

Supporting Report for “Chapter 2 Water Resources Potential and Development Plan”

	Page
Annex to 2.1 Surface Water-----	A2-1
2.1.1 Rainfall and Evaporation-----	A2-1
2.1.2 Runoff-----	A2-2
2.1.3 The Dead Sea-----	A2-2
2.1.4 Present Use of Surface Water-----	A2-2
Annex to 2.2 Groundwater-----	A2-130
2.2.1 General Landscape and Geology of Jordan-----	A2-130
2.2.2 Basin and Aquifer System-----	A2-134
2.2.3 Brackish Groundwater in Middle----- and Upper Aquifer Systems	A2-140
2.2.4 Groundwater Monitoring Records-----	A2-145

Table A2.1.1-5(1) Monthly Average and Annual Rainfall in Ajloun Governorate

Station Name : Kufrinja		ID No.: AJ0002													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1937 / 38	27.0	27.5	37.0	304.0	216.0	125.5	7.0	744.0	31.0	0.0	0.0	0.0	0.0	31.0	775.0
1938 / 39	0.0	213.5	66.0	85.0	250.0	184.5	27.0	826.0	0.0	0.0	0.0	0.0	0.0	0.0	826.0
1939 / 40	6.0	172.0	60.0	376.0	29.0	89.0	49.5	781.5	0.0	0.0	0.0	0.0	0.0	0.0	781.5
1940 / 41	16.0	121.1	152.0	136.0	26.5	181.0	7.5	640.1	0.0	0.0	0.0	0.0	0.0	0.0	640.1
1941 / 42	34.0	16.0	281.0	110.5	118.5	151.7	1.5	713.2	0.0	0.0	0.0	0.0	0.0	0.0	713.2
1942 / 43	132.5	107.2	17.8	311.8	122.3	177.3	105.0	973.9	0.0	0.0	0.0	0.0	0.0	0.0	973.9
1943 / 44	1.0	5.0	48.5	281.5	90.2	55.0	53.0	534.2	0.0	0.0	0.0	0.0	0.0	0.0	534.2
1944 / 45	0.0	227.5	144.0	168.0	262.0	58.0	49.0	908.5	0.0	0.0	0.0	0.0	0.0	0.0	908.5
1945 / 46	2.0	110.0	129.0	66.5	237.5	72.0	0.0	617.0	0.0	0.0	0.0	0.0	0.0	0.0	617.0
1946 / 47	4.0	1.0	75.0	166.0	40.5	50.5	13.0	350.0	0.0	0.0	0.0	0.0	0.0	0.0	350.0
1947 / 48	0.0	76.0	37.5	152.5	134.2	223.5	20.3	644.0	0.0	0.0	0.0	0.0	0.0	0.0	644.0
1948 / 49	0.0	51.0	170.5	157.8	202.7	229.7	107.0	918.7	0.0	0.0	0.0	0.0	0.0	0.0	918.7
1949 / 50	0.0	4.0	252.0	240.5	157.5	76.5	33.0	763.5	31.0	0.0	0.0	0.0	0.0	31.0	794.5
1950 / 51	9.5	20.5	25.0	103.5	131.0	44.0	5.0	338.5	0.0	0.0	0.0	0.0	0.0	0.0	338.5
1951 / 52	10.5	53.0	372.0	160.0	134.5	170.5	0.0	900.5	0.0	0.0	0.0	0.0	0.0	0.0	900.5
1952 / 53	8.0	22.0	20.0	148.0	176.0	222.0	7.0	603.0	0.0	0.0	0.0	0.0	0.0	0.0	603.0
1953 / 54	0.0	185.5	146.0	120.0	203.0	15.0	57.5	727.0	0.0	0.0	0.0	0.0	0.0	0.0	727.0
1954 / 55	0.0	55.0	148.2	7.7	63.0	45.0	23.0	341.9	0.0	0.0	0.0	0.0	0.0	0.0	341.9
1955 / 56	0.0	88.4	186.0	206.3	17.5	118.0	24.0	640.2	0.0	0.0	0.0	0.0	0.0	0.0	640.2
1956 / 57	0.0	17.5	126.3	88.0	187.5	144.0	28.8	592.1	18.0	0.0	0.0	0.0	0.0	18.0	610.1
1957 / 58	0.0	81.0	173.5	237.0	24.5	7.0	21.0	544.0	0.0	0.0	0.0	0.0	0.0	0.0	544.0
1958 / 59	0.0	0.0	32.2	135.6	191.5	56.6	7.5	423.4	2.7	0.0	0.0	0.0	0.0	2.7	426.1
1959 / 60	0.0	27.4	13.2	135.2	18.5	119.5	22.9	336.7	0.0	0.0	0.0	0.0	0.0	0.0	336.7
1960 / 61	0.0	88.0	61.5	175.8	159.3	21.2	46.5	552.3	12.5	0.0	0.0	0.0	0.0	12.5	564.8
1961 / 62	0.0	10.0	297.8	101.0	93.5	9.5	31.0	542.8	5.0	0.0	0.0	0.0	0.0	5.0	547.8
1962 / 63	9.5	8.7	105.2	120.0	174.5	59.6	24.1	501.6	34.2	0.0	0.0	0.0	0.0	34.2	535.8
1963 / 64	41.5	46.5	164.8	79.7	192.2	116.7	12.0	653.4	0.0	0.0	0.0	0.0	0.0	0.0	653.4
1964 / 65	0.0	171.3	77.3	232.0	76.9	66.3	47.0	670.8	0.0	0.0	0.0	0.0	0.0	0.0	670.8
1965 / 66	60.4	48.5	90.8	54.0	90.2	102.1	0.0	446.0	0.0	0.0	0.0	0.0	0.0	0.0	446.0
1966 / 67	29.2	2.0	280.7	210.0	117.0	210.6	11.0	860.5	24.0	0.0	0.0	0.0	0.0	24.0	884.5
1967 / 68	50.9	72.8	93.0	200.6	57.7	23.7	12.5	511.2	4.0	0.0	0.0	0.0	0.0	4.0	515.2
1968 / 69	15.0	47.8	203.1	235.8	29.1	189.8	1.8	722.4	0.0	0.0	0.0	0.0	0.0	0.0	722.4
1969 / 70	16.8	51.2	38.0	161.5	35.7	192.1	15.2	510.5	0.0	0.0	0.0	0.0	0.0	0.0	510.5
1970 / 71	6.2	8.2	115.1	90.4	122.8	42.5	249.6	634.8	0.0	0.0	0.0	0.0	0.0	0.0	634.8
1971 / 72	0.0	79.2	197.9	99.4	125.2	99.3	33.7	634.7	0.0	0.0	0.0	0.0	0.0	0.0	634.7
1972 / 73	0.5	44.7	21.7	143.3	14.6	118.2	0.0	343.0	0.0	0.0	0.0	0.0	0.0	0.0	343.0
1973 / 74	6.8	98.5	39.8	338.8	139.9	47.9	79.0	750.7	0.0	0.0	0.0	0.0	0.0	0.0	750.7
1974 / 75	0.0	43.4	94.5	47.5	228.3	92.6	8.0	514.3	0.0	0.0	0.0	0.0	0.0	0.0	514.3
1975 / 76	2.5	35.0	91.3	62.8	138.9	135.8	35.8	502.1	5.3	0.0	0.0	0.0	0.0	5.3	507.4
1976 / 77	11.4	91.0	26.4	124.0	68.3	143.6	80.6	545.3	0.0	0.0	0.0	0.0	0.0	0.0	545.3
1977 / 78	43.8	7.0	186.7	70.4	38.9	70.3	9.0	426.1	0.0	0.0	0.0	0.0	0.0	0.0	426.1
1978 / 79	47.9	7.1	123.3	73.4	38.9	70.3	6.2	367.1	0.0	0.0	0.0	0.0	0.0	0.0	367.1
1979 / 80	67.9	175.2	255.1	106.3	161.5	145.4	7.4	918.8	0.0	0.0	0.0	0.0	0.0	0.0	918.8
1980 / 81	10.0	17.7	204.5	192.0	105.5	64.0	60.8	654.5	0.0	0.0	0.0	0.0	0.0	0.0	654.5
1981 / 82	0.0	84.9	14.3	108.0	192.8	118.3	10.2	528.5	3.4	0.0	0.0	0.0	0.0	3.4	531.9
1982 / 83	8.2	77.5	66.0	186.3	269.2	149.6	24.5	781.3	0.0	0.0	0.0	0.0	0.0	0.0	781.3
1983 / 84	0.0	79.8	18.5	144.2	39.0	140.8	68.0	490.3	0.0	0.0	0.0	0.0	0.0	0.0	490.3
1984 / 85	29.1	42.9	53.0	56.4	313.0	32.0	32.0	558.4	0.0	0.0	0.0	0.0	0.0	0.0	558.4
1985 / 86	11.0	45.8	49.8	180.0	192.1	34.3	7.2	520.2	25.5	0.0	0.0	0.0	0.0	25.5	545.7
1986 / 87	34.5	312.5	96.2	133.5	64.5	72.9	1.0	715.1	0.0	0.0	0.0	0.0	0.0	0.0	715.1
1987 / 88	43.5	8.0	220.5	194.5	161.8	63.5	7.6	699.4	0.0	0.0	0.0	0.0	0.0	0.0	699.4
1988 / 89	10.0	52.0	210.8	78.5	60.0	140.7	0.0	552.0	0.0	0.0	0.0	0.0	0.0	0.0	552.0
1989 / 90	8.0	99.4	93.5	162.3	44.9	75.8	41.0	524.9	0.0	0.0	0.0	0.0	0.0	0.0	524.9
1990 / 91	12.0	22.0	14.5	234.0	71.2	181.0	30.0	564.7	5.2	0.0	0.0	0.0	0.0	5.2	569.9
1991 / 92	11.0	124.0	420.5	209.5	324.5	34.5	0.0	1,124.0	11.5	0.0	0.0	0.0	0.0	11.5	1,135.5
1992 / 93	0.0	46.6	337.5	133.9	117.5	44.8	0.0	680.3	23.0	0.0	0.0	0.0	0.0	23.0	703.3
1993 / 94	2.0	15.5	26.0	124.7	114.4	108.7	19.0	410.3	0.0	0.0	0.0	0.0	0.0	0.0	410.3
1994 / 95	36.1	272.8	123.2	35.1	71.5	38.9	30.5	608.1	0.0	0.0	0.0	0.0	0.0	0.0	608.1
1995 / 96	0.0	48.7	43.7	194.6	32.3	130.6	9.0	458.9	0.0	0.0	0.0	0.0	0.0	0.0	458.9
1996 / 97	47.2	6.8	85.5	130.4	224.0	148.3	8.8	651.0	21.0	0.0	0.0	0.0	0.0	21.0	672.0
1997 / 98	13.8	63.2	146.0	194.7	102.5	178.0	15.0	713.2	0.0	0.0	0.0	0.0	0.0	0.0	713.2
1998 / 99	0.0	15.0	23.5	108.0	32.0	42.2	16.8	237.5	0.0	0.0	0.0	0.0	0.0	0.0	237.5
Max.	132.5	312.5	420.5	376.0	324.5	229.7	249.6	1,124.0	34.2	0.0	0.0	0.0	0.0	34.2	1,135.5
Min.	0.0	0.0	13.2	7.7	14.6	7.0	0.0	237.5	0.0	0.0	0.0	0.0	0.0	0.0	237.5
Mean	15.1	68.6	121.4	152.0	123.7	102.8	28.4	612.0	4.2	0.0	0.0	0.0	0.0	4.2	616.1
Source: WIS database of MWL.														Std. Dev.	176.9

Table A2.1.1-5(2) Monthly Average and Annual Rainfall in Ajloun Governorate

Station Name : Wadi Kufrinja		ID No.: AJ0003													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1951 / 52	2.3	22.7	148.4	56.5	73.9	51.8	0.0	355.6	0.0	0.0	0.0	0.0	0.0	0.0	355.6
1952 / 53	5.4	9.8	6.4	79.2	76.9	89.7	1.5	268.9	0.0	0.0	0.0	0.0	0.0	0.0	268.9
1953 / 54	0.6	94.7	71.7	33.7	94.6	5.9	32.5	333.7	0.0	0.0	0.0	0.0	0.0	0.0	333.7
1954 / 55	1.2	48.1	78.4	4.3	5.7	61.1	10.4	209.2	0.0	0.0	0.0	0.0	0.0	0.0	209.2
1955 / 56	2.0	137.1	84.9	75.4	8.5	56.1	21.2	385.2	0.0	0.0	0.0	0.0	0.0	0.0	385.2
1956 / 57	0.0	14.4	77.5	68.5	87.1	67.2	22.1	336.8	12.9	0.0	0.0	0.0	0.0	12.9	349.7
1957 / 58	16.3	52.8	77.2	132.2	1.2	0.9	8.3	288.9	0.4	0.0	0.0	0.0	0.0	0.4	289.3
1958 / 59	0.7	0.0	20.1	43.5	98.2	22.7	2.2	187.4	0.0	0.0	0.0	0.0	0.0	0.0	187.4
1959 / 60	0.0	14.1	3.8	58.5	3.2	42.4	9.0	131.0	0.5	0.0	0.0	0.0	0.0	0.5	131.5
1960 / 61	0.0	79.2	27.6	91.4	77.1	13.0	25.9	314.2	18.3	0.0	0.0	0.0	0.0	18.3	332.5
1961 / 62	3.8	2.2	155.7	44.5	33.1	1.9	7.5	248.7	5.0	0.0	0.0	0.0	0.0	5.0	253.7
1962 / 63	16.7	0.0	52.9	31.2	35.1	19.0	5.2	160.1	14.3	0.0	0.0	0.0	0.0	14.3	174.4
1963 / 64	36.0	26.5	76.5	36.8	102.3	52.1	0.0	330.2	0.0	0.0	0.0	0.0	0.0	0.0	330.2
1964 / 65	0.0	46.6	67.0	102.9	15.0	29.1	22.2	282.8	0.0	0.0	0.0	0.0	0.0	0.0	282.8
1965 / 66	39.3	28.0	26.2	24.3	43.6	44.1	0.0	205.5	0.0	0.0	0.0	0.0	0.0	0.0	205.5
1966 / 67	13.6	7.5	152.7	77.9	34.4	75.1	0.4	361.6	9.9	0.0	0.0	0.0	0.0	9.9	371.5
1967 / 68	28.7	29.9	21.5	75.1	21.5	16.3	51.4	244.4	5.2	0.0	0.0	0.0	0.0	5.2	249.6
1968 / 69	2.8	1.0	70.5	98.3	12.7	98.5	0.0	283.8	0.0	0.0	0.0	0.0	0.0	0.0	283.8
1969 / 70	0.0	17.0	7.0	79.3	14.1	91.2	0.0	208.6	0.0	0.0	0.0	0.0	0.0	0.0	208.6
1970 / 71	0.0	0.8	49.2	48.0	48.0	14.8	107.6	268.4	0.0	0.0	0.0	0.0	0.0	0.0	268.4
1971 / 72	0.0	26.5	76.1	55.6	65.5	98.8	22.9	345.4	0.0	0.0	0.0	0.0	0.0	0.0	345.4
1972 / 73	0.0	16.5	22.0	58.4	5.2	63.9	0.0	166.0	7.8	0.0	0.0	0.0	0.0	7.8	173.8
1973 / 74	0.0	50.9	11.2	205.3	54.9	30.8	29.8	382.9	0.0	0.0	0.0	0.0	0.0	0.0	382.9
1974 / 75	0.0	0.0	44.8	17.3	106.7	36.0	3.1	207.9	0.0	0.0	0.0	0.0	0.0	0.0	207.9
1975 / 76	0.0	0.0	0.0	0.0	48.6	65.2	0.0	113.8	0.0	0.0	0.0	0.0	0.0	0.0	113.8
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978 / 79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979 / 80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980 / 81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981 / 82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982 / 83	0.0	0.0	0.0	0.0	257.8	63.0	0.0	320.8	0.0	0.0	0.0	0.0	0.0	0.0	320.8
1983 / 84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Max.	39.3	137.1	155.7	205.3	257.8	98.8	107.6	385.2	18.3	0.0	0.0	0.0	0.0	18.3	385.2
Min.	0.0	0.0	0.0	0.0	1.2	0.9	0.0	113.8	0.0	0.0	0.0	0.0	0.0	0.0	113.8
Mean	6.5	27.9	55.0	61.5	54.8	46.6	14.7	267.0	2.9	0.0	0.0	0.0	0.0	2.9	269.9
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	77.3

