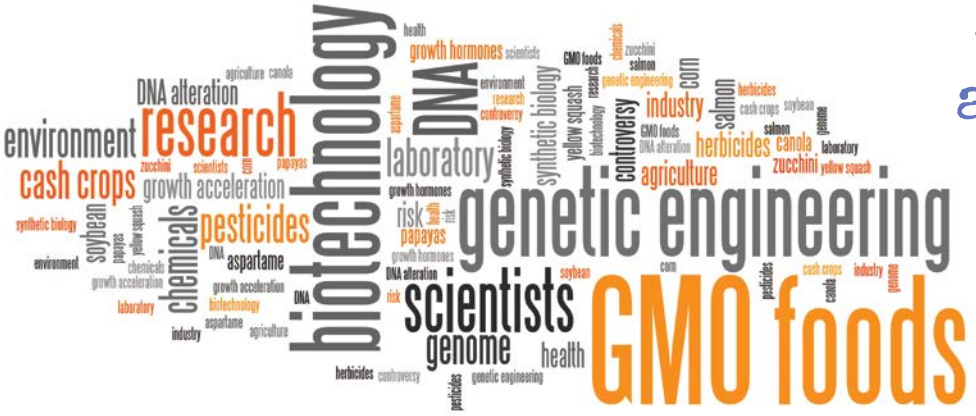
GM food labelling – is there a solution to the impasse?



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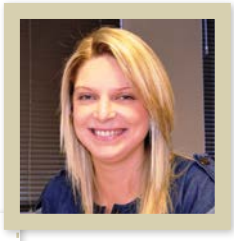

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South Africa has had compulsory labelling regulations in place since 2004 when the Department of Health (DOH) introduced labelling regulations under the Foodstuffs, Cosmetics and Disinfectants Act (1972) – Regulation 25. The regulation states that foodstuffs produced through genetic modification – where they differ significantly from existing foodstuffs in terms of their composition, nutritional value, mode of storage, preparation or cooking, allergenicity or genes with human or animal origin – must be labelled. As all current genetically modified (GM) foods are considered substantially equivalent, i.e. do not differ from the conventional counterpart, these regulations have never been triggered. In contrast, the more recent Consumer Protection Act (CPA, 2008) Regulation 293 from the Department of Trade and Industry (dti) states that ALL GM goods must be labelled. The difference between the two sets of regulations is that Regulation 25 is based on health and food safety concerns while Regulation 293 is purely value-based, hinging on the consumer's intrinsic right to information.

According to the CPA regulations, food producers, importers and packagers currently have to choose one of three mandatory labels for GM foods: (i) "containing GMOs" where the GM content is at least 5%; (ii) "produced using genetic modification" for food produced directly from GMO sources; or (iii) "may contain GMOs" when argued that it is scientifically impractical and not feasible to test food for GM content. Voluntary labels include: (i) "does not contain GMOs" where the GM content is less than 1%; (ii) "GM content is less than 5%" where GM content is between 1% and 5%; and (iii) "may contain genetically modified ingredients" if it can't be detected. Draft amendments to the dti's GM labelling regulations were published in October 2012, in essence only changing the wording from "labelling genetically modified organisms" to "labelling genetically modified ingredients or components." A significant implication of this change is that individual INGREDIENTS will have to be labelled as "containing GM" in the ingredients table and not the whole product as consumers are used to with the current, more obvious "non-GM" labels. To our knowledge these amendments have not yet been finalised.

A philosophical minefield

The labelling of GM-derived products as defined in the CPA regulations is based on the premise of a consumer's intrinsic right to information. Why, then, is this a controversial issue? In short – because it asserts the obligation to distinguish between products, based on an esoteric value decision alone. So, although the right of a consumer to information is not disputed, the value of that knowledge is, especially because the system is also open to abuse.

As the CPA regulations obligate the labelling of GM-derived products irrespective of the fact that they may not be distinguishable in any concrete manner from a

"conventional" counterpart, it is considered a value-system-based distinction by many. Value-system-based labelling of food products is nothing new – consider, for example, religion-based labels such as "Halal" and "Kosher" or ethics-based labels such as "free range" or "organic". But, these are all voluntary labels managed and maintained by relevant interest groups to give their particular constituencies a choice at their own cost, not mandatory legislative regulations impacting all consumers.

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Still, why not slap on a GM label and get it over with? The two main reasons are cost and unfair discrimination. As the regulations stand, they would obligate the introduction of separate value chains and the testing of all possible GM-containing products, which will have considerable cost implications for the products on the market and the great majority of consumers who use them. For example, 87% of South Africa's locally produced maize is currently GM. The direct cost increase to the consumer depends on many factors, but the average is calculated to be between 9% and 12%. This implies that the majority of the market bears the cost to maintain a value-system-based choice of a minority.

