



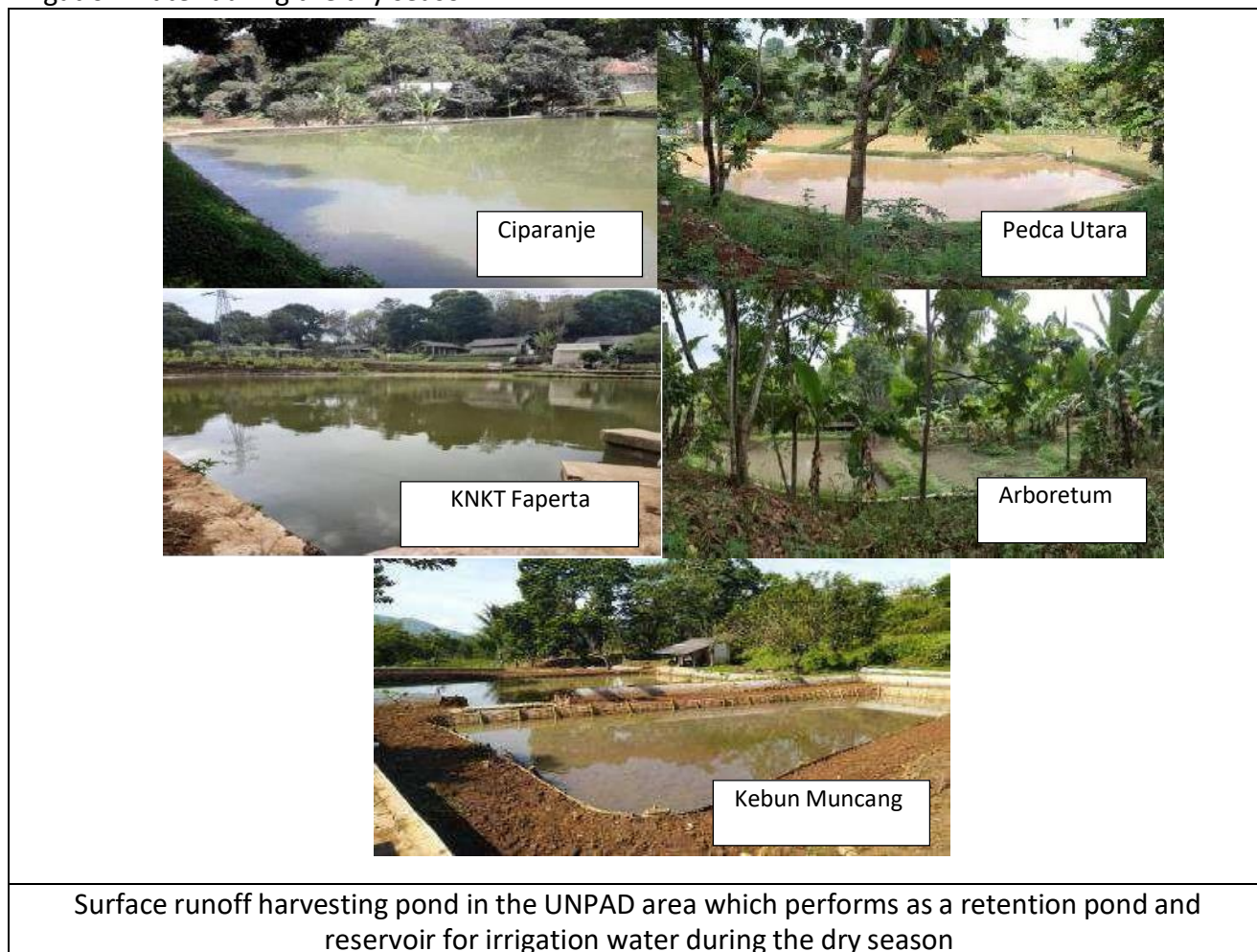
Water-Collection-and-Use-of-Its-Benefits

1. Utilization of Water from Rainwater Harvesting System from the Roofs of Buildings

In the rainwater harvesting system from the roof of the greenhouse, the accumulated rainwater is utilized as a source of irrigation water to cultivate vegetables, cherry tomatoes, and melons, as shown in Figure 4. The system built can accommodate as much as 21 m³ of rainwater used to supply irrigation water demands throughout the year.

