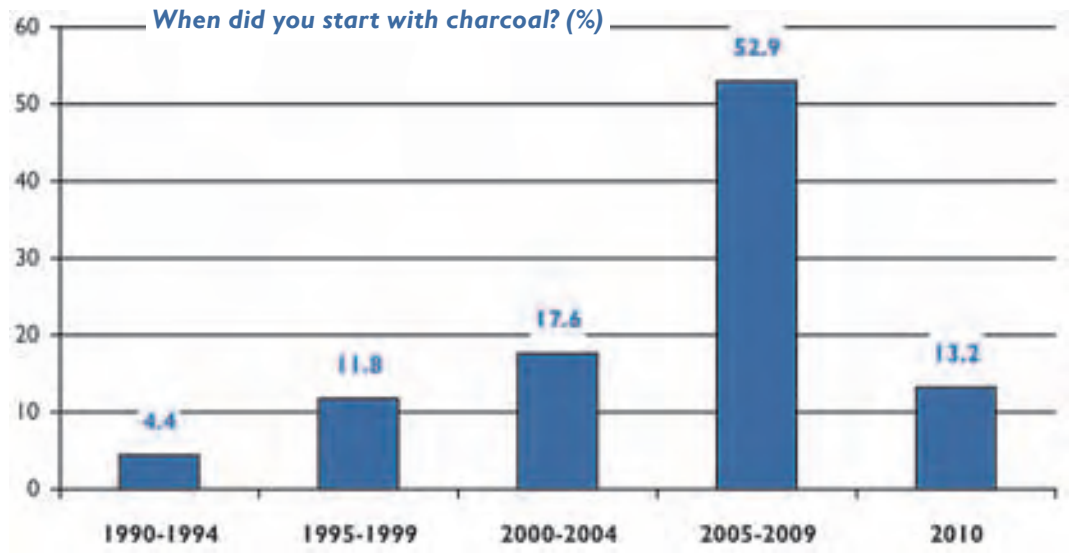


The youngest charcoal worker was 18 years old and the oldest 72. Almost 40% (80) of the workers in the sample were aged between 20 and 29; 40% (82) were aged between 30 and 39; and 14.2% (29) were aged between 50 and 59. Only four workers (2%) were older than 60, while 1.5% (3) were below the age of 20. The high percentage of young people in the industry might be due to the physical requirements (fitness, strength) for the kind of work involved. It also points to the low level of education among the youth and the related lack of better job opportunities.

(e) Length of service in the charcoal industry

The majority of the charcoal workers began work in the industry between 2005 and 2009 (see Figure 9). Nine (4.4%) workers in the sample began in the first half of the 1990s, while 27 (13.2%) began in 2010.

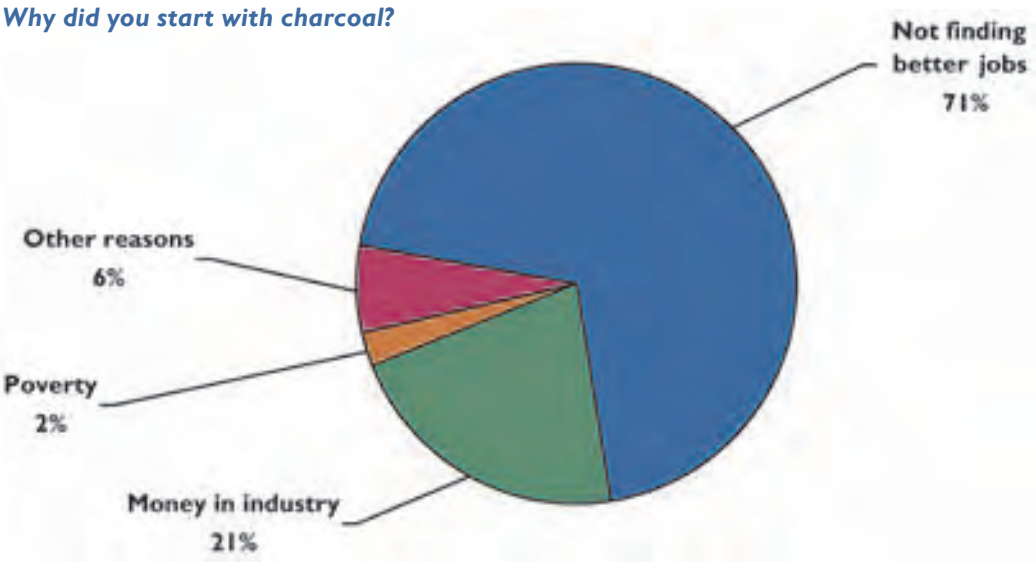
FIGURE 9: **Length of service in the charcoal industry**



(f) Motivation

Related to the level of education seem to be the reasons why workers entered the industry. About 70% (143) stated that they could not find a better job and that it had been easy to enter the charcoal industry (see Figure 10). Some of them added that they had entered the industry because of their low level of education. Some (2.4%, 5) admitted that they were in the industry simply because of poverty. Less than a quarter (22%, 44) of the interviewees believed that, at the time they entered the industry, there was the potential to make more money there than in other jobs. Two workers had been brought into the industry against their will: the producer had promised them farm work, but when they arrived at the farm they were given an axe to chop down trees.

FIGURE 10: **Motivation to work in charcoal production**



In the light of the facts presented above, it is safe to conclude that charcoal workers are among the poorest of the poor in Namibia.

4.2 Critical issues and the perspectives on them

During the study, the researchers identified various issues of concern in the charcoal industry as regards labour. These are grouped in the following categories and discussed separately below:

- Wages and livelihoods
- Frequency and timing of payment
- Expenses
- Accommodation
- Working hours
- Shops and credit
- Health issues
- Protective clothing and equipment
- Involvement of women and children
- Contracts and Social Security
- Mobility

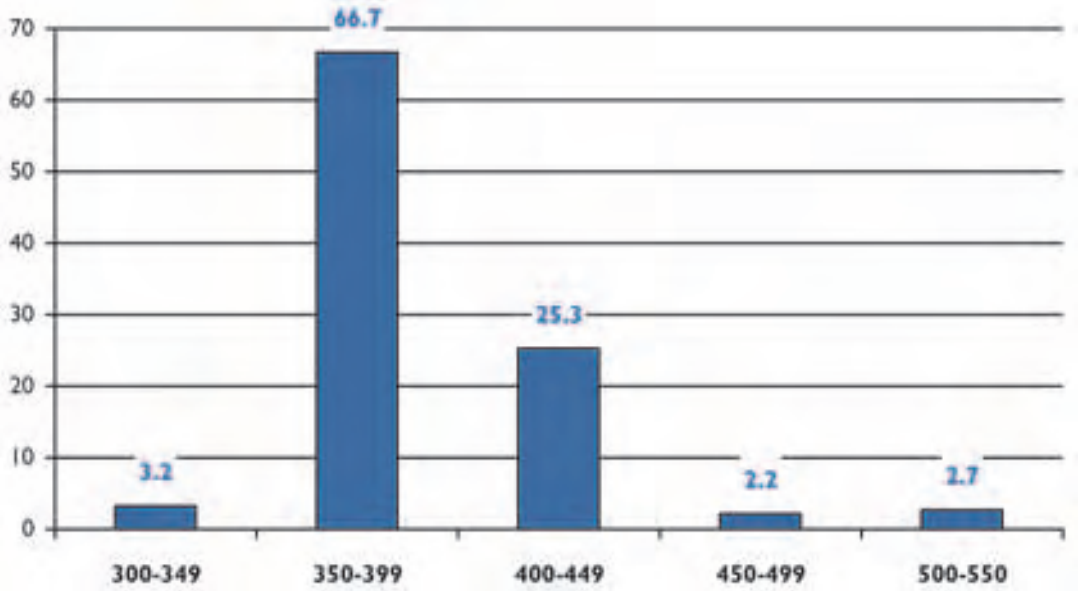
The findings with regard to these issues are described below, after which the discussion sheds light on the various stakeholders' perspectives, namely those of Government, the producers and the workers.

4.2.1 Wages and livelihoods

Most (186, or 91%) of the charcoal workers are paid per ton of unsifted or sifted charcoal (see Figure 11). There are also wood choppers who sell their wood to producers, while other workers burn the wood to produce the charcoal. Two women on a resettlement farm in Tsumeb who packed and sewed bags were paid a monthly salary, but the majority of the producers did not pay the women helping their husbands.

On average, the charcoal workers in the study sample were paid at the rate of N$379 per ton. There was a N$4 difference when this rate was compared with the average rate (N$382) calculated from the producer data. This discrepancy can be accounted for because the researchers did not always interview the same number of workers per producer. For further calculations, an average rate per ton of N$380 was assumed for the study. Figure 11 shows the rate paid to workers per ton of charcoal. Figure 11 is based on the 187 charcoal workers who sold charcoal to producers, and excludes those who sold wood to producers and those who did other work like burning or clearing.

FIGURE 11: **Rates per ton in N$ (percentage of workers)**



Other findings regarding payments are as follows:

- Eleven charcoal choppers were paid N$35 per ton of wood.
- One charcoal chopper was paid N$1,200 per hectare of invader bush cleared.
- Another charcoal worker burning wood at a central location was paid N$1,000 per month.
- Two women who helped with packing bags, sewing and cleaning were paid N$850 each per month.
- At some farms, women who assisted their husbands with gathering wood and packing and sewing bags were paid N$20 a day.
- Another burner said he was paid N$30 per day.

- One charcoal worker did not answer the researchers' questions, while another respondent's information was not clear.
- Some producers paid each worker between N$20 and N$40 or in kind for loading charcoal bags onto trucks.

A diligent worker could cut enough wood to produce up to 2–3 t of charcoal per week, whereas other cutters produced less than 0.5 t in the same period. The average amount of tons produced in a month is almost 5 t, according to the estimations of the charcoal workers themselves.

Thus, the average monthly salary for the 186 workers in the study sample who were paid per ton of charcoal amounted to N$1,900 (N$380 per ton x 5 t), which is higher than the minimum wage income for farm workers.

However, the given amount should rather be considered as an approximate value and not as an exact figure for two reasons. Firstly, it is difficult for workers to estimate their average amount of tons per month, given the high seasonal variability and/or short-term engagement. Secondly, the amount of charcoal they produce is not always weighted on a monthly basis, as they are often paid at the same time the trucks are loaded – which is rarely once a month.

It also has to be noted that these calculations differ from those done by the NPCA. The latter states that a charcoal burner can produce 3 t in the Grootfontein area and 3.5 t in the Outjo area in about a month.[51] This reduces the average monthly salary of a charcoal worker considerably, namely to N$1,235 (N$380 per ton x 3.25 t).

According to other information gleaned from a cross-section of charcoal producers, the average contractor is capable of producing 3.6–4.0 t of charcoal per month by clearing about 1.5 ha and harvesting about 15 t of wood.[52] At an average price of N$380 per ton, the net monthly income of a contractor would be in the region of N$1,444.

Choppers who sold wood to producers[53] cut between 28 and 70 t a month, with an average of 42 t a month. Being paid N$35 per ton, they earned between N$980 and N$2,450 a month, whereas the average monthly income for the small study sample was approximately N$1,470. Thus, this group of workers also earn above the minimum wage in the agricultural sector. However, due to the small sample of workers who cut per ton, these data are not representative.

The picture from the producers' data is the same as that for the rate per ton calculated from the worker questionnaire data. The producers who paid per ton – 32 in the study sample – offered between N$300 and N$500 per ton for unsifted/sifted charcoal. Those who paid more than N$400 sometimes demanded that smaller bushes were cleared as well. For clearing per hectare, one producer paid between N$600 and N$1,200 per ton, and extra for the production of charcoal.

The average amount for those paying per ton was N$382.

It is important to stress that taking only the rate per ton into account as a measure of the income potential of a charcoal worker is misleading. Many issues are critical in determining how much money a single worker can potentially earn and/or have at his/her disposal. Some of these reasons are internal, while others are external.

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51 NCPA (2008).
52 IDC (2002:41).
53 Consider, however, that the study only has data on the workers of one producer in this respect.

The internal reasons given were –

- techniques (cutting big trees or small, etc.; method of burning)
- motivation
- number of tons workers can produce due to their own skills
- buying and consumption habits (see also paragraphs 4.2.2 and 4.2.4), and
- single or with dependants (wife, children, extended family, etc.).

The external reasons given were –

- provision of equipment (spades, wheelbarrows, etc.) for more effective work
- free or charged provision of equipment
- free or charged provision of protective clothing
- quantity and quality of trees to be cleared in the area
- number of tons workers can produce
- shop prices at the farm, and
- potential deductions (cutting the wrong trees, not complying with farm rules, etc.).

(b) Additional income

The study findings indicate that most charcoal workers depend solely on their wages for their livelihood, especially while they are on the farm rather than in their home region. During the study, the workers were asked if they had any sources of income apart from their wages. Five workers responded that they had earned ad hoc additional income by selling dried fish, fat-cakes or *mutete* (dried spinach). However, three of the five respondents no longer earned money this way. The remaining 200 workers were engaged in no other income-generating activities besides their work at the farms. The reasons they gave were as follows:

- Business was not viable because everybody was broke or indebted.
- Most producers did not allow it because it was in direct competition with the shop.
- Producers who rented farms were particularly firm about permitting other business activities because they claimed that the workers might end up selling drugs and alcohol, which most farm owners did not allow, and they would risk losing business as a result.
- The charcoal workers whose sole income was from the charcoal industry indicated that they had no interest in conducting business at the farms.

(c) Alternative food

The charcoal workers were also asked if they received any food apart from what was available at the producer's shop or what they purchased after they had been paid. There were unconfirmed reports that charcoal workers resorted to poaching when faced with food shortage at the farms. However, being an illegal activity, the issue of poaching did not come up during our interviews with the workers.

The findings show that 12 (6.2%) of the charcoal workers had alternative food sources, while 193 did not produce or obtain alternative sources of food: they depended solely on their income from charcoal to purchase food.

The 12 who had an alternative food source obtained it in different ways, as follows:

- One worker indicated that he brought food with him from his home village in Kavango such as dried fish, *mutate* and grains.
- Another worker indicated that he obtain seasonal food from the veld, but did not specify what type of food it was.
- Nine workers indicated that they had been given gardens at the farm where they worked. In their gardens they produced food such as maize, beans, tomatoes, *mutate* and other vegetables, as well as groundnuts.
- One worker only said he had alternative food, but did not specify what it was.

The study found that charcoal workers who had access to alternative sources of food were in high rainfall areas such as Oshikoto and Otjozondjupa. Although food production was seasonal, at least there was a greater likelihood that they could save money from their charcoal income because less was needed to purchase food items.

The charcoal workers who indicated that they did not have alternative sources of food gave the following reasons for this:

- The areas where they worked, such as the Outjo District, were dry and cultivation would be difficult.
- Others were not provided with a piece of land to grow crops, especially at production sites where the producer was renting.
- Some charcoal workers showed no interest in crop cultivation.

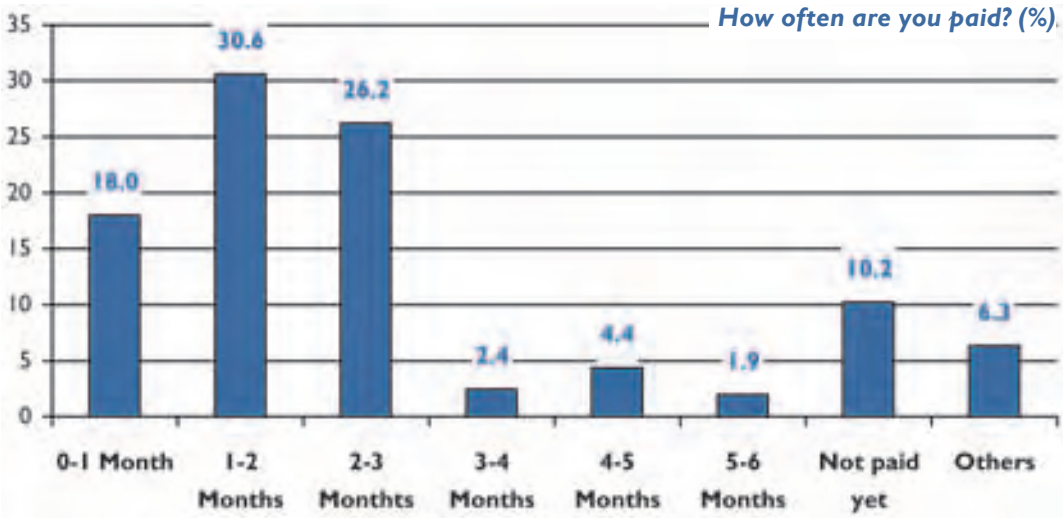
Crop cultivation by charcoal workers, 11 February 2010

4.2.2 Frequency and timing of payment

One of the issues which is not being given much attention in the public discourse on the charcoal industry is the frequency and timing of payments.

Figure 12 shows how often charcoal workers in the sample were paid according to their own reporting. The extent of work done before payment is effected includes cutting and gathering trees, chopping and burning the wood, and sifting, weighing and loading the charcoal. As explained in more detail below in most cases, the extent of work done prior to payment also includes the waiting period between having loaded the charcoal delivery truck and the concluded transaction between processor and producer. However, some producers were able to pay their workers once the charcoal had been delivered.

