



DECENT WORK IN WASTE MANAGEMENT

A Baseline Study on the Ward Contractor System in the City of Windhoek



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Written by Nico Westphal and Karl Pfeffer

Baseline Report produced in the framework of the ILO initiative "Support towards green economy transition in Namibia by boosting the productivity of SMEs providing waste management services in Windhoek"

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List of Acronyms

CoW City of Windhoek

DWA Decent Work Agenda

ILO International Labour Organization

MANWU Metal and Allied Namibian Workers' Union

MoF Ministry of Finance

MRF Material Recovery Facility

MTI Ministry of Trade and Industry

N\$ Namibian Dollars

NEF Namibian Employers' Federation

NUNW National Union of Namibian Workers

OSH Occupational Safety and Health

RAD Rent-a-Drum

SME Small- and Medium-sized Enterprise

SSC Social Security Commission

SWM Solid Waste Management

SWMP Solid Waste Management Policy

TUCNA Trade Union Congress of Namibia

1. Introduction

Due to an increase in environmental awareness and the need to mitigate the inevitable side effects of human activity, an ever increasing number of countries are upgrading their waste management systems. As such, the waste management sector is becoming a symbol of the green economy. Dumping of unsorted waste at landfills is gradually giving way to improved recycling and reusing of waste – ultimately reducing the total volumes of non-recycled waste.

In many countries, waste management systems are reviewed and re-engineered to better respond to environmental concerns and incorporate innovations in recycling processes. This is increasingly articulated in integrated waste management policies, both at national and local level, assigning roles to the public and private sectors. Public-private partnerships and enterprise development are stimulated through these initiatives, giving recognition to the sector as an important driver for job creation and as contributor to GDP.

Testimony to this, the waste management sector offers low entry level jobs for men, women and the youth who would otherwise experience greater difficulty gaining entry into the labour market. Waste management also attracts emerging entrepreneurs who add value – turning waste into income, whilst creating jobs. Examples are buy-back centres, recycling stores, street cleaning services, craft products and consumer goods made from recycled waste. Such enterprises are becoming increasingly important players in the waste management system and similarly an increasingly important source of job creation in the sector.

The huge pool of potential jobs in waste management is, however, often under-exploited – especially in the developing and emerging economies – with many of the existing jobs being categorised as informal, precarious and indecent due to unhealthy and unsafe working conditions, lack of social dialogue and social protection, and the absence of contracts or any other labour relationship. A good example are the vulnerable working conditions and health challenges faced on a daily basis by informal waste pickers active on many landfills in South Africa, as highlighted in a recent ILO study.

Even where formal labour relationships are in place, no guarantee is given that both employers and workers are fully acquainted with regulations, management practices, safety rules and other important elements which would ensure decent work conditions and the provision of opportunities for future growth and business development.



Green jobs in waste management need, therefore, not only to provide a positive environmental effect, but should comply with the four dimensions of decent work, i.e.:

- Social protection;
- Social dialogue;
- Fundamental principles and rights at work; and
- Productive work:

to be termed decent as well. Decent green jobs in the waste management sector will thus help to reduce negative environmental impacts, whilst contributing to environmentally and socially sustainable economies.

This document was prepared as a baseline for the ILO project "Support towards green economy transition in Namibia by boosting the productivity of SMEs providing waste management services in Windhoek". The programme ran in Namibia between January 2013 and November 2013, in close collaboration with the City of Windhoek (CoW), and the workers' and employers' organisations (Namibian Employers' Federation (NEF), Trade Union Congress of Namibia (TUCNA), National Union of Namibian Workers (NUNW)). The objective of this document is to take stock of the several dimensions related to decent work in waste management to guide, inform and evaluate the project's outputs. As such, this study can be seen as the starting point of a constructive dialogue on suitable ways and means to improve working conditions and enable employment creation in the waste management sector.

Based on primary data from interviews with owner-managers and workers, as well as information obtained from the CoW's Solid Waste Management Division, this study analyses a system of small- and medium-sized enterprises (SMEs) contracted for the provision of cleaning and collection services to the CoW and its citizens through the lens of ILO's Decent Work Agenda (DWA), as a potential good practice in creating green jobs in waste management. The aim is to provide information on the current quality of employment and to explore ways to enhance the decency of work and productivity within these SMEs.

The study provides:

- A brief explanation of the ward contractor system in the CoW;
- An examination of the enterprises in the context of ILO's Decent Work Framework from the employers' and workers' perspectives;
- An identification of existing gaps and possible deficits in terms of the four pillars of the Decent Work Agenda to assess where advisory and technical assistance might be beneficial and appropriate to facilitate change; and

An exploration of the technical aspects of running a waste management business within the
ward contractor system evolving around questions on the degree of recycling and related
processes, the contents and application of the municipal Solid Waste Management Policy
(SWMP), as well as business opportunities and potential for improvements for and within
existing enterprises.

The study provides useful insights into and an improved understanding of the crucial role of social dialogue between employers and workers for achieving decent work. It reveals that educating both parties on the relevant legislation and frameworks forms the cornerstone of such an endeavour. It also underlines that potential for business growth and increased employment is underutilised, which could be encouraged through incentivising higher recycling rates and improving inter-enterprise co-operation.

The supportive role played by the CoW, through the Mayor of the City and the Solid Waste Management Division, is sincerely acknowledged. So is the support provided by NEF, TUCNA and NUNW duly acknowledged.

This study was prepared by Nico Westphal, Associate Expert in the ILO Office Pretoria, in collaboration with Karl Pfeffer, Technical Officer at ILO Pretoria, under the technical supervision of the Senior Enterprise Development Specialist, Decent Work Team for Eastern and Southern Africa. The technical inputs received from other colleagues from the Decent Work Team as well as the Green Jobs Programme are acknowledged with gratitude.

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2. The Context: Waste Management in the City of Windhoek

The City of Windhoek (CoW), widely recognised as one of the cleanest cities in Africa, puts strong emphasis on protecting and improving this status. Its vision is to progressively graduate from a clean to a green city, which is dependent on a well-functioning waste management system.

Industrialisation and economic growth, in combination with an increasing population, however, put pressure on the CoW's waste management system, jeopardising both public health and well-being, as well as the CoW's objective to become a cleaner, greener city. Continuous development of the Solid Waste Management (SWM) system is therefore a prerequisite to improvement of the life of the city's citizens.

The municipal Solid Waste Management Policy (SWMP) is a cornerstone in the city's vision of a clean, green city. The policy, launched in 2010 under the theme "Moving Towards a Green City", breaks with the "business-as-usual" approach by promoting a shift from pollution and waste control to its minimisation, recycling and re-use. It therefore follows a waste management hierarchy approach that puts the focus on avoiding and reducing waste production, while encouraging increased rates of recycling by facilitating the reintroduction of recyclable waste into the value chain, either through correct recycling or the direct re-use as alternative products. The disposal of waste is only seen as a last resort for waste that cannot remain within the system. For this purpose, the CoW invests extensively in advocacy and awareness raising towards the public at large and the private sector. Furthermore, the SWMP does not remain at a prescriptive level, but advocates an integrated system for waste management – from source to the final use or disposal - involving both citizens and the private sector in contributing to the cleanliness of the city. In this vein, CoW capitilises on the opportunities for inclusiveness, private-public cooperation, employment creation, community empowerment and profiting from the value of waste by sub-contracting small-scale private contractors for the cleaning, collection and recycling of waste. The so-called "ward contractors" are at the heart of this approach where 19 SMEs are sub-contracted and supervised by the City's Solid Waste Management Division.

The ward contractor system was first introduced in 2006, when the CoW issued sub-contracts in support of the establishment of small-scale waste management businesses, preferably formed by a number of employees previously employed in the municipality's waste management services. The intention was to extend the reach of the waste management system to underserviced areas, while producing opportunities for job creation and community empowerment through recycling initiatives.

Climate Change

The ward contractors are responsible for a wide range of tasks comprising all matters that contribute to the "cleanliness of the City of Windhoek". This encompasses:

- Sweeping of all road surfaces;
- Cleaning of all streets, road reserves and open spaces;
- Cleaning of all storm water catch pits and culverts;
- Issuing and collection of black bags to all households in informal settlements;
- Transportation and handling of black bags collected;
- Collection of all household refuse in informal settlements:
- Ensuring the correct utilisation of all skip containers;
- Cleaning and installing of all pole refuse bins and street bins within the ward;
- Replacement and distribution of wheelie bins:
- Participating in community meetings:
- Cleaning of toilets in the informal areas;
- Provision of additional and ad hoc services: and
- Attending all official inspections.

However, the collection of waste from households in formal settlements and from businesses does not form part of this ward contractor system. The work of the ward contractors is therefore complemented by the CoW and additional medium-sized companies that collect waste from households and businesses in formal settlement areas of the CoW at an industrial scale. The largest of these companies, Rent-a-Drum (RAD), is however directly inter-linked with the ward contractor system, as recyclable waste collected by the ward contractors is directly diverted to RAD's Material Recovery Facility (MRF) in the outskirts of Windhoek.

