



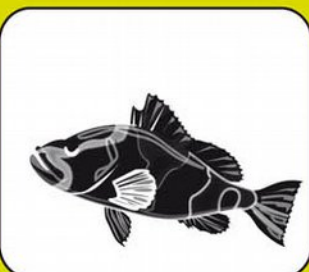
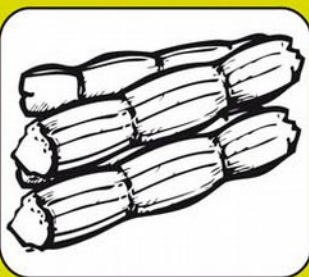
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SHORT NOTE

MOs in the PICTs, with focus on Fiji: Current Concerns and Actions needed

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[STOP OGM Pacifique is an association registered under new-Caledonian regulations. It aims at informing about Genetically Modified Organisms in food, agriculture, environment and it advocates for the adoption of a specific regulation on GMO in New Caledonia, and the other Pacific Island Countries and Territories].

When agriculture mixes with genetics

Throughout human history farmers have used selective breeding to improve crops and stock by breeding plants or animals that had qualities the farmers wanted to strengthen. The deliberate retention of the best of the agricultural production for future use as seed for sowing, or animals for breeding, has meant that quality has been continuously enhanced over the ages. In this way, farmers have for centuries developed animals and crops for desired characteristics, such as resistance to disease, or ability to cope with specific climatic and environmental conditions, and increased production.

Genetic modification, which is also referred to as 'genetic engineering', uses a variety of methods to isolate single genes from one or more microorganisms, plants or animals and insert them into the genetic material of the cells of another. These methods are collectively termed '*in vitro* nucleic acid techniques', and have been developed since the 1970s. Through genetic modification, genes are transferred and modified in ways that are not possible in nature, i.e. between different species and between animals and plants and microorganisms. The first transgenic plant grown in open-field and commercialized in the US in 1994 was a tomato with delayed maturity... since then, Genetically Modified Organisms (GMOs) have been increasingly promoted as the Trojan horse of the biotechnology industry monopoly. Follow some factsheets about GMO crop production and side effects of their cultivation and consumption.

Commercial crop production

- The main commercial GM crops are: **soy, maize, cotton and rapeseed (canola)**;
- The majority of the crops are grown in: **USA, Argentina, Canada, and China**;
- About 70% of GMOs are **herbicide resistant**, 20% **produce pesticides**, and some combine both characteristics;
- Soy accounts for 60% of all GMO crops, while corn accounts for around 20%, cotton 10% and canola 5%. More than 80% of GMO crops are intended to feed livestock;
- **Transgenic salmon** is about to be commercialized in USA. Commercial GM **tree** crops and GM **grass** also exist;
- **Transgenic papaya** is grown for commercial purpose in Hawaii

and in several Asian countries (Ring spot virus resistance);

- **Hundreds of GM varieties are tested** on many different species (fruits, vegetables, root crops, cereals...) for experiments and commercial agreements.

Problems with GMO cultivation in open fields

- There is little quantifiable evidence to support the claim of increased agricultural yield;
- Many widely promoted examples of GM applications have failed due to the limitations inherent in the technology and the complexity of the problems tackled;
- From a **health** perspective there is currently insufficient information regarding toxicity and the allergy causing potential of food products derived from GMOs;
- The environmental consequences of the release of GMOs into the environment are likely to be significant, in particular the **effects on biological diversity**;
- Deleterious changes to agricultural and industrial practices, including an **increase in environmental pollution**, may be so severe that they should not be permitted;
- The **socio-economic consequences** are potentially severe, e.g. displacement of cash crops or traditional crops and disruption of small scale farming systems that are prevalent in developing countries;
- The small number of companies involved in agricultural biotechnology and the grouping of seed stock and chemical control agents in these companies is undemocratic; and
- Patents on living organisms, genes and/or genetic resources are unacceptable, in particular:
- It is important that farmers are able to save productive seeds from one season to the next;
- There is a claim on intellectual property of a gene or nucleic acid sequences without true innovation.

What about GMOs in PICTs?

Pacific Island Countries are heavily dependent on food imports, mainly from Australia, Asia and the U.S., where GM crops are already well established, and more worryingly - massive importation of seeds. Therefore, the question must be posed: how can Pacific Island States regulate GMOs without giving-up the import of essential goods to their economy?

New Caledonia is currently considering a legal framework that takes this question into account and it will soon be implemented. During this process, New Caledonia also seeks to inspire other regions that are in a similar situation. Only Tonga and Niue currently have proper regulations dedicated to biotechnologies.

Although the French territory of New Caledonia has a special status and a certain degree of autonomy in many areas, including agriculture, this legal status also brings with it a grey area on the issue of GMOs in New Caledonia, where French-European law does not apply, New Caledonia had no legal framework covering this topic. GMOs were not considered a priority subject for a long time, but this is no longer the case. Today, under the leadership of the local association, STOP OGM Pacifique (1), the emergence of a new regulation has been put into place.

