

# focus

A woman with dark hair tied back is shown from the side, wearing a light-colored short-sleeved shirt. She is holding a large, round, woven basket and sifting a large amount of rice through it. The rice is captured mid-air, creating a dynamic spray of grains. In the background, a chicken is visible on the ground. The scene is set outdoors with warm, golden light, suggesting late afternoon or early morning.

THE MAGAZINE OF AUSTRALIA'S OVERSEAS AID PROGRAM

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## FOOD

Boosting agricultural production,  
protecting livelihoods and  
providing food aid

## About AusAID

The Australian Government, through the Australian Agency for International Development (AusAID), provides official development assistance to countries in the Asia Pacific, the Caribbean and Latin America, and in Africa.

Aid is delivered as part of long-term programs across a range of sectors—health, education, infrastructure, gender equality, law and order, rural development and the environment. The Australian Government also has a proud record of delivering humanitarian assistance to vulnerable populations caught in conflict zones or natural disasters such as cyclones, floods and earthquakes.

### Why we give aid

Australia is committed to helping developing countries achieve the Millennium Development Goals (MDGs), which aim to alleviate world poverty by 2015. Poverty is one of the greatest challenges of our time. Australian aid makes a difference to the lives of our neighbours and boosts growth and stability in our region. Australia's own economic and security interests are better protected because we're helping to build stronger communities and economies, and more stable governments.

### Size of the aid program

In 2011–12, Australian aid will increase to \$4,836 million. This is 0.35 per cent of gross national income (GNI). The Australian Government is working towards a target of 0.5 per cent of GNI by 2015–16.



Look out for this icon which tells you when you can find more information at Focus online. Visit <http://www.ausaid.gov.au/focusonline/>

ABOVE: World Humanitarian Day is on 19 August. Nearly a year ago, Australian nurse Ronnie Taylor treated a young Pakistani girl at the Australian Medical Task Force health centre in Kot Addu after devastating floods. Photo: Pawlenko/ADF



## Millennium Development Goals

The eight Millennium Development Goals are a blueprint agreed to by all the world's leading development institutions.

For further information see <http://www.ausaid.gov.au/keyaid/mdg.cfm>





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COVER: A woman in Sekong Province, Laos. With Australian support, NGO CARE is working with the community to help them grow coffee, cardamom, rice and other produce. Photo: Josh Estey/CARE

See story on page 24.

## Subscriptions

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## Governor-General visits eye hospital

Governor-General Quentin Bryce visited the Hue Eye Hospital in Central Vietnam to see how the Fred Hollows Foundation, with Australian Government support, is providing thousands of Vietnamese people with the gift of sight.

Under the Avoidable Blindness Initiative, the Australian Government is providing \$8.5 million to Australian NGOs, including the Fred Hollows Foundation, Christian Blind Mission and the International Centre for Eyecare Education, to support blindness prevention programs in Vietnam.

BELOW: Governor-General Quentin Bryce talks with a patient at the Hue Eye Hospital in Vietnam. Photo: Fred Hollows Foundation



## Pacific Disability Forum

**The Pacific Disability Forum held its regional conference recently with the support of the Australian and New Zealand governments and the Global Fund for Women.**

The conference brought together disabled persons organisations, governments, and civil society to discuss how to work towards realising the rights of persons with disabilities in the Pacific.

There are about 1.4 million persons with disability across the Pacific who continue to face multiple barriers to getting an education, a job or having their voices heard. The conference discussed how to encourage government and civil society to be more inclusive.

The conference also provided an opportunity to grant the first Disability Pasifika Awards to Sam Vilisoni, Setareki Macanwai and Frederick Miller for establishing the Pacific Disability Forum. Ten years ago, it was a battle for disabled person's organisations to be heard. Now, thanks to the Pacific Disability Forum, persons with disabilities are taking the lead.

## Peace, mining and law and order on the agenda in Bougainville

**Parliamentary Secretary for Pacific Island Affairs Richard Marles visited PNG and Bougainville in March.**

At the conclusion of his two-day visit, Mr Marles said there was much to be positive about in the way forward for Bougainville.

'With a continued commitment to mediation and peace, the future for the people of Bougainville is bright and we call on all parties in Bougainville to continue to work together towards reconciliation.'

During the visit, Mr Marles announced further Australian support for improvements in policing and law and order.

Australia is an active partner to the Autonomous Bougainville Government in addressing the development challenges of the region.

Mr Marles also travelled to Port Moresby where he met with PNG cabinet ministers and visited Australian Government-supported programs.

ABOVE: A traditional 'sing sing' or welcome ceremony greeted Parliamentary Secretary for Pacific Island Affairs Richard Marles during his visit to PNG. Photo: DFAT



More at Focus online



## Action on landmines in Afghanistan

**Afghans will have more farmland free of mines following a four-year, \$20 million Australian investment.**

On 4 April, International Day for Mine Awareness, Foreign Minister Kevin Rudd said the investment in Afghanistan would be Australia's largest ever mine activity. It will clear more than 7.8 million square metres of land, beginning in the provinces of Khost, Kandahar and Ghor, and moving to other high priority areas.

RIGHT: Australia supports community-based demining and mine risk education programs for safer movements within communities.  
Photo: United Nations Mine Action Centre for Afghanistan



## Australia assists landmine victims in Vietnam and Laos

**Australian assistance will provide rehabilitation services and improve the quality of life for thousands of people injured by landmines in Vietnam and Laos.**

During a visit to the Ho Chi Minh City Orthopaedic and Rehabilitation Centre, Foreign Affairs Minister Kevin Rudd announced \$4 million over four years for the work of the International Committee of the Red Cross (ICRC) Special Fund for the Disabled in Vietnam and other mine-affected countries.

'Vietnam is one of the most mine-contaminated countries in the region with an estimated 100,000 mine survivors. More than 20 per cent of the country is estimated to contain some 800,000 tonnes of explosive remnants of war, which continue to kill and maim scores of Vietnamese every year.

'This new investment in the ICRC Special Fund for the Disabled will help centres such as this assist more men and women with prostheses and rehabilitation, giving them the opportunity to work to support their families and fully participate in their communities,' Mr Rudd said.

'It builds on more than \$5 million Australia has invested in the ICRC's work in Vietnam and other mine-affected countries since 2006, which has provided rehabilitation services to more than 17,000 people.'

Australia will also invest \$2.5 million through the Convention on Cluster Munitions Trust Fund of Lao PDR. This will assist the Lao government clear unexploded ordnance from heavily contaminated land—a legacy of the two million tonnes of ordnance dropped on the country during the Indochina conflict.

*See Australia's support for landmine victims in Vietnam on page six.*

LEFT: Foreign Minister Kevin Rudd sees how prosthetic limbs are made at the Ho Chi Minh City Orthopaedic and Rehabilitation Centre. Photo: Peter Stuckings



## New volunteers program launched

**Foreign Minister Kevin Rudd officially launched the new overseas volunteers program, Australian Volunteers for International Development, on 26 May 2011.**

Following a review of the government's previous multifaceted overseas volunteering program, a single branded program for international volunteering was developed.

The new program draws together all initiatives into one program under a single brand. The Australian Government, through AusAID, is working in partnership with Australian Volunteers International, Austraining International and Australian Red Cross—organisations with extensive experience in international volunteering.

The new, integrated program will make it easier for more Australians to volunteer their services in developing countries, in support of the priorities of the Australian Government's aid program.

Volunteers are an important part of the aid program. They contribute to reducing poverty and long-term development. Each year, volunteers change the lives of thousands of the world's poorest people. They enable cross-cultural exchange between Australia and other countries, and support Australia as a global citizen.

The launch saw Mr Rudd reveal a new volunteers web portal.

'The new program will continue to make a valuable contribution to communities in need, as part of our overseas development assistance program,' Mr Rudd said.

'Each volunteer has returned with a story to tell, whether it be setting up a clinic so that women can give birth safely, building stronger homes to withstand cyclones or helping children with a disability to get to school. They have left a mark and enriched the communities they have helped.'



## There's something special about Rebecca

by Lou Anderson, AusAID

**When Rebecca Visintin's time as an Australian Youth Ambassador for Development ended in February, she left Samoa with the thanks and love of the staff and special needs children at Aoga Fiamalamalama.**

In 2010, Rebecca worked as a speech and language pathologist at Fiamalamalama, a school for children with intellectual disabilities in Apia. Rebecca doesn't speak Samoan. The students—many of whom have severe and complex learning difficulties—didn't speak English. So clearly, there's something special about Rebecca.

Overcoming the language barrier was her first challenge and while she brushed up on her Samoan, Rebecca quickly found other ways to communicate with the students, starting with visual prompts, slide shows and books, and role playing.

'It's difficult to be an effective speech pathologist when you can't speak the local language, but not impossible. I've had to be very creative and flexible,' Rebecca said.

By necessity, Rebecca used books, role-plays and many other visual prompts

to teach basic literacy skills, integrating sounds, words and colours to increase children's understanding.

'I remember when I arrived in Samoa that I said I was looking forward to using some creative resources to achieve the best quality of communication for the children. Little did I know then just how creative I would have to be.'

Rebecca wrote the school's English curriculum while she was there and counts two simple suggestions as ones that made the most difference to the learning outcomes of Fiamalamalama pupils.

'Changing the timetable to have classes start at the beginning of the school day, rather than sport or other group activities, has helped improve learning as the children are more alert and responsive in the morning. This, along with the introduction of a school water program, which has now been extended to basic health, has also seen some major improvements to school life.'

Rebecca said in her first week at school, two children had seizures and she noticed that very few children drank water during the day.





## The little things

by Cathy Reid, AusAID

'I was convinced this was contributing to lethargy and poor health so we arranged water bottles for all the children and now they all drink about 1.5 litres of water every day.'

