

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 A2.1.1-1(11) Monthly Average and Annual Rainfall in Amman Governorate

Station Name : Um El-Risas		ID No.: CD0017													
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	5.0	1.2	50.7	9.5	16.0	82.4	0.0	0.0	0.0	0.0	0.0	0.0	82.4
1963 / 64	0.0	5.5	116.3	43.4	34.0	26.2	0.0	225.4	0.0	0.0	0.0	0.0	0.0	0.0	225.4
1964 / 65	0.0	10.6	34.1	331.2	0.3	25.0	47.0	448.2	0.0	0.0	0.0	0.0	0.0	0.0	448.2
1965 / 66	7.0	3.0	7.0	16.9	8.3	45.0	0.0	87.2	0.0	0.0	0.0	0.0	0.0	0.0	87.2
1966 / 67	26.0	8.0	62.0	51.7	18.0	97.0	0.0	262.7	0.0	0.0	0.0	0.0	0.0	0.0	262.7
1967 / 68	22.0	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-
1968 / 69	0.0	0.0	0.0	28.0	0.5	69.6	13.3	111.4	0.0	0.0	0.0	0.0	0.0	0.0	111.4
1969 / 70	3.0	8.5	5.8	24.9	14.8	28.5	9.7	95.2	0.0	0.0	0.0	0.0	0.0	0.0	95.2
1970 / 71	0.0	3.0	25.5	21.5	2.0	19.0	117.7	188.7	0.0	0.0	0.0	0.0	0.0	0.0	188.7
1971 / 72	0.0	20.0	126.0	0.0	36.0	36.1	3.2	221.3	0.0	0.0	0.0	0.0	0.0	0.0	221.3
1972 / 73	0.0	19.0	1.5	37.5	0.0	1.0	0.0	59.0	0.0	0.0	0.0	0.0	0.0	0.0	59.0
1973 / 74	2.3	11.8	6.7	162.3	29.6	10.0	16.5	239.2	0.0	0.0	0.0	0.0	0.0	0.0	239.2
1974 / 75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975 / 76	0.0	0.0	0.0	0.0	19.5	25.5	0.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	45.0
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	0.0	3.0	68.0	55.0	39.0	67.0	6.0	238.0	0.0	0.0	0.0	0.0	0.0	0.0	238.0
1978 / 79	3.0	0.0	11.7	52.0	11.0	10.0	0.0	87.7	12.0	0.0	0.0	0.0	0.0	12.0	99.7
1979 / 80	5.0	88.0	70.0	40.0	108.0	59.0	3.8	373.8	0.0	0.0	0.0	0.0	0.0	0.0	373.8
1980 / 81	0.0	0.0	139.9	0.0	7.0	20.5	0.0	167.4	0.0	0.0	0.0	0.0	0.0	0.0	167.4
1981 / 82	0.0	5.6	0.0	4.0	13.0	14.5	0.0	37.1	0.0	0.0	0.0	0.0	0.0	0.0	37.1
1982 / 83	0.0	28.0	0.0	90.0	105.0	64.0	0.0	287.0	0.0	0.0	0.0	0.0	0.0	0.0	287.0
1983 / 84	0.0	0.0	0.0	28.0	12.0	107.0	0.0	147.0	0.0	0.0	0.0	0.0	0.0	0.0	147.0
1984 / 85	70.0	8.0	35.0	7.0	70.0	11.0	10.0	211.0	0.0	0.0	0.0	0.0	0.0	0.0	211.0
1985 / 86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986 / 87	0.0	77.0	34.0	41.9	17.8	51.0	0.0	221.7	0.0	0.0	0.0	0.0	0.0	0.0	221.7
1987 / 88	0.0	0.0	4.0	64.0	35.0	29.0	6.0	138.0	0.0	0.0	0.0	0.0	0.0	0.0	138.0
1988 / 89	0.0	0.0	0.0	48.0	58.0	23.5	0.0	129.5	0.0	0.0	0.0	0.0	0.0	0.0	129.5
