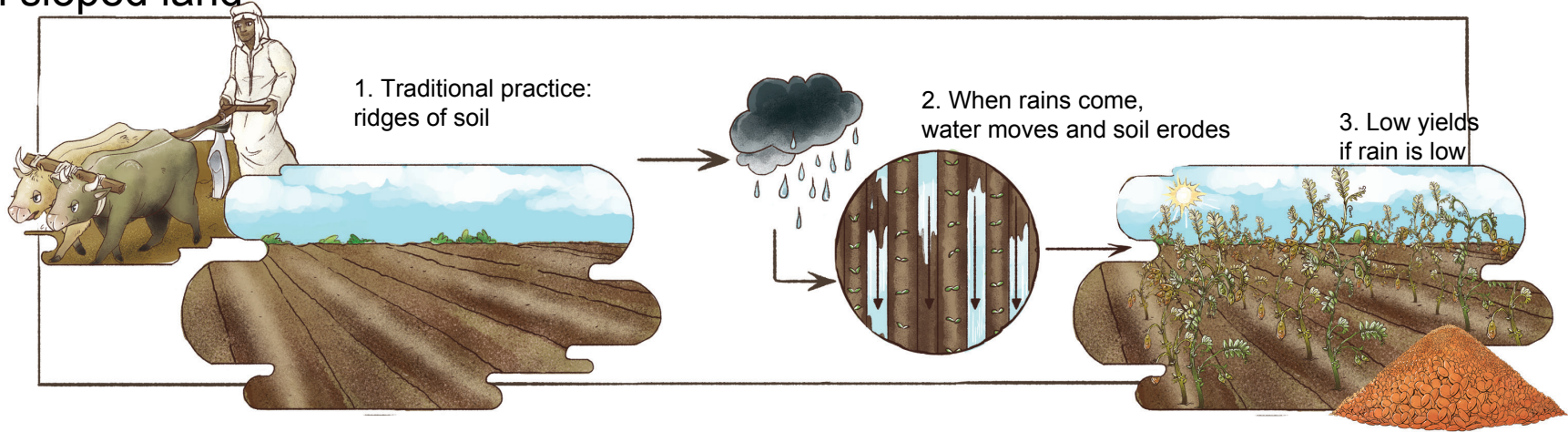
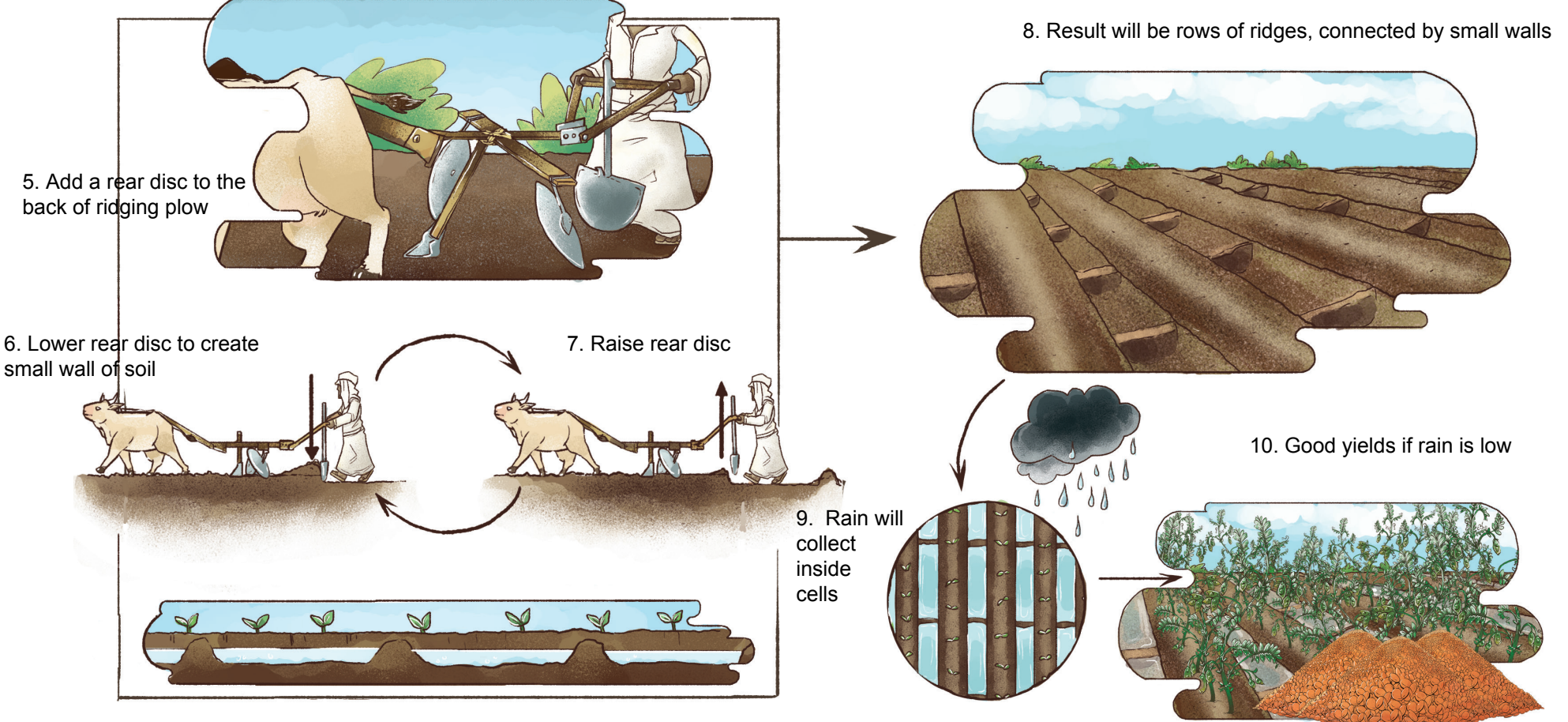