Besides this sophisticated and successfully operated system, the CoW, however, still faces challenges regarding waste management – especially in the poorer areas of the city, and mainly in informal settlements – specifically related to the separation and collection of waste, as well as the feed-in of recyclable waste into the recycling chain. The CoW is therefore constantly striving to further educate the population and extend collection and recycling services to these areas.

3. Methodology

The International Labour Organization (ILO) has identified the waste management sector as an intervention area for technical assistance to foster job creation and the promotion of decent work through enterprise development in Namibia in 2013. The survey that led to the production of this study was undertaken to inform the planning and design, as well as input towards the monitoring and evaluation of such interventions. Beyond such technical assistance by the ILO, the survey was also designed to provide data for relevant stakeholders and inform their interventions and policy decisions. It intended to measure all relevant aspects of decent work, as well as background information on the labour force and the structure of the respective businesses.

The specific objectives of the survey were to:

- Identify structural, labour and enterprise-specific challenges and opportunities, as well as
 inherent barriers and pull-factors in the sector in order to single out specific intervention
 areas and shape the design of interventions;
- Gather an improved understanding of the composition of the labour force in waste management SMEs, the working conditions with respect to the ILO Decent Work Framework, as well as the existing business opportunities; and
- Inform stakeholders and policy-makers about shortfalls and best practices within the sector in order to raise awareness and inform policy-making.

The guideline for the interviews with the owner-managers and workers in the ward contractor SMEs consisted of closed and open-ended questions of quantitative and qualitative nature, focusing on:

- General information on the company and labour force;
- Skills level(s) of the owner-manager and workers;
- Labour relations/social dialogue mechanisms;
- The situation regarding occupational safety and health;
- Social security and benefits;
- The amounts and kinds of waste:
- Major challenges experienced in the sector and by the workers: and
- Major opportunities for business expansion and expectations by workers and owner-managers.

The data was collected in the months of March and April 2013, and interviews were conducted with workers' representatives from all 19 companies operating in the ward contractor system – of which 14 were shop stewards – and 18 SME owner-managers

4. Key Findings from the Survey

4.1 A Snapshot of the SMEs and their Workers

4.1.1 Contractual Background and Start-up

In 2006, 16 contracts for the provision of cleaning and waste management services were issued to individual entrepreneurs for an initial duration of five years. In 2011 this first generation of contracts expired and were re-tendered and -issued in the same year to all existing contractors, whilst expanding the system to include a total of 19 companies. Only two of the three "newcomers", which started operations on 1 October 2011, were represented in the sample survey. The tender process was public and set out clear guidelines, including on workers' rights and duties as well as employer-worker relationships and key performance indicators for each ward.

All first generation contractors were former employees of the SWM Division of the CoW, which meant that none were independent entrepreneurs before entering into the ward contractor system. It is also noteworthy that all contractors that were awarded tenders in 2006 received start-up funding from the City, *inter alia* according to the number of employees, the size of the ward area covered, and whether they operate in informal or formal settlements. The start-up capital was meant to facilitate the purchasing of vehicles, equipment, protective clothing and to ensure salary payments to employees during the start-up period. The funding was later deducted from the monthly payments made by the CoW. Only three of the ward contractors have subsequently successfully applied for additional loans over the past seven years.

The SME owner-managers are:

- On average 45 years old, with the youngest being 35 and the oldest 61;
- In composition relatively gender-balanced with eight out of the 18 interviewed being women.

All of the enterprises are individually owned and – as a result of the contractual obligations – formally registered with the Ministry of Trade and Industry (MTI), the Ministry of Finance (MoF) and the Social Security Commission (SSC).

The contracts between the CoW and the contractors do not set any limits on expanding the business and/or venturing into contracts with other clients. However, only 28% of the interviewees confirmed that they have entered into business relationships with other clients for cleaning services. These clients include an embassy, an international organisation, a factory, a public company and private households.

To date, all 18 interviewed ward contractors own at least one truck – as required by the contract with the CoW. Six of them own two trucks and one of them even owns three trucks. In addition, 15 of the owner-managers have a car at their disposal. None of them, however, has a building specifically dedicated for their business.

4.1.2 Workforce Profile, Payment and Tenure

Regarding the workforce, the 18 interviewed SMEs employ:

- 369 people in total; with
- An average of 20.5 workers per company.

This exceeds the number of employees as stipulated in the tender documents from 2011 by 17.5%, which specified a minimum number of workers for each ward totaling 314 employees.

Table 1: Composition of the workforce

Composition of the workforce									
Emp	loyees	Years in the company	Average age of workers	How old is your youngest worker?	How old is your oldest worker?				
Men	Women	Years	Years	Years	Years				
10	10	5	30	n/a	59				
13	17	6	35	24	63				
15	7	6	30	24	40				
11	8	6	35	30	65				
13	2	6	35	26	59				
13	2	6	35	21	58				
12	13	4	30	18	61				
9	14	6	35	23	58				
9	9	6	36	32	56				
12	6	6	30	22	47				
9	14	6	32	24	52				
12	10	6	30	30	52				
16	2	6	35	21	63				
12	3	2	30	24	56				
13	12	6	35	23	60				
11	12	5	30	n/a	52				
9	5	2	30	25	53				
18	6	5	35	19	57				
217	152	5	33	24	56				

Protection Water Change

The sector seems to predominantly attract men who make up 59% of the workforce. However, due to the physical nature of the work, this number still shows a significant participation rate by women. The age structure of the workforce seems to be very mixed, with the oldest worker being 63 years and the youngest being 18 years old.

Monthly salaries average 2,167 Namibian Dollars (N\$)¹ with the lowest at N\$1,800 and the highest N\$2,514. In the light of the findings of the Namibia Labour Force Survey 2012, this shows that the salaries are in line with the average earning in the Namibian economy, or even slightly above. The survey also revealed that business success could be a contributing factor to higher remuneration of the workforce, as the owner-manager who indicated the highest monthly net profit within the sample (N\$30,000) is also the one who pays the highest salaries to the workers. This speaks in favour of the need for productivity increases, which could directly translate into higher salaries and a better economic position of the workers. It can furthermore be observed that those companies with a higher ratio of women in their workforce seem to perform better regarding their net profits, while salaries in these companies tend to not be significantly higher.

From the responses of the workers' representatives it can be concluded that the numbers given by the owner-mangers are to a large extent correct, as the workers estimated the average salaries at N\$2,172 per month without any gender differences in the amount of salary mentioned by the respondents. Apart from one employer who indicated a monthly wage of N\$1,800, all contractors seem to fulfill their contractual obligations towards the CoW. The tender documents from 2011 stipulated a minimum basic wage of not less than N\$1,900 per month, with an annual adjustment that corresponds to increases in payments granted by the CoW to the contractors, in accordance to changes in the price index set by the National Planning Commission (NPC). On the other hand, none of the owner-managers far exceed the required minimum wage.

The turnover of workers seems to be very low, with an average tenure in a company of five years. In the SMEs operating since 2006, workers' tenure tends to equal six years and in the companies that started operations in 2011, average employment tends to equal the two years of existence.

According to the owner-managers, all workers have written contracts. A total of six workers from two companies were on temporary contracts, whilst all others had fixed-period contracts. This was widely confirmed by the employee representatives interviewed, with the exception in three companies where it was mentioned that a minority of workers do not have formal written contracts and in one company where some workers were employed on a daily basis on oral contracts. This stands in contrast with the conditions of contract between the CoW and the ward contractors, as the agreement requires written contracts for all workers.

N\$ is equivalent to approximately 0.1 USD



The work within the SMEs constitutes the major source of income and is the sole employment for most workers. Only one case was reported where a worker runs a restaurant and rents out rooms in addition to his work in the waste management SME. On the question "how many people do on average live on a worker's salary?" only few interviewees could provide an answer. Responses therefore give a weak indication only, estimating that an average of seven people are dependent on an employee's salary.

4.1.3 Conditions of Employment

Although the conditions of employment in the companies can be rated as comparatively secure and stable, and workers are paid in accordance with local standards and contractual obligations, workers' representatives in nine companies mentioned that they know of employees that would like to quit the job. Their total number was estimated at 52, which represents 14% of the employees in the ward contractor SMEs. In some companies this rate was reported to be above 50%. Major reasons for the intention to change job were the wish to earn a higher remuneration (7), to improve overall working conditions (7) or to have a more stable or secure job (3). Other reasons provided were the intention to make better use of skills or receive better capacity building, to have a lower workload, or a safer working environment, more benefits or an employer who contributes to the pension scheme.