A nurse now visits the school monthly to teach the pupils about the importance of drinking water as well as basic health and personal hygiene tips.

Rebecca said despite the initial language challenges, she worked to build relationships and affinity with the children and their families, as well as the teaching staff.

'Training local staff is important as the onus falls to them to continue using the learning tools and guides that have now been developed to reinforce the work and the understanding.'

Rebecca's passion for speech and language pathology grew from her own love of communicating and an interest in other cultures and languages. She completed a degree in speech and hearing sciences followed by a Masters in Speech and Language Pathology at Macquarie University. Before travelling to Samoa, she worked as a speech and language pathologist in central Queensland.

**It's a slow day at the markets in Sisophon because a morning downpour has kept the villagers away. Kong Somaly hopes tomorrow will be better and she will sell more vegetables so she can feed her three children. She is feeling a bit tired today anyway—one of the side affects of being HIV positive. Somaly is one of around 126,000 people with the virus in Cambodia.**

Somaly is determined to stay well so she can raise her children. Unable to do more manual work like planting rice because of her ill health, she was given an opportunity to support herself with a small loan from the Social Environment Agricultural Development Organisation (SEADO). The organisation plays a lead role in HIV and AIDS prevention and care in Banteay Meanchey Province, where Somaly lives.

She now sells her own vegetables and earns up to \$2 a day, which is almost enough to support her family. She also gets assistance from the World Food Programme, which provides families like hers with 30 kilograms of rice, one litre of oil and 500 grams of salt every month.

Somaly also takes part in a SEADO-run support group for people living with HIV.

Cambodia is one of a few countries meeting the Millennium Development Goal for halting and reversing the spread of HIV, with the disease's prevalence falling from two per cent in 1998 to 0.7 per cent in 2010.

Aaron Watson is one of two Australian Government-funded volunteers working with SEADO.

'I always knew I wanted to do something to help people, but I never dreamed I would end up overseas in a developing country,' Aaron said.

'It is such a great culture with such beautiful people and the country is heading in the right direction. It just needs a little help and I am so grateful I can give some of that help.'

**ABOVE LEFT: Australian Youth Ambassador for Development Rebecca Visintin with students from Fiamalamalama school.**  
Photo: Lou Anderson/AusAID

**ABOVE RIGHT: Volunteer Aaron Watson chats to Kong Somaly, who has HIV, while she sells vegetables at a market in Sisophon, Cambodia.**  
Photo: Cathy Reid/AusAID

Australian support for the work of the International Committee of the Red Cross (ICRC) Special Fund for Disabled is helping to secure treatment and rehabilitation for amputees in Vietnam.



## Closing the gap

As a gifted athlete and teacher, Thuan has a bright future ahead of her. She's so good that the 24-year-old has a real chance of making it to London in 2012. She won't be there for the Olympic Games however; instead she hopes to compete at the Paralympic Games.

Thuan has an amputated leg. She lost her leg in a traffic accident in 1998 when she was just 12 years old.

Like the estimated 600 million people worldwide who have a disability, losing her leg was difficult for Thuan to deal with. That was until she received an artificial limb through the Ho Chi Minh Rehabilitation Centre in Vietnam. From the moment she had her new leg, she became interested in helping others

with disabilities. She now works at the Vocational Training Centre for Disabled People teaching embroidery and bead craft.

With Australian support, the ICRC Special Fund for the Disabled later provided Thuan with a replacement prosthetic limb because her original had worn out. This new prosthesis opened up great sporting opportunities for Thuan. She started learning the javelin throw, the discus and the shot put. She now trains five days a week and has won several bronze and gold metals at the 2006 ASEAN Para Games in Kuala Lumpur, the 2008 games in Nakhon Ratchasima, Thailand, and the 2009 games in Malaysia.

Thuan is proof of how the right support and services can help people with a disability participate in society.

Very little data exists about how many amputees actually exist in Vietnam. As in





Australian Government support over the last five years has covered 45 per cent of the project costs in Vietnam. That funding has enabled around 15,000 individuals, who would have otherwise had no access to replacement limbs or prosthetics, to get mobile again.

many developing countries, people with a disability, including amputees, are often destitute and forgotten.

'This is largely because the responsibility for health and rehabilitation rests with local governments,' said Director of the Special Fund for the Disabled, Theo Verhoeff.

'Physical rehabilitation is usually not a priority for these local governments or for the hospital that provides the services as they have only a limited amount of funds to spend on all the health services needed by the community.'

According to the Special Fund for Disabled, about 65 per cent of people they help in Vietnam are actually the victims of war, and the majority are from rural parts of the country.

According to the Vietnam Bomb and Mine Action Centre, almost 6.6 million

hectares of land in Vietnam are still contaminated by some 800,000 tonnes of unexploded devices, which continue to kill and maim many Vietnamese. Other victims were injured many years ago and are only just seeking treatment.

Mr Chi was a truck driver when he had a mine accident in 1974 at the age of 41. One of his legs was amputated as a result of the landmine.

He later received a prosthetic limb, which enabled him to continue driving trucks so he could provide for his large family.

'Without my artificial leg, subsidised by the ICRC Special Fund for the Disabled, I would never have been able to fulfil my obligations as head of the family,' he said.

Mr Verhoeff said a prosthetic limb gave individuals their lives back and helped them rejoin their communities.

'Even though it's only one aspect, it enables a person to function in society and to be included. Many people who've lost a limb are farmers or fishermen. They need mobility to earn a living and support their families. Having that mobility allows them to participate in society again,' he said.

'AusAID support over the last five years has covered 45 per cent of the project costs in Vietnam. That funding has enabled around 15,000 individuals, who would have otherwise had no access to replacement limbs or prosthetics, to get mobile again.'

LEFT: Thuan practicing the javelin throw at Thong Nhat Stadium, Ho Chi Minh City.

ABOVE LEFT: Thuan practices her embroidery skills in Vietnam.

ABOVE RIGHT: Mr Chi waits for a new prosthesis at the Ho Chi Minh Rehabilitation Centre, Vietnam.

Photos: ICRC/SFD









# FOCUS ON FOOD

Food, glorious food.

For most of us, food is available whenever we want. For dinner, we open our fridge, select an array of nutritious and delicious foods (hopefully from a few of the healthy food groups) and prepare a bountiful meal. If we're lucky, someone else has even prepared the meal for us and neither option is going to send us broke. In Australia, good food is readily available. It's relatively cheap and easy to access—simply head to your nearest supermarket or local takeaway. Thanks to sound economic policies and successful agricultural production, the majority of Australians would be described as 'food secure'. Many poor people in developing countries are not. Many can't afford the food they need because they don't earn enough and the food they can afford is often of insufficient nutritional value. A lot of farmers in developing countries can't grow enough to feed their families let alone access the markets where they could sell surplus crops to make a living. The Australian Government is working to make people in developing countries more food secure. While providing emergency food assistance to prevent the poorest from going hungry, the Australian Government is also working to improve livelihoods, access to markets, and agricultural production through research.

OPPOSITE: A young girl collects harvested maize in Mozambique. Photo: Kate Holt/AusAID



## Global food price crisis

**In 2007–08, the world saw dramatic increases in food and commodity prices creating a global crisis that led to economic instability and social unrest in both developing and developed countries.**

Droughts in grain-producing nations like Australia and rising oil prices caused initial price spikes in late 2006. As oil prices continued to increase, so too did the cost of fertilisers, transport and industrial farming. The increasing demand for biofuels and moves towards more varied diets in China might also have contributed.

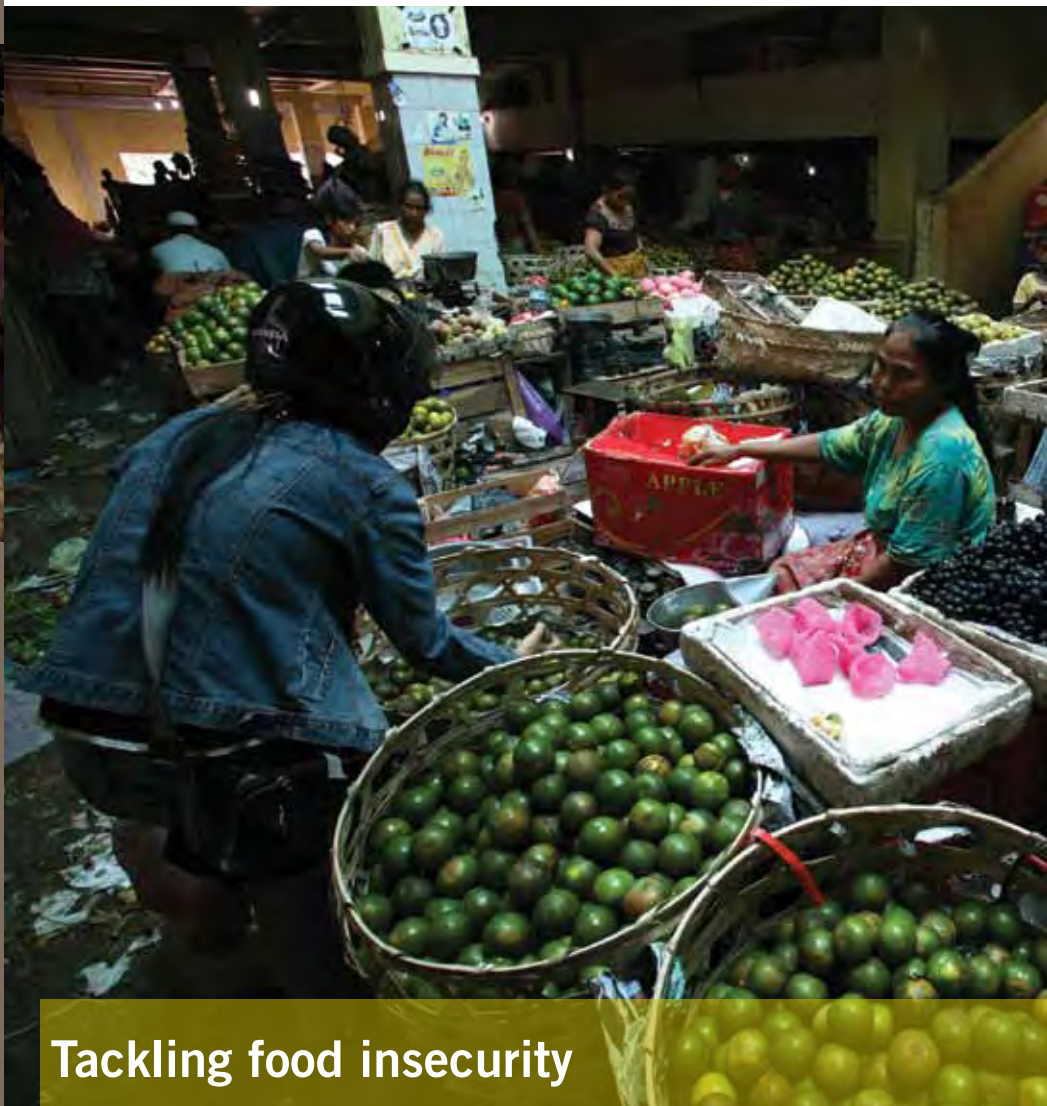
These factors and falling world food stockpiles all contributed to a global rise in food prices. Between 2006 and 2008, rice rose by 217 per cent, wheat by 136 per cent and corn by 125 per cent.

