

# Mitigating risks on food security

By JAMES LARAKI

CLIMATE change and climate-related changes are now one of the highest priority development issues and the greatest concern to the international community and organisations.

These issues are recognised because of global warming and climate change threatening the existence of life on this planet.

Impacts of climate change are many and food security is one of the major concerns. This is so as climate change affects all four dimensions of food security - food availability, food accessibility, food utilisation and food systems stability.

It has an impact on human health, livelihoods, assets, food production and distribution channels as well as changing the buying power and market flows.

Climate change impacts, both in the short term resulting from more frequent and intense extreme weather events and, in the long term, through changing temperatures and precipitation patterns. People who are already vulnerable and food insecure are likely to be the first to be affected.

Agriculture-based livelihood systems that are already vulnerable to food insecurity face immediate risk of increased crop failures, new patterns of pests and diseases, lack of appropriate seeds and planting material and loss of livestock and living organisms.

The other important manifestation of climate change is the increased cost of living, especially through increased food prices.

According to FAO's food price index, the world food prices surged to a new high in January following rising trend for the seventh consecutive month. The recent catastrophic weather events around the globe, associated with climate change, are adding pressure on the



cost of food.

Countries in the Western Pacific are far way from self-reliance in food production, in particular grains and animal products.

In the face of growing global food prices, these countries will have to spend more to import adequate amounts of these products to meet the existing level of demand.

This trend of high food prices, and the likely food shortages in the world, offers these countries a real opportunity to be food secure and self-reliant. Besides, we should take advantage of the situation and improve on its agricultural productivity and production, especially in the food and livestock sectors.

Our countries have more favourable environment now than ever before for all stakeholders to make positive contributions to innovative agricultural development, in general, and to research, science and technology in particular. Addressing climate change-related risk should be a part of these innovations.

The National Agricultural Research Institute (NARI) has initiated a number of research and development strategies to counter climate change impacts on agriculture and rural societies in PNG.

These efforts will be further strengthened with the NARI-European Union agriculture research and development project launched in Port Moresby last week.

The project, "generation and

adaptation of agricultural technologies to mitigate climate change imposed risks to food security in smallholder farming communities in Western Pacific countries", was officially launched by Agriculture and Livestock Minister Ano Pala.

The project, funded by the European Union, is being implemented by NARI in partnership with the Solomon Islands ministry of agriculture and livestock, Vanuatu's department of agriculture and rural development and the university of natural resources and applied life science in Austria.

Nine other organisations from the three countries will work closely with the partners in implementing the project.

The overall objective of the project is to mitigate climate change associated risks of food security and livelihoods for vulnerable smallholder farming communities in Western Pacific countries (PNG, Solomon Islands and Vanuatu).

More specific objective of the project is to improve food production capacity of smallholder farming communities in these three countries in areas where precipitation and soil salinity problems are becoming significant threats to agricultural production and productivity.

The project is timely as climate change, and the risks of food security, are real and are being felt in some parts of PNG and partner countries, Solomon Islands and Vanuatu.

Rising sea levels are affecting coastal communities; some

atolls are becoming increasingly difficult for agriculture and human livelihoods.

Coastal communities are having salinity problems; disruptive rainfall patterns are affecting the production of food and cash crops in both the highlands and lowlands.

Excessive water moisture and flooding in fertile agricultural areas are depressing subsistence and commercial agriculture.

The project, to be implemented over five years starting last month, will cover 11 vulnerable sites in these three countries, covering about 100 households per site.

This is expected to benefit about 2.4 million crop-livestock mixed farmers.

The partner institutions signed a memorandum of understanding during the launching to reaffirm their partnership. With similar cultural and climatic conditions, these three countries will learn from each other as they implement the project.

Similar partnerships have been established between these countries through another project under the ACP-EU science and technology programme.

A government-to-government technical agricultural cooperation agreement between PNG and the Solomon Islands is at its final stage of development.

It is expected that agriculture development will be one of the major focus areas.

Given the organisation of partnerships and resources, it is hoped that this project will improve the production capacity of smallholder farming communities in participating countries where climate change and associated risks are becoming major threats to agricultural production and livelihoods of the people.