WASHINGTON, D.C. -- An international economist and leading agricultural research administrator says the adoption of a centuries-old transplanting technique, combined with government support and new high-yielding varieties, has nearly quadrupled maize production in Vietnam since 1978.

Donald L. Winkelmann, Director General of the International Maize and Wheat Improvement Center (CIMMYT) at El Batan, Mexico, described the innovative Vietnamese winter maize program to members of the media today at a luncheon.

The luncheon was held here in conjunction with the annual meeting of the Consultative Group on International Agricultural Research (CGIAR).

Some 500,000 acres (200,000 hectares) of maize grown in Vietnam are started as seedlings transplanted individually to the field by hand, he said. Annual production of transplanted maize now totals about 400,000 metric tons.

"About as much maize is now produced through transplanting in Vietnam," Winkelmann stated, "as is grown in Ecuador or Uganda -- countries that historically rely heavily on maize as a food staple."

The program is currently in its sixth year of development and is "expected to play an important role in Vietnam's effort to feed a population that is currently expanding at a rate of more than 2 percent a year," Winkelmann said.

"Transplanted maize is grown in other parts of the world, but this is the only modern example of farmers transplanting maize seedlings by hand on such a large scale," Winkelmann stated. "The technique is not new. We know --over--
that farmers in ancient Mexico were transplanting maize on floating gardens when the Spanish first arrived."

He said Vietnamese farmers have developed a technique for sprouting maize two to three weeks before the rice harvest and transplanting the seedlings as soon as the rice is harvested.

"Prior sprouting and transplanting," Winkelmann said, "assures that a complete cycle of maize can be grown within the relatively short interval from harvest of summer-grown rice until winter temperatures set in."

Vietnam, Winkelmann said, hopes to again quadruple its annual maize output by the year 2000 by doubling the production of its winter varieties.

He estimated that the country plants about 500,000 acres (about 200,000 hectares) of winter maize -- nearly all of it early-maturing, short-statured varieties developed by CIMMYT. The CIMMYT varieties have proven successful for the unique conditions of the rice rotation because of their ability to withstand lodging in wet soils.

The newly-adopted varieties outperform local Vietnamese cultivars by nearly 50 percent, Winkelmann said.

Winkelmann, an American, termed the program "an example of what can be accomplished when farmers, government and the international agricultural research system pool their skills and resources.

"We are enthusiastic about the relationship," he said, "because it shows that there are still opportunities to combine the goals and skills of small farmers with the concerns of national programs and the products of international institutes in a situation where everyone gains."