Lesson: Connecting soil ridges with small walls of soil can conserve rainwater and reduce soil erosion on sloped land

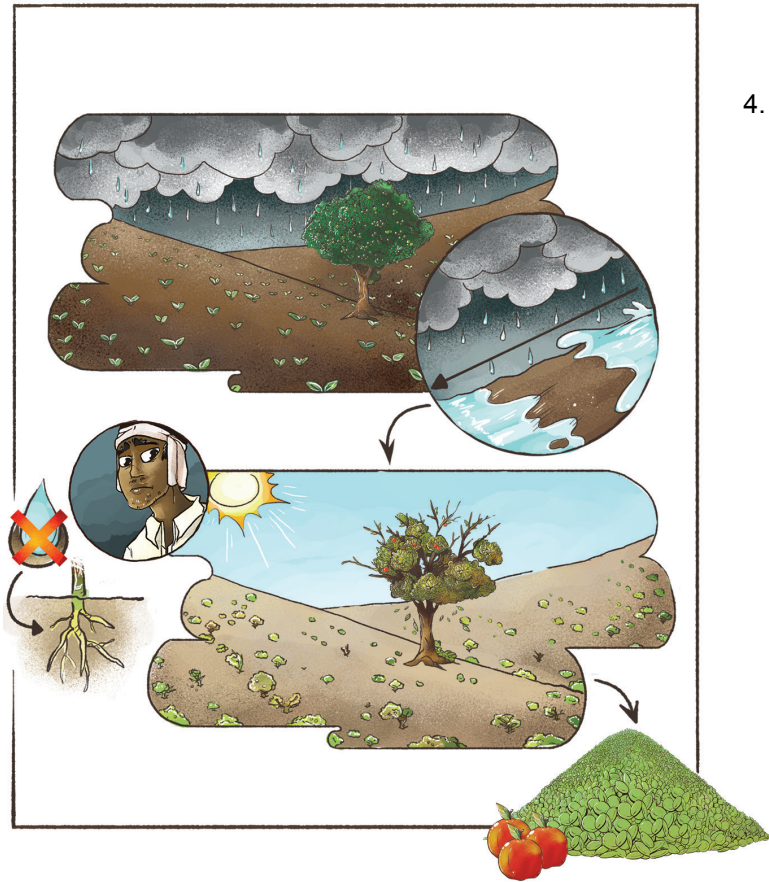


4. Improved practice



Lesson: There are simple methods to collect rainwater on slightly sloped land for dry season

