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# **C**onsumer Advocacy, Food Safety and the Environment in a Developing Tropical Economy: The Case of the Philippines

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## **Abstract**

Food safety is a public policy concern in the Philippines as it is elsewhere in the world. At present, both consumer and environmental protection agendas are in large part driven by the government. Although numerous consumer advocacy groups exist, they do not yet appear to have a wide enough citizen base to prevail directly upon food producers and consumers. There has been more vocal and influential advocacy work both for and against genetically modified organisms (GMOs) than in the area of traditional food safety concerns. Consumer movements, if widened, would be crucial to the food security of the Filipino people, for three reasons: (1) they raise the level of public demand for quality foods and so improve the competitiveness of food exports; (2) they expand the national network for monitoring and evaluating food safety; and (3) consumers' involvement will democratize food safety policy and decision making.

## **Background**

Food safety is a public policy concern in the Philippines as it is elsewhere in the world. Filipinos are like others in desiring sufficient and safe foods for themselves. But the country faces severe limitations on its ability to produce enough sustenance. There are serious ecological limits on its agriculture and industry, and unaddressed institutional hindrances to primary productivity relating to markets, credit, public investment, information and human resources. At 2,25% per annum, population growth is high, and food demand is rising. Housing and infrastructure are eating up what little land is left for growing crops. Among many consumers, food safety is often compromised in the desperate struggle to have something to eat. The government is undaunted, however. While pushing for food sufficiency, it is pushing as well for an agenda on food safety.

Among measures in this area, one can note the enactment of a consumer protection law in 1999 (RA 7394) that makes it a State policy to ensure safe and quality food for all Filipinos; the constitution of a National Consumer Affairs Council, with members from government, consumer sector and business and industry sectors (OFFICE OF THE PRESIDENT, 2000); and the establishment of a National Food Security Council to develop a comprehensive national food security and food safety program. Numerous agencies have been tasked to focus on food safety: the Bureau of Agriculture and Fisheries Product Standards, the Bureau of Fisheries and Aquatic Resources, the Bureau of Animal Industry, the Bureau of Plant Industry and the Fertilizer & Pesticide Authority (all in the Department of Agriculture) and the

Bureau of Food and Drugs in the Department of Health. A national multi-sectoral and interagency committee on biosafety regulates the development and adoption of crop biotechnology.

## **Food Safety and the Environment**

The Bureau of Agriculture and Fisheries Products Standards (BAFPS) identifies filth, additives, and microbial and chemical contamination as among the country's most common food hazards (Table I). They are often linked to poor handling, preparation and processing, but likewise to the humid and tropical conditions of the country. Virulence is high. Decomposition is fast. Chemical exposure is extensive because of the widespread use of pesticides to control a wide range of pests. Food handlers are easily exposed to infections and diseases common in hot and humid climes. Food safety is frequently compromised and is costlier to achieve.

Genetically modified organisms (GMOs) in foods is another, more recent, food safety concern in the Philippines, mainly for their perceived threats to humans and biodiversity. Philippine biodiversity is high and highly threatened (OLIVER and HEANEY, 1997); it is valued as a heritage and for its functions in agriculture (Table II). A threat to it is seen as a grave national concern. Crop biotechnology has been in use in the Philippines (Table III) but GMOs are causing fear among certain sectors of the general public that they might affect human health and/or the health and integrity of biota. There is fear also that they erode the seed security of farmers (AERNI, 1998).

## **Consumer Advocacy**

There are a number of consumer advocacy groups in the Philippines, among them the Nationwide Association of Consumers, Citizens' Alliance for Consumer Protection, the Consumer Federated Groups of the Philippines, National Federation of Women's Clubs, and the Post-Harvest, Food Science, and Nutrition Network (PHFSNN). They are mostly composed of prominent citizens, food safety activists and academics and, in the case of PHFSNN, staff of some government agencies. For the most part, their focus in the matter of food safety is on microbial, chemical and physical contamination, labeling and prices (LIZADA, 2000). Their advocacy is directed at convincing government to adopt certain regulations and standards. Their individual sway on producer and consumer food safety behavior is limited, as they do not seem to have a wide enough citizen base to prevail directly upon food producers and consumers. Consumer protection in this context is dependent on government rather than on consumers' collective action.

