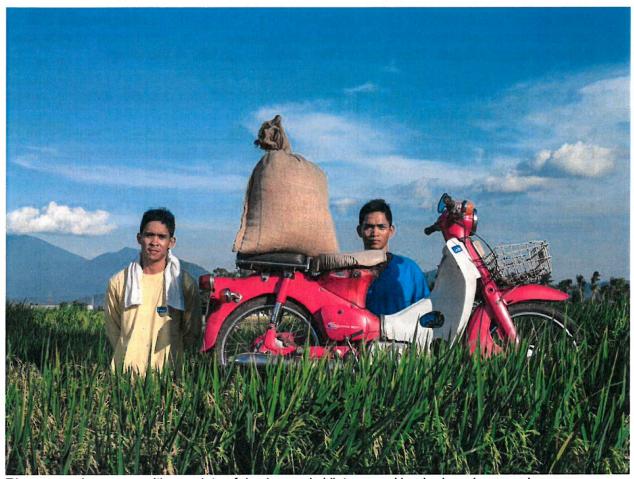


Opinion: Want to Make a Dent in World Hunger? Build Better Roads

Roads help farmers get their crops to market and their children to school, says Ambassador Kenneth M. Quinn.



Rice researchers pose with a variety of rice known in Vietnam as Honda rice—because bumper crops enabled farmers to buy motorcycles—in their field in Los Baños, in the Philippines.

PHOTOGRAPH BY CRAIG CUTLER, NATIONAL GEOGRAPHIC

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When I was a 26-year-old, brand-new American foreign service officer, my vision of a diplomatic career was of chandeliered ballrooms in London or Paris.

Instead, I was assigned as a district development adviser to eight villages in the Mekong Delta in Vietnam. There I learned the professional lesson of my life, one that would be reinforced time after time over the next five decades: Rural roads improve lives.

It was 1968, and the Green Revolution—sparked by World Food Prize founder Norman Borlaug's "miracle wheat"—was spreading to Southeast Asia in the form of IR8, a "miracle rice" with a shortened growing cycle.

While agricultural extension agents urged farmers in my district to plant the new IR8 rice, engineers were upgrading the rutted, largely impassable farm-to-market road that linked the eight villages. They finished the road through half of the villages.

Everywhere the new road went, farmers began using the new rice with amazing, almost overnight, results.

Farmers could now harvest two crops of IR8 rice per year. Each new crop produced a higher yield than the six-month floating varieties that had been planted for hundreds of years and had provided barely enough grain for subsistence. For the first time, smallholder farmers had a surplus crop and surplus income. (Read "The Next Green Revolution" in National Geographic magazine.)

Families could now invest in metal sheeting to improve the roofs on their homes and purchase better clothing and more nutritious food for their children. The children stayed in school longer, thanks to the little "taxis" that carried them from hamlet to hamlet over the new road. Child mortality dropped, as mothers with sick children could get them medical attention early enough for effective intervention.

The most amazing change, however, was the impact that the new upgraded road had on security. Villages once beset by insurgents and underground guerrillas now became safe to travel both day and night. As the new road opened the way for commerce, information, and opportunities, young people no longer were enticed to join political military movements and uprisings.

Where the upgraded road ended, however, so did the planting of IR8. Life in the four villages without the improved road remained mired in poverty and malnutrition, unchanged from decades earlier. Houses were ramshackle, and children were thin, poorly dressed, and not in school. Security remained a constant and even worsening problem. (See "World Making Progress Against Hunger, Report Finds, but Large Pockets of Undernourished Persist.")

I carried this lesson of roads with me through the rest of my diplomatic career, increasingly convinced that there was a correlation between the absence of quality roads and hunger, poverty, political instability, and terrorism.



Kenneth Quinn (right), who served as the U.S. ambassador to Cambodia from 1996 to 1999, shakes hands with Cambodian Prime Minister Hun Sen (left), during a visit to Phnom Penh by then Senator John Kerry (center).

PHOTOGRAPH BY REUTERS

In the early 1990s, I traveled to Cambodia as Deputy Assistant Secretary of State. Although genocidal Khmer Rouge troops still controlled much of the countryside, the United States had begun the process of repairing diplomatic ties with a small aid program of \$11 million.

My plan was to lease as much road-grading equipment as we could find in Thailand, bring it into Cambodia, and begin to remove mines and rebuild the roads that had collapsed during the two-decade-long civil war.

As we rebuilt the highways and roads, we could see a "medicinal effect": The roads were the bloodstream that carried chemotherapy to the tumor that was the Khmer Rouge. Nine years later, as U.S. Ambassador, I phoned Washington to report that the last Khmer Rouge had surrendered, one of the few times a terrorist organization had been completely eradicated.

A decade later, I told this story to then Secretary of Defense Robert Gates. He stopped me and said every one of his commanders in Afghanistan says the same thing: "Where the road ends, the insurgency begins."

When I met Norman Borlaug in 1999 and assumed leadership of his World Food Prize, I wondered how the scientist would feel about a diplomat filling this role. So I told him that I had been a foot soldier in his Green Revolution and about my experiences with rural roads.



Cambodian farmers thresh freshly harvested rice before transporting it to a mill in December 2010. PHOTOGRAPHY BY UDO WEITZ, EPA/CORBIS

When Norm slammed his fist on the table and shouted, "ROADS!" I was filled with apprehension. But he then went into a long exposition about the critical importance of roads. In fact, he had used the money from his 1970 <u>Nobel Peace Prize</u> to build a road in Mexico.

Norm and I became a kind of Iowa odd couple, him the farm boy from Howard County and me the city kid from Dubuque. We were united by our experiences in villages half a world away and our shared belief in the power of rural roads to uplift developing countries, just as they had transformed our home state in the first half of the 20th century.

As we confront the greatest challenge in human history—whether we can sustainably feed the nine billion people who will be on the planet in 2050—the importance of upgrading rural roads has never been more evident, nor more in need of emphasis by global leaders.

Today, road penetration in Africa is only about 35 percent. In most other parts of the world, where there are lower rates of hunger and malnutrition, road penetration is 95 percent.

Last August, I traveled to Uganda to attend a celebration of the Norman Borlaug Centennial Year in the town of Jinja. The theme for this conference was taken from Norm's last words: "Take it to the farmer."

Sadly, I once again observed the same truth I learned in 1968. Driving down the deeply rutted and inadequate secondary and tertiary roads in Kamuli District, I saw poor housing, malnourished people, and stunted children.

Were he still here today, I am certain that Norman Borlaug would have ended the presentation in Jinja the same way I did: "You can't take it to the farmer without good roads."

<u>Kenneth M. Quinn</u> has been president of the World Food Prize Foundation since 2000. Prior to that, he spent 32 years as a career American diplomat, culminating in his assignment as U.S. Ambassador to Cambodia from 1996 to 1999.