

# **Labelling of genetically modified food products in South Africa**

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# Introduction

- South Africa is the current leading exporter of genetically modified organisms (GMOs) in Africa with a local production of 80% of genetically modified (GM) maize, 90% of GM soya bean and 100% of GM cottonseed.
- Government approval of GMOs is not a guarantee of safety. Identifying and tracing back GM content does not improve the safety of the product.
- Labelling is the cautious approach to the use of GMOs in food products for information purposes. Some adverse effects are known while others are still unknown.

# Introduction

- The labelling of goods is regulated under the **Consumer Protection Act (CPA) 2008** and the **Foodstuffs, Cosmetics and Disinfectants Act (FCDA) 1972**. New provisions were drafted under the CPA and the Food Labelling Regulations which constitute important milestones to prevent companies and marketers from misleading consumers through deceptive advertising (Regulation relating to the labelling and advertising of foodstuffs (GN R 146 of 1 March 2010 under Section 15(1) of the FCDA). The CPA provides for an improved access to information for consumers (Section 22).
- Special labelling for biotechnological products was also required in the light of the above changes.

# Introduction

- Practical questions which may arise in relation to the application of the local GM labelling framework:
  - \*Whether the local labelling mechanism enables traceability from the first stage of production to the consumer?
  - \*Who is responsible to ensure that GM products bear appropriate labels?
  - \*Which products need to be labelled and according to which threshold?
  - \*Adequate GM labelling inspection staff and technical facilities for regular inspection?
  - \*If labelling is inadequate, what is the recourse mechanism?

# SA GM labelling framework

- When GM crops were commercialised in South Africa in 1999, there was no specific labelling requirement for GM products and the latter was subject to regulations governing the labelling and advertising of foodstuffs (GN R 2034 of 29 October 1993).
- From 1999 to 2011, specific labelling provisions in the country have evolved from an approach favouring voluntary labelling by the biotechnological industry to a stricter labelling framework.

# SA GM labelling framework

- Regulations under the Department of Health on the labelling of GM food in 2001 were proposed but not finalised.
- In 2004, special regulations on the labelling of GM foodstuffs came into existence under the FCDA. Only if there is a “significant difference” in the GM food product compared to its corresponding existing foodstuffs, would labelling be required :
  - \* Difference in the composition, nutritional value, mode of storage, preparation or cooking
  - \* Use of genes from common allergens (nuts, seafood, gluten, milk, eggs..)
  - \* Use of genes from human or animal origin or different animal family

# SA GM labelling framework

- **2008** marked a turn away from the “significantly different approach” by stronger labelling provisions on GM products under the Department of Trade and Industry: any prescribed goods that are produced, supplied, imported or packaged must display a notice disclosing the presence of any GM ingredients or components of these goods (**Section 24(6) of the CPA**).
- **Regulation 7 (1 April 2011)** in terms of Section 120(1) of the CPA specifies that labelling provisions apply to goods approved for commercialisation by the Executive Council for GMOs and to all goods containing **at least 5% of GM content** irrespective of whether they are produced in South Africa or elsewhere. It concerns any good, ingredient or component as well as relevant marketing material.

# Mandatory and voluntary GM labelling

- **Mandatory labelling :**
  - \* If the product has a GM content of at least 5%, it must indicate “**Contains GMOs**”.
  - \* If food is produced directly from GM sources and no testing is needed, this product must bear the label “**Produced using genetic modification**”.
  - \* In circumstances whereby one can argue that it is scientifically impractical to test the GM content, labelling is compulsory with a label “**May contain GMOs**” (Regulation 7(6) of 2011).



# Mandatory and voluntary GM labelling

- Any GM good or ingredient or component cannot be produced, supplied, imported or packaged without a conspicuous and legible label indicating that they contain GMOs (Regulation 7(4) of 2011).
- **Voluntary labelling** may be used in other cases:
  - \*If the GM content of a product is less than 5% but more than 1%, it is not stated which label is to used.
  - \*If the GM content is less than 1%.

# Mandatory and voluntary GM labelling

- The South African regime does not allow products to be labelled without GM (“GM-free, no GMO, GMO-free, biotech-free, non-GM”) unless the percentage of GM is less than 1.
- Could there be food with less than 1% pork indicating “pork-free” product?
- In some countries, it is not allowed to use the label “GM-free” since it is difficult to guarantee that a product is 100 % free from GMOs. Only absolute segregation can ensure the integrity of GM-free labelling.

# Examples of food with GM-related labelling

- Pioneer's Sasko bread labelled as "soyabean produced using genetic modification"
- Premier's IWISA maize labelled as "contains genetically modified organisms"
- Pioneer (Sasko's) Food's White Star maize meal labelled as "produced using genetic modification"
- Pioneer Food's (Bokomo's) corn flakes labelled as "corn 90% (genetically modified)"
- Certified organic banana Umbhaba only says GM banned under organic standards.
- Woolworths' Ayrshire milk and Parmalat Farmers' Pledge claim no use of recombinant bovine somatotrophin/GM growth hormones (rBGH/rBST).

