

Challenges of agriculture in Africa



Low soil fertility



Effects of climate change



Limited access to safe and sustainable inputs



Shortage of land



Low yield

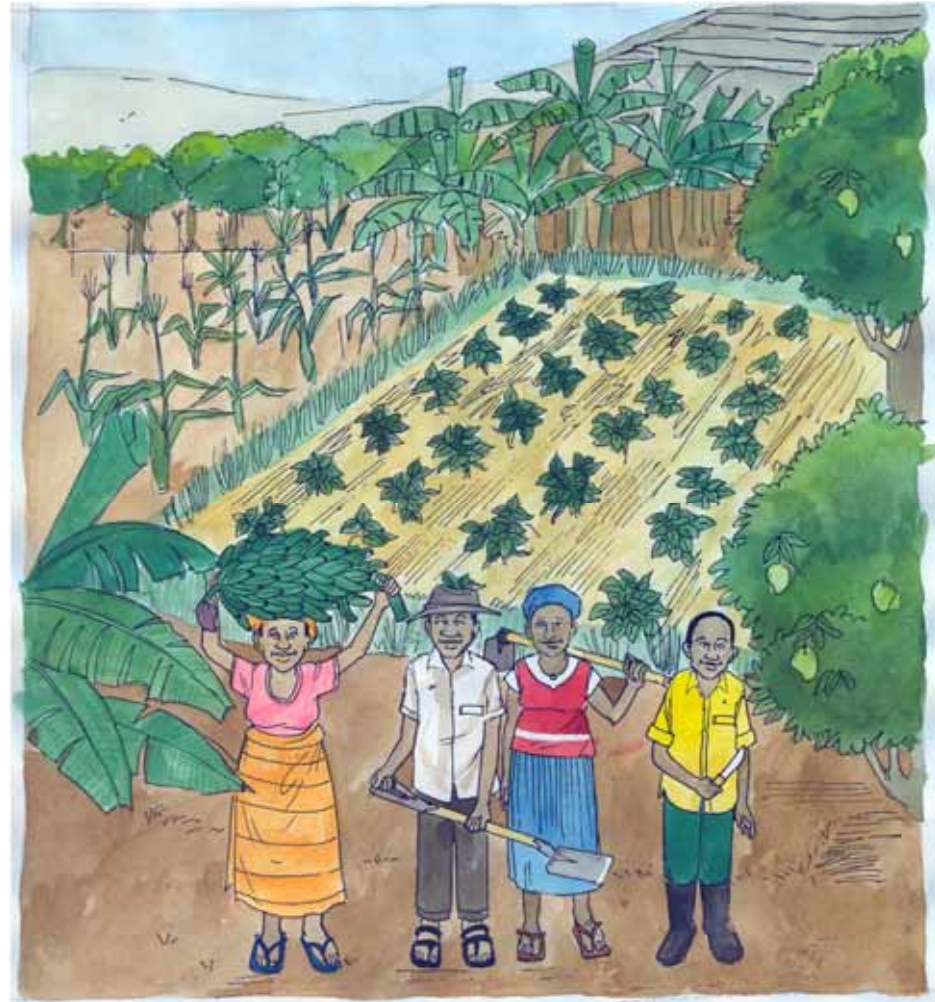


Limited access to reliable markets

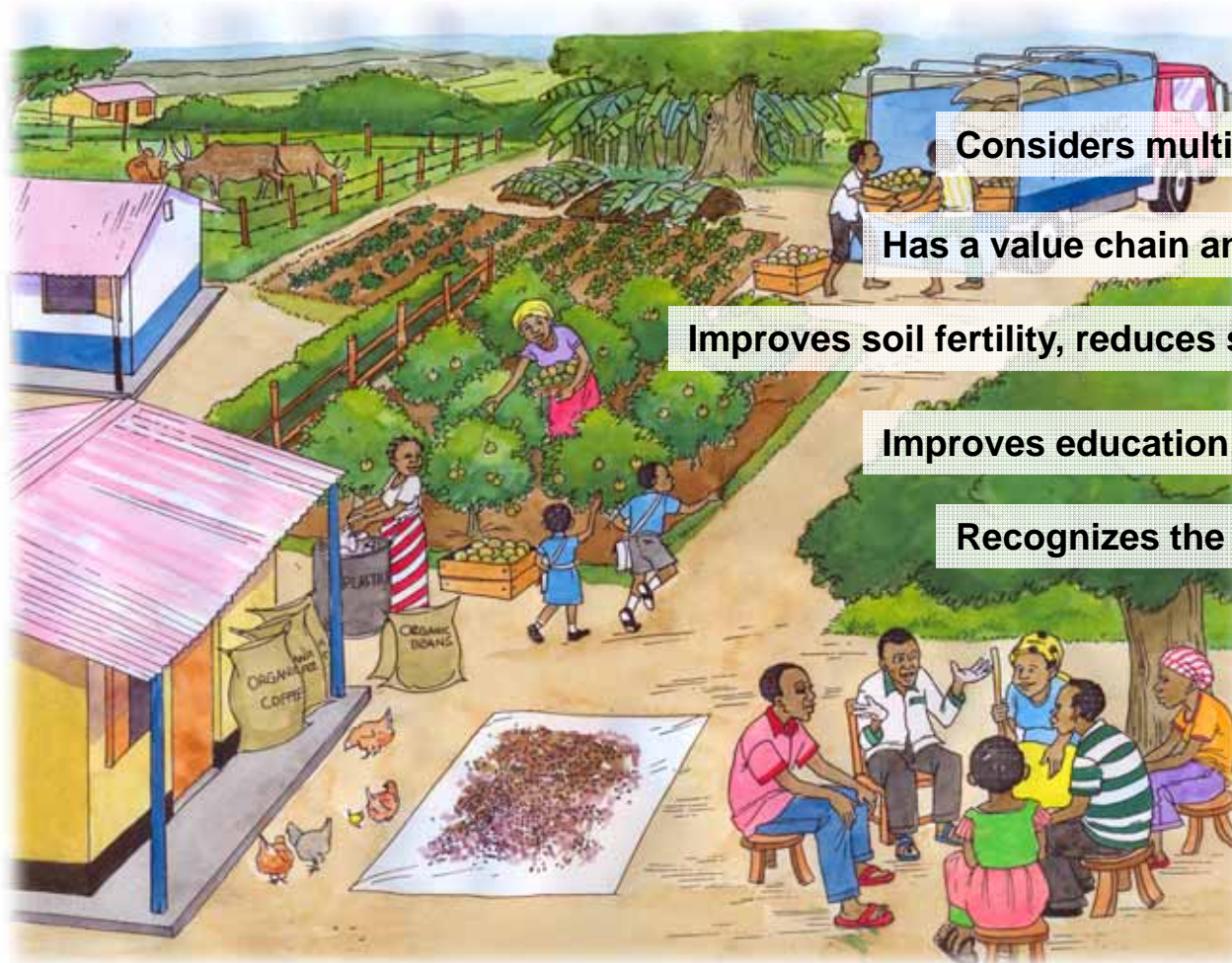


Key questions for food security in Africa

- › How can we increase yield security using natural resources efficiently and sustainably?
- › How can we avoid negative effects of intensified agricultural production systems?
- › How can we facilitate learning from each other?



