College of Tropical Agriculture and Human Resources
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Sustainable Agricultural Systems: Challenges and Opportunities

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Wind that seeks knowledge

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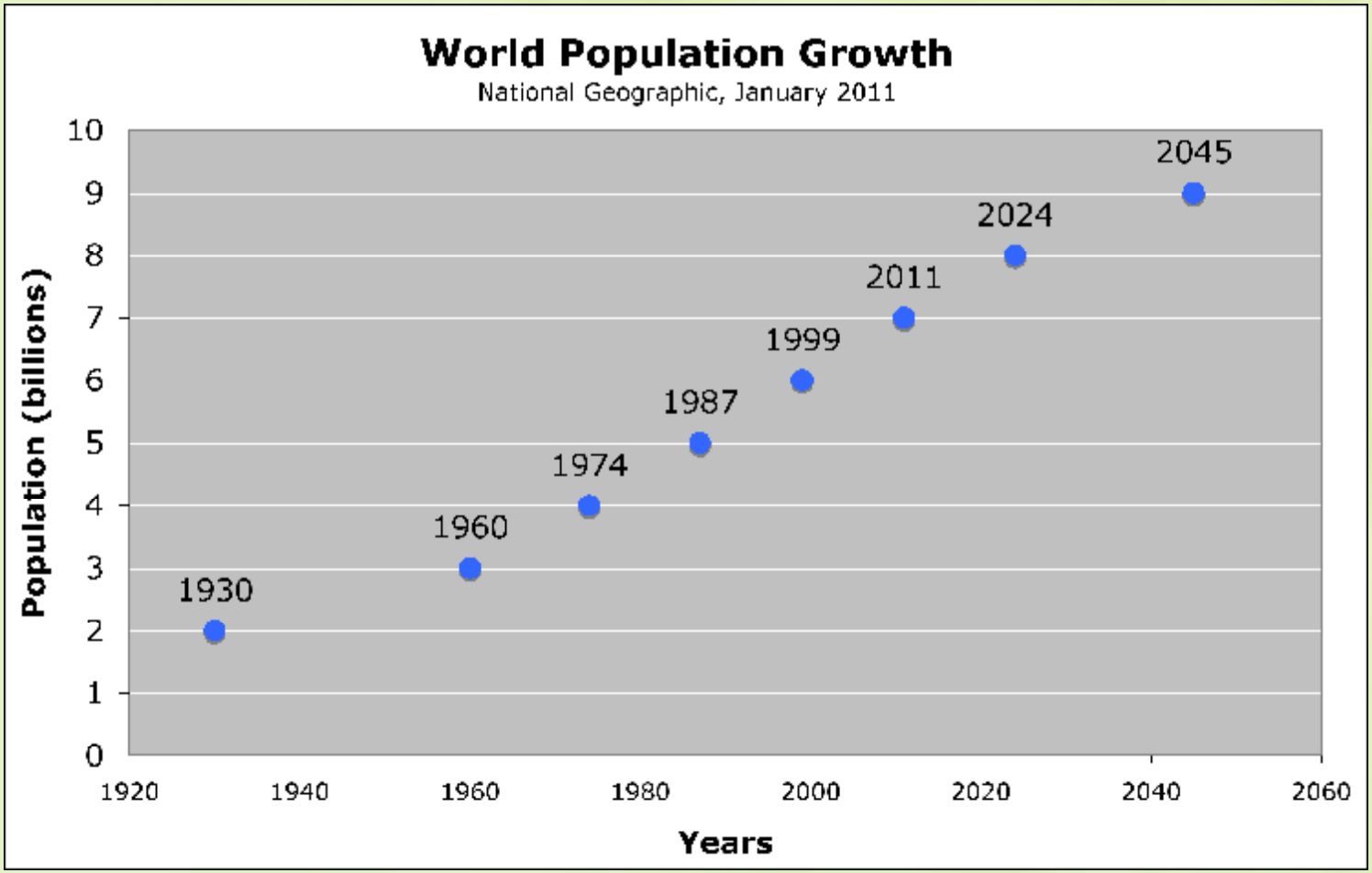
Sustainable agricultural systems should:

- Satisfy human needs
- Enhance environmental quality and protect natural resource base
- Sustain economic viability
- Enhance quality of life for farmers and society

