Dispelling myths about international agricultural research and development

MYTH 1: Funding for international agricultural research and development (R&D) means sending money overseas which could be used for Australian research.

FACTS
Money for international agricultural R&D comes from Australia’s international aid budget. Money for our own national agricultural R&D comes from the government, farmer levies and the private sector.

Australia’s agricultural productivity directly benefits from international agricultural R&D. Our farmers gain access to new crop varieties, management technologies and new biosecurity knowledge.

International agricultural R&D is often carried out in countries with similar climatic conditions to ours. We can adapt the findings from overseas to our own conditions, benefiting farmers with new knowledge and tools.

Our international agricultural R&D involves collaboration between Australian universities and research agencies, and our overseas counterparts. This results in new knowledge and skills being captured by all involved, including Australian researchers.

MYTH 2: Giving agricultural assistance to developing countries threatens Australia’s export markets.

FACTS
Research shows that developing countries with rapidly growing economies – due to the results of international agricultural research – increase their overall levels of food imports to meet new levels of demand. This occurs even if their imports of some foods drop slightly. Developing countries which produce crops for export rarely compete with Australia’s export products.

Our reports demonstrate that Australia’s investment in agricultural development through our aid budget is an outstanding success. It is well-targeted and contributes to the food and nutrition security of low-income countries, as well as their environmental and economic sustainability, and resilience, and to gender equity and regional stability.

Improving oyster farming
The work of the Australian Centre for International Agricultural Research (ACIAR) on oyster farming in Vietnam has increased the income of producers’ families while building the scientific capabilities of local and Australian researchers. In parallel with the work in Vietnam, Australian scientists have developed improved molecular tools which are being used to breed Sydney rock oysters with better disease resistance, growth and meat condition.
MYTH 3: International agricultural research may help developing countries, but countries like Australia—with modern, advanced farming systems—have nothing to gain.

FACTS
Australian farmers benefit from international agricultural research when they access:

- new farming techniques and improved crop varieties that can improve their bottom line
- new disease-resistant crop varieties and disease controls which save our farmers millions of dollars
- improved methods for sustainable farming, which can deal with Australia’s issues of soil erosion, acidification and salinity
- improved protection of our biosecurity by preventing the spread of pests and diseases from neighbouring countries.

MYTH 4: International agricultural research sounds like a great idea, but there are millions of starving people in the world. We should be sending food parcels to keep them alive.

FACTS
Food aid is absolutely necessary. However, it is a stop-gap solution to hunger. Programs which help poor countries help themselves through improved productivity help solve poverty long-term. International agricultural R&D is a very effective way to do this.

A recent World Bank report estimates that increased agricultural productivity reduces poverty in low-income countries by twice as much as any other productivity increases (such as in the manufacturing sector). Agricultural research is the most effective means of increasing prosperity and reducing hunger in developing countries.

Reducing drudgery and drought risk
Subsistence farmers in Laos are now more food-secure thanks to an ACIAR project that introduced direct seeding of drought-tolerant rice with machines rather than laboriously transplanting seedlings by hand. This means farmers have more time for other activities, such as growing vegetables. The benefit-cost ratio from this project is conservatively estimated at 4.4:1. The Fund’s long-term mentoring project in Laos with young Australian volunteers and its provision of training for crowd-sourced dry seeders has assisted with this work.

Boosting Australian wheat productivity
Australian farmers benefit from new, high-performance, climate-change-ready crop varieties developed by Australian breeders using genetic material they access from international agricultural research centres that are supported by Australian agricultural aid. More than 90 per cent of the wheat varieties grown in Australia can be traced back to varieties from the International Maize and Wheat Improvement Center (CIMMYT) in Mexico. Recently a CIMMYT wheat variety, Borlaug 100, set a new record and now holds the title of having the highest ever recorded wheat yield in Queensland, and is now being grown in Central and southern Queensland, and in northern New South Wales.