Characteristics of the best agricultural system



Considers multiple functions of agriculture

Has a value chain and regional perspective

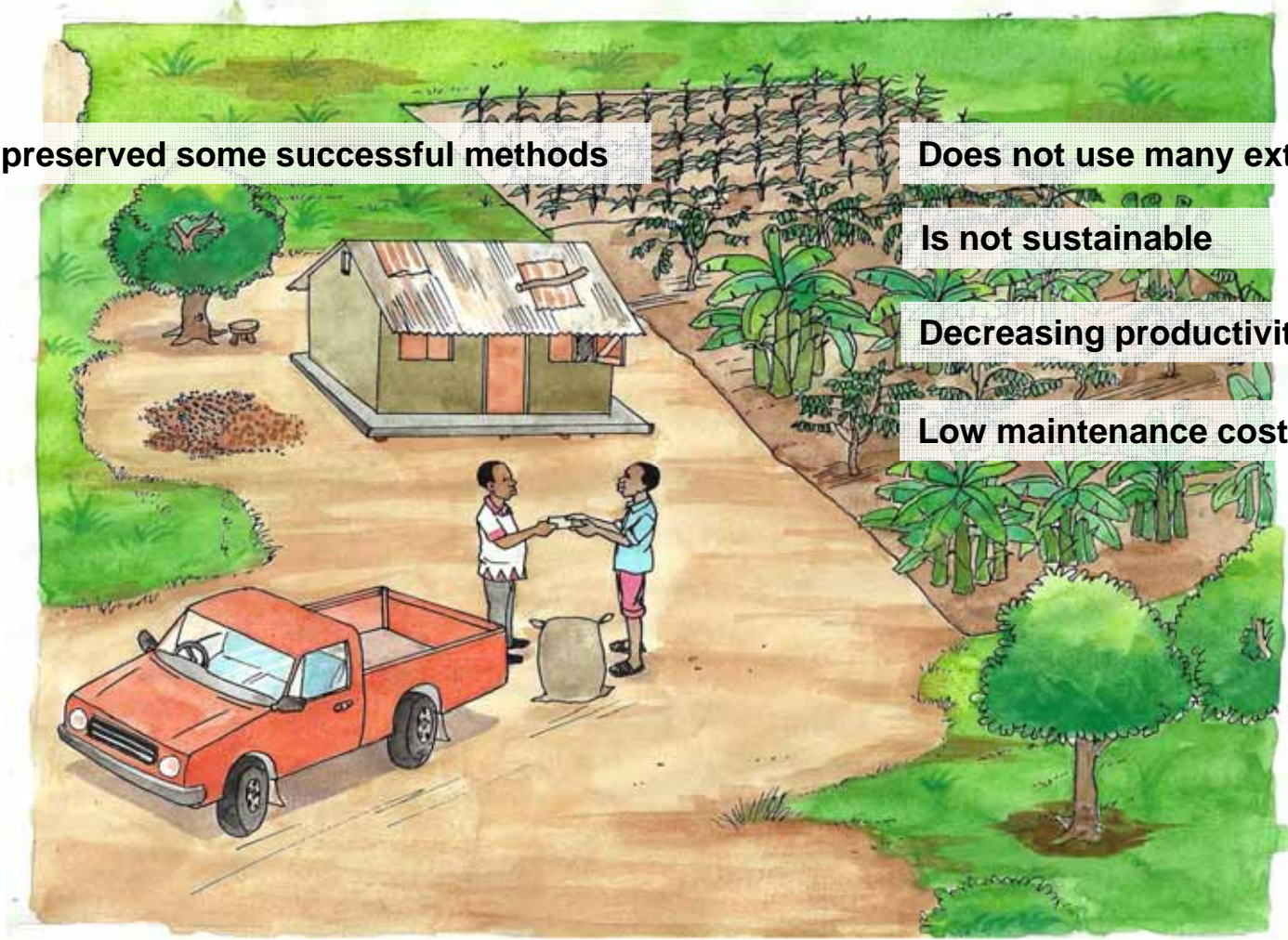
Improves soil fertility, reduces soil degradation

Improves education, research and extension

Recognizes the important role of women



What is traditional agriculture?