1989 / 90	0.0	1.0	0.0	40.0	50.0	16.0	17.0	124.0	0.0	0.0	0.0	0.0	0.0	0.0	124.0
1990 / 91	1.0	0.0	2.0	26.1	22.0	78.0	0.0	129.1	0.0	0.0	0.0	0.0	0.0	0.0	129.1
1991 / 92	0.0	15.7	63.2	69.5	144.5	0.0	0.0	292.9	0.0	0.0	0.0	0.0	0.0	0.0	292.9
1992 / 93	0.0	0.0	0.0	68.0	7.0	0.0	0.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0
1993 / 94	0.0	0.0	6.0	33.0	5.0	3.0	0.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0
1994 / 95	0.0	38.0	59.0	0.0	11.0	0.0	1.5	109.5	0.0	0.0	0.0	0.0	0.0	0.0	109.5
1995 / 96	0.0	7.0	2.0	13.5	0.0	45.0	0.0	67.5	0.0	0.0	0.0	0.0	0.0	0.0	67.5
1996 / 97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997 / 98	3.0	0.0	18.0	45.5	28.0	24.2	7.0	125.7	2.0	0.0	0.0	0.0	0.0	2.0	127.7
1998 / 99	0.0	3.2	11.0	2.0	18.5	5.0	0.0	39.7	0.0	0.0	0.0	0.0	0.0	0.0	39.7
Max.	70.0	88.0	139.9	331.2	144.5	107.0	117.7	448.2	12.0	0.0	0.0	0.0	0.0	12.0	448.2
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.1	0.0	0.0	0.0	0.0	0.0	0.0	37.1
Mean	4.3	11.4	28.6	45.2	30.5	31.9	8.6	159.8	0.4	0.0	0.0	0.0	0.0	0.4	160.3
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	98.6

Table A2.1.1-2(1) Monthly Average and Annual Rainfall in Zarqa Governorate

Station Name : Aluk		ID No.: AL0008													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1950 / 51	0.0	0.0	10.5	39.0	80.0	27.0	5.8	162.3	0.0	0.0	0.0	0.0	0.0	0.0	162.3
1951 / 52	4.0	26.7	240.4	36.8	70.8	58.4	0.0	437.1	0.0	0.0	0.0	0.0	0.0	0.0	437.1
1952 / 53	18.0	0.0	6.2	97.6	134.4	227.1	5.0	488.3	0.0	0.0	0.0	0.0	0.0	0.0	488.3
1953 / 54	0.0	104.9	78.5	58.9	158.1	13.0	37.6	451.0	0.0	0.0	0.0	0.0	0.0	0.0	451.0
1954 / 55	0.0	21.1	69.3	7.5	24.3	18.5	17.7	158.4	0.0	0.0	0.0	0.0	0.0	0.0	158.4
1955 / 56	0.0	127.3	68.0	90.8	15.5	105.9	37.5	445.0	0.0	0.0	0.0	0.0	0.0	0.0	445.0
1956 / 57	0.0	0.0	87.6	164.1	136.0	109.7	19.7	517.1	24.0	0.0	0.0	0.0	0.0	24.0	541.1
1957 / 58	0.0	20.1	79.1	100.3	11.7	5.0	22.3	238.5	0.0	0.0	0.0	0.0	0.0	0.0	238.5
1958 / 59	0.0	0.0	0.0	105.0	183.0	70.0	1.0	359.0	0.0	0.0	0.0	0.0	0.0	0.0	359.0
1959 / 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1960 / 61	0.0	55.5	38.5	140.0	123.5	9.0	13.0	379.5	0.0	0.0	0.0	0.0	0.0	0.0	379.5
1961 / 62	0.0	7.0	165.5	88.0	100.5	7.0	18.0	386.0	0.0	0.0	0.0	0.0	0.0	0.0	386.0