1. Traditional practice: water is lost

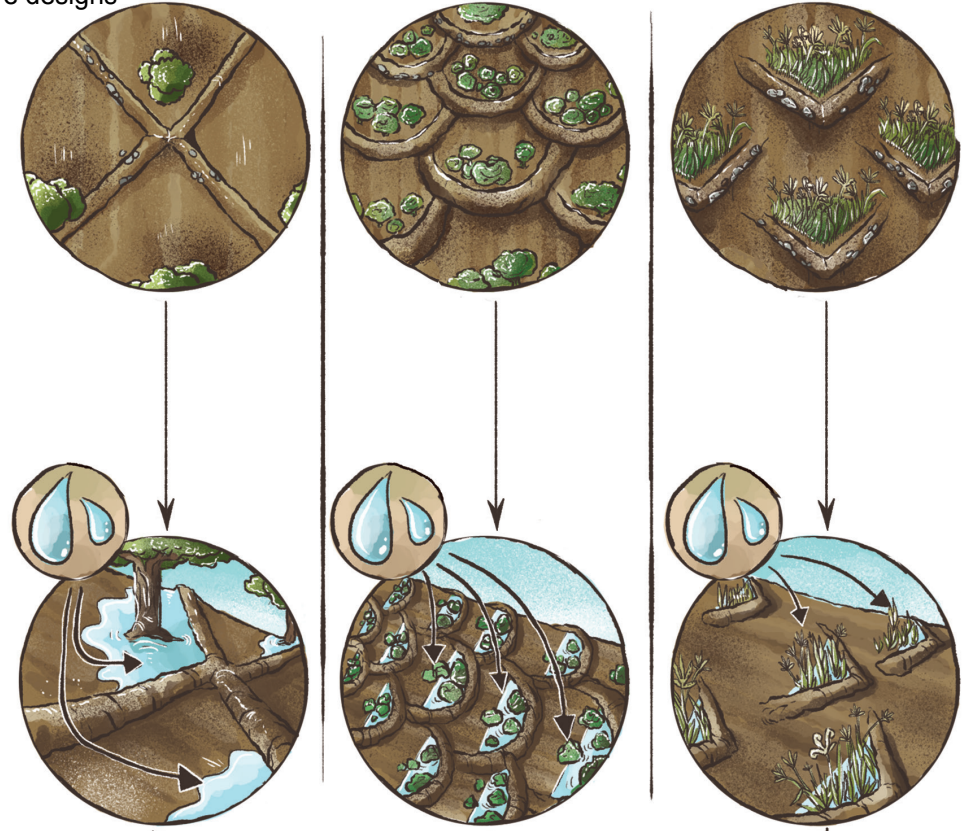


2. Low yields when rain is low (e.g. apple)

3. Improved practice: create soil bund that surrounds fruit tree to collect rainwater



4. Alternative designs

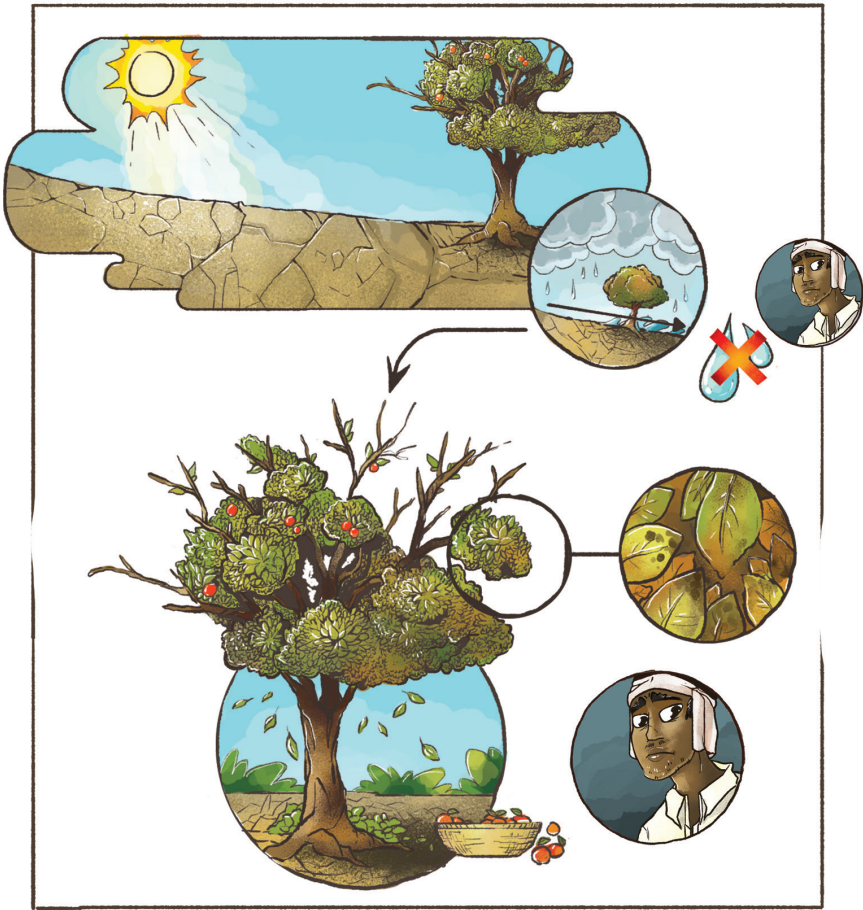


5. Improved yields



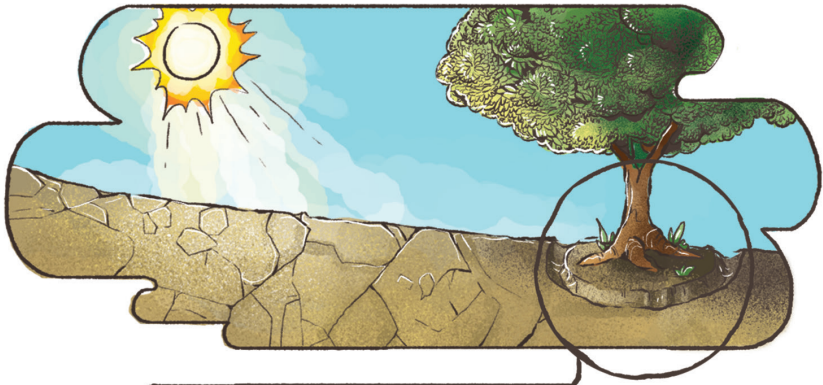
Lesson: Fruit trees can be grown in dry climates by harvesting rainwater around tree using a bund or pit

1. Traditional practice: no water collected



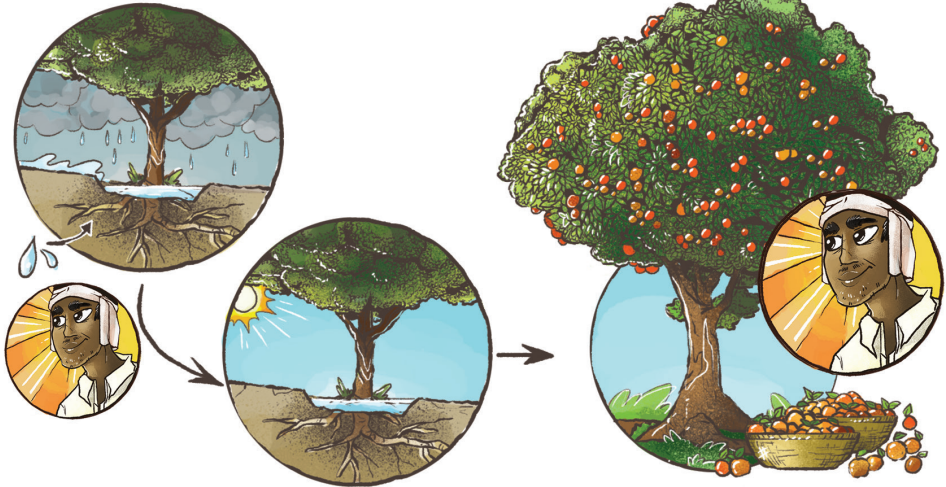
2. Low fruit yield (e.g. apple)

