

## 2 Objectives, scope and approach of this study

### 2.1 Objectives

The objective of this study is to develop a shared understanding among constituencies of the potential positive and negative impacts of the proposed regulations on the following:

- **Investment and dis-investment**, including the nature of the investment i.e. whether it is capital intensive, labour intensive, as well as the geographic location of the investment.
- **Employment**, including job losses, job creation, shifts in the nature of work/employment patterns, the profile of the workforce, skills profile and conditions of employment.
- **Distortions in the market** including supply and demand balances and different product types this is achieved by isolating one aspect of the packaging industry, namely the vest type carrier bag.
- **Industry**, which relates to industries directly affected, such as petrochemicals and plastics, as well as other related industries, considering the knock-on effect of closing or transforming these industries.
- **Consumers**

### 2.2 Research scope and approach

The research study was restricted to vest type carrier bags, which are technically defined as follows:

- *These bags are manufactured from extruded tubular polyethylene film in varying thickness.*
- *The tube is folded lengthwise on both sides (side gussets).*
- *A bag is then formed by heat-sealing at both ends with a profiled cut at one end resulting in the formation of two handles.*
- *The resultant bag has the shape of a "vest" or "T-shirt".*

The value chain relevant to the manufacture, use and disposal of VCB's is summarised as follows:

- Polymer production
- Conversion
- Consumption, including re-use
- Disposal and recycling

Data was collected by means of structured interviews and completion of questionnaires within the following sectors:

- Polymer producers

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- Manufacturers of vest type carrier bags
  - Plastic recyclers
  - Pulp producers
  - Paper bag manufacturers
  - Paper recyclers
  - Cloth bag makers
  - Retail industry
  - Government

Excluded from the direct data collection exercise were the distributors of VCB's as well as the end consumers of VCB's. Information about these two groups were indirectly obtained from VCB manufacturers in the case of the distributors; and retailers in the case of consumers.

Questionnaires and interview guides were designed so as to extract information as required by the terms of reference and were approved by the counterpart group prior to use.

The following sections outline the specific data gathering approach used and the progress made within the relevant sectors.

### **2.2.1 Polymer producers**

Data was successfully collected by means of in-depth interviews, using a structured interview guide, with the two polymer manufacturers in South Africa.

### **2.2.2 Manufacturers of vest-type carrier bags**

Data was gathered through two mechanisms, namely the use of a structured questionnaire and follow up interviews. Interviews were also held with labour representatives at those companies that were unionised.

#### **Data collection by means of structured questionnaire**

- Questionnaires were distributed to 52 VCB manufacturers as per the list of manufacturers provided by the Plastics Federation
- The relevant VCB population turned out to be 42 companies
- The total number of completed questionnaires represented 10 companies, and 12 manufacturing plants representing 75% of total VCB production.
- An additional source of high level, aggregate company data was identified to be the submissions made by companies to the Government (Report on Comments Received, Proposed Regulations under section 24 of the Environment Conservation Act, DEAT, 2000).

Any data used from this source was first verified (telephonic interview) before used for analysis purposes

### Follow up interviews with VCB manufacturers

- 13 interviews were successfully completed, as follows:

Region	Small****	Medium****	Large****
KZN	1	2	0*
Cape Province	1**	3	1
Gauteng	1***	1	3

\* Identified manufacturer did not make VCBs

\*\* Problematic due to language problems

\*\*\* Only produces bags above 30 microns

\*\*\*\* Organisations were categorised based on employment data supplied by the PFSA. Categories defined as follows: Small <25 employees, Medium <25 & <100 and Large >100 employees.

### Interviews with labour representatives of VCB manufacturers

The interviews were conducted in conjunction with the follow-up interviews of VCB manufacturers. Companies that were not unionised were not targeted for interviews with labour representatives. In addition one company did not agree to interviews. The following table summarises the results of the process

Region	Small*	Medium*	Large*
KZN	1	1	0
Cape Province	0	1	1
Gauteng	0	1	3

\* Organisations were categorised based on employment data supplied by PFSA. Categories defined as follows: Small <25 employees, Medium >25 & <100 and Large >100 employees

### 2.2.3 The plastic recycling industry

Data was collected by means of both questionnaires and follow up interviews, as detailed below.

