

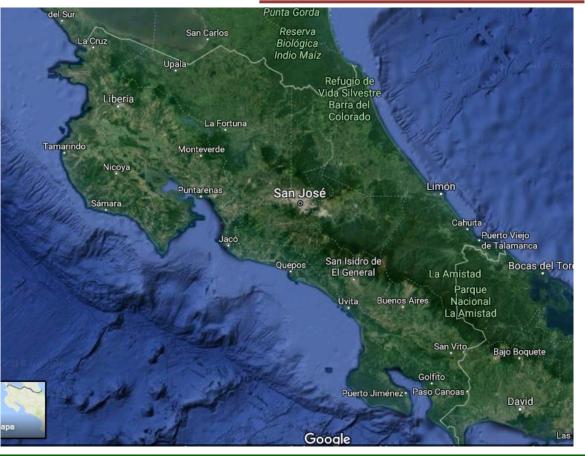


### **Sustainable Agriculture**

based on Costa Rica experiences



### Some relevant data about Costa Rica

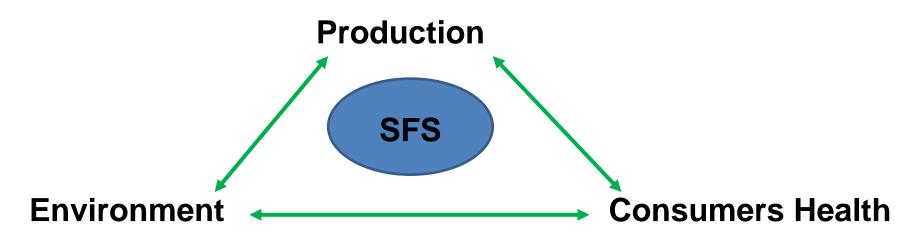


#### Costa Rica:

- 93.017 farms (64% 10 hectars or less)
- 2.4 million hectars crops and livestock production
- Climate vulnerability
- Hillside soils
- Biodiversity and microclimates
- Volcanos, valleys, dry areas, humid tropic



# Sustainable agriculture







### 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: agrobiodiversity

#### Sustainable agricultura: technical principles



To maintain vegetal coverage in soil

- Water infiltration
- Avoid erosion
- Water availability

#### Sustainable agricultura: technical principles



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

- Soil protection against rain
- To avoid nutrients loss

#### Sustainable agricultura: 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

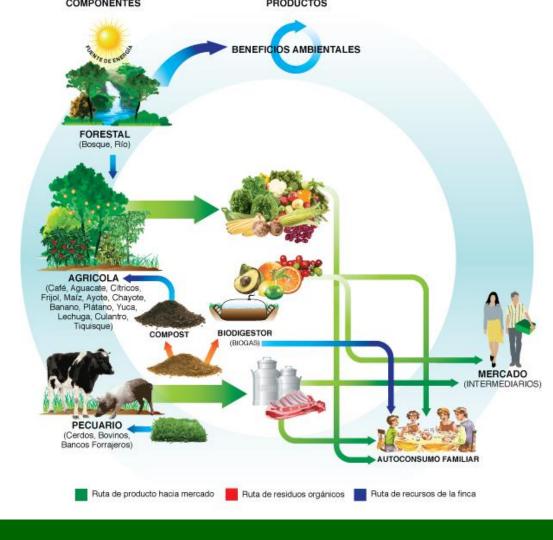
- Fruits
- Coffee
- Beans
- Corn
- others



To produce more with less: eco-efficiency



To promote biodiversity: agrobiodiversity



Low external input sustainable agriculture

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





# Thanks for your attention