4.1.4 Job Content

In all enterprises, workers did not exceed the maximum of 40 working hours' work per week. During these hours the employees in all companies are occupied with cleaning public spaces such as roads and water catch pits. Ten owner-managers indicated that cleaning of bins and the surroundings around containers, as well as awareness-raising of citizens, are other important tasks which their workers are undertaking during an average working day. Services directly focused at the household level, such as the collection of household refuse and the distribution of garbage bags (black bags) and wheelie bins, are only done by a minority of the companies on a regular basis. However, the distribution and collection of black bags is of utmost importance in informal settlements as it constitutes the only formal refuse removal system in these areas. At the same time, wheelie bins are currently only handled by the CoW, although the contractual provisions between the City and the ward contractors would also allow this service to be outsourced to the contractors.

Other tasks beyond those mentioned in the City's contracts are only performed by a few companies. These include the separation of recyclables from non-recyclables (1) and replacing signs (1). Workers' responses largely confirm this picture, with cleaning of surface, catch pits, bins and

Protection Water Change

areas around containers ranking highest. However, the perception within the body of workers is that during an average day, in 17 out of the 19 companies, some awareness-raising of the public in the area is done. In addition, more than half of the companies (10) confirmed that they distribute bags to the households in their wards. In one case, a workers' representative also mentioned additional tasks that go beyond normal cleaning services, but which also form part of the ward contractors' duties, such as "picking up of animal carcasses".

During data collection there has been no mentioning of gender traits with regards to the tasks performed, leading to the assumption that women and men have equal responsibilities and recognition within the companies.

4.1.5 Business Management Practices, Turnover and Growth

Although the data suggests a high level of formality and professionalism, the picture is different when having a closer look at the actual internal organisation of the SMEs. In terms of applied business management practices, the analysis shows that all of the owner-managers keep records of their cash flow, while only seven of them calculate costs before setting the final price of the service. The latter is not of major importance to companies operating only within the CoW ward contractor system, as the remuneration is linked to the size of the area covered, the waste collected, etc. However, three of the five companies that operate with other clients do not consider expenditures and revenues in setting the final prices for their services. The business management practices seem not to differ fundamentally between men- or womenled companies as the strength of the correlation between gender and most of the applied management processes was found to be statistically insignificant.

However, for some regular tasks that most of the SMEs perform as entrepreneurs, such as communication with other businesses for means of exchange (13) and analysing their customers' needs (11), women owner-managers seem to be less likely to execute these activities as a means to promote their business and enhance its viability. Overall, only a limited number of owner-managers invests time and resources into general marketing of the waste management services to (potential) clients (9), or actively pursues linking up with other businesses or customers to enhance business opportunities, improve the service quality or the quality of the workplace (8).



Figure 1: Business management practices regularly used by the SMEs

Eight of the 18 interviewed SME owner-managers have a written business plan in place of whom five are female owner-managers. At the same time, only two (one male, one female) of them had an immediate idea of their yearly turnover for 2012. Fifteen could indicate the expenses during that same period, and 11 could provide numbers on their net profit in the previous month. This seems to contradict the statement from the SME owner-managers that they do regular basic bookkeeping on their operations and that the City of Windhoek requires them to provide monthly statements on the payroll as well as invoices for the services rendered to the CoW.

The average estimated profit during the month prior to the survey was N\$11,591, with the lowest being N\$3,500 and the highest N\$30,000. However, no interrelation could be found between the existence of a business plan and the net profit of a business, or the calculation of selling prices and the net profit. Gender, however, is a factor that correlates with the estimated profit of the business, with male-led enterprises showing higher profit levels than female-headed enterprises, whereas companies with a higher ratio of women in the workforce show higher levels of net profits.

While only limited data could be gathered regarding overall turnover, four owner-managers indicated that they productively reinvested some of their returns. One owner-manager extended

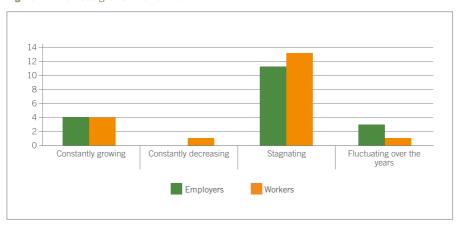
Climate Change

the office space and purchased new office equipment, two invested in a new truck, of which one also employed seven additional people. Another employer acquired new equipment that is used daily by the workers (spades, rakes, etc.). Remarkably, two of those who invested in equipment and staff reported the highest net profit in the last month. At the same time, it needs to be emphasised that the remaining 14 entrepreneurs did not set money aside to invest in growing their businesses over the course of the year.

Contrary to the information given by the owner-managers, the observations from the workers' representatives were that more investments, such as two additional trucks, new uniforms and office equipment, were made.

Interesting in this context is the fact that 75% of those who invested in their businesses in 2012 did confirm a stagnation in growth over the last three years, while only one owner-manager reported constant growth. In general, the perception of growth over the past years was rather negative or characterised by a fluctuating pattern. Interviewees, however, expressed strong confidence in their businesses to expand over the three years to come (11). Only four had a negative outlook (as depicted in the graphs below). These observations and estimates were widely shared on the side of the employees, who confirmed stagnation to a large extent over the past years. They seemed to be slightly more optimistic for the coming years.

Figure 2: Business growth 2010–2012



12 -6 4 2 Constantly growing Constantly Stagnating Fluctuating over Do not know decreasing the years Employers Workers

Figure 3: Business growth 2013-2015

It was further observed that only ten owner-managers (of which six were female) had at least the intention to improve their businesses in the short run (i.e. over the coming six months). Most prominently amongst these improvements were stated: a general improvement of the service quality (5), an extension of the workforce (4), and an improvement of working conditions (4). Productive investments, however, were envisaged by only three, while a single owner-manager pursued the avenue of reducing the number of workers to improve the situation of the business. Other strategies included training in occupational safety and health (2), motivating workers by rewarding them with performance certificates (1) and venturing into new business areas. Overall, six of the interviewed employers had multiple strategies to improve their business.

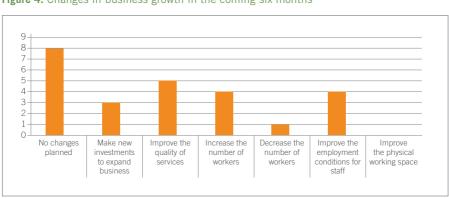


Figure 4: Changes in business growth in the coming six months

Protection of Water Change

4.1.6 Conclusion

From the information gathered it can be concluded that the employment situation of the workers in the ward contractor companies is stable and that the employers largely fulfill their contractual obligations towards their employees and the CoW. Gaps can be observed in respect of basic business management skills, as well as the ability/willingness for further investment and business expansion. These aspects need to be seen in the context of the nature of these businesses, which have limited scope of expansion within the contract with the municipality, as well as the background of the owner-managers as former CoW employees. The expectations for future growth are nonetheless relatively discernible, both with the employers and workers, showing potential for more employment and productive investments in the short term.

4.2 Skills Levels of Employers and Workers

The nature of the work requires both ward contractors and their employees to possess certain critical technical and entrepreneurial skills. Ward contractors are responsible for a wide array of issues, ranging from human resources management to marketing, accounting and client relationship management. Furthermore, they need to have expert knowledge of the handling of waste as a recyclable resource, as well as a potentially harmful and poisonous material. These skills also form the basis for expansion of the core business or venturing into new areas, as well as continuous improvements in service quality and the standard of the workplace. Ultimately, skills are a necessary condition for the creation of employment and more decent jobs. On the other side, workers within the SMEs also need to have basic skills in waste handling, the management of clients and other related topics. For this reason, the actual skills that are available within the companies and workforce should be analysed in order to identify patterns and gaps where further support might be needed to increase productivity and the level of decency in the workplace.

All owner-managers and workers have completed a minimum of 7–12 years of schooling. Eight of the owner-managers even hold a university degree (four women and four men) and one of them completed vocational/technical training. On the other hand, in the group of workers only one out of the 19 has attended university, while all others received schooling for at least seven years. The meaningfulness of this data is, however, biased by the specific setup of the Namibian education system as it is based on an automatic promotion system whereby all students are able to achieve at least ten years of schooling without necessarily dropping out of the system due to under-performance.

Nonetheless, some skills exist within the group of workers that can be of use for the work undertaken. These include, *inter alia*, plumbing, computer skills, tailoring, masonry, electrician, carpentry, car mechanics, agriculture, and painting. Mostly, these skills were acquired though formal or informal apprenticeships.

Energy

Ward contractors who have enjoyed tertiary education are the ones who have mostly specialised in some sort of trade or business. Four of the contractors indicated that they have specific training in waste management and food hygiene, and are therefore equipped with the specific knowledge for this business. This contradicts the fact that the 16 ward contractors who were awarded tenders in 2006 had previously worked in the City's waste management system and had therefore undergone basic training in waste management during their employment with the CoW. Three ward contractors indicated that they avail of an education in human resources (and public relations), whilst others are mechanics, typists, carpenters or hold a degree in administration. Some indicated that they avail of international degrees/certificates in their fields of expertise. The ward contractors, therefore, have, at least in part, the skills needed for this specific and highly demanding job. Nonetheless, nine of the 18 ward contractors did not indicate any area of specialisation. Interestingly, most employers who have some sort of technical or vocational skills reported the highest net profits in their businesses.

