A marvellous gift

“Creation is a gift, it is a present, it is a marvellous gift given to us by God so that we might care for it and use it, always gratefully and always respectfully, for the benefit of everyone.” — Pope Francis, 28 October 2014

A great gift brings great responsibility. We are all stewards of creation, and must respect, care for and share all gifts God has given us, including the environment.

A gift at risk

Now, more than ever, we are called to care for creation responsibly. Increasingly, our environment is being endangered by human activity. The effects of climate change are already being felt around the world. As global temperatures rise, we will experience increasingly severe impacts on a global scale. These may include inundation of low-lying coastal areas, climate-induced migration of millions of people, growing risks to human health, the collapse of vulnerable ecosystems, and reduced crop yields.

“Rapid climate change as the result of human activity is now recognised by the global scientific community as a reality....People around the world are experiencing the impacts of increasing land temperatures, rising sea levels, and a change in the frequency of extreme climatic events.” — Australian Catholic Bishops Conference, 2005

A shared responsibility

The effects of these disasters are the most debilitating for the children, women and men vulnerable to extreme poverty and injustice — often those who have contributed least to global warming. Extreme weather events affect every aspect of their daily lives: their safety, their livelihoods, their environment and their wellbeing.

But there’s still time to mitigate climate change, if we act together. We are one human family, caring for creation. We invite you to join us in walking in solidarity with those communities most at risk.

Together we can learn, share and find solutions to climate change injustice. Together we can create a more just world, caring for our common home.

“The environment must be seen as God’s gift to all people, and the use we make of it entails a shared responsibility for all humanity, especially the poor and future generations.” — Pope Benedict XV, 1 January 2010

Seeking solutions together

Many communities affected by climate change are responding with resourcefulness and courage. Around the world, vulnerable communities have identified their greatest challenges, and are partnering with local organisations to find sustainable solutions.

Caritas Australia, the international aid and development agency of the Catholic Church, is privileged to share the stories of three communities who are working to mitigate and adapt to the effects of climate change. These are stories of resilience, innovation and dignity, from some of the world’s regions most threatened by the destructive effects of climate change:

Rowan, from Australia, describes how the land can be protected by combining traditional practices and business needs

Gosto, from Bangladesh, shows that a community can adapt its farming practices to ensure food security

Martina, from the Solomon Islands, tells how a community can prepare itself for greater safety when natural disasters strike
“The earth is an environment to be safeguarded, a garden to be cultivated.” — Pope Francis, 22 April 2015

Rowan’s question

“How do you build a sustainable industry on Aboriginal land that is economically viable and good for the land?” This question has driven Rowan Foley for many years. Rowan is from the Wondunna clan of the Badtjala people, Traditional Owners of Fraser Island and Hervey Bay in Queensland.

He is a ranger by trade, and in this role he has cared for Australia’s traditional lands in Uluru–Kata Tjuta National Park in the Northern Territory. Rangers run cultural and natural resource projects on the traditional land, which is a world heritage national park. Their work supports the traditional landowners by enhancing their regions’ unique biodiversity and cultural values.

Climate change challenges

Today, regions throughout Australia are feeling the effects of climate change. The rangers’ work is needed more urgently than ever.

Climate change is making Australia hotter, with more very hot days and with longer and more frequent heatwaves. Seven of the ten warmest years on record have occurred since 2002. There are more extreme fire risk days each year, and the bushfire season is longer.

Connected to the land

Australia’s First Peoples are deeply connected to their traditional lands. But these lands are located in some of the hottest areas of the country. Rising temperatures have increased the risk of devastating bushfires.

Wildfires are a real threat to the stability of the communities living on country. Fires harm the land, affecting the livelihood, health and wellbeing of the traditional landowners, and the future of their culture.

Looking for an answer

Is there a way to care for the land so that the traditional owners can continue to live there, with a secure future? A new initiative has led Rowan closer to an answer.