Table A2.1.1-6(1) Monthly Average and Annual Rainfall in Jarash Governorate

Station Name : Rihaba		ID No.: AF0002													
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1962 / 63	0.0	0.0	0.0	58.2	103.1	57.8	35.6	254.7	16.7	0.0	0.0	0.0	0.0	16.7	271.4
1963 / 64	63.0	28.6	90.5	74.7	152.8	90.8	6.6	507.0	0.0	0.0	0.0	0.0	0.0	0.0	507.0
1964 / 65	0.0	88.7	65.3	148.7	81.9	45.6	52.4	482.6	0.0	0.0	0.0	0.0	0.0	0.0	482.6
1965 / 66	54.3	28.8	58.3	41.4	79.8	109.7	3.5	375.8	0.0	0.0	0.0	0.0	0.0	0.0	375.8
1966 / 67	31.2	24.3	162.8	179.5	82.8	186.3	7.1	674.0	7.7	0.0	0.0	0.0	0.0	7.7	681.7
1967 / 68	16.6	85.2	121.6	256.8	73.3	24.7	26.7	604.9	0.0	0.0	0.0	0.0	0.0	0.0	604.9
1968 / 69	9.9	44.3	210.2	271.3	57.3	222.9	31.8	847.7	0.0	0.0	0.0	0.0	0.0	0.0	847.7
1969 / 70	12.7	67.4	15.9	175.1	69.4	236.5	66.9	643.9	0.0	0.0	0.0	0.0	0.0	0.0	643.9
1970 / 71	3.5	21.5	103.6	91.5	190.2	59.5	280.3	750.1	0.0	0.0	0.0	0.0	0.0	0.0	750.1
1971 / 72	0.0	42.0	232.2	69.6	161.0	76.4	42.6	623.8	2.0	0.0	0.0	0.0	0.0	2.0	625.8
1972 / 73	1.3	34.7	24.9	190.4	26.5	116.8	8.2	402.8	12.0	0.0	0.0	0.0	0.0	12.0	414.8
1973 / 74	0.0	170.2	67.3	161.0	89.5	55.0	37.0	580.0	0.0	0.0	0.0	0.0	0.0	0.0	580.0
1974 / 75	0.0	29.9	51.0	37.9	169.5	94.0	0.0	382.3	0.0	0.0	0.0	0.0	0.0	0.0	382.3
1975 / 76	0.0	47.9	158.0	72.5	109.8	109.8	27.6	525.6	9.0	0.0	0.0	0.0	0.0	9.0	534.6
1976 / 77	23.7	74.2	15.0	131.3	56.0	206.0	130.5	636.7	0.0	0.0	0.0	0.0	0.0	0.0	636.7
1977 / 78	59.0	8.5	221.5	89.8	36.5	98.8	24.0	538.1	0.0	0.0	0.0	0.0	0.0	0.0	538.1
1978 / 79	14.6	3.0	100.0	22.0	24.1	77.3	11.0	252.0	0.0	0.0	0.0	0.0	0.0	0.0	252.0
1979 / 80	0.0	0.0	267.2	155.5	110.6	153.2	21.8	708.3	0.0	0.0	0.0	0.0	0.0	0.0	708.3
1980 / 81	15.1	13.5	203.3	152.0	117.0	56.3	37.8	595.0	0.0	0.0	0.0	0.0	0.0	0.0	595.0
1981 / 82	0.0	19.7	39.4	47.5	64.0	41.8	8.7	221.1	5.0	0.0	0.0	0.0	0.0	5.0	226.1
1982 / 83	4.7	81.8	21.8	101.0	294.1	169.4	23.4	696.2	10.6	0.0	0.0	0.0	0.0	10.6	706.8
1983 / 84	4.9	40.4	14.4	124.5	47.0	101.0	67.5	399.7	0.0	0.0	0.0	0.0	0.0	0.0	399.7
1984 / 85	28.8	40.9	89.2	76.3	301.1	24.5	18.0	578.8	0.0	0.0	0.0	0.0	0.0	0.0	578.8
1985 / 86	30.5	25.2	44.2	151.8	195.5	43.5	28.2	518.9	41.7	0.0	0.0	0.0	0.0	41.7	560.6
1986 / 87	42.0	166.1	135.6	92.6	52.2	156.5	1.5	646.5	0.0	0.0	0.0	0.0	0.0	0.0	646.5
1987 / 88	15.0	14.5	190.0	204.9	195.9	101.9	16.7	738.9	0.0	0.0	0.0	0.0	0.0	0.0	738.9
1988 / 89	11.5	45.5	208.5	59.9	45.2	87.9	0.0	458.5	0.0	0.0	0.0	0.0	0.0	0.0	458.5
1989 / 90	6.5	83.5	55.5	167.7	57.9	129.9	29.6	530.6	0.0	0.0	0.0	0.0	0.0	0.0	530.6
1990 / 91	13.5	21.7	11.5	207.2	78.0	135.0	40.0	506.9	0.0	0.0	0.0	0.0	0.0	0.0	506.9
1991 / 92	5.7	73.5	321.0	262.8	432.0	43.0	0.0	1,138.0	19.5	0.0	0.0	0.0	0.0	19.5	1,157.5
1992 / 93	0.0	83.5	251.8	111.7	130.3	61.5	0.0	638.8	23.0	0.0	0.0	0.0	0.0	23.0	661.8
1993 / 94	0.0	9.0	30.0	158.0	94.0	136.0	0.0	427.0	0.0	0.0	0.0	0.0	0.0	0.0	427.0
1994 / 95	36.5	305.2	111.0	18.0	36.0	97.0	64.0	667.7	0.0	0.0	0.0	0.0	0.0	0.0	667.7
1995 / 96	0.0	51.0	22.8	214.0	45.0	179.0	8.0	519.8	0.0	0.0	0.0	0.0	0.0	0.0	519.8
1996 / 97	54.0	17.5	72.0	137.5	257.5	134.4	27.1	700.0	16.0	0.0	0.0	0.0	0.0	16.0	716.0
1997 / 98	6.0	11.3	144.2	181.0	69.8	217.8	19.0	649.1	0.2	0.0	0.0	0.0	0.0	0.2	649.3
1998 / 99	1.0	0.0	16.0	77.5	32.3	38.2	15.8	180.8	0.0	0.0	0.0	0.0	0.0	0.0	180.8
Max.	63.0	305.2	321.0	271.3	432.0	236.5	280.3	1,138.0	41.7	0.0	0.0	0.0	0.0	41.7	1,157.5
Min.	0.0	0.0	0.0	18.0	24.1	24.5	0.0	180.8	0.0	0.0	0.0	0.0	0.0	0.0	180.8
Mean	15.3	51.4	106.7	129.0	114.0	107.5	32.9	556.8	4.4	0.0	0.0	0.0	0.0	4.4	561.2
Source: WIS database of MWI.														Std. Dev.	182.9

Table A2.1.1-6(2) Monthly Average and Annual Rainfall in Jarash Governorate

Station Name : Jarash		ID No.: AL0004													
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1942 / 43	0.0	46.4	12.4	170.4	55.6	109.0	44.6	438.4	3.0	0.0	0.0	0.0	0.0	3.0	441.4
1943 / 44	1.0	0.0	24.2	159.6	26.6	18.8	14.2	244.4	8.2	0.0	0.0	0.0	0.0	8.2	252.6
1944 / 45	0.0	131.4	135.0	130.8	152.6	26.6	10.0	586.4	15.0	0.0	0.0	0.0	0.0	15.0	601.4
1945 / 46	0.8	66.0	55.5	24.8	178.6	21.6	2.5	349.8	24.6	0.0	0.0	0.0	0.0	24.6	374.4
1946 / 47	1.0	0.0	25.2	120.6	14.8	7.8	8.6	178.0	0.0	0.0	0.0	0.0	0.0	0.0	178.0
1947 / 48	0.0	39.3	16.3	72.3	79.8	121.6	27.4	356.7	0.0	0.0	0.0	0.0	0.0	0.0	356.7
1948 / 49	0.0	10.5	76.1	59.4	152.2	108.6	59.9	466.7	4.2	0.0	0.0	0.0	0.0	4.2	470.9
1949 / 50	0.0	0.0	135.4	92.0	75.1	45.4	34.1	382.0	11.2	0.0	0.0	0.0	0.0	11.2	393.2
1950 / 51	0.0	19.2	14.7	46.5	66.2	24.3	6.2	177.1	1.0	0.0	0.0	0.0	0.0	1.0	178.1
1951 / 52	1.0	23.0	222.8	53.2	117.2	75.9	0.0	493.1	0.0	0.0	0.0	0.0	0.0	0.0	493.1
1952 / 53	22.4	4.2	10.3	60.9	117.2	165.7	2.9	383.6	0.0	0.0	0.0	0.0	0.0	0.0	383.6
1953 / 54	0.0	93.4	90.7	42.7	122.5	10.9	35.9	396.1	0.0	0.0	0.0	0.0	0.0	0.0	396.1
1954 / 55	0.0	46.9	79.5	2.3	30.3	50.0	16.3	225.3	0.0	0.0	0.0	0.0	0.0	0.0	225.3
1955 / 56	8.0	140.0	115.8	72.2	16.3	58.3	16.1	426.7	0.0	0.0	0.0	0.0	0.0	0.0	426.7
1956 / 57	0.0	3.5	66.2	96.0	108.7	71.2	7.7	353.3	28.6	0.0	0.0	0.0	0.0	28.6	381.9
1957 / 58	1.4	32.4	72.8	160.7	7.5	3.4	10.0	288.2	0.0	0.0	0.0	0.0	0.0	0.0	288.2
1958 / 59	0.0	0.0	4.4	57.2	202.3	38.4	2.0	304.3	0.0	0.0	0.0	0.0	0.0	0.0	304.3
1959 / 60	0.0	10.6	15.3	66.6	6.0	47.3	11.5	157.3	0.0	0.0	0.0	0.0	0.0	0.0	157.3
1960 / 61	0.0	59.4	20.9	101.1	110.8	13.8	20.2	326.2	12.8	0.0	0.0	0.0	0.0	12.8	339.0
1961 / 62	4.5	7.2	155.3	65.2	89.9	0.0	28.4	350.5	0.0	0.0	0.0	0.0	0.0	0.0	350.5
1962 / 63	3.4	0.0	25.7	26.8	95.1	25.8	36.5	213.3	12.0	0.0	0.0	0.0	0.0	12.0	225.3
1963 / 64	10.6	29.0	73.3	60.2	98.8	60.8	7.0	339.7	6.0	0.0	0.0	0.0	0.0	6.0	345.7
1964 / 65	0.0	64.0	66.5	147.8	59.7	31.8	47.0	416.8	0.0	0.0	0.0	0.0	0.0	0.0	416.8
1965 / 66	18.0	6.5	53.5	31.2	34.3	140.2	0.0	283.7	1.5	0.0	0.0	0.0	0.0	1.5	285.2
1966 / 67	37.4	33.5	190.9	117.4	38.8	192.2	2.1	612.3	0.0	0.0	0.0	0.0	0.0	0.0	612.3
1967 / 68	21.0	45.8	61.4	157.2	27.5	12.9	16.0	341.8	5.4	0.0	0.0	0.0	0.0	5.4	347.2
1968 / 69	8.5	12.1	92.3	146.9	31.3	131.0	15.5	437.6	0.0	0.0	0.0	0.0	0.0	0.0	437.6
1969 / 70	16.2	17.5	17.6	57.5	29.7	112.8	13.1	264.4	0.0	0.0	0.0	0.0	0.0	0.0	264.4
1970 / 71	3.2	2.6	54.0	40.0	92.9	120.5	210.6	523.8	0.0	0.0	0.0	0.0	0.0	0.0	523.8
1971 / 72	0.0	36.9	138.3	41.0	65.0	42.7	21.7	345.6	12.5	0.0	0.0	0.0	0.0	12.5	358.1
1972 / 73	0.0	41.0	3.3	80.5	29.3	75.6	0.0	229.7	0.0	0.0	0.0	0.0	0.0	0.0	229.7
1973 / 74	3.3	58.3	33.4	228.7	63.4	33.1	23.6	443.8	0.0	0.0	0.0	0.0	0.0	0.0	443.8
1974 / 75	0.0	24.5	26.2	18.6	166.6	50.1	12.1	298.1	0.0	0.0	0.0	0.0	0.0	0.0	298.1
1975 / 76	0.0	19.0	52.0	29.9	55.4	87.6	10.7	254.6	9.0	0.0	0.0	0.0	0.0	9.0	263.6
1976 / 77	7.5	49.0	1.0	75.1	49.4	49.9	32.9	264.8	0.0	0.0	0.0	0.0	0.0	0.0	264.8
1977 / 78	20.0	2.0	90.0	41.8	14.5	87.8	11.0	267.1	0.0	0.0	0.0	0.0	0.0	0.0	267.1
1978 / 79	8.5	12.0	50.0	28.7	14.5	28.0	3.3	145.0	0.0	0.0	0.0	0.0	0.0	0.0	145.0
1979 / 80	41.8	135.1	123.8	57.0	63.1	139.7	4.2	564.7	0.0	0.0	0.0	0.0	0.0	0.0	564.7
1980 / 81	5.0	10.5	186.9	37.2	47.9	20.4	16.1	324.0	0.0	0.0	0.0	0.0	0.0	0.0	324.0
1981 / 82	0.0	24.3	9.0	76.7	91.6	44.7	10.0	256.3	10.0	0.0	0.0	0.0	0.0	10.0	266.3
1982 / 83	8.5	57.7	32.6	120.2	103.6	92.8	5.0	420.4	1.5	0.0	0.0	0.0	0.0	1.5	421.9
1983 / 84	0.0	4.0	16.0	113.0	31.7	139.2	19.7	323.6	0.0	0.0	0.0	0.0	0.0	0.0	323.6
1984 / 85	18.6	14.0	28.4	21.9	160.5	33.0	6.6	283.0	2.0	0.0	0.0	0.0	0.0	2.0	285.0
1985 / 86	8.0	22.0	22.9	38.3	69.3	5.2	6.3	172.0	17.5	0.0	0.0	0.0	0.0	17.5	189.5
1986 / 87	14.7	141.2	37.5	86.6	20.0	52.2	0.0	352.2	0.0	0.0	0.0	0.0	0.0	0.0	352.2
1987 / 88	40.7	5.0	84.0	94.5	200.7	93.1	8.8	526.8	0.0	0.0	0.0	0.0	0.0	0.0	526.8
1988 / 89	7.5	16.8	146.5	37.2	39.7	49.5	0.0	297.2	0.0	0.0	0.0	0.0	0.0	0.0	297.2
1989 / 90	2.0	37.0	33.8	74.9	48.7	62.0	19.4	277.8	0.0	0.0	0.0	0.0	0.0	0.0	277.8
1990 / 91	3.0	10.5	1.3	110.6	42.7	65.2	5.2	238.5	3.0	0.0	0.0	0.0	0.0	3.0	241.5
1991 / 92	0.0	49.3	216.0	110.5	269.4	22.5	0.0	667.7	1.0	0.0	0.0	0.0	0.0	1.0	668.7
1992 / 93	0.0	46.5	242.1	91.2	49.8	25.5	0.0	455.1	7.8	0.0	0.0	0.0	0.0	7.8	462.9
1993 / 94	5.5	5.0	5.0	115.0	48.0	94.2	7.0	279.7	0.0	0.0	0.0	0.0	0.0	0.0	279.7
1994 / 95	5.2	169.5	121.7	7.2	67.0	34.4	9.2	414.2	0.0	0.0	0.0	0.0	0.0	0.0	414.2
1995 / 96	0.0	36.4	23.0	95.6	4.5	132.0	7.0	298.5	0.0	0.0	0.0	0.0	0.0	0.0	298.5
1996 / 97	17.0	24.5	56.4	72.3	174.0	62.5	10.4	417.1	6.0	0.0	0.0	0.0	0.0	6.0	423.1
1997 / 98	6.0	35.0	100.0	136.5	44.0	134.5	4.0	460.0	0.0	0.0	0.0	0.0	0.0	0.0	460.0
1998 / 99	0.0	0.0	11.0	80.0	67.0	31.3	7.5	196.8	0.0	0.0	0.0	0.0	0.0	0.0	196.8
Max.	41.8	169.5	242.1	228.7	269.4	192.2	210.6	667.7	28.6	0.0	0.0	0.0	0.0	28.6	668.7
Min.	0.0	0.0	1.0	2.3	4.5	0.0	0.0	145.0	0.0	0.0	0.0	0.0	0.0	0.0	145.0
Mean	6.7	35.6	68.0	80.0	76.1	63.8	17.0	347.2	3.6	0.0	0.0	0.0	0.0	3.6	350.8
Source: WIS database of MWI.														Std. Dev.	117.1

Table A2.1.1-6(3) Monthly Average and Annual Rainfall in Jarash Governorate

Station Name : Burma		ID No.: AL0026													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1962 / 63	0.0	0.0	59.6	60.3	164.5	44.9	6.3	335.6	39.3	0.0	0.0	0.0	0.0	39.3	374.9
1963 / 64	16.5	42.6	187.8	116.9	156.5	131.0	16.0	667.3	6.0	0.0	0.0	0.0	0.0	6.0	673.3
1964 / 65	0.0	120.3	63.5	192.6	93.1	52.5	62.8	584.8	0.0	0.0	0.0	0.0	0.0	0.0	584.8
1965 / 66	23.2	17.3	73.5	38.1	79.8	118.4	0.4	350.7	0.0	0.0	0.0	0.0	0.0	0.0	350.7
1966 / 67	17.0	0.0	219.5	178.0	75.0	235.5	5.0	730.0	0.0	0.0	0.0	0.0	0.0	0.0	730.0
1967 / 68	4.8	58.3	71.6	213.8	42.3	24.6	22.1	437.5	0.0	0.0	0.0	0.0	0.0	0.0	437.5
1968 / 69	4.0	27.5	122.2	207.5	27.0	166.5	10.0	564.7	0.0	0.0	0.0	0.0	0.0	0.0	564.7
1969 / 70	3.5	33.5	16.0	138.5	35.0	172.4	21.0	419.9	0.0	0.0	0.0	0.0	0.0	0.0	419.9
1970 / 71	0.0	0.0	99.0	61.5	55.1	79.0	275.6	570.2	0.0	0.0	0.0	0.0	0.0	0.0	570.2
1971 / 72	0.0	39.0	97.0	0.0	80.0	106.0	29.6	351.6	3.0	0.0	0.0	0.0	0.0	3.0	354.6
1972 / 73	0.0	32.6	1.8	150.5	31.3	109.8	0.0	326.0	0.0	0.0	0.0	0.0	0.0	0.0	326.0
1973 / 74	0.0	96.3	17.7	339.5	150.0	40.8	43.7	688.0	0.0	0.0	0.0	0.0	0.0	0.0	688.0
1974 / 75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975 / 76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978 / 79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979 / 80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980 / 81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981 / 82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982 / 83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983 / 84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984 / 85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985 / 86	0.0	12.3	0.0	64.6	121.2	0.0	16.4	214.5	20.2	0.0	0.0	0.0	0.0	20.2	234.7
1986 / 87	3.2	118.7	36.0	92.7	25.1	47.5	0.0	323.2	0.0	0.0	0.0	0.0	0.0	0.0	323.2
1987 / 88	40.3	4.8	103.9	105.4	213.0	107.2	9.7	584.3	0.0	0.0	0.0	0.0	0.0	0.0	584.3
1988 / 89	0.0	11.3	118.6	47.3	18.5	45.4	0.0	241.1	0.0	0.0	0.0	0.0	0.0	0.0	241.1
1989 / 90	4.7	54.4	62.5	120.4	51.5	68.6	29.5	391.6	0.0	0.0	0.0	0.0	0.0	0.0	391.6
1990 / 91	8.5	32.3	3.8	137.2	49.5	79.3	16.0	326.6	0.0	0.0	0.0	0.0	0.0	0.0	326.6
1991 / 92	15.2	63.8	302.0	136.5	223.4	33.6	0.0	774.5	1.2	0.0	0.0	0.0	0.0	1.2	775.7
1992 / 93	0.0	62.1	154.2	55.8	51.4	15.7	0.0	339.2	16.1	0.0	0.0	0.0	0.0	16.1	355.3
1993 / 94	1.0	6.0	13.0	104.0	62.9	80.4	3.5	270.8	0.0	0.0	0.0	0.0	0.0	0.0	270.8
1994 / 95	5.5	184.3	160.7	11.6	65.0	16.8	6.2	450.1	0.0	0.0	0.0	0.0	0.0	0.0	450.1
1995 / 96	0.0	20.5	12.7	102.5	10.5	132.0	6.0	284.2	0.0	0.0	0.0	0.0	0.0	0.0	284.2
1996 / 97	9.0	13.5	35.5	111.5	137.2	85.0	8.2	399.9	5.0	0.0	0.0	0.0	0.0	5.0	404.9
1997 / 98	19.5	27.0	102.3	144.5	44.8	142.1	5.0	485.2	0.0	0.0	0.0	0.0	0.0	0.0	485.2
1998 / 99	0.0	0.0	8.5	98.0	71.8	25.4	19.5	223.2	0.0	0.0	0.0	0.0	0.0	0.0	223.2
Max.	40.3	184.3	302.0	339.5	223.4	235.5	275.6	774.5	39.3	0.0	0.0	0.0	0.0	39.3	775.7
Min.	0.0	0.0	0.0	0.0	10.5	0.0	0.0	214.5	0.0	0.0	0.0	0.0	0.0	0.0	223.2
Mean	6.8	41.5	82.4	116.5	82.1	83.1	23.6	436.0	3.5	0.0	0.0	0.0	0.0	3.5	439.4
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	157.0