Have preserved some successful methods

Does not use many external inputs

Is not sustainable

Decreasing productivity

Low maintenance costs



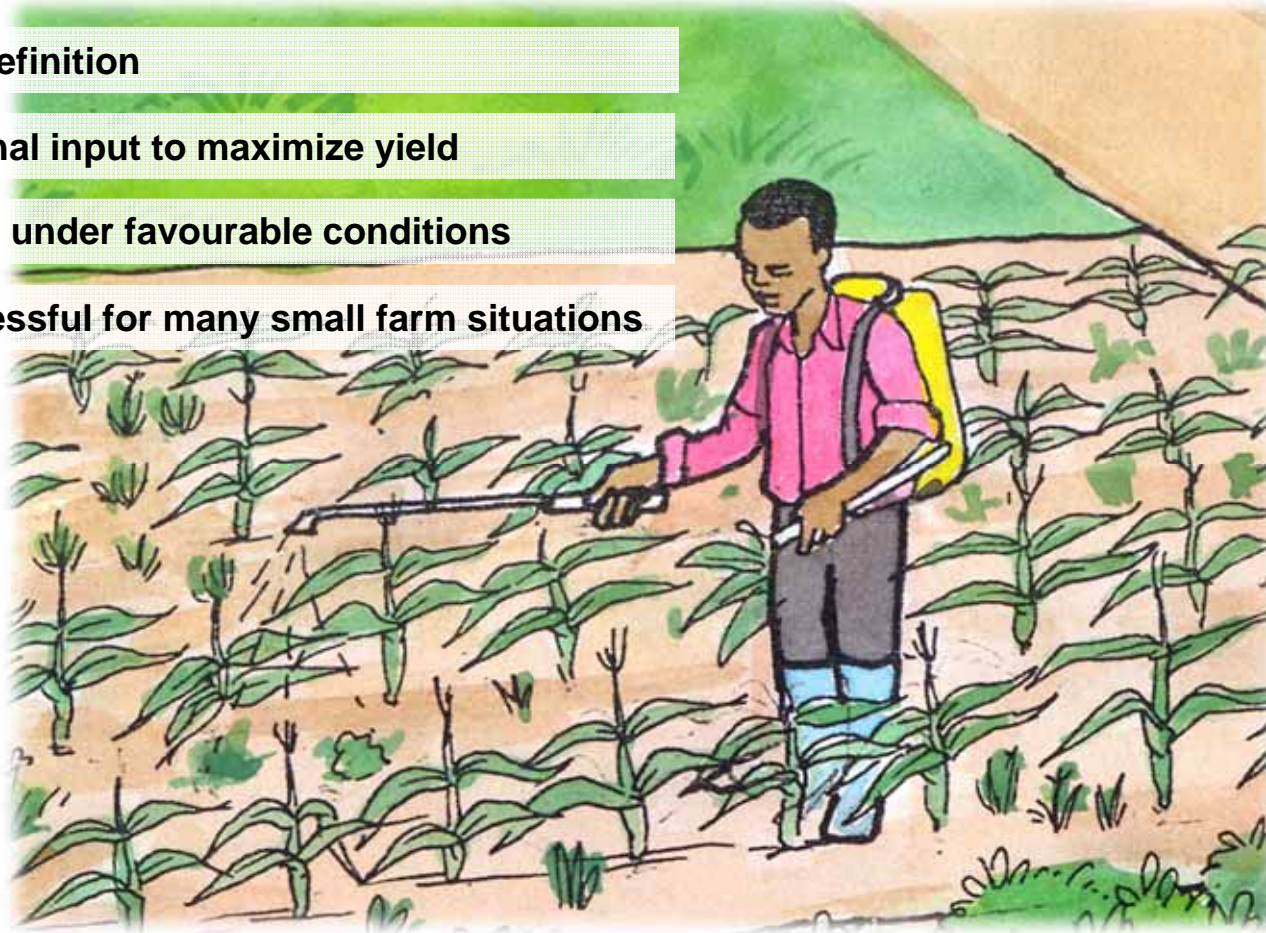
What is conventional agriculture?

