



Figure 6.8.1 Profile of Experimental Farm for Water Saving Irrigation

Profile of the Project Site and Water Saving Irrigation Experimental Farm

A: Experimental Fields for Drip Irrigation (A1: Onions; A2: Green peppers; A3: Tomatoes)

B: Experimental Fields for Traditional Irrigation (B1: Basin irrigation; B2: Furrow irrigation)

C: Experimental Fields for Pitcher Irrigation

Water Requirements:

Since this study is classified as baseline survey, it did not set intervals to carry out the irrigation management, while applying the conventional farmers' customs in the region. However, it cannot be applied to the case with abundant precipitation, in that the water supply had not been conducted, based on the confirmation of the values of pH. Based on the confirmed value of pF, farmers watered the field roughly once in two days. Daily water requirements of each irrigation technology derived from the experiment are laid down below; 3.2 mm/day by drip irrigation (without mulch); 2.6 mm/day by drip irrigation (with mulch), 3.5 mm/day by pitcher irrigation (without mulch); 3.0 mm/day by pitcher irrigation (with mulch); and 5.5 mm/day by traditional irrigation. Traditional irrigation consumes the volume of irrigation water the most, while the volume by drip irrigation was less than that of pitcher irrigation. The study team confirmed effectiveness of mulch to save water by approximately 15 to 20 %.

Table 6.8.2 Daily Water Requirements of Each Irrigation Technology

Irrigation Technologies	Drip Irrigation		Pitcher Irrigation		Traditional Irrigation
	without mulch	with mulch	without mulch	with mulch	without mulch
Daily Water Requirements (mm/day)	3.2	2.6	3.5	3.0	5.5