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Alternative Watering Systems

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Poaching of riverbanks

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Alternative watering options

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- Gravity feed supply
- Pumped farm supply
- Hydraulic ram pump
- Solar panel pump
- Water wheel pump
- Nose pump
- Mains water supply

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Which is best ?

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Which is best ?

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Every farm requirement is different

Need to take into account

- **Livestock type**
- **Grazing season**
- **Field size**
- **Stocking Density**

No one size fits all!

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What every system needs

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- **Water supply**
- **Pump**
- **Storage**
- **Supply pipe**

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Alternative watering 0ptions

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Gravity feed system

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Gravity feed system

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Pros

- Simple system
- Requires no power
- Runs 24 / 7

Cons

- Requires sloping ground
- Can airlock if supply pipes are undulating
- Needs good water supply or large holding tank

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Pumped farm supply

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Pumped farm supply

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Pros

- Simple or complex system options
- No limitations on distance
- Electric, diesel, petrol, (solar, hydro options)

Cons

- Requires farm water supply
- Pipework and system can be expensive to install
- Needs storage holding tank (not always)
- Has ongoing running costs in power supply and pump maintenance

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Hydraulic ram pump

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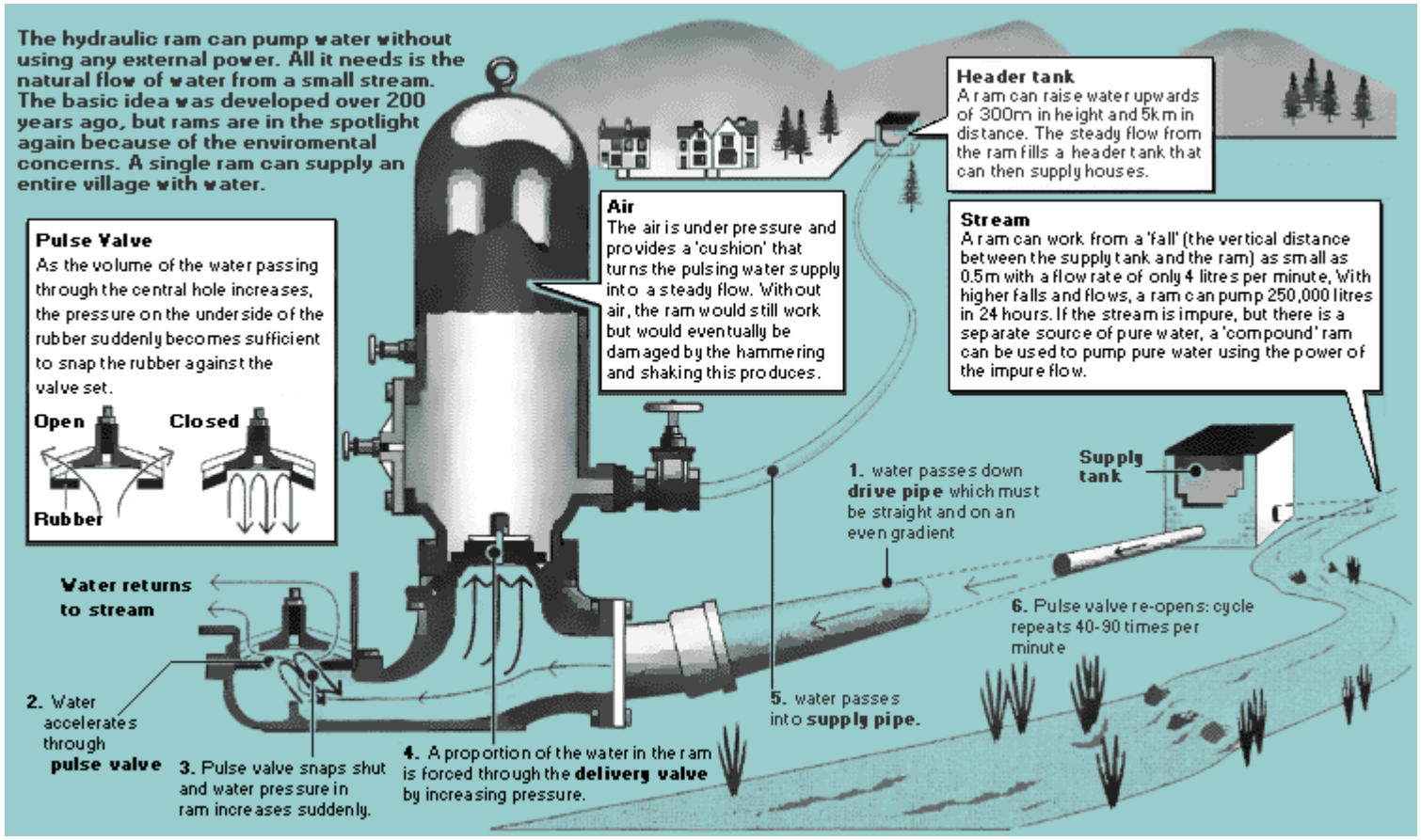

