2002 Annual Forum

at Glenburn Lodge, Muldersdrift

Does it Profit SMMEs to Care about the Environment?

J.N. Blignaut
University of Pretoria
T. Demana
Department of Trade and Industry

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

High expectations exist about the possible contribution of SMMEs to economic growth and development in South Africa. It is recognized, however, that SMMEs are seriously constrained in many regards, amongst others, legal and institutional requirements, whereas the authorities do not have adequate capacity for enforcement. Non-compliance cannot therefore be effectively sanctioned. The same trend is observed regarding compliance with environmental legislation and the implementation of environmental management systems. It is suggested here, based on international evidence, that prudent environmental management should not be viewed only as a cost item or legal matter, but actually as a matter of good business. This necessitates a proper and well-implemented development support and communication system between science, industry and government.

1. INTRODUCTION

It is generally believed that SMMEs do indeed play an important role within the South African economic context – especially in their contribution to employment. The further development of SMMEs is, however, severely hampered by a series of legal, institutional and financial constraints. Increasingly the question is also asked whether compliance to environmental legislation contributes to the legislative burden SMMEs are facing. In other words, does compliance with environmental legislation actually imply higher barriers to entry? It is argued here that, ideally, compliance with environmental legislation and economic efficiency should not be seen as two opposing factors, but that they actually could, and should, mutually reinforce each other. To achieve this entails a learning experience for both policy-maker and the businessperson alike.

These questions are discussed in this paper. In the next section the profile of the SMME sector and the main constraints faced by this sector is sketched. This is followed by an overview of the environmental legislation in the country. In the fourth section the international evidence of SMMEs and the environment is discussed. Section five focuses on the South African situation. Lastly some recommendations are furnished.

2. PROFILE OF SA SMME'S AND GENERAL CONSTRAINTS

2.1 Contribution to the gross domestic product

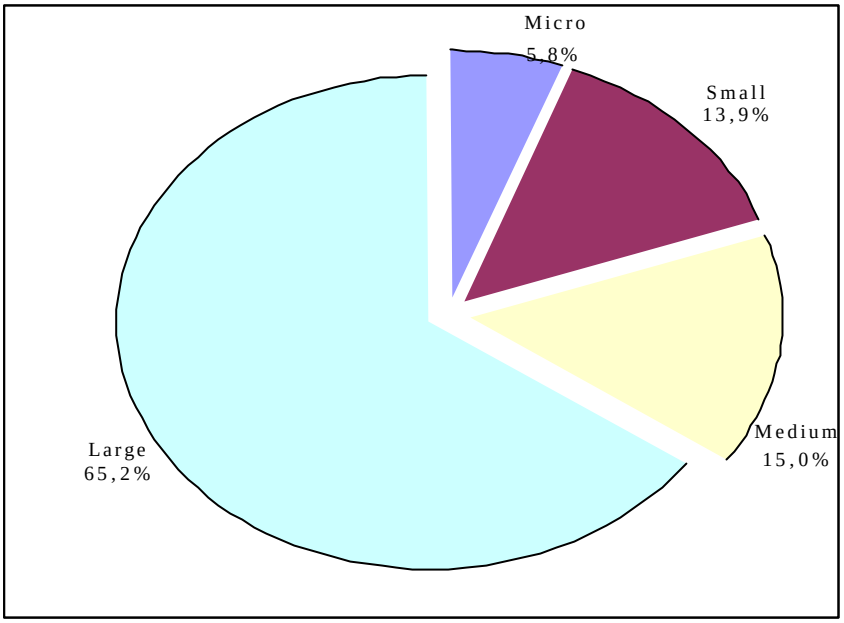
What portion of each industrial sector's contribution to GDP is generated by SMMEs? In other words, how important are SMMEs in terms of their contribution to GDP in each sector, excluding the public sector, and to the country as a whole? Table 1 and Figure 1 provide a breakdown in terms of size class of each sector's contribution to GDP. From this table, it is clear that on average for the whole country, 34,8 per cent of the GDP is generated by SMMEs and 65,2 per cent by large enterprises. Sectors where SMMEs contribute more than 40 per cent to the GDP in that sector are agriculture, construction, trade, and transport. In these sectors SMMEs are major contributors to economic activity.