3. Improved practice: create short wall or pit around tree

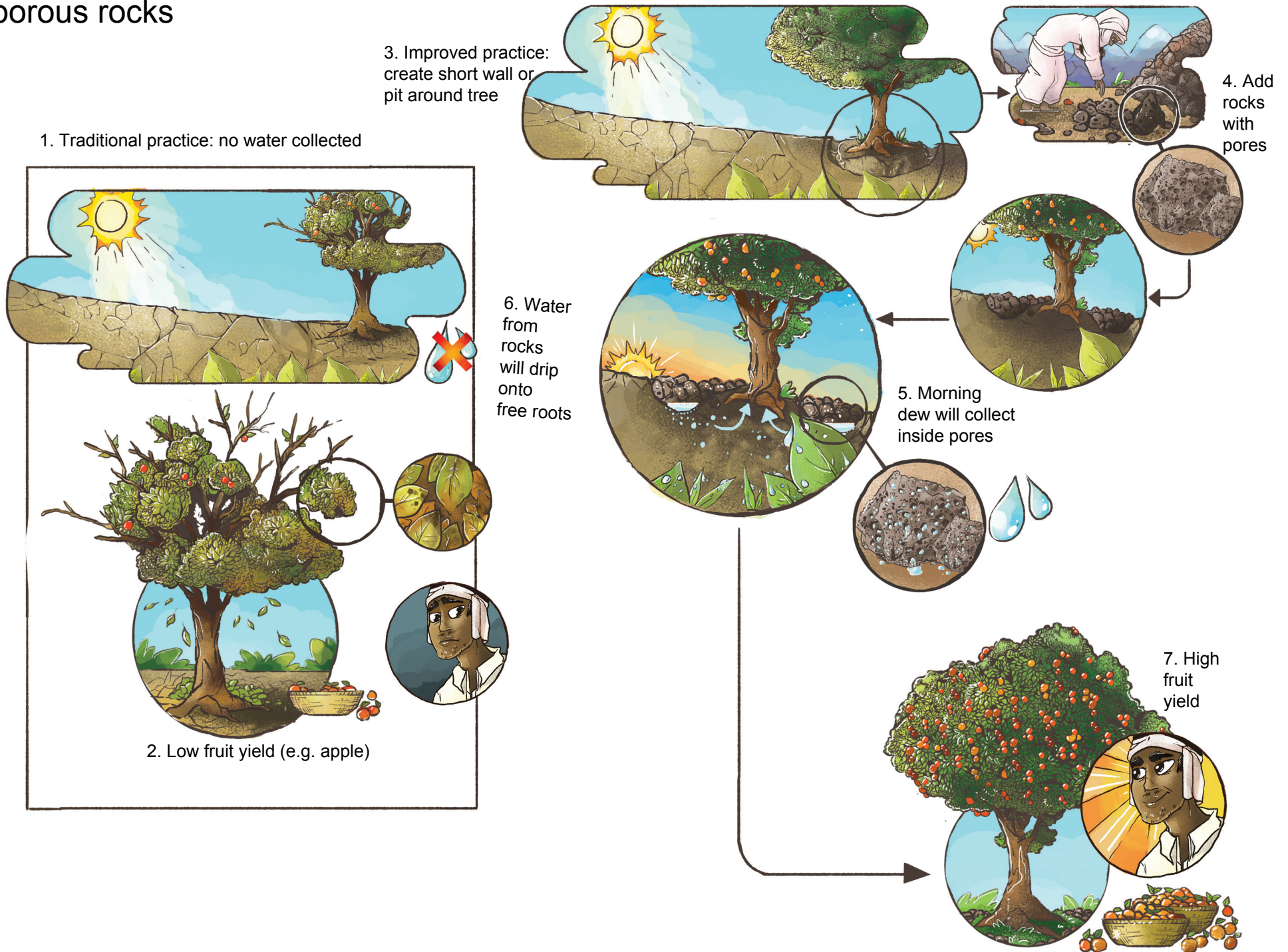


4. Rain collected

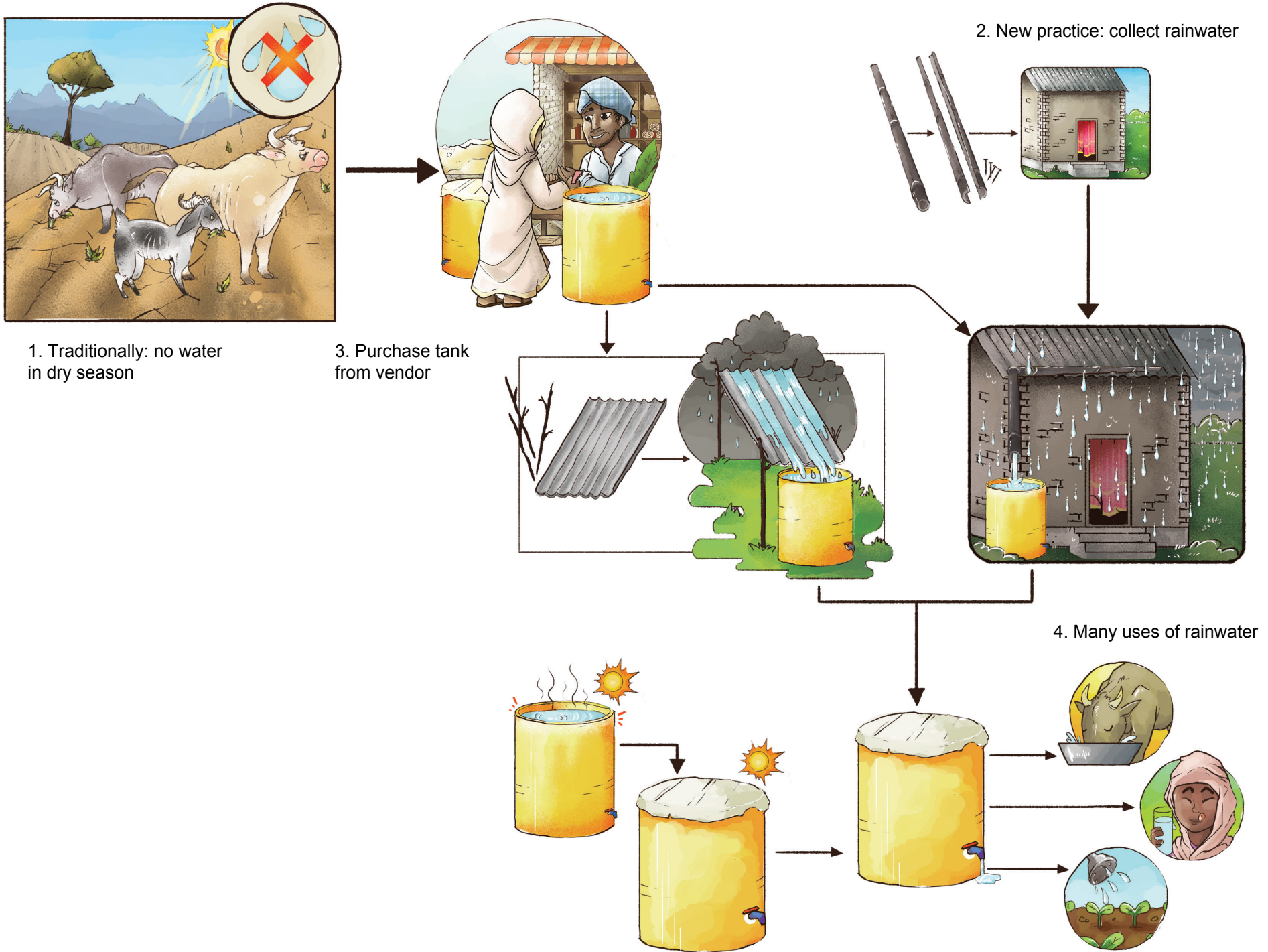
5. High fruit yield



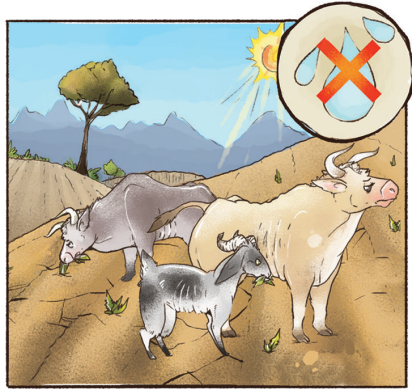
Lesson: Fruit trees can be grown in dry climates by harvesting rainwater around tree using porous rocks



Lesson: Rainwater can be collected



Lesson: Cheap foldable plastic tanks or tarpaulins can be used to collect rainwater

