Drip irrigation system - gravity fed

A gravity fed system is a good irrigation solution for small farms or plots which are not connected to the water system. It is mostly recommended for fields up to one acre.
The idea is simple: Water mixed with soluble fertilizers in an elevated reservoir being gravitated down to the field where it will be distributed evenly using the drip tubes.

System benefits:

- No electricity required.
- Easy to install.
- Good distribution as well as other inputs (microelements, fungicides etc.)
- Portable system can be easily shifted.
- Affordable for small farmers.

About elevation and the effect on drip lines?

The height of 2.3 foot of on the head will produce one pound per square inch (PSI) of water pressure. In other words, your water tank must be 23 feet above the field to produce 10 PSI or 12 feet up to produce 5 PSI. You can place the water tank on a hill or high in a barn or other building. You can build a tall stand. The higher the better until you reach 70'. Above that height, a gravity feed system will produce more than 30 PSI and will require a pressure regulator to keep the pressure at 30 PSI or less. If irrigating with less than 10 PSI it is important to choose the low volume drip tubes.

General notes - setup and maintenance (for vegetable crops)

- For irrigation of ¼ acre it is recommended to have 1000 gallons tank/s.
- According to the height choose the drip type that can handle the pressure.
- If needed use small valves at start of each bank to divide irrigation between plots.
- Use only soluble fertilizers and chemicals in the tank.
- Keep tank and filter clean.
- Use Phosphoric acid to unblock drip tubes.

Check this link below to learn about the specific setup for your field.

Free plan for your farm >

http://www.shigam.com/your_farm