The fragmentation or even lack of skills within the group of contractors has been recognised by the CoW and its SWM Division at the start-up of the ward contractor system. The CoW therefore enabled all the ward contractors to attend a "Training in Business Development and HR" course delivered by the Polytechnic of Namibia as a means to build or upscale their knowledge in basic business management practices. Training included topics such as financial planning and bookkeeping, negotiation, recruitment, personnel management and development, as well as information about legal matters such as taxes and benefits, industrial relations and tendering processes/procedures.

The graph below depicts to what extent this training might have yielded results in terms of equipping the ward contractors with the necessary skills required to run and expand their businesses, as well as to allow them to enter into other activities. Those skills needed to run the daily business are perceived by the SME owner-managers as being well developed. Especially in terms of customer relationship and staff management, they largely rate their skills as being very good or good. Even in terms of financial management only three owner-managers expressed concerns that their skills could be rated as "not so good". The areas of interest in view of possible support, based on the perceptions of the owner-managers, are quality assurance and monitoring, as well as marketing of their waste management services. The aspect of quality assurance, especially, has high importance both for fulfilling contractual obligations towards the municipality and also in terms of business sustainability and expansion. Only if the owner-managers are fully conversant with the regular monitoring of their activities and can identify gaps for improvement of their services, as well as inefficiencies in the service delivery, will they be able to take the necessary action or exploit strengths in their businesses.



Figure 5: Business management skills of SME owner-managers

Besides skills needed by owner-managers to run the businesses, it is also important to equip workers with the necessary skills. While the work undertaken is of a largely low-skill nature, it does entail interaction with the larger public, handling of hazardous material, correct utilisation of equipment, recycling, etc. As stated above, the workers lack specific waste management skills and it is the contractual responsibility of the SME owner-manager to "(...) train all its labour/personnel employed, to the degree of excellence as is demanded in (the) contract in order to fulfill the respective functions (...)". All newly-appointed staff must be trained to a level that ensures proper service delivery, and regular follow-up training needs to be put in place by the employer. This implies the presence of a skills set within the SMEs that enables them to train the workers in the correct fulfillment of their work

4.3 Social Dialogue

Social dialogue includes all types of negotiation, consultation and exchange of information between, or among, representatives of governments, employers and workers on issues of common interest. Social dialogue can range from mere sharing of information to active engagement amongst workers, employers and government. Social dialogue can also happen within the boundaries of a company or SME.

The survey analysed the role and importance of social dialogue from a sectoral perspective – focusing on affiliation to interest-based institutions such as employers' organisations and trade unions, as well as social dialogue at the company level.

Seven out of the 18 interviewed SMEs are members of a business association, of which five (four male) are members of the Namibian Employers' Federation (NEF) and two of Labour Skills Solutions. The latter, however, is not a recognised organisation within the institutionalised social dialogue mechanisms, but rather a consulting firm that provides technical and legal advice to enterprises. To assess social dialogue mechanisms, only the members of NEF are therefore considered.

No clear picture emerges on the usefulness of membership to the employers' organisation, as the assessment ranges from "very useful" to "not useful at all". However, the reasons for membership give a clearer picture, as capacity building and (legal) support in labour disputes rank high on the agenda. Fifteen out of the 18 interviewed owner-managers confirm that legal advice is an important element when considering membership to a business association. Other support services they expect an association to deliver are an exchange on business opportunities, operations and strategies for improvements.

Typical social dialogue functions (dialogue with workers and government) feature less strongly in the expected services required since only seven workers' representatives and five owner-managers see trade unions and business associations as a means to enter into dialogue with the workforce or employer and government. Additional elements that were raised separately included capacity building and training (3) as well as access to loans and support in labour matters.

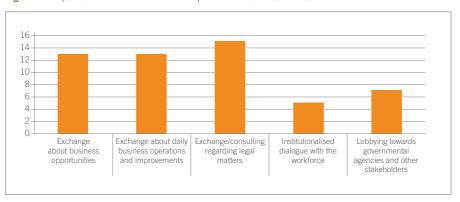


Figure 6: Expectations from membership in business associations

All employers are aware of the fact that their workers are members of trade unions and only one company was not organised and does not have a designated shop steward. This situation was confirmed by the workers' representatives.

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In total, the level of unionised workers stands at approximately 56% according to the workers' representatives, while employers estimate the level of unionisation at 44%. Workers are affiliated with the Metal and Allied Namibian Workers' Union (MANWU).

The workers largely rated the services of the trade union as "useful" (9) or "average" (3). Disappointment was only expressed by three interviewees, while absolute satisfaction was only experienced by one. "Assistance with labour disputes and disciplinary hearings" and "representation in wage negotiations" were the reasons mostly stated by the workers for being a member to a trade union. One also added the aspect of occupational safety and health (OSH) and the possibility to lobby for a better working environment.

As can be seen from the graph below, technical issues ranked rather high on the list of expectations by the workers from the trade unions, whilst softer issues such as workplace dialogue with the employer or lobbying with government ranked lower. Other expectations are protection against the employer, lobbying with the City of Windhoek and the provision of training.

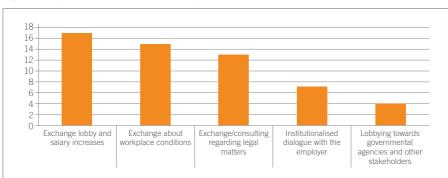


Figure 7: Expectations from membership in trade unions

The legal framework for labour relations, the Labour Act of 2007, is widely known by both workers and employers, as 17 of the 18 employers confirmed that they know that it is applicable to their businesses, as did 13 of the 19 workers' representatives. However, an open question asking for the overall judgment of these regulations in relation to the business activity/job revealed that both workers and employers lack detailed understanding of the Act. The workers' representatives widely referred to it as a "useful tool for workers and employers", sometimes specifying its relevance to labour disputes. The answers of owner-managers alike did not reveal any in-depth knowledge. They mainly focused on the general character of guiding workers and employers. Some, even, did not feel in the position to judge it (4), and only one mentioned that it lacks clear guidance on OSH.



The most important finding regarding social dialogue in general, as well as at the workplace, is the inability of both the owner-managers and the workers' representatives to specify the advantages and disadvantages of social dialogue mechanisms. Of the owner-managers, only one out of the 18 understood the questions and could give an indication about the advantages of social dialogue ("good co-operation between workers and employers"), but could not identify any disadvantages. Similarly, only one employer could indicate whether any alternative social dialogue mechanism exists in the company. This widespread lack of understanding was confirmed during the interviews with the workers' representatives. None of them could name an advantage or disadvantage of social dialogue or specify any alternative ways of social dialogue within the company. At the same time, six out of the 19 workers' representatives and only one SME owner-manager confirmed that there have already been cases of labour disputes in the company. Four of workers' representatives referred to unfair dismissal, whilst one indicated that "A shop steward was dismissed after attending a disciplinary hearing at the employer's lawyer's office" and in another case there was industrial action taken in the course of wage negotiations.

Overall, these findings underline the urgent need to foster understanding by both employers and workers about the contents of the Labour Act and the nature of social dialogue. The respondents' answers could thereby be read in two different ways. Either there is a general lack of knowledge about what is understood under the term social dialogue, what it means in the everyday workplace relations. Or, on the other hand, it can indicate a need to put processes in place that can be used to ensure dialogue and mutual exchange of information within the ward contractor SMEs and to create space for company internal dialogue mechanisms.

4.4 Occupational Safety and Health

Some of the points raised earlier referred to the issue of Occupational Safety and Health (OSH). Over the last decades, the topic has received a great deal of attention within the wider decent work agenda backed by ILO Convention 155. OSH at the workplace aims to reduce injuries, risks and negative side effects which can result directly or indirectly from the work performed. Therefore, OSH measures are employed to minimise particular hazards associated with the workplace. More than in other sectors, OSH is of significant importance when working towards green and decent jobs in the waste management sector.

Both workers' representatives and employers were asked to indicate the major challenges for the company in terms of OSH. All of the owner-managers and most of the workers' representatives (79%; 15/19) could give an answer to this question underscoring the importance and the existing awareness regarding the topic in both groups.

Most prominent for both groups are occupational hazards related to traffic as a result of working in the streets, as well as the issue of protective clothing. While five of the workers' representatives

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claimed that the protective clothing provided by the employers was inadequate (non-existent or irregular), the employers were concerned about the ignorance of the workers regarding wearing protective clothing regularly. The issue of protective clothing and road safety is explicitly referred to in the contracts between the ward contractors and the CoW. As a general rule, the ward contractors have to ensure that health and safety of the employees is in accordance with the Labour Act of 2007. In addition, both employers and employees are obliged to wear "(...) identifiable, neat and clean uniforms, overcoats or overalls (...)" and the contractors have the responsibility that their workers "are provided with and wear Personal Protective Equipment as required by law" and that the equipment, including overalls, illuminated aprons, safety shoes, gloves and hats, is worn at all times by the workers while on duty. Furthermore, warning signs must be in place at the sites where cleaning work is underway and the workers must use road cones and reflective jackets, as well as any other suitable equipment, to reduce the risk of traffic accidents.