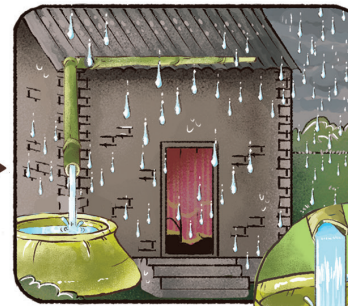


1. Traditional situation: rainfall is lost

2. In dry season, no water



3. New practice is to purchase folding plastic water tank



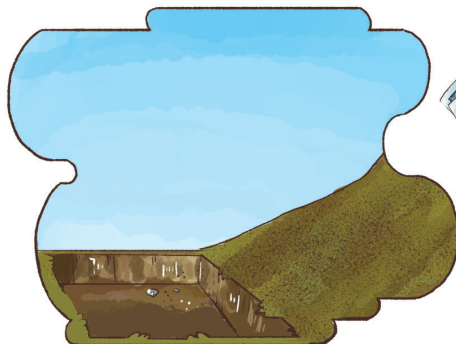
4. Collect rainwater



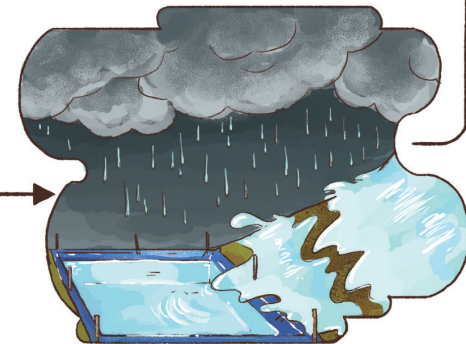
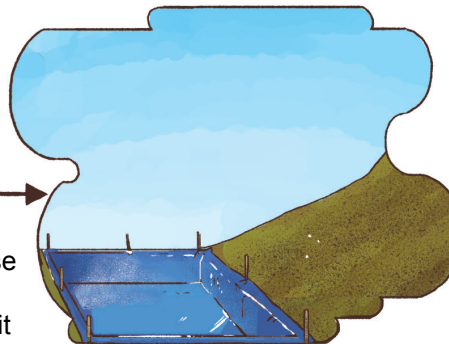
5. Many uses of rainwater



6. Second new practice is to dig pit at bottom of hill.



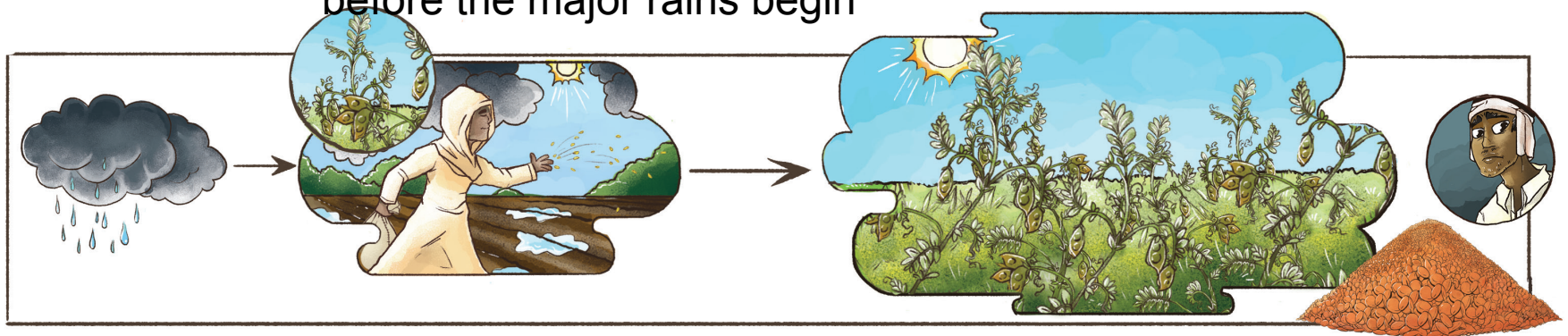
7. Purchase tarpaulin, then line pit



8. Collect rainwater in pit

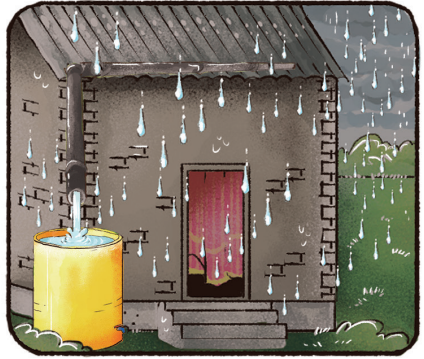
Lesson: Collected rainwater can be used to irrigate a millet nursery in order to enable sowing before the major rains begin

1. Traditional practice is to sow millet seeds after first rainfall

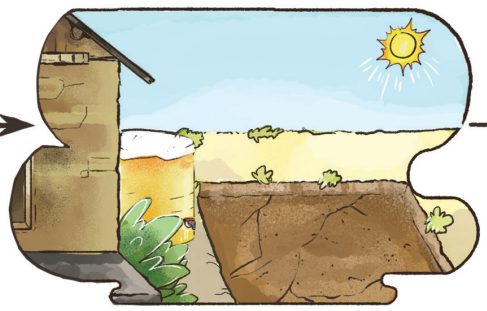


2. If growing season is short, then yield is low.

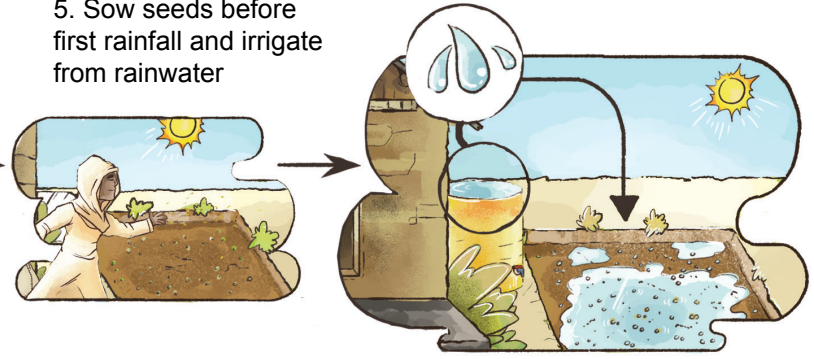
3. New practice is to collect rain during rainy season.