Table 1: Percentage contribution of SMMEs to the GDP in the industrial sectors

	MICRO	SMALL	MEDIUM	LARGE	TOTAL
Agriculture	4,13	8,67	43,71	43,49	100,00
Mining	1,01	1,74	2,55	94,70	100,00
Manufacturing	5,27	7,37	21,02	66,34	100,00
Electricity	0,00	0,00	0,00	100,00	100,00
Construction	3,14	35,60	12,20	49,06	100,00
Trade	2,27	23,41	17,12	57,21	100,00
Transport	7,07	18,50	20,30	54,13	100,00
Business & other services	14,90	12,90	2,90	69,30	100,00
Average: all sectors	5,82	13,90	15,05	65,23	100,00

Source: NTSIKA 2000.

Figure 1: Contribution of SMMEs to the GDP



It is in especially the construction, trade and transport sectors where the significant role of small enterprises is remarkable, even more dominant than the role of medium-sized enterprises.

From the above analysis it is evident that SMMEs are important, and more so in some sectors than others, within the context of the formal South African economy. Should one add the informal sector, the relative importance of SMMEs will increase since it is unlikely that there are large firms operating informally. This indicates that SMMEs are viable and that the development and promotion of SMMEs are of the utmost importance.

2.2 Contribution to employment

Irrespective of the importance of SMMEs in terms of their contribution to GDP, arguably their biggest single contribution to the South African economy is in terms of employment. This becomes even more true given the fact that employment on a national level is constantly declining. Currently the formal, non-agriculture, private sector is estimated to employ approximately 4,7 million people. The public and agriculture sectors combined employ approximately 2,6 million people whilst the informal sector employs a further 2,7 million people. Combined a total number of approximately 10 million people of the total population of 43 million are employed.

The role of SMMEs acting as an agency for employment in the country cannot be overemphasised, especially within the context of a developing nation. Within South Africa this also implies incredible socio-economic challenges, predominantly as a result of the racially biased policies followed under Apartheid. The contribution of SMMEs to employment in the respective industrial sectors is portrayed in Table 2.

Table 2: Percentage contribution of SMMEs to employment in the main industrial sectors

	MICRO	SMALL	MEDIUM	LARGE	TOTAL
Agriculture	4,17	13,81	52,31	29,71	100,00
Mining	0,92	2,51	2,59	93,97	100,00
Manufacturing	8,39	10,57	24,58	56,46	100,00
Electricity	0,00	0,00	0,00	100,00	100,00
Construction	2,93	37,28	13,45	46,34	100,00
Trade	35,77	23,73	13,00	27,49	100,00
Transport	11,38	23,50	20,84	44,27	100,00
Business services	25,14	19,18	5,20	50,48	100,00
Other services	52,68	18,22	8,23	20,86	100,00
Average: all sectors	17,38	16,34	20,76	45,52	100,00

Source: NTSIKA 2000.

SMMEs employ 54,5 per cent of all the formal, private sector enterprises, compared to 45,5 per cent in the large enterprises. This is also displayed in Figures 2 and 3. These numbers are in a different order of magnitude than those discussed in the previous section. It can therefore be concluded that SMMEs contribute to a much larger extent to employment than to GDP.

Viewed within the respective sectors themselves, more than 50 per cent of the employment within SMMEs occurs in the agriculture, construction, trade, transport and business and other services sectors. It should be noted that one generator producing approximately 94 per cent of the country's electricity dominates the electricity sector. The remaining 6 per cent is generated mostly by local authorities, which are not included here.

Once again the important role of small enterprises in the construction, trade and transport as well as the business services sectors is notable. Their contribution to employment is much higher within each of these four sectors than for small enterprises as a whole and, in the case of trade, comparable to that of medium and even large enterprises. From the outset an important trend is emerging. The small enterprises in these four sectors are comparatively more important than many micro and medium-sized enterprises in other sectors.