Challenges: Population Growth



Challenges:

- Increase in income
- Competition for land, water, energy
- Impact on environment
- Effects of Climate change
- Cost of production

Hawai'i

Hawai'i: Challenges

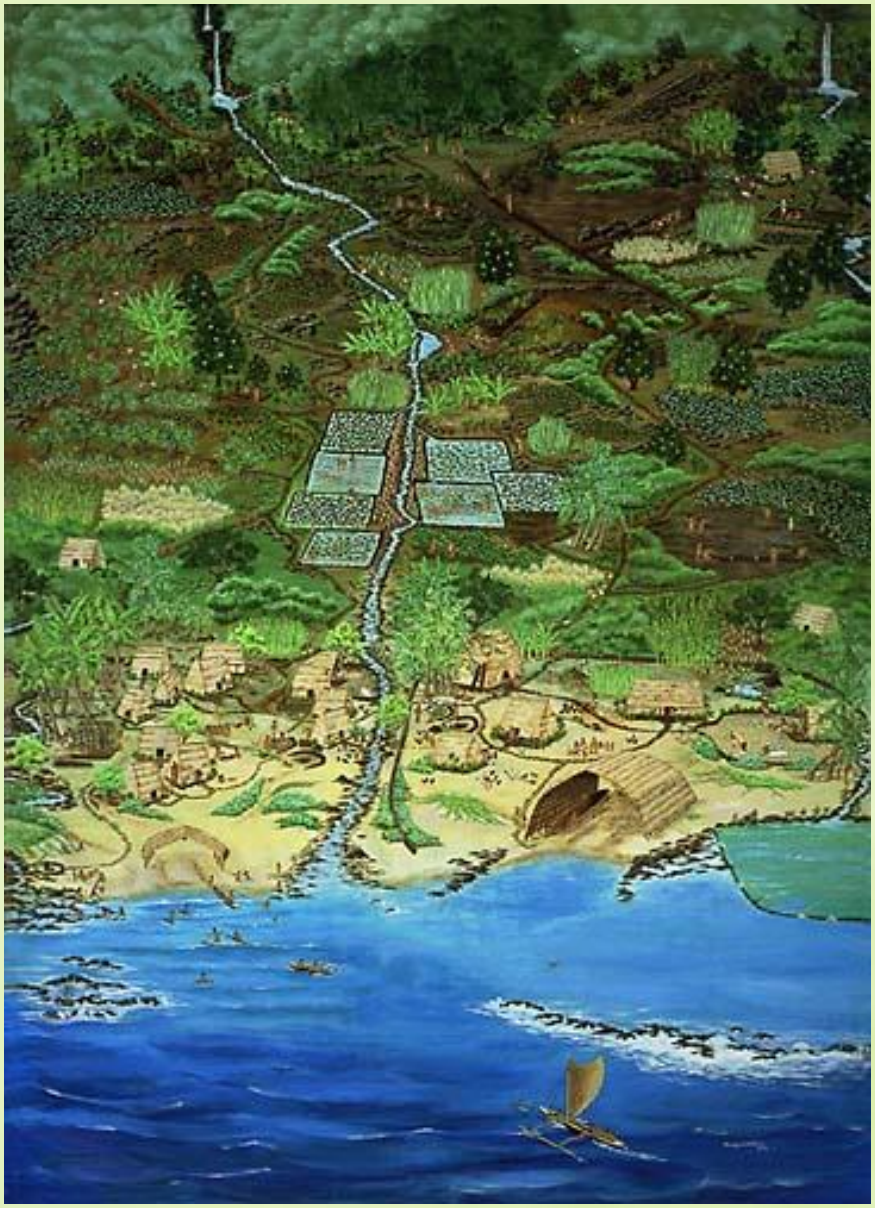
- Vulnerable to food supply disruptions
- 85% of food consumed imported
- Small, diverse farms
- Risk of invasive species

Mediterranean Fruit Fly

Coffee Berry Borer

Hawai'i: Opportunities

- 11 of 12 soil types in the world
- 10 of 14 climactic zones
- Commonalities with Pacific Rim countries
- Public "readiness"



Research and education: central to sustainable agricultural systems

We need to engage science at every level, from the farmer to the fork.

Dr. Roger Beachy
NIFA Director