In February 2014, the government of New Caledonia implemented two regulations:

- The first prohibits the import of genetically modified cereal and fruit seeds. The text allows New Caledonia to guard against two prevalent GM crops in the region originating specifically from Hawaii: corn and papaya.
- The second text imposes the labeling of any food product containing more than 0.9% GMO ingredients. This regulation is similar to the labeling threshold used in European regulations but goes further by requiring the mandatory labeling of products derived from animals fed with GMOs. It is also a beneficial method to promote local farm produce made without GMOs. This text has yet to be implemented by Congress.

STOP OGM Pacifique is concerned that the second text will be implemented too late. The current draft mandates an implementation date for mandatory labeling by 2017, this date is far too late when considering the incoming quality of

food. Especially since Australia intends to market genetically modified wheat by 2015, and because 99% of raw material imported to New Caledonia is dependent on Australian imports.

As part of its monitoring and information activities, the association STOP OGM Pacifique set up a 'GMO observation platform' project in the Pacific Island States. The purpose of this platform is to eventually accompany Pacific island states in its implementation of laws protecting human health and the protection of the environment and traditional agriculture.

This project will result in numerous partnerships with other regional organizations which all share the same goal: the territories of the Pacific must work in synergy and have a global view of biosafety regulations, and awareness of the varieties and GMO testing in other countries in the region. This is imperative if these island nations wish to control the flow of raw materials, seeds, and consumer products between states.

Regional platform for the observation of GMOs in the Pacific include:

- Collection of data on GMOs (inventory of crops, testing, marketing, and labeling procedures of existing authorities, trade relations, regulations or lack of regulation) from each island state.
- Setting up a network of people who can keep a watch locally (institutions, professional organizations, NGOs, international organizations).
- Collecting and providing data via a dedicated website.

The first phase of the project was to collect information on the situation of GMOs in countries neighboring New Caledonia. It is in this context that STOP OGM Pacifique organized a mission to Fiji in October 2013.

Fiji: Current Concerns and Actions needed

There are currently no specific regulations on GMOs in Fijian legal texts. Fiji has ratified the **Cartagena Protocol** (2), a "focal point" from the environment ministry is in charge of the implementation of this protocol in the context of the Biosafety Clearing House. Three ministries are involved in the drafting of the text: Agriculture, Environment, Health (Food Unit) and the Ministry of Economy which controls prices.

In terms of food and labeling, the Fijian Food Act could be amended, to make labeling of GMO mandatory for exporters and local food industry. In term of seeds, Biosecurity Authority of Fiji asks to all papaya seeds importers to prove that the imported seeds are not genetically modified (laboratory tests have to be made abroad because there is no operational PCR equipment locally): papaya test kits would help papaya producers to proceed to verification of their trees on site (a GMO contamination could harm the all papaya exportation sector).

Awareness Institutions, research groups and NGOs interviewed were generally well informed about the GMO issue, but – like other Pacific countries visited - all reported that they do not have sufficient data (“scientific” data and measures for the economic and societal impact). The general public is uninformed. STOP OGM Pacific noted that there appeared to be confusion between “hybrid” and “GMOs”.

Local NGOs working “bottom-up” and are close to rural communities, can be good catalysts for field awareness.

Main conclusions

The GMO issue is part of the wider issue of agro biodiversity: There is a huge loss of traditional seeds in Fiji, like in other Melanesian countries, in the name of varietal improvement and short-term productivity gains. The information must be provided about the dangers of GMOs for food security and sovereignty in order to preserve local agro-biodiversity (resilience to climate change, preserving the culture and lifestyle, economic interests of the locals ...). Traditional sustainable family farming should be encouraged and supported.

A regional approach is necessary to overcome the difficulties of supply to Pacific Island States that do not have large economic strength to face their trading partners such as USA, AU, NZ, Asia. PICTS, among which New Caledonia and Fiji, import raw products, like wheat, from countries who product, or plan to product and export GMOs (see the Australian GM wheat current situation (3)).

The creation of an advocacy tool in French and English would be required, and STOP OGM Pacifique is also currently discussing with regional organizations to organize a Pacific workshop dedicated to biotechnology/GMO issues in 2015. As a regional hub, Fiji could lead this approach with the support of dedicated organizations

like USP, Fiji National University (FNU), SPC (CEPACT Laboratory and Land & Resources Division), IUCN, civil society, etc.

(1) <http://www.stopogmpacifique.org>

(2) <http://bch.cbd.int/protocol/> (next meeting of the parties starts the 29th of September this year): an international coalition call for a stop of the GMO spreading into the environment <http://www.stopogmpacifique.org/2014/09/05/stop-ogm-pacifique-joins-the-international-call-to-stop-genetically-engineered-organisms-spreading-into-the-environment/>

(3) <http://www.stopogmpacifique.org/2014/05/31/petition-to-sign/>

Sources: STOP OGM Pacifique, IUCN, Inf’OGM