Figure 2: Contribution of SMMEs to employment

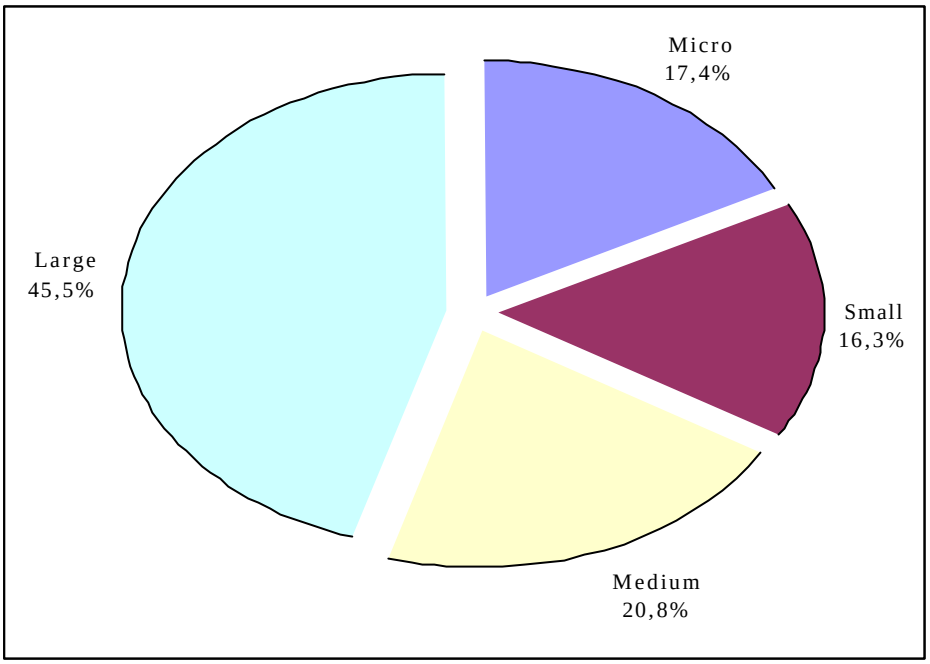
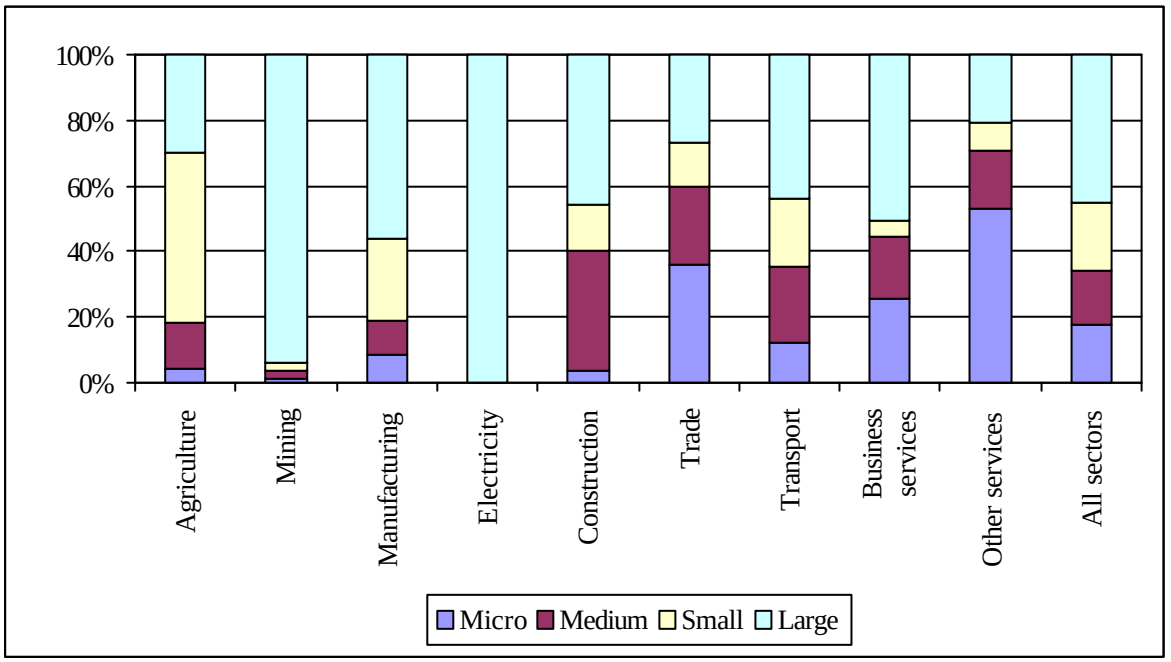