Table A2.1.1-6(4) Monthly Average and Annual Rainfall in Jarash Governorate

Station Name : Prince Feisal Nursery									ID No.: AL0036						
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1963 / 64	0.0	0.0	86.9	68.3	97.4	70.7	7.5	330.8	6.5	0.0	0.0	0.0	0.0	6.5	337.3
1964 / 65	0.0	57.8	57.0	127.8	50.3	40.3	50.4	383.6	0.0	0.0	0.0	0.0	0.0	0.0	383.6
1965 / 66	17.1	3.8	48.3	35.0	46.5	109.5	0.0	260.2	9.4	0.0	0.0	0.0	0.0	9.4	269.6
1966 / 67	32.2	4.2	191.9	116.3	39.0	167.4	6.1	557.1	0.0	0.0	0.0	0.0	0.0	0.0	557.1
1967 / 68	10.6	44.2	49.8	128.0	39.8	18.8	15.0	306.2	6.3	0.0	0.0	0.0	0.0	6.3	312.5
1968 / 69	3.3	8.9	81.5	135.4	18.6	99.9	20.9	368.5	3.5	0.0	0.0	0.0	0.0	3.5	372.0
1969 / 70	11.9	22.0	15.3	58.0	23.8	103.5	11.3	245.8	0.0	0.0	0.0	0.0	0.0	0.0	245.8
1970 / 71	0.0	8.8	54.3	50.8	63.1	52.4	183.9	413.3	0.0	0.0	0.0	0.0	0.0	0.0	413.3
1971 / 72	0.0	28.4	94.7	44.3	57.6	34.5	26.4	285.9	1.0	0.0	0.0	0.0	0.0	1.0	286.9
1972 / 73	0.0	39.0	1.8	104.3	21.2	68.8	0.0	235.1	0.0	0.0	0.0	0.0	0.0	0.0	235.1
1973 / 74	0.0	57.0	33.8	261.6	101.7	29.0	33.4	516.5	0.0	0.0	0.0	0.0	0.0	0.0	516.5
1974 / 75	0.0	21.1	29.7	24.9	104.2	58.9	9.9	248.7	0.0	0.0	0.0	0.0	0.0	0.0	248.7
1975 / 76	0.0	15.0	53.5	28.3	67.6	93.5	9.7	267.6	0.0	0.0	0.0	0.0	0.0	0.0	267.6
1976 / 77	3.9	57.0	5.0	68.5	30.2	65.8	27.4	257.8	0.0	0.0	0.0	0.0	0.0	0.0	257.8
1977 / 78	21.0	11.0	110.4	44.2	22.5	65.2	12.0	286.3	0.0	0.0	0.0	0.0	0.0	0.0	286.3
1978 / 79	11.7	2.1	57.8	40.2	20.1	38.9	4.7	175.5	0.0	0.0	0.0	0.0	0.0	0.0	175.5
1979 / 80	44.1	151.0	163.4	72.6	73.4	161.2	11.2	676.9	0.0	0.0	0.0	0.0	0.0	0.0	676.9
1980 / 81	5.4	10.5	203.5	63.4	52.6	36.5	13.1	385.0	0.0	0.0	0.0	0.0	0.0	0.0	385.0
1981 / 82	0.0	31.4	4.0	80.5	102.3	52.3	8.9	279.4	11.6	0.0	0.0	0.0	0.0	11.6	291.0
1982 / 83	9.0	59.1	20.7	124.8	174.6	125.3	5.1	518.6	2.7	0.0	0.0	0.0	0.0	2.7	521.3
1983 / 84	0.0	0.0	11.0	98.6	36.0	121.4	19.4	286.4	0.0	0.0	0.0	0.0	0.0	0.0	286.4
1984 / 85	19.2	11.0	33.5	48.6	144.6	30.1	0.0	287.0	0.0	0.0	0.0	0.0	0.0	0.0	287.0
1985 / 86	10.7	21.0	28.3	45.1	108.3	2.0	4.0	219.4	7.5	0.0	0.0	0.0	0.0	7.5	226.9
1986 / 87	8.0	173.2	52.5	87.5	45.0	58.0	0.0	424.2	0.0	0.0	0.0	0.0	0.0	0.0	424.2
1987 / 88	11.0	7.0	105.0	87.5	187.0	93.5	9.0	500.0	0.0	0.0	0.0	0.0	0.0	0.0	500.0
1988 / 89	3.0	17.0	165.0	81.4	29.0	72.5	0.0	367.9	0.0	0.0	0.0	0.0	0.0	0.0	367.9
1989 / 90	18.0	49.5	35.7	76.5	49.5	56.5	25.5	311.2	0.0	0.0	0.0	0.0	0.0	0.0	311.2
1990 / 91	3.0	21.6	2.4	92.8	57.8	66.0	10.5	254.1	0.0	0.0	0.0	0.0	0.0	0.0	254.1
1991 / 92	0.0	58.5	253.0	130.3	300.0	27.0	0.0	768.8	1.4	0.0	0.0	0.0	0.0	1.4	770.2
1992 / 93	0.0	58.0	158.5	75.5	49.5	12.5	1.0	355.0	5.0	0.0	0.0	0.0	0.0	5.0	360.0
1993 / 94	0.0	3.5	7.0	103.5	35.0	68.0	4.0	221.0	0.0	0.0	0.0	0.0	0.0	0.0	221.0
1994 / 95	47.0	184.4	139.0	9.3	29.7	47.2	5.5	462.1	0.0	0.0	0.0	0.0	0.0	0.0	462.1
1995 / 96	5.5	23.5	30.0	100.8	8.5	116.2	4.5	289.0	0.0	0.0	0.0	0.0	0.0	0.0	289.0
1996 / 97	9.5	22.5	77.6	118.0	193.3	187.4	3.5	611.8	3.0	0.0	0.0	0.0	0.0	3.0	614.8
1997 / 98	12.0	36.4	86.8	108.5	34.4	126.4	5.0	409.5	0.0	0.0	0.0	0.0	0.0	0.0	409.5
1998 / 99	0.0	0.0	7.5	69.0	67.0	20.0	7.8	171.3	0.0	0.0	0.0	0.0	0.0	0.0	171.3
Max.	47.0	184.4	253.0	261.6	300.0	187.4	183.9	768.8	11.6	0.0	0.0	0.0	0.0	11.6	770.2
Min.	0.0	0.0	1.8	9.3	8.5	2.0	0.0	171.3	0.0	0.0	0.0	0.0	0.0	0.0	171.3
Mean	8.8	36.7	71.0	83.6	71.7	72.1	15.5	359.4	1.6	0.0	0.0	0.0	0.0	1.6	361.0
Source: WIS database of MWI.														Std. Dev.	138.1

Table A2.1.1-6(5) Monthly Average and Annual Rainfall in Jarash Governorate

Station Name: Qafqafa		ID No.: AL0050													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1967 / 68	6.8	36.1	35.7	68.6	25.5	10.9	7.9	191.5	0.0	0.0	0.0	0.0	0.0	0.0	191.5
1968 / 69	0.0	13.0	115.7	130.3	9.0	108.3	7.9	384.2	0.0	0.0	0.0	0.0	0.0	0.0	384.2
1969 / 70	10.0	14.2	16.1	67.4	34.4	102.2	13.0	257.3	0.0	0.0	0.0	0.0	0.0	0.0	257.3
1970 / 71	0.0	0.0	50.0	35.6	39.6	30.5	155.0	310.7	0.0	0.0	0.0	0.0	0.0	0.0	310.7
1971 / 72	0.0	33.4	92.9	28.0	63.0	36.0	17.3	270.6	0.0	0.0	0.0	0.0	0.0	0.0	270.6
1972 / 73	0.0	27.0	0.0	70.3	20.6	42.7	6.0	166.6	0.0	0.0	0.0	0.0	0.0	0.0	166.6
1973 / 74	0.0	59.4	33.0	186.0	54.0	28.0	35.0	395.4	0.0	0.0	0.0	0.0	0.0	0.0	395.4
1974 / 75	0.0	20.3	28.0	4.6	100.3	31.0	11.0	195.2	0.0	0.0	0.0	0.0	0.0	0.0	195.2
1975 / 76	0.0	0.0	60.3	25.6	68.3	94.1	15.0	263.3	0.0	0.0	0.0	0.0	0.0	0.0	263.3
1976 / 77	10.4	45.2	1.0	68.2	27.5	53.5	45.7	251.5	0.0	0.0	0.0	0.0	0.0	0.0	251.5
1977 / 78	12.5	8.9	134.5	28.0	65.3	55.0	9.0	313.2	0.0	0.0	0.0	0.0	0.0	0.0	313.2
1978 / 79	15.0	0.0	56.6	47.5	22.5	42.2	2.0	185.8	0.0	0.0	0.0	0.0	0.0	0.0	185.8
1979 / 80	30.3	129.4	117.2	53.7	67.0	67.6	0.0	465.2	0.0	0.0	0.0	0.0	0.0	0.0	465.2
1980 / 81	8.0	4.0	198.7	79.3	26.6	13.0	13.5	343.1	0.0	0.0	0.0	0.0	0.0	0.0	343.1
1981 / 82	0.0	30.9	11.0	68.6	110.2	43.7	12.0	276.4	9.0	0.0	0.0	0.0	0.0	9.0	285.4
1982 / 83	13.0	59.1	24.5	114.7	104.3	92.2	3.2	411.0	0.0	0.0	0.0	0.0	0.0	0.0	411.0
1983 / 84	0.0	13.0	0.0	69.9	22.5	112.0	9.7	227.1	0.0	0.0	0.0	0.0	0.0	0.0	227.1
1984 / 85	15.4	12.2	31.8	6.5	180.3	15.0	2.0	263.2	2.5	0.0	0.0	0.0	0.0	2.5	265.7
1985 / 86	5.4	5.2	17.4	25.4	65.5	4.5	6.5	129.9	16.5	0.0	0.0	0.0	0.0	16.5	146.4
1986 / 87	15.3	153.5	34.0	186.1	32.2	29.9	0.0	451.0	0.0	0.0	0.0	0.0	0.0	0.0	451.0
1987 / 88	28.2	2.5	97.2	62.9	175.0	64.0	9.2	439.0	0.0	0.0	0.0	0.0	0.0	0.0	439.0
1988 / 89	3.5	7.5	200.5	48.1	23.0	45.6	0.0	328.2	0.0	0.0	0.0	0.0	0.0	0.0	328.2
1989 / 90	0.0	43.0	48.8	59.5	30.9	52.4	11.0	245.6	0.0	0.0	0.0	0.0	0.0	0.0	245.6
1990 / 91	0.0	18.5	0.0	74.5	45.9	73.7	1.8	214.4	0.0	0.0	0.0	0.0	0.0	0.0	214.4
1991 / 92	0.0	53.2	121.2	120.6	196.2	23.5	0.0	514.7	3.8	0.0	0.0	0.0	0.0	3.8	518.5
1992 / 93	0.0	10.5	112.7	66.2	36.1	23.6	0.0	249.1	5.5	0.0	0.0	0.0	0.0	5.5	254.6
1993 / 94	6.0	11.0	10.0	88.4	23.4	85.5	0.0	224.3	0.0	0.0	0.0	0.0	0.0	0.0	224.3
1994 / 95	0.0	151.0	90.8	10.7	65.0	35.0	6.2	358.7	0.0	0.0	0.0	0.0	0.0	0.0	358.7
1995 / 96	2.0	35.0	43.2	72.7	8.5	107.8	6.0	275.2	0.0	0.0	0.0	0.0	0.0	0.0	275.2
1996 / 97	21.0	0.0	31.0	95.5	106.9	58.8	2.0	315.2	3.5	0.0	0.0	0.0	0.0	3.5	318.7
1997 / 98	11.3	30.0	48.8	80.9	27.2	105.2	5.2	308.6	0.0	0.0	0.0	0.0	0.0	0.0	308.6
1998 / 99	0.0	0.0	7.9	43.0	48.5	13.5	7.6	120.5	0.0	0.0	0.0	0.0	0.0	0.0	120.5
Max.	30.3	153.5	200.5	186.1	196.2	112.0	155.0	514.7	16.5	0.0	0.0	0.0	0.0	16.5	518.5
Min.	0.0	0.0	0.0	4.6	8.5	4.5	0.0	120.5	0.0	0.0	0.0	0.0	0.0	0.0	120.5
Mean	6.7	32.1	58.5	68.4	60.2	53.2	13.1	292.1	1.3	0.0	0.0	0.0	0.0	1.3	293.3
Source: WIS database of MWI.														Std.Dev.	97.1

Table 2.1.1-6(6) Monthly Average and Annual Rainfall in Jarash Governorate

Station Name : King Talal Dam		ID No.: AL0053													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1969 / 70	0.0	0.0	0.0	190.8	56.0	258.1	38.1	543.0	0.0	0.0	0.0	0.0	0.0	0.0	543.0
1970 / 71	0.0	3.6	65.9	33.7	85.0	76.3	268.4	532.9	0.0	0.0	0.0	0.0	0.0	0.0	532.9
1971 / 72	1.9	58.5	283.8	108.1	136.7	113.5	52.9	755.4	6.5	0.0	0.0	0.0	0.0	6.5	761.9
1972 / 73	0.6	78.4	7.8	240.6	50.1	139.1	2.0	518.6	2.0	0.0	0.0	0.0	0.0	2.0	520.6
1973 / 74	1.5	127.3	90.6	545.1	251.1	42.9	68.4	1,126.9	0.0	0.0	0.0	0.0	0.0	0.0	1,126.9
1974 / 75	0.0	41.5	51.3	35.8	309.9	125.4	17.4	581.3	0.0	0.0	0.0	0.0	0.0	0.0	581.3
1975 / 76	0.0	25.0	28.5	0.0	0.0	0.0	13.5	67.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0
1976 / 77	2.8	42.3	3.5	120.7	54.8	102.8	101.8	428.7	0.0	0.0	0.0	0.0	0.0	0.0	428.7
1977 / 78	101.0	11.6	159.9	72.5	56.3	130.4	13.0	544.7	0.0	0.0	0.0	0.0	0.0	0.0	544.7
1978 / 79	19.8	9.0	144.8	120.5	25.9	123.1	8.0	451.1	0.0	0.0	0.0	0.0	0.0	0.0	451.1
1979 / 80	4.7	239.5	316.0	177.8	196.3	251.4	20.0	1,205.7	0.0	0.0	0.0	0.0	0.0	0.0	1,205.7
1980 / 81	2.1	21.6	374.7	138.4	153.5	116.0	16.3	822.6	0.0	0.0	0.0	0.0	0.0	0.0	822.6
1981 / 82	0.0	116.1	18.9	183.6	170.6	85.2	19.9	594.3	0.0	0.0	0.0	0.0	0.0	0.0	594.3
1982 / 83	10.9	126.6	46.8	298.2	341.6	224.5	20.8	1,069.4	26.0	0.0	0.0	0.0	0.0	26.0	1,095.4
1983 / 84	2.3	70.0	20.6	219.0	77.4	300.5	12.6	702.4	0.0	0.0	0.0	0.0	0.0	0.0	702.4
1984 / 85	19.4	43.0	57.1	76.8	436.6	67.6	8.5	709.0	0.4	0.0	0.0	0.0	0.0	0.4	709.4
1985 / 86	28.9	29.4	75.9	109.2	226.4	57.6	28.5	555.9	28.0	0.0	0.0	0.0	0.0	28.0	583.9
1986 / 87	62.8	344.2	125.2	164.7	56.7	105.9	0.7	860.2	0.0	0.0	0.0	0.0	0.0	0.0	860.2
1987 / 88	36.9	13.0	236.9	136.9	320.8	158.1	23.8	926.4	0.0	0.0	0.0	0.0	0.0	0.0	926.4
1988 / 89	12.4	44.0	317.9	136.3	78.9	158.0	0.0	747.5	0.0	0.0	0.0	0.0	0.0	0.0	747.5
1989 / 90	3.5	71.8	92.2	224.9	110.8	135.0	61.0	699.2	0.0	0.0	0.0	0.0	0.0	0.0	699.2
1990 / 91	12.2	41.3	5.8	303.9	123.1	169.3	25.7	681.3	0.0	0.0	0.0	0.0	0.0	0.0	681.3
1991 / 92	6.8	103.3	562.4	405.2	599.6	73.6	2.5	1,753.4	8.0	0.0	0.0	0.0	0.0	8.0	1,761.4
1992 / 93	0.0	139.7	295.0	192.9	129.3	39.9	0.0	796.8	57.5	0.0	0.0	0.0	0.0	57.5	854.3
1993 / 94	18.3	27.6	32.7	277.4	72.9	119.7	9.8	558.4	0.0	0.0	0.0	0.0	0.0	0.0	558.4
1994 / 95	47.2	325.8	241.2	22.1	134.2	54.9	22.4	847.8	0.0	0.0	0.0	0.0	0.0	0.0	847.8
1995 / 96	0.0	54.3	54.3	264.6	29.2	237.6	16.3	656.3	0.0	0.0	0.0	0.0	0.0	0.0	656.3
1996 / 97	25.7	28.5	93.8	185.7	288.0	166.6	11.6	799.9	10.4	0.0	0.0	0.0	0.0	10.4	810.3
1997 / 98	26.0	77.0	166.3	191.7	87.7	230.7	1.8	781.2	1.2	0.0	0.0	0.0	0.0	1.2	782.4
1998 / 99	0.8	0.0	11.2	142.0	173.4	57.8	19.1	404.3	0.0	0.0	0.0	0.0	0.0	0.0	404.3
1999 / 00	0.7	3.8	22.1	319.1	86.6	110.7	0.8	543.8	0.0	0.0	0.0	0.0	0.0	0.0	543.8
Max.	101.0	344.2	562.4	545.1	599.6	300.5	268.4	1,753.4	57.5	0.0	0.0	0.0	0.0	57.5	1,761.4
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0
Mean	14.5	74.8	129.1	181.9	158.7	130.1	29.2	718.2	4.5	0.0	0.0	0.0	0.0	4.5	722.8
Source: WIS database of MWI.														Std.Dev.	299.2

