

Pacific Community Communauté <u>du Pacifiq</u>ue

Resilient agriculture in the Pacific

Climate is Changing: Food and Agriculture too

Introduction



- Climate is changing
 - rainfall becoming more unpredictable

- Numbers of hot days increased and number of cold days decreased

- Severe droughts increasing
- Cyclone are stronger (category 5)
- Rising sea water levels

Food systems changing

- Flowering and fruiting patterns of some of the fruit trees like breadfruit and mango- changing

- Animal behaviour like chicken egg laying is changing- daylight lengths(?), tem pchanges (?)

- Fish spawning is also changing-timing/period



Building Agricultural Resilience

- Need Enhanced understanding of the role of natural resource base (water and soil) and biodiversity
- Understand Potential *Exposures*
 - Focus on extremes as well as mean changes
- Understand <u>Sensitivities</u>
 - Define critical thresholds & interactions
- Enhance <u>Adaptive Capacity</u>
 - Resilient systems: *Climate-ready crops & production systems*
- Improved treatment of uncertainty and risk in climate and adaptation decision-making and policy
 - Potential impacts are real but inherently uncertain

Agriculture and Climate Change

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- Existing adaptation strategies can help offset many – but not all –effects over the next 20-30 years; effects are very likely to worsen significantly beyond then, especially if GHG emissions remain high
- Improving the resilience of agricultural systems to climate change requires protection of the natural resource base (water & soil) and biodiversity, and development of new policies, strategies, tools, and practices for adaptation



Resilient Agriculture Systems

What do we mean? A system with the :

- capacity to respond to a disturbance or event to avoid or reduce damage to the existing system – persistence
- 2. capacity to recover from damaging events **adaptive**
- capacity to transform or change the existing system to one that is more resilient to disturbance transformative



Climate Resilience Agriculture through CSA:

- Increasing productivity
- Soil health C stock
- ICM
- Improved varieties and breeds
- Improving resilience
- Adaptation and biodiversity
- Diversification varieties
- Integration agroforestry
- Reducing GHG emissions
 Integration of agroforestry with







https://www.yunbaogao.cn/report/index/report?reportId=5_2609



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