In addition, industry fears that these labels will be used to promote unfair discrimination under the guise of "consumer choice". GM technology and, in particular, GM-derived foods have long been the target of destructive campaigns organised by NGOs and individuals with self-declared "environmental" and/or "social" agendas. The information presented by the anti-GM frame is strongly disputed by the industry frame, especially in light of the fact that GM technology is regulated, which ensures that all GM products have to pass a rigorous biosafety risk assessment before they can be commercialised. So, although GM foods carry an official stamp of approval, the disputed information in the public domain can still be used to influence consumer choices unduly and a label will make what boils down to unfair discrimination much easier.

Finally, although labelling is a particularly contentious point for GM foods, it is almost never discussed in terms of GM-derived medicines. Many GM-derived medicines are currently available in South Africa, including anti-cancer agents, vaccines, insulin, cytokines and growth stimulating factors. Depending on the frame from which you interpret this, it could suggest a different cost/benefit perception or a less lucrative area to exploit in support of a particular agenda.

Practical challenges

A visit to the local grocery store will reveal a plethora of varying and ambiguous GM labels on foods. For example, 100% coconut oil is labelled "GM free" while no GM coconut is cultivated anywhere in the world. In such cases, a "GM free" label, therefore, does not assist the consumer to distinguish between two possibly different products and is clearly used as a marketing tool. In addition, different labels in various formats are used to convey the same message, e.g. "GM free", "non-GM", "contains no GMOs", etc. These labels do not inform the consumer, but rather mislead and confuse the GM labelling issues further. Although some ambiguity remains, the current CPA regulations direct labelling per individual ingredient. A GM label will, therefore, only be part of the ingredients list and will refer to the percentage GM content of that particular ingredient, not the whole product. This means that if the percentage GM content of a minor ingredient is above 5%, it still has to be labelled even though the final GM content of the product as a whole may be well below that. Conversely, if individual ingredients are of pure GM origin, i.e. 100% GM, the "total GM content" of a final product can be calculated to be more than 100%, which is, of course, an irrational concept.

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Additionally, the GM content of a particular ingredient is detected with varying levels of sensitivity and accuracy in different backgrounds, i.e. calculating the GM content of raw soy flour and the same soy flour in baked bread will not yield the same results.

If no clear exemptions are included in the regulations as in other countries, this could cause additional practical difficulties. How would restaurants, for example, adhere to these regulations, especially in light of the "label per ingredient" interpretation? Also, if restaurants claim to have non-GM products, how could this be verified? The same is true for informal vendors and fresh produce markets.

Exactly how these labelling regulations will be policed is also not clear. The DOH and dti are responsible for ensuring the correct labelling of GMO-derived products. The DOH's intervention takes place at the level of initial approval of the GMO under the GMO Act, but it is not clear if they or the Department of Agriculture, Forestry and Fisheries (who administrates the GMO Act) will be responsible for policing. For the CPA, the National Consumer Commission is responsible for misleading labels and advertising and can, therefore, be approached if GM-containing foods are incorrectly labelled, but such actions will probably have to be initiated by consumers.

Can the problems be resolved?

GM food labelling is not a black and white issue, remaining controversial because it represents one of the battlefields between contrasting world views/frames. It is, therefore, important to realise that this controversy will never be resolved satisfactorily for both frames. A workable policy will have to strike a balance between "value-based" and "real-value" considerations.

Basing decisions on well-defined principles of good regulatory policy and practice is essential to avoid becoming trapped in a debate of irreconcilable philosophical differences between different frames. Principles to consider include the following:

- Be LOGICAL – contrast the material reasons for labelling as contained in Regulation 25 of the DOH with the value-based reasons of the CPA regulations to place them in context and act accordingly, based on what will add the most value.
- Be REALISTIC – evaluate the general right to knowledge in the context of the real value of the specific knowledge under consideration. The value of the label should be considered in terms of the tangible benefit that possible discrimination would pass on to the consumer and the ability of the average South African consumer to make that judgement. Erroneous or oversimplified factual claims also do not satisfy the right to knowledge.
- Be FAIR – weigh up the value of the information that the label conveys against its possible (or explicit) abuse as a tool to promote unfair discrimination and endorse a particular, niche viewpoint or market interest.
- Be CONSISTENT – based on which definable criteria should information be conveyed and how does this relate to other possible niche requirements, e.g. minority philosophical, ethical or religious views, which all are currently driven by market forces, i.e. voluntary labelling? Also consider the value of the information in light of information overload, the priorities of different types of information and its ambiguous implications in market and trade policies.
- Be PRUDENT – how is the required action complemented by other regulations or policies? If the GMO Act's regulations ensure the safety and sustainability of a product and the DOH regulations provide for possible material differences, what exactly is the role of value-based labels?

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A possible solution

GM products go through a rigorous risk-assessment process to ensure their safety before they are commercialised. As a consequence, approved GM foods do not hold any greater risk to human or animal health or the environment than their conventional non-GM counterparts; the imposition of onerous labelling regulations, therefore, does not add material value. A possible equitable solution could be a simple "may contain GM" label for end products (not per ingredient) that may contain GM ingredients and/or a regulated, voluntary label for verified, non-GM products that contain less than 1% GM ingredients per total mass or volume. This will provide consumers with the basic information they need to make an informed value decision without increasing the cost of the bulk of products on the market or creating an environment conducive to unfair discrimination.

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