In 2010 Rowan became the inaugural General Manager of the Aboriginal Carbon Fund, set up to support the sustainable development of Aboriginal lands. The Carbon Fund has attracted significant support in Australia, partnering with Aboriginal organisations, the business community and Caritas Australia.

Rowan tells the story

“The aim was to create a partnership between business and traditional landowners that would reduce climate change effects across the country.
We wanted to reduce the amount of carbon in the atmosphere produced by wildfires, which warm the planet.

The Fund has set up a program where landowners undertake carbon farming to reduce national carbon emission levels. They sell these carbon credits to organisations that need to offset their own carbon liability or footprint. Payment for carbon credits gives the remote communities a sustainable livelihood.

This program aims at more than just financial gain. It is also intended to help traditional landowners gain cultural, social and environmental benefits.

**Fire management programs**

Carbon farming is an agribusiness that can take the form of a savanna fire management program. We’re using our traditional practices. Over the last 40,000 years, the traditional owners in Australia actively managed the land, by making small fires in winter. This prevents very hot late-season fires.

And we’re expanding on the same practices now. For example, there’s the Oriners Forest Fire Management Program in Kowanyama near Cape York. The rangers have been working with the Kunjen/Olgol traditional owners; every year they burn the country, in the early dry season in June and July.

When it’s cold, that’s the time to light fires. Then you only produce a little amount of carbon (greenhouse gases) that will go into the atmosphere. If we just let things take their course, all that grass and vegetation on the ground would build up as fuel, and when the hot times come in November, we’d have big wildfires running across Cape York, burning out the region and its neighbours.

We can measure the reduction in carbon emissions that we gain from burning in winter. The amount of carbon saved through the process can be purchased as a carbon credit offset by the Government, or companies needing to reduce their carbon debt.

**Together for a common purpose**

Over the last few years, this program has prevented the hot summer fires, and it has also had social benefits.

The Kowanyama project gets people out on country and gives them access to bush tucker and other resources. It gets families and clans together, and helps with maintaining traditional knowledge and a healthy lifestyle.

It provides for better management of country. And it strengthens people’s connection with country.

**Broad social and cultural outcomes**

Traditional landowners are working as rangers, directly addressing climate change through other work in the community.

With the funds from carbon farming in the two coldest months, they can work to achieve broad social and cultural outcomes for the other ten months of the year. For example, they would undertake turtle tagging programs and participate in cultural programs.

**A new sustainable industry**

Carbon farming has put money in the bank for many marginalised First Australian communities. About 30 Australian organisations are buying carbon credits through this scheme, including banks, airlines, councils and universities.

Financial recognition has given traditional landowners a sense of pride in their work. People are holding their heads higher knowing the work they’re doing is of value. They’re generating income and protecting country and culture. They are feeling pretty good. And the community is realising its collective strengths.

These are the embryonic stages of a new sustainable industry on Aboriginal land.

It’s a clear signal to the business world. It’s a strong case for social return on investment — permanent jobs for traditional owners working in the sustainability industry in remote communities, using traditional knowledge and skills.

**Building a bridge**

This program has made greater interaction possible between traditional owners and non-Indigenous Australians. It has brought neighbouring Indigenous and non-Indigenous groups together for a common purpose — looking after country.

Carbon can build a bridge between black and white. Our work can help their business, and we can build a relationship. This program could be part of a reconciliation action plan or help organisations meet corporate social responsibility goals.

**The question answered**

With carbon farming, sustainable economies on rural and remote Aboriginal lands are employing local people, and improving the environment. You can look after country, and it can be economically viable. It’s a realisation of a dream.”
Farming for the future
A SUSTAINABLE FOOD SUPPLY IN BANGLADESH

“Nurturing and cherishing creation is a command God gives not only at the beginning of history, but to each of us. It is part of his plan; it means causing the world to grow responsibly, transforming it so that it may be a garden, a habitable place for everyone.”
— Pope Francis, 6 May 2013

Growing knowledge and skills
Gosto Gopal describes himself as a person with “skill and knowledge” about agriculture. He is a leader in his community in south-western Bangladesh, passing on knowledge of sustainable agriculture, and contributing to the social advancement of his fellow villagers.