The rapid increase in global food prices caused civil unrest and saw governments make drastic moves in severely-affected countries in Asia and Africa. The lack of basic food staples sparked riots in some countries while some governments banned food exports in response. This too contributed to the crisis.

The food price crisis of 2007–08 pushed an estimated 130 million people back into poverty.

The challenges of rising food prices have not dissipated. Global food prices will continue to rise and the Australian Government will continue to help people in developing nations to be food secure.

ABOVE: Maize grown in Malawi.  
Photo: Kate Holt/AusAID



## Tackling food insecurity

### Australia's strategic approach

**A population 50 times bigger than Australia goes hungry every day—two-thirds of them live in Asia and the Pacific. The number of people who go hungry—approximately one billion—is growing. Higher food and fuel prices combined with the flow-on effects of the global financial crisis have had a dramatic impact on the developing world. It's an impact that threatens to reverse many of the development gains of the last decade.**

While global food prices fell after their peak in mid-2008, a number of commodity prices are at similar levels today and generally remain higher than the 1990s and early 2000s. The World Bank and United Nations believe food prices will continue to rise for the next 10 years largely because global food production can't keep pace with demand. Population growth, per capita income growth and changing diets, climatic variability, limitations on rural land and

the availability of water, distorted global food trade, the demand for biofuels and feedstock, and falling investment in agriculture in developing countries—especially in agricultural research—are critical factors in this trend.

To reduce the impact of ongoing food insecurity and price volatility on the poorest, the Australian Government is working to provide emergency food assistance and safety nets for those that need it. At the same time, the government is also working to improve livelihoods and market access, especially for poor farmers, while investing in agricultural research to help boost food production.

### Building the resilience of communities

When shocks such as food price increases, natural disasters or household-level emergencies like an income-earner getting sick hit the vulnerable, their ability to afford and access sufficient and nutritious food declines. People often resort to coping strategies that have long-term consequences, some of them irreversible:





Nearly a billion people go hungry every day, unable to access the food they need for energy and growth. Several billion people suffer from nutrition deficiencies because they don't get the right foods. Hunger and poor nutrition have severe and sometimes fatal consequences for people's health, especially for women and children.

nutrition worsens, use of health and education services declines, and productive assets (such as livestock) are sold.

Food security is about supporting poor and vulnerable people to access sufficient, nutritious food, especially during shocks. Emergency food assistance during times of crisis is one way the Australian Government is working to make the poorest people food secure. Through partnerships with NGOs and organisations like the World Food Programme, the government is helping to meet the immediate needs of the vulnerable by providing food aid.

Social protection and safety nets are ways of supporting vulnerable people to access basic necessities such as food and health care. Social protection, such as cash transfers or grants, can address chronic poverty and provide an immediate response in times of crisis. The Australian Government is expanding its support of social protection programs as part of its food security strategy.

### Improving rural livelihoods

The majority of the world's hungry—75 per cent—live in rural areas and most rely on agriculture and farming for their livelihoods. Many struggle to grow enough food to feed their families and they don't earn enough to buy more food when they need it. Those who are able to grow enough food to have surplus to sell often find it difficult to access markets or sell their produce for a fair price. If they can't make money, they won't be able to grow their livelihoods and eventually lift themselves out of poverty. The Australian Government is working to improve the functioning of markets and the regulatory environment in developing countries while addressing issues of access to infrastructure and land. This will create more opportunities for trade and exports. The Australian Government is also supporting business growth by increasing access to microfinance and financial services.

### Boosting agricultural development

Without an increase in food production, efforts to make the poorest food secure will fail. Global food security is intimately linked to the ability of agricultural systems to produce more food. The Australian Government is working with and supporting research institutions, including its own Australian Centre for International Agriculture Research (ACIAR), to boost agricultural production. Australia is also a member and funder of the Consultative Group for International Agricultural Research (CGIAR), which brings together the key international agricultural research centres around the world. By finding ways to improve yields, reduce post-harvest losses and enhance the ability of poor farmers to adapt to climate change, the Australian Government is working to support farmers in developing countries grow the food they need.

ABOVE LEFT AND RIGHT: Produce for sale at a market in Lombok, Indonesia. Photos: AusAID



## Realising dreams

by Georgie Sacks, CARE

Land accessibility is a prerequisite to growing and distributing food. Unexploded ordnance pose an enormous barrier to this access. By clearing land of unexploded ordnance such as landmines, agricultural productivity can be increased and food security restored.

**Jon Kao lives in one of the poorest regions of Laos—the South-East province of Sekong—where she and her family often go hungry because she can’t grow enough food.**

‘I can only grow enough rice to last my family six months on my piece of land,’ she said.

The months without rice are difficult for Jon Kao.

‘The rest of the year I grow sweet potato, cassava and taro, otherwise there would be little for us to eat.’

The biggest barrier for Jon Kao to overcome poverty is the presence of landmines and other unexploded ordnance (UXO) around her home and in the nearby forest. Fear stops Jon Kao and her community from venturing into the

nearby countryside and forest to grow or find food.

‘My greatest fear is a bomb—a bomb is more scary than anything,’ said Jon Kao.

‘There have been two or three people who have died here in the past from UXOs, which means everyone is very careful. Once I did find [a bomb] as big as someone’s hand, so I always feel scared when I go out to do daily things like going into the forest to find food.’

At the age of 48, Jon Kao has lived every day in fear. This fear not only stops her collecting food in the forest, but also from growing her own crops near her home.

During the Vietnam War, there were an estimated 500,000 bombing missions over Laos—many over Sekong. Today, there are still approximately 80 million UXOs across the nation and





‘My dream is to have enough rice all year round. That way I can make more income for my family.’ *Jon Kao*



horrific tragedies continue to occur each year as a result of the danger that lies beneath the soil.

Laos is the most cluster munition and UXO-affected country in the world. Up to 10,000 villages suffer the consequences of these remnants of war, which can be found anywhere and kill or injure people indiscriminately.

Jon Kao was stuck in this cycle of poverty and fear for years until the land around her village was cleared of landmines through CARE’s Reducing UXO Risk and Improving the Livelihoods of Ethnic Communities, a project funded by the Australian Government.

Since 2006, the project has brought new opportunities to areas where locals were previously too scared to expand their crops or collect food from the forest because of UXOs.

Communities in Sekong have also received tools and training to make the most of their newly-available land. Since the project began, rice production has expanded and new cash crops, such as coffee and peanuts, have been introduced. People such as Jon Kao have been given opportunities they never dreamed of.

‘Once I can earn some money, for the first time I will be able to buy food, clothes and medicine for me and my family.’

The village is also benefitting from having a water system, which is reducing the distance and time it takes to collect water for drinking, cooking and cleaning—a time-consuming task usually carried out by women and girls, and one that can prevent them from attending school or earning an income.

There is another, less-visible benefit that is equally as important.

‘When the land is cleared, we aren’t scared anymore. It gives us freedom to get on with life,’ Jon Kao said.

‘My dream is to have enough rice all year round. That way I can make more income for my family.’

With greater food security for her family, Jon Kao can now focus on her livelihood and hopes for prosperity rather than just survival.

ABOVE LEFT: Jon Kao, Kailo Village, Sekong.

ABOVE: A girl grinds rice in Kailo Village, Sekong.

Photos: Josh Estey/CARE



## How does the world manage to feed itself?

by Jonathan Gouy, Economist at AusAID

**Everyone needs food to survive. The Food and Agriculture Organization argues that: ‘food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food, which meets their dietary needs and food preferences’.**

Sadly, many people in the world do not enjoy food security.

Still, many analysts consider that the world produces enough food, in total, to feed everyone. This is quite an impressive feat—at various times in the last 200 years, experts warned the world would run out of food, but this has not yet happened. This is because we have developed new technologies and farming techniques that have increased production without needing much more land, farm workers and seeds. In the future, humans will need to continuously find new ways to increase the production of food.

So, for the time being at least, there is enough food to go around. The main problem is that not everyone can access the food that is produced.

