General Bee Health Management

- Check hives for signs of stress.
- Monitor health of your hives and immediately report any disease cases to your livestock extension officers.
- Source bee stocks from proven healthy apiaries.
- Record keeping as part of good farm management practices

giz

SPC
Secretariat of the Pacific Community

For More Information:

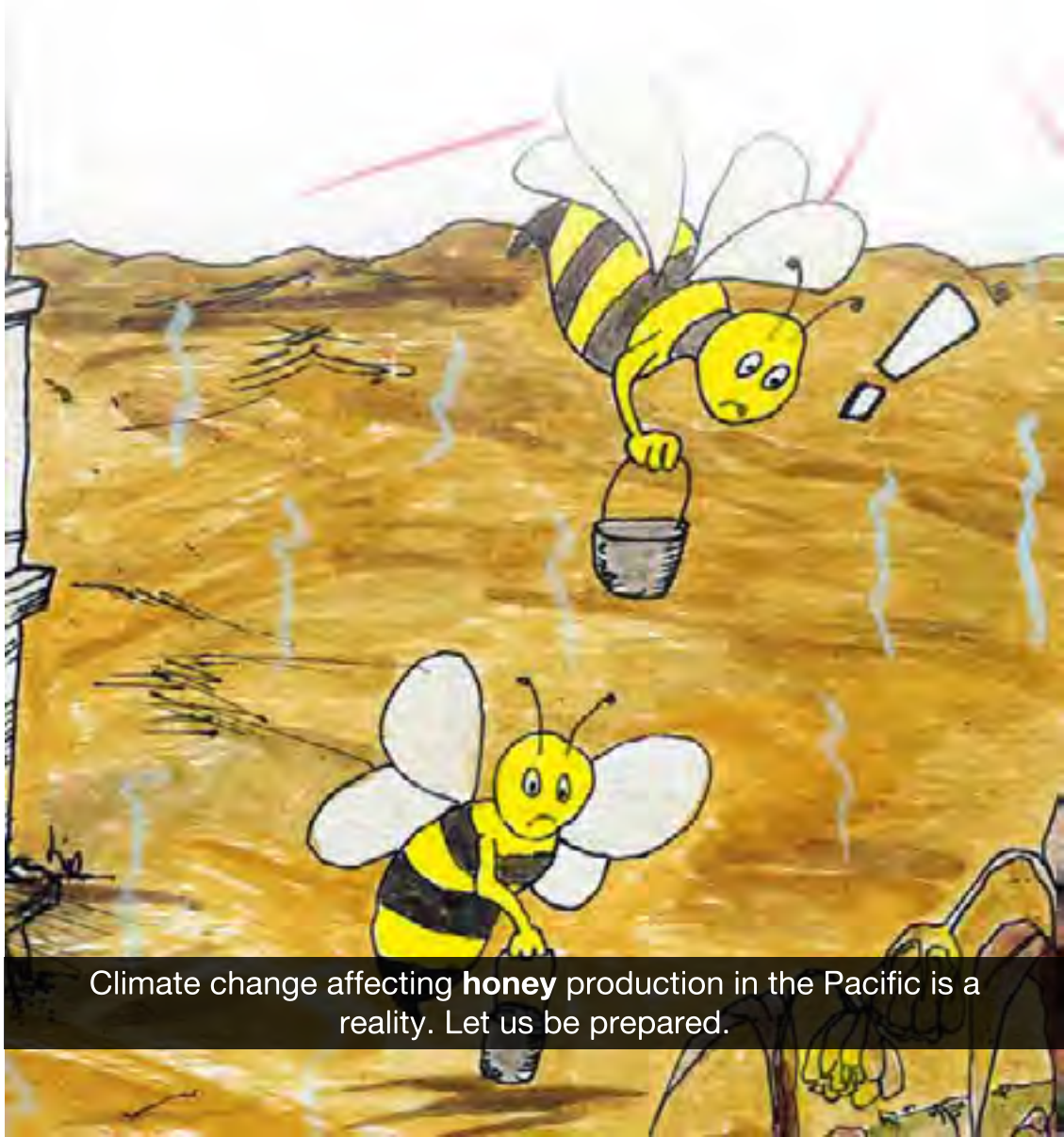
Contact your local animal health extension officer or the Secretariat of the Pacific Community – LRD helpdesk: lrdhelpdesk@spc.int

