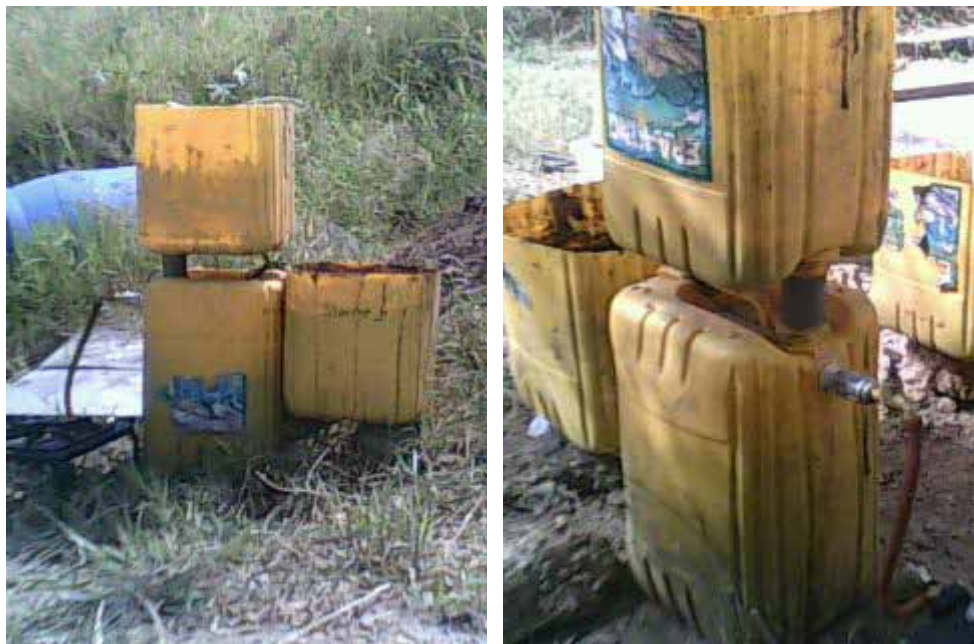
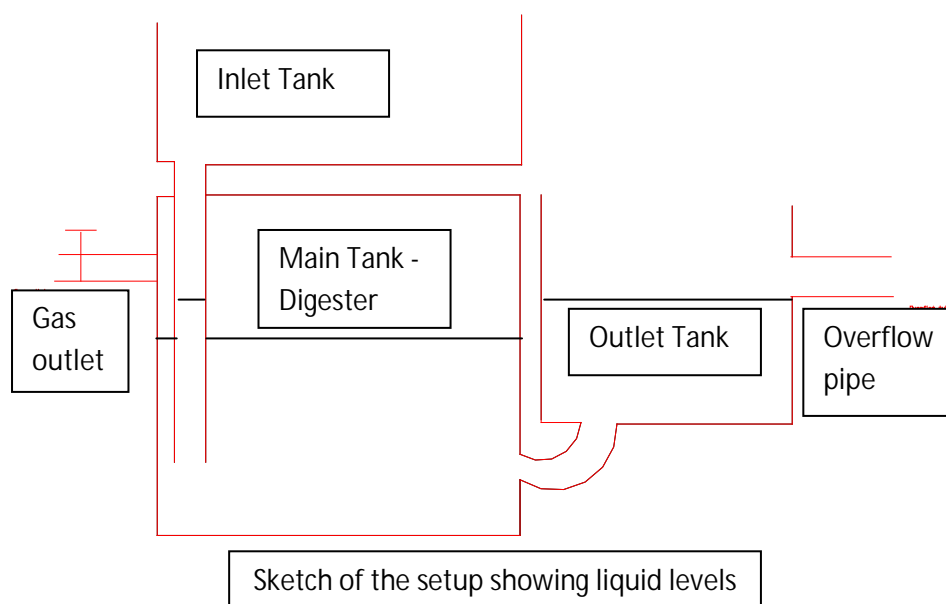


Biogas Demonstration Project

Wubishet Asrat, from Ethiopia Adama University, has come up with the demonstration unit shown below using plastic drums. It uses the "Chinese fixed dome" principle of displacing water as gas is generated, which develops gas pressure and assists in agitating the digester contents.



Two views of the setup



The sample biogas digester is made from three plastic water tanks joined together by means of PVC pipe and has an inlet for feeding and outlet for removing fermented materials from the digester. On the outlet tank there is a scale which shows the displaced amount of waste materials, indicating the produced gas inside the main digester body. It is suitable for continuous feeding. I am always feeding around 1kg of waste materials (per day) and it has a capacity of producing 5 litres of gas out of 17 litres of waste materials (working capacity). This is a retention time of about 17 days with an operating temperature of approximately 22° Celsius.