The global food production system has many parts. Like most other activities, it is a business and governments generally

have limited direct involvement in producing food.

Most of the world’s poor households are farming households. They produce much of their own food, sell surplus food to earn cash, and buy foods they don’t produce. Poor people in urban areas cannot produce food and need to earn sufficient incomes to survive.

As people and countries become richer and more urbanised, fewer and fewer people are directly involved in food production. Eventually, most people buy all their food.

More than half of the world’s food (in terms of wheat, rice, coarse grains, oilseeds, beef, poultry, butter, edible oils and sugar) is produced by the US, China, the European Union and India. Most of the world’s consumption of food occurs in those countries too.

There are only a handful of countries that produce more food than they consume. The US, Canada, Russia, Australia and the Ukraine are very large producers and exporters of grains, for example.

No country or region is entirely self-sufficient and all rely on trading food within and between countries. For various reasons, governments use many policies to regulate, control and tax food

production. Trade of food across borders, in particular, is heavily controlled. Some countries tax food imports highly, some limit the amount of food that can be imported, while others entirely ban the import of some foods. These policies might also be complemented by subsidies for domestic producers. The result is food is not necessarily produced in the most efficient and cheapest location, meaning higher prices. Also, it means that less food is traded across borders and so global food production is lower, allowing for fewer mouths to be fed.

Still, food trade is substantial and growing. Countries are slowly working together on agreements that will hopefully result in more food trade.

Food trade is, therefore, a good thing. Without the trade that goes on, famine would be a ‘normal’ daily event in many parts of the world.

Changes in humans’ taste for food have an impact on the sort of food produced. As incomes rise, people tend to eat more meat and fish. For example, Chinese meat consumption per person has increased from around 80 kilograms a year in 1990 to about 140 kilograms in 2009. Rapidly-rising incomes in many parts of the world have also contributed to increasing food prices.





## Backyard gardens in Fiji

by Maggie Boyle, AusAID

Food production relies on many inputs coming together, such as land, skilled farmers to tend the crops, fertilisers and pesticides to improve yields, good weather, and effective supply chains. Farming can be a big business so the availability of credit is also important.

In low-income countries, food production is often not as efficient as it is in richer countries. It is often held back by the limited use of fertilisers and other technologies that boost crop yields, and poor transport and infrastructure that prevents food getting to consumers.

The challenge in low-income countries is to help farmers improve crop yields.

### What can governments do to help?

Governments in developing countries can help encourage the production of more food by improving infrastructure, by improving the links between rural areas, and improving the quality of health and education services.

Governments in all countries could also remove policies restricting the production and trade of food across borders and within countries.

ABOVE: Corn is husked in Malawi.  
Photo: Stephen Morrison/AusAID

**With more than 50 per cent of Fiji's population living in urban settlements and increasing rates of poverty, food security is a challenge.**

People are migrating from rural townships to urban areas and the growing peri-urban population (those living on the urban fringes) face economic challenges such as finding employment to securing housing.

Informal settlements, also known as squatter settlements, litter the outskirts of Fiji's main cities.

An Australian-supported project is teaching communities in peri-urban areas to grow fresh food to eat and, in some cases, to sell for income.

Non-government organisation the Foundation for Rural Enterprises and Development (FRIEND) runs the backyard garden project. The project teaches different types of gardening. For example, communities by the sea find sea crabs getting into their gardens, so they've been shown how to build raised and hanging gardens. There's also training on building and cultivating garden beds, crop rotation and planting a wide range of vegetables.

Salome Silikia is a single mother of three from the Nasowata settlement where 300 people struggle to get by. Salome took part in the program and has grown her own household garden.

'Having my own garden in the little land that I share with my father has seen good changes in our family, especially

the food we eat. I have learnt to plant capsicum, eggplant, pawpaw, bele and rourou here. All of which I can feed my family with.'

Adapting to climate change is also integrated into the project's mix. FRIEND trains participants to preserve food by smoking and drying fish. Participants have also learned to make cooking flours with some seasonal crops.

Project officer Vive Liutaki has been working with community groups in informal settlements over the last two years.

'We go out to the communities and assess their needs. If they are looking at ways of improving their standard of living, we work with them on a six-module program, which includes food security, disaster management and income generation to name a few.'

While food security has been an integral part of the program, earning an income and budgeting have become crucial elements.

Adi Sereana Naika, from Naviyago Village, said: 'I don't go to the market anymore, I plant what I need. Even though my husband has a salary earning \$30 to \$40, now I can manage to save \$10 to \$20 from doing my gardening, selling the extras here in the village and at the nearby school.'

ABOVE: Project participants from Naviyago Village, including Adi Sereana Naika (right).  
Photo: Maggie Boyle/AusAID



## Protecting livelihoods in Zimbabwe

by Phoebe Anderson, AusAID

An Australian Government-supported livelihoods program in Zimbabwe is helping to set up functioning markets so that farmers can sell their produce for a fair price.

**Goats are a common commodity in Zimbabwe. For struggling farmers—often women—and their families, goats are a source of protein. Their sale can also provide valuable income, but only if a market exists where farmers can sell their goats at a fair price.**

Sister Dube has sold five goats through her local goat market. The 52-year-old widow is raising five children and she owns 118 goats and 72 sheep. Sister admits she seldom sold livestock before an Australian-supported initiative helped establish formal and fair markets in her region.

Very few formal domestic livestock markets used to exist in the southern Zimbabwe region of Matabeleland. Farmers struggled to buy and sell live chickens, goats, sheep and cattle because there was no regulated way of trading, which ensured they received a fair price. Buyers struggled to find out whether livestock were healthy or stolen.

The Australian Government-supported Protracted Relief Program has been working with the Khula Sizwe Trust to set up formal markets. The trust helps local communities to set a price for their goats based on the current price of \$1 per kilo. Farmers take their goats to specific venues once a month and sell them to buyers from urban abattoirs. Each goat is carefully weighed on a scale and the weights are openly recorded in an official sales ledger along with the sale prices.

AusAID's program manager in Zimbabwe, Dorothy Mufanechiye, says the trust is facilitating the markets so households can earn cash from their goats.

'It's a one-stop-shop,' Dorothy said. 'The police come to clear the livestock for possible theft charges, the veterinary department comes to clear them for diseases, and the local council comes to collect the levies owed. It all happens in one place. The buyers are able to go away with their new goats, and the families





are able to go away with cash for their goats, which they use to meet household requirements,' she explained.

School fees are \$20 a year per child in Zimbabwe, while the sale of a goat typically reaps \$40. This means Sister Dube's goats have an asset value of about \$4,720 and she helps her family by selling livestock when they require cash.

'I help my children to go to school. I buy clothes and I buy food,' she said. 'And, if they need to go to hospital, I can keep my goats safe because I've been able to build a pen for my livestock.'

The Protracted Relief Program has also prioritised access to safe water and sanitation and hygiene services. This recognises the links between access to clean water and sanitation services, and the health and food security of people in rural Zimbabwe.

Sarah Ncube, from the Chidobe Ward in Zimbabwe, used to struggle to produce enough food for her family and to pay for her children's school fees.

'We can take care of our own health issues, grow better food, manage our savings, assist others and work for ourselves. This is what we've learned from the Protracted Relief Program.' *Sarah Ncube*

In 2008, she came across the Protracted Relief Program that helped her grow a wider variety of crops. Through the program, she was able to buy seeds and other agricultural supplies such as fertiliser.

After just a year, her family harvested enough grains—including sorghum, millet and maize—to fill their stomachs every day. She's now selling the crops they don't eat for cash, providing \$30–\$50 in income a year.

Through the program, Sarah participated in a health and hygiene program to help her keep her new collection of pots and plates spotlessly clean. She's joined a savings and loans

group to help her manage her finances and she's also helping to manage the local borehole and water pump so the wider community can benefit from access to a reliable water source in the drought-ridden area.

ABOVE LEFT: Sarah Ncube at her home in Zimbabwe. Photo: Phoebe Anderson/AusAID

ABOVE RIGHT: A family's weekly supply of food under the Protracted Relief Program. Photo: Kate Holt/AusAID



More at Focus online

# Agricultural research to grow food security

by Nick Austin, Chief Executive Officer of the Australian Centre for International Agricultural Research

**Half the world's poor are smallholder farmers, with another 10 per cent of those living in poverty relying on fisheries, forestry or pasture resources. In many cases, these farmers have not benefitted from technological advances that have raised yields in the developed world.**

The potential to raise yields is great despite the barriers that must be overcome. Agricultural science has already demonstrated its potential through the Green Revolution of the 1960s.

This revolution introduced improved crop varieties in India and elsewhere, lifting the yields of smallholder farmers. It was led by scientists and contributed to a transformation of agriculture that significantly lifted food production.

Agricultural science has continued to lift yields since the 1960s. Most of the advances that have lifted yields since the Green Revolution have not reached many of the world's poor smallholder farmers.

With limited technologies and knowledge flowing to developing country agriculture, growth has been at a slower rate than in western countries. Smallholders miss out and the potential for agriculture to become a catalyst of broader growth is lessened.

Broad-based economic growth in developing countries is achieved by focusing on the largest sector—agriculture. In most developing countries, between 60 to 80 per cent of the population are employed in, or reliant for their livelihood on, agriculture.

Achieving productivity gains in this sector lifts incomes, reduces poverty and creates opportunities in other sectors, through freeing up of labour and generating growth in communities.

As Australian history has shown, the benefits of investment in agricultural research can be substantial. Productivity growth has accounted for the entire increase in output by the Australian agricultural sector over the last 30 years and has produced sizeable benefits—an estimated productivity dividend of more than \$170 billion.

A number of drivers have underpinned this growth. New knowledge and technology is one. The spillovers from this knowledge and technology may have also contributed to the ability of farmers to better organise production—another driver of productivity.