Figure 3: Sectoral contribution to employment in terms of enterprises-size class



2.3 General constraints faced by SMMEs in South Africa

As indicated in section 2.1 and 2.2 above, SMMEs are important both in terms of their contribution to GDP and employment since they constitute a significant portion of total activity and they perform a vital role within the country as job retainers (Ntsika

2000). The further development of SMMEs is, however, seriously constrained. The main source highlighting these constraints is Ntsika (1999). Some of the most significant constraints are briefly mentioned here:

1. Finance
    - Lack of access to loan and retail finance and direct SMME banking schemes; insufficient debt recovery schemes; insufficient mechanism to provide collateral.
2. Taxation
    - Large array of tax impediments and lack of tax incentive schemes; impact of tax on cash flows; complexity of tax system; tax compliance burden SMMEs; regressive nature of VAT and complexity of VAT system.
3. Labour
    - Cost of labour; difficulty in complying with labour laws (e.g. skills development act, basic conditions of employment act, labour relations act, employment equity act, unemployment insurance act); lack of adequate flexibility when determining wage setting.
4. Business trade
    - Strict requirements of the Business Act and the Trade Practise Act.
5. Property and land ownership
    - Cost of land and land ownership; Access to land and property is difficult; incompetence of local authorities.
6. By-laws and regulations
    - By-laws and local regulations are not harmonised; enforcement of regulations are haphazard; inflexibility regarding different land-use options; SMMEs do not enjoy benefits of local government investment packages.
7. Procurement
    - No uniform tendering procedure in the country; SMMEs do not have access to state tenders; corrupt officials being bought by large enterprises.
8. Women and rural development
    - Lack of infrastructure, especially rural, access for women to business a serious constraint.

Additional to the constraints mentioned above, Table 3 highlights constraints according to three other sources.

Table 3: Constraints facing SMMEs

Ntsika 1998	**Tswane 2001**	**Haveman 2002** Improving the interaction between large enterprises and SMME in development projects
Enterprise level: • Lack of access to credit • Lack of managerial skills • Lack of information • Lack of access to and information on market opportunities • Lack of infrastructure • Lack of basic literacy and numeracy	**Business constraints:** • Shortage of funds • Customers don't pay accounts • Overtrading (too many businesses) • Crime/theft/security • Lack of marketing/advertising • Fuel prices • Lack of infrastructure	**Technical professions were unprepared or reluctant to:** • Champion or pursue social development outcomes • Ensure sufficient opportunities for empowerment • Ensure that projects comply with policy or legislation • Promote training
Policy level: • Lack of clear policies for local development and SMME strategy • Inadequate co-ordination among government departments • Inadequate know-how and co-ordination between the various ties of government (national, provincial and local) • Lack of adequate co-ordination among non-financing and financing wholesalers	**Business problems:** • Lack of funds/credit • Low profit margins • Too many competitors • Too few customers • Poor access to small business support • Lack of product publicity • Lack of new technology • Theft • Cost of services (water & electricity)	
Service provider level: • Lack of sufficient number of service providers • Insufficient "rural orientation" of service providers • Lack of co-ordination and networking between service providers		
Ntsika level: • Lack of a rural SMME strategy • Lack of clearly defined roles and responsibilities for the division regarding a rural strategy		

Following from this overview it should be clear that SMMEs are operating in a seriously constrained financial, but heavily legalised environment. Any kind of environmental legislature that happens to be introduced will be an add-on to these constrains compounding the problems associated with SMME business.

3. OVERVIEW OF THE SA ENVIRONMENTAL LEGISLATION

The Constitution of South Africa guarantees everyone the right to an environment that is not harmful to health or well-being. The responsibility for a healthy environment falls within the jurisdiction of several government departments at all levels. To ensure a consistent approach the National Environmental Management Act of 1998 was created. While significant legislation exists for regulating all kinds of activities

that impact on the environment, the distinguishing feature of the National Environmental Management Act (NEMA) is its incorporation of the concept of co-operative governance in respect of environmental issues. In this way the NEMA provides a mechanism for government to implement environmental regulations in a manner conducive to sustainable industrial development.

