Abstract

The need to eliminate plastic shopping bags from South Africa’s environment has resulted in the formation and implementation of the Plastic Carrier Bags and Plastics Flat Bags Regulations (hereafter referred to as the Plastic Bags Regulations). The new law requires manufacturers to produce thicker, reusable and recyclable plastic shopping bags sold at purchase points. However, some major retailers have refused to charge customers for the new bags claiming that they were not party to the policy process. Consumer organisations have called for boycotts and urged shoppers to support retailers that continue issuing ‘free’ bags. Drawing theoretical insights from actor network theory (ANT) and other actor-oriented and practice-based policy frameworks, this small-scale study established that the failure to consider key actors and actants in the policy implementation process, and the role of powerful actor networks in the process have adversely affected the policy implementation process. Given that South Africa placed emphasis on consultative national environmental policy process approaches, the unfolding events and emerging policy process models show an emerging stakeholder participation paradox in implementing policies on waste management in South Africa.

Introduction

Until 9 May 2003, South African companies could manufacture, import and distribute thin film (14–17 microns) plastic bags. It is estimated that prior to the Plastic Bags Regulations, an average of about eight billion plastic shopping bags (hereafter termed plastic bags) were circulated in South Africa each year (Nedlac, 2001). Most of the plastic bags ended up in the environment, posing a severe litter problem. In response to this, the Minister of Environmental Affairs and Tourism indicated his intention to rid South Africa of their ‘national flower’ when he came into office in 1999. Problems associated with thin plastic bags resulted from their lack of re-use and recycling value, which in turn led to indiscriminate littering (RSA, 2000). This was aggravated by inadequate waste collection and disposal facilities in most high-density residential areas (ibid.). The small scale study reported here forms part of a larger scale research project which aims to analyse the policy processes associated with the implementation of the Plastic Bags Regulations in South Africa (Nhiamo, 2003b). The Plastic Bag Regulations are interesting from the point of view that it is the first time that the South African government is targeting a product with environmental legislation.
Understanding Waste Management Policy Processes

Waste management policy processes in South Africa can be understood from a range of conceptual frameworks, among them, those falling within the top-down, bottom-up and synthesis divide (Hill & Hupe, 2002; Lane, 1990). In response to government intention to involve ‘many actors’ in policy development processes in South Africa (DEAT, 1999a), I have chosen to apply an Actor Network Theory (ANT) synthesis framework (as used in Keeley & Scoones, 2003) in understanding policy processes surrounding the promulgation and implementation of the Plastic Bags Regulations. ANT recognises the existence of policy subsystems that incorporate networks, actors, coalitions and actants (Keeley & Scoones, 2003).

A policy subsystem is made up of actors (individual and corporate) from a range of public and private organisations that are actively concerned with a policy problem (Howlett & Ramesh, 1995). The actors are characterised by specific capabilities, perceptions and preferences. Capabilities describe all action resources that allow an actor to influence an outcome in certain respects and to a certain degree. Such capabilities capture attributes like physical strength, intelligence, or human and social capital; physical resources such as money, technology and privileged access to information (Scharpf, 1997).

Policy networks identify the practice of actors, connected to form coalitions of different kinds (Keeley & Scoones, 2003). Actors intending to create policy enrol others in their network; and where there are disagreements regarding policy beliefs, interests and goals are re-focused by creating new coalitions operating with new objectives (ibid.). This leads to the establishment of new narratives. Depending on the nature of the state/societal relations within the network, two major sets of networks may exist: bureaucratic (dominated by the state) and participatory (driven by society) (Howlett & Ramesh, 1995). Considering policy processes from an ANT perspective requires a consideration of historical records and previous research with a view to uncovering the practices and processes (often battles) that led to the termination of controversies, the black-boxing of uncertainties and indeterminacies, and the establishment of knowledge (Keeley & Scoones, 2003).

Within an ANT orientation, it is also useful to consider the use of advocacy coalition frameworks (ACF) (Sabatier & Jenkins-Smith, 1999) in understanding policy processes. ACF was initially developed to understand environmental policy processes within the USA. This framework is based on studies of policy implementation and the role of scientific information in environmental policy processes (Sabatier & Jenkins-Smith, 1999). The framework assumes that many legislators require technical knowledge concerning the extent and facets of an environmental problem, its causes and probable impacts of various solutions. According to Keeley and Scoones (2003:36), ‘policy entrepreneurs’ link the worlds of science and environmental policy. Their aim is to push environmental policy in particular ways by mobilising knowledge and expertise (ibid.).