In addition, the interviews revealed that the workers do not properly follow or are not sufficiently aware of the OSH rules and requirements and that – especially women – are exposed to violence and vulnerable situations, e.g. in bushy areas. Another important point raised by the workers was the long hours per day spent in the sun and the rain. This was partially confirmed by some employers, but does not seem to rank high on their agenda. Others regarded the general working environment in waste management and cleaning as potentially dangerous, e.g. by being exposed to hazardous fumes or when entering catch pits. One workers' representative, as well as one employer, explicitly referred to dumped babies and suicides as an additional health hazard.

The extensive list of possible OSH challenges as mentioned by the employers suggests some basic knowledge about the topic. In fact, ten out of the 18 interviewed owner-managers confirmed that they already attended a basic one-week OSH training course. The training did not form part of their initial business development training that was offered by the CoW in 2006, which leaves eight employers without any training in this important area. Within the workforce, only three interviewees confirmed that the workers have ever received OSH training. One worker was trained by the employer only on the use of protective clothing and the two remaining workers could not indicate the name of the training institution where they received the training. In addition, only five of the interviewed companies confirmed the existence of an OSH policy within the company, while only one workers' representative was aware of such a guiding document. Seven workers' representatives were sure that no policy was in place, while 11 others did not know of its existence.

A drastic discrepancy can be observed with regard to a more practical issue of OSH: the presence of a first aid kit on the workfloor. Seventeen out of 18 SME owners confirm that they have such a first aid kit available, while only three of the interviewed workers' representatives could attest to the fact. It can, however, not be concluded that no first aid kit is available, as a lack of

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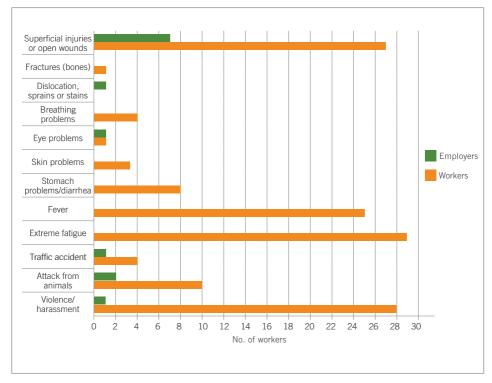
knowledge, e.g. on where the first aid kit is located, can provide a reasonable explanation. The picture, however, becomes more confusing when the frequency of the use of the first aid kit is investigated. While the workers say that it is either used "not at all" (2) or "seldom" (1), on the side of the employers three indicate that it is used "frequently", 11 indicate "seldom" use, two think it is "not used at all", and two others do not even know how often it is used.

This confusion can also be closely linked to an insufficient recording and reporting of OSH-related incidents. According to the contract with the CoW, the ward contractor is obliged to "(...) report all accidents and incidents related to its employees or the services rendered to Council within twenty-four (24) hours of such an accident or incident occurring". Only five employers confirmed during the interviews that they keep records of injuries, violence, or diseases related to the waste management activities. Four of those are the same companies that also have an OSH policy in place. The other 13 companies do not have a system for keeping track of OSH incidents. From the perspective of the workers there seems to be either no such record-keeping system in place (7), or they simply do not know about it (12). As a result, it can be concluded that even if a system for keeping OSH records is in place, none of the workers know about it and can therefore relate and report to it. Thus, none of the companies can identify potential sources of danger or patterns of OSH-related incidents. As a result, any effort to reduce the hazards related to waste management is undermined.

Nonetheless, some – but only few (7) – owner-managers, including a number of those who do not regularly keep records of incidents, could indicate the accidents or illnesses that occurred in their company as a result of the work undertaken. Most prominently mentioned where superficial injuries or wounds (five SMEs/seven workers) and animal attacks (two SMEs/two workers). Other incidents, with one case each, were "dislocations, sprains or stains", "eye problems", "traffic accident", and "violence/harassment".

This situation seems to be much more serious from the point of view of and according to the indications of the workers' representatives. In total, an estimated number of 141 workers were affected by injuries or illnesses related to their work in the past 12 months. In 14 SMEs a total of 27 workers had superficial injuries and open wounds. Violence and harassment occurred to 28 workers from ten companies. In eight companies, a total of 29 workers suffered from extreme fatigue and in six companies ten workers were attacked by animals. Other important incidents were work-induced fever (two SMEs/25 workers), breathing problems (four SMEs/four workers), stomach problems/diarrhea (one SME/eight workers), skin problems (one SME/three workers), as well as eye problems and fractures. In one serious case, according to a workers' representative, a worker died in a car accident related to his work.

Figure 8: Estimated number of OSH incidents in last 12 months



Three major observations can be made from these statistics: first, the discrepancy between the numbers reported by the workers' representatives and the employers is enormous and can be related to either over-/under-reporting on each side or due to the fact that those illnesses cannot unambiguously be directly attributed to the work. A second observation is that serious injuries such as fractures were not reported by the employers at all, meaning that they are either not reported to them properly, it was not clearly work-related, or the employers are hesitant to declare those incidents. However, since one SME owner-manager was not represented in the interviews, it is also possible that it is not captured in the responses. A third and final observation is the high number of cases in secondary effects reported related to work such as fever or extreme fatigue. These were only reported by the workers' representatives, but constitute a major threat to the employees and can result in low productivity of the SMEs.

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These assumptions are also underlined by other numbers such as the number of visits of workers to doctors as a result of work-related injuries or illnesses. While only four employers, of which three are women, indicated that their workers had to visit the doctor (in average three doctor's visits in the last 12 months in each company), 12 workers' representatives indicated that in their company employees had to go to the doctor due to work-related issues. On average, eight visits per company occurred, with a maximum of 30 in one company where the total number of employees was 20.

The employers did not have the impression that work-related illnesses/injuries led to significant absence from work (two companies, six days in total), and only resulted in an overall loss of N\$300–500 (data from two SMEs) or no loss at all (five SMEs). From the perspective of the workers' representatives, absenteeism as a result of work-inflicted disease/injuries occurred in eight SMEs, with an average of 15 work days' absence in each company over the last 12 months. This led to an estimated loss of N\$3,075 for the affected workers. While the companies did not experience any major negative effect from workers' sickness or injuries, the workers themselves seem to have incurred significant personal loss from it.

It is therefore understandable that only three owner-managers confirmed that they take medical precautions to prevent the workers from falling sick, including vaccinations (1) and annual medical check-ups (2). Only in one case a workers' representative confirmed the medical check-ups, all others denied any precautions taken by the employer or did not know about it. These findings are surprising since the contracts with the CoW stipulate that all employees need to undergo medical check-ups upon employment as well as on a yearly basis (workers cleaning toilets are required to undergo two check-ups per year). It also stands in contrast with the records of the SWM Division, which show higher numbers of medical examinations conducted (12). Since the costs are covered by the CoW upon presentation of the necessary proof of examination, it can be argued that the annual medical check-ups are not understood by most of the workers and employers as a measure of medical precaution for the employees.

Physical stress and workload are other important factors when considering work-related injuries and diseases beyond the direct effects resulting from external factors such as traffic, hazardous material or the like. On average, the workers are continuously walking between six and seven hours in a neighborhood per shift. During that time, most of the workers in 17 companies never wash their hands and face with soap, and in only two it was indicated that they seldom wash them. Both the workers' representatives and the employers indicated that in most cases the workers do not at all or seldom drink and eat during that time. Only in six companies did the workers' representatives say that the employees drink and eat regularly during their shifts.

In none of the companies the weight of the waste carried on an average day per worker has ever been measured. However, from the estimations given by the ward contractors on the overall

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amount of waste collected per day and company (see section 4.6), it can be concluded that a worker (irrespective whether male or female) is handling around 149 kg of waste per day. The SWM Division, however, records significantly lower figures and estimates that in informal areas workers are handling an average of 125 kg per day, in Katutura and Khomasdal (low-to middle-income areas) approximately 68 kg and in more affluent areas only 23 kg.

Most employers denied that the workers get in contact with noxious waste. This is in full accordance with their contract, since the collection of hazardous waste is the sole responsibility of the CoW. Nonetheless, the daily cleaning activities may not afford complete avoidance of contact with potentially harmful kinds of waste. However, only one out of the 18 interviewed SME owner-managers referred to rotten animal carcasses as a potentially harmful sort of waste. This was also mentioned by six of the interviewed workers' representatives as a potentially noxious and harmful sort of waste. In three other cases reference was made to exposure to some unknown toxic substances or rat poison, sewerage, as well as batteries. In one case the discovery of dumped babies and a bomb were mentioned as other potentially harmful types of waste that the workers get in contact with.