South African legislation to regulate the major environmental areas of air quality, water quality, waste and land management as well as nature conservation is world-class. Regulations under the Environment Conservation Act, Act 73 of 1989, for instance, require that activities that may have significant environmental impact perform an *environmental impact assessment* before they can be initiated. In practice this requirement means that environmental issues are a consideration in all economic activities. However, translating national environmental legislation to good environmental practice by small to medium-sized companies remains a challenge.

Environmental issues cut across various levels of government and therefore cannot be adequately addressed by a single national department. The delineation of authority in this regard between national departments, provincial and local authority is unclear, especially for the small business sector. In most cases a single activity is regulated by more than one role-player and for a small production entity capacity to adequately satisfy the different focal areas of regulators cannot be expected to be strong. In general it is difficult for an SMME to access the environmental regulations or standards that control its business activities because there is no central or one-stop entry point. Currently government-owned organisations charged with disseminating business skills to SMMEs have not integrated environmental compliance into their programmes. There are virtually no dedicated facilities to promote good environmental practice as a competitive factor in business.

The world-class environmental legislation discussed above is implemented through regulations that national departments, provincial and local authorities promulgate. The approach to these regulations is not necessarily uniform. To facilitate compliance, these regulations should ideally consist of four components – an international equivalent standard that has to be complied with, a defined assessment procedure to assess compliance, a regulator that will enforce compliance and sanctions in cases of non-compliance. However not all regulations comply with this model. As a result, it is not clear in some cases who is responsible for enforcement and what sanctions are applicable in cases of non-compliance. There is little uniformity in application of regulations across the country.

Environmental legislation can be a key driver for growth in the environmental goods and services industry. The environmental goods and services industry consists of activities which produce goods and services to measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems (OECD 1999). The environmental goods and services sector is largely dominated by small companies and regulations that will serve to implement the full intent of national environmental legislation, not only reducing pollution, but also adding to the growth of the SMME sector.

Both regulators and SMMEs share the same constraint of human resources. Highly skilled professionals are needed to redesign the processes of industries to increase environmental sustainability and reduce pollution. Skilled individuals are needed to understand the complexity of environmental issues, trade and sustainable development. Government needs professionals to translate legislation into performance-based standards and issue permits or enforce compliance with existing legislation. Besides regulators and enterprises, communities need to be educated on their environmental rights so that they can exert the necessary pressure for business to comply with good environmental practice.

4. INTERNATIONAL EVIDENCE REGARDING ENVIRONMENTAL MANAGEMENT

Two studies regarding the environmental performance of Mexico and Brazil (Dasgupta *et al*. 1997 and Dasgupta *et al*. 1998) indicate that size and system of management do matter. The main conclusions can be summarised as follows:

- Plants, which institute ISO 14000-type internal management procedures, exhibit superior environmental performance.
- Environmental training for all plant personnel is more effective than developing a cadre of environmental specialists; assigning environmental tasks to general managers is more effective than using special environmental managers.
- Plants, which have experienced regulatory inspections and enforcement, are significantly cleaner than their counterparts.
- Large plants in multi-plant firms are much more likely to adopt policies which improve environmental performance.
- Plants with more highly-educated workers have significantly greater environmental management effort and better performance.
- Small plants are indeed more pollution intensive.
- Small plants in poor areas cause more pollution than those in rich areas.
- The risk of mortality from industrial air pollution is much higher in the top two income deciles among Brazil's municipalities. Furthermore, the great majority of projected deaths in the high-income areas are attributable to emissions from large plants. The scale of large-plant emissions dominates all other factors. So, lower-income areas suffer much less from industrial air pollution in Brazil, despite a higher dirty-sector share and greater prevalence of emissions-intensive small plants.

Based on these results it is clear that the smaller a firm and the poorer the area in which it operates, the higher the pollution intensity. But all is not lost.

