CFS
COMMITTEE ON WORLD FOOD SECURITY

The following case study was received as a result of a call issued by the Committee on World Food Security for case studies highlighting examples of initiatives aimed at 'Developing the knowledge, skills and talent of youth to further food security and nutrition'. The cases received provide the background for a discussion of lessons learned and potential policy implications at a special event on October 15th, 2015 during CFS 42. Find out more at www.fao.org/cfs/youth.

Background

In 2009, a prestigious fellowship program was established by Monsanto in honor of two of the world's most preeminent plant breeders, Henry Beachell, Ph.D. and Norman Borlaug, Ph.D, experts in rice and wheat, respectively. The goal was to develop highly educated rice and wheat plant breeders to serve as future agricultural leaders. Monsanto Company has pledged $13 million to support students, primarily from developing countries, to study advanced breeding techniques and have an opportunity to establish professional relationships with other scientists at elite plant breeding centers around the world.

Challenges

Financial support for public breeding programs for improving wheat and rice varieties has not been consistently available. Both wheat and rice crops have a prominent role in global food security, especially in developing countries. Investment in the future leaders of agriculture is an important step toward sustainable food security.

Approach Used

Applicants are students seeking a Ph.D. in rice or wheat plant breeding. Typically, students split their time between institutions in developed and developing/transition countries. This approach provides students with access to and familiarity with state of the art techniques, and the ability to establish important professional relationships with the most visionary plant breeders working in agriculture today. At the same time, they stay connected locally in their home countries, to understand the challenges that are faced by local farmers.

Outcome and Impact Achieved

Since the inception of the program, 80 scholars from 28 countries have received fellowships totalling $12 million dollars. These 80 students (47 in wheat, 33 in rice) were selected by a international panel of judges. Thirty of the scholars are women. The intent of the program is for each scholar is to find placement in public breeding programs, hopefully in their home country. Long term, their

influence on plant breeding, education and the development of future agricultural leaders is expected to dramatically improve food security on a local level.

Lessons Learned/Opportunities for Scaling-Up

The primary lesson learned is that there is an adequate pool of highly qualified students from developing countries willing to dedicate their lives to improving agriculture. There is also a corresponding pool of the world's elite breeding scientists willing to take on the responsibility of educating and mentoring these students, so that they can be the agriculture leaders of tomorrow. As for opportunities, although these students are among the best and brightest of their countries, they face challenges. They possess knowledge, contacts and motivation. Funding for directed local research is hard to find. A system that provides "start-up" funds to these gifted scientists in their home countries, to establish programs and position their institutions to utilize their training, would be an important step in realizing the full potential of the program.

Policy Implications

What policy changes are needed to support this type of initiative and scaling up?

There are no apparent policy changes needed to support this type of initiative. The greatest hurdle to the scale up of this type of program is financial support, whether from the public, private or philanthropic sector.