

**Comments by
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Recipient of
2002 Rotary Award for World Understanding and Peace**

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I wish to thank the two Rotary Clubs of Des Moines, Iowa, for nominating me, and Rotary International and the Rotary Foundation for selecting me, to receive this prestigious award. I am also grateful for the US\$ 100,000 grant, which I plan to use to support a number of scholarships and educational initiatives in my home state of Iowa and in my adopted home of Mexico.

I have long been an admirer of Rotary International and of your motto, "Service above Self." I am proud to be a Paul Harris Fellow. In 1998, I had the pleasure of addressing a gathering of Rotarians from the Americas in Rio de Janeiro at the Rotary International Pan-American Presidential Congress, whose theme was "Food and Education: The Pillars of Peace."

With 30,000 clubs in 160 countries and 1.2 million members, Rotary International truly has a global reach and impact. Rotarians can be very proud of their contributions to the Polio Plus program. I understand that you have exceeded your original target four-fold—having now mobilized \$500 million to support immunization programs to eradicate this debilitating disease. With only about 7,000 cases reported annually, the target of eliminating polio from the face of the Earth by 2005—the 100th anniversary of the founding of Rotary—is do-able. Congratulations on this outstanding achievement.

Rotary International has made important contributions to individual excellence and advancement through its various scholarship and "ambassador" programs. I have first-hand knowledge of one such beneficiary, my CIMMYT colleague, Dr. Sanjaya Rajaram, an Indian agricultural scientist who obtained his PhD degree at the University of Sydney in Australia 34 years ago through an International Rotary Club scholarship, arranged through the Rotary Club of Narrabri, New South Wales. Rajaram is perhaps the premier wheat breeder in the world today. Derivatives of his wheats are grown on 65 million hectares (160 acres) around the world. From a poor Indian family, Rajaram might never have made these contributions without the assistance of Rotary International.

A lot of what I know about Rotary International comes from your fellow Rotarian, Dr. E.T. York, a long-time friend and colleague, and former Chancellor of the Florida State University System. Himself a Paul Harris Fellow, E.T. played a key role in a number of Rotary International development efforts, including the Freedom from Hunger Scholarship program, which operated in the 1980s and early 1990s.

I am a firm believer that education is necessary to overcoming poverty and achieving world peace. Over my career in Mexico, I have been involved in the hands-on training of several thousand young wheat researchers from more than 60 countries, mostly in the developing world. In 1984, at the age of 70, I also began a career as a part-time professor at Texas A&M University, where I have taught a graduate course in international agriculture.

One of my fondest dreams is the elimination of gender inequalities in primary and secondary education and the achievement of primary education for all. Still today, an estimated 150 million primary age children do not go to school and 870 million adults—nearly two-thirds of them women—cannot read and write. If we are ever to build a more equitable global society, such disparities must be narrowed. Perhaps, once the goal of a polio-free world is achieved, Rotarians can turn their energies and talents toward assuring universal primary education.

I am now in my 58th year of continuous involvement in agricultural research and production, working primarily in the low-income, food-deficit developing countries with many colleagues, political leaders, and farmers to transform food production systems through the introduction of productivity-enhancing technology.

We began the 21st Century with adequate world food supplies and market prices for wheat, maize and rice, adjusted for inflation, at the lowest level they have ever been. While all consumers have benefited from these lower food prices, the poor have benefited relatively more, since they spend a larger portion of their income on food.

However, despite all of the successes of the so-called “Green Revolution,” the battle to ensure food security for hundreds of millions of miserably poor people is far from won. There are still upwards of one billion people who frequently go to bed hungry. Particularly disheartening are the 200 million young children who go hungry each day, with this undernourishment leading to often-irreversible damage to their bodies and minds.

During the 1960s and 1970s, the famine-plagued regions of the world were South and East Asia. I had the pleasure and privilege of seeing these regions become essentially self-sufficient in basic foods, and had the satisfaction of participating modestly in this effort. Currently, the most severe food-deficit-hunger region is sub-Saharan Africa, where food insecurity and hunger are increasing.

Since 1986, I have been involved in a program called the Sasakawa-Global 2000 agricultural initiative, conceived by the late Ryoichi Sasakawa and funded since its inception by the Nippon Foundation of Japan, and enthusiastically supported by former U.S. President Jimmy Carter. Although modest in budget and staffing, we have been able—with ministries of agriculture and several million small-scale farmers in 14 African countries—to introduce improved food production technology. Though the field results have been extremely promising, I doubt I will live to see a Green Revolution on this continent because a host of political, economic, and social constraints that I don't have time to explain today. But, God willing, it is my fervent belief that in the not too distant future Africa will be able to free itself from the shackles of poverty, misery and hunger that still plague all too many of its people.

Thirty-two years ago in my Nobel Peace Prize lecture I quoted another Laureate, Lord John Boyd Orr, the first director general of FAO, who said, "you cannot build peace on empty stomachs." Indeed, few developing countries with generally adequate nutrition are mired in conflict. In contrast, in those countries where more than half of the population are underfed, more than half are also experiencing civil conflict.

Overcoming hunger will require much greater cooperation between rich and poor nations than is the case today and much greater investments in education, health, potable water, agricultural research and production, irrigation, transport and electricity in the low-income, food-deficit developing countries.

We cannot lose sight of the enormous job before us to feed future generations, 90 percent of whom will begin life in a developing country, and many in poverty. Only through dynamic rural development programs—in which education and agriculture will play critical roles—will there be any hope to alleviate poverty and improve human health and productivity and reducing political instability.

The world has the technology—either available or well advanced in the research pipeline—to feed on a sustainable basis the 9-10 billion people projected to inhabit the world later in this century. The more pertinent questions are (1) whether farmers and ranchers will be permitted access to the new technologies—including biotechnology—needed to meet agricultural, food and nutrition challenges that lie ahead, and (2) whether a more equitable global distribution of benefits in food supplies can be assured in the future.