Produced by the Animal Health and Production Team, Land Resources Division, Secretariat of the Pacific Community in collaboration with the German Agency for International Cooperation (GIZ) Coping with Climate Change in the Pacific Island Region Project (CCCPIR)
Illustrations by John Bryan Mausio

SPC-AHP CC FACT SHEET NO:05

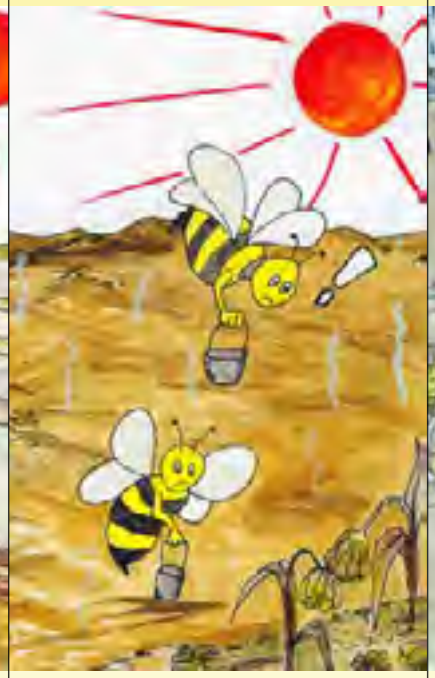
CLIMATE CHANGE ADAPTATION FOR SMALLHOLDER

BEE FARMING IN THE PACIFIC



Climate change affecting **honey** production in the Pacific is a reality. Let us be prepared.

CLIMATE CHANGE IMPACTS:

Increased Temperature	Drought And Low Rainfall	Higher Rainfall	Increased Cyclones And Flooding	Sea Level Rise
				
1. Increased fanning activity to keep hives cool. **2.** Increased energy use leading to stress **3.** Increased temperature inside hives can kill immature bees (brood).	**1.** Reduced nectar sources as plants produce less flowers. **2.** Less water available for bees to collect for colony use. • Lower food production - stored food in hives are quickly depleted. **3.** Fire risk on hives during drought	**1.** Risk of too much water leaking into hives reducing honey quality. **2.** Bees cannot fly out to forage. • Lower food production - stored food in hives are quickly depleted.	**1.** Hives destruction. **2.** Food sources (trees and plants) destroyed. • Risk of food shortage in the colony. **3.** Increased stress to the colony	**1.** Reduced food sources as plants affected by salt water intrusion. **2.** Increased salinity of water sources.

ADAPTATION OPTIONS:

• Select breeds of honeybees adapted to high temperature. • Provide water sources for hives. • Increase ventilation in hives. • Increase hives entrance space. • Locate hives under shades. • Paint outside of hives white to reflect heat to keep hives cool.	• Planting of drought-tolerant trees and plants. • Provide water sources for hives. • Provide sugar syrup supplements during drought. • Locate hives far from fire-prone area.	• Provide waterproofed hive tops. • Provide sugar syrup supplements during high rainfall events. • Properly position hives to avoid rain water lodging inside. • Locate hives under shelter.	• Locate hives at sheltered sites and away from flood prone areas. • Provide sugar syrup supplements close to hives (covered from rain). • Have an animal evacuation plan in place. • Secure hives with ropes and weights.	• Plant salt-tolerant, coastal flowering plants and tress (e.g. mangroves). • Provide sugar syrup supplements. • Provide water sources for hives.