FIGURE 12: **Frequency of payments**



The variance in the frequency and timing of payment is attributed to a number of factors. For example, producers implement different systems of payment, and according to these, paid their workers at different points in the production-delivery-sale process. Only three producers in the sample paid their charcoal workers when the charcoal had been delivered and weighed. Seven producers in the sample paid their workers less than three days after the delivery truck had been loaded. This translates into 34 (16.6%) of the interviewed workers being paid within this period.

Most producers only paid their workers once they had in turn received payment from the processors. The transaction between producer and processor could take between one and three weeks since most of the agents and processors were based in South Africa. According to the report findings, most sales were transacted within a week after loading, meaning that the workers were paid a week after loading. The practice of paying workers only after sales income had been received might partly be due to producers' cash flow problems.

Less than half (99, or 48%) of the workers in the sample received their money within a week after they had delivered their charcoal or after the truck had been loaded. Producers who distributed their charcoal to local processors seemed to pay their workers sooner after loading, whereas those who sent their charcoal through agents to South Africa seemed to take longer.

Most lorries used for transporting charcoal had a capacity of about 30 t. Producers waited until they had produced this amount of tons before ordering a lorry.

Evidently, the frequency and timing of payment also depended on the number of workers a producer had contracted, as well as the amount of tons an individual worker produced.

In some cases, the workers would be the ones deciding when to deliver their charcoal and, therefore, when payment was due. This was apparently only the case when the producer had a considerable number of workers, produced a sizeable amount of charcoal, and/or had no cash flow problems.

Even more problematic than the observed timing of payment was the infrequency of it. Although our data do not allow for a final conclusion, it is estimated that, due to the abovementioned factors, at least a third of the workers could not calculate – let alone influence – when they would get paid. It is not difficult to imagine that the timing and infrequency of payment makes financial management very difficult, and limits the potential to exit the vicious cycle of accumulating debt.[54]

4.2.3 Expenses

As regards being asked how they spent their income from charcoal, workers mentioned food and clothing most frequently. Given that most workers were observed to be wearing rags, the answer as regards clothing is surprising. In addition, producers stated that workers often used their overalls, which were meant as protective clothing, for trips to town on payday. These two findings did not point to relatively substantial expenditure on clothing. However, since most of the workers had to pay for their overalls and gumboots themselves if they wanted to have such protective clothing, it might be that these expenses were the ones they meant regarding clothing, since the producer often deducted such costs from a worker's pay in regular rates. The fact that clothing made up such a large proportion of their expenses might indicate the level of poverty amongst workers.

A total of 22 (10.7%) workers did not answer the question, and 15 (7.3%) had not yet been paid at the time of the interview. Of the remaining 169 (82%) workers in the sample, 93 (55%) explicitly mentioned that they took care of others: 86 (51%) paid for school fees, and 52 (30.8%) said that they sent money home and/or supported immediate or extended family. However, the workers' expenses, i.e. the items on which they spent their income, might also be correlated to the amount of income they earned.

4.2.4 Accommodation

Accommodation is an issue that Government and producers have been discussing for some years now. The Government prefers traditional housing for charcoal workers. These structures consist of a thatched roof and mud on the side, while dwellings made of corrugated iron are also acceptable.

[54] Namibia is well acquainted with the payday phenomenon: even with a regular and average monthly salary, many employees have no money left at the end of the pay cycle. This shows that, even under 'normal' circumstances, financial management is a challenge.

Various types of housing for charcoal workers were found on the different farms. The accommodation is mostly designed for easy dismantling, for several reasons.

Firstly, charcoal work is mobile: workers move from camp to camp, and producers prefer them to live close to their worksites instead of at the farm workers' places of residence. Only three producers provided accommodation close to the farm workers' dwellings.

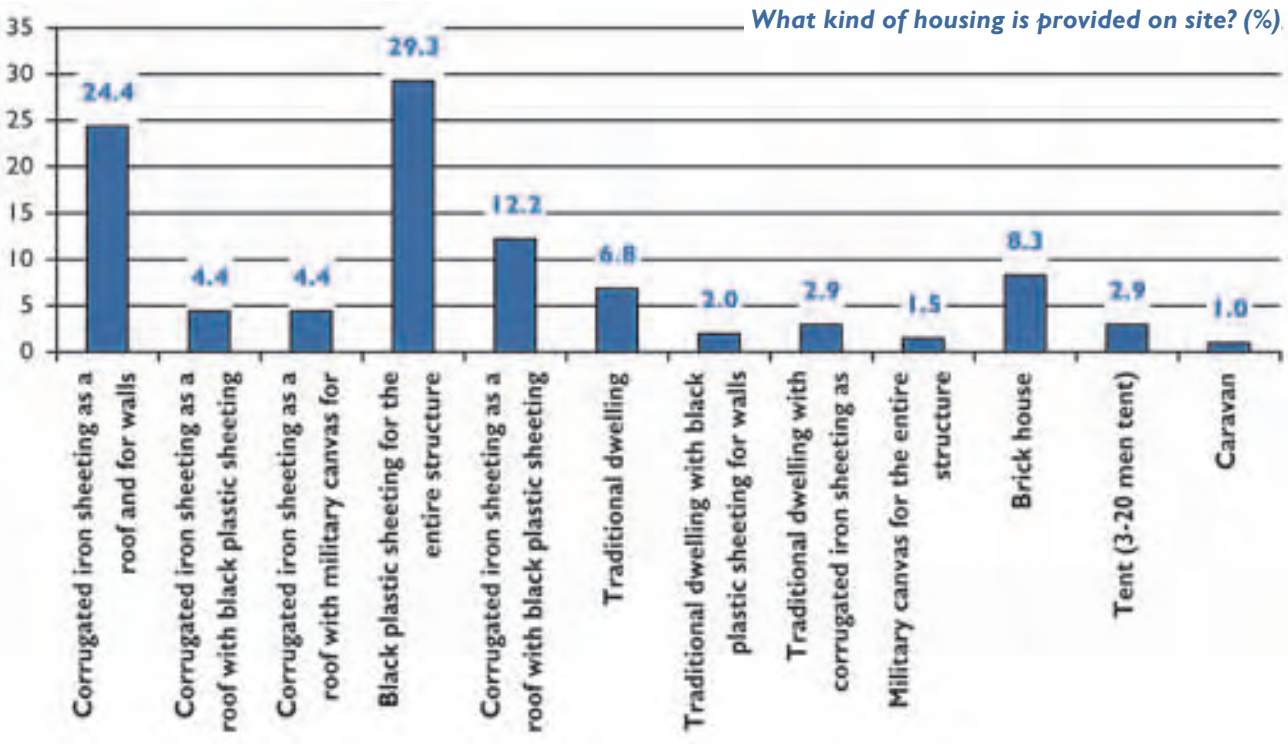
Secondly, workers often work on rented farms.

Thirdly, the seasonal nature of the business as well as the fluctuation of markets and the mobility of workers entails that producers have a varying number of workers during the year. Producers cited this factor to explain the difficulty of building permanent housing for charcoal workers.

The following types of housing were provided for charcoal workers on the farms where they were working:

- Corrugated iron sheeting as a roof and for walls
- Corrugated iron sheeting as a roof with mud walls
- Corrugated iron sheeting as a roof with military canvas for walls
- Black plastic sheeting for the entire structure
- Corrugated iron sheeting as a roof with black plastic sheeting for walls
- Traditional dwelling
- Traditional dwelling with black plastic sheeting for walls
- Traditional dwelling with corrugated iron sheeting as roof
- Military canvas for the entire structure
- Brick house
- Caravan
- Tent

FIGURE 13: **Type of accommodation**



As illustrated by Figure 13, only 14 (6.8%) of the workers live in housing preferred by the Government, namely traditional dwellings. A total of 60 (29.3%) of the workers live in houses made up of only black plastic sheeting – which is an unacceptable practice in the eyes of the Government.

Traditional dwelling, 2 February 2010

Traditional dwelling with corrugated iron sheeting as a roof, 2 February 2010

Corrugated iron sheeting as a roof with military canvas for walls, 5 February 2010

Corrugated iron sheeting as a roof and for walls, 26 March 2010

Black plastic sheeting for the entire structure, 13 July 2010

Extended black plastic structure, 20 July 2010

Inside an estabished charcoal worker's black plastic structure, 20 July 2010

Newcomers often have to sleep on the ground, 20 July 2010

4.2.5 Working hours

As can be seen in Table 1, the majority of charcoal workers (126, or 61.5%) reportedly worked 11 hours per day. One worker claimed to work 14 hours per day, which is the longest in the sample. A total of 23 (11.2%) of the workers averaged a 13-hour workday, while 41 burners (20%) worked nine-hour days. Only seven burners (3.4%) worked an eight-hour day.

The reason given by the workers for working so many hours is that they were paid by the ton. For them, this meant "more time, more charcoal, more money". For many charcoal workers it was also a way to cope with debt: the more charcoal one produced, the greater the chance that there was going to be money left at payday after one's purchases on credit had been deducted. Therefore, according to the workers, in this job one had no time to rest. This also explains why many charcoal burners preferred to camp near their duty station: it saved them time by not having to walk long distances to work.

However, according to the workers, there was apparently a high degree of flexibility when it came to the time allocated for a lunch break. This was because some workers started work at 05:00, while others began at 08:00. Some finished working at 15:00, while a few worked up to 19:00 and even 21:00.[55]

Those who worked very few hours a day[56] were mostly foremen at the farm who were also in charge of supervising charcoal burners. These supervisors were paid their farm worker's wage plus an allowance for supervision. Others were farm workers who were additionally in charge of transporting charcoal bags from the bush to the farm using a tractor or truck. These farm workers were paid per truckload after the bags had been weighed. A typical example was a farm worker in Outjo who was paid N$500 per truckload. In such cases, charcoal-related work was part-time and was done to supplement a farm worker's income when there was less to do on the farm.

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[55] It has to be borne in mind that the results provided are extracted from the workers' own estimations. We were not able to observe how long the workers actually worked for. It might be that some workers overestimated their working time in order to impress the interviewer.

[56] For example, one only worked for an hour a day.

TABLE 1: **Daily working hours for charcoal workers**

Working hours excluding lunch (estimate)	Number of workers	Percentage of total workers
14	1	0.5
13	23	11.2
11	126	61.5
10	1	0.5
9	41	20.0
8	7	3.4
5	5	2.4
1	1	0.5
Total	**205**	**100**

4.2.6 Shops and credit

The vast majority of the charcoal workers depended on the producers' shops in terms of buying food and other items for their daily needs such as soap, toothbrushes and cell phone credit. The worksites were often remote, far from the nearest town, and public transport was nonexistent. The producer either had a shop on the farm or regularly drove to the worksites with a pick-up loaded with food and other basic items. Most producers provided free transport to town only on payday. The vast majority of the charcoal workers bought what they needed on credit at the producers' shops.

The study found that this system often lacked transparency. Many workers did not have an overview of their credit in relation to their potential income, which in many cases led to a vicious cycle of debt because the amount they received on payday was minimal. Some workers were already considerably indebted to – and felt they were at the mercy of – the charcoal producer.

To aggravate things, producers varied in the percentage by which they marked up the prices in their shops in comparison with the prices at which they had purchased the goods. These varying mark-ups potentially meant that the rate paid per ton was of limited informative value with regard to a worker's actual income. For example, even where a producer paid a comparatively high rate per ton, if the food sold at the farm shop was extraordinarily expensive, the higher rate was cancelled out – or even undermined, given the fact that the workers spent a high percentage of their income on food. Many workers complained about the food being very expensive at certain producers and they were able to provide exact examples of this. However, the producers claimed that their prices were cheaper than in cuca shops or some of the shops in towns nearby.

The study also found that workers who received a considerable amount of money at payday were those who were disciplined in terms of their purchases on credit or bought everything in cash.

Only two producers in the study sample did not allow charcoal workers to buy food on credit. Others tried to limit the amount of credit they permitted workers to accumulate, but often found it difficult to implement this limitation.[57]

[57] If a worker has no food, it might be difficult not to provide him/her with food on credit – thereby increasing the credit.

A charcoal producer's pick-up delivering food and other supplies to workers at a remote worksite, 3 February 2010

It has to be noted that workers often preferred the credit system to cash as their financial management was weak. One producer, who limited his credit, reported that workers had left him because of his cash-based system. However, the workers interviewed at his farm said they were comparatively happy with the working and living conditions there.

4.2.7 Health issues

There are many indications that charcoal workers in Namibia are exposed to a variety of health risks due to the kind of work they do. Studies from other countries indicate that charcoal workers' exposure to wood smoke is associated with increased symptoms of respiratory disease and decreased pulmonary function.[58] In a study carried out in Zambia, backache, heat and cough were reported to be the charcoal workers' main complaints.[59]

The study reported on here found the most common health problems referred to by charcoal workers were as follows: headache, chest pain, back pain, coughing, body pain, pain in the arms and hands, pain in the legs, cuts on the legs and hands, snakebite, itching eyes, high blood pressure, nose bleeds, liver damage, dizziness, sneezing, difficult breathing, toothache, malaria, pimples, lung problems, sneezing ash, exhaustion, stomach problems, pain in the shoulders, pain in the fingers, pain in the hips, broken leg (fell in a hole), swollen legs, fainting from the heat, tuberculosis, pain in the knees, muscular pain, cuts on the feet, burns from the kilns, thorns piercing the skin, and abdominal pain.

[58] Tzanakis et al. (2001); Kato et al. (2005).
[59] Ellegård (1994).

The dominant health problems were –

- back pain
- chest pain
- coughing
- headache, and
- pain all over the body.

These health issues are clearly due to the hard physical work involved in charcoal production as well as the technology of burning the charcoal and the exposure to charcoal smoke and dust. Clearly, other health problems listed above – like malaria, liver damage and stomach problems – have nothing to do with charcoal production.

The important questions with regard to health issues are, firstly, how to prevent them, and secondly, how to deal with them once they occur. In the worker interviews, the responses indicate that the following factors made the health situation of charcoal workers a critical issue:

- Regular medical check-ups were lacking in most cases.
- Only a few producers organised first aid training for workers.
- Only a few producers had first aid kids at the worksites.
- Protective clothing was frequently lacking.
- Charcoal workers and their dependants often did not get immediate or timely assistance as regards transport to hospital when they fell ill or were injured. Some workers related how they had had to endure broken or swollen limbs or digits for weeks at the farm without medical assistance.
- Many workers did not have Social Security, and could therefore not afford to pay their medical costs. At times, even the producers could not afford such costs, despite being willing to assist.

Producers, on the other hand, claimed that regular medical check-ups, which cost N$170, were too expensive. They also complained that workers abused the system and pretended to be sick to get to town, e.g. in order to abuse alcohol. Those who rented farms stated that they did indeed experience difficulties when it came to offering transport to town for injured or sick workers or their dependants. This was because they did not live close to the workers themselves and had not organised a functioning system for the provision of transport in the case of an emergency.

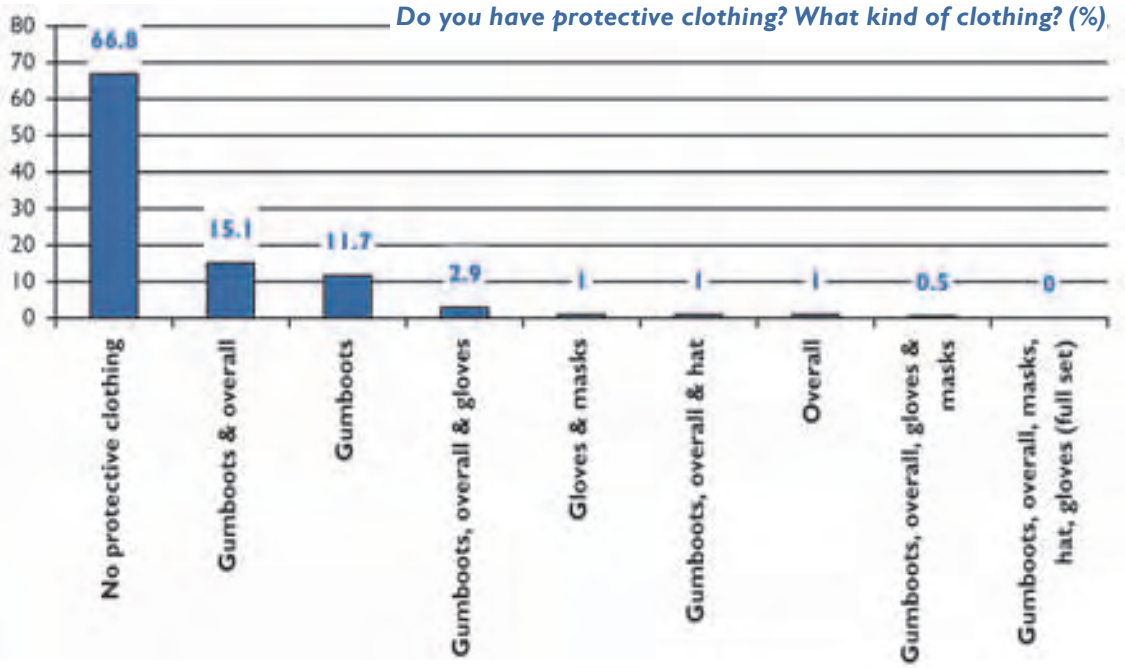
4.2.8 Protective clothing and equipment

Producing charcoal exposes workers to risks such as snakebite, heat exhaustion, inhalation of sawdust and smoke, and cuts from equipment such as axes and pangas. Protective clothing can prevent many such injuries as well as the diseases linked to working in the charcoal industry. Generally, a set of protective clothing includes –

- safety boots[60]
- overalls
- gloves
- a mask, and
- a hat.

