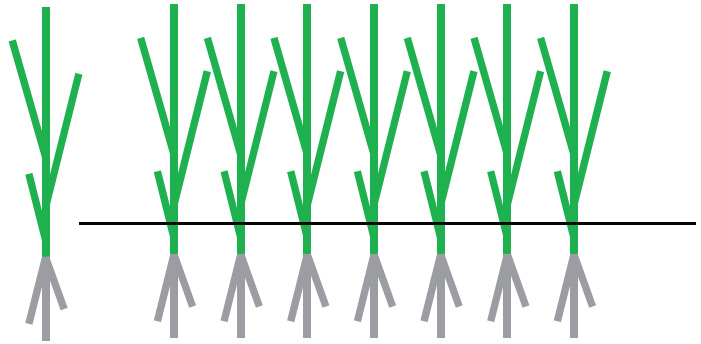




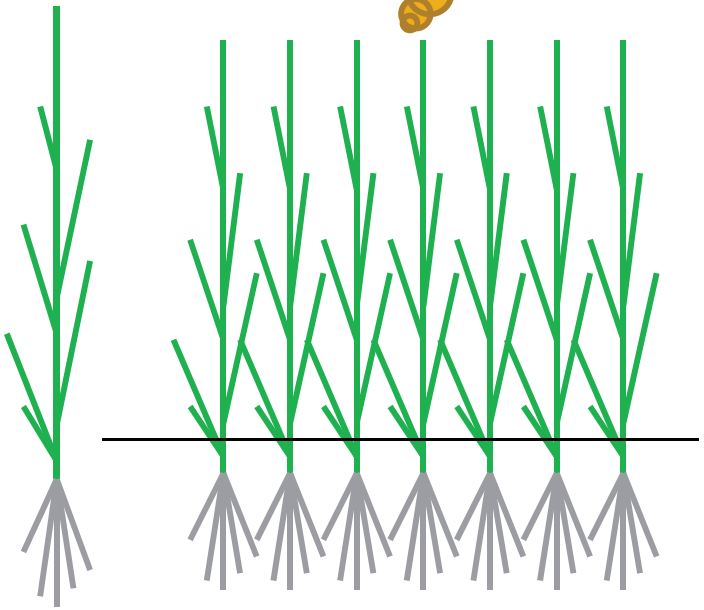

- ✓ **Appropriate nursery period is 2 - 3 weeks when seedlings develop 4th leaf.**
- ✓ **Tillering starts at 4-leaf age.**
- ✓ **Don't leave the seedlings in the nursery too long.**

Healthy, vital,
4 leaves
Start tillering.

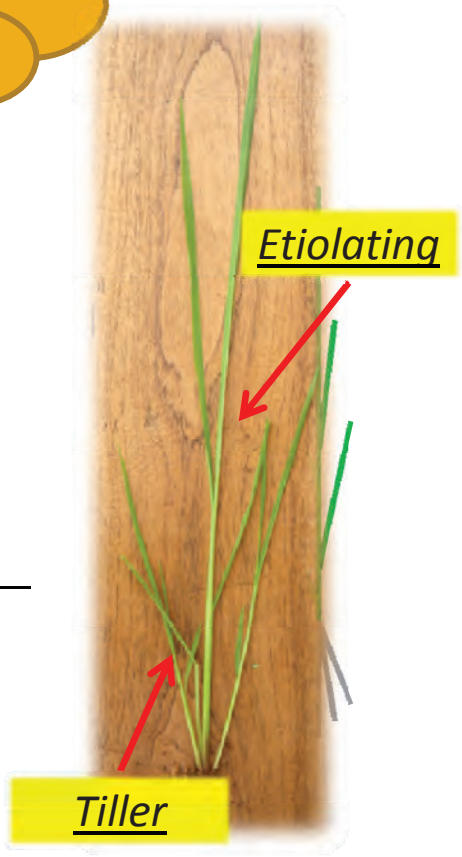


2 - 3 weeks

Weak, etiolated,
5 - 6 leaves,
Tillering started



more than 4 weeks



3 weeks-old seedlings

5 weeks-old seedlings

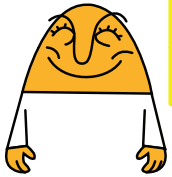
Younger seedlings recover from planting shock quicker and grow better.