1962 / 63	0.0	0.0	37.0	19.5	90.0	16.0	8.0	170.5	27.0	0.0	0.0	0.0	0.0	27.0	197.5
1963 / 64	24.0	40.0	135.5	108.0	123.5	88.5	11.0	530.5	0.0	0.0	0.0	0.0	0.0	0.0	530.5
1964 / 65	0.0	70.0	59.5	146.5	39.0	40.5	51.0	406.5	0.0	0.0	0.0	0.0	0.0	0.0	406.5
1965 / 66	22.0	5.5	53.0	43.0	76.3	141.5	2.0	343.3	0.0	0.0	0.0	0.0	0.0	0.0	343.3
1966 / 67	40.0	9.0	175.5	172.0	76.0	302.5	0.0	775.0	0.0	0.0	0.0	0.0	0.0	0.0	775.0
1967 / 68	0.0	38.0	65.0	0.0	19.0	0.0	0.0	122.0	0.0	0.0	0.0	0.0	0.0	0.0	122.0
1968 / 69	0.0	11.5	76.0	140.5	22.0	195.0	10.0	455.0	0.0	0.0	0.0	0.0	0.0	0.0	455.0
1969 / 70	12.0	10.0	12.7	75.8	26.3	121.0	9.0	266.8	0.0	0.0	0.0	0.0	0.0	0.0	266.8
1970 / 71	0.0	10.0	5.1	78.3	30.0	75.0	83.0	281.4	0.0	0.0	0.0	0.0	0.0	0.0	281.4
1971 / 72	0.0	44.0	109.0	47.0	64.0	44.0	15.5	323.5	0.0	0.0	0.0	0.0	0.0	0.0	323.5
1972 / 73	0.0	40.0	3.0	131.0	43.0	36.5	0.0	253.5	0.0	0.0	0.0	0.0	0.0	0.0	253.5
1973 / 74	0.0	44.5	39.5	350.0	82.5	58.5	33.0	608.0	0.0	0.0	0.0	0.0	0.0	0.0	608.0
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	5.5	24.8	25.3	84.6	16.7	13.0	169.9	20.3	0.0	0.0	0.0	0.0	20.3	190.2
1986 / 87	11.6	138.4	49.7	74.0	36.8	69.0	0.0	379.5	0.0	0.0	0.0	0.0	0.0	0.0	379.5
1987 / 88	1.6	10.5	92.0	73.5	184.0	84.5	0.0	446.1	0.0	0.0	0.0	0.0	0.0	0.0	446.1
1988 / 89	5.6	20.0	125.6	0.0	0.0	0.0	0.0	151.2	0.0	0.0	0.0	0.0	0.0	0.0	151.2
1989 / 90	0.0	33.0	38.6	91.6	42.6	51.4	31.2	288.4	0.0	0.0	0.0	0.0	0.0	0.0	288.4
1990 / 91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1991 / 92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992 / 93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993 / 94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994 / 95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995 / 96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996 / 97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997 / 98	10.8	46.0	78.8	129.9	19.5	110.8	4.8	400.6	0.0	0.0	0.0	0.0	0.0	0.0	400.6
Max.	40.0	138.4	240.4	350.0	184.0	302.5	83.0	775.0	27.0	0.0	0.0	0.0	0.0	27.0	775.0
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	122.0	0.0	0.0	0.0	0.0	0.0	0.0	122.0
Mean	5.2	32.4	69.8	90.8	72.3	72.5	15.5	358.4	2.5	0.0	0.0	0.0	0.0	2.5	360.9
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	148.3

