

Editorial

Interpretations, Actions, and Implications of Scientific Progress

SCOTT C. RATZAN

It is clear that Sub-Saharan Africa does not share the 21st century prosperity we all hope for as traditional and new infectious diseases kill millions annually. Malaria, measles, tuberculosis, and HIV/AIDS condemn people to death. Many who resist the infectious agents survive only to be in want of food.

One might hope the developed countries with food surplus might be able to help, and many have tried. Yet, while 20th century scientific advances have supported medical, technological, and agricultural science, these have unequal impact. Herein lies the challenge: how can we share success and diffuse our prosperity to advance humankind?

In particular, as the world's population is projected to grow to eight billion people by 2030, how can we provide resources to support their existence without jeopardizing the environment and our livelihood?

Conventional wisdom and progress are at risk as the trends at the cusp of the millennium continue to show doubt of scientific progress. While no one would like to see anyone go hungry, the same people that argue for the impoverished and undernourished have fueled the dialogue to be "safe rather than sorry." This so-called precautionary principle has led leaders in Zimbabwe, Zambia, and Mozambique to refuse food aid for their people. In these countries alone, 14 million people will go hungry in 2002.

In today's world, where actions and perceptions are louder than proclamations, decisions are derived from perceptions and public opinion, rather than public good. For example, the Zambian president recently asked: "If Europe has rejected the [genetically modified (GM) crops], then why should we accept them, just because we are poor?" (The policy decision required significant discussion, and at the time this was written, Zambians were still going hungry.)

Logical arguments show that millions eat these foods daily and flourish in North America. The leading scientific multi lateral bodies, WHO, UN Food and Agricultural Organization, and World Food Program have weighed in and reiterated that there was no scientific evidence that there was any risk to human health by eating these foods.

Nonetheless, the European Union will not import genetically modified crops. While the public arguments are safety, other unspoken criteria are involved such as protectionism. While the safety argument is loudest in the public mindset, the economic argument translates into many third world countries refusing to accept American food aid with GM crops, as they will be banned from future export to Europe.

Scott C. Ratzan, MD is Editor-in-Chief of the *Journal of Health Communication: International Perspectives*

There are many reasons for the doubts of policymakers and the media who compare hypothetical to “real” risk. Many wear the shroud of science despite underlying realities. The Mad Cow crisis and other food scares abound in the media and public psyche.

As we all are in the business of protecting public health, we must think of the consequences of our actions as they are translated in the current global environment. In the current famine, it is unconscionable for millions to die for theoretical reasons when individuals could be saved with the provision of food.

As biotechnological progress offers hope and promise to conquer disease and enhance the quality of life we must argue for ethical and logical decision-making at governmental levels.

We must strive for the highest ideal to promote the public good and attempt to anticipate the consequences of our actions. Education and communication are key in the 21st century environment where is impractical and unrealistic for any one decision to be isolated in the global village. Many of us help shape the interpretation or engage in the subsequent actions. Regardless, we are all implicated in the consequences.