[60] Many people regard safety boots as an absolute must. Gumboots are the minimum standard in safety boots. In the study, the only boots in question were gumboots.

FIGURE 14: **Type and combination of protective clothing**



The findings show that, of the 205 charcoal workers interviewed, 137 (66.8%) did not have any protective clothing. The remaining 68 (33.2%) had some kind of protective clothing, but often only single items. None of them had a full set of protective clothing. A total of 31 (15.1%) of the workers had boots and overalls, while 24 (11.7%) only had boots. Six (2.9%) had boots, an overall and gloves.

Old gumboots, 21 April 2010

Packing charcoal at a processor's site, 24 April 2010.

The producers claimed to have had the experience that, if one provided workers with an overall and/or boots when they started work, they tended to leave with the clothing – leading to financial losses for the producer. One solution was to offer the protective clothing for sale in their shops or to provide them subject to a monthly deposit to cover the costs – the latter option also being acceptable to NAFWU in the negotiations for a collective agreement.[61] Another solution was to provide them for free after workers had worked for a year on their farm. Some producers also mentioned that the workers would not wear their overalls to work, but instead wore them to go to town on payday because their overalls were the nicest clothes they possessed. This point was cited as a justification for not providing protective clothing.

Regarding masks, producers said that the workers usually did not make use of them. It also appeared that the producers did not deem hats as being necessary for the protection of their workers. One producer mentioned that he had given gloves to a worker but that the worker was reluctant to wear them because they would "make his hands sweat and soften them".[62]

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61 W Enslin, pers. comm., 19 October 2010.
62 (ibid.).

4.2.9 Involvement of women and children

Due to the challenging physical work involved in charcoal production, the vast majority of the paid workers were men. The women active in the industry were mostly those who accompanied their spouses. Only two women were interviewed directly.

As mentioned earlier herein, charcoal workers generally performed various tasks. These included cutting and burning wood, clearing bush/trees, packing charcoal into bags, loading the bags onto trucks, transporting the bags, sifting the charcoal and sewing the bags. Women were not involved in the more heavy-duty work such as cutting and burning the wood or transporting the bags. The tasks that women performed were mainly those of gathering the wood, packing the charcoal and sewing charcoal bags. In the study sample, 63 women accompanied their spouses. At least 40 of these women assisted their spouses in the described tasks. Many producers seemed reluctant to deal with the women involved in the industry, and preferred only to pay the men – whose tonnage might have been increased through their spouses' assistance. Thus, the women only 'assisted' their spouses. There were a few producers who paid the women between N$20 and N$29 a day for their work. At one farm, the women packing the bags of charcoal were paid N$800 per month. It is obvious from their lack of acknowledgement as workers in the industry that women are particularly vulnerable when it comes to being paid for their labour.

A pregnant woman packing charcoal, 26 March 2010

Two women with a baby along the Outjo–Otavi road, packing charcoal for N$20 a day, 4 February 2010

No charcoal workers mentioned that their children helped them. A study published in 2007[63] looked into children's engagement in the production of charcoal in Namibia, but far fewer cases and far less anecdotal evidence than expected were found in the study on children working in the charcoal industry. Nonetheless, a particular problem in this respect is that children and babies are often right next to their parents while they work. This implies severe health risks for the children.

Another concern regarding children who accompanied their parents to the worksite relates to their school attendance. In most cases, these children do not attend school. Only one producer mentioned that he sent the charcoal workers' children to school at his own expense. Many workers could not afford to or simply did not bother to send their children to school or kindergarten. The worksites were remote, and the schools and kindergartens were located in the nearest towns. This meant it would be difficult to organise transport and/or afford hostel fees for their children to go to school.[64] As mentioned in paragraph 4.2.3, some workers spent part of their money on school fees. However, this was mostly the case when their children stayed behind in the worker's region of origin.

[63] Terry (2007:8).

[64] As is the case with other marginalised groups, workers might not have sufficient knowledge about exemptions from school fees, etc., nor would they be in a position, from an administrative point of view, to apply for such exemptions.

Charcoal workers' children often do not attend kindergarten or school, 5 February 2010

4.2.10 Contracts and Social Security

A total of 174 (85%) of the interviewed workers did not have a written contract. Of these, 123 (70%) said they would like to have such a contract. Their reasons for wanting a contract were mostly that it is helpful in dealing with labour issues and job security.

At most farms, charcoal workers were not regarded as employees but as contractors, albeit mostly without written contracts. Moreover, charcoal workers were not aware of the distinction made between *employee* and *contractor* and the social benefits to which they would be entitled as employees. In some cases, although contracts were issued, their content was not communicated well to the workers – who were often illiterate. They were not able to understand the content of the contracts they signed, and they believed such contracts were in the producer's favour. Some charcoal workers also refused to sign such contracts.

Unfortunately, the interview sessions did not include a question on whether the workers had registered for Social Security. From the producers' interviews, however, it became obvious that a very small minority had registered all or only some of their workers for Social Security benefits. A slightly higher number had registered their workers for employees' compensation.

4.2.11 Mobility

Producers in the charcoal industry are faced with the problem of workers moving from one producer to the next. Many complain about this, saying, "[The workers] come today, [but] they leave when they want to." Thus, according to the producers, charcoal workers leave at will as soon as they hear that the producer next door or even further away offered better conditions of service. Many of the producers interviewed indicated that this was one aspect that made registering the workers for Social Security difficult. According to Willem Enslin, a former Chairman of the NCPA and charcoal producer in the Grootfontein area, it cost money and took time to register workers, but they left whenever they wanted to – and the process had to start from scratch with the workers who replaced them. Producers also used this to explain why they did not pay for protective clothing and equipment for their workers when they started on the job, and why they rarely had the pre-employment medical examination done. One producer mentioned that the workers did not provide their identity documents, and even alleged that they changed their names from producer to producer.

This mobility is clearly a consequence of the sector's informality. In the survey questionnaire, an attempt was made to examine the extent of mobility, the reasons for it, and the workers' plans for future work. The questions posed in this regard were as follows:

- When did you start with charcoal?
- Since when are you working here?
- On how many farms have you worked beforehand in charcoal?
- What are the reasons why you left?
- For how long will you stay here?
- What will you do afterwards?

On average, the charcoal workers have been operating in the industry since 2005, i.e. for about five years. As Figure 15 (on the next page) illustrates, nine (4.4%) of the charcoal workers started between 1990 and 1994, 24 (11.8%) started between 1995 and 1999, and 36 (17.6%) started between 2000 and 2004. More than half of the workers (108, or 52.9%) started between 2005 and 2009, while 27 (13.2%) only started in 2010. This shows that many of the workers are relative newcomers to the business.

Looking at the duration of service at the interviewees' current workplace/farm, the responses showed that one worker had started in 1995 and still worked for the same producer. On average, the workers had only begun working at their current stations in 2008. Thus, on average, a worker had been at his/her current workplace for more than two years. At the time of the study, a total of 16 (7.8%) of the interviewees had begun working for their chosen producer between 2000 and 2004, while the majority (121 workers, or 59.3%) had started between 2005 and 2009. Remarkably, almost a third (32.4%) of the workers had only started producing charcoal at their current workplace in 2010. However, this high number of newcomers (since 2010) needs to be put into perspective: 53 (26%) of them only started in the industry in 2009 and 27 (13.2%) in 2010.

The findings show that the average worker had been engaged on 1.5 farms involved in the charcoal industry before s/he arrived at the workplace at which s/he was interviewed. With regard to the length of the interviewee's engagement in the charcoal industry and the number of farms s/he had worked on, Figure 16 shows that the people who had been in

the industry for the longest had also worked, on average, on the highest number of farms. However, the two workers who had worked on the most farms started in 1992 and 2003, respectively. Two workers who had worked on nine farms had started in 1995 and 2003, respectively. One worker had worked on seven other farms, six workers on five other farms, and four workers on four other farms. As mentioned previously, one worker had started in the charcoal industry in 1995 already, and had remained with the same producer since then. The high number of workers who had not been working on other farms beforehand is also due to the fact that more than a quarter of the workers (55 workers, 26%) only started with charcoal in 2009 or 2010.

FIGURE 15: **Duration of working in charcoal** and **at current workplace (%)**

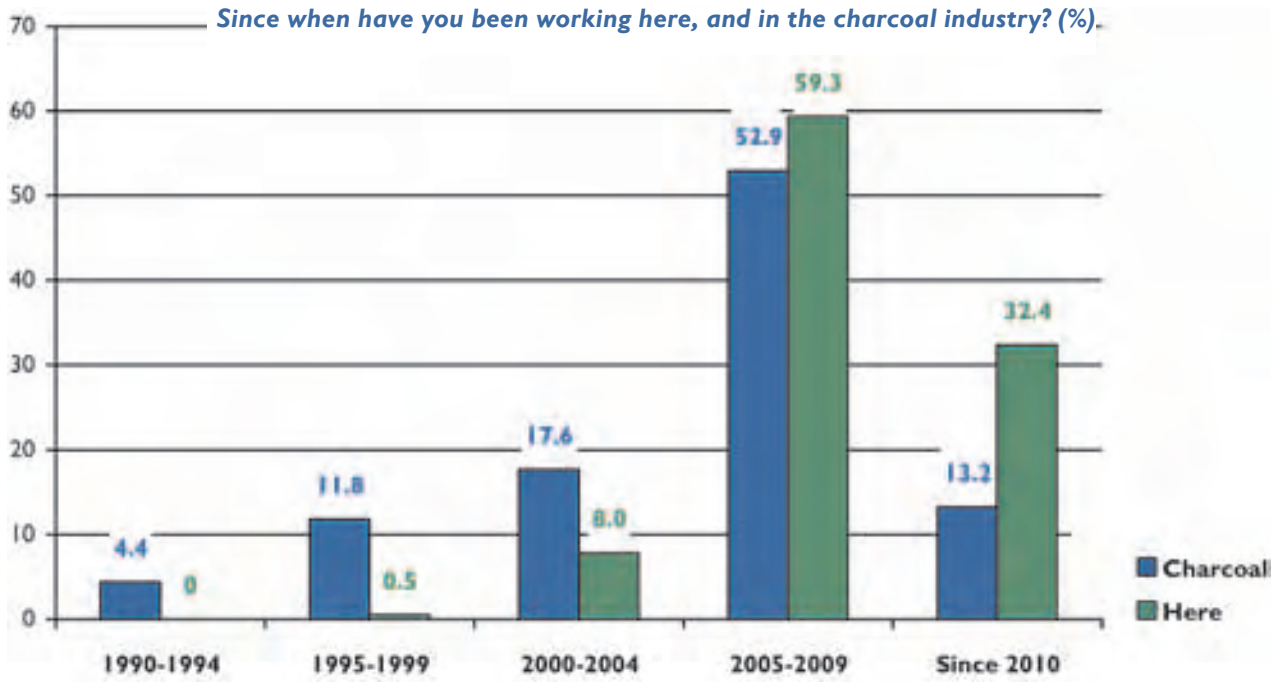


FIGURE 16: **Number of farms that worker has previously worked on in charcoal production**

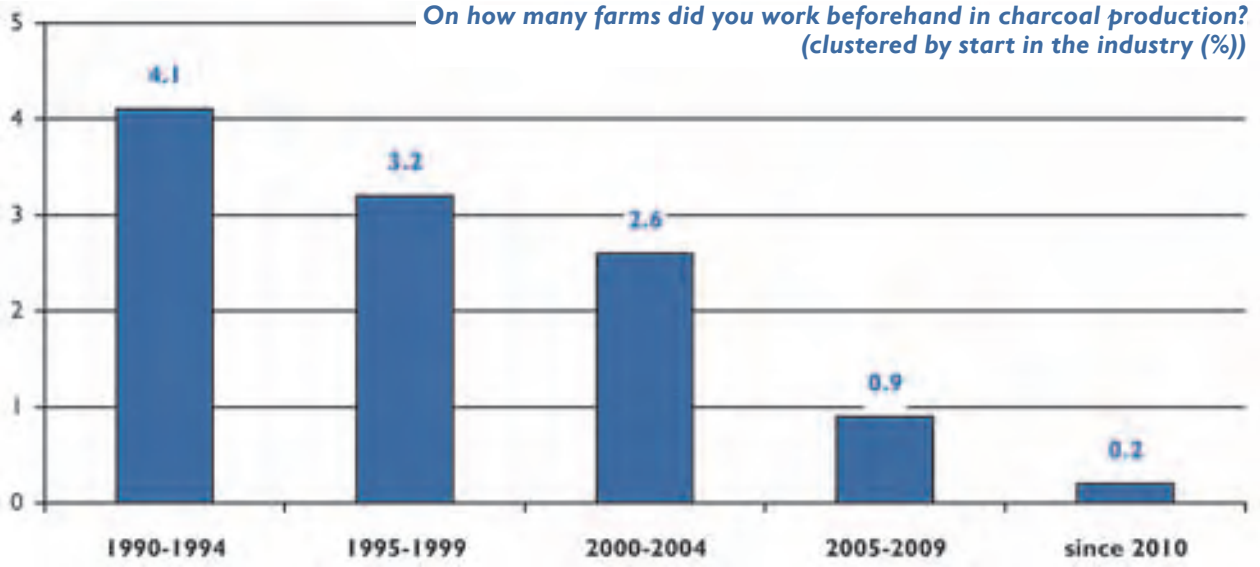


Table 2 focuses on the oldest charcoal workers (between 50 and 72 years of age) in order to see whether there was a correlation between the workers' age and the number of farms they had worked on, the years they had spent in the industry, and the years they had spent on the farm at which they were stationed at the time of the interview.

TABLE 2: **Oldest and longest-serving charcoal workers**

Age of worker	In industry since …	At current workstation since …	Number of farms at which previously engaged
72	2006	2010	3
64	2002	2006	3
61	2003	2009	1
61	2008	2008	0
55	2009	2009	0
54	1990	2003	3
53	2005	2008	1
53	2006	2006	1
53	2009	2009	0
50	2009	2009	0
Average	**2004**	**2007**	**1.2**

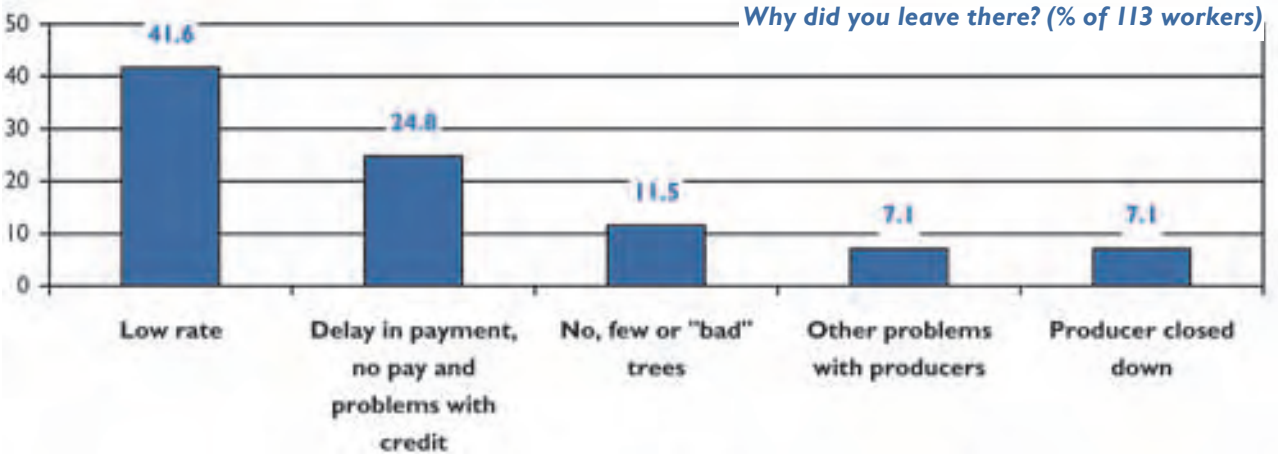
Table 2 shows that people entered the industry – regardless of their age – because they had a limited chance of finding other work. All of the workers interviewed had entered the industry because they could not find better jobs. One elderly person put it this way:

> ***I entered the industry when I realised that no one could pay school fees for my grand-children because their fathers were unemployed and some children were orphans.***

4.2.11a) Reasons for leaving producers

When asked in the study, 92 (almost 45%) of the workers did not provide reasons for why they had left their former producers. Part of the reason for this was that the question did not apply to 66 (32%) of the workers who had not worked on any other farm.

FIGURE 17: **Reasons for leaving other producers**



(a) Low rate

Of the 113 (55%) of workers who had indicated why they had left previous producers, 47 (more than 40%) stated that the rate paid per ton was too low. Thus, they would move if they heard that the next producer offered a higher rate per ton of charcoal or of wood.

Well-established producers had the financial assets to get more workers by paying them a higher rate than what small-scale producers were able to pay. Other producers paid workers a small amount (about N$20–N$40) for loading the trucks, which also attracted workers.

(b) Delay in payment, no pay, and problems with credit

A total of 28 (almost 24.8%) of the workers who responded to the question mentioned delays in payment, waiting for payment, high food prices or the lack of food as the reasons why they had left a previous producer.

