

Fisheries, Food Security and Climate Change

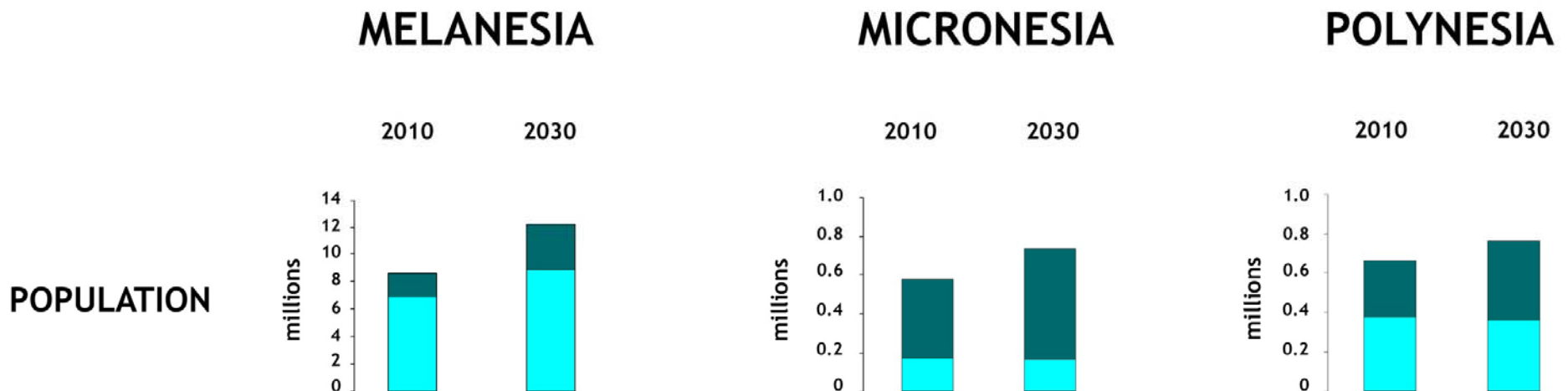
An Information Paper

FAO/SPC/SPREP/USP, and associated experts

Threats to food security

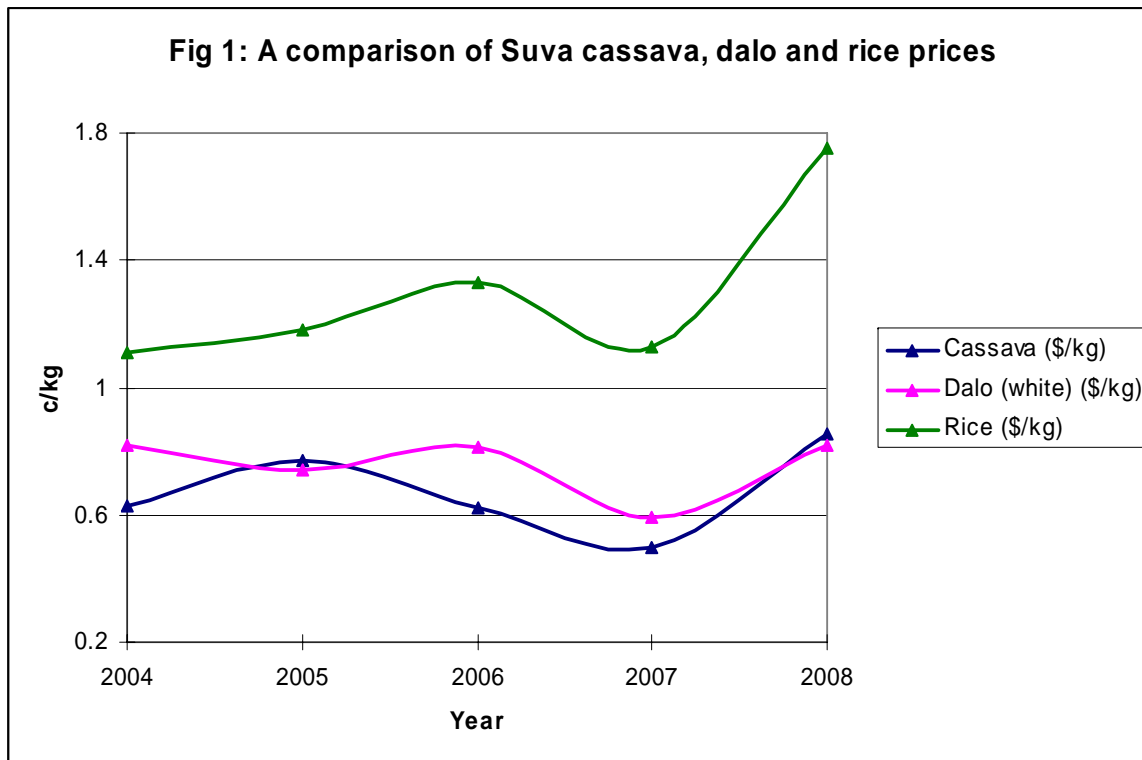
- Rapid population growth

- * Population of urban centres in Melanesia will double by 2030



Threats to food security

- Rising global food and fuel prices
 - * In Kiribati, price of rice has increased 30% since beginning of year



Threats to food security

- Loss of traditional knowledge due to rural–urban migration
- Methods for growing and preserving food are being lost
- Loss of biodiversity
- Traditional foods and crop varieties are being lost
- Increased consumption of low quality imports
- High cost of imported foods is forcing households to switch to cheaper products of poor nutritional quality