Be gentle!
Don't kick or
hit seedlings.

Don't make
roots dry.

Uproot seedlings little by little!

Keep roots wet until transplanting!



- ✓ **Uproot seedlings carefully.**
- ✓ **Keep root wet.**
- ✓ **Transplant soon after uprooting.**



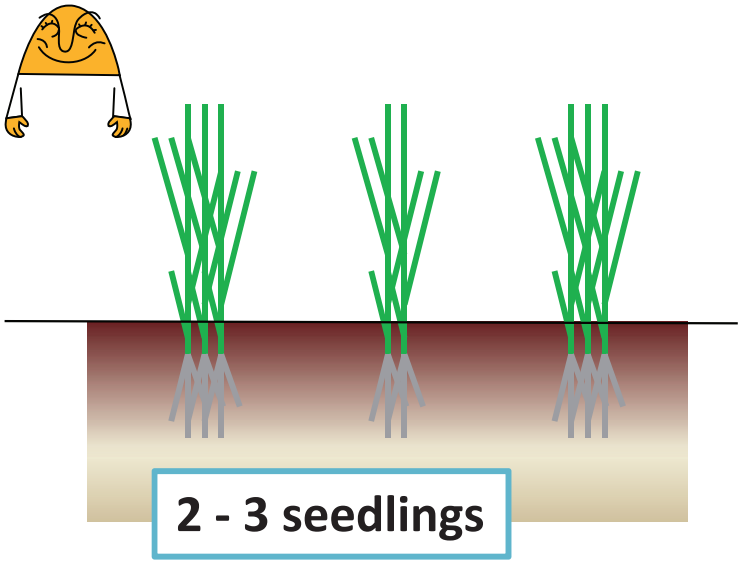

Transplanting

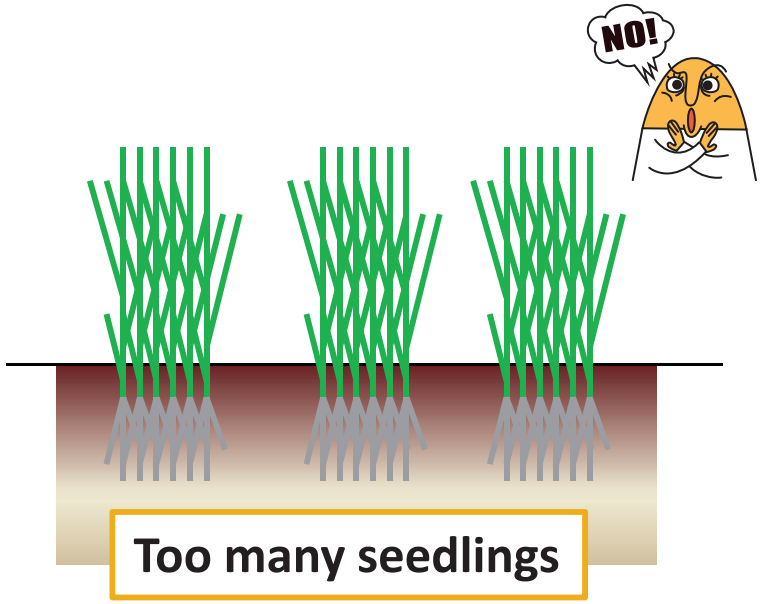



Key Points in Transplanting (1)

Plant a few seedlings per hill

- 2 - 3 seedlings are enough as they develop tillers.
- Reduced number of seedlings per hill can save cost for seeds.