The issue of delay in payment was discussed in detail in paragraph 4.2.2. Regarding food and credit, the researchers observed that the remoteness of the worksites meant that some producers were unable to keep enough stock in their shops (which were often simply pick-ups with supplies), especially when it came to food. It was also reported that some producers did not provide enough food to the workers. In other cases, workers reported that they had been starved and were forced to go to a neighbouring producer's workers to borrow food. The lack of food was also reported at resettlement farms, where the resettlement beneficiaries were also charcoal producers.

Some workers complained that the prices for food and other items were too high, or that nothing was left over from their pay once credit for food had been deducted. Some workers believed certain producers deliberately had high prices in their shops so that the charcoal workers received very little cash at payday, and so that they made money not only from charcoal sales, but also from the high grocery prices.

(c) No, few or "bad" trees

Some charcoal workers reported that certain producers insisted workers continue to chop down trees in camps or on farms where there were hardly any. This brought a high degree of frustration to the workers, because the lack of trees meant they could not cut down enough to make a reasonable income. However, producers argued that most workers preferred big trees which exceeded the maximum permissible size set by the DF. They preferred such trees because they could produce more tons of charcoal by cutting fewer trees. Some producers claimed that the workers did not fully understand the purpose of cutting down the trees – being to fight invader bush, rather than just for making money. Therefore, from the producers' perspective, it was not reasonable to move to camps with larger trees but to areas where bush encroachment was prevalent.

However, as stated earlier herein (4.1.1(a)), not every producer cared about bush encroachment. This problem points out the urgency to develop proper control measures for cutting trees in order to make the business environmentally sustainable.

(d) Other problems with producers

Eight (7.1%) of the workers stated other problems with the producer as the reason to leave. Among these problems were the lack of assistance when injured, unfair weighing of the charcoal, and a bad relationship with the foreman.

(e) Producer closed down

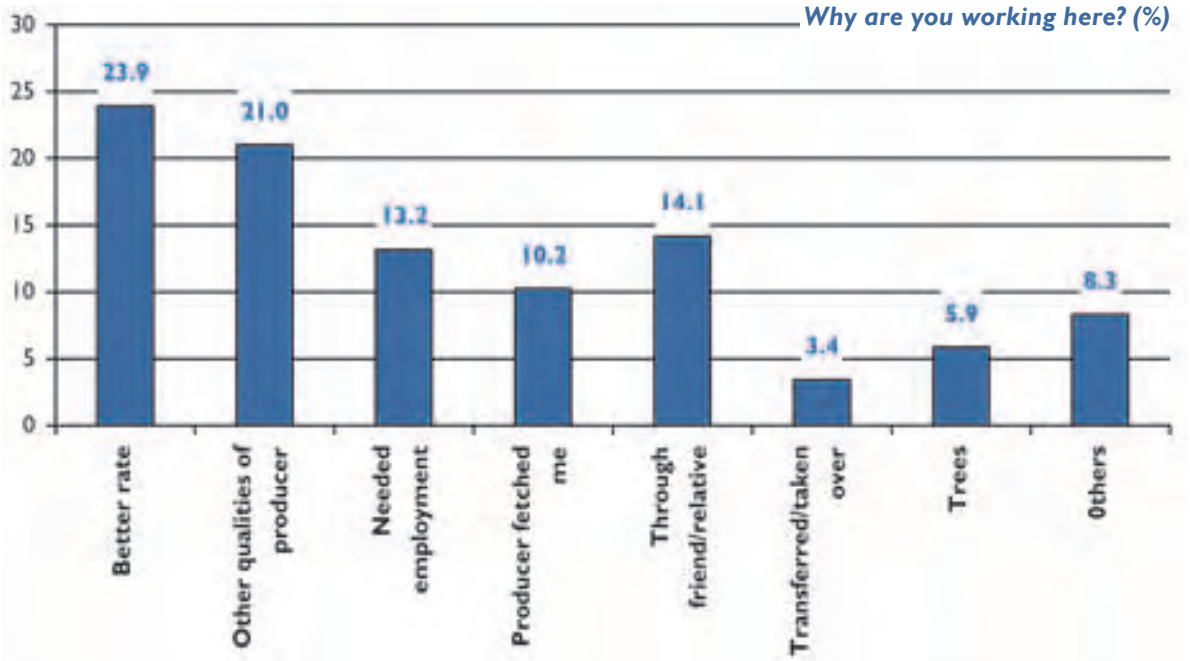
Eight (7.1%) of the workers indicated that they had been forced to leave a previous producer because operations had been closed down. This response was prevalent in cases where producers rented land for charcoal production. For example, some producers apparently closed down because of a misunderstanding or argument with the farm owner. Such disagreements reportedly had their origins in rental disputes, or because workers cut down the wrong trees or vandalised the farm infrastructure. According to the respondents, some producers terminated their charcoal production operations for other reasons as well. This meant that the worker was forced to find work elsewhere.

Adding to the picture of mobility, one producer from the Grootfontein area related that charcoal workers had left him to work for producers in the Outjo area for three reasons:[65]

- There were big mopane trees there, which workers preferred to use.
- Other producers did not check the bags of charcoal for quality by sifting the charcoal first before buying.
- The producer had limited the use of credit to a minimum.

4.2.11b) Reasons for working and staying at a specific producer

FIGURE 18: **Reasons for working at current workplace**



[65] W Enslin, pers. comm., 19 October 2010.

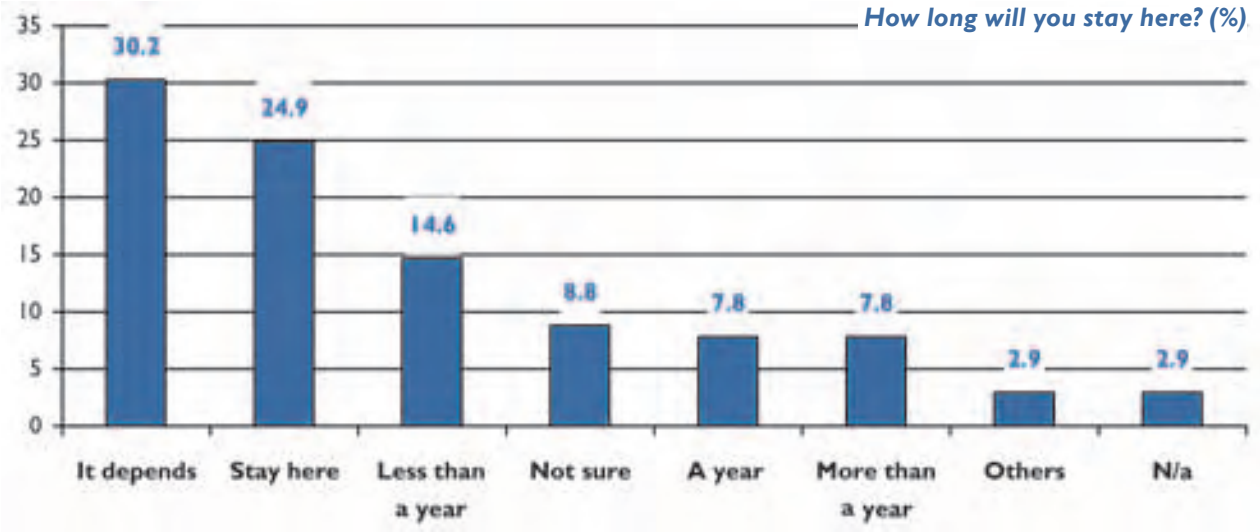
The questions "What are the reasons that you work here?/Why did you come here?" provoked answers in different dimensions. While some answered the question in relation to former workplaces, some just mentioned the ways they had ended up at their current place of work (fetched by producer, through a friend relative, transferred).

From the workers' responses, it is clear that the rate paid per ton is the most important reason for working at a specific producer,[66] followed by other qualities possessed or behaviour displayed by the producer. Some of the answers provided in the latter category of response were that the producer was a good person to work with, he paid quickly, there was transparency in workers' wages, workers were treated better, and boots and axes were given for free.

Twelve (5.9%) of the workers mentioned either the quality or the quantity of trees at the farm as being the reason for their current engagement.

These categories at least imply that there are some – albeit limited – options for workers to change producers for specific reasons. The categories "I needed employment", "The producer fetched me", "Transferred, taken over" do not necessarily imply these options, but rather sound fatalistic.

FIGURE 19: **Intended length of service at current workplace**



As can be seen in Figure 19, 80 (almost 39%) of the respondents are not sure of their length of service at their current workplace. Some did not provide details about the conditions on what their length of service depended, while others were clear about this. The conditions mentioned most often were –

- "Treatment by the producer"
- "If the rate doesn't increase"
- "If I get a better job", and
- "If there are no trees anymore".

By and large, the above list of reasons reflects the workers' reasons for leaving other producers. On the other hand, 51 (almost 25%) of the interviewees were clear about wanting to stay at

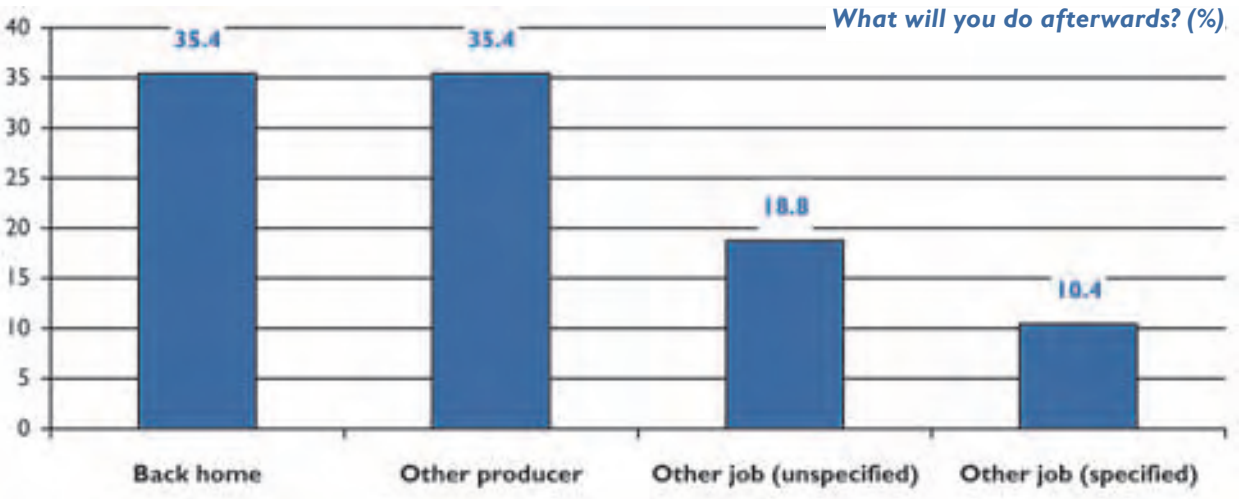
[66] This category includes also workers who were just told or thought that there is a better rate, but in reality it turned out that the rate was not as good as expected.

their current workplace but mentioned no time factor. A total of 30 (14.6%) workers in the sample planned to stay for less than a year, while many of this group were just waiting for the next payday so that they could leave. A total of 16 (7.8%) of the workers planned to stay with their current producers for more than a year. Three workers mentioned that they could not leave because they were in debt.

4.2.11c) Future plans

When asked about what they wanted to do after their current job, 109 (53%) of the respondents did not provide an answer to the question – either because they wanted to stay or they had not thought about it yet. Of the remaining 96 (47%) workers who had plans for the future, 34 (35.4%) wanted to go home, some wanted to cultivate back at home, and the same number wanted to move on to another producer. A total of 28 (29.2%) respondents wanted to do something else in future, either farm work or other specified work like being a driver, or they simply wanted to look for other (unspecified) work.

FIGURE 20: **Plans for future work**



All these findings point out that the workers do not have many options for improving their working conditions in particular or their livelihoods in general. Most of them do not have written contracts, nor any job security, and they often have no insight as regards their legal rights. According to the respondents, one option for them to try to improve their livelihoods is to leave their current producer and try their luck with others – who, because they need labour, increase their rates (or pretend to do so) in order to attract workers.[67]

This mobility is in fact one of the biggest issues within the industry. For the producers, it makes planning very difficult, and it makes investment in the labour force a risky enterprise. In fact, it seems to be a vicious cycle: as long as there is no job security for the workers, as long as the working conditions remain bad, and as long as there is no other assistance forthcoming for them, e.g. from NAFWU, workers see their migration to another producer as their only chance to improve their circumstances.

[67] As already mentioned, producers pay different wages for sifted and unsifted charcoal, for example. Sifted charcoal implies more work than unsifted charcoal. Other producers pay more when small bushes are also cut down. Furthermore, they have different prices in the shops. To the researchers' best knowledge, the workers did not differentiate between these issues; they were only attracted by a relatively higher rate paid per ton of charcoal produced – which might be misleading in the light of such other factors.

A woman carrying charcoal bags, 26 March 2010

4.3 Case studies

The following case studies are included in the report in order to provide a better picture of practices in the industry.

The first study describes a case where the producer seems to have a proper management system in place, and is trying to abide by the Labour Act, albeit as adapted to the special circumstances of the charcoal industry. The second and third cases illustrate the dependence of many workers on the goodwill of the producer. The fourth case, in line with the first, provides an example of workers being content with their workplaces. It also provides an insight into the difficulties of starting a charcoal production business, and shows the learning process which the producer goes through.

4.3.1 Case 1

The producer in this case is an established farmer in the Grootfontein district who began producing charcoal in 1999 already. At the time of the interview, he was producing charcoal at his own farm as well as at a neighbouring farm. He estimated that charcoal made up 60% of his total farm income, with the remaining 40% derived from cattle farming. He paid his workers about N$420 per ton of charcoal. As regards charcoal production at his own farm, he is in possession of a Forest Stewardship Council (FSC) Certificate. FSC inspectors visited his farm twice in 2009 to monitor his charcoal activities. Depending on the season, he took on between 40 and 80 workers.

Six-month contracts with workers were drawn up in writing before the workers started production. The contract stipulates that a worker is obliged to deliver charcoal every six weeks. With regard to payment, the farmer paid workers once the charcoal had been weighed and loaded onto the truck. Thus, he needed to have a sound financial management system in place which reduced cash flow problems.

He provided protective clothing to workers. The cost of the clothing was deducted in instalments from the workers' salaries in the first year in order to discourage them from leaving with the gear. Those who had worked for longer than 12 months were provided with protective clothing free of charge each year. Protective masks were provided free of charge. Workers were given a spot fine of N$5 if they did not wear the masks. Every second year, the workers went for their periodic medical examination which he paid for.

The producer tried to limit giving credit to emergencies, e.g. when families experienced serious financial problems at home. He also allowed the workers to grow crops on the farm. Some of his workers had received first aid training, and a first aid kit was available on site. The workers had also received some training in fire prevention. Where workers did not follow the prescribed harvesting rules, he subtracted a spot fine from their salaries.

Workers engaged by this producer were interviewed as well. They were of the opinion that the cash system was good because it allowed them to receive all their money at once and they were able to spend it as planned. They did not have to worry about their debts like workers on other farms. As one of the burners put it, –

> ***I think the other advantage we have is that we are given small plots at our residence to make gardens where we grow maize, mahangu and vegetables as this helps us to save our money.***

The Grootfontein area is one of the high rainfall areas in Namibia. Therefore, charcoal workers are able to produce additional food if the producer permits it. This has apparently helped them to save money by consuming what they produce in their gardens, compared with other burners who only depend on their wages from charcoal production for food.

Another observation at this farm was that some workers and their relatives were involved in other income-generating activities, like selling fat-cakes, bread, sweets, fish or biscuits. The workers and their relatives were allowed to sell anything except alcohol and drugs. Items were sold to other workers and people in the vicinity. It shows that workers have the cash to buy these items due to the producer's cash system. This encourages other workers to engage in business because there is a market. In contrast, at most of the other farms, workers had

no cash at their disposal. This discouraged them and their relatives from engaging in other income-generating activities, as there was no one to buy from them.

4.3.2 Case 2

One charcoal burner in this case study, which was undertaken at a large producer's farm in the Outjo area, stated the following:

> ***When my wife was in labour, I begged the producer to take her to the hospital to give birth. I knew it was going to be difficult because he does not like providing such assistance. When I went to the farmhouse he simply told me to get a knife and cut out our child, because he did not have time and it was not his responsibility to take my wife to the hospital.***

The producer's wife, who was very sympathetic to the worker and his wife, tried to convince her husband to provide assistance, but he refused. She then took the initiative and assisted the worker's wife to deliver her baby in the worker's plastic house on the farm. The worker felt that the producer cared more about his livestock at the farm than for people. He reported that when it came to his livestock, the producer could wake up even in the middle of the night to save his animals; but for emergencies concerning the charcoal workers, he did not care at all. Other workers confirmed that this particular producer did not care very much for his workers.

4.3.3 Case 3

The producer in this case, an active politician who served on the Traditional Authority Council in Khorixas, started producing charcoal on his farm in 2007. His farm was part of a resettlement scheme close to the Khorixas area. He also owned some cattle and goats. The producer's wife, who lived in Khorixas with him, managed the business. At first, she seemed reluctant to be interviewed. Later, however, she agreed to be interviewed in Khorixas. She later also gave permission for the seven farm workers to be interviewed.