Recent evidence (SustainAbility 2002:4) shows that emerging market companies in developing countries gain financially from sustainability - the so-called business case for the environment. The main benefits are:

- Saving costs by making reductions to environmental impacts and treating employees well;
- Increasing revenues by improving the environment and benefiting the local economy;
- Reducing risk through engagement with stakeholders;
- Build reputation by increasing environmental efficiency;
- Developing human capital through better human resource management; and
- Improving access to capital through better governance.

This business-case approach towards sustainability is not only applicable to large enterprises, but also to SMMEs as is indicated by various case studies (see CSBE 2002 and Greengazelles 2002):

- Small businesses, profiting from compliance with environmental regulations, are profiting even more by exceeding standards.
- Small businesses are profiting from voluntary pollution prevention.
- Small businesses are profiting from recycling.
- Small businesses are profiting from outdoor recreation and tourism, two industries that depend heavily on environmental quality for their survival.
- Small businesses are profiting from devising, manufacturing, or marketing innovations that help protect the environment.
- Small businesses are profiting from appealing to growing numbers of environmentally-conscious consumers.
- Small businesses are profiting from the manufacture of smaller, lighter, more durable products.
- Small businesses are profiting by reducing environmental hazards in the workplace.
- Small businesses are profiting from exporting pollution control know-how and technology to other countries.
- Small businesses are using money they've saved by "greening" to enable them to green - and save - even more.

5. ENTERPRISE SIZE AND ENVIRONMENTAL PERFORMANCE IN SA

In a first best world one would have loved to have a comprehensive data set, stretching over a number of years, that provides information regarding environmental externalities within and across industries in terms of enterprise-size class. Data tables such as Tables 4 and 5 covering a number of years are therefore preferred. Needless to say this type of data could not be found with respect to South African industry.

Table 4: Various pollutants per size class in sector XYZ

Pollutant	Micro	Small	Medium	Large	Total
CO2					
NH4					
Volatile matter					
Solid waste					
Etc.					
Etc.					
Total					

Table 5: XYZ pollutant in terms of industry and size class

Industry	Micro	Small	Medium	Large	Total
Textiles					
Automotive					
Chemistry					
Etc.					
Etc.					
Total					

Coleman (1997), however, finds that environmental awareness and compliance amongst SMMEs in the automotive industry is particularly weak. She concludes as follows:

> The case study of selected automotive service activities in the Cape metropolitan area cannot reflect fairly the situation in all sectors. However, it highlighted weaknesses in skills, awareness, ethics, institutional support and government policies. This impacts on the sustainability of SMME activity and, therefore, environmental issues should be integrated with SMME policy development at an early stage, and not neglected until environmental problems become critical barriers to SMME growth.

These views of Coleman are independently supported by Liebenberg (1998), who states:

> The findings from this study indicate that, within the South African context, the environmental awareness levels amongst SMMs can still be considered to be low. Most SMMEs in the study would seem to lack the organisational capacity at the moment to introduce more formalised management control functions or structures, such as those for EMS.
>
> *The study indicates a serious need for measures for improving the flow of appropriate environmental information to SMMEs. Although respondents did not foresee problems with the ability of their companies to identify its environmental impacts, most of them expressed a need for financial as well as non-financial advice and support to assist them with the management of these impacts.*
>
> *With regard to the application of EMS specifically, companies will clearly be directed by the cost implications of an EMS and the perceived benefits to be obtained from implementing it.*

> *SMME growth and development are important aspects of the economic strategy in South Africa. Approaches will therefore have to be developed to ensure that SMMEs can address environmental management in such a way that it is not considered a limiting factor to their ability to continue towards economic growth.*

Alarming as these findings may be, Grosskopf (2002) states that the socially optimal scale of production, internalising externalities etc., is generally at a much smaller scale of production than normally anticipated. A cleaner textile production study, funded by DANCED, for the Department of Trade and Industry (DARUDEC 2002) clearly indicates that through the introduction of appropriate management systems (i.e. the introduction of preventative approaches), water consumption and other negative environmental externalities could greatly be reduced. In the process the industries within the sample saved money, gained tremendously from the transfer of skills and were able to market environmentally friendly cotton products.

