

INFRASTRUCTURE	ADEQUACY		
	Good	Adequate	Needs Attention
Grazing			
Paddock Size	X		
Farm Roadways		X	
Water troughs	X		
Milking parlour			
No. of rows	X		
Collecting Yard	X		
Drafting			X Priority 2015
Farmyard			
Slurry Storage		X	
Silage Slab	X		
Cubicle Spaces		X	
Head Feed Space			X
Calf Facilities		X	
Calving Facilities			X Priority 2015

5 Steps to Improving Soil Fertility

Information

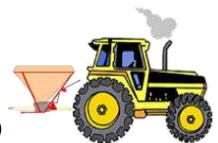
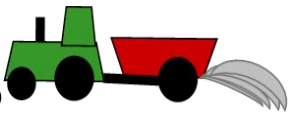
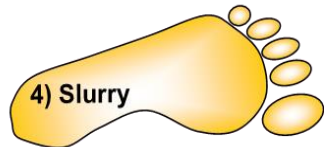
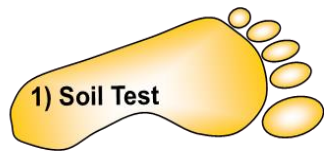
1) Soil Test

Interpretation

3) P & K Index 3

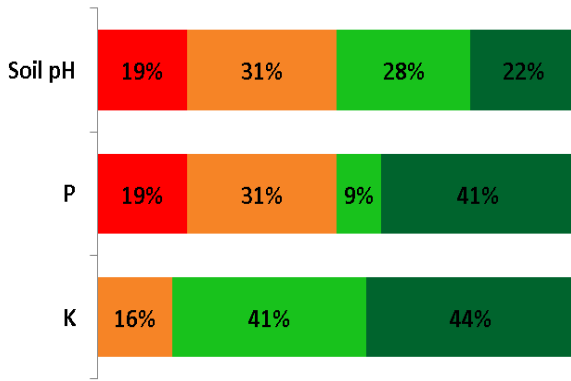
Action

5) NPKS Balance



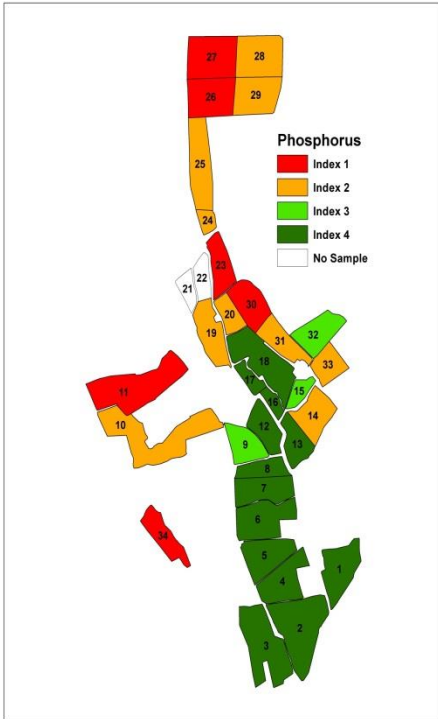
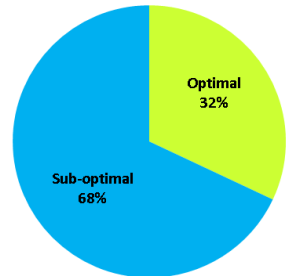
Index	Description
1	Very Low
2	Low
3	Target
4	High