The challenges that prompted the Green Revolution, and demonstrated the role of agricultural research as a powerful driver of poverty reduction, are greater and more complex today. They include climate change impacts, the increased pressures on available land, and increasing competition for inputs such as water. At the same time, demand for outputs is rising with competition from biofuels and changing dietary preferences.

These factors all impact on those least able to adapt—smallholder farmers.

Helping lift these people out of poverty requires the delivery of productivity gains without imposing additional costs. Science must lead this challenge, leveraging scientific knowledge and developed-world expertise.

Agricultural research, appropriately targeted to the needs of developing countries, can lift production. Designing the appropriate response allows the technology and knowledge developed in Australia to be transferred to those smallholders who can benefit from it, throughout the Asia-Pacific region and Africa.

The Australian Centre for International Agricultural Research (ACIAR) facilitates partnerships between Australian research experts, and their counterparts in developing countries, to identify the problems holding back agricultural growth and transfer the knowledge and technologies that overcome those problems.

ACIAR is making a genuine contribution to meeting this challenge, in our region and beyond. Through this cooperative effort, Australian science—a vital driver of achieving food security, contributing to the Millennium Development Goals and ending poverty—is making a difference.

RIGHT: Farmers work in a rice field in Lombok, Indonesia. Photo: Josh Estey/AusAID







## Keeping abreast of diseases in Africa

by Dr Mary Young and Dr Robyn Alders, KYEEMA Foundation

**For thousands of years, humans have domesticated animals to feed themselves. But this can come at a cost to both human and animal health. Managing diseases has always been a challenge for producers and consumers. Improving animal health benefits food security.**

Chickens are one of the few assets owned by many households, especially those who live on or below the poverty line. They are generally owned by women and provide a cash income, a key source of nutrition, and social capital through their use as gifts and in ceremonies.

Newcastle disease threatens to destroy this. The disease has been an ongoing problem, killing between 50 to 100 per cent of chickens where outbreaks occur. Past attempts to control Newcastle disease in village chickens had limited success. Most of the vaccines needed to be refrigerated and were only available in large pack sizes making it difficult for rural farmers to afford and store. Farmers were also sceptical about the use of vaccines because they did not understand the benefits.

The Australian Centre for International Agriculture Research (ACIAR) supported the University of Queensland to research and develop a vaccine that was less reliant on

refrigeration. The I-2 vaccine was developed to help prevent outbreaks and the master seed for making the vaccine has been made available to governments at no cost. AusAID built on the ACIAR research to support the implementation of the Southern African Newcastle Disease Control Project from 2002 to 2005.

Through the International Rural Poultry Centre of the KYEEMA Foundation, AusAID continues to support the expansion of community-based Newcastle disease control programs using the I-2 vaccine in Malawi, Mozambique, Tanzania and more recently Zambia.

Staff from government-run veterinary laboratories are trained to produce and distribute the vaccine, and to run effective vaccination campaigns to educate farmers about the importance of disease control.

The vaccination of village chickens against Newcastle disease has resulted in an increase in village chicken production. Proceeds from the sale of chickens are being used to pay for school fees and to buy medicine, clothes and other essentials. Some people are using the money they earn to 'trade up' and buy a goat. More chickens also means improved household nutrition and healthier families.

**ABOVE: A young girl carries her chicken to be vaccinated. Photo: Kate Holt/AusAID**





## Research rewards

by Cathy Reade, Crawford Fund

The ‘perfect storm’ that caused the food price crisis back in 2008 has not disappeared. Recent natural disasters have highlighted the need for greater investment and research and development into agriculture to boost production and reduce poor farmers’ vulnerability. At a recent Crawford Fund conference on food security, it was reported that an independent analysis of 120 Australian agricultural research projects had proved their total benefit was \$31.6 billion from an outlay of \$372 million. Here are some Australian-supported examples of agricultural research currently under way. These examples focus on helping poor people to cope with climate change, land degradation, loss of biodiversity, rising food prices, the energy crisis, and a world population explosion.

### Rice rewards

Rice is the most important food staple for humans with more than three billion people eating it every day. It is particularly important in Asia where the supply of rice is closely linked to food security and where ensuring there is enough affordable rice for everyone is the key to addressing poverty. India is the world’s second largest producer of rice yet many Indian farmers, particularly those with land least-suited to rice production, suffer crop losses because of flooding every year. Through a research project that took 20 years to complete, the International Rice Research Institute developed a rice variety that, unlike any other, can survive for up to 17 days under water and still produce rice grain. This submergence-tolerant rice is being adopted at unprecedented rates, proving its capacity to improve rice production across Asia and to improve the lives of farmers and their families. Mini-kits containing five kilogram packets of the so-called ‘scuba rice’ seeds are currently being distributed to farmers across India. Mostafa Kamal is a Bangladeshi farmer recruited to test the submergent rice on the six-hectare farm he shares with his brothers. The farm must feed 22 family members. While a large farm by Bangladeshi standards, it suffers heavy

losses because of flooding every four out of five years. ‘In the past, many of my plots became fallow because they were flooded too often,’ said Mr Kamal. ‘If we can cultivate on these plots, it will help us produce rice to sell on the market.’ When 95 to 98 per cent of the plants recovered after the next flood, Mr Kamal was so encouraged he planned to give away—not sell—a kilogram of flood-tolerant seeds to each of his neighbours who lost their entire crops.

### Tilapia a GIFT

Aquaculture, or fish farming, is the world’s fastest-growing food production sector. In South-East Asia, tilapia farming is a major contributor to this growth. For more than two decades, the WorldFish Center and partners have worked together on the Genetic Improvement of Farmed Tilapia (GIFT) project. This project has resulted in both the development of an improved tilapia strain and new technology that can be applied to the production of tilapia and other species. Scientists at the centre have proved that the new strain outperforms farmers’ strains in Asia, with growth rates improving between 30 and 80 per cent with no changes to the survival rate. These strains are being grown across





Asia, which produces about 80 per cent of all farmed tilapia. The technology is now being taken to Africa with remarkable success in Egypt, Ghana and Malawi.

#### More maize'ing results to come

Maize is an important source of food, especially for poor people in southern and eastern Africa. Sadly, not enough is grown to go around. Legumes are a rich source of protein and vitamins. They also act as a natural soil fertiliser and can be sold for cash. As a result, legumes and maize are essential to improving food security and incomes. Farmers in five African countries are getting the opportunity to improve their maize and legume crops to levels closer to what's experienced in other parts of the world. This is thanks to Australian-supported program, SIMLESA, led by the International Maize and Wheat Improvement Center. Scientists from Australia, Ethiopia, Kenya, Malawi, Mozambique and Tanzania are working with farmers to find ways of boosting crop yields in the face of pests, droughts and diseases. The program is also introducing new farming techniques such as 'minimum' or 'zero' tillage—where seeds are planted without ploughing to help retain moisture, reduce soil erosion and cut the drudgery of work involved.

It's hoped that this four-year program, an initiative of the Australian Centre for International Agricultural Research (ACIAR), will increase small-scale farmers' food production by 30 per cent within the next decade. The program is targeting 500,000 farms in the five countries, which is expected to increase the food security of three million people in eastern and southern Africa. During a SIMLESA farmers' field day with about 300 farmers in Embu, Kenya, Erasmus Njiru Clement talked about the farm he and his wife have. Their farm is being used as a pilot for the SIMLESA program. They're trying out manure, fertiliser, new tillage practices and intercropping. 'The methods we are using are better from the methods we were using, and we are expecting a better yield than the former days,' Erasmus said.

ABOVE LEFT: A field test of submergent rice in Bangladesh. Photo: IRRI

LEFT: Ayele Bedaso with haricot beans monitored in a SIMLESA intercropping trial in Boset district, Ethiopia. Photo: John Dixon/ACIAR

ABOVE: Harvested tilapia in Bangladesh. Photo: WorldFish Center



# Mr Tony—turning deserts into food bowls

by Rob Francis, World Vision Australia

For the last three years, the Australian Government has supported Farmer Managed Natural Regeneration work in West Africa through its contributions to World Vision Australia projects.

Across the Sahel region of Africa they call him Mr Tony—a gently-spoken, gracious and religious man who has devoted his entire adult life to helping the poor grow enough food to feed themselves and have some left over to earn a living. From Senegal to Niger, from Uganda to Ethiopia and beyond, he is greeted with huge hugs of affection everywhere he goes.

Mr Tony is Tony Rinaudo, the Natural Resources Research and Development Advisor at World Vision Australia. He is also a pioneer. Twenty-five years ago he invented a conservation farming system called Farmer Managed Natural Regeneration and it is now spreading across the globe.

In Niger alone, it has transformed five million hectares of degraded cropping and grazing lands where crops failed three years in five leading to massive famine and loss of life. It has multiplied yields by up to five times, producing an extra 500,000 tonnes of grain annually, feeding an extra 2.5 million people, and doubling farmers' incomes. As a bonus, it has turned the desert into farmland again; some native wildlife and plant life have returned, water tables are back up to old levels, and it has helped communities deal with climate change.

The Sahel is a band of marginal savannah land that runs across the African continent immediately south of the Sahara Desert. It encompasses parts of Senegal, Mali, Burkina Faso, Niger, Chad, Sudan and Ethiopia. Most of its



people are subsistence farmers and it is not an easy place to live. Poverty and poor farming practices have turned productive land to desert leading to the erroneous, yet nevertheless apt, description that 'the sands of the Sahara are moving south'.

Armed with a Bachelor of Rural Science, Tony arrived in the parched farmlands of Niger in 1981. The country was besieged by drought and famine. Tony soon assessed that a lack of trees was the problem. Trees are the glue that holds the land together; trees shade the soil and grazing animals from fierce heat, and they help keep it fertile.