Table A2.1.1-7(1) Monthly Average and Annual Rainfall in Balqa Governorate

Station Name : Deir Alla Agr. Station									ID No.: AL0010						
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1953 / 54	0.0	91.9	76.1	30.6	95.4	9.0	53.4	356.4	0.0	0.0	0.0	0.0	0.0	0.0	356.4
1954 / 55	0.0	33.0	61.5	3.9	13.3	17.5	14.6	143.8	1.3	0.0	0.0	0.0	0.0	1.3	145.1
1955 / 56	5.0	127.4	83.0	80.8	13.4	55.4	39.0	404.0	1.6	0.0	0.0	0.0	0.0	1.6	405.6
1956 / 57	0.4	12.8	53.4	36.4	100.9	74.3	17.8	296.0	18.6	0.0	0.0	0.0	0.0	18.6	314.6
1957 / 58	2.6	28.3	72.8	123.9	2.0	3.0	5.2	237.8	0.0	0.0	0.0	0.0	0.0	0.0	237.8
1958 / 59	2.9	0.0	8.7	67.7	92.4	30.9	1.6	204.2	1.3	0.0	0.0	0.0	0.0	1.3	205.5
1959 / 60	0.0	8.8	12.6	50.4	1.4	34.4	5.1	112.7	1.9	0.0	0.0	0.0	0.0	1.9	114.6
1960 / 61	0.0	47.4	21.7	95.2	73.8	3.7	32.9	274.7	12.1	0.0	0.0	0.0	0.0	12.1	286.8
1961 / 62	3.2	12.9	118.4	57.2	39.8	0.5	21.7	253.7	19.2	0.0	0.0	0.0	0.0	19.2	272.9
1962 / 63	10.8	0.0	45.8	28.0	61.1	19.1	5.4	170.2	14.4	0.0	0.0	0.0	0.0	14.4	184.6
1963 / 64	14.8	27.1	87.8	34.8	99.4	65.7	1.8	331.4	0.0	0.0	0.0	0.0	0.0	0.0	331.4
1964 / 65	0.0	53.8	55.9	107.6	21.9	36.0	23.3	298.5	0.0	0.0	0.0	0.0	0.0	0.0	298.5
1965 / 66	22.4	14.5	44.0	26.3	44.3	60.1	0.0	211.6	0.0	0.0	0.0	0.0	0.0	0.0	211.6
1966 / 67	12.0	6.2	166.1	91.7	50.0	100.0	1.5	427.5	12.3	0.0	0.0	0.0	0.0	12.3	439.8
1967 / 68	37.5	34.2	21.1	76.7	14.5	14.5	40.8	239.3	3.4	0.0	0.0	0.0	0.0	3.4	242.7
1968 / 69	2.2	12.4	63.7	84.4	13.0	91.0	4.4	271.1	0.3	0.0	0.0	0.0	0.0	0.3	271.4
1969 / 70	9.2	23.1	9.4	68.7	11.5	85.7	10.4	218.0	0.0	0.0	0.0	0.0	0.0	0.0	218.0
1970 / 71	2.6	17.0	61.7	55.3	69.0	27.5	103.2	336.3	0.0	0.0	0.0	0.0	0.0	0.0	336.3
1971 / 72	0.0	35.0	77.8	50.9	66.4	78.3	34.8	343.2	0.7	0.0	0.0	0.0	0.0	0.7	343.9
1972 / 73	1.3	14.9	12.8	64.1	11.8	66.0	0.0	170.9	6.0	0.0	0.0	0.0	0.0	6.0	176.9
1973 / 74	0.0	74.2	13.7	225.0	101.0	51.9	37.7	503.5	0.0	0.0	0.0	0.0	0.0	0.0	503.5
1974 / 75	0.0	13.5	41.7	15.6	101.8	25.7	5.8	204.1	0.0	0.0	0.0	0.0	0.0	0.0	204.1
1975 / 76	0.0	15.7	29.4	26.8	0.0	51.2	15.1	138.2	0.0	0.0	0.0	0.0	0.0	0.0	138.2
1976 / 77	5.6	52.5	9.5	68.8	22.7	45.0	52.2	256.3	0.0	0.0	0.0	0.0	0.0	0.0	256.3
1977 / 78	28.8	2.0	87.4	32.5	20.6	37.3	8.9	217.5	0.0	0.0	0.0	0.0	0.0	0.0	217.5
1978 / 79	16.7	6.6	56.4	35.6	14.3	41.1	0.4	171.1	0.2	0.0	0.0	0.0	0.0	0.2	171.3
1979 / 80	26.1	59.8	122.1	52.0	78.1	79.6	13.4	431.1	0.0	0.0	0.0	0.0	0.0	0.0	431.1
1980 / 81	0.0	8.6	79.8	87.5	28.7	41.5	9.6	255.7	0.0	0.0	0.0	0.0	0.0	0.0	255.7
1981 / 82	0.0	42.3	7.1	53.9	87.6	55.8	0.0	246.7	0.0	0.0	0.0	0.0	0.0	0.0	246.7
1982 / 83	0.5	75.9	27.3	102.7	113.7	76.9	25.0	422.0	4.6	0.0	0.0	0.0	0.0	4.6	426.6
1983 / 84	0.0	0.0	2.3	54.7	21.0	74.1	31.4	183.5	0.0	0.0	0.0	0.0	0.0	0.0	183.5
1984 / 85	9.3	8.4	0.0	34.5	88.7	25.8	0.0	166.7	0.0	0.0	0.0	0.0	0.0	0.0	166.7
1985 / 86	8.1	21.5	41.0	43.6	83.8	10.8	7.9	216.7	18.8	0.0	0.0	0.0	0.0	18.8	235.5
1986 / 87	8.0	219.7	33.7	45.5	14.6	22.7	0.0	344.2	0.0	0.0	0.0	0.0	0.0	0.0	344.2
1987 / 88	26.1	4.0	82.5	67.8	129.7	29.3	11.2	350.6	0.0	0.0	0.0	0.0	0.0	0.0	350.6
1988 / 89	0.0	20.0	104.9	44.0	37.3	49.4	0.0	255.6	0.0	0.0	0.0	0.0	0.0	0.0	255.6
1989 / 90	9.1	46.4	70.6	79.2	31.9	44.8	21.7	303.7	0.0	0.0	0.0	0.0	0.0	0.0	303.7
1990 / 91	6.0	24.9	0.3	91.9	29.1	83.7	16.4	252.3	0.0	0.0	0.0	0.0	0.0	0.0	252.3
1991 / 92	11.5	74.3	176.7	114.8	183.4	32.8	1.2	594.7	4.9	0.0	0.0	0.0	0.0	4.9	599.6
1992 / 93	0.0	21.4	150.5	49.7	47.3	17.8	0.0	286.7	0.6	0.0	0.0	0.0	0.0	0.6	287.3
1993 / 94	6.6	8.0	6.5	87.4	37.7	22.0	0.8	169.0	0.0	0.0	0.0	0.0	0.0	0.0	169.0
1994 / 95	28.2	202.6	75.5	9.4	49.1	6.1	10.3	381.2	0.0	0.0	0.0	0.0	0.0	0.0	381.2
1995 / 96	1.0	49.1	22.0	90.7	11.4	87.6	4.8	266.6	0.0	0.0	0.0	0.0	0.0	0.0	266.6
1996 / 97	14.1	7.7	48.2	111.5	105.9	76.9	0.7	365.0	1.0	0.0	0.0	0.0	0.0	1.0	366.0
1997 / 98	8.5	74.2	92.9	75.1	18.8	75.4	5.6	350.5	1.8	0.0	0.0	0.0	0.0	1.8	352.3
1998 / 99	0.4	0.3	1.6	57.4	22.0	17.7	2.7	102.1	0.0	0.0	0.0	0.0	0.0	0.0	102.1
Max.	37.5	219.7	176.7	225.0	183.4	100.0	103.2	594.7	19.2	0.0	0.0	0.0	0.0	19.2	599.6
Min.	0.0	0.0	0.0	3.9	0.0	0.5	0.0	102.1	0.0	0.0	0.0	0.0	0.0	0.0	102.1
Mean	7.4	37.7	55.2	65.0	51.6	44.7	15.2	276.9	2.7	0.0	0.0	0.0	0.0	2.7	279.6
Source: WIS database of MWI.														Std. Dev.	102.6

Table A2.1.1-7(2) Monthly Average and Annual Rainfall in Balqa Governorate

Station Name : Rumeimin										ID No.:		AL0028			
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1962 / 63	0.0	0.0	35.9	36.1	141.8	42.7	6.6	263.1	21.7	0.0	0.0	0.0	0.0	21.7	284.8
1963 / 64	11.4	21.8	107.6	84.8	134.0	86.6	6.5	452.7	0.0	0.0	0.0	0.0	0.0	0.0	452.7
1964 / 65	0.0	65.3	53.7	114.0	55.1	56.5	49.5	394.1	0.0	0.0	0.0	0.0	0.0	0.0	394.1
1965 / 66	20.2	9.4	61.3	26.0	43.3	112.9	0.0	273.1	0.0	0.0	0.0	0.0	0.0	0.0	273.1
1966 / 67	16.8	5.5	196.7	119.8	47.4	207.9	8.0	602.1	0.0	0.0	0.0	0.0	0.0	0.0	602.1
1967 / 68	27.4	78.8	31.5	148.4	14.5	15.5	0.0	316.1	0.0	0.0	0.0	0.0	0.0	0.0	316.1
1968 / 69	0.0	15.1	108.6	144.4	41.5	167.0	17.3	493.9	0.0	0.0	0.0	0.0	0.0	0.0	493.9
1969 / 70	15.8	28.5	10.0	88.0	22.0	108.7	19.0	292.0	0.0	0.0	0.0	0.0	0.0	0.0	292.0
1970 / 71	0.0	7.8	59.3	0.0	66.3	94.8	207.0	435.2	0.0	0.0	0.0	0.0	0.0	0.0	435.2
1971 / 72	0.0	28.0	133.0	40.0	24.0	47.0	24.0	296.0	6.0	0.0	0.0	0.0	0.0	6.0	302.0
1972 / 73	0.0	24.5	2.0	209.0	25.0	59.0	0.0	319.5	0.0	0.0	0.0	0.0	0.0	0.0	319.5
1973 / 74	0.0	57.4	44.9	277.5	102.2	28.7	21.0	531.7	0.0	0.0	0.0	0.0	0.0	0.0	531.7
1974 / 75	0.0	29.3	35.4	4.0	141.9	39.8	12.1	262.5	0.0	0.0	0.0	0.0	0.0	0.0	262.5
1975 / 76	0.0	37.7	53.2	37.7	65.3	95.5	20.7	310.1	0.0	0.0	0.0	0.0	0.0	0.0	310.1
1976 / 77	12.0	79.0	5.0	59.0	6.0	61.5	72.5	295.0	0.0	0.0	0.0	0.0	0.0	0.0	295.0
1977 / 78	27.0	5.4	65.0	43.2	21.4	84.0	14.0	260.0	0.0	0.0	0.0	0.0	0.0	0.0	260.0
1978 / 79	15.3	1.8	70.6	74.2	9.2	70.4	3.4	244.9	0.0	0.0	0.0	0.0	0.0	0.0	244.9
1979 / 80	30.7	137.3	198.9	61.0	161.7	101.6	14.2	705.4	0.0	0.0	0.0	0.0	0.0	0.0	705.4
1980 / 81	2.4	8.8	211.3	49.7	39.9	101.6	3.1	416.8	0.0	0.0	0.0	0.0	0.0	0.0	416.8
1981 / 82	0.0	17.3	1.7	37.8	223.4	53.6	7.8	341.6	0.0	0.0	0.0	0.0	0.0	0.0	341.6
1982 / 83	0.0	20.3	24.6	48.7	62.6	37.9	1.7	195.8	0.0	0.0	0.0	0.0	0.0	0.0	195.8
1983 / 84	0.0	0.0	0.0	59.0	52.0	142.2	37.8	291.0	0.0	0.0	0.0	0.0	0.0	0.0	291.0
1984 / 85	24.0	20.1	47.3	4.0	123.2	23.5	13.5	255.6	4.5	0.0	0.0	0.0	0.0	4.5	260.1
1985 / 86	21.5	26.0	29.8	70.9	123.8	23.5	1.5	297.0	20.5	0.0	0.0	0.0	0.0	20.5	317.5
1986 / 87	40.0	164.7	99.2	76.5	32.0	59.9	0.0	472.3	0.0	0.0	0.0	0.0	0.0	0.0	472.3
1987 / 88	28.2	4.5	158.2	62.8	179.9	86.6	8.0	528.2	0.0	0.0	0.0	0.0	0.0	0.0	528.2
1988 / 89	0.6	16.0	127.4	49.9	30.8	85.1	0.0	309.8	0.0	0.0	0.0	0.0	0.0	0.0	309.8
1989 / 90	1.0	37.2	47.0	88.1	42.4	50.9	25.3	291.9	0.0	0.0	0.0	0.0	0.0	0.0	291.9
1990 / 91	0.7	34.0	1.3	126.4	36.0	77.0	17.0	292.4	0.0	0.0	0.0	0.0	0.0	0.0	292.4
1991 / 92	9.5	36.1	163.7	293.5	230.1	59.1	0.0	792.0	2.0	0.0	0.0	0.0	0.0	2.0	794.0
1992 / 93	0.0	59.5	162.4	97.5	58.6	27.0	0.0	405.0	2.2	0.0	0.0	0.0	0.0	2.2	407.2
1993 / 94	19.0	11.3	14.5	127.9	27.8	78.0	3.5	282.0	0.0	0.0	0.0	0.0	0.0	0.0	282.0
1994 / 95	9.5	105.7	145.5	5.0	75.5	35.5	11.1	387.8	0.0	0.0	0.0	0.0	0.0	0.0	387.8
1995 / 96	0.0	17.5	23.0	119.7	11.5	117.3	13.5	302.5	0.0	0.0	0.0	0.0	0.0	0.0	302.5
1996 / 97	10.6	13.6	70.7	136.3	180.2	64.3	7.2	482.9	2.0	0.0	0.0	0.0	0.0	2.0	484.9
1997 / 98	26.6	35.1	66.9	109.7	33.8	69.3	0.6	342.0	0.0	0.0	0.0	0.0	0.0	0.0	342.0
1998 / 99	0.0	0.0	5.5	41.1	33.0	22.2	7.7	109.5	0.0	0.0	0.0	0.0	0.0	0.0	109.5
Max.	40.0	164.7	211.3	293.5	230.1	207.9	207.0	792.0	21.7	0.0	0.0	0.0	0.0	21.7	794.0
Min.	0.0	0.0	0.0	0.0	6.0	15.5	0.0	109.5	0.0	0.0	0.0	0.0	0.0	0.0	109.5
Mean	10.0	34.1	72.2	85.7	73.5	72.8	17.7	366.0	1.6	0.0	0.0	0.0	0.0	1.6	367.6
Source: WIS database of MWI														Std. Dev.	135.8