But this was not always the case. Before 2008, Gosto described himself as “a poor and landless farmer” living with his family in a hut. He and his wife had to “sell their labour” to others, but work was available for only three months each year, during the rice and shrimp cultivation periods. The family did not have enough money to educate all three children, and often there was not enough food to eat.

Once a fertile land
Gosto’s village in east Jelekhali lies on the bank of Bangladesh’s Malancha River. This is one of the most fertile areas in the densely populated region.

Most people who live there are farmers, relying heavily on the land for both food and livelihood.

Though the environment in the region is so critical to the community, it is one of the most vulnerable in the world to climate change.

In Bangladesh climate change will continue to cause rising sea levels, extreme river floods, more intense tropical cyclones and very high temperatures. Salinity intrusion is also killing off fertile land. Agriculture is highly vulnerable to climate change: food security, food prices and nutrition are all adversely affected when extreme weather events disrupt people’s lives.

A seed of hope
In 2008, Gosto learnt that Caritas Bangladesh, with support from Caritas Australia, was offering a program to assist farmers in south-west Bangladesh. This program had sprung from local farmers’ recognition that natural disasters were increasingly

To learn more about this program, see a video at www.caritas.org.au/sweetwater

“I first started compost preparation in 2011. Three years later, about 270 families are preparing and using compost fertiliser, and vermicomposting. I have established a seed bank, and distributed seed to poor farmers.”

Credit: Richard Wainwright.
eroding their landscape, and they needed to adopt new agricultural practices to withstand any further damage.

Like other local farmers, Gosto saw the program as a seed of hope. He seized the opportunity to be trained in sustainable farming practices that would increase his independence and offer a more secure future for his family.

In the program, farmers identified the challenges they were facing, and were supported in finding sustainable solutions. They were trained to implement workable new systems for fish farming, seed germination, vegetable cultivation, kitchen gardening and nursery development.

For two years, Gosto undertook training on adaptive technologies, such as natural fertilisers and pesticides, drip irrigation and saline-tolerant rice and fish cultivation. He learnt new techniques that have allowed him to use the same fresh water to grow rice and farm fish in one field.

Financial support enabled the farmers to put their learning into practice, and in 2009 Gosto received funding. He used it to lease land, and began fish farming using his newly acquired skills.

**A setback to growth**

Only a few months later the devastating cyclone “Aila” tore through the coastal belt of Bangladesh. The storm claimed 210 lives and flattened more than 3000 thatched homes. Gosto lost his dwelling house and kitchen. Tidal surges washed out his farm, and he lost his assets.

“Our land flooded with sea water, contaminating all our fresh water supplies,” Gosto said. “We were lucky to escape with our lives. My rice and vegetable gardens stopped producing, and with no fresh water I had to sell all my livestock.”

With support from Caritas Australia, the community excavated a canal to provide renewable fresh water supplies. Six hundred homes were built and roads were repaired, with funding from several organisations.

**Cultivating a new future**

This second stage of support helped Gosto and other farmers in the community to consolidate the skills they had gained from the training program, and from working their own land. As more sustainable practices are being undertaken, the local environment is being renewed.

Gosto now applies some of the techniques he learnt during training to protect his crops: “We use raised vegetable beds and cultivate saline-tolerant rice. And we use the canal for water. I can now cultivate year-round vegetables and fish. It has ensured my family’s food security.”

As Gosto has become more confident in his ability to farm sustainably, he has begun to pass on his knowledge to the farmers in his community.

“I first started compost preparation in 2011. Three years later, about 270 families are preparing and using compost fertiliser, and vermicomposting. I have established a seed bank, and distributed seed to poor farmers.”

The local government representative of his village, Ms Nurjahan Begum, said, “The community people are now getting encouragement and motivation on organic farming, climate resilience agricultural production and climate adaptive technology from Gosto Gopal.”

Gosto supports people in his community through training and help with understanding farming technology. He also plays a leadership role on the village’s school and social festival committees.