The workers received N$380 per ton of charcoal. The workers were not provided with any protective clothing. One of their comments was as follows:

> ***We have not eaten proper food for two weeks and the producer who is based in Khorixas just comes here to make promises but does not bring the food.***

The workers complained that they had to work on empty stomachs: sitting around doing nothing made it worse because their credit increased but not their productivity and, hence, income generation. Furthermore, they mentioned that one of the workers was sick, but there was nothing they could do about it because the producer would not assist them. They did not have any contracts with the producer. Remarkably, all of them said in the interviews that they did not want to have contracts with this particular producer because of the awful working conditions and lack of food at the site. These workers did not see the advantage of an employment contract and how it would help to improve their working conditions, health-related matters or social security. This revealed many workers' understanding of contracts: they often feel that, with a contract, they commit themselves to a producer. They would prefer not to do so because the producer might pay a low rate, offer bad working conditions,

and so forth. In fact, four of the seven workers said that they were planning to leave this producer as soon as they received their next payment.

After the interview, the interviewer went with one of them to Fransfontein, about 10 km from the farm, to buy bread and sugar for the workers from his own money.

4.3.4 Case 4

The producer in this case study rents his father's farm in the Outjo area for charcoal production. When we first contacted him, he was very defensive about his charcoal business and indicated to the interviewer that he did not want interference from anybody because the business was just doing well. After a few minutes of heated argument – which almost led to personal confrontation – he agreed to be interviewed, and was even willing to bring five workers to Outjo for the interviews. Only later did the interviewer realise the reason for his defensiveness, which is explained later in this section.

At the time of the interviews, the producer engaged about 190 workers. Apart from his father's farm, he was also renting land from four other farmers. He paid N$450 per ton of charcoal, which included N$30 for medical expenses and transport.

Charcoal production was this subject's only business: previous experience had taught him that it required his full attention in order to succeed. According to him, the biggest problems within the industry were labour issues and problems with workers.

When he entered the charcoal business in 2005, he provided credit to his burners. As a result, he experienced many problems with workers and eventually lost most of them to other producers. Some of the burners also left without paying their debts.

Another problem he encountered was workers leaving to work for other producers who allegedly paid a better rate. This was the main reason why he had not trusted the interviewer at the beginning. Eventually his business started going down and he was forced to find an alternative income. He went overseas to look for a job as a seaman to raise funds. In 2008 he re-entered the charcoal business and, this time, employed a different strategy. His strategy later paid off and, today, he is one of the biggest charcoal producers in the country. According to him, the fundamental aspects of his strategy are the following:

- The new charcoal burners get free food for the first month so that they can start cutting charcoal and ensure that they are free from debt from day one. When they sell their charcoal, they then have money in cash to spend on food and other items.
- They also get free equipment such as axes and files, which they return to the producer when they go on holiday or if they resign. An overall and boots are subsidised, and become the burners' property.
- If, for some reason, the burner has misused his cash and needs money for food, he is expected to produce at least one kiln's worth of charcoal before the producer will pay him the equivalent or an amount in that region in cash.
- Burners are paid the same day the trucks are loaded.

The producer said that when he started with the new system in 2008 he had 40 burners, but now the number had grown to 190. His charcoal production had doubled and labour problems were almost nonexistent:

You can call the labour office in Outjo and they will tell about the problems I used to have before this system, and they will tell you what is happening now.

He also told the interviewer that he regularly received calls from people who wanted to come and work for him because they had heard about the good working conditions. In fact, even while the interview was in progress, people were calling to ask for charcoal work from the producer.

The interviewer's expectations were that the workers would present a different story. This had been the case with other interviews, where workers' accounts differed from their producers' in a number of respects. However, in this case, the workers confirmed what the producer had stated. Most of them had worked at other farms where conditions were bad. They indicated that there were no delays with payment, and they did not have debt because they had money to spend:

We will work here for as long as we have strength because this is the best place to do charcoal, because the producer is really a good man.

In striking contrast to workers on other farms, the workers here answered the question on how they spent their money. Apart from the obvious expenses, they also revealed that they bought livestock, built houses and saved:

I could even buy a second-hand car if I save properly because this money is enough.

Charcoal workers, Case 4, 15 July 2010

4.4 Assessment of the most critical issues

How does one identify the most critical issues in the industry? One way is to look at the different standpoints and situational assessments of the main stakeholders, namely Government, producers and workers, and their respective demands for improvement.

4.4.1 Government

With regard to the Government's position, the report refers to the Cabinet directives approved on 2 February 2007 (see Annexure 1).

The biggest concern is the status of the workers as contractors. Government would like to see them as employees protected by the Labour Act, with the possibility of a collective agreement for exemptions. The directives also mention the necessity of protective clothing which is to be provided by the producer, and pre-employment and periodical subsequent medical examinations – also at the expense of the employer.

Another need mentioned by the Government relates to first aid kits being available on site, and for first aid training being provided to workers so that immediate basic care is available to injured workers at the worksite. In addition, the Government wishes to compel producers to obtain a permit from the MAWF and a Trading Licence from the Ministry of Trade and Industry.

The Government also directs the Ministry of Education to explore the possibility of establishing educational facilities in areas of the country where charcoal production is carried out on a large scale.

4.4.2 Producers

The majority of producers regard the problems they experience with their workers as the principal negative issue in the industry. Some producers mentioned the connected issue of the producers' and Government's conflicting perspectives. Other problems related to bush fires, access to and instability of the market, and the lack of reliability among processors and agents buying the charcoal from the producer.

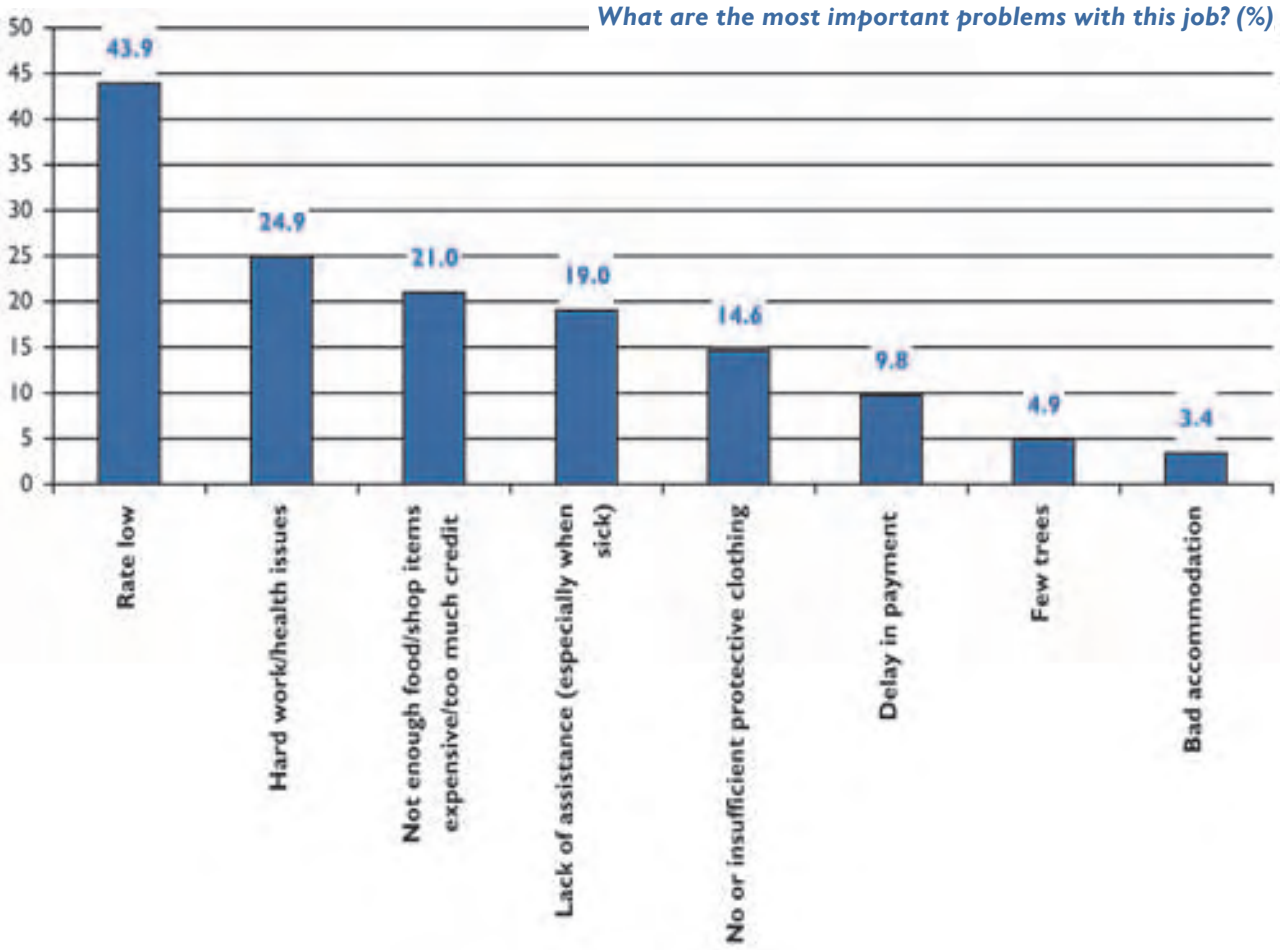
With regard to the workers, the producers' main complaint had to do with their unreliability and high mobility. The interviewees quite often mentioned that "Workers just leave for another farm when the rate paid there is higher" and "They leave for home when they want to." In this regard, producers complained about considerable financial losses because workers left without paying off their debt, or took along equipment and protective clothing they had been provided with for their jobs but did not own.

4.4.3 Workers

Since the workers' voices are mostly unheard, the researchers chose to give their opinions a bit more space than that devoted to the Government and the producers' perspectives. The workers talked about problems they had experienced with previous producers. The workers

were also asked to mention any problems they had experienced in the industry in general. Figure 21 reflects the problems mentioned most frequently. By and large, this reflects the findings summarised under section 4.2.11, headed "Mobility".

FIGURE 21: **Problems experienced with the charcoal work**



A total of 90 (43.9%) of the workers complained that the **rate paid per ton** of charcoal or wood was low, regardless of the variation of rates paid by different producers. In addition, workers felt that the work was very hard, but that the remuneration was limited to tonnage only. Because their services covered a wide range, from cutting and gathering trees, burning and packing charcoal, sewing bags, and loading and transporting charcoal, they felt that they needed to be paid additionally for some of these tasks.

There were also complaints about **delays in payment** (20, or 9.8%), including delays associated with delays in loading the trucks. In fact, many workers had migrated from one producer to the next because of this issue. Such delays forced workers to increase their debt and then they risked becoming ensnared in a debt cycle.

A total of 51 (24.9%) of the workers mentioned the **hard work** or related **health issues** as a problem within the industry. This was often stated in relation to the rate paid per ton, which was perceived as being too low.

A total of 43 (21%) mentioned problems such as the **lack of food**, **hunger**, the fact that the **food was too expensive** or that their **credit** became too high.

The issue of **protective clothing and equipment** was mentioned as a problem by 30 (14.6%) of the workers. Many producers did not provide protective clothing to their workers, or if they did, the workers had to pay for it. This resulted not only in many health problems, but also in low productivity. The main piece of equipment that most charcoal workers referred to was the wheelbarrow, as it helped with transporting wood to the kilns.

A total of 39 (19%, or almost a fifth) of the workers expressed dissatisfaction because there was a **lack of assistance** from the producer's side when it came to **personal problems**, mostly health problems. The lack of transport to hospital was mentioned in particular, meaning that workers had to pay for the transport themselves or find a lift. There were also times when charcoal workers had to attend funerals back home, needed money to be sent home to their relatives, or had to travel home themselves for such purposes.

The issue of **bad accommodation** was mentioned by only 7 (3.4%) of the workers. Most of this group were accommodated in dwellings made of black plastic sheeting. This low number might be surprising, as 60 (almost 30%) of the workers lived in dwellings like this. These houses are very weak and can be destroyed by strong wind and rain. They are also very hot in summer and very cold in winter, and they need constant maintenance. Sometimes, the cost of replacement sheeting is deducted from workers' wages. By virtue of the fact that the rate paid per ton was a far greater issue to the workers than the standard of their housing, it is clear that financial issues are much more important than the state of housing – pointing again to the workers' poverty.

4.4.4 Workers' suggestions for improvement

The following were suggestions made by workers to improve the situation. Note that the findings below include alternative suggestions made by the workers for the same problem, such as free rations or realistic prices for food.

(a) Suggestions on where producers could improve

- The rate paid per ton of charcoal and of wood should be increased.
- Delays with payments and hiring of trucks should be minimised, as this encourages burners to increase their debt and in some cases accelerates the debt cycle.
- Food rations should be provided for free.
- Food prices in the shops should be realistic and not too expensive, as is usually the case.
- Producers should always have food and basic medicine such as pills at the farm, especially where farms were far from the nearest towns.
- Producers should provide and enter into contracts with workers.
- All producers should pay the same rate to their charcoal workers per ton. This is necessary because some producers paid more to existing burners and less to newcomers.
- Protective clothing such as boots, overalls, masks, hats, gloves and raincoats should be provided to workers free of charge or at a nominal rate.
- Producers should provide workers with equipment such as wheelbarrows to help with transporting the wood.
- Producers should provide workers with free transport, at the very least to take them to hospital.
- Producers should attend to emergencies involving workers as soon as they occur. Of primary importance are health issues, but other problems such as funerals should also be considered.

- Producers should treat charcoal workers with respect.
- If bigger trees are cut down in one camp, workers should move to the next camp or farm, instead of being forced to work in camps where only small invader bushes are found and could be cut.
- Producers should give charcoal workers a reasonable number of leave days to rest.
- The housing for workers should be improved because using black plastic sheeting for dwellings was not acceptable.
- There should be proper toilets and showers at the farms.
- Producers should increase the number of kilns to limit delays with payments as some burners are forced to share the available kilns.
- Producers should be allowed to engage in other income-generating activities where feasible, to supplement their income.
- Workers felt that they should be paid separately for each of the various stages or activities associated with charcoal production, such as cutting down trees, burning the wood to make charcoal, sewing the bags, packing them, weighing them, and transporting them.

(b) Suggestions on where Government and NAFWU activities could be improved

- Government, through the MSLW, should intensify its monitoring and evaluation exercises in order to regulate the industry better. Many charcoal workers have never seen any inspector visit them or the producer.
- The Government, through the Office of the Prime Minister's Emergency Management Unit, should include charcoal workers in its drought food distribution programme.
- NAFWU should visit workers and heighten their awareness of labour issues.
- All stakeholders in the sector should discuss its formalisation.

5 CONCLUSION

One charcoal worker's production load ready for weighing and transporting, 13 July 2010

This study provided a detailed picture of the situation of workers in the charcoal industry. It became obvious that the various stakeholders had different concerns and priorities with regard to labour issues within the industry. Unfortunately, it seems that environmental issues are not a major concern for most stakeholders yet.

The Government would like the workers to be protected under the Labour Act. The producers fear that this would involve much more administrative effort and lead to increased costs, which would make their businesses unprofitable. Producers also presently perceive the unreliability of the workers and their high mobility as the main problems in the industry.

The authors of this report argue that the producers themselves would benefit from a proper employer–employee relationship. It is argued that, if workers were better protected and their living conditions were improved, their tendency to move from one farm to the next would diminish. Furthermore, employment contracts could invoke sanctions if employees absconded from their employment.

The researchers further argue that producers should agree to a standardised rate per ton amongst each other in a transparent way, in order to not 'poach' workers from each other.

Most of the workers have insubstantial knowledge about the Labour Act. Thus, they do not have a comprehensive understanding of what their rights would be under the law. Very few were visited by NAWFU. Where visits were undertaken, the purpose had principally been to register workers as paying union members rather than to inform them about NAFWU's activities – let alone the Labour Act. What workers mostly complained about was the rate paid per ton of charcoal produced and related financial issues, i.e. that the food in the producers' shops was too expensive, that they had too much debt, that they had to pay for protective clothing, etc.

However, if one looks at the rate per ton and the price at which the producers sold the charcoal, it does not seem feasible for many producers to increase the rate per ton. Some producers already pay almost 50% of the sales price to the workers, even if the (informally agreed) rate is different for the area concerned. These rates for Grootfontein, Otavi and Tsumeb amount to 38% of the selling price for unsifted charcoal, and 40% of that price for sifted charcoal. In the Outjo and Otjiwarongo area, a minimum price of 35% for unsifted and 37% for sifted charcoal was paid, including payment for rations and overtime, as well as 3% for leave.

Some of the workers' concerns, e.g. regarding basic conditions of employment, would be covered by the Labour Act once they have entered an employee–employer relationship with the producer. Other concerns, e.g. acceptable accommodation, could be covered in a collective agreement.

Discussion regarding *contractor/employee*

The question of whether charcoal workers should be regarded as *contractors* or *employees* is not clear. According to section 1 of the Labour Act, *employee* is defined as –

> **... an individual, other than an independent contractor, who –**
>
> **(a) works for another person and who receives, or is entitled to receive, remuneration for that work; or**
> **(b) in any manner assists in carrying on or conducting the business of an employer.**

The Act defines *employer* as being –

> **... any person, including the State[,] who –**
>
> **(a) employs or provides work [for] an individual and who remunerates or expressly or tacitly undertakes to remunerate that individual; or**
> **(b) permits an individual to assist that person in any manner in the carrying [on or conducting of] that person's business.**

Thus, the producer could be regarded as an *employer*; but, given the wide definition of *employee*, it is difficult to determine whether a worker is an independent contractor or an employee. In addition, the legislation does not define *independent contractor*. One would need

to look at the peculiar circumstances of specific cases in order to determine whether or not an individual who works for another person is an independent contractor. Namibia's labour legislation[68] uses the 'dominant impression test' to determine the nature of a contractual relationship.[69] In practice, the courts look at the specific relationship holistically in order to determine its nature.