Not in a single company is machinery used by the workers to fulfill the everyday tasks of cleaning the wards. The employers mainly provide brooms, spades, rakes, traffic cones and refuse bags to the workers to fulfill their duties. In a few cases, the work is eased by the provision of wheelbarrows. While all the employers reported that their workers are equipped with and use string leather shoes and boots, gloves, mouth caps, nose caps, uniforms, as well as reflector jackets, not all of the workers' representatives confirmed this, giving a mixed picture of the actual equipment of the workers. Especially nose and mouth caps seem not to be provided regularly, although this equipment also falls under the essential items that need to be provided to the workers as per the contractual obligations towards the CoW. In general, the overall numbers show that the supply of protective clothing and equipment is widely satisfactory and equipment such as sun hats, goggles or rain coats are also given to the workers in some cases.

As depicted above, in general terms, the preconditions for an adequate OSH system are in place within the waste management SMEs. Nonetheless, major obstacles remain, especially with regards to workers' compliance with the obligation to wear protective clothing as well as the overall knowledge and guiding policies regarding OSH in waste management. It is therefore of significant importance to build the capacity of both the workers and employers to respect basics rules in safe handling of waste. As a starting point, major shortcomings need to be identified per company and a Code of Conduct needs to be developed for each SME. This has to be done in a participatory process between workers and employers and supplemented by a short course in occupational safety and health.

4.5 Social Security and Benefits

As shown below, all the companies are registered with the Social Security Commission (SSC) and therefore social security contributions are paid for all workers. In addition, the contracts with the CoW require registration of all employees with the Workmanship Compensation.

In all companies the workers are entitled to paid sick leave and receive medical benefits. Only one workers' representative denied this fact. This is also in full accordance with the CoW-contracts, as they require medical aid and leave benefits to be granted as defined in the Labour Act of 2007. The number of annual leave days given differ between 20 and 24 days, with an average of 22 days granted per worker.

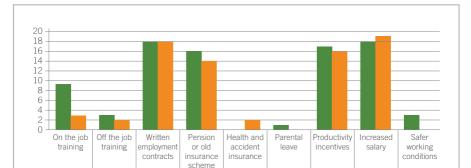


Figure 9: Benefits granted/received

Other benefits that are pre-determined by the Labour Act of 2007 are pensions and transport allowances. From the interviews it is clear that, in terms of benefits, the perceptions are largely congruent between the employers and workers' representatives. Written contracts, pension or insurance schemes, as well as productivity incentives and increased salaries were recognised as the major benefits given over the preceding 12 months. Others included on- and off-the-job training in some cases. Health and accident insurance, parental leave, safer working conditions and transport allowances were only recognised by a marginal number of interviewees as additional benefits

Workers

Employers

Protection 6 9 Water Change

Since the companies operate fully in the formal sector, and regular inspections are conducted by the CoW within the waste management SMEs, little room is left to circumvent the legal requirements in terms of social security and other benefits. Nonetheless, fostering a better understanding of the Labour Act of 2007 can help increase acceptance and recognition of the entitlements and requirements for those schemes and thus strengthen internal coherence and respect in the companies.

4.6 Types of Waste Handled and Recycling

In order to assess potential for future growth and possibilities for boosting productivity, as well as a better integration into larger scale waste management and recycling systems, the owner-managers were asked to provide some basic information about the waste they are handling as well the areas they are covering and the linkages with other actors in the sector.

None of the owner-managers were able to give an estimate of the size of the area they are covering or the number of businesses they provide their services to. Only one of them was able to indicate the number of households he/she is serving within the waste management service. In general, the layout of the wards ensures that all contractors service at least 10,000 households.

This lack of knowledge is astonishing since the contracts with the CoW clearly determine remuneration hikes when the number of households in the ward increases by 400 (or 800 households in the informal settlements) or should the ward boundaries be shifted. The same applies to an increase in the road surfaces that need to be cleaned. The SME owner-manager should, therefore, at least have a general idea about the size of his/her service area since the request for such an increase needs to be made by the ward contractor him-/herself based on a written request to the CoW.

According to the responses from the owner-managers every company handles in average around 2,500 kg (median) of waste per day, with a large variance between them, ranging from 15 kg to 15,000 kg. The CoW estimates significantly lower amounts of waste collected with approximately 1,150 kg/day in informal settlements, 650 kg/day in formal lower- and middle-income areas and 300 kg/day in high-income areas. This stark difference might be explained by a lack of understanding of the measurements, but at the same time gives a good impression of the capacities and the general knowledge of the business owners regarding the daily work and the resources their workers are handling. This is even more surprising since the CoW contracts require the ward contractors to keep daily records of the amounts of waste and the number of loads that have been transported as it forms the basis for the monthly payments of the ward contractors.

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Benchmark figures from the CoW contracts indicate that ten of the 19 wards are expected to deliver on average a quantity of waste amounting to 23,500 kg over a period of six months. Amounts vary greatly between the wards, from 10,000 kg up to 65,000 kg over this period. There is thus a significant difference between the amounts of waste handled in every ward, but it also shows that numbers given by the ward contractors are far higher than the benchmarks set at the date of signing of the contracts.

Business collaboration between ward contractors happens occasionally. Eight of the 17 interviewed confirmed that they co-operate on average with two other ward contractors to deliver the services to the citizens. Although two ward contractors indicated that they know of other companies providing services for the collection/removal of business waste, they do not directly co-operate with them. This is an interesting finding, considering that all contractors that collect clear bags in their wards are required to deliver these recyclables directly to RAD's material recovery facility (MRF) in Windhoek. This, however, does not seem to be perceived by the contractors as a business partnership.

The largest part of the waste that the ward contractors collect every day is paper and cardboard, followed by glass (see table overleaf). Due to the fact that sweeping the streets is an essential part of the tasks entrusted to the ward contractors, sand makes up an essential part of the waste collected (approx. 12.3%). Recyclable and non-recyclable plastics as well as cans are estimated to make up slightly more than 10% of the collected waste. Garden refuse, food/scraps, dung/excrement, as well as mixed waste are each estimated to account for approx. 10% of the waste collected. Other items that were mentioned included used household items such as fridges, mattresses or furniture, clothing, iron, metal carcasses, bones, ash and coal, as well as batteries.

Waste that the ward contractors cannot evacuate from the streets in the course of their work include animal carcasses, liquid and construction waste, sand and garden waste, as well as scrap and old cars. One respondent emphasised the occurrence of bodies and dumped babies again. Since this response was also given by another interviewee, it seems to be a relevant problem for some workers and contractors.

Table 2: Estimated distribution of the kinds of waste collected

Estimated distribution of the kinds of waste collected								
Kind of waste	% of waste collected by	No. of SMEs with this						
KITIU OF WASLE	company	kind of waste						
Paper and cardboard	27.5	18						
Glass	12.4	18						
Sand, etc.	12.3	13						
Non-recyclable plastics	11.9	18						
Recyclable plastics	11.7	18						
Cans	11.6	17						
Garden waste	10	4						
Food/scraps	10	11						
Mixed waste	10	11						
Dung/excrement	10	18						
Other	10	4						

Although these are only estimates, it shows that up to 70% of the collected waste can be recyclable waste – which constitutes a resource and possibly offers a supplementary source of value addition or sales.

Weighbridge figures from the MRF reveal further insight into the overall amount of recyclable waste that is recovered. 2013 saw a steep increase from 20,020 kg delivered in January 2013 to 63,020 kg disposed of in April 2013. The significance of the ward contractor system can be assessed when putting these figures in comparison with the 120,000 kg recycled every month through the dedicated collection system for household waste. In addition, the number of ward contractors who discharge clear bags at the recycling facility increased from three contractors in January 2013 to 11 companies in April 2013. The amounts of recyclable waste per company however differ significantly – from 740 kg to 20,940 kg, and were averaging 5,312 kg per company.

During the interviews with the owner-managers it was estimated that 41% of the waste could be recycled, while 59% goes to the landfill. None of the interviewed owner-managers indicated that collected waste is re-used, although some items such as furniture might possibly be reclaimed directly. Building rubble, e-waste as well as garden refuse are other forms of collected waste that could be recycled, re-used (e.g. construction waste), or directly fed into value-addition processes such as composting.

It must, however, be stated that the recycling rates differ significantly amongst companies, ranging from 0% (four SMEs, male-led) to 95% (two SMEs, female-led) with companies owned



by women recycling approximately 25% of the collected waste and those owned by men only 17%. However, recycling rates need to be seen in the context of the areas that are covered by a specific company since wards in informal settlements are currently not required to feed into the recycling system. It is important to note that the data from the survey does give an indication of a weak negative correlation between the recycling rate of the companies and their net profit. Thus, it needs to be explored whether there would be a real business case for the ward contractors to increase the recycling rate, or which factors might be hampering the creation of potential profit from feeding waste into the recycling process.

