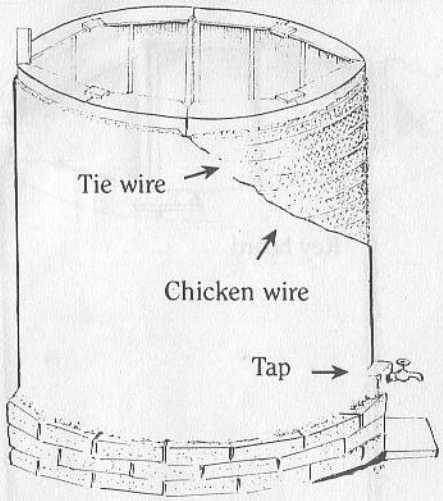
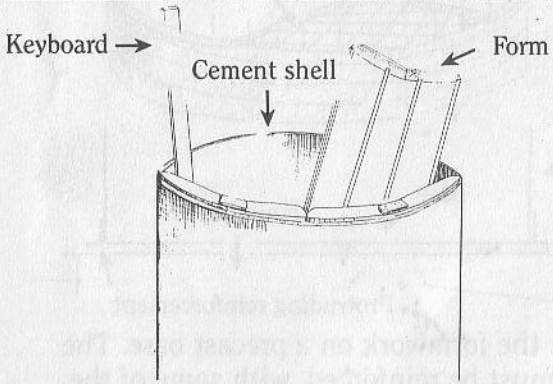
REINFORCEMENT AND PLASTERING



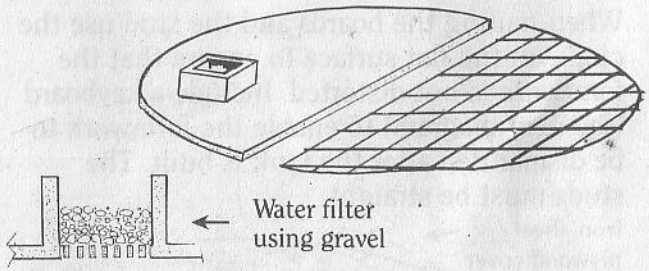
Wrap the chicken wire around the formwork. This is followed by 3-4 mm wire about 20 or 30 mm apart from each other. The tank is then plastered with mortar — one part cement to two parts of sand. The total thickness of the tank wall should not be more then 30 mm.

REMOVING THE FORMWORK

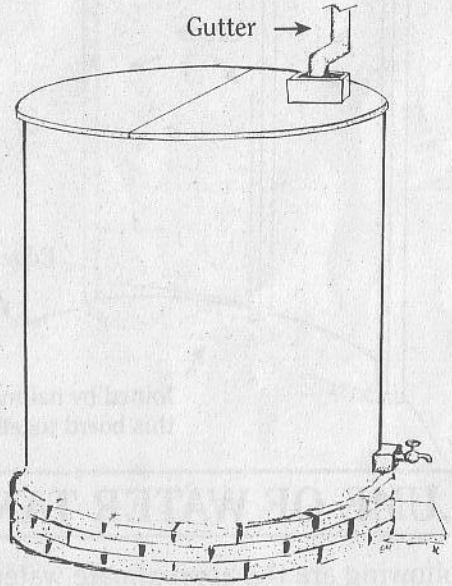


The formwork can be taken out after 24 hours. The keyboard is pulled out first. The inside of the tank is then plastered with the same mixture as the outside.

THE LID



If the tank is more than 3 m in diameter, the lid can be made in two sections. A filter using fine gravel at the water intake will prevent mosquitos from breeding in the water.

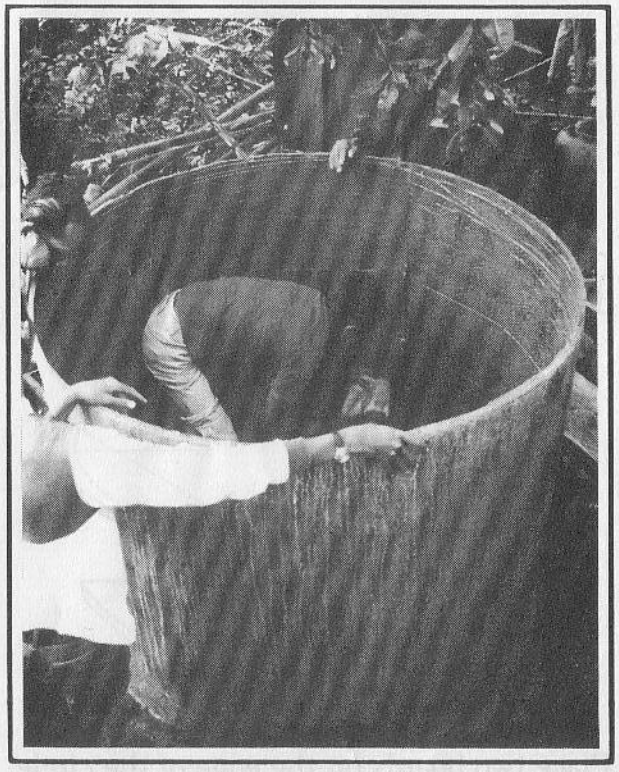


CURING

It is important to allow the tank to dry slowly. Keep it shaded and damp for 2-3 weeks. The tank is ready to be fitted with water within one week after the plastering is completed.

For more information please contact World Vision in your Country.