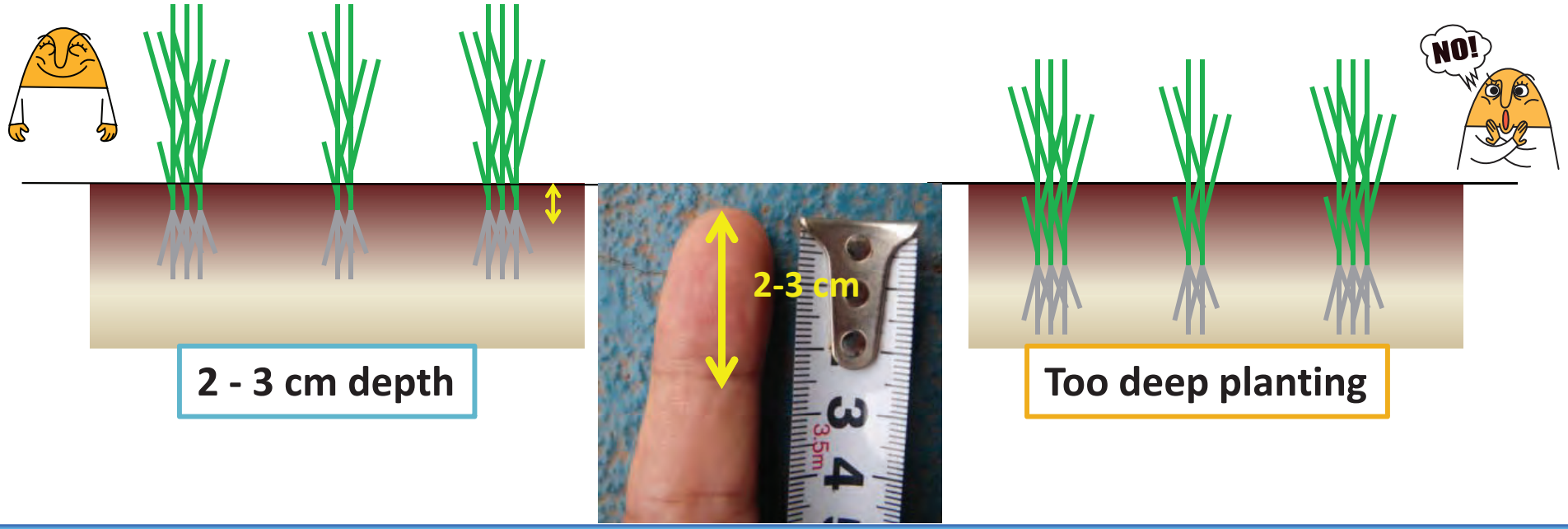


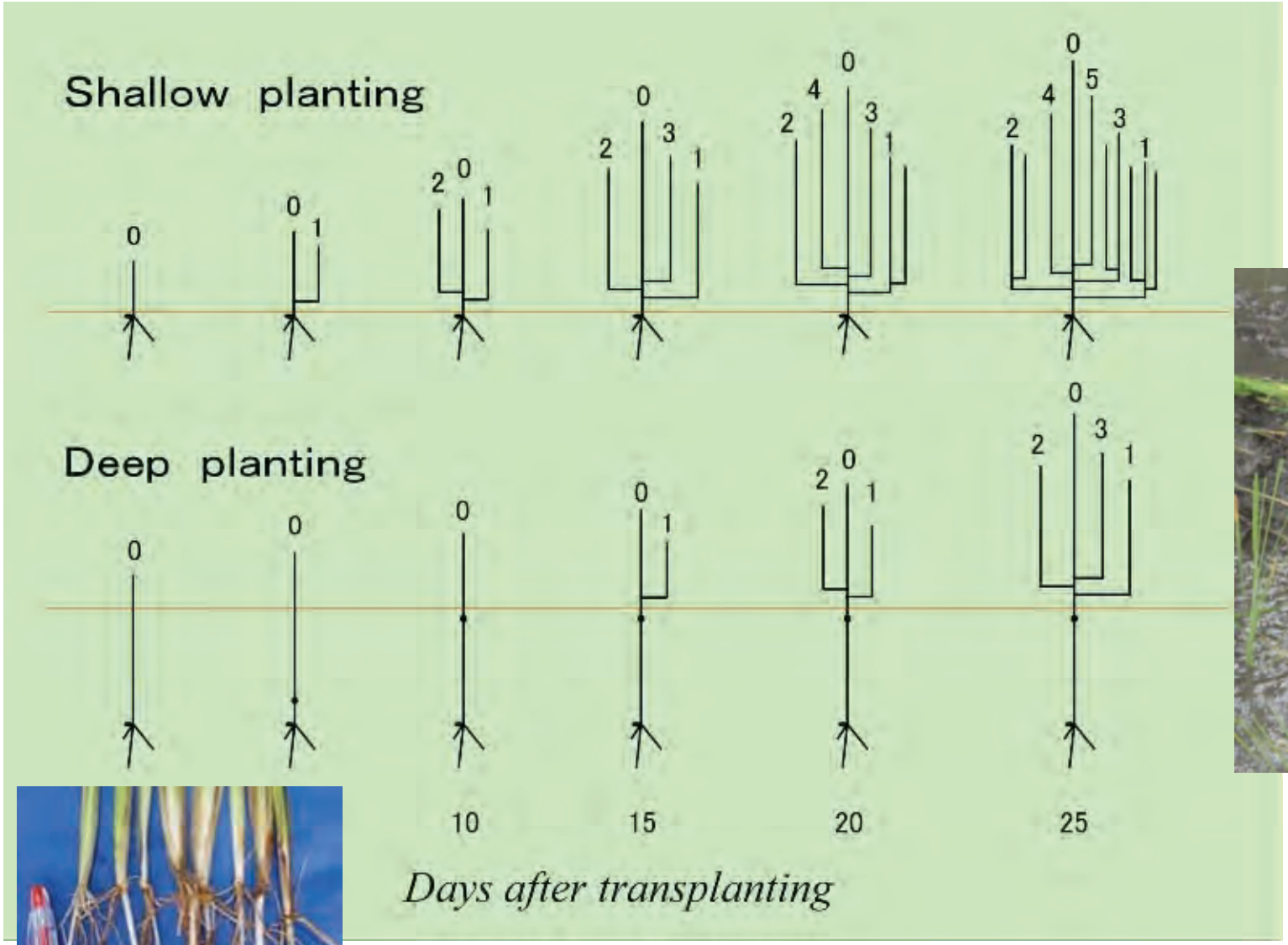


Key Points in Transplanting (2)

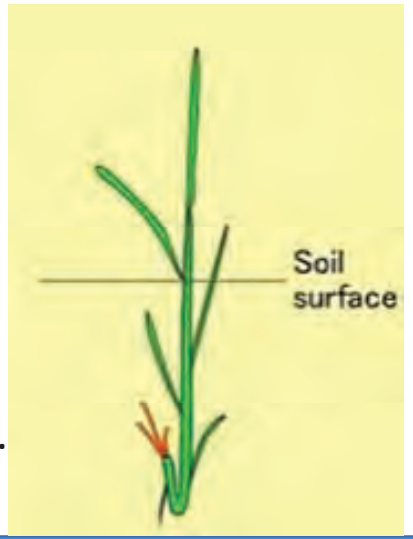
Plant at the depth of 2 - 3 cm