No exact definition

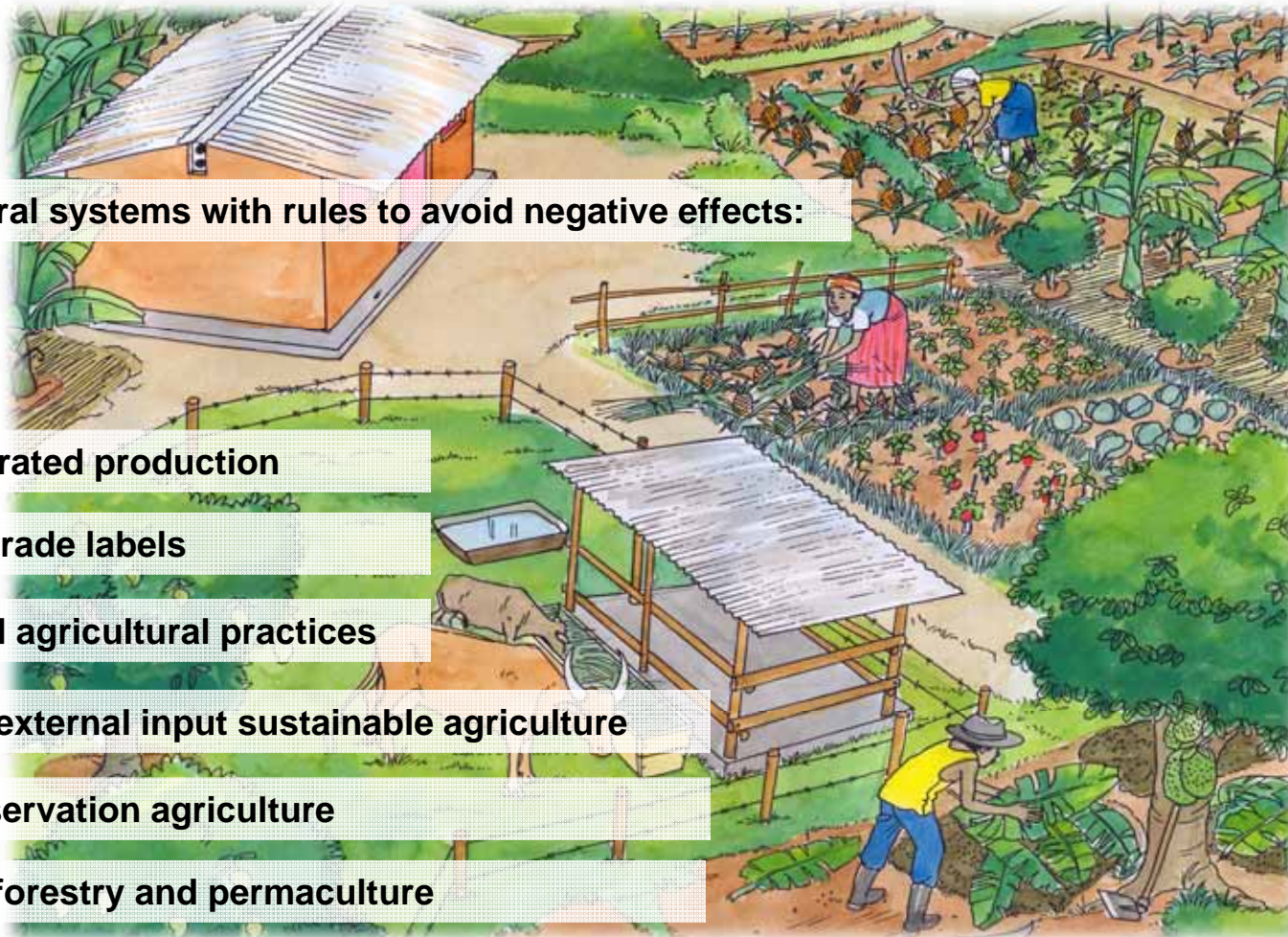
High external input to maximize yield

Successful under favourable conditions

Less successful for many small farm situations



What is sustainable agriculture?



Several systems with rules to avoid negative effects:

Integrated production

Fair trade labels

Good agricultural practices

Low external input sustainable agriculture

Conservation agriculture

Agroforestry and permaculture



What is organic agriculture?