Soil Fertility Summary: Lehane's Farm



Very low Low Optimum High

Percentage of soils with optimum soil pH, P & K status



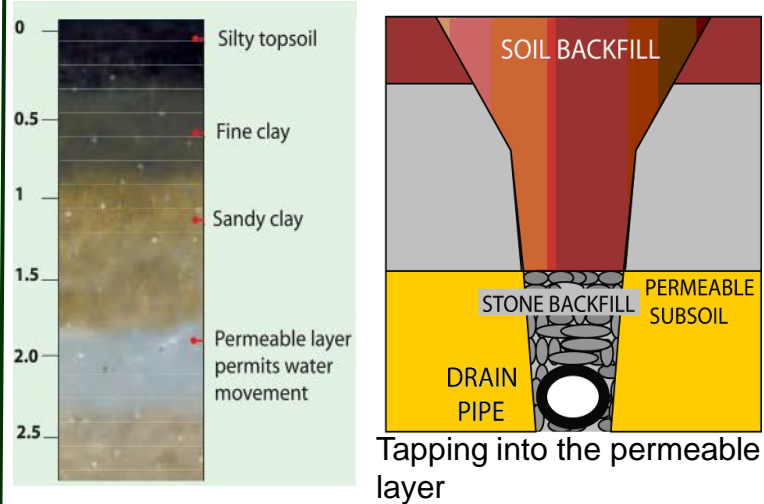
Problem Diagnosis



Soil Test pits (at least 2.5m deep)

- Design varies with soil type
- Is it a groundwater or shallow drainage problem?
- Water enters in permeable layers
- Other layers need help

Groundwater Drainage System



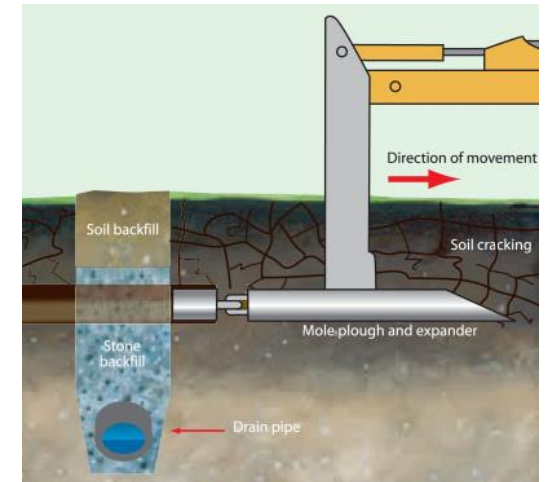
Conventional or deep pipe drains:

- Where a permeable layer will transmit water
- Where water can percolate to watertable
- Most effective way to discharge water

Shallow Drainage System

Mole/Gravel Mole drain/Subsoiling:

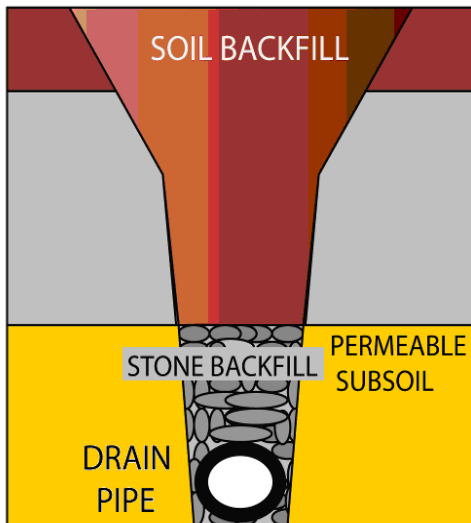
- Aim to fracture and crack the soil
- Effectiveness dependent on:
 - Soil clay/stone content
 - Implement used
 - Weather conditions
- Used In tandem with collector drains