- Deep planting causes delay in development of tillers.
- Planting at 2 - 3 cm in depth is recommended.





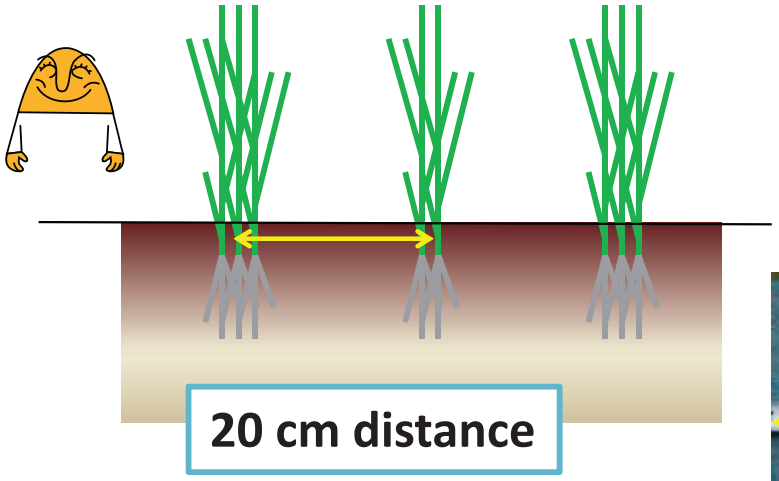
Planting fork is
not recommended.