Howlett and Ramesh (1995) identify five key actor groups in the ACF: cabinet and parliamentarians, appointed officials (‘bureaucracy’), interest groups (e.g. NGOs, CBOs, labour and industry), research organisations and mass media. However, the authors also identify two
other sets of actors – the electorate and political parties whom they maintain are rather subdued in environmental policy processes.

The ACF framework, however, only focuses on actors in the policy process. Another aspect in environmental policy subsystems relates to actants (non-human facets such as documents, mailing and discussion networks and meeting places, and in this case, the plastic bags under regulation) (Latour, 1986; Callon, 1999; Keeley & Scoones, 2003). The inclusion of actants in a consideration of policy subsystems broadens policy process analysis to include both the material and social worlds, and the relational dynamics that exist between actors and actants in policy processes (Callon, 1999; Keeley & Scoones, 2003). From an ANT perspective, policy knowledge is constructed as a result of the involvement of actors and actants who form networks, and through these networks, policy beliefs are established within policy subsystems (Keeley & Scoones, 2003). As such, environmental policy formulation becomes a function of both competition within the subsystem and events outside it. This is the view traditionally associated with a pluralist approach to policy processes (ibid.) and captures aspects related to power (Latour, 1986), social class, politics and the material (non-human) world as these shape environmental policy processes.

The ANT framework is useful in waste management policy process research because it enables an analysis of policy subsystems to move beyond the simple dichotomy of structure – agency analytical frames, and allows an explicit examination of resources, arguments and flows of knowledge between structures, actants and actors (Davies, 2002). In the case of this small-scale study, I use an ANT framework to provide insights into how various actors and actants in policy subsystems shaped the formulation and implementation of the Plastic Bags Regulations in South Africa.

**Participation in South Africa’s Waste Policy Processes**

In line with a stakeholder governance framework, the new government of South Africa established a participatory policy development framework for environmental policies in May 1995, known as the Consultative National Environmental Policy Process (CONNEPP). This consultative policy process led to the development of various environment related policies, White Papers and Acts, the main one being the National Environmental Management Act of 1998. According to the Department of Environmental Affairs and Tourism (DEAT), ‘multiple actors’ were to participate, through CONNEPP, in developing new waste management policies for South Africa (DEAT, 1996:2). The 2000 White Paper on Integrated Pollution and Waste Management (DEAT, 2000), a central document for waste management, is a White Paper that developed out of the CONNEPP process.

The CONNEPP is hailed as a true reflection of stakeholder participation in policy development (DEAT, 1999a). The Environmental Justice Networking Forum (EJNF) (1996:6) notes that participation is the ‘organised efforts of people to define and control development, and the resources which sustain development, so that they are empowered to take responsibility for their environments’. This means creating contexts and processes that enable people to articulate their concerns associated with environment and development issues and ensuring that they have appropriate information to do so (EJNF, 1994). Hence, participation in waste
management policy processes in a typical South African context pays special attention to involving those formerly disadvantaged, among them women’s, rural, youth, religious and environmental organisations, civics, unions and service NGOs. Given this position, participation should create democratic space allowing partnerships in development, the prioritisation of the right to know, accountability as well as the freedom of debate and association within waste management policy subsystems (ibid.). Participation in this context would also include environmental education processes that foster individual and community capacity building.

As can be seen in Figure 1 below, a range of actors and actants were involved in the formulation of the 2000 White Paper on Integrated Pollution and Waste Management (IP&W). The figure illustrates that, by including these actors and actants in the process, much attention was given to public participation and interaction between actors and actants.

**Figure 1.** Major actors and actants in the IP&W policy formulation process
The public participation approach and details leading to the finalisation of the White Paper on IP&WM were laid down in the discussion document of May 1997 (DEAT & DWAF, 1997). The discussion document outlined the following activities associated with CONNEPP:

- Ministerial Provincial Workshops – June and July 1997.
- Direct comment to DEAT (Deadline 25 July 1997) – June and July 1997.