2. Utilization of Water from Surface Runoff Harvesting System for Irrigation and Fisheries

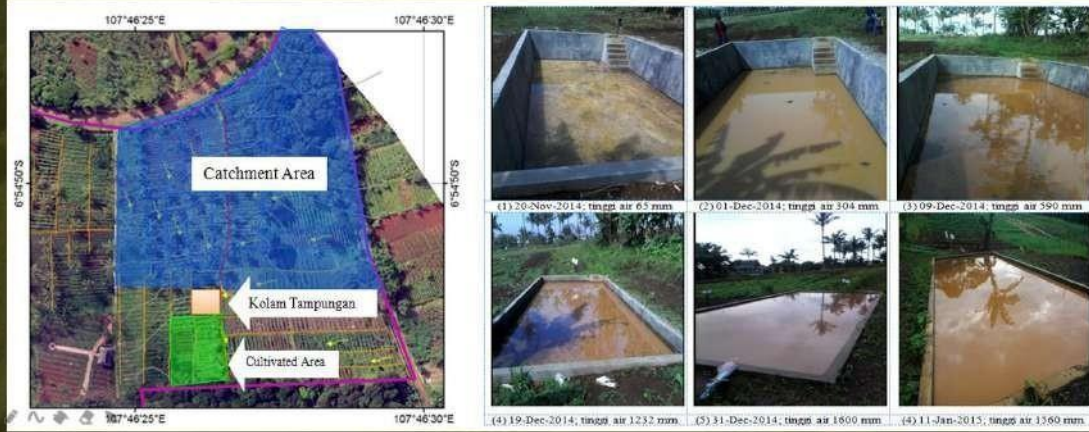
In addition to harvesting rainwater from the roofs of buildings, efforts to harvest surface runoff water from the land surface can also be managed as a source of irrigation water during the dry season or during periods of deficit. Surface runoff water can be harvested from direct runoff that occurs during rain (Figure 5) or in the form of a diversion system from natural flows accommodated in agricultural/fishing ponds that also function as retention ponds or infiltration ponds (Figure 6). The total area of the pool in the UNPAD Jatiningor campus area is approximately 1.1 ha spread over several places at least able to accommodate more than 15000 m³ of water which is also utilized as irrigation water during the dry season.

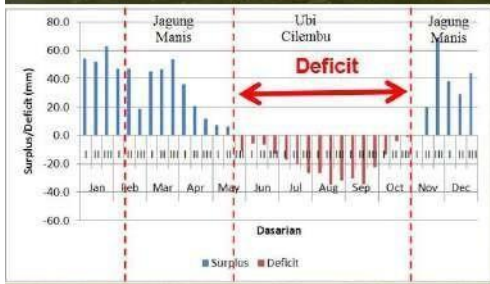




SISTEM PEMANENAN AIR LIMPASAN: Macrocatchment System - UNPAD

PEMANENAN RUNOFF (SISTEM PEMANENAN LIMPASAN LANGSUNG)



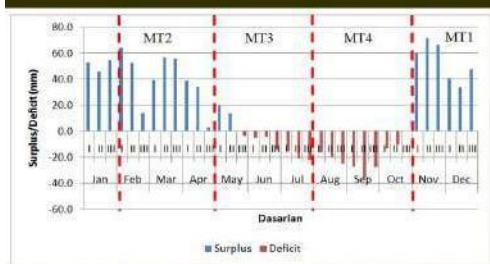


- Optimasi Pola Tanam Jagung Manis - Jagung Manis - Ubi Cilembu
- Periode Defisit Air Mei 3 – Oktober 3 (Musim tanam Ubi Cilembu)
- Total Deficit = 299,3 mm



Runoff water harvesting system directly from the land surface for irrigation water sources in the dry season

SISTEM PEMANENAN AIR LIMPASAN: Macrocatchment System - UNPAD



Tanpa Runoff Harvesting



Dengan Runoff Harvesting



Harvesting Surface Runoff Water by diverting it from natural watercourses and storing it in agricultural ponds for irrigation in the dry season



3. Utilization of Water from Arboretum UNPAD Check Dam for Irrigating Gardens and Experimental Gardens

Aside from being a catchment area, the Arboretum UNPAD check dam has functioned as a source of irrigation water for gardens and experimental gardens during the dry season.



Irigasi Taman Unpad



Cekdam Arboretum



Kebun Percobaan Unpad