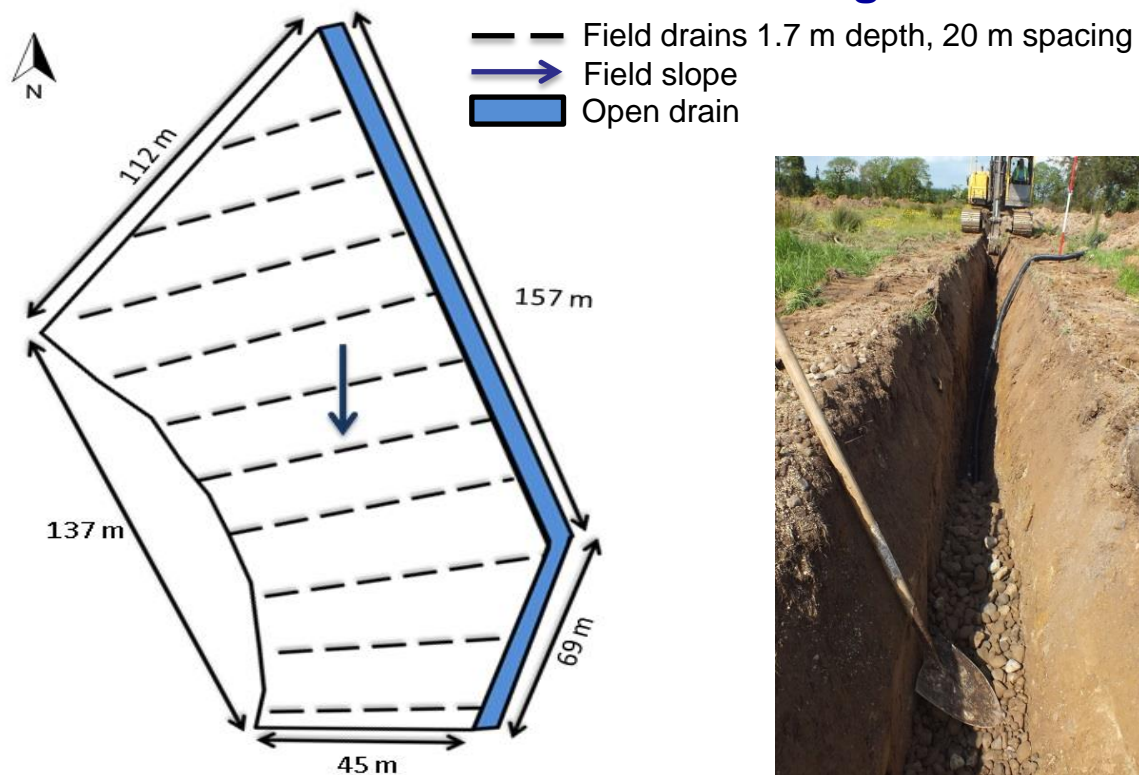
Groundwater Drainage

1.7 m deep drains

- Where a permeable layer will transmit water
- Where water can percolate to watertable
- Most effective way to discharge water



Drainage System Design



Con Lehane – Drainage Costs

Key points:

- Soil investigation
- Site appraisal
- Drainage system design

Costs

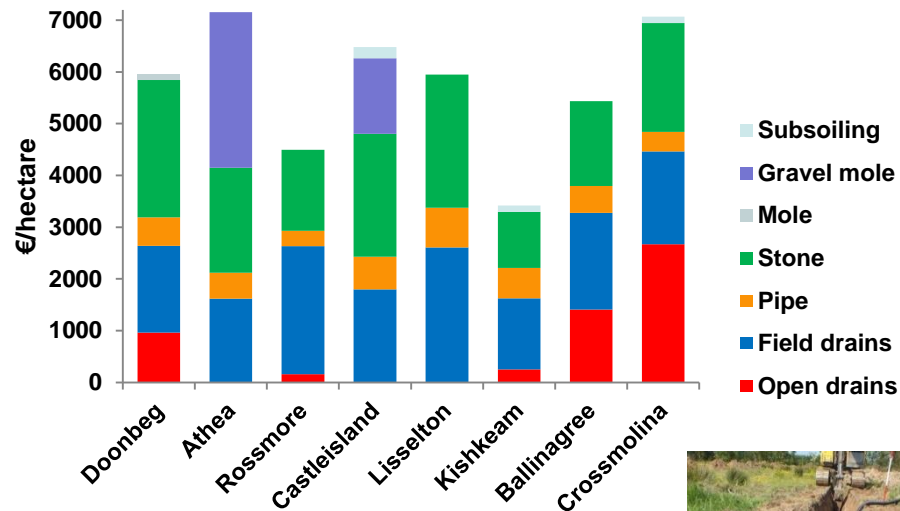
Total/ha

Drain installation @ €45/hr (73 hrs) €3,285

Drainage pipe @ €0.89/m (592 m) €525

Drainage stone @ €13.87/t (118 t) €1,640

Drainage cost €5,450



Decision process:

- Soil fertility
- Farm roadway and water Infrastructure
- Ryegrass pasture
- Drainage