The Study on Water Resources Management in The Hashemite Kingdom of Jordan
Final Report/Supporting Report Part-A "Master Plan"

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

Station Name : Zarqa									ID No.: AL0015						
Hydrological	Wet Season								Dry Season						
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	Annual
1937 / 38	1.0	35.5	0.0	49.5	76.5	23.5	0.0	186.0	24.0	0.0	0.0	0.0	0.0	24.0	210.0
1938 / 39	0.0	55.0	15.0	19.5	28.5	34.5	4.0	156.5	0.0	0.0	0.0	0.0	0.0	0.0	156.5
1939 / 40	0.0	40.0	6.5	48.0	2.0	8.0	26.0	130.5	0.0	0.0	0.0	0.0	0.0	0.0	130.5
1940 / 41	3.0	20.0	24.0	27.5	10.5	6.0	1.0	92.0	0.0	0.0	0.0	0.0	0.0	0.0	92.0
1941 / 42	2.5	2.0	66.5	31.0	45.5	44.5	0.0	192.0	0.0	0.0	0.0	0.0	0.0	0.0	192.0
1942 / 43	20.1	17.0	10.2	21.5	14.5	44.5	13.5	141.3	2.0	0.0	0.0	0.0	0.0	2.0	143.3
1943 / 44	5.0	0.0	9.0	61.5	0.2	12.5	32.0	120.2	13.0	0.0	0.0	0.0	0.0	13.0	133.2
1944 / 45	0.0	80.0	66.5	69.0	44.0	4.5	0.0	264.0	14.0	0.0	0.0	0.0	0.0	14.0	278.0
1945 / 46	0.0	12.0	74.5	6.5	49.0	12.2	0.0	154.2	4.5	0.0	0.0	0.0	0.0	4.5	158.7
1946 / 47	0.0	7.5	13.0	11.0	1.5	5.5	3.0	41.5	0.0	0.0	0.0	0.0	0.0	0.0	41.5
1947 / 48	0.0	4.5	9.0	55.5	26.0	26.5	1.0	122.5	0.0	0.0	0.0	0.0	0.0	0.0	122.5
1948 / 49	0.0	6.0	8.5	19.5	55.5	65.5	8.0	163.0	2.0	0.0	0.0	0.0	0.0	2.0	165.0
1949 / 50	0.0	0.0	41.5	21.0	17.5	20.0	0.5	100.5	0.0	0.0	0.0	0.0	0.0	0.0	100.5
1950 / 51	0.0	2.5	1.5	15.5	21.0	6.0	0.0	46.5	0.0	0.0	0.0	0.0	0.0	0.0	46.5
1951 / 52	0.0	2.5	81.0	8.0	57.0	17.5	0.0	166.0	0.0	0.0	0.0	0.0	0.0	0.0	166.0
1952 / 53	12.0	0.0	11.0	16.0	62.5	56.5	0.0	158.0	0.0	0.0	0.0	0.0	0.0	0.0	158.0
1953 / 54	1.5	77.5	21.5	3.0	38.5	9.5	13.0	164.5	0.0	0.0	0.0	0.0	0.0	0.0	164.5
1954 / 55	0.0	16.0	21.5	3.5	0.0	0.0	2.0	43.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0
1955 / 56	0.0	42.0	21.8	17.8	4.8	11.3	0.0	97.7	0.0	0.0	0.0	0.0	0.0	0.0	97.7
1956 / 57	0.0	0.0	11.0	22.0	66.5	40.0	4.0	143.5	11.0	0.0	0.0	0.0	0.0	11.0	154.5
1957 / 58	0.0	0.0	23.8	42.5	3.0	0.0	0.0	69.3	0.0	0.0	0.0	0.0	0.0	0.0	69.3
1958 / 59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1959 / 60	0.0	1.5	22.0	0.0	3.5	12.0	0.0	39.0	0.0	0.0	0.0	0.0	0.0	0.0	39.0
1960 / 61	0.0	22.5	15.0	54.0	40.0	0.0	5.0	136.5	0.0	0.0	0.0	0.0	0.0	0.0	136.5
1961 / 62	0.0	5.4	96.2	26.4	49.4	0.0	0.0	177.4	0.0	0.0	0.0	0.0	0.0	0.0	177.4