Possible Impacts on agriculture

Loss of crops due to floods , droughts , soil erosion and salination

Increased risks of pests and diseases



Reduced yields



Increased dependence on imported foods



Poorer diets

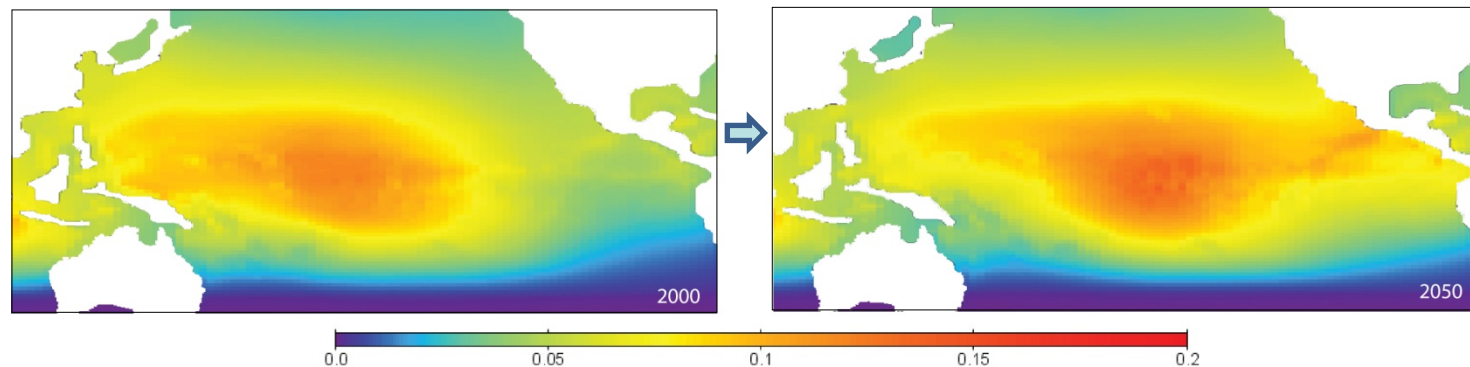


Increased NCDs

Possible Impacts on fisheries

- Changes to the distribution of tuna

Preliminary modeling



Tonnes of skipjack tuna per km2

Possible Impacts on fisheries

- Decline in coral reefs and coastal fisheries
- Damage to infrastructure
- Greater costs for safe fishing at sea
- Difficulties in developing pond aquaculture due to flooding

Regionalizing commitments of HLC

Short-term measures

Respond to urgent requests for assistance

- * Agencies assure resources for 'safety net' operations
- * Agencies enhance co-operation in emergencies
- * Deliver food in emergencies ASAP
- * Donors to provide budget support for low-income countries

Regional Action

- * Pacific Disaster Net
- * Red Cross/ Red Crescent Programmes
- * Humanitarian aid from regional donors
- * FAO direct inputs in response to soaring food prices

Regionalizing Commitments of HLC

Short-term measures

Immediate support for agricultural production & trade

- * Revise policies to help farmers increase production and supply markets
- * Improve access to fertilizers, seed and technical assistance for poor farmers
- * Moderate fluctuations in grain prices and stockpile food
- * Minimise restrictive trade that increases price volatility

Regional Action

- * CROP Agencies, FAO, IFAD
- * FAO direct assistance to vulnerable groups in rural communities
- * Regional development partners
- * Regional development partners
- * Doha Development Agenda ; Promote 'Aid for Trade'

Regionalizing Commitments of HLC

Longer-term measures

- * Policies to support poor in rural, peri-urban and urban areas

Regional Action

- * Strengthening infrastructure for food distribution, improved shipping services (MRD)
- * Making agriculture attractive to youth
- * Developing urban agriculture
Fiji's 'Plant 5 a day' campaign for backyard gardening.
- * Retaining low value tuna for storage and sale
- * Raising awareness of the nutritional value of local foods

Regionalizing Commitments of HLC

Longer-term measures

* Increase resilience of food production systems to climate change

Regional Action

- * Assess vulnerability of tuna and coastal fisheries, and agriculture, to climate change
- * Diversifying subsistence fishing through inshore FADs and small pond aquaculture
- * Salt/drought/flood tolerant 'climate ready' crops
- * Crop varieties resistant to pests and diseases favoured by climate change
- * AusAID, EU, USAID, FAO and GTZ

Regionalizing Commitments of HLC

Longer-term measures

* Address challenges and opportunities posed by biofuels

Regional Action

*Thorough assessment of impacts on food security

*Biodiesel from coconut oil?

*Cassava in PNG and Fiji

Regionalizing Commitments of HLC

Longer-term measures

* Step up investment in science and technology for food and agriculture

Regional Action

- * Centre for Crops and Trees
- * Centre of Excellence for Atoll Agriculture
- * Improve biosecurity and disease eradication measures
- * Incorporate benefits of traditional agriculture
- * Aquaculture
- * Post-harvest for fish in rural areas
- * Address difficulties in achieving economies of scale

Regionalizing Commitments of HLC

Longer-term measures

* Monitor and analyse food security in all its dimensions

Regional Action

*Forecasts of fish needed for food security by 2030

*Use of HIES and censuses to measure success of policies to achieve food security for rapidly growing populations

Cross cutting Issues

- Undertake vulnerability analyses for all food production sectors
- Raise awareness of threats to food security and available solutions at the community level
- Provide incentives for economic growth to increase the options for achieving food security
- Appropriateness of agr courses taught in tertiary institutes

Summary of National and Regional Priorities for Action

- Diversify production systems to adapt to climate change
- Boost local production of crops and fish through investment in science
- Make agriculture attractive to youth
- Strengthen infrastructure for food distribution
- Reduce the burden of higher prices
- Develop peri-urban and urban agriculture
- Raise awareness of nutritional value local foods
- Implement effective biosecurity