Table A2.1.1-7(3) Monthly Average and Annual Rainfall in Balqa Governorate

Station Name : Salt		ID No.: AM0001													
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1937 / 38	21.0	29.0	19.5	446.0	340.5	109.5	0.0	965.5	31.0	0.0	0.0	0.0	0.0	31.0	996.5
1938 / 39	0.0	207.5	46.0	62.5	275.0	231.0	30.1	852.1	0.0	0.0	0.0	0.0	0.0	0.0	852.1
1939 / 40	0.0	177.5	82.5	375.5	6.5	107.5	33.0	782.5	0.0	0.0	0.0	0.0	0.0	0.0	782.5
1940 / 41	3.0	96.0	132.0	197.5	16.0	175.0	24.0	643.5	0.0	0.0	0.0	0.0	0.0	0.0	643.5
1941 / 42	11.5	38.0	355.5	91.0	133.0	260.0	5.0	894.0	0.0	0.0	0.0	0.0	0.0	0.0	894.0
1942 / 43	110.9	67.4	16.5	378.8	141.0	180.0	108.5	1,003.1	3.0	0.0	0.0	0.0	0.0	3.0	1,006.1
1943 / 44	0.0	0.0	66.5	270.5	48.0	71.5	21.0	477.5	30.0	0.0	0.0	0.0	0.0	30.0	507.5
1944 / 45	0.0	263.0	168.5	191.0	304.5	43.0	38.0	1,008.0	30.0	0.0	0.0	0.0	0.0	30.0	1,038.0
1945 / 46	4.0	169.0	90.0	55.5	283.0	40.0	0.0	641.5	42.0	0.0	0.0	0.0	0.0	42.0	683.5
1946 / 47	0.0	0.0	129.0	148.0	39.0	40.0	10.0	366.0	0.0	0.0	0.0	0.0	0.0	0.0	366.0
1947 / 48	0.0	67.0	27.0	131.5	155.5	267.0	10.0	658.0	1.0	0.0	0.0	0.0	0.0	1.0	659.0
1948 / 49	0.0	36.0	171.0	157.0	239.0	215.0	91.0	909.0	0.0	0.0	0.0	0.0	0.0	0.0	909.0
1949 / 50	0.0	0.0	258.0	235.0	136.0	43.0	59.0	731.0	41.5	0.0	0.0	0.0	0.0	41.5	772.5
1950 / 51	0.0	9.0	20.5	93.0	131.0	67.0	5.5	326.0	0.0	0.0	0.0	0.0	0.0	0.0	326.0
1951 / 52	15.0	31.0	425.0	172.0	137.0	146.0	0.0	926.0	0.0	0.0	0.0	0.0	0.0	0.0	926.0
1952 / 53	3.8	10.0	25.2	148.0	167.0	281.0	12.0	647.0	0.0	0.0	0.0	0.0	0.0	0.0	647.0
1953 / 54	0.0	179.0	155.0	84.5	165.0	23.0	75.0	681.5	0.0	0.0	0.0	0.0	0.0	0.0	681.5
1954 / 55	0.0	39.0	137.0	18.0	15.0	38.0	15.0	262.0	0.0	0.0	0.0	0.0	0.0	0.0	262.0
1955 / 56	0.0	150.0	140.0	169.0	26.5	120.5	37.0	643.0	0.0	0.0	0.0	0.0	0.0	0.0	643.0
1956 / 57	0.0	29.0	127.0	167.0	151.0	135.0	16.0	625.0	26.0	0.0	0.0	0.0	0.0	26.0	651.0
1957 / 58	0.0	33.0	107.0	179.0	17.0	1.0	18.0	355.0	0.0	0.0	0.0	0.0	0.0	0.0	355.0
1958 / 59	0.0	1.0	16.0	142.5	232.0	85.0	2.5	479.0	0.0	0.0	0.0	0.0	0.0	0.0	479.0
1959 / 60	0.0	24.0	21.0	101.0	14.5	115.5	9.0	285.0	17.0	0.0	0.0	0.0	0.0	17.0	302.0
1960 / 61	0.0	0.0	38.5	206.0	234.0	28.0	24.0	530.5	25.0	0.0	0.0	0.0	0.0	25.0	555.5
1961 / 62	0.0	17.0	202.0	113.0	79.8	0.5	16.5	428.8	0.0	0.0	0.0	0.0	0.0	0.0	428.8
1962 / 63	1.2	0.0	43.2	52.7	168.5	17.2	5.3	338.1	0.7	0.0	0.0	0.0	0.0	0.7	338.8
1963 / 64	7.0	18.3	252.0	98.0	227.7	120.2	9.0	732.2	0.0	0.0	0.0	0.0	0.0	0.0	732.2
1964 / 65	0.0	120.4	59.0	260.3	85.5	60.3	47.8	633.3	0.0	0.0	0.0	0.0	0.0	0.0	633.3
1965 / 66	20.1	23.5	86.0	54.2	113.5	129.5	0.0	426.8	0.0	0.0	0.0	0.0	0.0	0.0	426.8
1966 / 67	42.0	1.7	287.3	247.5	79.0	250.5	5.0	913.0	5.0	0.0	0.0	0.0	0.0	5.0	918.0
1967 / 68	41.2	54.0	32.0	162.5	58.0	24.0	32.5	404.2	8.0	0.0	0.0	0.0	0.0	8.0	412.2
1968 / 69	2.0	58.0	170.2	198.6	41.8	233.2	17.0	720.8	0.0	0.0	0.0	0.0	0.0	0.0	720.8
1969 / 70	16.6	35.0	21.5	148.5	35.0	145.0	21.0	422.6	0.0	0.0	0.0	0.0	0.0	0.0	422.6
1970 / 71	6.5	10.8	137.8	77.1	125.2	74.2	286.5	718.1	0.0	0.0	0.0	0.0	0.0	0.0	718.1
1971 / 72	0.0	53.0	249.8	96.5	85.5	86.1	38.5	609.4	10.5	0.0	0.0	0.0	0.0	10.5	619.9
1972 / 73	0.0	53.0	11.0	156.5	24.0	99.0	0.0	343.5	6.0	0.0	0.0	0.0	0.0	6.0	349.5
1973 / 74	0.0	96.0	44.5	367.0	186.0	45.5	54.0	793.0	0.0	0.0	0.0	0.0	0.0	0.0	793.0
1974 / 75	0.0	53.2	90.0	60.5	194.5	91.5	14.5	504.2	0.0	0.0	0.0	0.0	0.0	0.0	504.2
1975 / 76	0.0	30.0	91.1	72.5	121.0	131.0	25.0	470.6	2.0	0.0	0.0	0.0	0.0	2.0	472.6
1976 / 77	16.5	91.0	13.0	106.0	24.5	104.0	62.3	417.3	0.0	0.0	0.0	0.0	0.0	0.0	417.3
1977 / 78	58.0	5.0	193.0	77.0	47.5	105.8	24.0	510.3	0.0	0.0	0.0	0.0	0.0	0.0	510.3
1978 / 79	11.0	22.3	122.0	105.0	18.5	116.9	5.1	400.8	0.0	0.0	0.0	0.0	0.0	0.0	400.8
1979 / 80	62.5	187.0	237.0	154.9	140.0	120.2	12.6	914.2	0.0	0.0	0.0	0.0	0.0	0.0	914.2
1980 / 81	2.2	17.1	243.1	148.9	145.2	69.1	14.7	640.3	0.0	0.0	0.0	0.0	0.0	0.0	640.3
1981 / 82	0.0	70.5	18.2	135.1	111.2	152.6	6.5	494.1	0.0	0.0	0.0	0.0	0.0	0.0	494.1
1982 / 83	0.1	101.1	60.0	256.0	212.0	174.0	20.0	823.2	6.0	0.0	0.0	0.0	0.0	6.0	829.2
1983 / 84	1.7	55.5	8.0	162.0	32.0	171.0	52.1	482.3	0.0	0.0	0.0	0.0	0.0	0.0	482.3
1984 / 85	34.7	17.6	50.2	36.4	343.0	32.8	27.9	542.6	0.0	0.0	0.0	0.0	0.0	0.0	542.6
1985 / 86	14.0	14.9	38.9	92.9	170.2	17.5	14.0	362.4	34.2	0.0	0.0	0.0	0.0	34.2	396.6
1986 / 87	50.5	229.3	83.9	120.4	40.0	75.1	0.0	599.2	0.0	0.0	0.0	0.0	0.0	0.0	599.2
1987 / 88	43.7	4.2	215.3	105.1	233.9	81.3	13.2	696.7	0.0	0.0	0.0	0.0	0.0	0.0	696.7
1988 / 89	9.2	36.0	200.5	138.0	54.5	130.5	0.0	568.7	0.0	0.0	0.0	0.0	0.0	0.0	568.7
1989 / 90	2.0	54.5	88.5	190.0	76.5	79.0	22.0	512.5	0.0	0.0	0.0	0.0	0.0	0.0	512.5
1990 / 91	5.8	26.0	2.0	210.0	75.4	185.0	16.0	520.2	15.5	0.0	0.0	0.0	0.0	15.5	535.7
1991 / 92	15.8	116.8	379.5	142.5	464.6	59.4	2.6	1,181.2	9.5	0.0	0.0	0.0	0.0	9.5	1,190.7
1992 / 93	0.0	77.5	263.0	167.9	99.2	37.1	0.0	644.7	21.8	0.0	0.0	0.0	0.0	21.8	666.5
1993 / 94	5.0	18.3	32.8	194.8	89.9	92.6	9.3	442.7	0.0	0.0	0.0	0.0	0.0	0.0	442.7
1994 / 95	46.0	224.7	189.1	31.0	55.1	34.7	17.8	598.4	0.0	0.0	0.0	0.0	0.0	0.0	598.4
1995 / 96	0.0	21.0	26.5	216.2	23.9	194.0	11.0	492.6	0.0	0.0	0.0	0.0	0.0	0.0	492.6
1996 / 97	15.2	8.0	80.0	152.3	204.9	126.0	0.6	587.0	13.4	0.0	0.0	0.0	0.0	13.4	600.4
1997 / 98	19.8	35.7	113.4	156.6	66.4	125.3	1.1	518.3	0.0	0.0	0.0	0.0	0.0	0.0	518.3
1998 / 99	2.8	2.2	8.7	109.2	54.1	35.5	10.9	223.4	0.0	0.0	0.0	0.0	0.0	0.0	223.4
Max.	110.9	263.0	425.0	446.0	464.6	281.0	286.5	1,181.2	42.0	0.0	0.0	0.0	0.0	42.0	1,190.7
Min.	0.0	0.0	2.0	18.0	6.5	0.5	0.0	223.4	0.0	0.0	0.0	0.0	0.0	0.0	223.4
Mean	11.7	59.9	116.4	154.7	126.0	108.1	25.2	602.0	6.1	0.0	0.0	0.0	0.0	6.1	608.1
Source: WIS database of MWL.														Std. Dev.	208.7

Table A2.1.1-7(4) Monthly Average and Annual Rainfall in Balqa Governorate

Station Name : Wadi Shueib Agr. Station															ID No.:	AM0002
Hydrological Year	Wet Season								Dry Season						Annual	
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total		
1954 / 55	0.0	54.7	111.1	11.5	7.0	35.0	12.0	231.3	0.0	0.0	0.0	0.0	0.0	0.0	231.3	
1955 / 56	0.0	85.4	77.7	62.2	13.6	101.0	25.5	365.4	0.0	0.0	0.0	0.0	0.0	0.0	365.4	
1956 / 57	0.0	25.5	80.6	123.7	97.9	106.9	23.9	458.5	22.2	0.0	0.0	0.0	0.0	22.2	480.7	
1957 / 58	0.0	17.0	93.2	138.8	12.5	6.0	0.0	267.5	1.0	0.0	0.0	0.0	0.0	1.0	268.5	
1958 / 59	0.0	0.0	11.0	102.0	96.8	67.2	0.0	277.0	0.0	0.0	0.0	0.0	0.0	0.0	277.0	
1959 / 60	0.0	22.0	12.0	49.0	4.0	89.0	7.1	183.1	1.0	0.0	0.0	0.0	0.0	1.0	184.1	
1960 / 61	0.0	77.0	25.5	163.0	134.5	13.0	31.0	444.0	13.0	0.0	0.0	0.0	0.0	13.0	457.0	
1961 / 62	2.3	9.0	170.5	82.0	42.0	0.0	14.0	319.8	0.0	0.0	0.0	0.0	0.0	0.0	319.8	
1962 / 63	3.0	0.0	27.0	37.7	79.0	20.2	4.0	170.9	12.5	0.0	0.0	0.0	0.0	12.5	183.4	
1963 / 64	3.0	7.7	194.1	67.7	87.6	71.5	0.5	432.1	0.0	0.0	0.0	0.0	0.0	0.0	432.1	
1964 / 65	0.0	60.5	48.0	182.0	30.5	56.5	24.5	402.0	0.0	0.0	0.0	0.0	0.0	0.0	402.0	
1965 / 66	26.5	12.2	46.7	34.0	61.5	73.0	0.0	253.9	0.0	0.0	0.0	0.0	0.0	0.0	253.9	
1966 / 67	5.8	1.0	153.2	117.2	42.9	116.9	3.4	440.4	6.5	0.0	0.0	0.0	0.0	6.5	446.9	
1967 / 68	19.5	41.0	27.1	151.2	18.5	14.4	21.5	293.2	40.5	0.0	0.0	0.0	0.0	40.5	333.7	
1968 / 69	0.0	40.4	118.5	81.8	22.3	170.0	6.3	439.3	0.0	0.0	0.0	0.0	0.0	0.0	439.3	
1969 / 70	3.6	11.6	11.1	101.0	13.3	122.0	16.0	278.6	0.0	0.0	0.0	0.0	0.0	0.0	278.6	
1970 / 71	8.2	16.7	91.5	31.9	79.9	55.2	229.3	512.7	0.0	0.0	0.0	0.0	0.0	0.0	512.7	
1971 / 72	0.0	63.5	248.1	54.3	87.1	86.1	29.7	568.8	0.0	0.0	0.0	0.0	0.0	0.0	568.8	
1972 / 73	14.0	26.3	11.7	96.3	10.9	49.2	16.5	224.9	0.0	0.0	0.0	0.0	0.0	0.0	224.9	
1973 / 74	0.0	67.1	28.0	256.2	154.9	28.9	57.0	592.1	0.0	0.0	0.0	0.0	0.0	0.0	592.1	
1974 / 75	0.0	61.7	51.4	31.5	146.5	42.8	6.5	340.4	0.0	0.0	0.0	0.0	0.0	0.0	340.4	
1975 / 76	0.0	43.6	66.5	55.9	82.5	86.7	10.4	345.6	0.0	0.0	0.0	0.0	0.0	0.0	345.6	
1976 / 77	7.2	56.5	7.5	85.9	10.7	58.4	67.7	293.9	0.0	0.0	0.0	0.0	0.0	0.0	293.9	
1977 / 78	10.8	0.0	95.4	32.2	19.0	99.0	0.0	256.4	0.0	0.0	0.0	0.0	0.0	0.0	256.4	
1978 / 79	11.7	17.6	138.2	60.3	36.2	79.3	12.6	355.9	0.0	0.0	0.0	0.0	0.0	0.0	355.9	
1979 / 80	39.5	111.5	187.0	94.2	87.4	95.4	7.0	622.0	0.0	0.0	0.0	0.0	0.0	0.0	622.0	
1980 / 81	0.0	8.5	230.3	60.7	66.2	54.2	4.7	424.6	0.0	0.0	0.0	0.0	0.0	0.0	424.6	
1981 / 82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1982 / 83	0.0	49.9	0.0	76.5	0.0	102.9	6.7	236.0	5.0	0.0	0.0	0.0	0.0	5.0	241.0	
1983 / 84	0.0	0.0	0.0	63.2	20.5	78.7	38.7	201.1	0.0	0.0	0.0	0.0	0.0	0.0	201.1	
1984 / 85	13.8	8.0	25.5	22.1	211.5	30.5	11.0	322.4	22.5	0.0	0.0	0.0	0.0	22.5	344.9	
1985 / 86	9.5	30.5	38.9	44.6	60.9	15.2	13.3	212.9	24.2	0.0	0.0	0.0	0.0	24.2	237.1	
1986 / 87	26.5	187.1	38.7	59.6	21.9	23.9	14.0	371.7	0.0	0.0	0.0	0.0	0.0	0.0	371.7	
1987 / 88	29.0	2.4	135.8	70.1	152.5	45.3	6.0	441.1	0.0	0.0	0.0	0.0	0.0	0.0	441.1	
1988 / 89	8.4	15.6	143.5	58.3	58.4	89.8	0.0	374.0	0.0	0.0	0.0	0.0	0.0	0.0	374.0	
1989 / 90	0.0	27.1	62.9	152.7	54.2	56.1	54.6	407.6	0.0	0.0	0.0	0.0	0.0	0.0	407.6	
1990 / 91	7.8	22.8	0.5	119.8	69.7	136.6	6.8	364.0	0.0	0.0	0.0	0.0	0.0	0.0	364.0	
1991 / 92	1.2	90.3	279.3	99.7	260.1	35.8	0.0	766.4	0.0	0.0	0.0	0.0	0.0	0.0	766.4	
1992 / 93	0.0	59.2	145.3	89.2	89.9	17.7	0.0	401.3	5.3	0.0	0.0	0.0	0.0	5.3	406.6	
1993 / 94	0.0	9.4	19.6	119.0	60.9	29.2	6.2	244.3	0.0	0.0	0.0	0.0	0.0	0.0	244.3	
1994 / 95	37.9	148.2	105.9	15.6	51.0	15.8	12.5	386.9	0.0	0.0	0.0	0.0	0.0	0.0	386.9	
1995 / 96	0.0	14.2	25.8	137.1	14.2	100.2	21.8	313.3	0.0	0.0	0.0	0.0	0.0	0.0	313.3	
1996 / 97	10.1	2.2	58.5	162.3	123.6	61.3	2.7	420.7	12.5	0.0	0.0	0.0	0.0	12.5	433.2	
1997 / 98	12.2	21.4	108.2	73.8	29.0	84.1	0.0	328.7	0.0	0.0	0.0	0.0	0.0	0.0	328.7	
1998 / 99	0.0	0.0	0.0	54.4	64.9	15.6	9.6	144.5	0.0	0.0	0.0	0.0	0.0	0.0	144.5	
Max.	39.5	187.1	279.3	256.2	260.1	170.0	229.3	766.4	40.5	0.0	0.0	0.0	0.0	40.5	766.4	
Min.	0.0	0.0	0.0	11.5	0.0	0.0	0.0	144.5	0.0	0.0	0.0	0.0	0.0	0.0	144.5	
Mean	7.1	37.0	80.7	86.0	65.6	62.2	19.0	357.5	3.8	0.0	0.0	0.0	0.0	3.8	361.3	
Note: "-" data not available. Source: WIS database of MWI														Std. Dev.	124.9	