Following a successful consultative process at both national and provincial levels, a draft White Paper on IP&WM was gazetted for further public scrutiny on 19 August 1998, inviting written submissions by or before 21 September 1998 (DEAT & DWAF, 1998). This resulted in the 2000 White Paper on IP&WM, which was gazetted on 17 March 2000 (RSA, 2000). A list of those who submitted written comments on the draft White Paper is available in electronic format from DEAT (DEAT, 2000).

The CONNEPP approach has led to other key waste management policy documents such as the National Waste Management Strategy and the Polokwane Declaration (DEAT, 1999b; 2001) encompassing the notions of participation, environmental education and awareness raising.

**Formulating the Plastic Bags Regulations**

The formulation of the Plastic Bags Regulations thus follows earlier policy development processes in waste management (as outlined above). What is interesting, however, is that there appears to have been a change in orientation to policy making within the latter policy development process. This section looks at two models that led to the formulation and implementation of the Plastic Bags Regulations. The first model shows a predominantly government dominated top-down approach (Model A) and the second model shows a quasi-stakeholder approach (Model B). The two models are discussed in more depth below.

**Model A: A top-down approach**

Based on Section 24 of the Environment Conservation Act (RSA, 1989; Nedlac, 2001), the first draft of the Plastic Bags Regulations (hereafter called Regulations) was prepared and gazetted for public comment for the first time in May 2000 (RSA, 2000). The Minister of Environmental Affairs and Tourism (through DEAT) gave three months notification for public input. The draft Regulations proposed to prohibit the manufacture and distribution of carry bags of less than 30 microns by 1 January 2001 and 80 microns respectively by 1 June 2001. In addition, any person contravening provision of the Regulations would be guilty of an offence and liable of conviction to a fine not exceeding R100 000 (about US$14 000 as of 30 September 2003) and/or receive a jail term of not more than 10 years.

The Congress of South African Trade Unions (COSATU) argued that the proposed draft Regulations were likely to result in job losses and additional costs to consumers. COSATU (the largest labour movement with an estimated membership of 1.7 million people) estimated that over 70 000 jobs would be lost if the government went ahead and implemented the draft...
Regulations without further adjustments (Meelis, 2002). Those affected would be workers from the raw material suppliers, converters, distributors and retail outlets packers. Furthermore, some estimated 380 000 dependents from the rural areas whose income was attached to would-be retrenchees were to be affected (ibid.). In a meeting with both the Minister of Environmental Affairs and Tourism and Ministry of Trade and Industry, COSATU proposed thicker bags of up to a maximum of 22 microns. This was to ensure that industry did not close down due to the need to invest in new equipment to make the new thicker bags. Another proposal was to increase municipal services for collecting the plastic bags, charging a levy on plastic bags and structuring the levy so that the poor would not be disadvantaged (ibid.). For the sake of the environment, COSATU proposed that recycling, anti-littering and public environmental education and awareness programmes be put in place to promote environmental sustainability.

After COSATU’s propositions, the matter had to be referred to the National Economic Development and Labour Council (Nedlac) for further consultations (Nedlac, 2001). Nedlac is an institution primarily concerned with social dialogue between organised business, government, labour and communities on issues pertaining to social and economic policy. Nedlac instituted a study on the socio-economic impact of the proposed Regulations (Nedlac, 2001). The findings and recommendations of the study were forwarded to the Minister of Environmental Affairs and Tourism.

The draft Regulations were then amended and passed into law as they appeared in the Government Gazette of 9 May 2002 (RSA, 2002). Section 2(1) of the Regulations prohibited the manufacturing, trade, and commercial distribution of plastic bags with wall thickness less than 80 microns. Under Section 2(2) a tolerance level of 10% microns (meaning no wall thickness would be less that 72 microns) was set. The fines and other penalties remained the same and these Regulations were supposed to enter into force on 9 May 2003.

The final version of the Regulations was not popular with organised labour and industry as both sets of actors felt the Regulations were still too harsh and could not be implemented without further changes. As such they had to seek further and continued dialogue with the Minister of Environmental Affairs and Tourism. This opened up a quasi-stakeholder approach that led to the refinement and co-production of the new Regulations (discussed below).