How to make a FERRO CEMENT WATER TANK



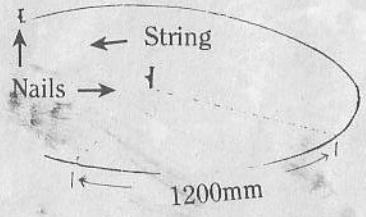
WORLD VISION OF AUSTRALIA
Prepared by Rus Alit
G.P.O. Box 399C
Melbourne Australia 3001

Village Technologies Series No. 5

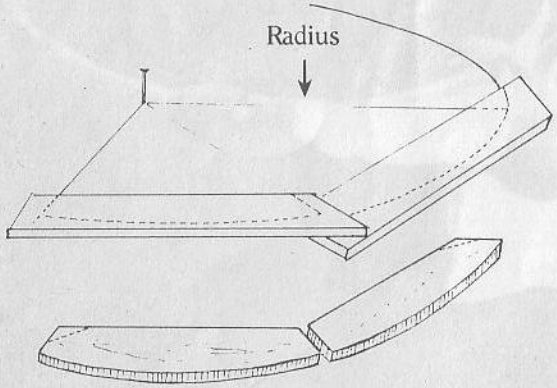
INTRODUCTION

You can make 20-30 water tanks using this method. It is the ideal way if many water tanks are to be built for the community. This is how it is made.

THE FORMWORK



On a flat surface draw a circle the diameter of the tank you want to build.

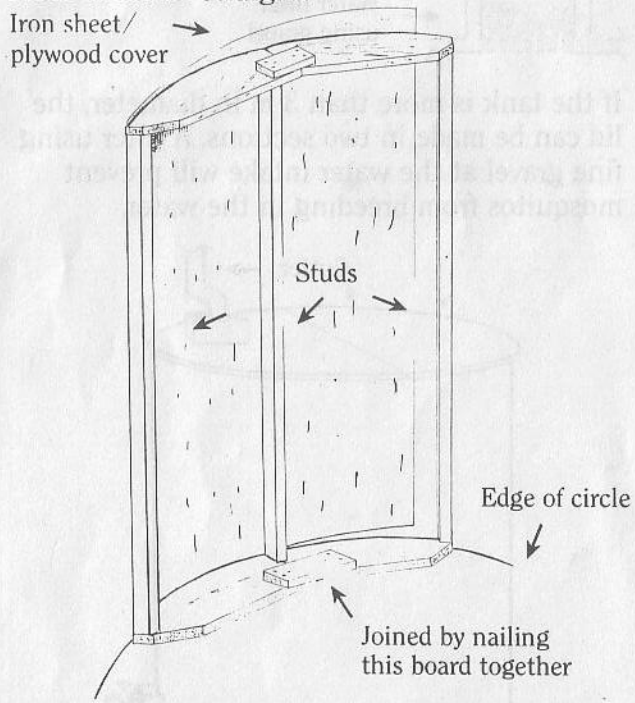


Place two boards on the edge of the circle, then draw another circle on the boards (see dotted line). Cut the boards along the dotted line. Make more cut boards to complete the circle.

The width of each segment of the formwork should be 1200mm because this is the most common size of the plywood or flat iron sheet for the formworks cover.

NAILING THE FORMWORK

When nailing the boards and the stud use the circle on the flat surface to ensure that the formwork is not distorted. Include a keyboard (see next diagram) to enable the formwork to be dismantled after the tank is built. The studs must be straight.

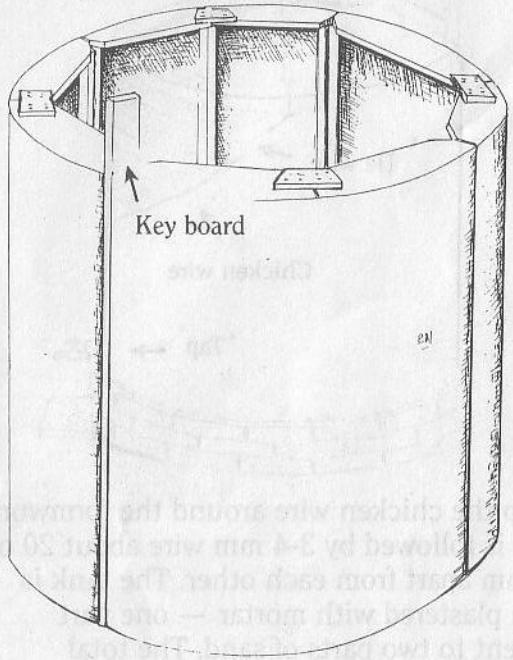


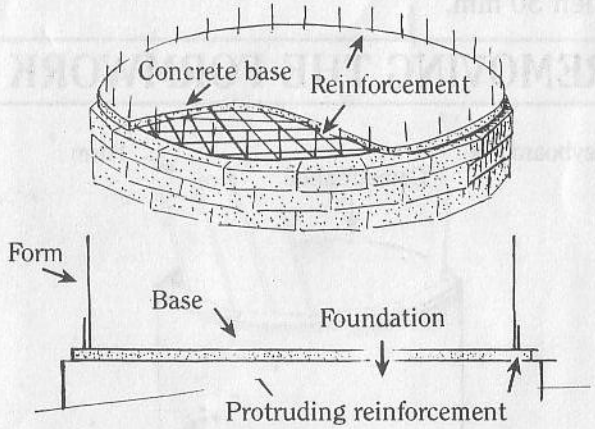
VOLUME OF WATER TANK

The following are the approximate water tank capacities using formwork discribed above.

Radius cm	Number of formwork	Height of of studs	Volume (liters)
76	4	120 cm	2100
76	4	240 cm	4300
95	5	240 cm	6800
114	6	240 cm	9800
152	8	240 cm	17400
190	10	240 cm	27200

ASSEMBLING THE FORMS





Place the formwork on a precast base. The base must be reinforced, with some of the reinforcing protruding to ensure a good bond between the base and the wall of the tank. The base diamater is about 50 mm more than the diameter of the form.