Table A2.1.1-8 Monthly Average and Annual Rainfall in Madaba Governorate

Station Name : Madaba		ID No.: CC0001													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1937 / 38	4.0	44.0	1.0	141.0	116.0	83.0	0.0	389.0	8.0	0.0	0.0	0.0	0.0	8.0	397.0
1938 / 39	0.0	121.4	13.0	18.0	134.0	106.5	4.0	396.9	0.0	0.0	0.0	0.0	0.0	0.0	396.9
1939 / 40	5.5	131.5	48.5	178.0	9.5	40.5	34.0	447.5	0.0	0.0	0.0	0.0	0.0	0.0	447.5
1940 / 41	8.0	50.5	61.0	57.0	10.0	64.0	6.5	257.0	0.0	0.0	0.0	0.0	0.0	0.0	257.0
1941 / 42	1.0	11.0	253.5	85.5	57.0	142.0	0.0	550.0	0.0	0.0	0.0	0.0	0.0	0.0	550.0
1942 / 43	25.0	22.5	17.0	135.7	80.0	131.8	37.5	449.5	2.5	0.0	0.0	0.0	0.0	2.5	452.0
1943 / 44	0.0	0.0	26.0	168.5	25.9	39.3	20.5	280.2	14.5	0.0	0.0	0.0	0.0	14.5	294.7
1944 / 45	0.0	179.9	130.8	128.7	110.5	20.6	13.0	583.5	32.0	0.0	0.0	0.0	0.0	32.0	615.5
1945 / 46	0.0	69.0	64.0	38.5	147.0	29.0	0.0	347.5	3.0	0.0	0.0	0.0	0.0	3.0	350.5
1946 / 47	0.0	0.0	26.5	82.0	11.5	44.0	5.0	169.0	1.0	0.0	0.0	0.0	0.0	1.0	170.0
1947 / 48	0.0	23.0	12.0	124.0	68.0	98.0	25.0	350.0	0.0	0.0	0.0	0.0	0.0	0.0	350.0
1948 / 49	0.0	15.0	68.5	79.0	116.0	167.5	53.0	499.0	0.0	0.0	0.0	0.0	0.0	0.0	499.0
1949 / 50	0.0	0.0	166.3	137.2	254.0	32.0	10.0	599.5	41.0	0.0	0.0	0.0	0.0	41.0	640.5
1950 / 51	0.0	0.0	7.0	46.2	98.4	50.4	1.5	203.5	0.0	0.0	0.0	0.0	0.0	0.0	203.5
1951 / 52	0.0	13.4	235.7	45.9	85.2	83.1	7.0	470.3	0.0	0.0	0.0	0.0	0.0	0.0	470.3
1952 / 53	12.0	4.5	11.5	31.7	112.5	129.9	7.0	309.1	0.0	0.0	0.0	0.0	0.0	0.0	309.1
1953 / 54	0.0	124.8	78.6	31.6	118.6	32.7	28.3	414.6	0.0	0.0	0.0	0.0	0.0	0.0	414.6
1954 / 55	0.0	57.1	78.7	16.5	25.7	16.4	27.0	221.4	0.0	0.0	0.0	0.0	0.0	0.0	221.4
1955 / 56	0.0	79.7	70.8	79.2	24.1	136.0	27.0	416.8	0.0	0.0	0.0	0.0	0.0	0.0	416.8
1956 / 57	0.0	44.7	73.5	130.0	123.5	119.5	8.7	499.9	17.5	0.0	0.0	0.0	0.0	17.5	517.4
1957 / 58	0.0	16.5	24.8	108.5	7.0	1.5	0.0	158.3	0.0	0.0	0.0	0.0	0.0	0.0	158.3
1958 / 59	0.0	0.0	0.5	65.5	159.0	42.0	0.0	267.0	0.0	0.0	0.0	0.0	0.0	0.0	267.0
1959 / 60	0.0	21.0	3.5	13.5	9.0	80.0	14.0	141.0	0.0	0.0	0.0	0.0	0.0	0.0	141.0
1960 / 61	0.0	54.0	16.3	76.2	109.8	27.0	38.5	321.8	2.0	0.0	0.0	0.0	0.0	2.0	323.8
1961 / 62	4.5	23.5	125.5	54.0	115.5	1.4	12.0	336.4	0.0	0.0	0.0	0.0	0.0	0.0	336.4
1962 / 63	0.0	0.0	9.5	1.7	64.5	29.0	8.0	112.7	23.0	0.0	0.0	0.0	0.0	23.0	135.7
1963 / 64	14.0	23.0	232.5	77.5	86.5	74.0	0.0	507.5	2.0	0.0	0.0	0.0	0.0	2.0	509.5
1964 / 65	0.0	58.5	38.0	188.7	36.2	37.3	93.0	451.7	0.0	0.0	0.0	0.0	0.0	0.0	451.7
1965 / 66	24.5	14.0	21.3	29.0	50.5	86.5	0.0	225.8	0.0	0.0	0.0	0.0	0.0	0.0	225.8
1966 / 67	32.5	3.5	115.5	131.9	36.0	127.5	0.0	446.9	0.0	0.0	0.0	0.0	0.0	0.0	446.9
1967 / 68	5.0	68.0	47.0	147.0	45.0	22.5	4.0	338.5	12.0	0.0	0.0	0.0	0.0	12.0	350.5
1968 / 69	13.0	47.5	79.0	106.0	27.3	172.0	30.5	475.3	0.0	0.0	0.0	0.0	0.0	0.0	475.3
1969 / 70	7.0	6.5	7.2	74.0	21.0	90.0	19.0	224.7	0.0	0.0	0.0	0.0	0.0	0.0	224.7
1970 / 71	1.0	9.0	74.0	38.0	17.5	52.5	118.5	310.5	0.0	0.0	0.0	0.0	0.0	0.0	310.5
1971 / 72	0.0	27.5	102.0	32.2	74.7	80.5	19.0	335.9	16.0	0.0	0.0	0.0	0.0	16.0	351.9
1972 / 73	1.5	23.0	8.8	70.5	19.5	20.0	0.0	143.3	0.0	0.0	0.0	0.0	0.0	0.0	143.3
1973 / 74	5.5	37.4	13.7	169.5	62.7	15.8	34.1	338.7	0.0	0.0	0.0	0.0	0.0	0.0	338.7
1974 / 75	0.0	26.3	34.6	8.9	90.6	25.5	3.3	189.2	0.0	0.0	0.0	0.0	0.0	0.0	189.2
1975 / 76	0.0	26.8	24.8	16.8	50.7	64.0	7.4	190.5	5.1	0.0	0.0	0.0	0.0	5.1	195.6
1976 / 77	0.0	23.4	4.8	80.1	35.3	49.2	91.5	284.3	0.0	0.0	0.0	0.0	0.0	0.0	284.3
1977 / 78	0.0	0.0	100.2	25.3	35.5	74.0	11.5	246.5	0.0	0.0	0.0	0.0	0.0	0.0	246.5
1978 / 79	1.7	0.0	59.7	29.0	9.0	37.5	0.0	136.9	0.0	0.0	0.0	0.0	0.0	0.0	136.9
1979 / 80	24.3	94.1	194.9	69.5	66.5	47.1	17.6	514.0	0.0	0.0	0.0	0.0	0.0	0.0	514.0
1980 / 81	2.6	1.8	216.8	63.0	65.6	33.2	5.0	388.0	0.0	0.0	0.0	0.0	0.0	0.0	388.0
1981 / 82	0.0	0.0	0.0	0.0	2.6	25.3	2.0	29.9	26.0	0.0	0.0	0.0	0.0	26.0	55.9
1982 / 83	0.0	48.4	21.5	55.7	148.7	55.7	0.0	330.0	0.0	0.0	0.0	0.0	0.0	0.0	330.0
1983 / 84	0.0	17.2	0.0	34.6	27.0	33.0	0.0	111.8	0.0	0.0	0.0	0.0	0.0	0.0	111.8
1984 / 85	45.6	21.2	5.7	31.8	196.0	50.4	0.3	351.0	0.0	0.0	0.0	0.0	0.0	0.0	351.0
1985 / 86	3.5	0.0	56.8	1.2	101.6	8.0	1.5	172.6	9.5	0.0	0.0	0.0	0.0	9.5	182.1
1986 / 87	4.5	136.3	56.8	84.9	5.7	43.5	0.0	331.7	0.0	0.0	0.0	0.0	0.0	0.0	331.7
1987 / 88	13.6	0.0	116.4	70.7	152.7	81.5	5.8	440.7	0.0	0.0	0.0	0.0	0.0	0.0	440.7
1988 / 89	10.6	16.1	77.5	50.2	45.4	53.1	0.0	252.9	0.0	0.0	0.0	0.0	0.0	0.0	252.9
1989 / 90	0.0	12.4	20.4	100.0	56.9	26.3	45.3	261.3	0.0	0.0	0.0	0.0	0.0	0.0	261.3
1990 / 91	3.0	4.5	3.5	57.6	74.5	85.0	5.0	233.1	0.0	0.0	0.0	0.0	0.0	0.0	233.1
1991 / 92	1.0	44.0	301.1	81.3	296.6	31.5	0.0	755.5	0.0	0.0	0.0	0.0	0.0	0.0	755.5
1992 / 93	0.0	58.0	37.3	39.0	86.5	26.5	0.0	247.3	7.6	0.0	0.0	0.0	0.0	7.6	254.9
1993 / 94	12.0	19.3	23.0	73.2	71.0	15.5	7.5	221.5	0.0	0.0	0.0	0.0	0.0	0.0	221.5
1994 / 95	5.5	151.8	108.9	4.5	40.5	13.5	15.5	340.2	0.0	0.0	0.0	0.0	0.0	0.0	340.2
1995 / 96	0.0	17.0	11.8	52.0	23.0	107.5	0.0	211.3	0.0	0.0	0.0	0.0	0.0	0.0	211.3
1996 / 97	15.2	7.0	12.0	83.5	118.7	72.4	0.9	309.7	0.0	0.0	0.0	0.0	0.0	0.0	309.7
1997 / 98	9.0	0.0	92.5	75.6	43.0	61.0	2.0	283.1	2.0	0.0	0.0	0.0	0.0	2.0	285.1
1998 / 99	0.0	2.5	2.5	53.5	81.9	11.6	14.0	166.0	0.0	0.0	0.0	0.0	0.0	0.0	166.0
Max.	45.6	179.9	301.1	188.7	296.6	172.0	118.5	755.5	41.0	0.0	0.0	0.0	0.0	41.0	755.5
Min.	0.0	0.0	0.0	0.0	2.6	1.4	0.0	29.9	0.0	0.0	0.0	0.0	0.0	0.0	55.9
Mean	5.1	34.7	63.7	70.6	74.1	59.0	15.2	322.4	3.6	0.0	0.0	0.0	0.0	3.6	326.0
Std. Dev.														139.7	

Source: WIS database of MWI.

Table A2.1.1-9(1) Monthly Average and Annual Rainfall in Karak Governorate

Station Name : Mazar		ID No.: CD0013													
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1937 / 38	41.0	29.5	12.5	165.5	73.5	86.0	0.0	408.0	6.0	0.0	0.0	0.0	0.0	6.0	414.0
1938 / 39	0.0	63.7	26.0	47.0	207.5	121.5	11.3	477.0	0.0	0.0	0.0	0.0	0.0	0.0	477.0
1939 / 40	2.0	118.4	47.0	156.0	10.5	68.0	38.5	440.4	0.0	0.0	0.0	0.0	0.0	0.0	440.4
1940 / 41	5.0	17.0	108.5	63.5	21.5	143.0	4.5	363.0	0.0	0.0	0.0	0.0	0.0	0.0	363.0
1941 / 42	0.0	10.5	249.0	41.5	35.0	155.0	0.0	491.0	0.0	0.0	0.0	0.0	0.0	0.0	491.0
1942 / 43	10.5	27.5	10.0	67.0	93.0	195.0	37.0	440.0	0.0	0.0	0.0	0.0	0.0	0.0	440.0
1943 / 44	5.8	0.0	23.0	225.0	24.5	60.5	72.0	410.8	0.0	0.0	0.0	0.0	0.0	0.0	410.8
1944 / 45	0.0	71.6	125.9	111.5	87.5	27.8	31.0	455.3	0.0	0.0	0.0	0.0	0.0	0.0	455.3
1945 / 46	0.0	91.1	102.1	98.5	116.7	14.5	0.0	422.9	0.0	0.0	0.0	0.0	0.0	0.0	422.9
1946 / 47	0.0	0.0	24.0	60.0	3.5	82.0	1.5	171.0	0.0	0.0	0.0	0.0	0.0	0.0	171.0
1947 / 48	0.0	31.0	16.0	155.0	105.0	137.0	10.0	454.0	0.0	0.0	0.0	0.0	0.0	0.0	454.0
1948 / 49	1.0	8.5	85.0	81.5	76.0	86.5	39.5	378.0	4.5	0.0	0.0	0.0	0.0	4.5	382.5
1949 / 50	0.0	0.0	95.0	37.5	60.5	23.0	3.0	219.0	12.0	0.0	0.0	0.0	0.0	12.0	231.0
1950 / 51	2.0	0.6	5.2	49.0	170.2	51.5	0.0	278.5	0.0	0.0	0.0	0.0	0.0	0.0	278.5
1951 / 52	0.0	14.5	189.0	77.0	104.5	65.5	6.5	457.0	0.0	0.0	0.0	0.0	0.0	0.0	457.0
1952 / 53	0.5	0.0	8.7	4.5	82.7	114.0	18.0	228.4	0.0	0.0	0.0	0.0	0.0	0.0	228.4
1953 / 54	0.0	49.7	78.1	14.0	160.0	48.0	45.0	394.8	0.0	0.0	0.0	0.0	0.0	0.0	394.8
1954 / 55	0.0	41.5	157.0	25.0	5.0	15.7	23.0	267.2	0.0	0.0	0.0	0.0	0.0	0.0	267.2
1955 / 56	0.0	69.4	121.0	91.7	40.2	137.1	29.8	489.2	0.0	0.0	0.0	0.0	0.0	0.0	489.2
1956 / 57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1957 / 58	0.0	14.0	8.0	107.5	9.0	0.0	0.0	138.5	0.0	0.0	0.0	0.0	0.0	0.0	138.5
1958 / 59	0.0	1.0	13.5	13.0	161.5	69.0	0.0	258.0	2.0	0.0	0.0	0.0	0.0	2.0	260.0
1959 / 60	0.0	39.0	23.0	55.2	0.0	76.0	5.0	198.2	0.0	0.0	0.0	0.0	0.0	0.0	198.2
1960 / 61	0.0	26.0	17.0	99.0	149.0	22.0	10.0	323.0	0.0	0.0	0.0	0.0	0.0	0.0	323.0
1961 / 62	6.0	27.0	136.0	37.0	19.5	0.0	18.0	243.5	0.0	0.0	0.0	0.0	0.0	0.0	243.5
1962 / 63	0.0	0.0	5.8	6.5	80.0	14.5	13.0	119.8	0.0	0.0	0.0	0.0	0.0	0.0	119.8
1963 / 64	8.0	6.5	234.0	60.0	95.5	37.0	19.5	460.5	0.0	0.0	0.0	0.0	0.0	0.0	460.5
1964 / 65	0.0	38.0	86.0	407.0	8.0	53.0	18.0	610.0	0.0	0.0	0.0	0.0	0.0	0.0	610.0
1965 / 66	68.0	24.0	18.0	19.0	61.5	52.5	0.0	243.0	0.0	0.0	0.0	0.0	0.0	0.0	243.0
1966 / 67	11.0	20.0	57.0	72.0	61.5	137.5	0.0	359.0	0.0	0.0	0.0	0.0	0.0	0.0	359.0
1967 / 68	7.0	45.0	26.0	77.5	68.3	0.0	34.0	257.8	10.0	0.0	0.0	0.0	0.0	10.0	267.8
1968 / 69	0.0	47.0	60.0	39.5	0.0	84.5	16.0	247.0	0.0	0.0	0.0	0.0	0.0	0.0	247.0
1969 / 70	0.0	25.5	5.0	51.5	12.0	105.5	2.0	201.5	0.0	0.0	0.0	0.0	0.0	0.0	201.5
1970 / 71	0.0	3.5	35.0	33.5	8.5	4.0	229.5	314.0	0.0	0.0	0.0	0.0	0.0	0.0	314.0
1971 / 72	0.0	20.0	187.5	20.0	40.0	135.0	18.5	421.0	5.0	0.0	0.0	0.0	0.0	5.0	426.0
1972 / 73	1.0	29.0	28.0	68.0	2.4	6.1	2.0	136.5	0.0	0.0	0.0	0.0	0.0	0.0	136.5
1973 / 74	0.0	0.0	28.0	168.5	74.5	24.6	23.0	318.6	0.0	0.0	0.0	0.0	0.0	0.0	318.6
1974 / 75	0.0	15.0	72.3	34.0	159.5	25.4	1.0	307.2	0.0	0.0	0.0	0.0	0.0	0.0	307.2
1975 / 76	0.0	11.0	50.1	17.8	37.8	37.6	7.5	161.8	0.0	0.0	0.0	0.0	0.0	0.0	161.8
1976 / 77	0.0	12.0	6.5	87.5	15.2	16.9	77.5	215.6	0.0	0.0	0.0	0.0	0.0	0.0	215.6
1977 / 78	0.0	17.8	71.5	26.0	15.0	55.5	3.0	188.8	0.0	0.0	0.0	0.0	0.0	0.0	188.8
1978 / 79	0.0	0.0	53.0	84.5	47.0	115.5	0.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0	300.0
1979 / 80	0.0	56.0	140.5	72.0	94.0	11.0	9.3	382.8	0.0	0.0	0.0	0.0	0.0	0.0	382.8
1980 / 81	2.5	0.0	231.0	13.0	113.7	84.1	19.0	463.3	0.0	0.0	0.0	0.0	0.0	0.0	463.3
1981 / 82	0.0	15.7	0.0	46.0	55.6	32.3	0.0	149.6	17.8	0.0	0.0	0.0	0.0	17.8	167.4
1982 / 83	0.0	46.0	66.2	19.8	106.2	11.0	0.0	249.2	0.0	0.0	0.0	0.0	0.0	0.0	249.2
1983 / 84	0.6	2.8	0.0	22.0	19.0	108.5	0.0	152.9	0.0	0.0	0.0	0.0	0.0	0.0	152.9
1984 / 85	0.0	3.2	43.0	2.5	166.0	43.2	52.0	309.9	0.0	0.0	0.0	0.0	0.0	0.0	309.9
1985 / 86	0.0	0.0	64.0	38.8	33.2	4.5	27.0	167.5	4.2	0.0	0.0	0.0	0.0	4.2	171.7
1986 / 87	0.0	32.2	30.0	13.0	31.0	106.5	0.0	212.7	0.0	0.0	0.0	0.0	0.0	0.0	212.7
1987 / 88	0.0	0.0	103.8	130.0	147.5	131.2	0.0	512.5	0.0	0.0	0.0	0.0	0.0	0.0	512.5
1988 / 89	0.0	2.0	132.5	60.5	125.0	55.0	0.0	375.0	0.0	0.0	0.0	0.0	0.0	0.0	375.0
1989 / 90	0.0	0.0	17.5	91.0	52.5	36.0	94.0	291.0	0.0	0.0	0.0	0.0	0.0	0.0	291.0
1990 / 91	0.0	2.5	0.0	142.0	56.5	267.0	0.0	468.0	0.0	0.0	0.0	0.0	0.0	0.0	468.0
1991 / 92	0.0	0.0	121.5	158.5	174.0	44.0	0.0	498.0	0.0	0.0	0.0	0.0	0.0	0.0	498.0
1992 / 93	0.0	59.0	130.0	35.0	56.0	20.3	0.0	300.3	0.0	0.0	0.0	0.0	0.0	0.0	300.3
1993 / 94	0.0	9.0	25.0	124.0	56.0	30.0	0.0	244.0	0.0	0.0	0.0	0.0	0.0	0.0	244.0
1994 / 95	26.0	109.9	88.0	0.0	82.9	1.0	4.1	311.9	0.0	0.0	0.0	0.0	0.0	0.0	311.9
1995 / 96	0.0	5.5	10.8	88.2	22.7	95.4	0.0	222.6	0.0	0.0	0.0	0.0	0.0	0.0	222.6
1996 / 97	0.0	8.1	19.4	96.0	50.5	0.0	0.0	174.0	0.0	0.0	0.0	0.0	0.0	0.0	174.0
1997 / 98	15.0	4.5	54.2	96.1	72.5	61.5	0.0	303.8	0.0	0.0	0.0	0.0	0.0	0.0	303.8
1998 / 99	0.0	0.0	0.0	32.3	86.4	22.0	20.0	160.7	0.0	0.0	0.0	0.0	0.0	0.0	160.7
Max.	68.0	118.4	249.0	407.0	207.5	267.0	229.5	610.0	17.8	0.0	0.0	0.0	0.0	17.8	610.0
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.8	0.0	0.0	0.0	0.0	0.0	0.0	119.8
Mean	3.5	23.3	65.3	72.7	68.9	63.4	17.9	315.1	1.0	0.0	0.0	0.0	0.0	1.0	316.1
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	117.9