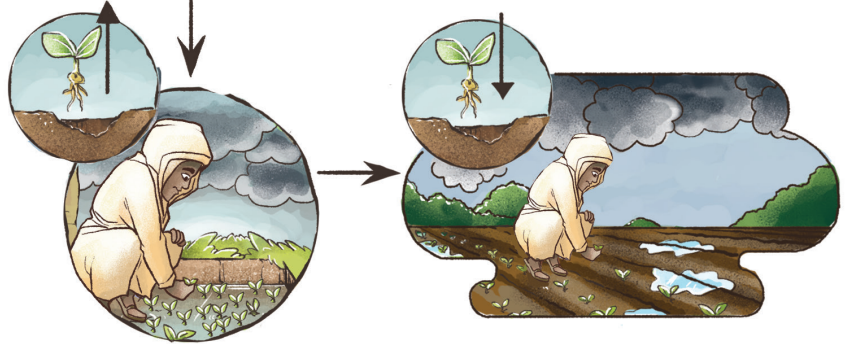
4. Prepare nursery at end of dry season



5. Sow seeds before first rainfall and irrigate from rainwater



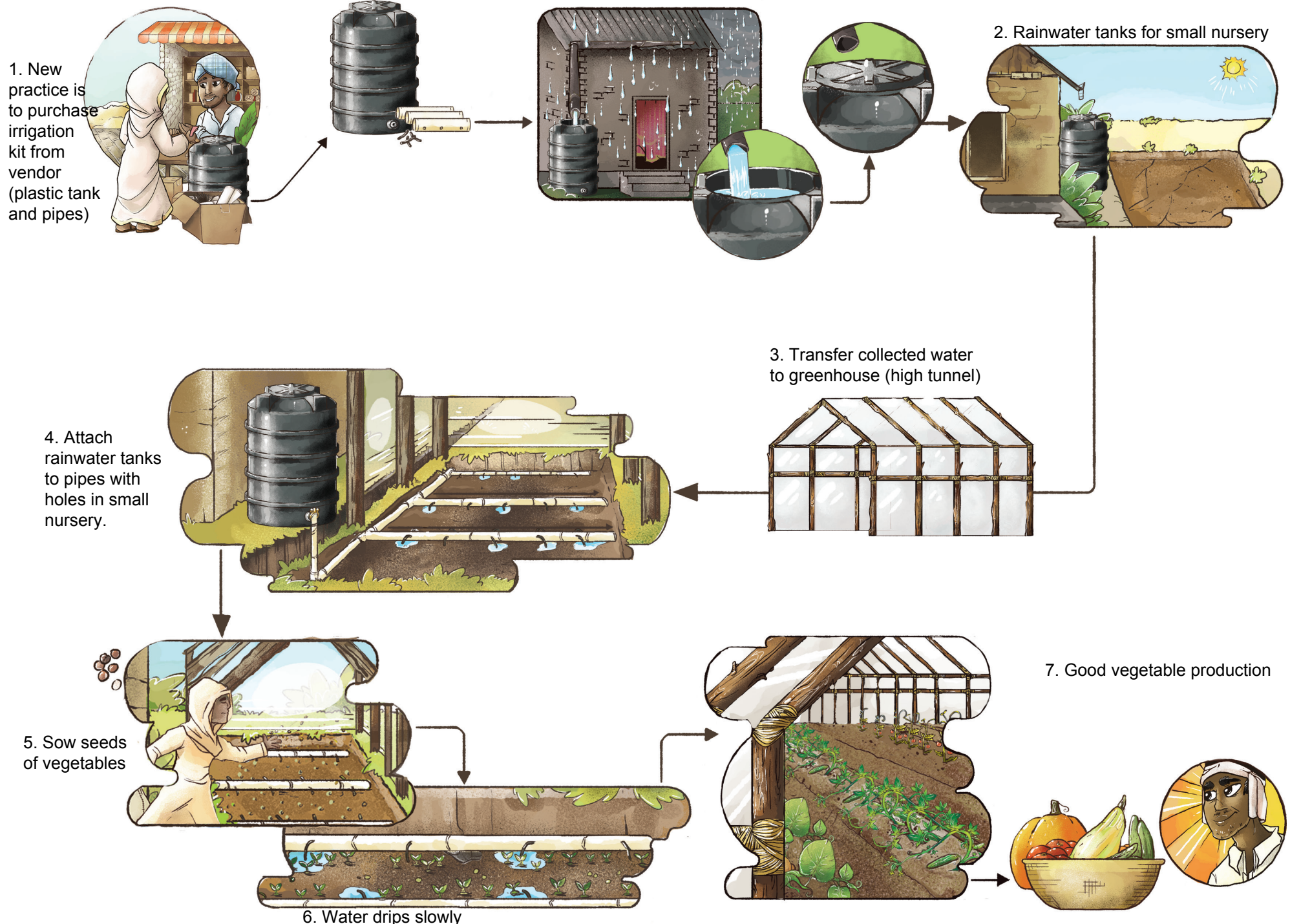
6. When rains arrive, transplant seedlings to the field



