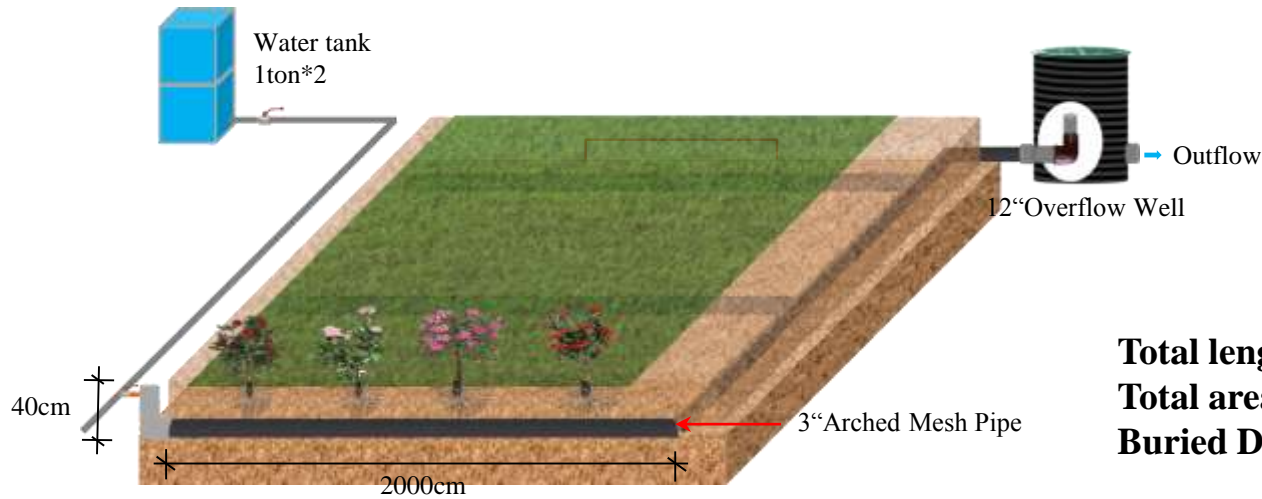
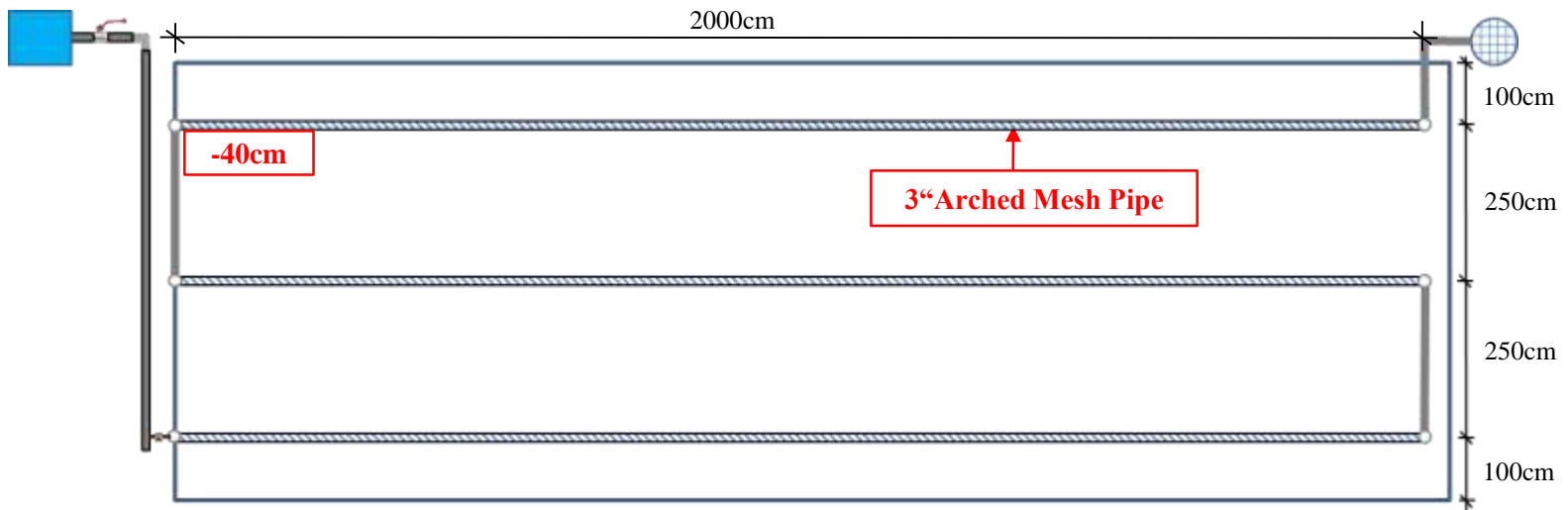