#### Data collection by means of structured questionnaire

- A total of four completed questionnaires were returned
- Follow up communications with plastic recyclers revealed that most do not see the relevance of the proposed regulations to their organizations, and also indicated that they do not see the relevance of questions asking for historical data.

#### Follow up interviews conducted with plastic recyclers

- Four companies, including the two that recycle VCBs (only two currently recycle VCBs) were recommended to the consultants by the Plastics Recyclers Employer Organization
- Two interviews were successfully conducted

#### **2.2.4 Pulp producers**

The Paper Manufacturers Association of South Africa recommended two pulp producers. One structured interview was successfully completed.

#### **2.2.5 Paper bag manufacturers**

Data was collected by means of questionnaire and follow up interviews, as detailed below.

##### **Data collection by means of structured questionnaire**

- The total population was identified to comprise of 6 South African paper bag manufacturers
- Three completed questionnaires were received, and considered to be representative

##### **Follow up interviews conducted with paper bag manufacturers**

- Analysis of the completed questionnaires indicated that it would be best to limit follow up interviews with 3 manufacturers that completed the questionnaire
- One interview was conducted successfully

#### **2.2.6 Paper recyclers**

Data was collected by means of structured interviews, as detailed below.

- 4 paper recycler were identified by the Paper Manufacturers Association of South Africa
- Two paper recyclers were successfully interviewed

#### **2.2.7 The retail industry**

The large listed retail sector was firstly identified, using the results of the Financial Mail's annual top 200-company survey. Within the study is an indication of the top companies in the retail sector from which the top 20 companies were singled out by turnover and those that are involved in either the retail of foodstuffs or clothing were approached by means of a faxed questionnaire. 17 questionnaires were distributed to representatives for 38 individually branded outlets and representing R 117bn in turnover. In total responses were received from 7 retail groups representing R 41.13bn in turnover and 2475 outlets. As data extracted by means of the questionnaire was not representative it was necessary to extract additional data using the follow-up interviews, for this reason follow-up interviews were held with 4 large retailers.

Secondly, smaller retailers were identified through the utilization of a contact database acquired from Matrix Marketing. The small retail sector was then segmented according to Geographic location, Standard Industrial Code (SIC) classification and company size. A direct marketing company was utilized to undertake the requisite number of interviews in order to include an appropriate number of respondents (i.e. 384). The sampling approach forced the inclusion of respondents in terms of

segmentation variables. The desired weightings were determined from retail revenue data from StatsSA. In addition the number of retailers has been estimated at 90 000 outlets.

The total number of successful interviews was 377, the shortfall of 7 being due to irregularities with contact data, (e.g. incorrect telephone numbers, business closed, etc.). The actual sample was found not to differ significantly from the desired sample and was therefore accepted for analysis.

### **2.2.8 Cloth manufacturers**

Data was gathered from cloth manufacturers by means of structured interviews. Cloth bags were restricted to being those that were made of woven polypropylene and calico. The interviews were as follows:

- Two manufacturers of poly-propylene bags were interviewed
- One manufacturer of calico bags was interviewed
- One cloth manufacturer was interviewed

### **2.2.9 Informal sector**

Data was to be gathered from the informal retail sector by means of a structured questionnaire. This proved unsuccessful as representative bodies proved difficult to establish and retain contact with. Representatives indicated that bodies only dealt with issues affecting the right to trade within certain areas. Attempts to ascertain market size through interviews with small VCB manufacturers proved fruitless due to a lack of understanding of the profile of their cash/small clients.

### **2.2.10 Government**

Data was gathered from Government by their submission of a written response to a set of questions. Follow up interviews were held to obtain more clarity.

### **2.2.11 Additional interviews conducted**

Additional information gathering interviews were held with the following:

- Packaging Council of South Africa
- Symphony Plastics
- CSIR – Process Technology Centre