**Model B: The quasi-stakeholder approach**

As highlighted earlier, after the passing into law of the final draft of the Regulations in May 2002, organised labour and organised industry sought further audience with the Minister of Environmental Affairs and Tourism. This resulted in ongoing tripartite negotiations between organised labour, organised industry and government. COSATU and the National Council of Trade Unions represented organised labour. Organised industry was represented by the Chemical and Allied Industries Association, Plastics Federation of South Africa, Plastics Recyclers Employers’ Organisation and retail chains Pick ‘n Pay (Pty) Ltd, Woolworth (Pty) Ltd and Shoprite-Checkers (Pty) Ltd (DEAT, 2002).

Organised industry presented government with a ‘Plastic Bag Business Plan Alternative Proposal’ (PFS, PREO & CAIA, 2002). The e-Bag alternative (as organised industry called it) would have resulted in an increase of minimum wall thickness to 22 microns and a Collect-a-Bag
approach similar to the Collect-a-Can initiative (ibid.). Collect-a-Can is probably the best example of a large-scale waste recycling initiative managing one-way packaging of beverage cans in South(ern) Africa. As of December 2002, about 63.7% of all used beverage cans were being recycled (Collect-a-Can, 2002).

Finally, in September 2002 the tripartite parties agreed upon the following points relating to the amendments to the 2002 Plastic Bag Regulations (DEAT, 2002):

• **Minimum thickness of the plastic bag.** This was set at 30 microns, with a 20% tolerance until May 9, 2008.

• **Disclosure and transparency of cost at checkout points.** Customers were supposed to be made aware of the cost associated with the new plastic bags before purchase. In addition, retailers were to reduce commodity prices accordingly.

• **Printing on plastic bags.** The thickness, ink type and extent of printing were to be set by the South African Bureau of Standards (SABS). Printing would include a safety message, name of converter, e-mark, polymer identification grade, product purchase bar code and country of origin.

• **Creation of recycling market.** DEAT in consultation with the Department of Trade and Industry were to develop standards regarding minimum percentage recyclable content of the plastic bags.

• **Creation of a non-profit company.** To promote re-use and recycling of plastic bags, particularly by small to medium-scale enterprises and civil society.

• **Promotion of job creation.** The manufacturers, recyclers and retailers committed themselves not to retrench workers for the next five years. Furthermore, the Section 21 Company is envisaged to create between 180 to 220 jobs and it is estimated that between 2 000 and 4 000 jobs will be created through the extension of recycling.

• **Mandatory levies.** Plastics converters will pay the levies and recover the cost by invoicing the next packaging chain.

• **Prevention of illegal imports.** DEAT and the Department of Trade and Industry were to work together to develop new legislation to ensure that local and imported plastic bags comply with the regulations.

This quasi-stakeholder approach to policy making led to an agreement among the tripartite parties to implement the amended Regulations as of 9 May 2003. The amended Plastic Bags Regulations that repealed the May 2002 Regulations were gazetted on 9 April 2003 (RSA, 2003a) and passed into law in the gazette of 9 May 2003 (RSA, 2003b). This was the same day the Regulations entered into force. There are two noticeable revisions: specification of wall thickness; and fines against offenders. The wall thickness clause has been reduced from 80 microns to 24 microns and now falls under the Compulsory Specifications Regulations of the Department of Trade and Industry. The US$14 000 fine has been scrapped, with any person found guilty of an offence (RSA, 2003a) being liable to a fine not exceeding three times the commercial value of anything in respect of which the offence was committed. Under Section 3(2), offenders can be imprisoned for a maximum of 20 days, instead of the original 10 years.
Implementing the Plastic Bags Regulations

Putting policy into practice is not easy. It is not a simple one-stakeholder show, but rather a complex and at times potentially explosive journey. Having set a good platform for implementing the Plastic Bags Regulations, 9 May 2003 was a day of reckoning for the tripartite parties. Consumers were to buy new plastic bags for about 26 cents (12 litre size) and 46 cents (24 litre size). As for the government, officials from DEAT were waiting to see how the general community would receive the Plastic Bags Regulations. On Monday 5 May 2003 DEAT released a press statement on the ‘Inspection of readiness of retailers on the eve of Plastic Bag Regulations effect’ (http://www.environment.gov.za, 8 May 2003). The inspections of three of the top five retail chains were to be conducted by the Acting Minister of Environmental Affairs and Tourism on Thursday 8 May 2003 in Cape Town. Two other members of the Provincial Executive Committee responsible for the environment were to conduct inspections on the enforcement day in kwaZulu-Natal and Gauteng Provinces respectively. ‘All media are invited to accompany the Minister on this walkabout’ read part of the press statement (ibid.). This press release recognises the role of the media as an actor (stakeholder) in policy implementation, as was evident by articles and reports (actants) that flooded the print media and electronic media prior to and after the enforcement deadline.