The distinction between *contractor* and *employee* will determine whether or not the working arrangement is subject to the various conditions of employment set out in the Labour Act. To the researchers' understanding, this implies circular reasoning: one of the aims of the Act is to protect employees from unfair labour practices by setting up basic conditions of employment. However, if the worker is regarded as an independent contractor, such legislative protection is unavailable to him/her. In any case, there is no definitive distinction between *independent contractor* and *employee*, and this allows for interpretation according to the interpreter's interests.

A broader understanding of *independent contractor* provides the following definition:[70]

> **[A] natural person, business, or corporation that provides goods or services to another entity under terms specified in a contract or within a verbal agreement. Unlike an employee, an independent contractor does not work regularly for an employer but works as and when required, during which time she or he may be subject to the Law of Agency. Independent contractors are usually paid on a freelance basis. Contractors often work through a limited company, which they themselves own, or may work through an umbrella company.**

The fact that the charcoal worker works for the producer on a regular basis and not for a definite period of time would tend to define him/her as an *employee*, therefore. The fact that some charcoal producers have registered their workers with Social Security and pay their contributions to the Employee's Compensation Fund for them also implies that they regard their workers as employees.

Another factor that makes it difficult to determine whether or not a charcoal worker can be regarded as an independent contractor is that a contract of any kind – with an independent contractor or with an employee – is not required to be in writing to be effective: a contract can be oral or implied. Most charcoal workers are certainly not able to differentiate between a contract of employment as an employee and a contract of appointment as an independent contractor.

The definition of *employee* in the Employee's Compensation Amendment Act makes no provision for independent contractors. The definition reads as follows:

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68 Made up of common law from judgements of the Labour Courts, the Labour Act, regulations on occupational health and safety, etc.

69 In the 'dominant impression test', the court examines every feature of the actual relationship (and not just the contract) between the parties to determine whether the dominant impression is such that the relationship could be described as an employer–employee relationship. In the relationship between the parties, indicators such as the nature of the task, the freedom of action, the magnitude of the contract, the manner of payment, the power of dismissal, the circumstances under which the payment of the reward may be withheld, control, supervision, and subjection to the orders of another are looked at.

70 http://en.wikipedia.org/wiki/Independent_contractor; last accessed 6 October 2010.

(1) Subject to the provisions of subsection (2) and unless inconsistent with the context, "employee" in this Act means any person who has entered into or works under a contract of service or of apprenticeship or learnership, with an employer, whether the contract is express or implied, is oral or in writing, and whether the remuneration is calculated by time or by work done, or is in cash or in kind, and includes –

(a) any person whose occupation is conveying for gain, persons or goods by means of any vehicle, ship or aircraft, the use of which he or she has obtained under any contract other than a purchase or hire-purchase agreement, whether or not the remuneration of such person under such contract be partly an agreed sum and partly a share in takings, but does not include any such person whose remuneration is fixed solely by a share in takings;

(b) any person or class of persons excluded from the scope of this Act by the provisions of subsection (2)(b) or (g), if the employer of such person or class of persons has made special arrangements with the Commission to that effect and complied with the conditions prescribed by the Commission in regard thereto; …

[Para (b) substituted by sec 1(a) of Act 58 of 1967 and by sec 2(a) of Act 5 of 1995.]

(c) when an employee is dead or under disability, his or her representative, his or her dependants and any other person to whom or for whose benefit compensation is payable: …

Thus, according to the Employee's Compensation Amendment Act, charcoal workers are defined as *employees* and, thus, the producer is obliged to register his/her workers for contributions to the Employee's Compensation Fund.

After this study we concluded that workers should be treated as employees as determined by the Labour Act, with certain exemptions, and as laid down in a collective agreement negotiated between the NCPA and NAFWU. The suggested exemptions are described in Chapter 6 herein. On the one hand, this would ensure fundamental labour rights and protections for workers, and would regulate the basic terms and conditions of employment for them. Furthermore, it would help to ensure the health, safety and welfare of workers and would protect them from unfair labour practices.

On the other hand, given that a collective agreement would be reached that takes the special nature of the charcoal industry into account, it would help producers, as employers, to ensure that they had employed a more reliable and stable workforce, it would decrease any financial losses suffered from worker mobility, and would improve the management of the business.

6 RECOMMENDATIONS

Protective mask used in charcoal processing, 22 July 2010

The regulation of the charcoal industry with regard to labour and environmental issues is overdue. Some of the recommendations listed below would be met if the most fundamental recommendation is met, namely that workers become regular employees under the Labour Act. Due to the uncertainty of when this will happen, the report has included the most important aspects as separate recommendations. Although there was no specific attempt in the study to focus on the environmental implications of the charcoal industry, some recommendations pertaining to environmental issues are included.

6.1 Recommendations for Government

- The MLSW should conduct annual inspections at charcoal production sites.
- The Ministry of Education should look into the issue of charcoal workers' children not attending school and take the necessary steps.
- The DF should ensure that cutting and harvesting procedures are carried out properly, that permit requirements are followed, and that inspections take place on every charcoal-producing farm. Given its lack of capacity, the DF should consider outsourcing this task to another institution, possibly the Namibian Woodlands Management Council (NWMC; see 6.8). Alternatively, Government should equip the DF with enough vehicles to conduct inspections and should increase the number of staff where necessary so that proper inspections can be carried out.
- The Environmental Management Act should be implemented.
- A strategic environmental assessment should be conducted on the alternative uses of encroacher bush, e.g. as charcoal, firewood, or wood gasification – as piloted by the Combating Bush Encroachment for Namibia's Development (CBEND) Project – in order to identify the significance and magnitude of the environmental and socio-economic impacts of the industry on local, national, regional and global levels.
- The inclusion of mopane (*Colophospermum mopane*) as a protected species in the Forest Act conflicts with its widespread use in making charcoal. This conflict should be resolved in the legislation, either by removing it from the protected species list or by setting firm criteria for its inclusion in the list, and applying appropriate measures relating to its utilisation. At the moment it is in a grey zone, without clear guidelines as to its conservation and use.[71]

Bush encroachment with mopane, 31 October 2006

6.2 Recommendations for NAFWU

NAFWU should –

- make sure they represent the genuine interests of the charcoal workers in negotiations with the NCPA to reach a collective agreement, as described by the Labour Act
- increase its capacity and visit charcoal workers in different regions on a regular basis to ensure that they present their interests appropriately, and
- distribute information to charcoal workers on the Labour Act and other relevant legislation in order to empower them.

6.3 Recommendations for the NCPA

The NCPA should –

- formalise its membership and levy membership fees
- provide compulsory training in safety and fire prevention for charcoal workers
- lobby its members for compliance with labour legislation and environmental recommendations
- organise exchange study visits among its members to learn from the best in the industry
- organise training for members as regards the financial and administrative management of a charcoal business
- encourage its members to provide traditional housing to workers
- encourage its members to establish a sound financial management system, to monitor the charcoal quality before the producer sells the charcoal, and to pay when the charcoal is delivered, and
- standardise contracts of employment in accordance with the Labour Act and the collective agreement, and distribute such contracts to producers.

6.4 Recommendations for producers

- The producer–worker relationship should be regulated as an employee–employer relationship according to the Labour Act, with certain collective exemptions for the industry, as defined in the collective agreement (see 6.5).
- Producers should register their workers for insurance under the Employee's Compensation Amendment Act, as it provides the framework for insuring employees against loss of earnings resulting from incurring injury or contracting a disease during the course of their employment.
- Producers should register their workers for benefits under the Social Security Act as it provides for the payment of maternity leave, sick leave and death benefits to employees.
- Producers should limit the credit system for food and daily necessities to a minimum, and should provide credit only under exceptional circumstances.
- Producers should provide each worker with protective clothing on the understanding that, if such worker leaves before the end of an agreed period, e.g. six months, the cost of the clothing will be deducted from the worker's final salary, as defined in a work contract or collective agreement.
- Equipment such as axes, files or spades should be provided to workers and returned to the producer upon termination of the workers' employment.

- Producers should be obliged to pay for pre-employment medical examinations, as stipulated in the Health and Safety Regulations of 1997, provided that if a worker should leave within an agreed period, e.g. nine months, as stipulated in a collective agreement or contract, the worker would have to compensate the employer for such costs.
- Producers should monitor the charcoal quality when it is delivered, and should pay workers immediately after delivery.
- The timing and frequency of payment should be transparent and agreed upon, and workers should be told before they start production what the terms of payment are, how often they are obliged to deliver and when they will be paid after delivery in order to facilitate each worker's management of his/her finances.
- The system of payment and the deduction of credit owing should be made transparent to workers.
- Shop prices should not be permitted to be higher than 10% of the wholesale price in the next town.
- The produce should give charcoal workers basic information regarding which trees to cut and which to leave.
- Control mechanisms should be established and regular inspections conducted in the harvesting areas to see if workers comply with regulations as to which trees to cut.
- Producers should attend training courses in financial and administrative management of the charcoal business.

Sifting charcoal, 21 July 2010

6.5 Recommendations for collective agreements

Collective agreements should stipulate the following:

- The timing and frequency of payments to workers.
- That protective clothing is provided to workers free of charge, but if a worker leaves before the end of a period accepted by both parties in the collective agreement, e.g. six months, the amount will be deducted from his/her final salary.
- That equipment such as axes, files and spades are to be provided to workers free of charge, provided that they are returned to the producer upon the worker terminating his/her employment.
- That producers are to pay for the cost of a pre-employment medical examination, provided that if a worker leaves within a period accepted by both parties in the collective agreement, e.g. nine months, the worker has to pay such costs back to his/her employer.
- The costs of the pre-employment and periodic medical examinations, since the exemption stated in *Government Gazette* 4459 of 15 April 2010 is only valid for self-employed individuals.
- That producers are entitled to deduct a fee from a worker's salary where s/he cuts down the wrong tree, and that such fee is to be paid to the NCPA to secure funding for training to workers.

6.6 Recommendations for charcoal workers

Workers should –

- ask for an employment contract before starting work
- ask to be registered for benefits under Social Security and the Employee's Compensation Fund
- require protective clothing, wear it, and maintain it in order to reduce occupational diseases and injuries
- agree with the producer on the timing and frequency of charcoal delivery, e.g. every six weeks, in order to improve their financial situation
- ask the producer for a list of items and their prices in his/her shop
- get clarity about assistance when s/he falls ill, requires annual leave, etc., and
- elect a delegate at each producer's farm and form a Charcoal Workers' Association to strengthen workers' negotiating power.

6.7 Environmental recommendations for producers and workers

With regard to environmental issues, the recommendations of the Southern African Institute for Environmental Assessment[72] for the Combating Bush Encroachment for Namibia's Development (CBEND) Project are followed here, since harvesting of bush for wood gasification and for charcoal production are the same. The recommendations are as follows:

[72] See NPCS (2010:92).

- Bush thinning rather than bush clearing is the key element to harvesting.[73]
- Complete clearing of bush should never be done as this is bad practice for soil fertility. The rule of thumb is that the number of tree equivalents per hectare should not exceed twice the long-term mean annual rainfall, and there should be a range of size classes in the remaining bush. Relatively smaller bushes should be targeted for removal, while large trees (over 4–5 m in height) should not be cut. Thinning should take out fewer trees in areas where mopane or silver terminalia predominate.
- The intention is to restore rangeland to an open savanna matrix containing scattered large trees, some dead trees, and some bush clumps of 1–4 ha, with a diversity of habitats.
- Bush harvesting should not be done at all on slopes steeper than 12%, and slopes from 5% to 12% should only be partially harvested. This is to prevent soil erosion.
- Activities of harvesters should make a point to not disturb nesting raptors or to cut any trees which hold large nests.
- Poaching of wildlife is prohibited by law and this should be strictly dealt with if noticed. No animals should be unnecessarily disturbed or killed.

6.8 Recommendations for all stakeholders

- Institutions should be identified to provide charcoal workers with training in labour issues, financial management, and sustainable harvesting methods.
- Charcoal workers should be assisted with organising themselves to have a voice, e.g. by way of an informal national committee, and to decide on their relationship to NAFWU. Such a committee would be able to feed issues facing charcoal workers to relevant stakeholders. The committee could also represent charcoal burners at various platforms.
- Additionally, as suggested already, the lack of capacity in the DF at present suggests that the establishment of the NWMC should be sped up so that it can facilitate some of the administrative and regulatory responsibilities. Such a measure should be discussed in the interest of preventing the overexploitation of bush resources and ensuring their long-term use. The NWMC has been in the proposal stage for a few years, but has not yet been constituted. In the interim, the Namibia Agronomic Board has a management agreement with the MAWF to administer the funds for its establishment. To prevent the possibly excessive consumption of time and money by committees, this body should work closely with the existing NCPA.[74]

[73] (ibid.).
[74] See also NPCS (2010:94).

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Annexures

Women packing charcoal, 21 April 2010

ANNEXURE 1

Cabinet directives on the charcoal industry (2 February 2007)

Cabinet approved the following measures to address problems in the charcoal industry:

1. Charcoal cutters must be regarded as employees of a particular charcoal producer for whom they are working or rendering a service. Their minimum wage per ton should be negotiated differently from existing farm workers through the Namibian Labour Forum (NLF), chaired by the Permanent Secretary of Labour and Social Welfare;
2. Where employers regard charcoal cutters as self-employed or sub-contractors, an agreement must be entered into through the Namibian Labour Forum to allow cutters to bargain for their prices for services rendered;
3. Charcoal cutters must be entitled to all the conditions of service and benefits as prescribed in the Labour Act;
4. The charcoal producer must take responsibility for all the employees in his employment, including the charcoal cutters who are performing duties at his/her farm or private place;
5. Charcoal producers should provide his/her employees with all the necessary personal protective equipment as prescribed in the regulations relating to the health and safety of employees at work and they should be made aware of the location of that personal protective equipment at their [workplace];
6. Personal protective equipment should be maintained by the employer who must ensure that it is in a good condition;

7. The charcoal cutters must undergo pre-employment and [periodical] medical examinations to ensure that they are healthy and fit for the work to be performed;
8. The medical examinations should be done at the expense of the employer and during working hours without loss in pay to the employees being examined;
9. Charcoal producers must send some of the workers on first aid training to allow them to provide first aid to injured workers at the workplace;
10. Charcoal producers must provide and maintain a readily available first aid box at the workplace;
11. Charcoal production farmers should be compelled to obtain a permit from the Ministry of Agriculture, Water and Forestry, as well as a Trading [Licence] from the Ministry of Trade and Industry;
12. The Ministry of Agriculture, Water and Forestry should conduct regular inspections on charcoal[-]producing commercial farms to avoid deforestation;
13. The Ministry of Education must expand the education facilities at the Queen [Sofia] Primary School to add more classes up to Grade 10;
14. Cabinet also directed that the Ministry of Education should explore the possibility of establishing educational facilities in other areas of the country where charcoal production is carried out on a large scale; and
15. The Ministry of Health and Social Services should establish an outreach mobile clinic at Queen [Sofia] for the farming community to ensure the early detection of symptoms as a result of health hazards among the farm workers and their children.