These numbers should also be seen in the context of the current recycling and waste collection system employed in the City of Windhoek. Refuse collected through sweeping the of road surfaces or the cleaning of open spaces must be placed in black bags which will not enter the recycling process, but are directly transported to the Kupferberg landfill site. Other recovered waste goes into skip containers, which are also discharged at the Kupferberg landfill. In informal settlements the collection of household waste is done exclusively via the black bag system. Thus, no separation takes place at source or at a later stage, and the waste is directly dumped at the landfill. The distribution and collection of clear bags is currently limited to middle- and upper-income areas of the City of Windhoek. A roll-out of this system to low-income areas has to date been challenging due to a lack of awareness amongst the population and consequently, an insufficient willingness for separation at source. As a result, a large amount of recyclable waste is not fed into the recycling process. Garden refuse and building rubble are currently not classified as recyclable material since the CoW lacks the machinery to shred or process this kind of waste, e.g. by producing compost.

However, provisions in the 2011 contracts show that recycling forms part of the cleaning and collection processes. Under the heading "Recycling activities and opportunities" it is stipulated that contractors should "(...) as far as possible separate the recyclable material collected in open space and street cleansing activities" and "(...) contain such recyclables in appropriate receptacles (e.g. clear bag) for disposal at the Material Recovery Facility".

In addition, the ward contractors are urged to encourage their employees to recycle as much as possible and to allow for sorting and storage of these recyclables. However, these activities are currently discouraged by the existing remuneration system since the transport and disposal of waste at the Kupferberg landfill site and at the MRF are based on the same fee scale. Active sorting of waste by the workers is therefore discouraged as it would result in higher costs while not being remunerated with higher returns.

Three major elements for business growth and co-operation become clear from these findings. Firstly, the owner-managers seem to have limited knowledge about the basic data of their

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businesses in terms of waste processed, areas covered, etc. This hampers the identification and exploitation of growth potential, as well as opportunities for increasing productivity and efficiency. Secondly, recycling seems to be discouraged, due to limited awareness amongst the contractors as well as the public, and as a result of systemic shortfalls that do not allow separation of waste at source (black bag system) or during cleansing/collection activities (adverse fee structure). Lastly, business co-operation seems to be unco-ordinated. The link between the ward contractors and the large-scale waste management service provider, RAD, is especially under-utilised. Approaching these three issues in a co-ordinated manner could yield significant results and may create spill-over effects that allow for further business growth and job creation in combination with increased environmental protection.

4.7 Knowledge of SWM Policy and Roles

Windhoek's SWM Policy provides the most important regulatory framework for citizens, businesses, the City and the operators of waste management services. However, the policy is not known to 11 out of the 18 interviewed owner-managers. Of those who indicated that they know about the policy, only one could indicate the major elements such as recycling and re-use, and another owner-manager made a distinction between storage, collection, transportation and safe disposal of waste. The remaining answers were very general in nature and resembled responses like "The policy aims at keeping the city clean and hygienic" or "To remove any waste from amongst people".

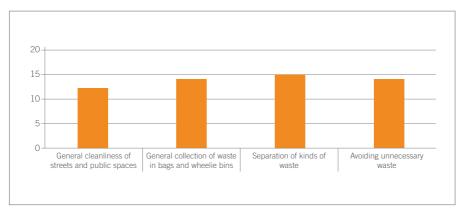
Interestingly, some of the ward contractors could also not identify the specific roles ascribed to the citizens, the city, themselves and other companies within the waste management system of the CoW. Of the ten who mentioned elements of the role of the City, most indicated its supervisory function towards the ward contractors and a managerial role fulfilled for the entire waste management system. The same ten respondents were also largely clear on the role of the citizens in reducing waste, ensuring its safe, hygienic and legal disposal and co-operation with the service providers. However, only 11 out of the 18 SME owner-managers were in a position to describe their own role – clearly indicating it as the collection of waste in open spaces in accordance with their contractual obligations. Other companies were not seen as being assigned any responsibility within the CoW waste management system.

These relatively vague replies and the comparatively small number of contractors that were able to respond to the questions indicate a widespread lack of understanding of the SWM Policy and the waste management hierarchy. Considering the fact that their contracts include the hierarchy, and that monthly meetings with the SWM Division ensure a close collaboration with the CoW, it emphasises the need to foster better understanding and a closer collaboration with the partners in the waste management system to identify linkages and areas for growth.

In terms of the regulatory framework, two major shortcomings were identified by the owner-managers as the most important challenges experienced in complying with the rules set out by the CoW: (1) illegal dumping and mixing of waste by citizens; and (2) lack of awareness and co-operation from the public in the waste management process, linked with a lack of enforcement by the City. Only three of the owner-managers confirmed that the citizens in their service area are aware of the regulations that apply to them based on the waste management system of the City. Four denied that citizens had any awareness, while the remaining 11 did not know about the level of awareness within the households in their wards. It is therefore understandable that only five owner-managers could confirm compliance of citizens with the waste management regulations.

It is interesting to observe that while all owner-managers confirmed that the citizens in their area are aware of their services, the public seems to be ill-informed about the regulations pertaining to the waste management system. To a certain extent it is the role of the ward contractors, on behalf of the CoW, to raise such awareness to ensure proper handling and reduction of waste produced. Their contracts stipulate that the contractors can be requested to distribute material on behalf of the CoW and should participate in clean-up campaigns that are meant to raise people's awareness. However, due to knowledge gaps experienced by the ward contractors on the waste management system, it can be concluded that the contractors need further training in order to be able to raise awareness and explain the principles of the SWM Policy to the households.

Figure 10: Areas needing further awareness raising



As clearly illustrated in the above graph, there is a general need for more awareness raising in all areas, especially with regard to separation at source, as well as the reduction and the correct disposal of waste. The cleanliness of streets seems to be a slightly less important aspect.

Some of the ward contractors already undertake to educate people when the need arises or during community meetings. Others write official letters to the CoW to indicate the need for more awareness raising or use the opportunity during monthly meetings with the SWM Division to voice their concerns.

4.8 Expected Changes, Opportunities and Challenges for Businesses and Workers

Business growth and expansion seem to be hampered by some of the above-mentioned issues, despite the large potential for improvement from recycling rates, new fields of activities, better workplace co-operation and the like.

From the SME owners' point of view, both female and male, the future outlook is largely positive, with the expectation of more employment to be created and waste to be handled. A few do not expect any changes or anticipate to purchase some additional machines and equipment. The pessimists, however, are largely outnumbered.

The workers are equally optimistic about the future changes that can be expected in the companies. Although they expect more waste to be handled, many do not expect more people to be hired, nor additional machinery and equipment to be purchased.

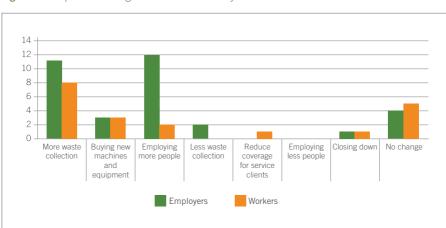
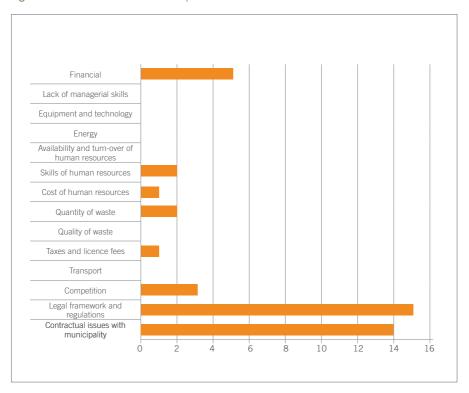


Figure 11: Expected changes in the next three years

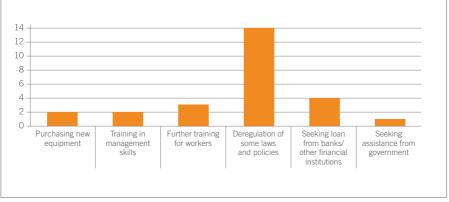
In order to better assess the opportunities for business expansion, the owner-managers were asked to indicate the most important problems they experience in expanding their waste management activities. As depicted in the graph below, the major issues mentioned are related to the contractual arrangements with the City that clearly delineate which activities the contractors are allowed to carry out and the area to cover. Of minor importance were financial constraints, competition with other providers of waste management services, the skills sets available within the workforce, the quantity of waste, as well as staff and administrative costs. Issues such as a lack of managerial skills, inadequacies in terms of equipment, technology or energy supply, the availability of workers, as well as the quality of waste and issues related to transportation have not been identified by the employers as problem areas experienced in the potential expansion of their businesses.

Figure 12: Problems for business expansion



The owner-managers focused on issues of deregulation and easier access to business finance as ways to overcome the above-stated challenges. However, none of them could indicate specific actions to be taken towards an improved regulatory framework or better access to finance. Statements made reflected that contractual obligations should be "less rigid" (12 owner-managers) or that "more funding to expand services is needed". Three interviewees indicated that training of workers focused on OSH could be a means to improve the chances to expand business activities. It was also repeatedly mentioned that the tender processes of the CoW should allow for a preferential treatment of the ward contractors and expansion into other towns should be supported.