Another factor that may have contributed to the on-schedule implementation of the Plastic Bags Regulations could have been the lengthy period which industry was given to readjust. In total, industry had three years to work towards meeting the new Plastic Bag Regulations. The major retailers also seemed to have met the implementation deadline. My observations on 9 May 2003 to check compliance by major retail outlets in the small town of Grahamstown (Eastern Cape Province) confirmed this position.

Political commitment could not be faulted either. The Acting Minister and his two members of the Provincial Executive Committee responsible for the environment honoured their schedules in Cape Town, Durban and Johannesburg metros. They inspected major retail outlets in major cities for their readiness to comply with the new law. This kind of commitment is not common in many developing countries.

Emerging Policy Practice Tensions and Paradoxes

From the above analysis it appears that the Minister of Environmental Affairs and Tourism, through DEAT, clearly responded to the power of the stakeholders in the co-production and implementation of the Plastic Bags Regulations. Certainly, the Environmental Conservation Act in which the Regulations were formulated does not stipulate the procedures that the Minister has to follow when formulating regulations. However, many changes taken place in South Africa since 1989, including the transition from the apartheid regime to a democratic South Africa.

It is also of great interest to note how attention suddenly shifted from the broader CONNEPP approach to policy formulation (involving a wide range of actors and actants) to a focus on ‘vocal’, strong and powerful groupings (a few influential actors).
process in the case of the Plastic Bags Regulations involved only organised labour and organised industry as the ‘multi-stakeholders’. This confirms Butler and Hallowes’ (2002) observation regarding the difficulty of weaker actors (stakeholders) to maintain the momentum in a policy process right through to where it matters most – the implementation.

The policy development processes outlined above have created tensions and paradoxes relating to policy implementation processes. These tensions reflect various relational dynamics between actors and actants. One such issue is related to the failure of the process to consider some of the key actors affected by the legislation (consumers). Already, consumer organisations have called for boycotts of all dealers who opt to sell plastic bags (Sapa, 2003a). This has been attributed to the fact that most consumers may not be able to afford the new plastic bags. From preliminary interviews with consumers surveyed for opinions, the feeling is that food and other commodity prices have not changed as promised by government. In addition, most small-scale enterprises run by women cooperatives and individuals depending on the old plastic bag for crafts face extinction (Nhamo, 2003a; 2003b).

The failure to have a key actor – the Non-profit Company - in operation well before the law was implemented presents a major challenge to the whole process. The Company was meant to provide public education to avoid misinformation from various quarters on the ‘why pay for the bag’ issue. The government, through DEAT has, however, put in place a provisional measure of a hotline (number 0800-203-622) dedicated to the public for two reasons: to get the facts on the new law right; and to report on lack of compliance (DEAT, pers commun., 16 May 2003). The Non-profit Company would also have resulted in the creation of more than 3 000 jobs (DEAT, 2002). The absence of an inspectorate and lack of direct involvement of local authorities (DEAT, pers commun., 16 May 2003) makes it difficult to oversee implementation. Of late the issue of having an environmental inspectorate has been addressed under the amended Environmental Management Act (DEAT, 2003a). Up till now, the role of local authorities (significant actors) in enforcement has not been specified.

Some retail outlets have opted for alternative carrier bags. This has resulted in a flooding of the local market with cloth, paper, plastic basket and other forms of so-called environmentally friendly bags or carriers. One retail chain was reported to have sold 300 000 green bags imported from Ireland within two days (Sapa, 2003b) and it had placed an order for two million more green bags (ibid). According to a report by Ngobese (2003) other actors are already advocating for the introduction of biodegradable plastics. All these substitute carrier facilities (actants) might have severe impacts on the plastic bags packaging value chain in terms of, especially, employment and production sustainability – a factor that organised labour and
organised industry tried to mitigate against during the tripartite negotiations. As of September 2003, figures of an 80 to 90% drop in demand for plastic shopping bags were being quoted (DEAT, pers comm., 1 October 2003).