7. Yield is higher because the crop duration was increased

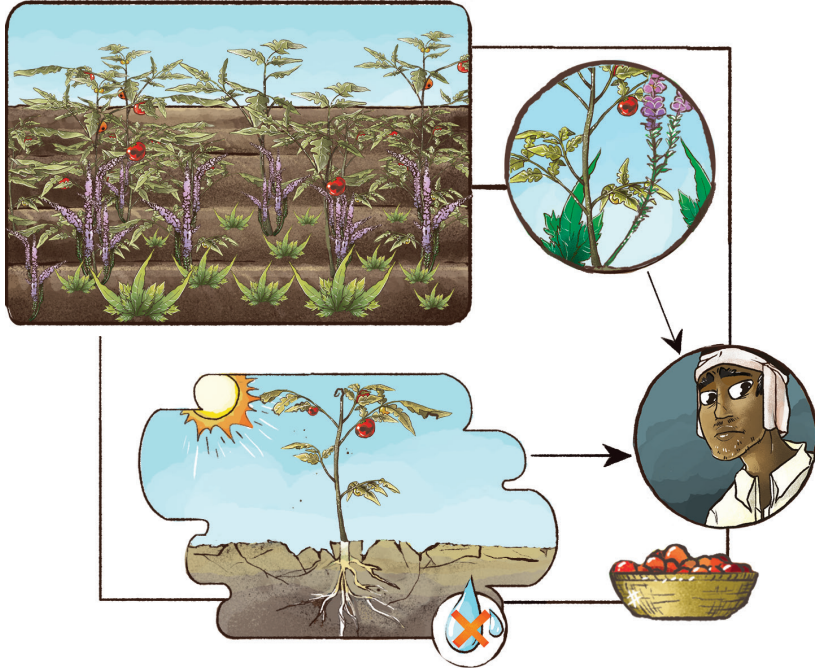


Lesson: Collected rainwater can be connected to pipes with holes to feed water directly to roots



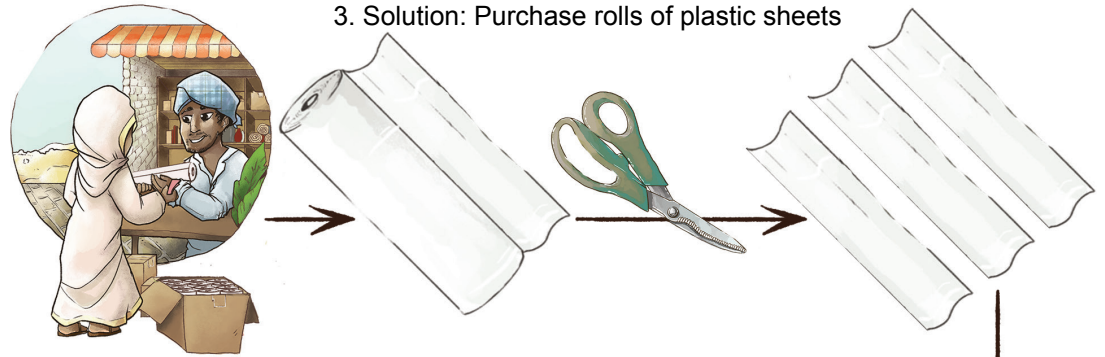
Lesson: Use plastic mulch to suppress weeds in the garden, prevent water loss and keep soil warm.

1. Problem: in garden weeds can grow

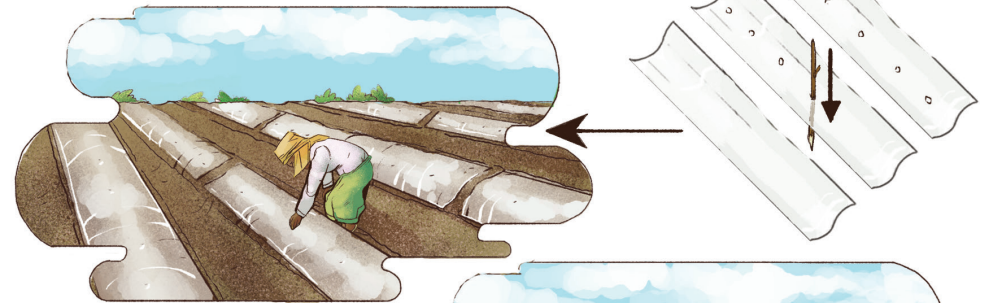


2. Problem: In hot season with low rainfall, crops will not grow.

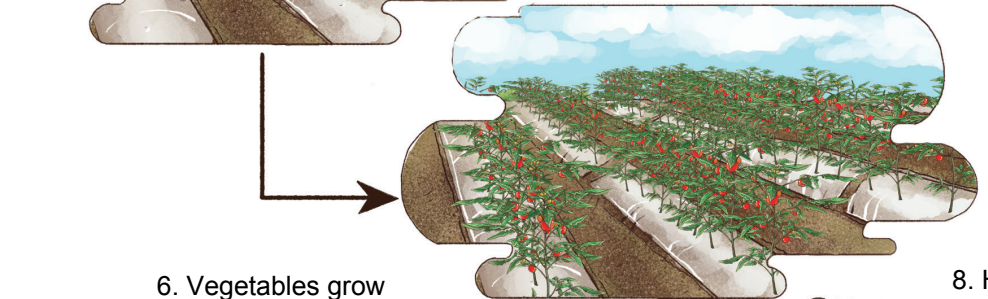
3. Solution: Purchase rolls of plastic sheets



4. Place on ground, create holes.



5. Sow seeds in holes



6. Vegetables grow without weeds.

8. High yield

7. Plastic prevents water from evaporating and keeps the soil warm.