ANNEXURE 2
Interviewees

2.1 EXPERTS AND OTHER INDIVIDUALS CONSULTED, IN ALPHABETICAL ORDER

Name	Position	Organisation
Mr Alfred **Angula**	General Secretary	Namibian Farm Workers' Union
Anonymous	Intern	Namibia National Farmers' Union
Anonymous	Lecturer	Polytechnic of Namibia, Agriculture Department
Anonymous		Ministry of Environment and Tourism
Mr Sacky **Coetzee**	Chief Executive Officer	Namibia Agricultural Union
Mr Ian **Galloway**	General Manager	Jumbo Charcoal
Mr Jesse **Goliath**	Administrator	Namibia Agronomic Board
Mr Carter **Hartz**	Division Manager	Consulting Services Africa
Mr Harald **Markgraaf**	Manager: Commodities	Namibia Agricultural Union
Mr Diamantis **Pavlochristos**	Agent/Exporter	Invader Bush Charcoal
Mr Geel **Schoombee**	Labour Specialist	Agricultural Employers' Association
Mr Ileni **Shikwambi**	Occupational Health Inspector	Ministry of Labour and Social Welfare
Mr Festus **Shiwedha**	Chief Forest Technician	Ministry of Agriculture, Water and Forestry
Ms Yvonne **Thomas**	Owner	Invader Bush Charcoal

2.2 PRODUCERS, BY DATE OF INTERVIEW

Date of interview	Production site	Name of producer
19.1.2010, 10.2.2010	Farm Honigberg, Tokai, etc.	Mr Frans Holzkampf
2.2.2010	Farm Pierre, Nimitz, etc.	Messrs Gerd and Willem Groenewald
2.2.2010	Farm Wembley, Kleinhuis, etc.	Mr Tron and Ms Sonja Erasmus
2.2.2010	Farm Goodbegin	Mr Mathew Ipangelwa
2.2.2010	Farm Gelukspu t, Clifton, etc.	Mr Alfred Bagot Smith
3.2.2010	Farm Grensplaas, Poole	Mr Patat du Toit
3.2.2010	Farm Kenilworth	Mr Chris Botha
4.2.2010	Farm Koenig	Mr Samuel Puriza
4.2.2010	Farm Lazy Spade, Queen Sofia, etc.	Mr Mans Steenkamp
4.2.2010	Farm Dornwald	Mr Oskar Kauteza
11.2.2010	Farm Okurisengo	Mr Obet Kaveterua
11.2.2010	Farm Brunnental, etc.	Mr Gerald Steyn
11.2.2010	Farm Orupemparora	Mr Zeck du Toit
11.2.2010	Farm Marburg	Mr Petrus Higun
24.3.2010	Farm Breedskroon, etc.	Mr Willem Enslin
24.3.2010	Farm Blystroom	Mr Dawid Kok
25.3.2010	Farm Nuitsas Sued	Mr Amor Maritz
25.3.2010	Farm Nora	Mr Schalk Kuehn
25.3.2010	Farm Sardo	Mr Piet Dietrichs
26.3.2010	Farm Choantsas	Mr Karl-Heinz Friedrich
26.3.2010	Farm Leeupos	Mr Erastus Gomachab
19.4.2010	Farm Hiebis-Ost	Mr Diederik J Erasmus
20.4.2010	Farm Leeupos	Mr Jonas Amadhila
21.4.2010	Farm Pommern	Mr David Shifotoka
21.4.2010	Farm Welmoed	Mr Karl Damaseb
22.4.2010	Farm Nooitgedacht	Mr Markus Damaseb
22.4.2010	Farm Eersteling	Mr Philipus Johannes Fourie
22.4.2010	Farm Arbeidsgenot	Ms Niana van Aswegen
23.4.2010	Farm Tirol	Mr Alfons Aseb
24.4.2010	Farm Ombanje	Mr Peter I Amwaama
22.7.2010	Farm Welkom	Mr Louis Vorster
22.7.2010	Farm Ben-Hur	Mr Christof Malehe
21.7.2010	Farm Gottesgabe	Mr GA Friedrich
21.7.2010	Farm Waterloo	Mr Hendrick Jacobus Blaauw

ANNEXURE 3

Farms visited, by date of visit

Date (2010)	No.	Farm name	District	Region	Producer	Owner or resettled farmer
2.2	1	Poole	Outjo	Otjozondjupa	Mr Willem Groenewald	Mr Gabriel Ithete
2.2	2	Goedbegin	Otjiwarongo	Otjozondjupa	Mr Matthew Ipangelwa	Mr Matthew Ipangelwa
2.2	3	Kleinhuis	Outjo	Otjozondjupa	Mr Tron and Ms Sonja Erasmus	Mr Clemens Haufiku
2.2	4	Gelukspu t	Otjiwarongo	Otjozondjupa	Mr Alfred Bagot Smith	Alfred Bagot Smith
3.2	5	Poole	Outjo	Otjozondjupa	Mr Patat du Toit	Mr Gabriel Ithete
3.2	6	Kenillworth	Otjiwarongo	Otjozondjupa	Mr Chris Botha Jr	Mr Chris Botha Sr
4.2	7	Lazy Spade	Outjo	Otjozondjupa	Mr Mans Steenkamp	Mr Mans Steenkamp
4.2	8	Koenig	Outjo	Otjozondjupa	Mr Sam Puriza	Mr Sam Puriza
5.2	9	Honigberg	Otjiwarongo	Otjozondjupa	Mr Frans Holtzkampf	Mr Janni du Toit
10.2	10	Brunnental	Otjiwarongo	Otjozondjupa	Mr Gerald Steyn	Mr Gerald Steyn
10.2	11	Dornwald	Otjiwarongo	Otjozondjupa	Mr Oscar Kauteza	Mr Oscar Kauteza
11.2	12	Marburg	Otjiwarongo	Otjozondjupa	Mr Petrus Higun	Mr Petrus Higun
12.2.	13	Okarusu	Otjiwarongo	Otjozondjupa	Mr Johannes Damaseb	Mr Shakuleni Daniel
24.3	14	Sachsenwald	Grootfontein	Otjozondjupa	Mr Willem Enslin	Mr Atutale Ndeshimona
24.3	15	Blystroom	Grootfontein	Otjozondjupa	Mr David Kock	Mr David Kock
25.3	16	Nora	Grootfontein	Otjozondjupa	Mr Schalk Kuhn	Mr B van Wyk
25.3	17	Nuitsas-Sued	Grootfontein	Otjozondjupa	Mr Amor Maritz	Mr Amor Maritz
26.3	18	Leeupos	Tsumeb	Oshikoto	Mr Erastus Gomagab	Mr Erastus Gomagab
20.4	19	Welmoed	Tsumeb	Oshikoto	Mr Karl Damaseb	Mr Karl Damaseb
20.4	20	Leeupos Ext. 2	Tsumeb	Oshikoto	Mr Jonas Amadhila	Mr Hileni Amadhila
21.4	21	Pommern	Tsumeb	Oshikoto	Mr David Shifotoka	Mr Simon Sven
21.4	22	Hiebis-Ost	Tsumeb	Oshikoto	Mr Diederik K Erasmus	Mr Dave Keyser
22.4	23	Eersteling	Otavi	Otjozondjupa	Mr Philipus Johannes Fourie	Mr Philipus Johannes Fourie
22.4	24	Nooitgedacht	Otavi	Otjozondjupa	Mr Markus Damaseb	Mr Markus Damaseb
23.4	25	Tirol	Otavi	Otjozondjupa	Mr Alfons Aseb	Ms Elke de Vries
24.4	26	Ombanje	Otavi/Tsumeb	Otjozondjupa	Mr Peter I Amwaama	Dr Leake S Hangala
13.7	27	Narachams	Khorixas	Kunene	Ms Lydia !Uiras	Mr Frans !Uirab
13.7	28	Gainatseb	Khorixas	Kunene	Mr Erastus Luipert	Mr Erastus Luipert
14.7	29	Eastwood	Khorixas	Kunene	Mr Gabriel Goraseb	Mr Gabriel Goraseb
14.7	30	Tsumamas	Khorixas	Kunene	Mr "Akades"	Mr "Eddy"
15.7	31	Kaitzaas	Outjo	Kunene	Mr Ockert A Grove	Mr JA Grove
15.7	32	Borwa	Outjo	Kunene	Mr Stewardt Cumming	Mr Stewardt Cumming
16.7	33	Vaalkop	Outjo	Kunene	Mr Mans Steenkamp	Mr Albertus Geingob
16.7	34	Kakurusu	Outjo	Kunene	Mr India Katjivena	Mr India Katjivena
20.7	35	Ultima-Thule	Gobabis	Omaheke	Mr Hugo Derks	Mr Hugo Derks
21.7	36	Travena	Gobabis	Omaheke	Mr Frans Murangi	Mr Frans Murangi
21.7	37	Waterloo	Gobabis	Omaheke	Mr Hendrik J Blaauw	Mr Hendrik J Blaauw
21.7	38	Gottesgabe	Gobabis	Omaheke	Mr GA Friedrich	Mr GA Friedrich
22.7	39	Welkom	Gobabis	Omaheke	Mr Louis Vorster	Mr Louis Vorster
22.7	40	Ben-Hur	Gobabis	Omaheke	Ms Matilde Malehe	Mr Christof Malehe

ANNEXURE 4

Recommendations of Report on the Investigation into the Occupational Health Hazards in the Charcoal Industry (7–12 July 2008)

- The Ministry of Labour and Social Welfare to convene a meeting of Social Partners to conclude the agreement in order to implement the Cabinet Directives.
- Some of the Cabinet Directives (from 3–11) to be implemented now by all the charcoal producers.
- Regular inspections by the Ministry of Labour and Social Welfare should be conducted at the charcoal farms to enforce and promote the regulations on health and safety.
- Fines to be determined about the non-compliance and possibly to revoke their permit and trading [licence].
- The charcoal producers to take responsibility of regular checking or taking their employees to hospital.
- The charcoal cutters or burners to be remunerated as soon as the charcoal has been loaded to their designated destinations.
- It is recommended that the Ministry of Gender Equality and Child Welfare [and] Home Affairs and Immigration [are] to be added to the Ministries that are identified already, to deal with charcoal issues.
- No refugees allowed [to work] without the permission of the Ministry of Home Affairs and Immigration.
- NAFWU must have permanent person(s) to attend the forum.
- The meeting of a tripartite charcoal forum to be convened and chaired by the Ministry of Labour and Social Welfare. It can be chaired by the Permanent Secretary, Deputy Minister or any staff member assigned by the Minister or Permanent Secretary.
- The agreement reached by all the parties, once gazetted, will be applicable to all charcoal producers, [whether] a member or not of [the] Namibia Charcoal [Producers'] Association.
- As per Cabinet directives the charcoal producers must take responsibility for all the employees in their employment, including the charcoal cutters who are performing duties on their farms or any other places.
- The [Ministry's] inspection on charcoal industries should be done on an annual basis.
- The Ministry of Agriculture, Water and Forestry must conduct a regular inspection, in order to avoid deforestation … .

ANNEXURE 5

Encroacher bush species in Namibia: Species to be targeted for harvesting[75]

Scientific name	English name	Afrikaans name	Oshiwambo/ Otjiherero name	Comment
Indigenous encroacher species				
Dichrostachys cinerea	Sickle bush	Sekelbos	Ongete Omutjeti	Abundant and widespread. Spiny bush/small tree with very curly pods that remain on the tree. Small leaflets. Seeds remain viable for years. This plant has extreme ability to coppice (regrow from the stump) after being cut down. It is likely that worse infestations will result after harvesting. Aftercare treatment is necessary in order to achieve good grazing.
Acacia mellifera	Black thorn	Swarthaak	Omunkono Omusaona	Abundant and widespread. Small tree with flat to rounded crown. Pairs of hooked thorns. Small leaflets but larger than other local acacias. Seeds do not remain viable after one year. Some trees will die after cutting while others will coppice.
Terminalia prunioides	Purple pod terminalia	Deurmekaarbos Sterkbos	Omuhama Omuhama	Abundant and widespread. Broadleaved trees. No thorns. This is one of only two broadleaved target species. It is an untidy tree with distinct dark red pods; many remain on the tree. Also browsed.
Acacia luederitzii *Acacia reficiens*	False umbrella thorn	Baster haak-en-steek	Omutyuula Omungondo	Abundant and widespread. Tree stems have a deep reddish colour. Small leaflets. Has hooked or straight thorns or both.
Acacia erubescens	Blue thorn	Geelhaak Blouhaak	Omunkono Omungongomui	Abundant in places. The yellowish, papery bark is distinctive. Pairs of hooked thorns have a dark bluish colour.
Acacia fleckii	Plate thorn	Sandveld acacia Bladdoring	Omumang Omutaurambuku Andjamba	Abundant in places. The hooked thorns extend in a plane along the stems.

[75] NPCS (2010: Appendix B).

Acacia nilotica	Scented-pod acacia	Lekkerruikpeul	Olufu	Abundant mainly in the north-east to north-west of the project area. Small leaflets. Thorny. Long pods.
Colophospermum mopane	Mopane	Mopanie	Omusati Omutati	Widespread in the north-west of the charcoal production area. The large kidney-shaped symmetrical leaf is distinctive. The plant has no thorns.
Terminalia sericea	Silver terminalia	Sandgeelhout	Omugolo Omuseasetu	Occurs almost entirely on deep sandy areas. The leaves are grey and distinctive. The flat pods are pinkish. The wood is yellow. The plant has no thorns.
Catophractes alexandri	Trumpet thorn	Gabbabos Trompetdoring	Okalyanzi Omukaravezi	Abundant and widespread. Tends to occur densely only in patches. Broadleaved, spiny bush. Grey leaves, large trumpet-like flowers, and distinctive pods. One of only two broadleaved target species. Also browsed.
Alien invasive tree species				
Prosopis sp.	Prosopis Mesquite	Prosopis Suidwesdoring Muskiet		Alien invasive tree from Central America/Mexico. Several species occur in Namibia and all are invasive. This evergreen species has a drooping form and soft compound leaves that conceal long spines. It was introduced for its very nutritious pods as fodder. Serious infestations occur along some of the river valleys in Namibia, especially in the drier parts. It is less prolific in the northern half of the country.
Lantana camara	Lantana	Lantana		A thorny, tough bush. Not yet common in the study area. May form thickets. Bright yellow and pink/purple flowers. Square stems with small thorns on corners of stems. Seed fleshy and black when ripe. Care required to prevent spreading the seeds. Might need some herbicidal aftercare.
Leucaena leucocephala	Wondertree	Wonderboom		Fast-growing tree. Not yet common in the project area. No thorns. Many brown pods remain on the tree. Care required to prevent spreading the seeds.

ANNEXURE 6

Important fodder/browse species: Ideally *not* for harvesting[76]

Scientific name	English name	Afrikaans name	Oshiwambo/ Otjiherero name	Comment
Bauhinia petersiana	Coffee neat's foot	Koffiebos	Omutwanghuta Omukatjipera	Abundance: Occasional. Distribution: Rare. Associated with deep sands found in intermontane valleys. Could get relatively dense. TAN 212, vW&vW 372/3.
Combretum apiculatum	Kudu bush Red bushwillow	Koedoebos	Omumbuti Omunaluko	Abundance: Common. Distribution: widespread Could also get relatively dense TAN 468, vW&vW 328/1.
Combretum hereroense	Mouse-eared combretum	Kierieklapper		Abundance: Common. Distribution: Occasional. TAN 478, vW&vW 332/1.
Croton gratissimus	Lavender croton	Laventelbos	Mbango Omumbango	Abundance: Common. Distribution: Common. TAN 326, vW&vW 86/3.
Dombeya rotundifolia	Wild pear	Drolpeer	Omuryahere	Abundance: Occasional. Distribution: Occasional. TAN 452, vW&vW 234/3.
Ehretria alba (= Ehretria rigida)	White puzzle-bush	Deurmekaarbos	Omusepa	Abundance: Occasional. Distribution: Occasional. TAN 565, vW&vW 162/4.
Euclea undulata	Common guarri	Gewone ghwarrie Besembos	Omukarambandje	Abundance: Occasional. Distribution: Occasional. TAN 514, vW&vW 340/3.
Grewia bicolor	Two-coloured raisin bush	Basterrosyntjie	Omuhonga Omundjembere	Abundance: Occasional. Distribution: Common. TAN 428, vW&vW 236/4.
Grewia flava	Velvet raisin	Rosyntjiebos	Omuvapu	Abundance: Occasional. Distribution: Occasional. TAN 432, vW&vW 238/2.
Grewia flavescens	Sandpaper raisin	Skurweblaar rosyntjie	Omuhe	Abundance: Common. Distribution: Common. TAN 434, vW&vW 238/3.
Tarchonanthus camphorates	Wild camphor	Vaalbos	Omuteatupa	Abundance: Occasional. Distribution: Occasional. TAN 628, vW&vW 112/2.
Terminalia sericea	Silver terminalia	Sandgeelhout	Omugolo Omuseasetu	Abundance: Occasional. Distribution: Rare. Associated with deep sands found in intermontane valleys. TAN 498, vW&vW 174/2.
Ziziphus mucronata	Buffalo thorn	Blinkblaar wag-'n-bietjie	Omukaru Omukekete	Abundance: Occasional. Distribution: Occasional. TAN 412, vW&vW 232/2.

[76] NPCS (2010: Appendix C).

ANNEXURE 7

Legally protected species[77]

Scientific name	English name	Afrikaans name	Oshiwambo/ Otjiherero name	Comment
Acacia erioloba	Camelthorn	Kameeldoring	Omuthiya Omuonde Omumbonde	Protected by the Forest Act.[78] Occasional, usually on sandy soils and scattered amongst encroacher bush. One of the largest *Acacia* species. Pods are valuable for browse/fodder.
Acacia haematoxylon	Grey camelthorn	Vaalkameeldoring		Protected by the Forest Act. Occurs in south-eastern Namibia, probably outside the charcoal production area.
Acacia montis-usti	Brandberg acacia	Brandbergakasia		Protected by the Forest Act. May occur along the far western margin of the charcoal production area.
Acacia robynsiana	Whip-stick acacia	Antenna-akasia		Protected by the Forest Act. Occurs in the north-west along the escarpment. Uncommon to rare in the charcoal production area.
Acacia sieberana	Paperbark	Papierbasdoring		Protected by the Forest Act. Locally common in the north-west of the charcoal production area.
Adansonia digitata	Baobab	Kremetartboom		Protected by the Forest Act. Uncommon to rare in the Tsumeb area. May be locally common in the far north-west of the charcoal production area.
Albizia anthelmintica	Worm cure albizia	Aru Oumahout	Omuama	Protected by the Forest Act. Abundance: Occasional. Distribution: Occasional.
Aloe littoralis and all *Aloe* species	Windhoek aloe	Bergalwyn	Otjindombo	Protected by the Nature Conservation Ordinance[79] and CITES Appendix II.[80] Abundance: Occasional. Distribution: Rare.
Baikiaea plurijuga	Zambezi teak			Protected by the Forest Act. May occur in the extreme north-east of the charcoal production area.
Berchemia discolor	Bird plum	Bruinivoor	Omuve	Protected by the Forest Act. Abundance: Occasional. Distribution: Rare.