So he started planting, but the trees kept dying. Then one day he noticed

tufts of growth here and there pushing through the baked croplands. On further investigation, he found it was re-growth from tree stumps and by pruning them back to a couple of stems, the trees would flourish. In fact, what Tony found was 'an underground forest' just waiting to bounce back to life.

The secret to Farmer Managed Natural Regeneration is to select the strongest stems and prune the rest of the bushy tufts away, which immediately adds organic matter to the soil. With a small amount of care—pruning off low branches a couple of times a year—these stems soon grow into trunks with branches full of foliage, which can be





*'If you work with nature instead of fighting against it all the time, nature will work for you.'*

*Tony Rinaudo*

used for shade, animal fodder, or it can be harvested for timber.

Called coppicing and pollarding, this time-old tradition has been around for centuries, but poverty, poor farming practices, and a lack of legal ownership of trees had led people to forget.



One of the great benefits of this method is its adaptability. In the Sahel, an eight-month dry season can mean pastures are completely depleted, but by having trees, grazing animals can make it through by feeding on leaves and pods at a time when no other food is available. It can be used to combat deforestation and can help empower communities as it creates social cohesion, helps establish user rights through work with local government and regulatory bodies, and develops beneficial business models.

Farmer Managed Natural Regeneration lends itself to sustainability—it is low-cost, rapid, not dependant on external inputs, and easily replicated. In fact, some would consider it a mystery as to how more than 50 per cent of Niger's farmlands became reforested over 20 years without government support, minimal NGO intervention, and the absence of a master plan or even budget.

But Rinaudo argues that it is no mystery at all: 'Farmers simply did what they have done for generations—they just looked over the farm fence at what their neighbours were doing and talked about it. And when farmers are on to a good thing there is no holding them back.'

Even so, there are a few foundation stones that greatly enhance the sustainability of this method and the main

one is user rights, or ownership, so that farmers can be confident they will benefit from the trees they nurture.

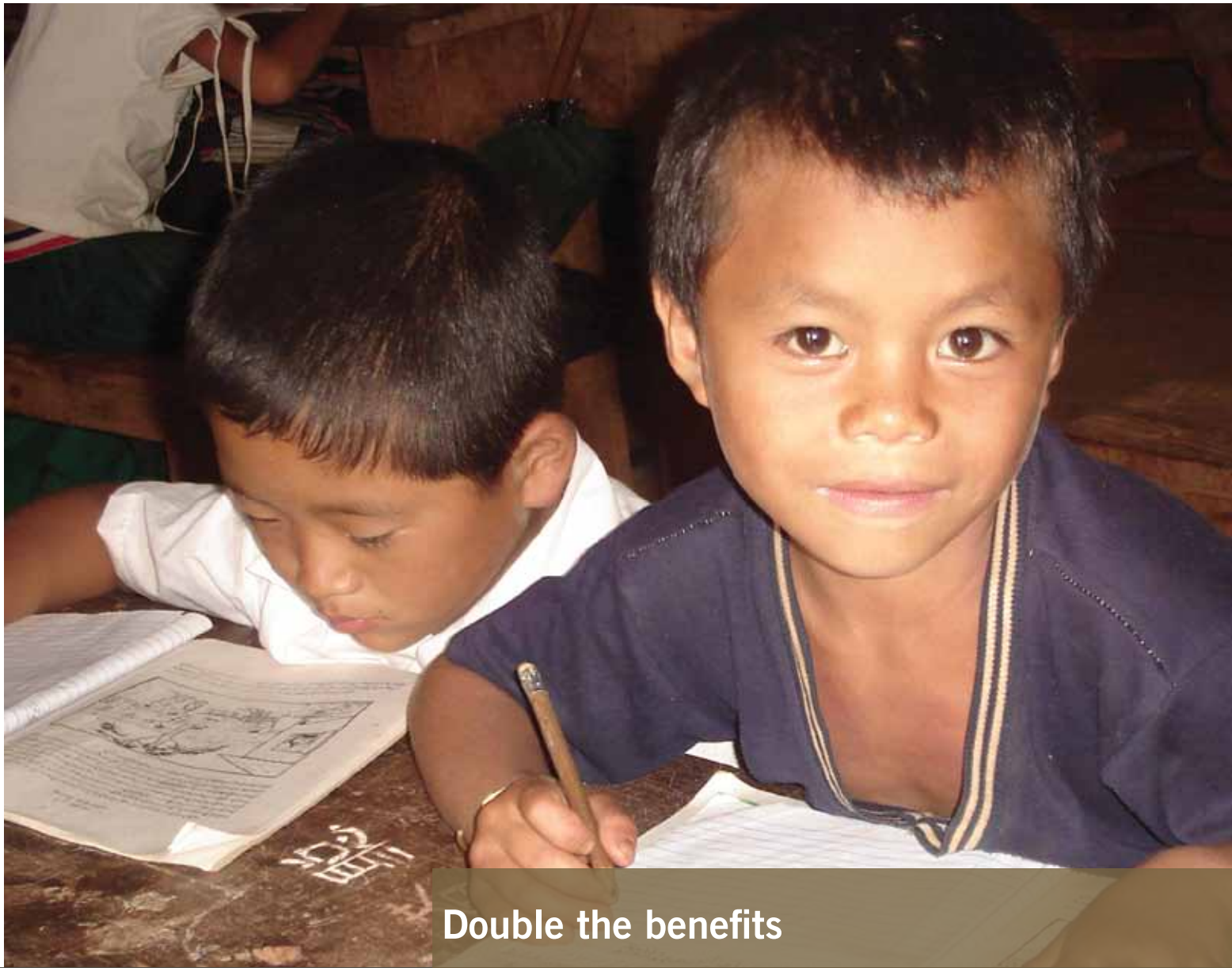
Farmer Managed Natural Regeneration is about winning hearts and minds because at its core it is an affront to both traditional and modern land management. 'Everybody knows that trees compete with crops and pastures and therefore must be removed,' chants Mr Tony, tongue firmly in cheek. 'And so starting a Farmer Managed Natural Regeneration movement is about winning credibility, tactfully challenging long-accepted practices, and creating an environment in which it's okay to experiment together, make mistakes, learn together and implement change.'

Although there are challenges, millions of hectares have been transformed through Farmer Managed Natural Regeneration. It is low-cost and it is being driven by the farmers themselves. It is creating social cohesion, offering new business structures, building resilience against food shortages and prices, and creating an environment that will withstand climate change. No wonder they hug Mr Tony whenever they meet him.

ABOVE LEFT: Haildou Gangara inspects his garden after Farmer Managed Natural Regeneration.

ABOVE RIGHT: Tony Rinaudo prunes a tree.

Photos: World Vision Australia



## Double the benefits

by Jillian Ray, AusAID

**It is estimated that around five million Burmese people don't get the food they need each day. The Australian Government, through its support for the World Food Programme's Food for Education scheme, is helping to tackle this problem and, at the same time, attracting more kids to primary school.**

Aik Sam never imagined he would be able to complete primary school. Now 10 years old, Aik Sam dropped out of Ho Ko Loi Ham School in Lashio Township, northern Burma, when he was just six. His father had passed away and his mother, Daw Aye Moon, simply could not afford to send Aik Sam to school. Education is free in Burma, but the transport, uniforms and books are often too costly for many families to afford.

Daw Aye Moon was battling to make ends meet as she raised her three sons.

She earned a meagre living for her family off a tiny area of upland property where she grew maize and rice. 'At that time, we did not have enough food to eat. We ate whatever we could afford and never more than two small meals a day,' Daw Aye Moon said.

However, things changed for Aik Sam and his family four years ago when the UN World Food Programme's Food for Education scheme started in their village. The headmaster gathered all the primary school children together and explained that if they went to school regularly, they would receive 10 kilograms of rice each month. This was the incentive Aik Sam and his family needed to re-enrol him in primary school.

Aik Sam's mother was overjoyed to be able to send her son to school again and told World Food Programme staff that not only was Aik Sam going to school, he was also earning food for his family.

'He never fails to go to school and even wants to go when he is not feeling well. There are many children like Aik Sam that are able to go to school again because of this program.'

Aik Sam is one of more than 800,000 children and family members who benefited from the food assistance program in Burma in 2010 and these benefits were twofold.

Regularly providing extremely poor families with food provides a safety net against hunger while, at the same time, encouraging more children to enrol in and regularly attend primary school. Since the program started in Burma, the primary school enrolment rate has increased by 17 per cent in target areas. For families that cannot otherwise afford to send their children to primary school, this helps to break the cycle of poverty that could otherwise continue through generations.



The World Food Programme, with Australian Government support, is helping to feed the five million Burmese who don't get the food they need and, at the same time, encouraging children to go to school.



In conjunction with its other work, the World Food Programme will provide food assistance to close to two million of the most vulnerable people in Burma in 2011. This level of outreach would not be possible without the support of the Australian Government. Australia is the World Food Programme's largest donor in Burma, providing almost \$38 million over the last five years.

The World Food Programme buys most of its rice and other commodities from areas of surplus within Burma. By doing so, the program has also stimulated local economies by increasing local agricultural production and improving marketing opportunities for growers and small traders.