# Existing recourse mechanism

- **Information regarding an alleged contravention or non-compliance** in terms of the Consumer goods regulations (Section 71 of the CPA) may be submitted to the National Consumer Commission (NCC).
- **A complaint can be filed to the NCC** with regard to an alleged contravention or instance of non-compliance (in terms of misleading representation).
- **Investigation** by an inspector (directed by the Commissioner).
- **Non-compliance with a labelling requirement may relate to an omission, a wrong or illegal label content** (fine or to imprisonment for a period not exceeding 12 months or to both a fine and imprisonment).

# Inspection of food and agricultural products

- **Inspection of local food** by health inspectors under the FCDA (false and misleading description of articles-Section 5).
- **Inspection of imported goods by** the Commissioner for Customs and Excise under Customs and Excise Act 1964.
- The Minister of Agriculture under the Agricultural Product Act (APA) 1990 may **prohibit the sale of a product not meeting the required standards** while inspection, grading, sampling for quality control is effected by the executive officer. The executive officer on the authority of a warrant, have powers of entry, investigation and sampling if there are reasonable grounds for any product, material or substance wrongly labelled, graded, classified (Section 7 of the APA). Penalties and offences (Section 11 of APA fine or prison not more than 4 years).

# Recommendations

- Need for **transition provisions** for the labelling of GM products (for the stock of goods before the entry into force of the labelling regulations).
- Need for a **pre-market surveillance** for the monitoring of local GM as well as imported GM foods before the import permit is granted or else it is difficult to handle especially if they are processed foods.
- \* Stronger control of imported goods (monitoring of the GM content of imported goods already packed may be challenging).
- \* Stronger control of labels implying healthier, additive-free or claiming specific characteristics such as organic products and “purity” baby foods.

# Recommendations

- Lowering of the GM labelling threshold to 1%.
- More precision on the person who is responsible to ensure that GM foods bear appropriate labels and will be liable in case of injury or damage. There may be a chain of producers or suppliers for a particular GM good, ingredient or component.

# Recommendations

- **Mandatory disclosure of the use of GM growth hormones in livestock for meat and other animal by-products.**

Tolerance of the domestic use of rBGH/rBST or genetically engineered bovine growth hormone in SA. IGF-1 is an insulin-like substance which has been linked to increased cancer incidence in humans and milk from rBST or rBGH treated cows has been found to contain higher than the usual levels of IGF-1.



# Recommendations

- **Mandatory disclosure of the use of antibiotic gene-markers.** Antibiotic resistance genes are present in transgenic plants as a result of use as marker genes to select transformed plant cells.
- Legal provisions for **disclosure of GM feed and its control** (Fertilisers, Farm Feeds, Agricultural and Stock Remedies Act 1947).
- Labelling requirements for animal and dairy products obtained from livestock fed with GM feed.

# Recommendations

- Adequate staff and technical facilities to carry out inspection and testing of GM content.
- Efficient screening and identification of GM content. Techniques for the detection of the presence of marker genes, guidance on sampling and detection of GM content should also be developed by competent authorities.
- Validation of sampling and analysis methods used within the context of official controls with internationally accepted protocols (The European Committee for Standardisation or Codex Alimentarius standards).

# Recommendations

- Need for an “identity preservation system” (IPS) or segregation of products (tracking system of crop management from seed to package, from farm to fork, which refers to a system of production, handling and marketing practices that maintains the integrity and purity of agricultural commodities).

Local farms, grain storage and transportation systems are not designed or structured to segregate GM and non-GM products, whether on a bulk or on a large scale basis. Segregation procedures needed to protect non-GM shipments from contamination during transport and handling.

Changes for an adequate segregation would doubtlessly add costs to the farming sector but if there is a mistake or mishandling, there will be greater costs to take necessary measures for remedies.

# Recommendations

- Need for a **post-market surveillance** to identify and monitor unanticipated compositional changes and health effects of GM foods.
- Appropriate sanctions in case of inadequate labelling of GM food.

# Conclusion

- In practice, GM labelling seems to be the exception rather than the rule.
- Labelling opponents tend to fear compulsory labelling of GM products since it will scare consumers and not really because of increased production costs.
- Insect resistant and herbicide resistant crops or growth hormones are used mainly to have a better yield in view of greater profits for producers and not necessarily in the interests of consumers or the environment.

# Conclusion

- There is a risk of liability from lawsuits as scientific research develops on the long-term effects on human and animal health and the environment. There may be claims for injuries that may occur due to a failure to inform.
- Better enforcement of labelling requirements with an adequate inspection team is called for.
- Without adequate segregation measures and traceability from farm to fork , GM labelling may be misleading.

# Conclusion

- An adequate monitoring of labelling obligations for both GM food products placed on the market or released in the environment, are both important to **respect consumers' access to information** as well as to **facilitate the withdrawal of unsafe products** by producers, importers, distributors and retailers in case of scientific uncertainty on the adverse impacts of these products.

# Conclusion

- Labelling has its limitations. Once labelling of GM products is clearly indicated, nobody can guarantee that consumers can fully understand the implications of GM products and that they will choose GM or non-GM products. Nevertheless access to information must be respected and the rest is a matter of choice.



- Thank you for your attention