77 Some of these are also browser species. NPCS (2010: Appendix D).
78 No. 12 of 2001, as amended by Act No. 13 of 2005.
79 No. 4 of 1975.
80 Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Scientific name	English name	Afrikaans name	Oshiwambo/ Otjiherero name	Comment
Boscia albitrunca	Shepherd's tree	Witgat	Omunghudi Omutendereti	Protected by the Forest Act. Occasional but widespread, often scattered amongst encroacher bush. Evergreen with pale grey stems. Small individuals are easily overlooked due to heavy browsing. Slow-growing but ecologically important as browse and fruit for birds. Valuable fodder for livestock in times of drought.
Burkea africana	Omutundungu Burkea	Sandsering	Omutundungu	Protected by the Forest Act. Abundance: Occasional. Distribution: Rare. Associated with deep sands found in intermontane valleys.
Colophospermum mopane	Mopane	Mopani	Omusati Omutati	Protected by the Forest Act. Abundance: Common. Distribution: Occasional. Found in the north-western areas.
Combretum imberbe	Leadwood	Hardekool	Omumborombonga Omukuku Omumbolombongo	Protected by the Forest Act. Abundance: Common. Distribution: Occasional. Browsed by wildlife and livestock.
Cyphostemma juttae	Blue kobas	Blou kobas		Protected by the Nature Conservation Ordinance. Abundance: Occasional. Distribution: Rare. Stem succulent associated with mountains.
Elaeodendron transvaalense (= Cassine transvaalensis)	Transvaal saffron Bushveld saffron	Lepelhout	Omudengambwa	Protected by the Forest Act. Abundance: Occasional. Distribution: Rare.
Entandrophragma spicatum	Owambo wooden-banana	Owambo-mahonie		Protected by the Forest Act. May occur rarely in the far north-west of the charcoal production area.
Erythrina decora		Suidweskoraalboom		Protected by the Forest Act. May be locally rare to common in the charcoal production area.
Euclea pseudebenus	Wild ebony	Swartebbe		Protected by the Forest Act. Occurs along the western margins of the charcoal production area.
Euphorbia guerichiana	Paper-bark euphorbia	Papierbasmelkbos	Omupondorowa	Protected by CITES Appendix II. Abundance: Occasional. Distribution: Rare. Associated with mountains and foothills.

Scientific name	English name	Afrikaans name	Oshiwambo/ Otjiherero name	Comment
Faidherbia albida	Ana tree	Anaboom		Protected by the Forest Act. Occurs in the western parts of the charcoal production area, mainly along river valleys.
Ficus burkei (= *Ficus thonningii*)	Strangler fig	Wildevy	Omupuya Omuhoro	Protected by the Forest Act. Abundance: Common. Distribution: Rare.
Ficus burkei (= *Ficus thonningii*)	Strangler fig	Wildevy		Protected by the Forest Act. Occurs particularly in the central parts of the charcoal production area, in the vicinity of the Otavi Mountains.
Ficus cordata	Namaqua rock-fig	Haartvy		Protected by the Forest Act. Scattered in the central parts and western parts of the charcoal production area.
Ficus sycomorus	Sycamore fig	Geelstamvy		Protected by the Forest Act. Occurs in the central to western parts of the charcoal production area.
Guibourtia coleosperma	Ushivi	Baster mopane		Protected by the Forest Act. May be encountered in the extreme north-east of the charcoal production area. TAN 204.
Gyrocarpus americanus	Propeller tree	Helikopterboom Draaivrugboom		Protected by the Forest Act. Abundance: Occasional. Distribution: Rare. Associated with mountains and foothills.
Kirkia acuminata	White syringe	Bergsering Witsering	Omulemba	Protected by the Forest Act. Abundance: Abundant. Distribution: Common. Associated with mountains and foothills.
Lannea discolour	Live-long	Dikbas	Omundjimune	Protected by the Forest Act. Abundance: Common. Distribution: Occasional. Associated with mountains and foothills.
Maerua schinzii	Ringwood tree	Lammerdrol	Omutengu	Protected by the Forest Act. Abundance: Occasional. Distribution: Rare.
Ochna pulchra	Peeling-bark ochna	Lekkerbreek		Protected by the Forest Act. Occurs in north-eastern Namibia, including the north-eastern parts of the charcoal production areaarea.
Olea europea subsp. *africana*	Wild olive	Olienhout	Kanongovandu	Protected by the Forest Act. Abundance: Common. Distribution: Occasional. Associated with the plains and foothills around Otavi.

Scientific name	English name	Afrikaans name	Oshiwambo/ Otjiherero name	Comment
Ozoroa crassinervia	Namibian resin tree	Namibiese harpuisboom		Protected by the Forest Act. Mainly in mountainous localities, including parts of the charcoal production area.
Pachypodium lealii	Bottle tree	Bottelboom	Ohwanga	Protected by the Nature Conservation Ordinance and CITES Appendix II. Abundance: Occasional. Distribution: Rare. Stem succulent associated with mountains.
Pappea capensis	Jacket-plum	Doppruim		Protected by the Forest Act. Not known from the charcoal production area.
Parkinsonia africana	Green-hair tree	Lemoendoring		Protected by the Forest Act. May be found along the central western edges of the charcoal production area.
Peltophorum africanum	African wattle Muparara	Huilboom	Omuparara Omupalala	Protected by the Forest Act. Abundance: Common. Distribution: Occasional.
Philenoptera nelsii (= Lonchocarpus nelsii)	Kalahari omupanda Kalahari apple-leaf	Kalahari appelblaar	Omupanda	Protected by the Forest Act. Abundance: Occasional. Distribution: Rare. Associated with sandy soils. Browsed by wildlife and livestock.
Philenoptera violacea (= Lonchocarpus capassa)	Rain tree	Appelblaar		Protected by the Forest Act. Occurs in north-eastern Kavango and in Caprivi. Not known in the charcoal production area.
Pterocarpus angolensis	Kiaat Mukwa	Dolf		Protected by the Forest Act. May be found in the extreme north-east of the charcoal production area.
Rhus lancea	Willow rhus	Karee Soetkaree		Protected by the Forest Act. Abundance: Rare. Distribution: Rare.
Salix capensis	Small-leaved willow			Protected by the Forest Act. Not in the charcoal production area. Only found near the Orange River.
Schinziophyton rautanenii	Manketti	Manketti	Omunkete Omangette Ongete Omungette	Protected by the Forest Act. Abundance: Rare. Distribution: Rare. Associated with deep sands found in intermontane valleys.
Schinziophyton rautanenii (= Ricinodendron rautanenii)	Manketti	Manketti		Protected by the Forest Act. Found in the north-east of the charcoal production area.

Scientific name	English name	Afrikaans name	Oshiwambo/ Otjiherero name	Comment
Schotia afra	Karoo schotia	Karooboerboon		Protected by the Forest Act. Not found in the project area. Only found near the Orange River.
Sclerocarrya birrea	Marula	Maroela	Omungongo	Protected by the Forest Act. Abundance: Occasional. Distribution: Occasional.
Securidaca longipendunculata	Violet tree	Krinkhout		Protected by the Forest Act. Occurs in the north-east and far east of the charcoal production area. Uncommon.
Spirostachys africana	Tamboti	Tambotie	Omuhongo	Protected by the Forest Act. Abundance: Common. Distribution: Occasional. Associated with foothills in the charcoal production area. POISONOUS.
Sterculia africana	Tick tree	Bosluisboom		Protected by the Forest Act. Occurs in the western parts of the charcoal production area.
Sterculia quinqueloba	Large-leaved sterculia	Grootblaar-sterkastaing		Protected by the Forest Act. Might occur in the western parts of the charcoal production area.
Strychnos cocculoides	Corky monkey-orange	Geelklapper		Protected by the Forest Act. May be encountered in the north-east of the charcoal production area.
Strychnos pungens	Spine-leaved monkey-orange	Steekblaarklapper		Protected by the Forest Act. May be encountered in the north-east of the charcoal production area.
Strychnos spinosa	Spiny monkey-orange	Doringklapper		Protected by the Forest Act. Not found in the project area. Only occurs in the north-eastern Kavango and Caprivi Regions.
Tamarix usneoides	Wild tamarisk	Abiekwasgeelhout		Protected by Forest Act. Found along the western margins of the charcoal production area.

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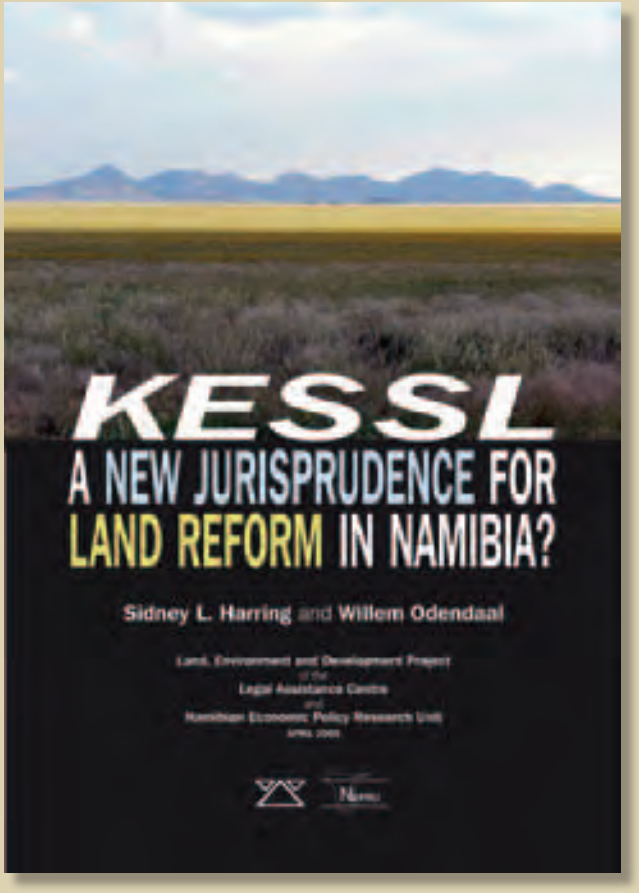

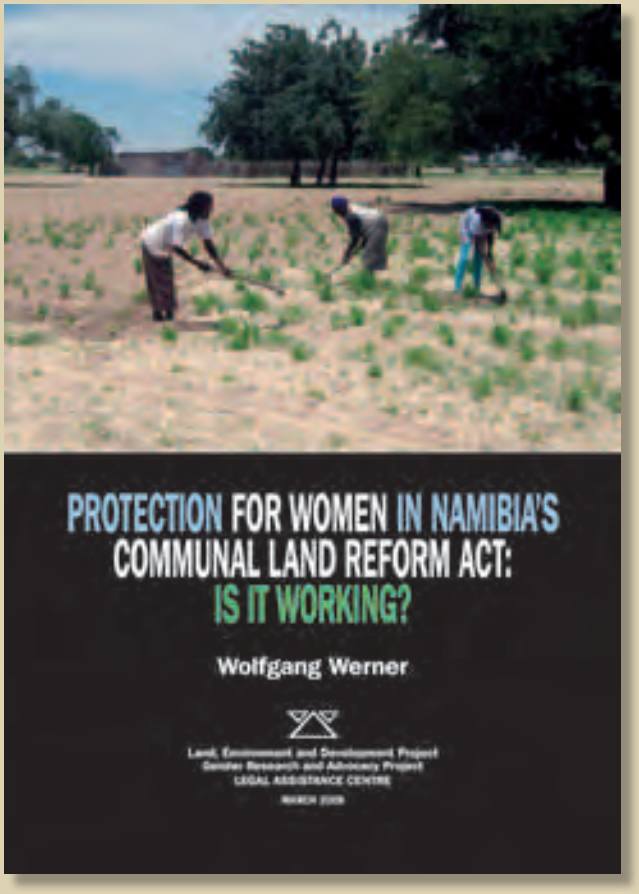

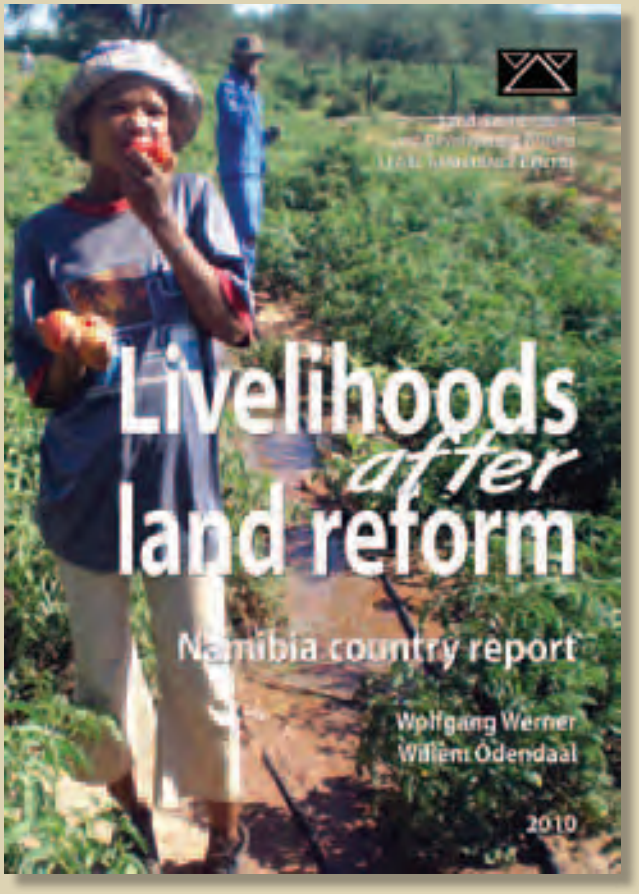

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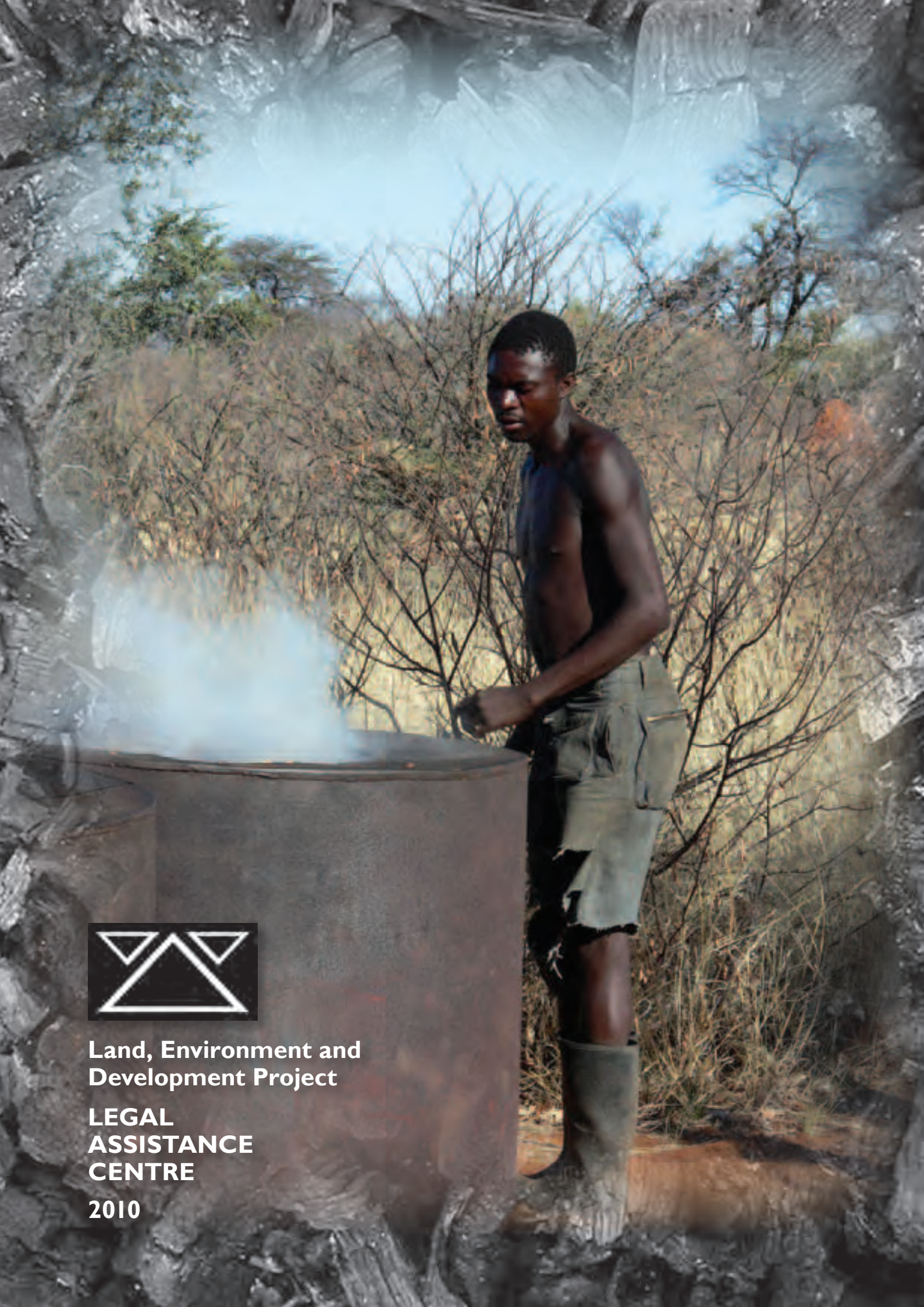

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