ABOVE LEFT: Aik Sam at school. He has been able to go back to school thanks to the Australian-supported UN World Food Programme project called Food for Education. Photo: WFP

ABOVE CENTRE: LIFT participants plant rice in Klar Ohn Pin Su Village. Photo: U Moe Naing Oo/ Lutheran World Federation

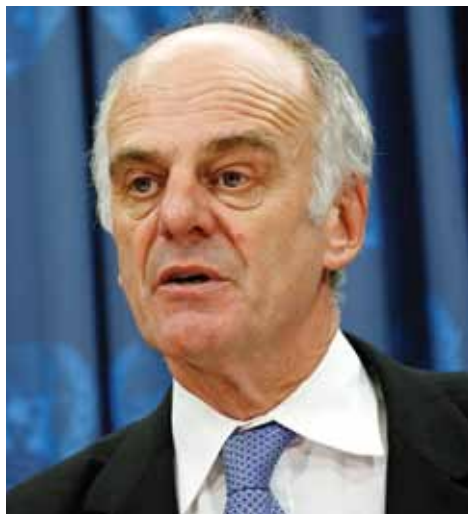
## Australian support

The Australian Government is helping to build more sustainable food security solutions in Burma.

Burma has great potential for improved agricultural production. Further development of this sector will help millions of rural people out of poverty, but the lack of technical know-how, high cost of farm inputs like seeds and fertilisers, and significant levels of household debt are just some of the constraints preventing agricultural growth.

Recognising this, Australia and other countries have created the Livelihoods and Food Security Trust Fund. Known as 'LIFT', the fund provides support to UN agencies and NGOs who work with communities and farmers. These organisations help to improve agricultural techniques and technology use, help farmers gain better access to markets, and increase the availability of sustainable microcredit. LIFT also provides training to help smaller Burmese NGOs to improve their own ability to support agricultural growth. While only in its first year of operation, LIFT has already reached 750,000 people.

ABOVE: A woman checks on her betel leaf crop in War Boe Gone Village. Photo: Khun Issac/ADRA



## Ensuring food security for all

By Dr David Nabarro, UN Secretary-General's Special Representative on Food Security and Nutrition

**In 2008, the world's food systems broke down. Prices rose rapidly provoking instability and riots in more than 30 countries. Shortages of key crops on global markets reduced the volumes being traded and this led to increases in prices. The problem was exacerbated when governments of some countries banned exports of foods; although this may have helped improve their own people's access to food staples, it resulted in higher prices internationally.**

The UN system responded quickly in 2008. It brought together the heads of 22 different international organisations, including the Food and Agriculture Organization, World Food Programme, World Trade Organization and the World Bank, to form a High-Level Task Force on food security. The Task Force works with governments to ensure immediate food assistance reaches those most in need and to revitalise smallholder agriculture as a force for reducing hunger and poverty, and for enhancing sustainable environments.

The Task Force's first task was to analyse the drivers of the price swings. The underlying cause of volatile food

prices is fragility of supplies in the face of increasing demand. This is increasing continually because of population growth and increasing affluence, because of the need for animal feed, and because some nations are encouraging the use of cereal crops to produce biofuels. Supplies are increasingly tight because of insufficient investment in agriculture, especially in poorer nations. Productivity is reducing as a result of climate change and environmental degradation. The resulting food shortages cause hardship for poor people, especially children.

The Task Force's second task was to develop and agree a Comprehensive Framework for Action—a joint strategy for responding to food insecurity. The framework drew on the work of several sectors: agriculture and food, public health, social protection, education and crisis response. The framework's multi-sectoral approach focuses on local-level needs, and immediate and long-term responses.

The Task Force's third task was to make its conclusions widely available, which it did with a report. The report proposed action on two tracks. The first was to meet the immediate needs of vulnerable populations through emergency food assistance and nutrition interventions and safety nets, increasing

food production by smallholder farmers, adjusting trade and tax policies and improving local and regional markets, and managing the macroeconomic implications of responses to food insecurity. The second track focused on building long-term resilience that contributed to global food and nutrition security. This was through the expansion of social protection schemes, long-term investments in smallholder farmer food production, better management of ecosystems for sustainable food production, and improving the performance of international food markets. At country level, the framework requires strengthened information and monitoring systems.

The Task Force also encouraged governments and development partners to work differently—developing inclusive partnerships for food security that improved smallholder productivity. The Task Force emphasised the need to tackle food security in four dimensions: availability, access, utilisation (nutrition), and stability.

At the G8 meeting at l'Aquila in 2009, donor governments and development agencies pledged financial support and initiated major regional efforts, especially in Africa. Many developing country





A third challenge is that political changes and instabilities contribute both to supply shortages and high prices. We should do what we can to avoid market ‘thinning’.

The fourth challenge is that we need to ensure that higher prices turn out to be an opportunity for farmers, including smallholders, to increase production and income. Despite widespread appreciation that investing in agriculture is one of the most efficient ways to reduce poverty, there is still insufficient investment in sustainable agriculture and food security in poor countries, and this may result in unsustainable production systems and low productivity.

The upswing in food prices has already led to millions of people swelling the ranks of the poorest in our world. Policymakers are trying to mitigate the impact of the price rises, and of other factors like climate change, on poor people. This means increasing the coverage of social protection and safety net programs. Thanks to their prudent investments, several countries have seen record harvests with stable grain prices. The world is not in the grip of a global food crisis, but poor people are facing additional hardship as a result of the recent rises.

The UN’s High-Level Task Force is now urgently working with governments, civil society, businesses and researchers as they seek long-term increases in the volume and efficiency of investments in climate-smart agriculture. They’re working to increase the efficient use of water and energy, reduce food price volatility, empower farmers’ organisations, respond to particular needs of women farmers, improve the functioning of food markets, increase local and regional trade, while ensuring social protection and insurance for those at particular risk, and contributing to climate mitigation.

**FAR LEFT:** David Nabarro briefs the press.  
**Photo:** United Nations

**MIDDLE:** Olive Sabila Chemutai tends her tomatoes on her homestead in Kapseror Village, Uganda.  
**Photo:** Kate Holt/AusAID

**ABOVE:** A woman harvests some of the vegetables she has grown in a garden in Cape Town, South Africa. **Photo:** Kate Holt/AusAID

governments revitalised their own agricultural investment strategies as a base for poverty reduction and sustainable development. They sought to build public-private partnerships with real benefits for smallholder farmers and they built safety nets to help vulnerable people avoid hunger and malnutrition.

Following that period, there has been growing political recognition of the links between agriculture and food security on the one hand, and nutritional outcomes on the other. Poor nutrition between conception and a child’s second birthday can be a handicap for life: the risks of educational underachievement, reduced earning capacity and chronic disease in later life are all increased.

Now—in 2011—food prices are rising again. This is a cause for concern given

that prices are climbing even in countries that report good food stocks. We also know that the challenges and choices faced by food-insecure communities are serious and difficult.

One challenge is that poor households spend more than three quarters of their income on food. When prices go up they tend to cut back: women and children are the worst hit. Recently, the World Bank estimated that 44 million people have been affected by the latest food price rises. How do we best convey this stark and depressing fact?

Another challenge is that agriculture is increasingly at the mercy of the weather: the underlying risks of harvest failure will continue to increase as a result of global warming. Does this issue need specific attention?



# Breaking the poverty cycle

by Shaheen Mahmud, AusAID



In Bangladesh, the Australian and UK governments jointly support the Chars Livelihoods Programme. The program helps one of the poorest and most vulnerable groups in the world—those living on the chars.

Char is a Bangla word for isolated river islands, which form throughout Bangladesh's extensive river systems.

Given how remote the chars are, there is poor access to schools and health care. The communities living on the chars often have to travel long distances to the mainland to access these and other essential services. There is no electricity and opportunities to earn a living—either through farming or employment—are very limited. Annual flooding and erosion mean that the homes

and assets of char dwellers are at risk of being washed away. As a result, these people are some of the poorest and most vulnerable in the world.

Rahima lives on a char on the Jamuna river. She is a participant of the Chars Livelihoods Programme. Her husband is a day labourer (earning around \$1.50 a day) when work is available. They have four grown children. Before her involvement in the program, Rahima's family could not afford three meals a day. In 2007, Rahima's family plunged further into poverty when her eldest daughter married; they had to take a loan to pay a dowry of \$211 to the groom's family. Although illegal, paying a dowry is a traditional and common practice in rural Bangladesh.

Following her daughter's marriage, a dispute broke out when the groom's family demanded more money. As Rahima's husband was not able to pay

any more, their daughter was forced to leave her husband's house, but only after being severely beaten. She returned to her parent's house to live; one more mouth to feed. With no access to legal services for many poor in Bangladesh, this sad tale is unfortunately common in Bangladesh.

On joining the program in 2008, Rahima was given a cow and training on how to care for her cow, and on how to grow vegetables for her family to eat and sell. She also received vegetable seeds and fertiliser, and a small stipend for 18 months. To prevent her assets being washed away, the program elevated her house plot above the flood level. Rahima also received training on social and legal awareness. She learned that paying or asking for a dowry was illegal and she was also made aware of the negative impact this practice has, particularly on poor families.





The Chars Livelihoods Programme aims to lift 300,000 people out of extreme poverty by 2016. The Australian Government is contributing \$15 million to this effort.

After one year of participating in the program, Rahima's cow had calved and she was able to sell 10 litres of milk each day at the local market. With the availability of milk and homegrown vegetables, Rahima's family had better access to nutritious food. After two years, the value of Rahima's assets had grown considerably as had her family's resilience to poverty. Since joining the program, Rahima has saved 10 to 30 taka (the equivalent of 15–45 cents) every week with a village savings group formed with other participants.

'When the calf is old enough to sell, I will use the money from the cow and my savings to lease some farming land to grow rice,' Rahima said.

This will diversify her source of income and help her break the cycle of poverty.

ABOVE LEFT: A woman harvests from the garden she developed with support from the Chars Livelihoods Programme.

ABOVE RIGHT: A woman carries her child while tending to the cow she received as part of the Chars Livelihoods Programme.