There is perceivably more public involvement in the case of GMOs in foods. Citizens' groups – for and against GMOs – while not large in terms of membership, have been so vocal and persistent in their advocacy that they seem to have succeeded in influencing directly public perceptions of the human and ecological safety of GM foods, to a far greater extent than the groups attending to microbial, chemical or physical contamination (Table IV). Their influence on policy has been strong. Opponents have been bridling crop biotechnology R&D even though the nation has a good ability to do it and the simulated economic losses from delays in adopting GMOs in foods appear substantial (EVENSON, 1998). At the same time, proponents are succeeding in pushing government to increase funding for crop biotechnology R&D (PHILIPPINE STAR, 6 August 2000).

## Need for Consumer Movements

Like many developing economies, the Philippines is inextricably tied into the global food trade system. In 1999, the country's food imports totaled US\$1.947 billion, while exports amounted to US\$1.296 billion (BAS, 2000). Local food safety issues will no doubt be linked closely with those elsewhere in the world. To take a recent example, the reported expansion of Hazard Analysis and Critical Control Point (HACCP) coverage to include source areas may require Philippine fisheries to harvest from certified non-polluted seas and inland waters in order to meet international fisheries trade standards.

Consumer movements, if widened, would be crucial to the food security of the Filipino people, for three reasons: (1) they raise the level of public demand for quality foods and so improve the competitiveness of food exports; (2) they expand the national network for monitoring and evaluating food safety; and (3) consumers' involvement will democratize food safety policy and decision making.

The first refers to their direct influence on the market. It shifts the pressures for food safety from a "command and control" approach to one driven by economic imperatives (a more potent force on producers and consumers alike than the former which, in a developing economy, is often graft-prone and likely to fail).

The second is crucial for two reasons: (1) cold chains are often so long and extensive that regulatory agencies find themselves insufficiently staffed to match the diversity of the sources and routes of food supplies; citizens' involvement will widen the reach of overseeing compliance to regulations; (2) the ecological contexts of food production and consumption in the country are vastly diverse; direct citizens' involvement will likely improve the oversight of the ecological and human impacts of food production and consumption.

The third is critical in three ways: (1) at over 11% of total supplies, the country's dependence on food imports is high (GONZALES, 2000). It would be efficient, from the perspective of policy, if a larger mass of the population were involved in decisions on how much of the food they have and need, and the extent to which their ecological security should be put at risk in the inevitable process of give-and-take in food trade; (2) food is both a cultural and ecological phenomenon; it is a "people thing" rather than merely the concern of government; it involves the people's trust (or distrust) of State and food institutions; food safety risks – to humans and the environment – are a political question that perforce requires society-level decisions on food standards, investments, science and technology, ethics, and commitments to trade partners; and (3) where democratic values may need to be upheld, the people themselves, through citizens' consumer movements, might have to be the ones to determine what would be the role of the State in ensuring their safety and the safety of their environment, not the other way around.

Developing tropical economies like the Philippines are often starved of two things: land and technology. Either their land is physically limited in relation to their population, or its fertility is low relative to the demand for primary products. The need for technology is high (to improve productivity and land values) but the economy's ability to avail of technology is low. Capital is scarce (because of low productivity) and so technology procurement does not match the rise in the need for value added in land use. But the economy, being in the tropics, may have the advantage of biodiversity. As the global demand for genetic information goes up and traditional land uses continue to offer low returns, the economic and political values of biological resources are likely to rise. Their strategic worth will increase, as will the value of protecting them. In this light, food safety – in relation to food technology, food trade and food security – takes on a heavier political and ecological burden. Food safety becomes a complex of social, political, economic, technological, ethical and ecological issues.

Consumer movements become more necessary for the State to achieve a sound and stable food policy regime.

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**Table I. Common Hazards Associated with Philippine Foods**

Meats	Fisheries	Vegetables	Fruits
<i>E. coli</i>	<i>V. cholera</i>	<i>L. monocytogenes</i>	<i>E. coli</i>
Avian flu virus	<i>L. monocytogenes</i>	<i>C. botulinum</i>	Staphilococci
Trichinae	Nematode larvae	Salmonella	Protozoa
Antibiotics	Hepatitis A virus	Protozoa	Pesticides
Hormones	Aflatoxins	Mycotoxins	Hormones
Aflatoxins	Herbicides	Pesticides	Mycotoxins
Dioxin	Hg, Pb, Cu, Cd	Pb, Cu	Hg, Pb, Cd
Mercury	Allergens	Alkaloids	Filth
Bone shards	Neurotoxins	Oxalic acid	Splinters
	Filth & splinters	Cyanogenic glucosides	
		Filth & splinters	

Source: LIZADA, 2000.