Table A2.1.1-9(2) Monthly Average and Annual Rainfall in Karak Governorate

Station Name : Sirfa		ID No.: CD0029													
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1967 / 68	0.0	64.6	26.7	111.3	43.1	12.5	23.7	281.9	2.8	0.0	0.0	0.0	0.0	2.8	284.7
1968 / 69	0.0	0.0	91.0	41.5	0.0	147.1	18.5	298.1	0.0	0.0	0.0	0.0	0.0	0.0	298.1
1969 / 70	0.0	4.7	24.6	66.7	1.0	81.2	17.0	195.2	0.0	0.0	0.0	0.0	0.0	0.0	195.2
1970 / 71	0.0	23.0	56.5	43.0	22.5	18.7	260.3	424.0	0.0	0.0	0.0	0.0	0.0	0.0	424.0
1971 / 72	0.0	26.9	270.7	0.0	95.5	103.2	14.0	510.3	6.5	0.0	0.0	0.0	0.0	6.5	516.8
1972 / 73	0.0	55.0	7.5	88.0	5.5	14.4	1.6	172.0	0.0	0.0	0.0	0.0	0.0	0.0	172.0
1973 / 74	0.0	7.0	36.1	359.2	134.5	31.6	43.6	612.0	0.0	0.0	0.0	0.0	0.0	0.0	612.0
1974 / 75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975 / 76	0.0	40.5	47.2	10.0	39.2	40.9	22.4	200.2	0.0	0.0	0.0	0.0	0.0	0.0	200.2
1976 / 77	0.0	18.6	18.6	124.0	26.4	21.2	31.5	240.3	0.0	0.0	0.0	0.0	0.0	0.0	240.3
1977 / 78	0.0	11.5	138.9	122.8	22.4	30.5	0.0	326.1	0.0	0.0	0.0	0.0	0.0	0.0	326.1
1978 / 79	0.0	0.0	73.4	111.5	30.8	51.0	0.0	266.7	14.0	0.0	0.0	0.0	0.0	14.0	280.7
1979 / 80	4.0	94.3	243.7	122.0	109.8	62.8	10.2	646.8	0.0	0.0	0.0	0.0	0.0	0.0	646.8
1980 / 81	0.0	1.5	206.1	19.0	58.4	46.8	8.0	339.8	0.0	0.0	0.0	0.0	0.0	0.0	339.8
1981 / 82	0.0	0.0	0.0	23.5	130.8	54.6	0.0	208.9	0.0	0.0	0.0	0.0	0.0	0.0	208.9
1982 / 83	0.0	80.8	29.5	116.8	208.5	41.7	0.0	477.3	0.0	0.0	0.0	0.0	0.0	0.0	477.3
1983 / 84	0.0	0.0	4.7	66.1	15.0	74.8	0.0	160.6	0.0	0.0	0.0	0.0	0.0	0.0	160.6
1984 / 85	14.0	12.4	26.5	7.0	177.0	44.9	5.0	286.8	0.0	0.0	0.0	0.0	0.0	0.0	286.8
1985 / 86	0.0	6.0	63.2	14.3	64.9	6.1	11.5	166.0	6.9	0.0	0.0	0.0	0.0	6.9	172.9
1986 / 87	0.0	127.2	38.8	20.0	55.0	79.0	0.0	320.0	0.0	0.0	0.0	0.0	0.0	0.0	320.0
1987 / 88	0.0	0.0	89.7	112.7	169.4	55.8	4.3	431.9	0.0	0.0	0.0	0.0	0.0	0.0	431.9
1988 / 89	5.0	0.0	132.5	69.3	115.0	79.0	0.0	400.8	0.0	0.0	0.0	0.0	0.0	0.0	400.8
1989 / 90	0.0	0.0	14.9	73.3	23.3	31.5	87.6	230.6	0.0	0.0	0.0	0.0	0.0	0.0	230.6
1990 / 91	2.7	6.0	3.0	145.3	40.2	287.4	0.0	484.6	1.2	0.0	0.0	0.0	0.0	1.2	485.8
1991 / 92	10.5	42.0	146.0	95.5	122.0	17.5	0.0	433.5	0.0	0.0	0.0	0.0	0.0	0.0	433.5
1992 / 93	0.0	66.0	70.5	65.5	77.5	0.0	0.0	279.5	0.0	0.0	0.0	0.0	0.0	0.0	279.5
1993 / 94	0.0	22.0	28.0	135.5	84.0	34.0	16.0	319.5	0.0	0.0	0.0	0.0	0.0	0.0	319.5
1994 / 95	23.5	122.0	88.5	0.0	71.0	12.0	0.0	317.0	0.0	0.0	0.0	0.0	0.0	0.0	317.0
1995 / 96	0.0	9.5	29.0	72.5	30.0	94.0	2.5	237.5	0.0	0.0	0.0	0.0	0.0	0.0	237.5
1996 / 97	7.0	10.0	22.8	125.0	99.5	40.6	0.0	304.9	0.0	0.0	0.0	0.0	0.0	0.0	304.9
1997 / 98	8.5	0.0	108.8	111.5	57.0	21.5	0.0	307.3	0.0	0.0	0.0	0.0	0.0	0.0	307.3
1998 / 99	0.0	8.0	0.0	54.0	102.5	0.0	30.0	194.5	0.0	0.0	0.0	0.0	0.0	0.0	194.5
Max.	23.5	127.2	270.7	359.2	208.5	287.4	260.3	646.8	14.0	0.0	0.0	0.0	0.0	14.0	646.8
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	160.6	0.0	0.0	0.0	0.0	0.0	0.0	160.6
Mean	2.4	27.7	68.9	81.5	72.0	52.8	19.6	325.0	1.0	0.0	0.0	0.0	0.0	1.0	326.0
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	124.4

Table A2.1.1-10(1) Monthly Average and Annual Rainfall in Ma'an Governorate

Station Name : Shaubak Agr. Station									ID No.: DA0002						
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1962 / 63	0.0	0.0	11.5	0.0	47.4	33.7	15.2	107.8	0.0	0.0	0.0	0.0	0.0	0.0	107.8
1963 / 64	0.0	9.0	352.3	85.3	78.6	29.1	13.0	567.3	0.0	0.0	0.0	0.0	0.0	0.0	567.3
1964 / 65	0.0	27.7	75.0	350.0	0.0	48.8	26.1	527.6	0.0	0.0	0.0	0.0	0.0	0.0	527.6
1965 / 66	3.6	3.0	4.6	29.5	69.1	72.6	0.0	182.4	0.0	0.0	0.0	0.0	0.0	0.0	182.4
1966 / 67	16.6	19.0	16.2	85.0	82.0	99.9	1.6	320.3	59.5	0.0	0.0	0.0	0.0	59.5	379.8
1967 / 68	8.7	38.9	16.2	92.9	62.0	27.7	22.3	268.7	16.4	0.0	0.0	0.0	0.0	16.4	285.1
1968 / 69	15.7	45.3	61.8	55.8	5.2	120.9	51.4	356.1	3.2	0.0	0.0	0.0	0.0	3.2	359.3
1969 / 70	2.5	21.9	0.2	45.5	2.0	95.9	8.2	176.2	0.0	0.0	0.0	0.0	0.0	0.0	176.2
1970 / 71	0.3	4.4	71.7	56.7	22.5	5.4	98.2	259.2	0.0	0.0	0.0	0.0	0.0	0.0	259.2
1971 / 72	0.0	5.0	200.8	10.3	77.0	143.0	21.6	457.7	0.5	0.0	0.0	0.0	0.0	0.5	458.2
1972 / 73	18.0	43.3	16.0	57.2	0.5	2.0	1.1	138.1	0.0	0.0	0.0	0.0	0.0	0.0	138.1
1973 / 74	0.0	0.0	0.0	238.0	107.0	22.0	15.2	382.2	0.0	0.0	0.0	0.0	0.0	0.0	382.2
1974 / 75	0.0	13.0	77.4	35.2	159.3	23.0	2.0	309.9	0.0	0.0	0.0	0.0	0.0	0.0	309.9
1975 / 76	0.0	2.1	64.7	15.3	25.6	72.0	3.1	182.8	0.0	0.0	0.0	0.0	0.0	0.0	182.8
1976 / 77	4.8	5.3	2.4	102.2	22.2	27.1	104.0	268.0	0.0	0.0	0.0	0.0	0.0	0.0	268.0
1977 / 78	0.0	75.2	76.2	22.7	21.1	34.5	0.0	229.7	0.0	0.0	0.0	0.0	0.0	0.0	229.7
1978 / 79	0.4	3.4	42.0	143.6	61.6	46.3	0.0	297.3	10.0	0.0	0.0	0.0	0.0	10.0	307.3
1979 / 80	5.7	63.5	97.8	33.0	135.3	32.6	6.5	374.4	0.0	0.0	0.0	0.0	0.0	0.0	374.4
1980 / 81	8.7	0.0	146.2	12.8	29.3	76.1	19.3	292.4	0.0	0.0	0.0	0.0	0.0	0.0	292.4
1981 / 82	0.0	14.2	0.0	63.2	95.2	74.8	8.8	256.2	0.0	0.0	0.0	0.0	0.0	0.0	256.2
1982 / 83	0.4	95.2	84.6	98.0	72.7	79.0	2.0	431.9	0.3	0.0	0.0	0.0	0.0	0.3	432.2
1983 / 84	0.0	2.0	7.9	35.2	7.5	42.4	0.0	95.0	0.0	0.0	0.0	0.0	0.0	0.0	95.0
1984 / 85	11.4	1.0	35.0	9.5	104.1	42.5	21.7	225.2	0.0	0.0	0.0	0.0	0.0	0.0	225.2
1985 / 86	8.8	0.8	126.8	17.1	42.9	5.6	67.7	269.7	9.3	0.0	0.0	0.0	0.0	9.3	279.0
1986 / 87	0.0	50.0	14.3	6.9	49.7	88.2	0.0	209.1	0.0	0.0	0.0	0.0	0.0	0.0	209.1
1987 / 88	2.0	0.0	47.6	96.6	129.5	145.7	0.0	421.4	0.0	0.0	0.0	0.0	0.0	0.0	421.4
1988 / 89	2.3	0.0	97.4	89.7	80.1	35.9	0.0	305.4	0.0	0.0	0.0	0.0	0.0	0.0	305.4
1989 / 90	0.0	5.5	12.3	37.1	16.0	61.8	89.3	222.0	0.0	0.0	0.0	0.0	0.0	0.0	222.0
1990 / 91	0.0	0.0	0.0	143.6	45.0	279.6	0.0	468.2	0.0	0.0	0.0	0.0	0.0	0.0	468.2
1991 / 92	10.5	4.7	59.0	154.0	162.3	29.6	0.0	420.1	0.4	0.0	0.0	0.0	0.0	0.4	420.5
1992 / 93	0.0	30.4	96.5	30.8	58.5	6.5	0.0	222.7	0.0	0.0	0.0	0.0	0.0	0.0	222.7
1993 / 94	22.5	0.9	32.3	122.3	56.7	41.8	2.0	278.5	0.0	0.0	0.0	0.0	0.0	0.0	278.5
1994 / 95	22.7	177.3	70.3	0.0	85.7	0.0	34.3	390.3	0.0	0.0	0.0	0.0	0.0	0.0	390.3
1995 / 96	0.0	18.8	1.8	95.8	24.3	69.3	4.5	214.5	0.0	0.0	0.0	0.0	0.0	0.0	214.5
1996 / 97	0.0	17.4	3.8	140.4	23.4	35.3	9.6	229.9	0.0	0.0	0.0	0.0	0.0	0.0	229.9
1997 / 98	18.0	0.3	56.7	93.2	56.3	45.3	5.4	275.2	0.0	0.0	0.0	0.0	0.0	0.0	275.2
1998 / 99	0.5	0.2	12.6	35.1	90.1	5.5	1.2	145.2	0.0	0.0	0.0	0.0	0.0	0.0	145.2
Max.	22.7	177.3	352.3	350.0	162.3	279.6	104.0	567.3	59.5	0.0	0.0	0.0	0.0	59.5	567.3
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.0	0.0	0.0	0.0	0.0	0.0	0.0	95.0
Mean	5.0	21.6	56.5	74.0	59.7	56.8	17.7	291.3	2.7	0.0	0.0	0.0	0.0	2.7	294.0
Source: WIS database of MWI.														Std. Dev.	113.2

Table A2.1.1-10(2) Monthly Average and Annual Rainfall in Ma'an Governorate

Station Name : Wadi Mousa		ID No.: DG0001													
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1937 / 38	16.0	53.0	16.0	96.5	53.5	54.5	2.5	292.0	0.0	0.0	0.0	0.0	0.0	0.0	292.0
1938 / 39	0.0	68.5	61.0	29.5	58.5	42.5	8.0	268.0	0.0	0.0	0.0	0.0	0.0	0.0	268.0
1939 / 40	0.0	107.5	2.0	42.1	7.5	20.5	17.0	196.6	0.0	0.0	0.0	0.0	0.0	0.0	196.6
1940 / 41	9.5	4.0	30.5	0.0	29.0	102.0	0.0	175.0	0.0	0.0	0.0	0.0	0.0	0.0	175.0
1941 / 42	0.0	5.5	55.5	38.5	46.0	58.0	0.0	203.5	0.0	0.0	0.0	0.0	0.0	0.0	203.5
1942 / 43	3.0	9.5	0.0	11.0	60.0	108.0	19.0	210.5	13.0	0.0	0.0	0.0	0.0	13.0	223.5
1943 / 44	0.0	0.0	21.5	75.5	7.0	20.0	9.5	133.5	4.5	0.0	0.0	0.0	0.0	4.5	138.0
1944 / 45	0.0	42.5	83.0	44.0	37.5	37.5	5.0	249.5	61.0	0.0	0.0	0.0	0.0	61.0	310.5
1945 / 46	0.0	17.5	33.5	42.0	27.0	3.0	0.0	123.0	3.5	0.0	0.0	0.0	0.0	3.5	126.5
1946 / 47	0.0	5.5	0.0	37.0	0.0	81.5	3.5	127.5	0.0	0.0	0.0	0.0	0.0	0.0	127.5
1947 / 48	0.0	37.0	6.0	33.0	45.0	82.0	14.0	217.0	0.0	0.0	0.0	0.0	0.0	0.0	217.0
1948 / 49	0.0	8.0	8.0	35.0	101.0	54.0	8.0	214.0	0.0	0.0	0.0	0.0	0.0	0.0	214.0
1949 / 50	0.0	1.0	75.5	30.0	69.5	4.0	10.0	190.0	21.0	0.0	0.0	0.0	0.0	21.0	211.0
1950 / 51	0.0	3.0	17.0	41.0	75.0	12.0	0.0	148.0	0.0	0.0	0.0	0.0	0.0	0.0	148.0
1951 / 52	0.0	6.0	90.5	25.0	87.5	7.0	0.0	216.0	0.0	0.0	0.0	0.0	0.0	0.0	216.0
1952 / 53	0.0	0.0	3.0	4.0	22.5	19.0	18.0	66.5	0.0	0.0	0.0	0.0	0.0	0.0	66.5
1953 / 54	0.0	15.0	44.3	0.7	87.0	19.0	59.5	225.5	0.0	0.0	0.0	0.0	0.0	0.0	225.5
1954 / 55	0.0	8.0	84.0	16.0	2.5	8.0	5.0	123.5	0.0	0.0	0.0	0.0	0.0	0.0	123.5
1955 / 56	0.0	25.5	73.0	24.5	9.0	29.5	6.0	167.5	0.0	0.0	0.0	0.0	0.0	0.0	167.5
1956 / 57	0.0	7.5	33.0	30.5	29.0	31.0	26.0	157.0	14.5	0.0	0.0	0.0	0.0	14.5	171.5
1957 / 58	0.0	11.0	3.0	50.4	2.0	0.0	0.0	66.4	0.0	0.0	0.0	0.0	0.0	0.0	66.4
1958 / 59	0.0	3.0	17.0	32.0	44.0	54.0	7.5	157.5	0.0	0.0	0.0	0.0	0.0	0.0	157.5
1959 / 60	0.0	18.0	12.0	42.0	0.0	16.0	0.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0
1960 / 61	0.0	15.7	21.5	53.0	75.0	8.0	18.0	191.2	9.0	0.0	0.0	0.0	0.0	9.0	200.2
1961 / 62	8.5	14.0	73.0	60.5	8.0	0.0	18.0	182.0	0.0	0.0	0.0	0.0	0.0	0.0	182.0
1962 / 63	0.0	0.0	7.1	0.0	46.5	13.0	26.5	93.1	0.0	0.0	0.0	0.0	0.0	0.0	93.1
1963 / 64	0.0	0.0	174.0	75.0	60.0	9.0	18.0	336.0	0.0	0.0	0.0	0.0	0.0	0.0	336.0
1964 / 65	0.0	10.0	70.0	282.0	0.0	44.0	15.5	421.5	0.0	0.0	0.0	0.0	0.0	0.0	421.5
1965 / 66	0.0	0.0	0.7	31.5	50.0	28.5	0.0	110.7	0.0	0.0	0.0	0.0	0.0	0.0	110.7
1966 / 67	0.0	24.0	21.0	34.0	42.0	77.0	0.0	198.0	29.0	0.0	0.0	0.0	0.0	29.0	227.0
1967 / 68	9.0	18.0	10.0	8.5	40.0	0.0	0.0	85.5	0.0	0.0	0.0	0.0	0.0	0.0	85.5
1968 / 69	10.0	31.8	18.5	59.2	1.0	79.8	37.9	238.2	0.0	0.0	0.0	0.0	0.0	0.0	238.2
1969 / 70	9.8	3.5	0.0	20.5	0.0	53.3	9.0	96.1	0.0	0.0	0.0	0.0	0.0	0.0	96.1
1970 / 71	0.0	6.0	30.5	37.0	7.0	0.0	54.0	134.5	0.0	0.0	0.0	0.0	0.0	0.0	134.5
1971 / 72	0.0	5.5	153.0	0.0	45.5	86.0	12.0	302.0	1.0	0.0	0.0	0.0	0.0	1.0	303.0
1972 / 73	0.0	16.5	8.0	13.6	0.0	1.5	0.0	39.6	0.0	0.0	0.0	0.0	0.0	0.0	39.6
1973 / 74	0.0	11.5	10.6	178.5	73.0	15.5	12.5	301.6	0.0	0.0	0.0	0.0	0.0	0.0	301.6
1974 / 75	0.0	8.0	52.5	18.2	113.5	12.0	1.2	205.4	0.0	0.0	0.0	0.0	0.0	0.0	205.4
1975 / 76	0.0	1.0	40.5	5.0	14.0	52.5	0.0	113.0	4.0	0.0	0.0	0.0	0.0	4.0	117.0
1976 / 77	0.0	0.0	4.5	30.0	12.5	5.0	77.0	129.0	0.0	0.0	0.0	0.0	0.0	0.0	129.0
1977 / 78	0.0	0.0	29.0	25.0	15.0	14.0	0.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0
1978 / 79	0.0	0.0	33.4	38.0	39.0	25.0	0.0	135.4	6.5	0.0	0.0	0.0	0.0	6.5	141.9
1979 / 80	2.0	46.0	88.5	7.4	84.0	18.0	0.0	245.9	0.0	0.0	0.0	0.0	0.0	0.0	245.9
1980 / 81	0.0	0.0	57.5	14.6	12.0	40.5	2.0	126.6	0.0	0.0	0.0	0.0	0.0	0.0	126.6
1981 / 82	0.0	6.0	2.0	30.0	53.0	35.0	2.0	128.0	8.0	0.0	0.0	0.0	0.0	8.0	136.0
1982 / 83	0.0	65.0	34.5	51.0	21.0	72.5	0.0	244.0	0.0	0.0	0.0	0.0	0.0	0.0	244.0
1983 / 84	0.0	0.0	9.2	27.0	6.0	16.0	0.0	58.2	0.0	0.0	0.0	0.0	0.0	0.0	58.2
1984 / 85	3.0	0.0	23.5	4.5	67.5	36.5	17.0	152.0	0.0	0.0	0.0	0.0	0.0	0.0	152.0
1985 / 86	7.5	0.0	69.5	0.0	31.0	4.5	29.0	141.5	6.0	0.0	0.0	0.0	0.0	6.0	147.5
1986 / 87	0.0	26.5	9.0	0.0	38.0	69.0	0.0	142.5	0.0	0.0	0.0	0.0	0.0	0.0	142.5
1987 / 88	1.2	0.0	32.3	69.5	86.0	97.0	0.0	286.0	0.0	0.0	0.0	0.0	0.0	0.0	286.0
1988 / 89	0.4	0.0	21.4	43.6	19.4	30.6	0.0	115.4	0.0	0.0	0.0	0.0	0.0	0.0	115.4
1989 / 90	0.0	6.4	11.0	15.5	5.3	50.0	69.0	157.2	0.0	0.0	0.0	0.0	0.0	0.0	157.2
1990 / 91	8.0	0.0	14.5	67.5	16.0	151.6	0.0	257.6	0.0	0.0	0.0	0.0	0.0	0.0	257.6
1991 / 92	4.7	0.0	15.5	34.5	116.1	3.0	0.0	173.8	0.0	0.0	0.0	0.0	0.0	0.0	173.8
1992 / 93	0.0	21.1	61.9	30.7	34.1	2.4	0.0	150.2	0.0	0.0	0.0	0.0	0.0	0.0	150.2
1993 / 94	11.0	0.0	20.6	65.5	29.9	60.2	0.0	187.2	0.0	0.0	0.0	0.0	0.0	0.0	187.2
1994 / 95	35.0	47.6	25.9	0.0	60.5	0.0	24.0	193.0	0.0	0.0	0.0	0.0	0.0	0.0	193.0
1995 / 96	0.0	5.0	0.7	72.7	6.0	36.1	0.0	120.5	0.0	0.0	0.0	0.0	0.0	0.0	120.5
1996 / 97	0.0	12.0	12.0	72.5	30.6	9.7	0.0	136.8	0.0	0.0	0.0	0.0	0.0	0.0	136.8
1997 / 98	12.2	2.5	39.5	78.0	50.6	31.7	3.0	217.5	0.0	0.0	0.0	0.0	0.0	0.0	217.5
1998 / 99	0.0	0.0	2.0	18.0	67.5	0.0	0.0	87.5	0.0	0.0	0.0	0.0	0.0	0.0	87.5
Max.	35.0	107.5	174.0	282.0	116.1	151.6	77.0	421.5	61.0	0.0	0.0	0.0	0.0	61.0	421.5
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.6	0.0	0.0	0.0	0.0	0.0	0.0	39.6
Mean	2.4	13.9	33.5	39.6	38.3	34.7	10.7	173.1	2.9	0.0	0.0	0.0	0.0	2.9	176.0
Source: WIS database of MWI.														Std. Dev.	75.0