Gosto plans to buy more land, and use this to demonstrate best practice to the community. “Now,” he says, “I am confident enough to raise voice and able to motivate the community for alternative livelihoods and offer poor people dignity.”

“A way has to be found to enable everyone to benefit from the fruits of the earth ... above all to satisfy the demands of justice, fairness and respect for every human being.”

— Pope Francis, 20 June 2013
“Climate change, the loss of biodiversity and deforestation are already showing their devastating effects in the great cataclysms we witness.” — Pope Francis, 28 October 2014

Martina’s story
Martina lives in the Solomon Islands. She is a teacher at Bishop Epalle Catholic School in Nggosi, West Honiara. She loves to teach, and her small classroom rings daily with the sounds of her students’ eager voices, often raised in song.

“My students love to sing,” says Martina.

But, while the classroom is a place of learning and laughter, the world outside can be far less stable. In the Solomon Islands, a changing climate means that sea levels are rising, increasing the impact of storm surges and coastal flooding. Every year, the Islanders’ safety is under threat during the six-month cyclone season. Tropical cyclones are projected to become more intense, and the weather will become more extreme, with more heavy rainfall days and more very hot days expected.

“Our homes are under threat from landslides and cyclones,” says Martina.

The Solomon Islands also experience other hazards. In 2013, a powerful earthquake on Ghizo island in the north-west of the Solomons triggered a tsunami that swept away many homes. Several people were reported missing.

Calming the children’s fears
For the children, these extreme weather events and other natural hazards can be overwhelming. At times, they have felt fearful and insecure on their way to school; disasters have previously occurred in the mornings, when the children may be walking or travelling alone.

To learn more about this program, see a video at www.caritas.org.au/nurseryrhy
The community began developing strategies to help its children, working with Caritas Australia's Solomon Islands staff. From this collaboration a holistic program emerged, to increase resilience to disaster.

‘Singing our way to safety’

A program was created to promote safe behaviours for children during natural disasters. In this program, nursery rhymes and other popular rhymes are adapted to break down the fear associated with natural disasters.

With these songs, teachers help their students to identify the types of risks present in their community, and the warning signs for tsunamis, cyclones and landslides. The songs contain clear messages on whom to listen to, what to do, and where to go when disaster strikes.

Martina's students have learnt four songs, including the "Flood Song", which is sung to the tune of "This is the Day that the Lord has Made". The song gives simple advice for effectively avoiding danger:

“When the river floods
If we stay we’ll drown
We must run away
Up to the hill and the mountain top.”

Teachers and students create the song themselves. Using well-known tunes, they write new lyrics that describe what to do if disaster strikes. Martina and her students sing about the natural disasters that usually happen in the Solomon Islands: “I write up the words based on what shall we do — I choose a few common [songs] that the kids can remember.” Her students’ favourite song is the tsunami nursery rhyme, sung to the tune of “Jingle Bells”.

“Run up to the mountain top
Run and run and run
Teacher students don’t you stop
You must reach the top.”

Working in harmony

Caritas Australia runs workshops to train teachers in the Solomons on risk management planning. Teachers provide material for nursery rhyme workbooks, and risk management strategies are developed collaboratively.

This partnership between local officials and their communities means that emergency procedures can be taught through local languages and customs, and reflect national policy. Teacher training and curriculum materials are developed with the knowledge and support of the Ministry of Education and the National Disaster Management Office.

The joy of song

Martina has seen many benefits of the program for her students. The students enjoy learning the songs, and the movements that accompany them. “The songs help children memorise the emergency response,” she said.

The program is based on group singing, and this has an added benefit. Group singing is known as a valuable coping strategy for people enduring challenging times.

Through their learning, Martina’s students have taught many others safe behaviours for managing disasters.

“Really helpful for their family”

The impact of this program is also evident among the children's peers, families and neighbours.

Martina recalls: “It happened that during a weekend an earthquake shook. On Monday when we came back to school I asked my students what happened on Saturday afternoon and they told me there was an earthquake and they used the nursery rhyme based on the earthquake. One of my students told me that the nursery rhyme that I taught was really helpful for their family.”