Does not use chemical-synthetic pesticides and fertilizers

Improves soil fertility

No livestock feed additives and minimal use of synthetic animal drugs

Preventive pest and disease management

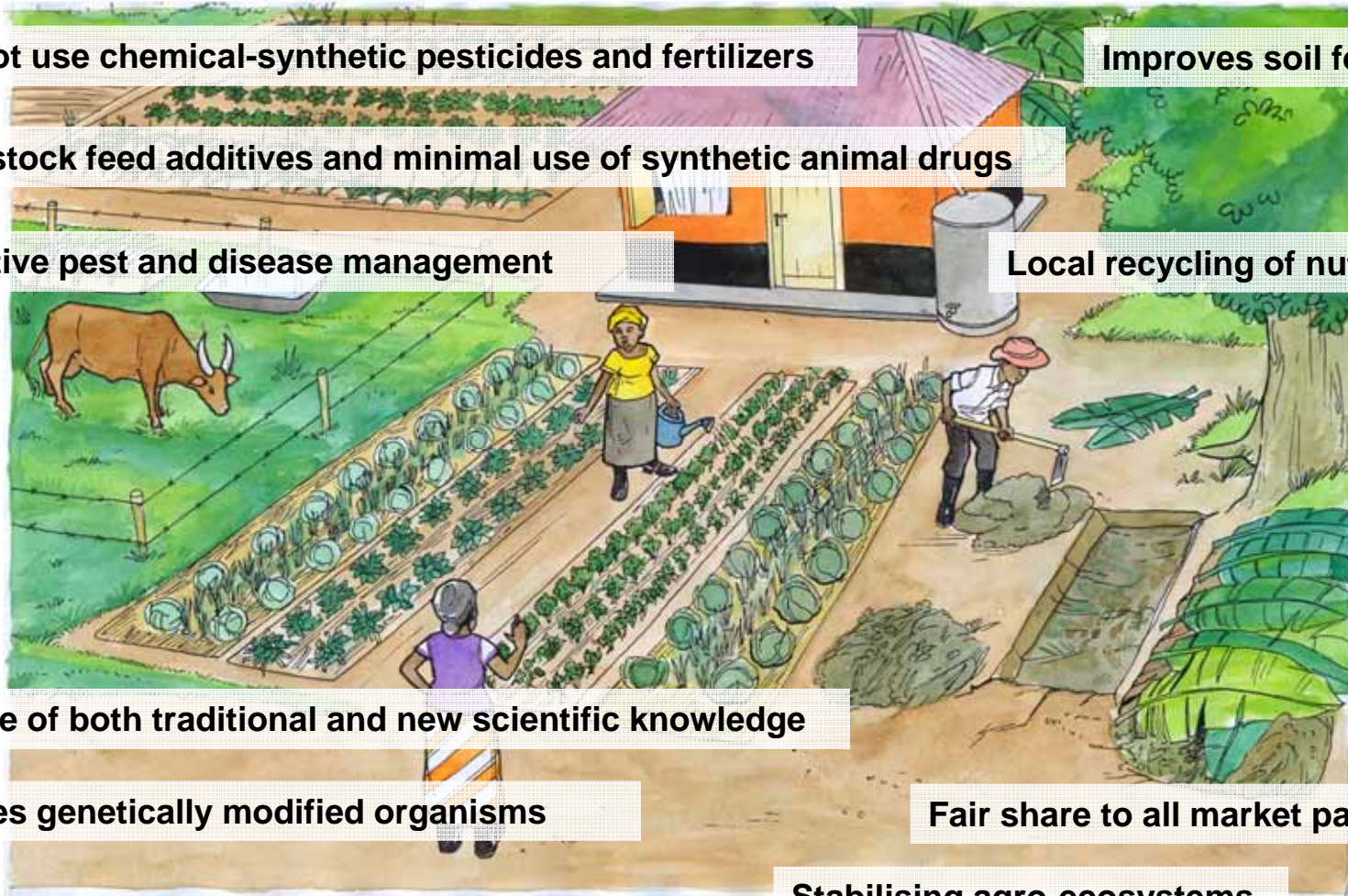
Local recycling of nutrients