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Hydraulic ram pump

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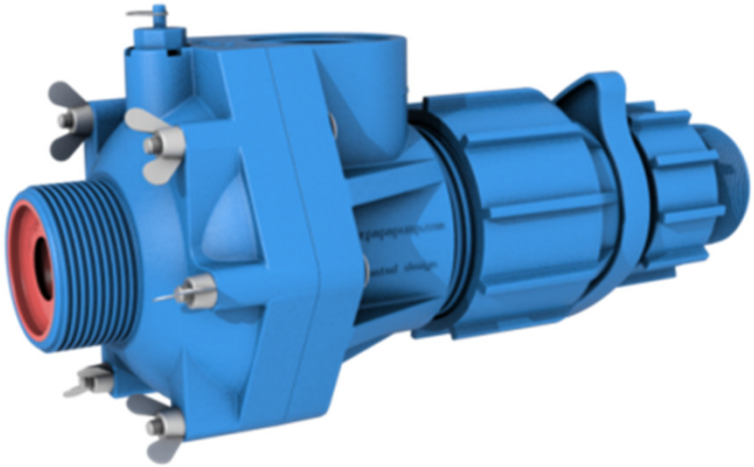

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Hydraulic ram pump

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Hydraulic ram pump

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Pros

- Simple system
- Requires no power
- Runs 24 / 7

Cons

- Systems can be expensive
- Requires sloping ground a least 1.5 metre fall (height it can pump depends on fall and water flow)
- Can airlock if supply pipes are undulating
- Needs good water supply or large holding tank to balance flow requirements
- Needs consistent water supply (can fail in dry years)

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Solar panel pump

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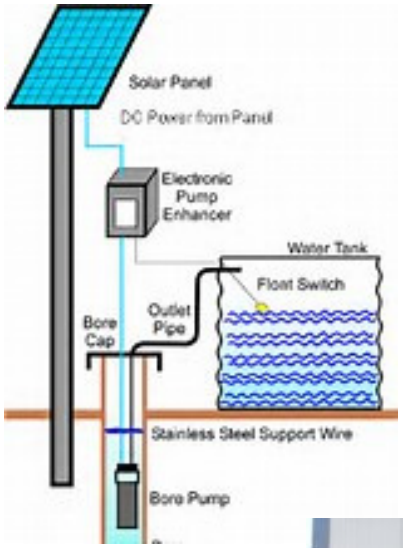

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Solar panel pump

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Pros

- Requires no power
- Runs during daylight (can have battery backup)
- Can be made mobile

Cons

- Systems are expensive
- Needs good water supply or large holding tank to balance flow requirements
- Needs consistent water supply
- Poor operation in winter

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Water wheel pump

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Water wheel pump

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Pros

- Relatively simple system
- Requires no power
- Runs 24 / 7

Cons

- Systems can be expensive
- Requires sloping ground can work with flow of river
- Needs good water supply for power or a good head or large holding tank to balance flow requirements
- Needs consistent water supply (can fail in dry years)

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Nose pump

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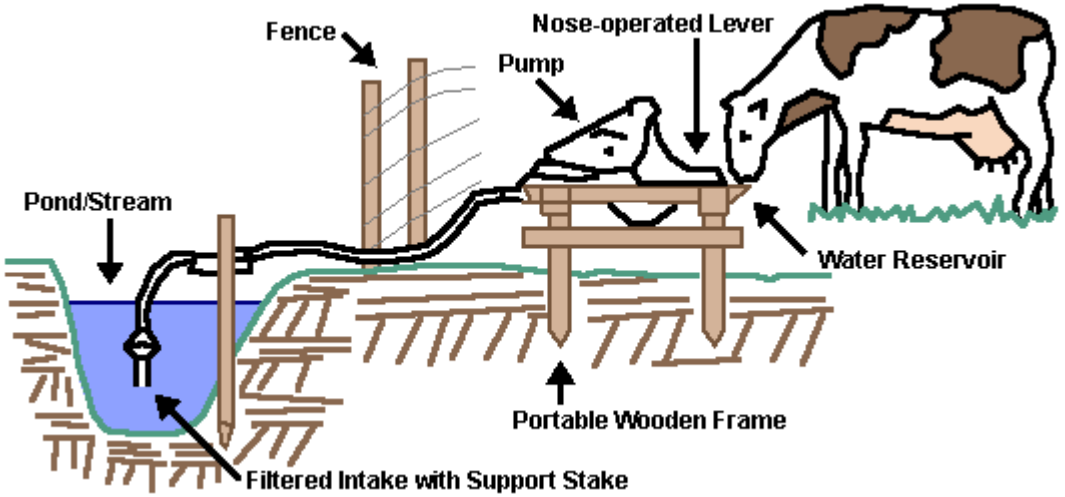

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Nose pump

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Pros

- Requires no power
- Simple system
- Systems are relatively inexpensive
- Easily made into multiple units
- Runs 24 / 7
- Can be made mobile

Cons

- Needs consistent water supply
- Limited height it can suck water up
- Limited to 20 cattle per pump
- Can be susceptible to damage
- Poor operation in winter

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Mains water supply

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Pros

- Requires no power
- Runs 24 / 7
- Consistent flow and quality

Cons

- Expensive installation charges
- All water metered and charged for – even leaks!
- Pipe work only maintained to customers boundary.

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Tanks

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Tanks

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Requirements

- Make sure they are big enough (at least 2 times peak daily requirement)
- Should be sealed from vermin
- On a firm base
- Locate strategically – gravity water supply when pump breaks down
- Protect an insulate supply and distribution pipes

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Any Questions?

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