Singing its praises

The education program has been recognised internationally for its ability to help communities prepare for natural disasters. In 2014, it received the inaugural Pacific Innovation and Leadership Award for Resilience from the United Nations International Strategy for Disaster Risk Reduction. This award recognises innovative approaches to disaster risk reduction in the Pacific.

While this recognition is a reward in itself, the greatest reward is the community’s increasing sense of resilience. A community vulnerable to the impacts of climate change is finding its own solutions. Martina has observed that, as her community becomes increasingly effective at protecting itself, it is facing its future with growing confidence and strength.

“No our children and their parents know what to do, they are more confident. Singing has given them hope that when the floods come, everything will be okay.”

With support from the Australian Government, Caritas Australia has expanded the program’s reach to other areas. It was developed in the Solomon Islands and Vanuatu, and is also being carried out in Tonga.

When Cyclone Pam struck Vanuatu in March 2015, families faced the onslaught of wind and water with greater confidence. Using the safe practices learnt through the rhymes, they sang their way to safety.

“This program relies on strong partnerships in the community. Everyone is responsible for minimising the risk of disasters in a community, from teachers and children and their parents to the National Disaster Management Office.”

— Mary Malagela, Solomon Islands program officer, 2015
Caritas Australia is the international aid and development agency of the Catholic Church in Australia. Through effective relationships with the Church, local partners and communities, Caritas Australia helps to end poverty, promote justice and uphold dignity in over 30 countries. Many of our programs, advocacy and education initiatives overseas and in Australia assist communities with facing challenges due to a changing climate. We envisage a world in which children, women and men most vulnerable to extreme poverty and injustice are architects of their own sustainable development.

Caritas Australia is part of Caritas Internationalis, a confederation of over 160 members worldwide. Caritas Internationalis works with national Caritas organisations around the world, Bishops’ Conferences, local partners and vulnerable communities to speak out on, and respond to, global issues, including climate change.

References

Page 1
Pope Francis, 19 March 2013, Inauguration, St Peter’s Square, Vatican City
Pope Francis, 28 October 2014, Address of Pope Francis to the Participants in the World Meeting of Popular Movements, Old Synod Hall, Vatican City
Pope Benedict XVI, 1 January 2010, Celebration of The World Day of Peace

The Pontifical Academy of Sciences and the Pontifical Academy of Social Sciences, 2015, Climate Change and The Common Good, Vatican City

Rowan’s story
Pope Francis, 22 April 2015, General Audience in St Peter’s Square, Earth Day
Kowanyama Land Office News, April 2015
Australian Human Rights Commission, 2009, Native Title Report
Australian Academy of Science (AAS), 2015, The Science of Climate Change Questions and Answers, February 2015, AAS, Canberra, ACT
CSIRO and Australian Bureau of Meteorology, 2014, State of the Climate 2014, Commonwealth of Australia
Pope Francis, 5 June 2013, General Audience on World Environment Day, St Peter’s Square, Vatican City

Gosto’s story
Pope Francis, 6 May 2013, World Environment Day
Gosto’s story collector, Mr Bikash Biswas, Program Officer — Ecological Conservation and Development, Caritas Central Office, 20 April 2015
World Bank, 1 June 2013, Turn down the heat: climate extremes, regional impacts, and the case for resilience working paper, World Bank, Washington DC
Pope Francis, 20 June 2103, Address to the Food and Agricultural Organization, Vatican City

Martina’s story
Pope Francis, 22 April 2015, General Audience in St Peter’s Square, Earth Day
Pope Francis, 22 March 2013, Inaugural Mass Hornily, St Peter’s Square, Vatican City

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“We must care for our sister the Earth, our mother Earth, so that she does not respond with destruction”
—Pope Francis, 20 November 2014, addressing the UN Food and Agriculture Organisation’s Second International Conference on Nutrition

“The lord God placed the man in the Garden of Eden to tend and watch over it.”