Best use of both traditional and new scientific knowledge

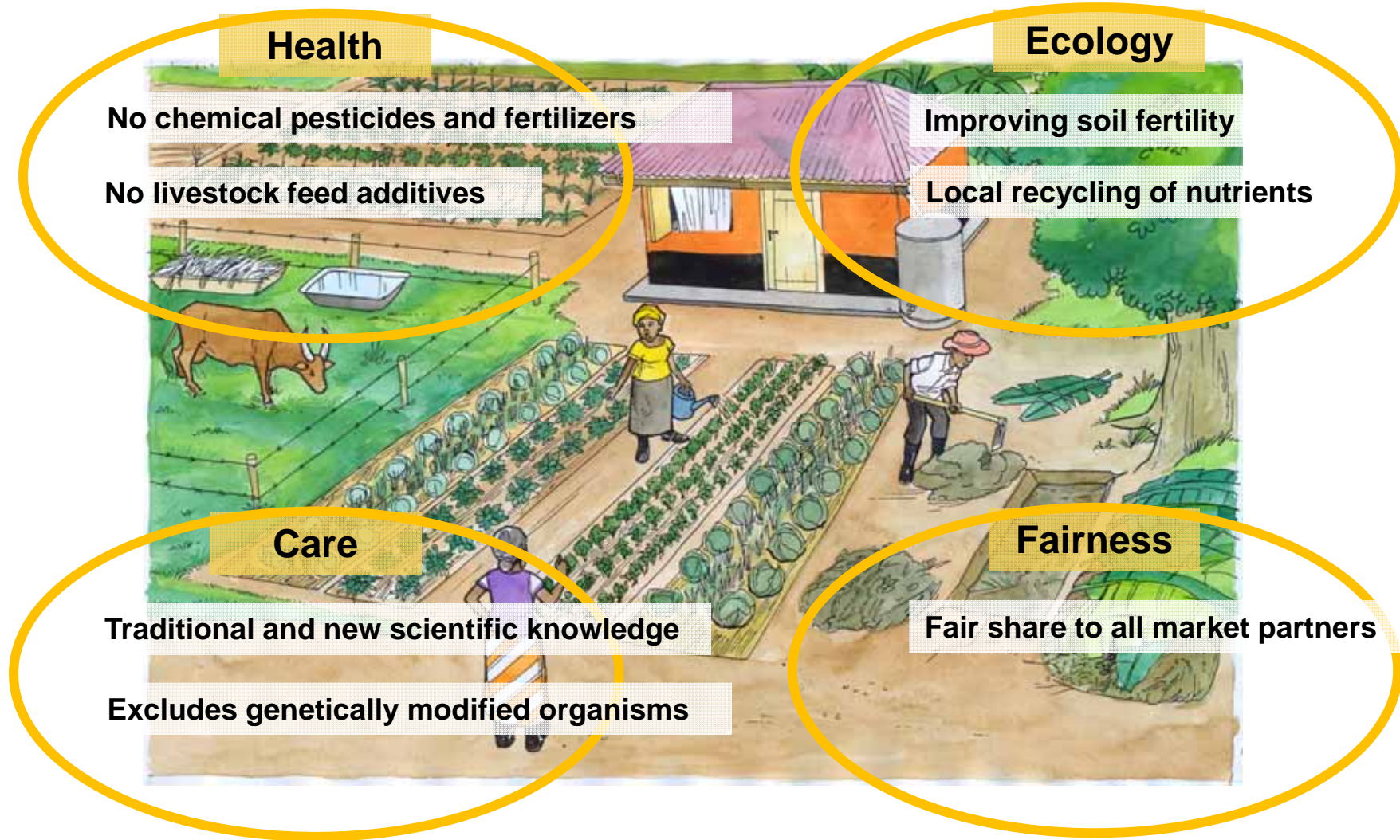
Excludes genetically modified organisms

Fair share to all market partners

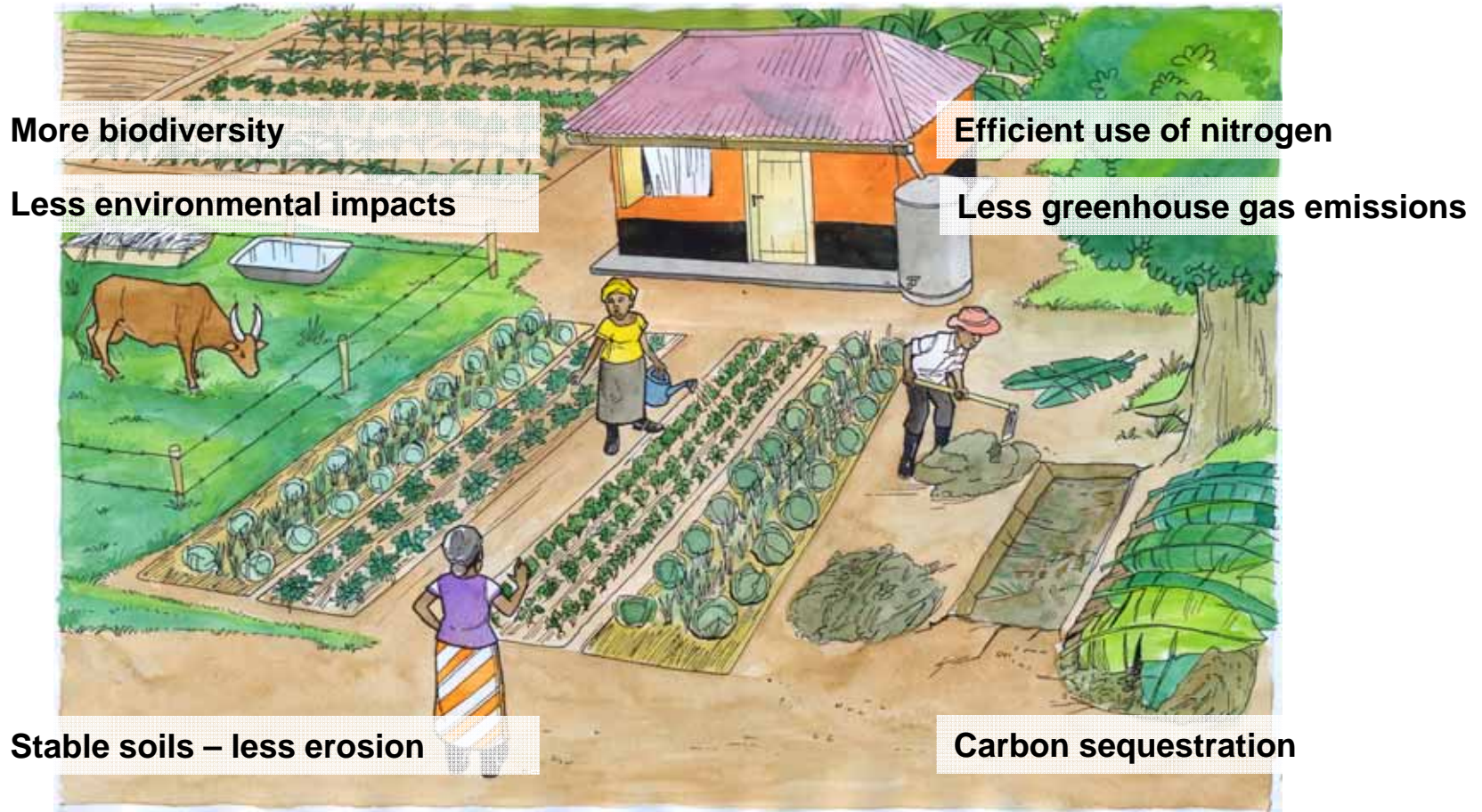
Stabilising agro-ecosystems



Principles of organic agriculture



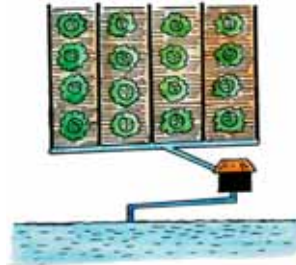
Benefits of organic farms



Solutions for agriculture in Africa



Compost making



Water harvesting



Agroforestry



Soil fertility management



Cooperation



Organic animal husbandry