Figure 13: Interventions helping to expand business

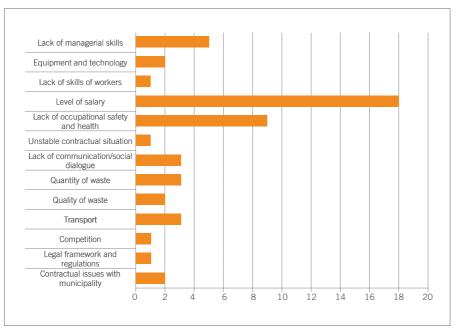


When asked where the owner-managers saw the largest potential for business growth under the precondition that the right support will be provided, two major patterns arose:

- Firstly, recycling and further diversification in the waste management value chain were
 most frequently stated as major opportunities for business expansion, including recycling
 of construction rubble and garden refuse; and
- Secondly, growth into other towns, or newly developed areas within the CoW, as well as the expansion of service areas into parks and cemeteries.

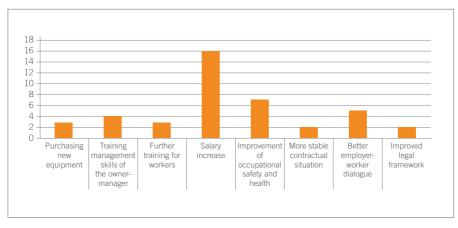
The workers' representatives, on the other hand, highlighted the biggest challenges experienced by the employees as low salary levels and the unsatisfactory situation regarding OSH. Other issues mentioned were the lack of managerial skills of the owner-managers and communication within the companies, the quantity of waste to be handled, i.e. workload and issues related to transportation.





Therefore, interventions that would help improve the situation of the workers could focus on salary issues, ultimately leading to a pay hike. Most of the workers' representatives mentioned a minimum wage of about N\$3,000–3,500 as an adequate remuneration that would better workers' livelihoods. More regular and adequate provision of protective clothing and improvements in terms of OSH would also contribute to the workers' well-being. The third most important issue was improved dialogue between employers and employees at the workplace. Such an intervention might not have immediate tangible effects for workers and the SMEs, but could significantly contribute to steering initiatives aimed at improving working conditions whilst enhancing productivity. Six of the workers' representatives also raised the need for more people to be employed to be able to properly service the wards and decrease the workload for the employees. This could ultimately lead to additional cost for the SMEs, requiring productivity increases or opportunities for business expansion as stipulated by the owner-managers. The activities envisaged could have a double impact if issues from the workers' and employers' side are tackled in parallel.

Figure 15: Interventions helping to improve the situation of workers



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5. Conclusions and Recommendations

While this study is not primarily meant as a technical analysis of the ward contractor system in the CoW, it reveals that the system showcases an interesting example for exploiting the job creation potential in green services, and more specifically the waste management sector. The system provides income to more than 360 people – mainly low-skilled employees – as well as 19 owner-managers. The high degree of formality, as well as the close relationship with and guidance from the Solid Waste Management Division of the CoW, ensure compliance with the minimum requirements in terms of social protection, rights at work and fair remuneration. The system therefore provides excellent grounds for decent job opportunities in a green sector, thereby creating green jobs.

The findings, however, reveal persisting challenges and areas for improvement to increase productivity and business expansion within the SMEs, which, when addressed, would provide for higher levels of decency and increased opportunities for job creation. Interventions targeted at improving the framework conditions at micro-, macro- and meta-level can be distinguished according to short-term and long-term measures. In the short term, interventions should focus on improving adherence to and application of existing regulations and procedures in order to overcome challenges in terms of decent work for the existing workforce and setting the foundation for more sophisticated support services.

A significant lack of social dialogue within the companies was identified. Although a high level of trade union membership was attested too, dialogue rarely happened at company level, which was identified as a potential impediment to productivity and workplace co-operation. In this context, it will be important to tackle deficits in both employers' and workers' understanding of the Labour Act of 2007 and the potential it yields for improved co-operation at enterprise level. Such training should focus on making owner-managers and workers more conversant with the legal framework, and fostering open discussion between the groups about shortfalls in the companies to unlock existing potential for productivity increases.

It will also lay the ground for future work as is outlines major issues such as the requirements in terms of occupational safety and health (OSH). Although clearly regulated and controlled by the CoW, the study disclosed that workers are insufficiently aware of the importance of compliance with OSH regulations and that owner-managers lack a structured approach towards their implementation. Measures to overcome these shortfalls could be developed during short, company-specific OSH audits that form the basis for targeted training sessions, and the development of a Code of Conduct that gives workers and employers a guiding framework for the everyday implementation of OSH measures.

Protection of the Management o

Since the contractors and their staff form part of a larger approach towards waste management in the CoW, they play an important role in minimising, re-using, recycling and disposing waste. The diverse structure of the system and the ambitious goals of the CoW to remain one of the cleanest cities in Africa, provide the ward contractors with opportunities to expand their businesses and increase co-operation with other companies. At the same time they play an important role towards the public in terms of awareness raising and encouraging citizens to comply with the waste management policy. The study, however, revealed that their knowledge of the SWMP is limited and would therefore need to be enhanced. A short training course by the SWM Division is recommended in order to get the full buy-in from all employers and workers' representatives to comply with and promote the policy.

These short-term activities would pave the way towards a more sophisticated set-up of support measures at all levels, i.e. the enterprise level, the policy level and the level of people's perceptions towards waste management and the related job creation potential. In the meantime, they will have an immediate effect on enhancing the quality of the workplace.

Although business management skills are at a level that allows the ward contractors to run their businesses in the current setting, they lack knowledge in quality assurance and regular monitoring, as well as the marketing of their waste management services. The aspect of quality assurance is important for fulfilling current contractual obligations, but also in terms of business sustainability and expansion. This would help them identify gaps for improvement of their services as well as inefficiencies in the service delivery, and thereby enable them to take the necessary action or exploit strengths in their businesses. Subsequently, the owner-managers would need to be capacitated to properly market their services. Such training at the micro-level might therefore be a first step towards future business expansion in terms of business management skills, but also regarding a shift in their mindsets.

The biggest potential for job creation in the city's waste management system probably lies in a more intensive recycling activity and possible value addition to recyclable waste products. Some obstacles currently exist that hamper the full exploitation of this potential, mainly in the areas of:

- Policy environment and social dialogue;
- Skills development; and
- Awareness raising and sensitisation.

At the policy level, the financial incentives for the ward contractors to undertake additional recycling activities are low and thereby discouraged. It therefore needs to be thoroughly analysed how the system can be restructured in order to incentivise separation of mixed waste and collected

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refuse and what these activities yield in terms of direct and indirect job creation potential.

At the same time, business collaborations need to be supported and fostered in order to exploit the scale effects and possibly allow for a service expansion to other cities. Ward contractors and other recycling companies, together with policy stakeholders, need to exchange information more frequently and their awareness about the inherent potentials needs to be enhanced to create a supportive environment for private-private and public-private collaboration.

Finally, the SME owners need to be better equipped with skills to recycle and add value to the collected waste. Such training will complement the existing knowledge-base of business management skills and therefore need to be tailored to the specific needs of different owner-managers who want to venture into various fields in the waste management business.

Another important finding is related to the need for sensitisation and awareness raising with regard to recycling and waste management. Although this study did not specifically address the attitudes of the citizens on separation at source and recycling in general, the public at large remains an important stakeholder in the entire waste management chain. The approach pursued by the CoW to change from "clean" to "green" by increasing the importance of minimisation, recycling and re-use indicates political goodwill. Nevertheless, the CoW encounters challenges to maximise rates for recycling at source. Increased commitment by all citizens, as well as the workers and employers in the ward contractor system, could significantly increase the amount of collected recyclable waste and thereby reduce pressure on the existing landfills.

In order to foster dialogue between employers and workers, the strong involvement of all social partners is of utmost importance for the success of any initiative in the sector. Since the approach outlined above strongly corresponds with the suggestions made and problems identified by the workers as well as the employers, their strong support can be expected during the implementation of the various measures.

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Many countries are upgrading or restructuring their waste management systems. By providing access to low entry level jobs to men, women and young people who would otherwise have a difficult time entering the labour market, the sector could be an increasingly important driver for the creation of green jobs and inclusive economic growth.

However, the job creation potential in this sector is often underexploited and many of the existing jobs can be categorised as precarious and indecent due to unhealthy and unsafe working conditions, lack of social dialogue and social protection, and the absence of fair employment conditions.

This Baseline Study was prepared in the context of the International Labour Organization's initiative entitled "Support towards green economy transition in Namibia by boosting the productivity of SMEs providing waste management services in Windhoek". The report analyses a specific sub-section of the formal waste management system in the City of Windhoek – the so-called ward contractor system – along dimensions related to decent work and with regards to business growth and recycling activities. The study is meant as a starting point of a constructive dialogue on how to improve working conditions and enable employment creation in the waste management sector.