# Wicking Beds Experiment



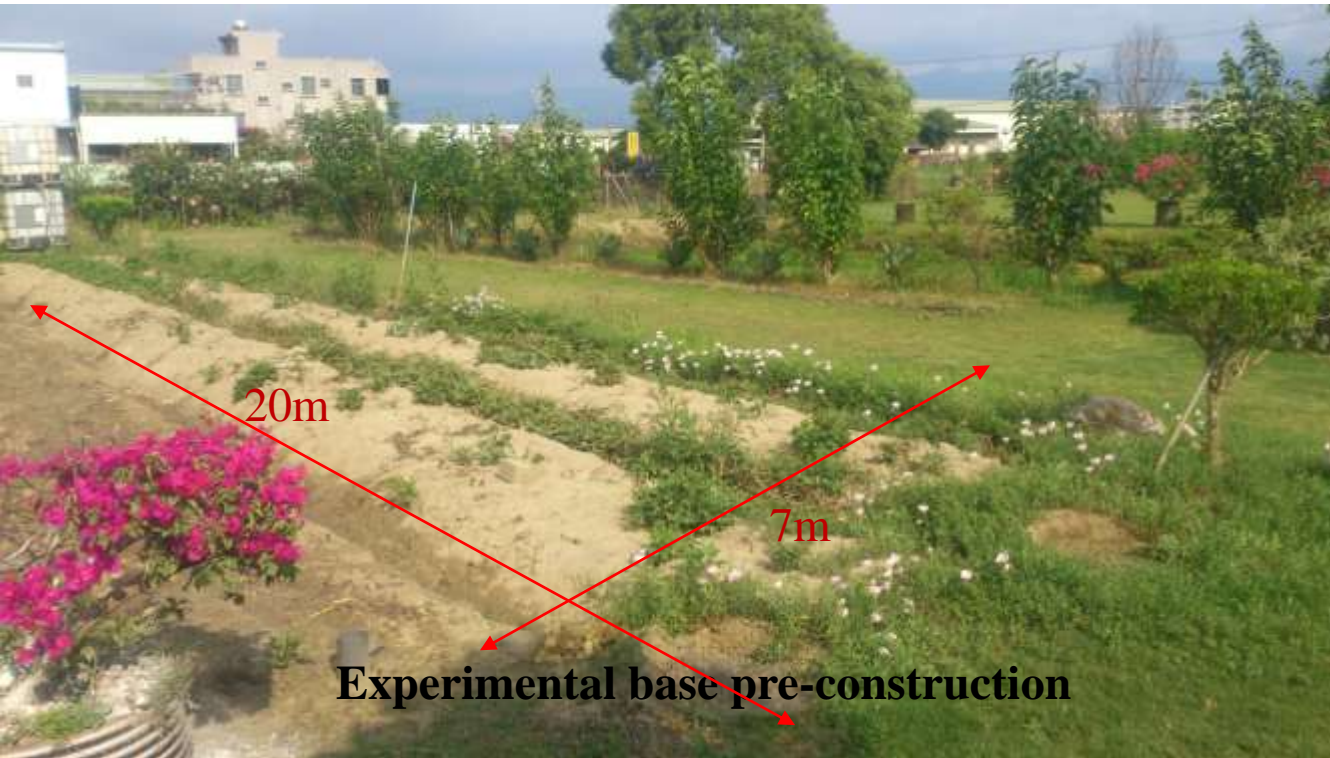
**Total length : 60m of 3 "Arched Mesh Pipe**  
**Total area : 14m<sup>2</sup>**  
**Buried Depth 40cm**



**Sub-irrigation and drainage of Arched Mesh Pipe length-Experimental schematic**



*Wicking Beds Experiment*





**Marking**



**Trenching : 40cm depth**



## *Arched Mesh Pipe Subsurface Irrigation and Drainage System*

### *Wicking Beds Experiment*



**Laying Arched Mesh Pipe**



**Connect Water Supply System**



**Irrigation and drainage systems connection**



**Overflow Well**



*Wicking Beds Experiment*



**Fill with Growing Medium**



**Leveling**



**17.7%**



**21.8%**



**14.1%**



**24.5%**



**21.8%**



**22.4%**

**After irrigation 1000kg humidity**

**After irrigation 2000kg humidity**

*Wicking Beds Experiment*



**After 24 hours and then measuring humidity**



**The status after 40 days**



**The Points of humidity after irrigation**

## **The results**

**Arched Mesh Pipe length 60m**

**Arched Mesh Pipe spacing 1.5 ~ 3.0m**

**12 "water catch basins covering irrigated area 300M<sup>2</sup>**

**Water-saving 50~60%**

**Save more than 70% of human irrigation**