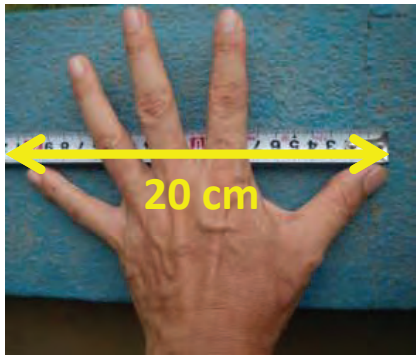


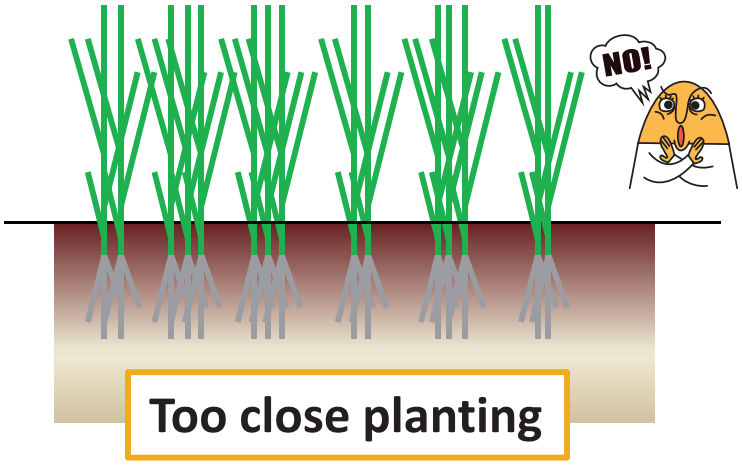
Key Points in Transplanting (3)

20 cm apart between hills

- Space between hills is not less than 20 cm.
- Wider space between hills can save cost for rice seeds and labor.







Transplanting and water management

- Flooding water causes damage to young seedlings just planted in a field. Farmers had better avoid transplanting on heavy rainy days.
- When prepare cropping calendar, transplanting time should not coincide with the peak rainy season.
- The water level in a plot after transplanting should be kept low for several days to promote root development by supplying oxygen, as well as to promote fertilizer absorption.

Summary 1

- Seedlings should be uprooted at 2 to 3 weeks after sowing when they develop four leaves.
- Uprooting should be done with care. Do not kick or hit the seedlings to remove soils from the roots. They are gently removed with water.
- Uprooted seedlings are immediately carried to the main field for transplanting. The roots of seedlings are always kept wet.

Summary 2

- Transplanting is made with 2 to 3 seedlings per hill at 20 cm apart between hills. Planting is done at a depth of 2 to 3 cm.
- The main field should be well puddled and leveled before transplanting.
- At transplanting, soils in the main field is soft, and saturated with water.
- After transplanting, water depth is kept shallow for several days.

Land Development and Land Preparation

Training on Rice Production
-Essence of Technical Package-

The Sustainable Rice Development Project in Sierra Leone (SRDP)