**Table II. Biodiversity Sectors and Their Services to Philippine Agriculture**

Sectors	Functions
Forests	Watersheds; wind/pest breaks; microclimate regulation; pollinator habitat; crosses
Wetlands	Water sources; microclimate regulation; pollinator habitat; source of crosses
Marine	Supplemental feeds; source of genetic materials for aquaculture; climate regulation
Protected areas	Pollinator habitats; crosses; water; pest breaks; source of supplemental feeds
Agricultural areas	Source of breeding materials; pest breaks; source of feeds
Coastal areas	Fish sanctuary and breeding grounds; energy subsidy; wind/wave protection

Source: A. ALCANTARA, P. PACARDO, P. SAJISE, Z. BATAAC-CATALAN, personal communication, 1999.

**Table III. Philippine Crops Improved by Cross-Breeding or Self-Pollination Using Local Varieties or Crosses\***

Categories	Crops
Cereals	Corn, wheat, sorghum
Legumes	Mungbean, peanut, soybean,
Vegetables	Pole sitao, bush sitao, cowpea, white potato, tomato, eggplant, cucumber, hot pepper, lima pepper, garden & sweet pea, luffa, chinese cabbage, squash, radish, patola, bitter melon, upo, winged bean, okra, pole snapbean, sweet pepper, pechay, watermelon, onion, shallot, chayote, garlic, yardlong bean, cauliflower, lettuce, sweet corn
Feeds/Industrial	sweet potato, cassava, cotton, kenaf, abaca, coconut, cacao, coffee
Ornamentals	Anthurium, mussaenda, hibiscus, orchids
Fruits	Atemoya, atis, avocado, balimbing, banana, cashew, chico, jackfruit, lanzones, mango, pili, tiesa, santol, rambutan, caimito, durian, guava, bignay, bitungol, papaya, pineapple, citrus, melons, guyabano, abin, bitongol
Farm animals	Carabao, goats, poultry, swine, other ruminants

\* Released by the National Seed Industry Council or Institute of Plant Breeding, or developed by farmers. Source: Institute of Plant Breeding, University of the Philippines at Los Baños, personal communication, 1999 and 2000; BONDOC, 1998.

**Table IV. Media Coverage of Crop Biotechnology in Three Dailies in the Philippines (May-Oct 2000)**

Daily	Date/Page	Title of Article	Space (cm <sup>2</sup> )	Tenor*
BW	5/8; 1	Tropical rice hybrids viable way to boost yields	545	+
	5/29; 21	Chinese rice hybrids offer yield boost to RP	213	+
	8/7; 23	DOST supports crop biotech, coconut R&D	147	+
	8/14; 21	Study measures economic impact of improved rice varieties	239	+
PS	10/18; 19	Brazil will soon cultivate genetically altered crops	200	+/-
	5/14; 26	Bt corn test results out	296	+
	5/28; 23	Chinese rice hybrids to boost RP yields	301	+
	5/31; B5	Golden rice: the promise of beta-carotene	343	+/-
	6/3; 17	Tests on 'mutant' rice planned	207	-
	6/4; 23	Six new rice varieties approved	265	+
	7/29; 22	IRRI develops 5 promising rice varieties for RP	225	+
	8/6; 24	Gov't oks P15-M biotech program to boost reforestation	132	+
	10/29; 29	Breakthrough: salt-tolerant variety developed	103	+
	10/30; 29	AIM tackles biotech concerns in RP	99	+
PP	5/3; B5	Scientists breakthrough in decoding genetic make-up of rice	695	+
	5/3; B5	Engineering resistance to pests	139	+
	5/17; A4	The politics of hybrid rice	939	-
	7/25; 1	Genetically altered rice coming to RP soon, farmers apprehensive	160	-
	7/26; 1	IRRI's BB-rice test seen as ploy to hoodwink public	368	-
	7/26; A5	IRRI responds to the story	266	+
	7/26; 13	Golden rice seedlings for Asian farmers	188	+
	7/27; A5	How can IRRI be so forgetful?	241	-
	Report	IRRI seed firms cite food crisis to justify BB-rice tests	932	-
	7/27; A5	The origins of BB-rice	106	+/-
	7/28; A5	Profit, not hunger, behind giant firms' dev't of transgenic crops	732	-
	7/28; A5	Opposition to BB-rice mounts	126	-
	7/29; A4	IRRI reacts to post report	424	+
	7/29; A4	Patenting ensures TNCs' control of transgenic crops, life forms	620	-
8/2; A4	What's the beef about BB-rice?	273	-	

\* Toward biotechnology and GMOs; BW = Business World; PS = Philippine Star; PP = Philippine Post. Prepared by: P. OMANA, University of the Philippines at Los Baños, School of Environmental Science and Management