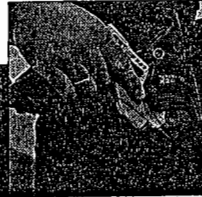


MORE OPINION/ When the Mounties Taser an 82-year-old heart patient in his hospital bed, you know something's wrong



WE WANT TO HEAR YOUR OPINIONS The best way to send us a letter to the editor, or to offer a text for this opinion page, is via our website: http://www.montrealgazette.com/viewpoints where you'll find convenient links to us and easy-to-follow directions. We consider everything offered, but can print only a fraction of the material received. Unfortunately we cannot acknowledge receipt of your material.

We need a massive reinvestment in agricultural research

The world food crisis lends new urgency to the need for research

CHANDRA A. MADRAMOOTOO

In the early 1960s, parts of the world, particularly Asia, were affected by back-to-back droughts that led to massive starvation, famine and death. The pictures were revolting.

The situation was so stark that, in 1967, the U.S. President's Science Advisory Committee concluded that "the scale, severity, and duration of the world food problem are so great that a massive, long-range, innovative effort unprecedented in human history will be required to master it." Consequently, the U.S. government, along with other governments and international institutions, gathered support for an international agricultural research system: the Consultative Group on International Agricultural Research.

The International Rice Research Institute and the Interna-

tional Maize and Wheat Improvement Centre are constituents of the CGIAR, and have focused on improving agricultural productivity and the socio-economic well-being of rural agrarian communities in the developing countries of Asia, Africa and Latin America; the same countries currently facing food shortages and suffering from instability due to rising food prices.

So it is ironic that 40 years later, in the midst of a global food crisis, the directors of IIRRI and CIMMYT jointly wrote to the president of the World Bank about the significant erosion of support for agricultural research. Over the past 15 years, there has been a 50-per-cent decrease in real terms of the CGIAR budget. Can history be repeating itself?

A reinvestment in agricultural research in both the developed

and developing countries is urgently needed if we are to achieve the targets set by the Millennium Development Goals, particularly with respect to eradicating extreme poverty and hunger.

There are about 1 billion people in the world who live on less than \$1 a day. Almost 700 million of them live in the rice-growing regions of Asia. Given that rice is a staple of the Asian diet, and 30 to 40 per cent of household income is spent on rice alone, it is doubtful the millennium goals of reducing poverty and hunger by one-half will be met by 2015. Research into new drought- and disease-resistant seed varieties, advanced water-management technologies, the reduction of post-harvest losses and improved methods of food processing in rural communities are key to achieving these goals.

We must urgently rethink the use of valuable food-producing lands, as well as the destruction of forested lands, to grow crops for fuel. In some ways, this is the genesis of the current food cri-

sis. The effects of these practices on soil and water degradation, and loss of biodiversity are not only enormous, but potentially environmentally irreversible.

Cellulosic materials are more suited for biofuels, but there is still much research and development required before the conversion technologies are both economical and efficient. There is also room to conserve energy in the agri-food sector, and to implement more energy-efficient systems for food production and manufacturing. These initiatives will reduce the consumption of fossil fuels in agriculture.

We have experienced low commodity prices for the past 10 years, and this has contributed to the low cost of food. These factors, in conjunction with the statistic that in North America, for example, we spend only about 10 per cent of our household expenditures on food, have perhaps led to our taking the food-supply system for granted. We have been lulled into a false sense of food security as a result of low retail food prices and the general abun-

dance of processed food products in Europe and North America. This has also led to governments in both the developed and developing countries cutting back on investments in the agricultural sector.

The private sector involved in food processing, manufacturing, distribution and retail needs to play a much bigger role in the revitalization of the agri-food industry than it has been accustomed to playing. The private sector depends on millions of farmers around the world for a steady supply of high-quality raw materials. It then puts a significant mark-up on the finished product. The return to the farmer is generally only a fraction of the consumer price paid for the commodity. So it is incumbent on the private sector to invest in new non-proprietary technologies and partner with the farmers and governments, on the creation of value-added processing and marketing systems to advance the socio-economic well-being of rural agrarian communities and agricultur-

al producers.

While current efforts to increase funding for food-aid programs are commendable, this is really only a short-term fix. For sure, we need food aid in cases of emergencies, and for relief from natural disasters of drought and famine and wars. But we also need to rebuild food reserves in most parts of the world.

This can be done only by the public and private sectors in both the developed and developing worlds reinvesting significantly in agricultural research and development, rural infrastructure, food storage and distribution systems, and agricultural and food processing technologies.

This is the most urgent path toward securing global food supplies, reducing poverty and constraining the socio-economic turmoil associated with the current food shortages.

Chandra A. Madramootoo is dean of Agricultural and Environmental Sciences at McGill University.