Photos: Mahmud/Map/CLP

## Bangladesh: the bigger picture

Social protection is emerging as an effective approach to reducing poverty and inequality in developing countries. In Bangladesh, 25 per cent of the population (38 million) is extremely poor. These people are highly 'food insecure' and can only afford a fraction of their daily food needs. They have not benefited from Bangladesh's economic growth and have been bypassed by mainstream development programs.



## Are these seeds safe for eternity?

by Julie Stalker, AusAID

**Food security has become a global issue. It is no longer a concern for just developing countries, but a worldwide issue. So, is a global seed vault the saviour for all food needs of the world?**

Julian Laird, Director of Development and Communications at the Global Crop Diversity Trust, is certain that the Svalbard Seed Vault is a vital extra step in preserving global seed collections and strengthening global food security.

'The vault provides perfect conditions for seed storage. No seeds can survive forever, however, and so samples in Svalbard will need to be periodically refreshed. It is anticipated that this will be done at the same time that gene banks refresh their main collections, producing extra seed to send to Svalbard. I should also point out that the vault is a very small part of the trust's overall program

and that there are also crops (vegetatively propagated crops such as yam, banana, cassava) which cannot be stored as seed and which will not benefit from the vault,' he said.

The majority of the more than 1,400 seed collections (or gene banks) around the globe are still vulnerable not only to natural catastrophes and war, but also to simple and avoidable disasters such as mechanical failures. The Svalbard Vault was established to serve as a backup storage facility.

'The vault has also been built with worst-case climate change predictions in mind and so is high enough up the mountain to be above any possible rise in sea level, and is far enough inside the mountain to benefit from the protection of the permafrost in all those scenarios,' said Mr Laird.

'The vault houses some 650,000 unique samples and, after only three

years, it is the most diverse collection of seeds anywhere in the world. It is still growing rapidly.'

The trust, along with the Norwegian government, operates this specially-constructed site located 1,300 kilometres from the North Pole. Svalbard was officially opened on 26 February 2008. It is a low-tech, unmanned facility that does not have the capacity to store anything other than seeds. To date, there has not been a need to access any of the stored seeds.

Australian Ambassador to Denmark James Choi experienced the vault firsthand when he accompanied Wimmera (Victoria) grain farmer Dr Tony Gregson to deposit Australia's first seed consignment in mid-February this year.

'It was a privilege to be part of this historic occasion. The Nordic seed vault is a visionary endeavour with a vital objective. The commitment to this project



The Svalbard Seed Vault is a vital extra step in preserving global seed collections and strengthening global food security.



of Dr Tony Gregson and the Executive Director of the Global Crop Diversity Trust, Cary Fowler, is remarkable.'

Australia will contribute \$21 million to the trust by 2013 and has provided \$17.5 million since 2003. The Grains Research and Development Corporation has also pledged to contribute US\$5 million.

During an interview with the Australian Farm Journal, Dr Gregson said the seed vault would protect Australian seeds from destruction in the event of a disaster such as fire or flood.

'We're doing it as an insurance policy so that this pretty unique germ plasm is actually preserved in a very, very secure place,' Dr Gregson said.

'It really is very important from the point of view of global food security and Australia's contribution to that.'

The first consignment of seeds, from the Horsham Australian Gene Bank Grains Collection, includes 301 pea

varieties from China, and 42 chickpea varieties from the Middle East, which were imported to Australia about 35 years ago. Some of the chickpea lines are now considered to be very rare.

The box of seeds has been sealed by the Australian Quarantine and Inspection Service so that the seeds can be returned to Australia quickly for use. Australia retains control of its seeds at the vault and can retrieve them easily.

The seed vault is not the only program that preserves crops. The trust has another program at Leuven in Belgium that holds an international collection of bananas under the International Treaty on Plant Genetic Resources. This program uses liquid nitrogen to 'cryo-preserve' bananas. To date, this collection has not been called on to replace lost samples.

'The reality is that despite being called the doomsday vault in the media and linked to apocalyptic scenarios, the

vault will probably prove most valuable in redressing the attrition by less glamorous dangers such as the widespread underfunding of gene banks and the lack of importance placed on the conservation of our crops' genetic diversity,' Mr Laird said.

Will the Svalbard seed vault be the saviour for all food needs of the world? Let's hope not. Let's hope that it is used just as it is intended, as a backup for a disaster.

ABOVE LEFT: Seed vault entrance as seen at dusk. Photo: Mari Tefre/Global Crop Diversity Trust

ABOVE RIGHT: (left to right) Cary Fowler, Dr Tony Gregson and Australian Ambassador James Choi prepare to place Australian seeds inside the seed vault. Photo: Tone Sund/ Global Crop Diversity Trust

## Australia Awards making a difference

In 2011, more than 2,800 individuals from developing countries, 700 more than in 2010, will start study and professional development in Australia before returning home to contribute to the development of their countries.

### Cao Dinh Hung



**Cao Dinh Hung completed a Masters at the University of Technology in Sydney through an AusAID scholarship. He has since completed a groundbreaking PhD at the University of the Sunshine Coast in Queensland.**

The Vietnamese student made a breakthrough in the method of propagating tropical trees that are valued both for industrial production as well as environmental protection.

He began his PhD at the University of the Sunshine Coast a few years ago because of its reputation as Australia's leading university for tropical forestry research. 'I want to assist in reducing deforestation while establishing and improving plantations in our countries,' he said.

Working with Associate Professor Stephen Trueman, he discovered a way of using synthetic seeds to create new eucalyptus and African tree seedlings. Both are difficult to propagate using the traditional method of cutting.

Cao Dinh Hung's process involves inserting a small tree bud into a gel bead. After treatment in the laboratory,

the bead grows new shoots and roots, and can be propagated in nurseries. This process creates stronger trees and increases the number produced a year from 100 to about 10 million.

Cao Dinh Hung, a graduate of Hue University of Science in Vietnam, plans to contribute to the sustainable management of forests in his country.

A large number of AusAID alumni from Vietnam have also studied and work in the area of natural and physical sciences and climate change. They include Vu Anh Tuyet, a Program Analyst at the Clinton Climate Initiative, and Nguyen Van Kien, a Climate Change Advisor at the UK Department for International Development, who both received AusAID scholarships for study in Australia.

### Telma Corte Real de Oliveira



**Telma Corte Real de Oliveira is currently studying a Masters of International Public Health at the University of New South Wales in Sydney as part of an Australian Development Scholarship.**

Due to her academic success, Telma was recently nominated for the New South Wales International University Student of the Year Awards.

'I'm very happy with my achievements. They signify to me that through hard work and dedication in study, as Timorese we can compete with students from other countries too,' said Telma.

In addition to her scholarship, Telma was selected for a Prime Minister's Pacific-Australia Award. These awards provide practical work placements and leadership support in Australia.

Before coming to Australia, Telma worked at the World Health Organization in East Timor. When she returns home, she would like to work for the Ministry of Health to improve maternal and child health. Her Prime Minister's Pacific-Australia Award placement and studies will help her achieve this goal.

A number of AusAID alumni have gone on to work in senior levels in East Timor, including the current Minister of Health (Dr Nelson Martins), the Minister of Education (Dr Joao Cancio Freitas), and the Minister for Infrastructure (Pedro Lay).

Telma recognises the importance of the development awards provided by AusAID. 'This scholarship program provides great benefit to Timorese to increase their level of qualifications and have the experience of studying in Australia. When these students complete their studies, they will be able to make a significant contribution to the development of Timor-Leste.'



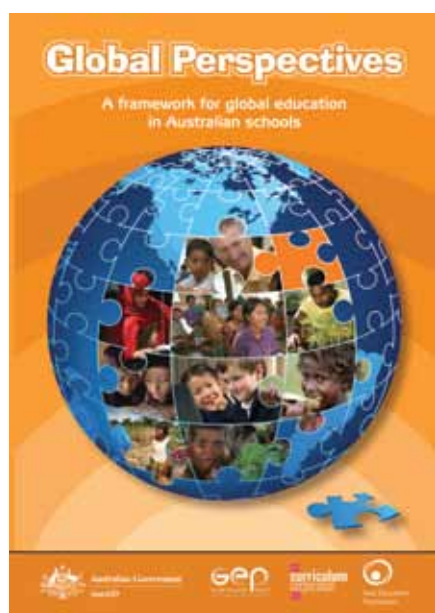
More at Focus online



# GLOBAL EDUCATION

## Global perspectives

The Global Education program produces curriculum material to support the teacher professional development program. The latest posters are available from [books@ausaid.gov.au](mailto:books@ausaid.gov.au)



Global integration and international mobility have increased rapidly in the past decade. As a consequence, new and exciting opportunities for Australians are emerging. This heightens the need to nurture an appreciation of and respect for social, cultural and religious diversity, and a sense of global citizenship.

*Global Perspectives: A framework for global education in Australian schools* describes the nature and purpose of global education at all stages of schooling in Australia. It includes a framework for global education, recommendations about how to integrate global perspectives within and across learning areas, and advice for teachers and school leadership teams about how to implement the framework for global education at a school level.



A new DVD resource has been developed to support the framework document. Developing Global Citizens models and promotes the integration of global perspectives across the curriculum. It fosters active global citizenship as students explore people's rights to basic needs and responds to the complex issues of globalisation and environmental sustainability.

The DVD has primary and secondary units of work, a photo gallery, seven short films that model teachers integrating a global perspective in their classrooms, and other support material.

The five primary units focus on developing an understanding of people's rights to basic needs, about sustainable ways of providing for those needs and how people can work towards a better world. The five secondary units focus on thinking deeply about some of the complex issues faced by people around the world and exploring a range of perspectives to develop active personal and global responses. These resources can be ordered from the Global Education website.

ABOVE: An Australian teacher works with students in the Maldives. Photo: AusAID



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