JICA-MAFFS

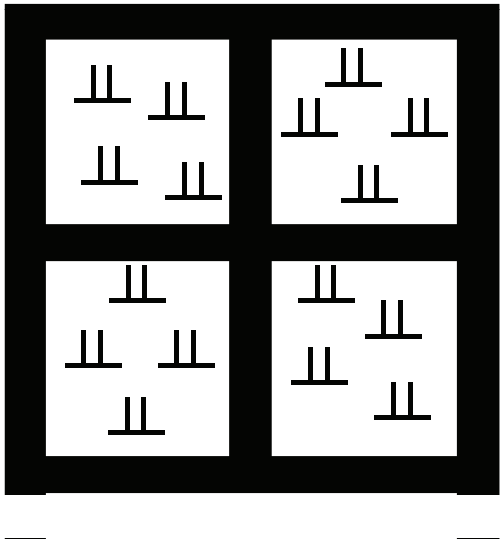
Contents

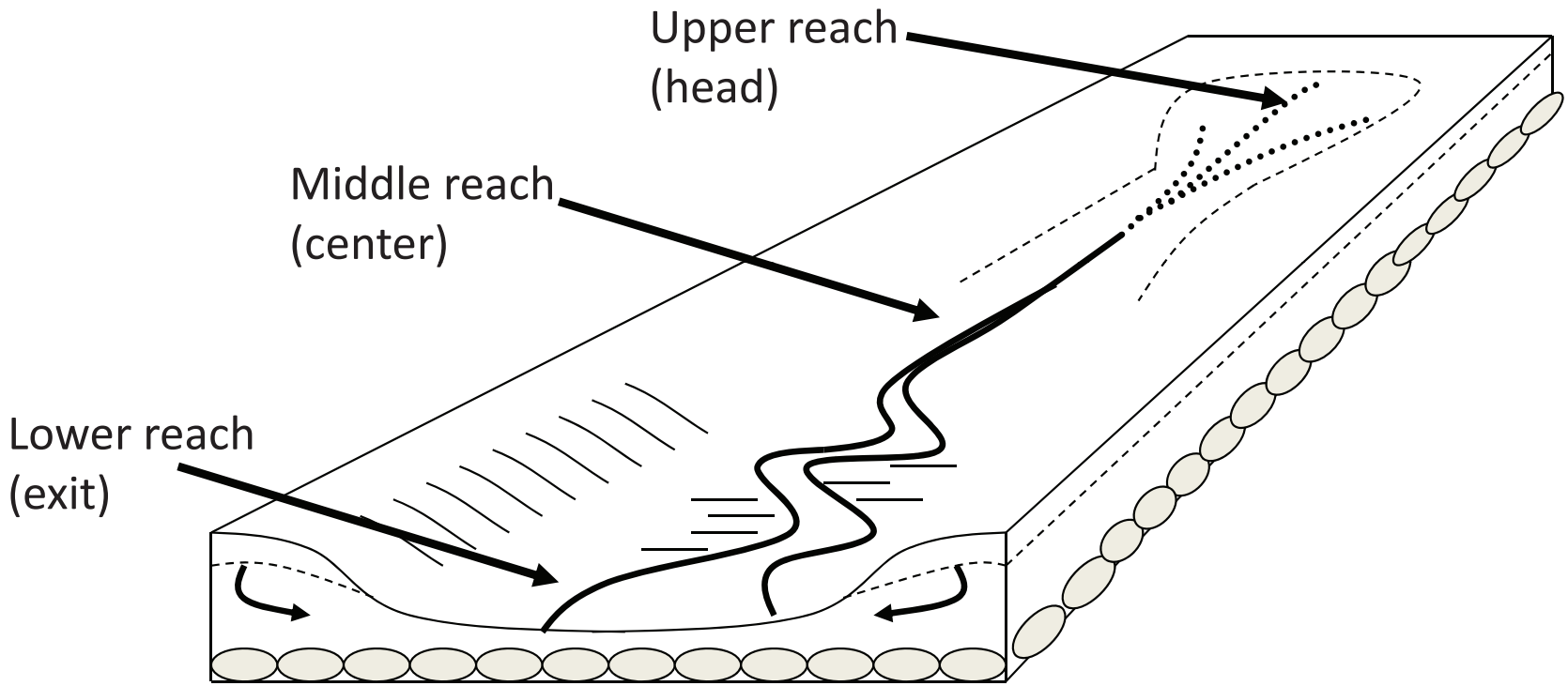
- Land Development
  - Bund
  - Drainage canal
  - Land leveling
- Land Preparation
  - Brushing, Clearing and Digging
  - Leveling
  - Puddling
- Summary