Probably the best example reflecting tensions and paradoxes is a case that resulted in some major clothing retailers refusing to charge for the new shopping plastic bags, citing that they were not party to the tripartite agreement (DEAT, pers comm., 1 October 2003). A ‘plastic bags price war’ erupted amongst these key actors on 12 August 2003 and this saw major rival retail chains slashing the price of the shopping bags by more than 50%. To deal with issues pertaining to pricing standards, the Environmental Conservation Act of 1989 has been amended (DEAT, 2003b) to include green taxes. Once passed into law, the Minister of Environmental Affairs and Tourism may set minimum plastic bag charges. Another law reform related to the Plastic Bag Regulations is the transfer of the waste management mandate from the Minister of Water Affairs and Forestry to the Minister of Environmental Affairs and Tourism.

As indicated earlier, the ‘plastic bag price war’ resulted in competition between industry actors, as major retailers (including those that were party to the tripartite agreement) effectively contradicted the agreements contained in the 9 May 2003 Regulations and reduced plastic bag prices for the 24-litre size bags from about 17 to 46 cents and for the 12-litre size from about 12 to 26 cents. The government has accepted this new change, a move that confirms the difficulties associated with putting policy into practice. The move also illuminates how the relational dynamics can change between actors and actants in policy implementation processes.

In addition, ‘free’ shopping bags (both old and new) are being circulated. On 31 September and 1 October 2003, I was a recipient of five free old shopping plastic bags from one of the major retail outlets in Grahamstown. This trend turned out to be a common phenomenon as peers from larger metropolitans such as Cape Town and Port Elizabeth confirmed the same acts, particularly from clothing and fast food retail outlets. Other retail outlets are selling their old bags and for the purposes of generating evidence for this research I have allowed myself to be a victim of this on three occasions. This raises issues relating to double charging and consumer environmental injustices, aspects that fall outside the scope of this paper.

Conclusion

This paper has revealed that there is an emerging stakeholder participation paradox in the implementation of South Africa’s waste management policies. This has resulted in tensions and debates around the implementation process of the Plastic Bags Regulations with threats to strike by major labour movements over job losses, refusal to charge for the new bags by some major retailers and environmental law and policy reforms to harness the tensions and non-compliance.

As indicated already, stronger actor networks ended up making representations to the Ministers of Environmental Affairs and Tourism and Industry and Trade leading to the repulsion of the May 2002 regulations. As it stands, the process did not fully conform to the earlier CONNEPP processes, as portrayed in most of the earlier waste management policy processes. A quasi-stakeholder model of policy making emerged in the case of the Plastic Bag
Regulations, which led to the signing of a victorious (on the part of organised labour and organised industry) tripartite agreement.

However, as illuminated, this quasi-stakeholder model has failed to consider key actors in the policy implementation process (such as the media, consumers and those that are dependent on plastic bags for entrepreneurial activities). The effective implementation of the Plastic Bag Regulations has also been influenced by the role of unanticipated actants (e.g. media reports, old shopping bags, a range of substitute carrier facilities and related legislation). The relational dynamics between these actors and actants have changed and influenced the development and amendment of legislation surrounding the Plastic Bag Regulations.

The ‘plastic bag price war’ was triggered by the lack of involvement and participation of all actors (stakeholders) in the formulation of the Plastic Bags Regulations. Other major stakeholders that are not clearly visible in the promulgation process include the South African National Civics Organisation, CBOs, NGOs and local authorities. For example, the Environmental Justice Network Forum, which has a membership of more than 450 organisations, usually represents the CBOs and NGOs and yet it was not party to the tripartite agreement. There has also been an absence of public education programmes to effectively empower South African citizens to participate in this policy development and policy implementation process. Analysis of the policy implementation processes associated with the Plastic Bags Regulations, drawing on ANT, has illuminated that public education processes would need to move beyond simply informing the public of the ‘contents’ of the legislative framework. These are some of the gaps that need to be filled in South Africa’s waste management policy implementation processes in future.

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Acknowledgements

I would like to acknowledge financial support from the Nampak Group of Companies.