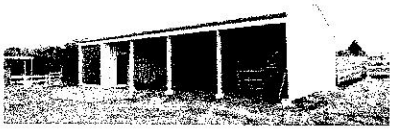
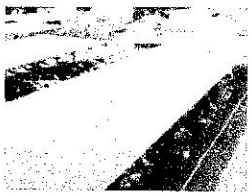
Implement Shed

Implement shed or workshop will be constructed for equipment and tools storage and farm machinery parking. Total area required for implement shed is 20m (L) x 8m (W), this building requires a very basic structure with solar panel roof on it, floor of the building will be 25Mpa (3626 psi) concrete.



Solar panel roof



ROOF RUNOFF STRUCTURE

Roof runoff structure will be designed to collect rain water from milking parlor building which is later used for irrigation. Roof runoff structure will be designed with a minimum design life of ten years and has minimum chances of damage by livestock and equipment. To design roof runoff structure, 25-years, 24-hour storm event has been taken into account. The maximum 24-hour, 25-years storm event at Mahaulepu is 6.6 inches or 168mm which was recorded on 03/02/1989.

Climate Data Online Extremes Products

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U.S. Department of Commerce
National Oceanic & Atmospheric Administration

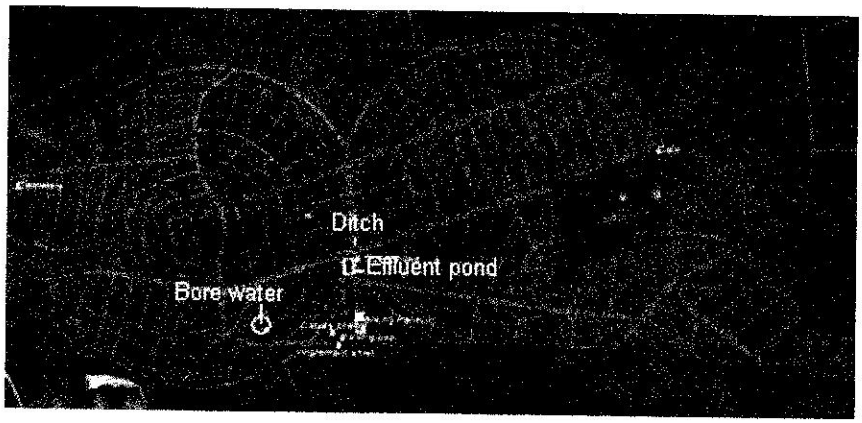
Precipitation; Daily Extreme Maximum; By Month
Date Range Selected: 1988 to 2009

National Climatic Data Cer
Federal Bu di
151 Patton Aven
Asheville, North Carolina 288

515710/99999, Mahaulepu 941.1 Station POR For Element **EMXP:** Lat. 21°.9'N, Lon. 159.421°11'V
null **1919 to 2010** Elev. 80 ft. above sea level

Month	Precipitation (inches)	Date(s)
1	3.90	01/12/1952
2	2.15	02/27/2004
3	6.60	03/02/1989
4	1.12	04/10/2003
5	2.74	05/06/2002
6	2.20	06/01/1989
7	0.63	07/23/2003
8	4.8*	08/22/1989
9	1.00	09/29/2007
10	0.90	10/15/1999
11	2.67	11/29/2007
12	3.33	12/31/2004
All	6.60	See Above

*Data sourced from U.S. Department of Commerce
National Oceanic & Atmospheric Administration



Weather station (GHCND: USC00515710) at Mahaulepu shows maximum 17 consecutive raining days ending on 08-01-1996 with a total rainfall of 48.3 mm. Lagoons will have 30 days storage capacity of effluent produced at farm. The effluent is irrigated only when there has been no heavy rain in the last two days and no rain is forecast for the next two days.

1.89 inches

STATION	STATION_NAME	ELEVATIO	LATITU	LONGITUDE	DATE	DAPR [Number of days included in the multiday precipitation total (MDPR)]	MDPR [Multiday precipitation total (tenths of mm; use with DAPR and DWPR, if available)]	Amount of rain in consecutive days (mm)
GHCND:USC00515710	MAHAULEPU 941.1 HI US	24.4	21.9	-159.41667	19960108	17	483	pitation to 48.3

Settling / solids pond: (solid/liquid waste separation facility)

All the manure that is collected from milking parlor and yards is transferred into settling pond. Once the settling pond is full, the liquid fraction overflows into the storage pond through screen pipes. The clear screens are fitted into the overflow pipes that do not allow solids to enter into storage pond. A stirrer pump is operated two hours per day to break up the solids in the settling pond. The size of the settling pond is 69' (21m) x 115' (35m) x 16'.4" (5m).