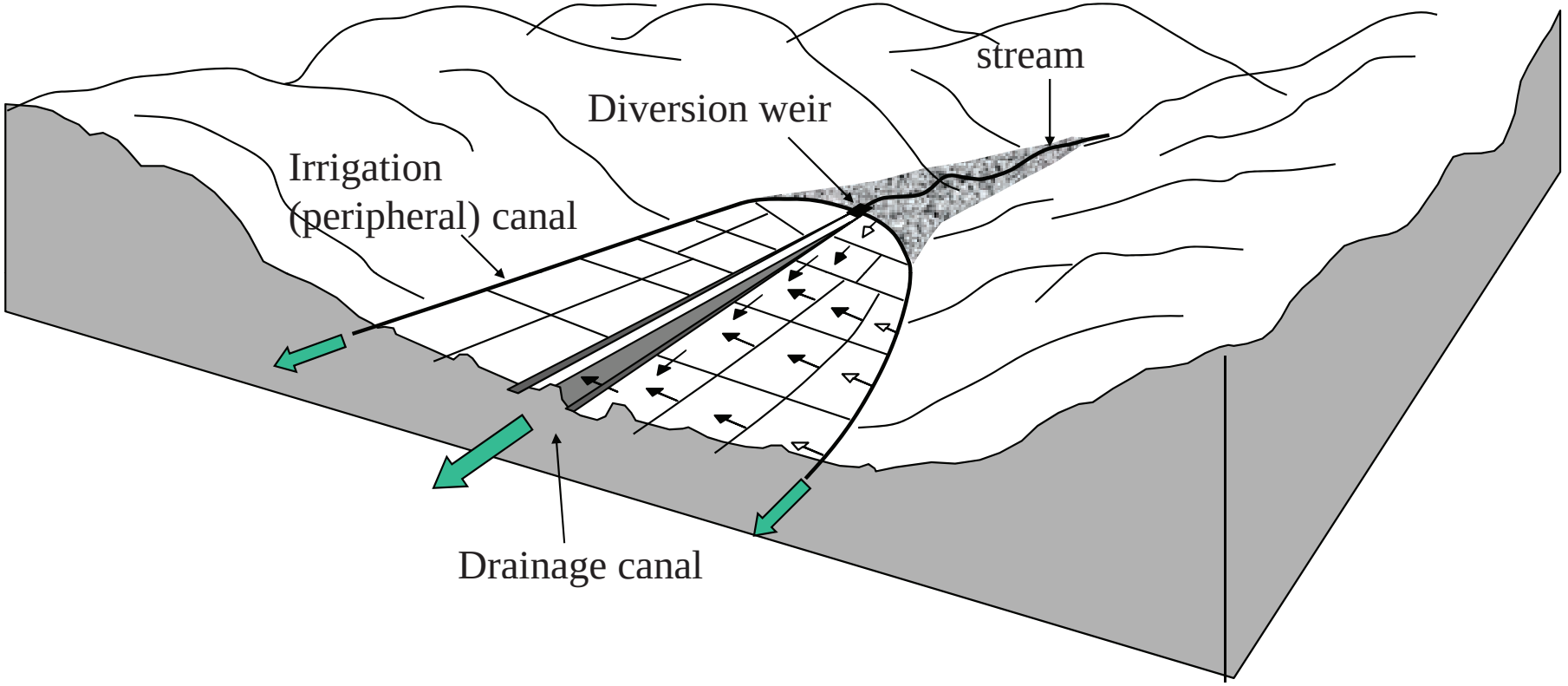
Principles of paddy field in lowland

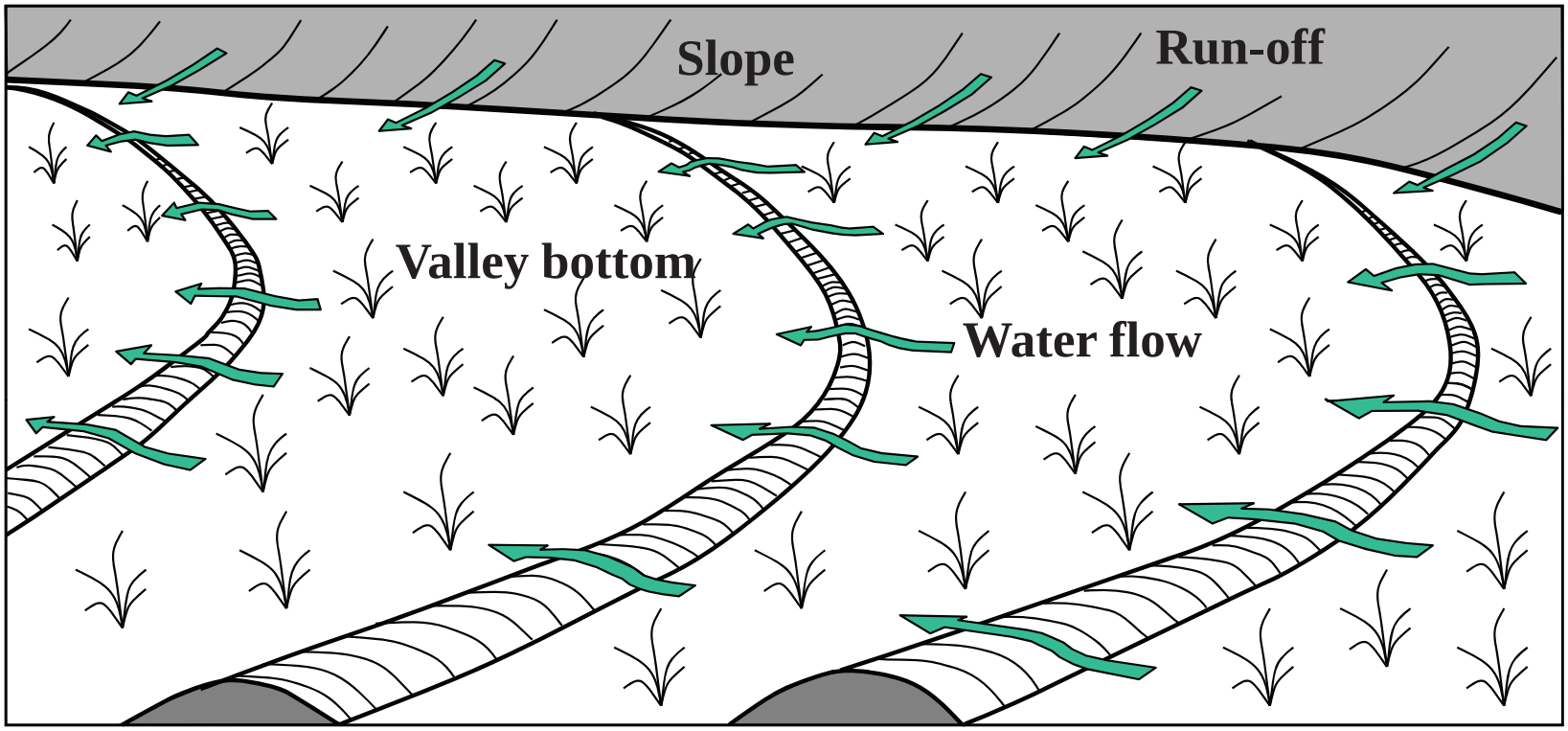
- Lowland paddy is grown under submerged condition.
- A paddy field should be able to irrigate water and drain water (water control).
- A paddy field should provide uniform water environment for rice plants to grow.
- A paddy field should then have a function of water control.
- The Japanese character, expressing paddy field is composed of bund.

Tambo




Upper reach
(head)
Middle reach
(center)
Lower reach
(exit)


stream
Diversion weir
Irrigation
(peripheral) canal
Drainage canal



Simple contour bunds

Example of IVS development