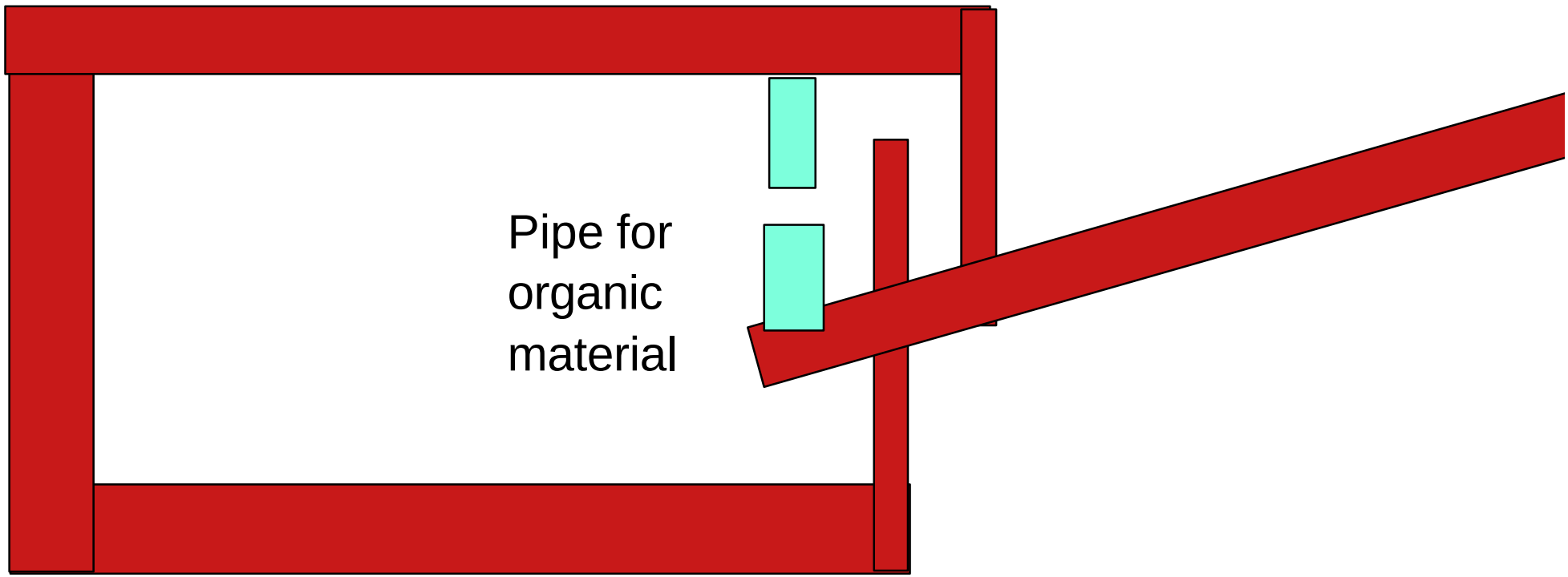
This is a press to produce briquettes which can substitute firewood and charcoal. A system was developed in Malawi where groups of women produce briquettes for their own use and for sale. The materials used are waste paper, saw dust, various leaves, grass, etc.
The paper is placed in water for one day and is mashed together with the other material.
The press is made of timber and is a manual press. The material for the briquettes is placed in a short metal pipe (the white tube on the photo). The sides have small holes drilled so that water can come out when pressed. The briquettes are then dried in the sun for some days and can be used instead of firewood or charcoal.
The first task is to find out what materials can be obtained in the area which could be used for briquettes. Leaves and grass can be used. Sawdust. The leftovers after milling maize or rice (if they are not used for animal or fish food). If you are close to the coast you might have much seaweed available. If you do not have sawdust, waste paper or seaweed to make the briquettes stick together, some clay or mud can be used.
If there is charcoal production in the area the charcoal dust can be used for production of briquettes.
If there are eucalyptus plantations in the area the small branches and twigs can be used to produce charcoal, which then can be pressed into briquettes.
The task is to try the various organic materials and develop a system which can work in your area and which can reduce the consumption of firewood and charcoal.
It will be necessary to experiment to manage to construct the press - because we do not yet have exact drawings.
The press consists of 3 pieces of timber in the form of a "U" lying down. The largest part is placed on the ground. The top horizontal part can move downwards.
Two short pieces of wood at the end of the top horizontal part hold a long piece of timber which is used for doing the pressing. This handle is also fixed on the bottom horizontal part by two short pieces of timber. When the long handle is moved downwards the material in the metal tube is pressed up against a piston fixed on the top horizontal part and the briquette is formed.
The metal tube is not fixed to the handle but can be taken off so that it is possible to get the pressed briquette out of the tube and fill it with more material. To get an efficient production it is good to have two tubes, so that one is filled while the other is pressed.
The moving parts are made by drilling holes through the timber and placing pieces of round iron.

Briquette press position 1



Briquette press position 2