Sustainable Agriculture
based on Costa Rica experiences

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Some relevant data about Costa Rica

Costa Rica:

- 93,017 farms (64% 10 hectares or less)
- 2.4 million hectares crops and livestock production
- Climate vulnerability
- Hillside soils
- Biodiversity and micro-climates
- Volcanos, valleys, dry areas, humid tropic
Sustainable agriculture

Production

SFS

Environment

Consumers Health
Sustainable agriculture

TECHNICAL PRINCIPLES FOR THE DEVELOPMENT OF CONSERVATION AGRICULTURE

To maintain vegetal coverage in soil

To promote water infiltration into the soil profile and to avoid runoff

To improve soil life and fertility (organic matter)
Sustainable agriculture

To avoid contamination of production (clean food)

To increase productivity in production systems

To produce more with less: eco-efficiency

To promote biodiversity: agro-biodiversity
Sustainable agriculture: technical principles

To maintain vegetal coverage in soil

• Water infiltration
• Avoid erosion
• Water availability
Sustainable agriculture: technical principles

To promote water infiltration into the soil profile and to avoid runoff

- Soil protection against rain
- To avoid nutrients loss
Sustainable agriculture: technical principles

To improve soil life and fertility (organic matter)

- Carbon stock
- Life cycles in soil
- Oxygen in soil
- Biodiversity in soil
- Good health for plants
To avoid contamination of production (clean food)

- Self consumption
- Local market
To increase productivity in production systems

- Fruits
- Coffee
- Beans
- Corn
- others
To produce more with less: eco-efficiency
To promote biodiversity: agro-biodiversity
Low external input sustainable agriculture

- Food for family
- Biodiversity
- Ecosystem services including safe food
- Employment
- Incomes
Thanks for your attention