Table A2.1.1-10(3) Monthly Average and Annual Rainfall in Ma'an Governorate

Station Name : Ma'an		ID No.: G0003													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1937 / 38	18.0	20.0	0.0	15.0	10.5	6.0	8.0	77.5	2.0	0.0	0.0	0.0	0.0	2.0	79.5
1938 / 39	0.0	8.0	6.5	0.2	13.5	5.0	7.0	40.2	0.0	0.0	0.0	0.0	0.0	0.0	40.2
1939 / 40	4.0	33.0	0.0	3.5	0.0	6.5	4.8	51.8	0.0	0.0	0.0	0.0	0.0	0.0	51.8
1940 / 41	3.8	0.0	1.0	0.0	8.0	29.6	0.0	42.4	1.0	0.0	0.0	0.0	0.0	1.0	43.4
1941 / 42	0.0	0.0	8.8	1.1	19.0	7.5	0.0	36.4	0.0	0.0	0.0	0.0	0.0	0.0	36.4
1942 / 43	0.0	10.0	0.0	0.0	11.0	3.0	2.5	26.5	0.0	0.0	0.0	0.0	0.0	0.0	26.5
1943 / 44	0.0	0.0	4.5	16.0	2.0	13.0	1.5	37.0	23.0	0.0	0.0	0.0	0.0	23.0	60.0
1944 / 45	0.0	19.5	39.0	19.0	5.5	2.5	0.0	85.5	17.5	0.0	0.0	0.0	0.0	17.5	103.0
1945 / 46	0.0	4.5	3.0	1.5	0.5	1.5	0.0	11.0	2.0	0.0	0.0	0.0	0.0	2.0	13.0
1946 / 47	0.0	0.0	0.0	4.5	0.0	17.0	0.0	21.5	0.0	0.0	0.0	0.0	0.0	0.0	21.5
1947 / 48	0.0	5.5	2.0	1.0	19.0	5.0	0.0	32.5	0.0	0.0	0.0	0.0	0.0	0.0	32.5
1948 / 49	2.5	0.0	0.0	6.0	24.0	31.0	0.0	63.5	3.5	0.0	0.0	0.0	0.0	3.5	67.0
1949 / 50	0.0	1.0	33.0	5.0	13.0	7.0	11.0	70.0	12.0	0.0	0.0	0.0	0.0	12.0	82.0
1950 / 51	2.0	9.0	9.0	2.0	5.0	0.0	0.0	27.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0
1951 / 52	0.0	0.0	15.5	10.5	0.0	0.0	0.0	26.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0
1952 / 53	18.0	0.0	6.0	3.0	2.0	15.0	13.0	57.0	0.0	0.0	0.0	0.0	0.0	0.0	57.0
1953 / 54	0.0	1.0	6.2	0.0	12.8	0.0	13.0	33.0	0.0	0.0	0.0	0.0	0.0	0.0	33.0
1954 / 55	0.0	5.5	29.0	1.0	0.0	6.0	1.5	43.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0
1955 / 56	0.0	2.5	7.0	2.5	0.0	1.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
1956 / 57	0.0	0.0	0.6	5.7	10.2	0.0	5.9	22.4	0.0	0.0	0.0	0.0	0.0	0.0	22.4
1957 / 58	0.0	9.0	0.0	2.5	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	11.5
1958 / 59	0.0	0.0	0.5	0.5	44.0	7.5	1.0	53.5	0.0	0.0	0.0	0.0	0.0	0.0	53.5
1959 / 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1960 / 61	8.0	11.0	1.1	4.4	2.4	0.0	3.0	29.9	1.5	0.0	0.0	0.0	0.0	1.5	31.4
1961 / 62	5.0	0.4	25.5	5.3	1.3	0.0	11.6	49.1	0.0	0.0	0.0	0.0	0.0	0.0	49.1
1962 / 63	0.0	0.0	2.3	0.2	9.5	1.1	14.0	27.1	0.0	0.0	0.0	0.0	0.0	0.0	27.1
1963 / 64	0.0	2.0	8.8	6.0	2.5	2.0	0.0	21.3	0.0	0.0	0.0	0.0	0.0	0.0	21.3
1964 / 65	0.0	0.0	4.7	35.4	0.0	5.1	3.3	48.5	0.0	0.0	0.0	0.0	0.0	0.0	48.5
1965 / 66	12.1	0.0	0.0	4.0	14.1	45.0	0.0	75.2	0.0	0.0	0.0	0.0	0.0	0.0	75.2
1966 / 67	0.0	0.0	2.2	1.3	1.8	9.3	0.0	14.6	9.0	0.0	0.0	0.0	0.0	9.0	23.6
1967 / 68	7.2	35.0	0.0	7.1	6.5	1.2	3.4	60.4	2.9	0.0	0.0	0.0	0.0	2.9	63.3
1968 / 69	0.0	15.2	0.0	14.7	0.0	12.8	2.6	45.3	0.0	0.0	0.0	0.0	0.0	0.0	45.3
1969 / 70	5.7	0.2	0.0	17.6	1.0	3.2	0.0	27.7	0.0	0.0	0.0	0.0	0.0	0.0	27.7
1970 / 71	3.2	3.8	7.4	11.1	0.0	5.8	21.2	52.5	0.0	0.0	0.0	0.0	0.0	0.0	52.5
1971 / 72	0.0	0.0	25.8	2.0	12.3	10.0	5.6	55.7	0.0	0.0	0.0	0.0	0.0	0.0	55.7
1972 / 73	0.0	13.6	0.4	3.5	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0	0.0	0.0	17.5
1973 / 74	0.0	0.4	2.5	25.4	22.2	20.7	7.0	78.2	0.0	0.0	0.0	0.0	0.0	0.0	78.2
1974 / 75	0.0	9.2	9.7	0.6	45.9	0.0	1.0	66.4	0.0	0.0	0.0	0.0	0.0	0.0	66.4
1975 / 76	0.0	0.0	7.3	0.0	0.0	7.2	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	14.5
1976 / 77	0.0	0.0	0.0	2.0	0.7	1.1	12.2	16.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0
1977 / 78	0.0	0.0	6.2	0.8	1.5	6.2	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0	14.7
1978 / 79	0.0	0.0	8.8	0.0	15.3	12.0	0.0	36.1	0.0	0.0	0.0	0.0	0.0	0.0	36.1
1979 / 80	0.0	0.0	1.0	1.8	19.4	14.0	1.2	37.4	0.0	0.0	0.0	0.0	0.0	0.0	37.4
1980 / 81	0.6	0.0	46.0	0.5	0.0	24.3	0.0	71.4	0.0	0.0	0.0	0.0	0.0	0.0	71.4
1981 / 82	0.0	0.0	0.3	2.8	3.6	3.7	1.2	11.6	2.6	0.0	0.0	0.0	0.0	2.6	14.2
1982 / 83	0.8	9.6	2.8	21.8	13.8	9.6	0.0	58.4	0.0	0.0	0.0	0.0	0.0	0.0	58.4
1983 / 84	0.0	0.0	5.2	5.0	0.2	5.7	0.0	16.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1
1984 / 85	0.0	0.0	5.8	0.0	12.8	5.3	0.0	23.9	0.0	0.0	0.0	0.0	0.0	0.0	23.9
1985 / 86	2.0	0.0	20.0	0.0	5.0	5.0	6.7	38.7	0.0	0.0	0.0	0.0	0.0	0.0	38.7
1986 / 87	0.0	8.7	0.0	0.0	0.0	13.2	0.0	21.9	3.0	0.0	0.0	0.0	0.0	3.0	24.9
1987 / 88	3.4	0.0	4.2	24.2	21.4	54.4	0.8	108.4	0.0	0.0	0.0	0.0	0.0	0.0	108.4
1988 / 89	1.4	0.0	20.5	8.7	22.4	3.0	0.0	56.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0
1989 / 90	0.0	2.8	1.0	3.6	2.5	8.2	9.6	27.7	0.0	0.0	0.0	0.0	0.0	0.0	27.7
1990 / 91	0.0	0.0	0.0	27.3	0.0	28.0	0.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	55.3
1991 / 92	1.3	0.2	7.0	14.6	9.4	0.6	0.0	33.1	0.0	0.0	0.0	0.0	0.0	0.0	33.1
1992 / 93	0.0	1.6	3.3	3.3	0.4	3.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.0	11.6
1993 / 94	37.4	0.0	4.8	27.0	9.5	12.0	0.0	90.7	0.0	0.0	0.0	0.0	0.0	0.0	90.7
1994 / 95	27.4	20.3	3.7	0.0	3.5	12.0	7.0	73.9	0.0	0.0	0.0	0.0	0.0	0.0	73.9
1995 / 96	0.0	0.0	0.4	19.8	0.0	5.6	0.2	26.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0
1996 / 97	0.0	22.2	0.0	15.7	1.4	0.6	0.0	39.9	0.0	0.0	0.0	0.0	0.0	0.0	39.9
1997 / 98	52.4	29.4	3.6	0.0	3.5	1.6	0.0	90.5	0.0	0.0	0.0	0.0	0.0	0.0	90.5
1998 / 99	0.0	0.0	0.0	3.8	18.6	0.0	0.0	22.4	0.0	0.0	0.0	0.0	0.0	0.0	22.4
1999 / 00	0.0	0.0	0.0	6.9	2.0	6.1	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
Max.	52.4	35.0	46.0	35.4	45.9	54.4	21.2	108.4	23.0	0.0	0.0	0.0	0.0	23.0	108.4
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5
Mean	3.5	5.1	6.7	6.9	7.8	8.4	2.9	41.3	1.3	0.0	0.0	0.0	0.0	1.3	42.6
Std. Dev.														24.4	

Note: "-" data not available. Source: WIS database of MWI.

Table A2.1.1-10(4) Monthly Average and Annual Rainfall in Ma'an Governorate

Station Name : Qurein										ID No.:		G0006			
Hydrological	Wet Season								Dry Season						Annual
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1962 / 63	10.0	0.0	5.0	6.5	51.0	4.0	26.7	103.2	0.2	0.0	0.0	0.0	0.0	0.2	103.4
1963 / 64	0.0	4.5	182.9	73.8	68.2	9.4	6.2	345.0	0.0	0.0	0.0	0.0	0.0	0.0	345.0
1964 / 65	0.0	15.4	68.6	23.5	0.0	56.0	22.5	186.0	0.0	0.0	0.0	0.0	0.0	0.0	186.0
1965 / 66	0.0	0.0	5.1	21.5	67.3	95.9	0.0	189.8	0.0	0.0	0.0	0.0	0.0	0.0	189.8
1966 / 67	4.2	14.5	26.9	29.4	32.8	49.6	1.6	159.0	24.3	0.0	0.0	0.0	0.0	24.3	183.3
1967 / 68	0.0	28.9	20.3	29.4	9.9	30.8	18.8	138.1	3.0	0.0	0.0	0.0	0.0	3.0	141.1
1968 / 69	2.0	41.4	20.8	21.0	0.0	108.2	33.5	226.9	0.0	0.0	0.0	0.0	0.0	0.0	226.9
1969 / 70	10.4	2.9	0.0	22.9	0.5	39.5	10.2	86.4	0.0	0.0	0.0	0.0	0.0	0.0	86.4
1970 / 71	0.0	0.6	38.4	11.2	15.0	3.3	141.5	210.0	0.0	0.0	0.0	0.0	0.0	0.0	210.0
1971 / 72	0.0	4.4	100.3	17.7	31.0	38.6	15.9	207.9	0.0	0.0	0.0	0.0	0.0	0.0	207.9
1972 / 73	0.0	24.0	9.4	0.0	0.0	0.5	0.0	33.9	0.0	0.0	0.0	0.0	0.0	0.0	33.9
1973 / 74	0.0	15.0	9.2	128.0	62.3	17.3	0.0	231.8	0.0	0.0	0.0	0.0	0.0	0.0	231.8
1974 / 75	0.0	17.0	68.0	6.2	99.0	26.0	1.5	217.7	0.0	0.0	0.0	0.0	0.0	0.0	217.7
1975 / 76	0.0	0.0	28.3	3.6	9.3	36.7	0.0	77.9	0.0	0.0	0.0	0.0	0.0	0.0	77.9
1976 / 77	0.0	0.0	0.0	19.3	6.5	17.5	53.9	97.2	0.0	0.0	0.0	0.0	0.0	0.0	97.2
1977 / 78	0.0	1.5	100.0	13.9	9.0	49.7	0.0	174.1	0.0	0.0	0.0	0.0	0.0	0.0	174.1
1978 / 79	0.0	0.0	0.0	38.5	80.0	18.0	0.0	136.5	0.0	0.0	0.0	0.0	0.0	0.0	136.5
1979 / 80	2.0	32.0	120.0	13.0	39.0	7.0	0.0	213.0	0.0	0.0	0.0	0.0	0.0	0.0	213.0
1980 / 81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981 / 82	0.0	4.5	2.5	0.0	40.2	10.0	0.0	57.2	0.0	0.0	0.0	0.0	0.0	0.0	57.2
1982 / 83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983 / 84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984 / 85	10.0	2.5	30.2	10.5	58.5	25.5	0.0	137.2	0.0	0.0	0.0	0.0	0.0	0.0	137.2
1985 / 86	1.0	0.0	77.9	3.0	39.0	7.0	18.5	146.4	2.5	0.0	0.0	0.0	0.0	2.5	148.9
1986 / 87	0.0	33.5	11.9	0.0	29.0	68.5	0.0	142.9	0.0	0.0	0.0	0.0	0.0	0.0	142.9
1987 / 88	0.0	0.0	30.0	51.5	71.5	92.0	0.0	245.0	0.0	0.0	0.0	0.0	0.0	0.0	245.0
1988 / 89	0.0	0.0	77.2	95.5	36.5	28.0	0.0	237.2	0.0	0.0	0.0	0.0	0.0	0.0	237.2
1989 / 90	0.0	0.0	3.0	10.9	12.0	27.5	70.0	123.4	0.0	0.0	0.0	0.0	0.0	0.0	123.4
1990 / 91	4.5	0.0	0.0	32.0	22.0	127.0	0.0	185.5	0.0	0.0	0.0	0.0	0.0	0.0	185.5
1991 / 92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992 / 93	0.0	8.0	32.4	0.0	25.0	0.0	0.0	65.4	0.0	0.0	0.0	0.0	0.0	0.0	65.4
1993 / 94	2.5	0.0	39.0	72.5	30.0	35.0	0.0	179.0	0.0	0.0	0.0	0.0	0.0	0.0	179.0
1994 / 95	25.5	71.7	41.3	0.0	50.0	0.0	0.0	188.5	0.0	0.0	0.0	0.0	0.0	0.0	188.5
1995 / 96	0.0	0.0	0.0	42.0	2.0	35.0	0.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0
1996 / 97	0.0	5.6	0.6	66.9	10.0	16.0	0.0	99.1	0.0	0.0	0.0	0.0	0.0	0.0	99.1
1997 / 98	12.0	2.4	35.0	73.1	20.9	14.1	0.0	157.5	0.0	0.0	0.0	0.0	0.0	0.0	157.5
1998 / 99	0.0	0.0	0.0	20.5	44.1	0.0	0.0	64.6	0.0	0.0	0.0	0.0	0.0	0.0	64.6
1999 / 00	1.2	0.0	2.8	7.0	1.0	11.2	0.0	23.2	0.0	0.0	0.0	0.0	0.0	0.0	23.2
Max.	25.5	71.7	182.9	128.0	99.0	127.0	141.5	345.0	24.3	0.0	0.0	0.0	0.0	24.3	345.0
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	0.0	0.0	0.0	0.0	0.0	0.0	23.2
Mean	2.5	9.7	34.9	28.4	31.5	32.5	12.4	151.9	0.9	0.0	0.0	0.0	0.0	0.9	152.8
Note: "-" data not available. Source: WIS database of MWL.														Std. Dev.	69.9