



ORGANIC AGRICULTURE: MEETING THE CHALLENGES OF CLIMATE CHANGE



The Pacific Islands region is characterised by island nations with small populations scattered across an ocean area of approximately 30 million square kilometres. Less than 2% of this area is land. Our region has a total population of around 9.5 million people. The potential effects of climate change pose a serious threat and place significant pressure on local farming systems. Although Pacific islands produce very small amounts of greenhouse gases, we may be among the countries most affected by climate change, with whole islands under threat from the sea-level rise.



conditions, and failed to protect the very ecosystems that sustain us. Policy makers are now referring to 'soil organic matter', 'soil carbon,' 'ecosystem services' and to 'holistic' approaches- all of which are established pillars of Organic Agriculture. Organic Agriculture enhances biodiversity, protects our fragile soils, improves the nutritional quality of food, ensures high standards of animal welfare and provides increased employment in rural areas. At the same time, Organic Agriculture reduces green house gas emissions, cuts nutrient and pesticide pollution and stops potentially harmful pesticide residues entering our food chain. Organic Agriculture builds resilient farming systems capable of combating climate change and securing local food supplies and is highly effective in sequestering carbon.



Climate change and the global food crisis have put a spotlight on the vulnerability, unsustainability and social inequity of agriculture and food production. There is growing acceptance that policies and practices have failed to feed the world's most vulnerable people, failed to adapt to continuously changing environmental



Organic farming has significant potential to avoid or reduce the production of greenhouse gases through:

- Lower use of fossil fuels – organic farming does not use energy demanding synthetic fertilisers as it focuses on maintaining soil fertility through the use of internal farm inputs.
- Reduction in the production of nitrous oxides – organic farming does not use synthetic nitrogen fertiliser.
- Reduction in methane production by promoting soil aerobic microorganisms and high levels of soil biological activity.

In addition, organic practices encourage the sequestration of carbon by:

- Maintaining tight nutrient and energy cycles through organic management of soils;
- Systematic recycling of organic waste, often by means of composting;
- Encouraging agro-forestry farming systems;
- Protecting soil from erosion and associated loss of soil organic matter.

Organic farming also provides strategies that will assist farmers to adapt to the potential impacts of climate change, for example by establishing farming systems that:

- Lessen the impacts of wind, e.g. through providing shelter for land, farms and people;
- Are drought resistant and support the conservation of water resources;
- Are tolerant of higher temperatures and fluctuations in temperature;
- Encourage use of locally adapted varieties and in situ-adaptation of crop species.

Organic Agriculture has a significant role to play in addressing two of the world's biggest and most urgent issues: climate change and food security. While requiring political and institutional support Organic Agriculture is also a solution that empowers those most affected and engages farming communities in securing their own future.

The Pacific Organic and Ethical Trade Community urges you to embrace organic agriculture as a solution in international agreements on our shared future, in national planning and policy making and in the choices you make every day.