6. RECOMMENDATIONS AND CONCLUSION

From the evidence scrutinised it seems as if the SMME sector in South Africa lacks far behind their international counterparts when it comes to prudent environmental management. The evidence, however, also indicates that small is indeed beautiful and productive and that, with some concerted effort, meaningful progress in terms of environmental and economic performance is not only possible but also feasible.

The problem of non-compliance to existing legislation is, however, two-fold. On the one hand there is inadequate knowledge amongst SMME practitioners regarding the potential welfare gains embedded in prudent environmental conduct, but, also, there seems to be a lack in communication through appropriate structures from the legislature's side motivating environmental legislation. It should also be said that there seems to be confusion even amongst government ranks about the current environmental standards and requirements. These two problems, which actually form one problem viewed from two sides, could and should be addressed through a rigorous system of development support. Firstly, development support to assist government to develop capacity to deliver on policy measures, i.e. implementational capacity together with the sound knowledge as to why a specific policy should be enforced. A critical factor for success of any environmental legislation should be its embedded incentives, which should act as a catalyst for a change in production structures and systems. Secondly, development support for SMMEs to understand and enable the incorporation of new legislation: this support should focus on making the most of the embedded incentives within the legislation since without these incentives no support will be successful.

The stakeholders in this development support system should be government (as legislator), SMMEs (as business) and science (as generators of new knowledge and production methods) with the environmental service providers acting as the glue and lubricant between the various sectors.

Further recommendations:

- Effective enforcement of regulations together with targeted incentives
- Awareness and education programmes
- Integration of environmental support to other business support schemes
- The use of standards to meet environmental objectives
- Incentives for science and technology education programmes
- Incentives for environmental education
- Development of codes of practice for SMME sector
- Development of support centres for business environmental issues
- Incentives for the services sector.

REFERENCES

Coleman, A. 1997. Small business management: A case study from the Western Cape automotive sector. In: Bethlehem, L. and Goldblatt, M. (Eds.) *The bottom line*. Cape Town: UCT Press.

DARUDEC. 2002. *Cleaner textile production*. Research report for the Department of Trade and Industry. Funded by DANCED.

Dasgupta, S., Hettige, H. and Wheeler, D. 1997. What improves environmental performance? Evidence from Mexican industry. Web-site visited on 20 July 2002. http://www.worldbank.org/nipr/work_paper/1877/index.htm#TopOfPage.

Dasgupta, S., Lucas, E.B. and Wheeler, D. 1998. Small plants, pollution and poverty: New evidence from Brazil and Mexico. Web-site visited on 20 July 2002. http://www.worldbank.org/nipr/work_paper/smplants/index.htm#P45_1146.

Greengazelles. 2002. *Read about green gazelle success stories*. http://www.geocities.com/greengazelles/case.html.

Grosskopf, M. 2002. *Towards an optimal scale of production*. Paper presented at the World Forum on Sustainable Development under the theme Sustainable consumption and production, 27-28 August. Johannesburg.

Haveman. 2002. *Sustaining the process of social development in projects in the built environment 'technical involvement and accountability'*. Paper presented at the build environment professions conference.

Liebenberg, M.M.B. 1998. *An exploratory study into the application of environmental management systems in small, medium and micro enterprises (SMMEs) on the highveld in Mpumalanga Province*. Unpublished Master's Thesis in Geography and Environmental Studies. Potchefstroom University for Christian Higher Education.

Ntsika. 1998. *Rural small, medium and micro enterprises support strategy*. Report by Ntsika: Pretoria.

Ntsika. 1999. *National small business regulatory review*. Ntsika: Pretoria. (ISBN 1-919779-06-x)

Ntsika. 2000. *The contribution of micro, small and medium-sized enterprises to the South African economy: An Input-Output approach*. Unpublished research report.

SustainAbility. 2002. Developing Value. Web-site visited on 24 July 2002. http://www.sustainability.com/developing-value/contents.asp.

Tswane. 2001. *Quantitative and qualitative review of SMMEs in the Tswane metropolitan municipality: Towards an SMME development strategy*. Report by the Tswane Metro: Pretoria.

The Centre for Small Business and the Environment (CSBE). 2002. *Ten ways small businesses profit from greening*. Web-site visited on 24 July 2002. http://www.geocities.com/aboutcsbe/ten.html.