1962 / 63	0.3	0.0	16.7	2.6	57.7	16.2	4.4	97.9	10.0	0.0	0.0	0.0	0.0	10.0	107.9
1963 / 64	15.1	5.6	54.3	40.5	32.6	26.1	0.0	174.2	0.0	0.0	0.0	0.0	0.0	0.0	174.2
1964 / 65	0.0	0.0	24.1	66.7	11.3	12.0	19.0	133.1	0.0	0.0	0.0	0.0	0.0	0.0	133.1
1965 / 66	1.3	0.0	21.6	15.8	6.4	82.0	0.0	127.1	0.0	0.0	0.0	0.0	0.0	0.0	127.1
1966 / 67	14.6	0.0	48.8	39.4	12.7	29.0	0.0	144.5	0.0	0.0	0.0	0.0	0.0	0.0	144.5
1967 / 68	0.0	17.5	13.2	39.0	9.4	16.6	0.0	95.7	0.0	0.0	0.0	0.0	0.0	0.0	95.7
1968 / 69	0.5	22.2	0.0	52.2	9.6	56.1	4.7	145.3	0.0	0.0	0.0	0.0	0.0	0.0	145.3
1969 / 70	8.6	4.1	1.6	17.1	9.2	18.8	5.0	64.4	0.0	0.0	0.0	0.0	0.0	0.0	64.4
1970 / 71	0.0	0.0	7.3	21.0	13.0	10.7	55.0	107.0	0.0	0.0	0.0	0.0	0.0	0.0	107.0
1971 / 72	0.0	10.3	52.8	11.0	36.2	28.5	9.2	148.0	0.0	0.0	0.0	0.0	0.0	0.0	148.0
1972 / 73	0.0	34.6	0.5	29.4	20.2	11.4	0.0	96.1	0.0	0.0	0.0	0.0	0.0	0.0	96.1
1973 / 74	5.5	21.5	1.8	161.1	28.4	8.4	12.2	238.9	0.0	0.0	0.0	0.0	0.0	0.0	238.9
1974 / 75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975 / 76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978 / 79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979 / 80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980 / 81	0.0	2.7	102.3	22.1	15.9	8.8	2.9	154.7	0.0	0.0	0.0	0.0	0.0	0.0	154.7
1981 / 82	0.0	12.4	0.0	39.5	21.6	20.2	15.1	108.8	10.7	0.0	0.0	0.0	0.0	10.7	119.5
1982 / 83	9.2	15.7	12.0	50.7	62.1	40.3	0.6	190.6	3.1	0.0	0.0	0.0	0.0	3.1	193.7
1983 / 84	0.0	0.0	0.0	26.6	6.3	53.4	0.0	86.3	0.0	0.0	0.0	0.0	0.0	0.0	86.3
1984 / 85	3.3	9.5	0.0	0.0	91.5	0.0	0.0	104.3	0.0	0.0	0.0	0.0	0.0	0.0	104.3
1985 / 86	3.0	0.0	34.1	2.0	32.0	2.8	4.8	78.7	6.0	0.0	0.0	0.0	0.0	6.0	84.7
1986 / 87	26.4	74.8	8.5	27.4	11.2	24.4	0.0	172.7	0.0	0.0	0.0	0.0	0.0	0.0	172.7
1987 / 88	32.6	2.0	34.3	36.0	103.4	35.6	6.2	250.1	0.0	0.0	0.0	0.0	0.0	0.0	250.1
1988 / 89	6.0	5.3	78.1	32.9	12.1	15.4	0.0	149.8	0.0	0.0	0.0	0.0	0.0	0.0	149.8
1989 / 90	0.0	11.8	22.3	29.8	20.4	34.8	11.2	130.3	0.0	0.0	0.0	0.0	0.0	0.0	130.3
1990 / 91	0.0	5.4	0.3	43.2	17.1	18.3	3.6	87.9	0.2	0.0	0.0	0.0	0.0	0.2	88.1
1991 / 92	1.1	14.0	71.8	40.9	114.8	13.6	1.3	257.5	0.7	0.0	0.0	0.0	0.0	0.7	258.2
1992 / 93	0.0	26.8	25.6	18.2	14.7	9.0	0.0	94.3	3.6	0.0	0.0	0.0	0.0	3.6	97.9
1993 / 94	13.5	6.2	9.0	50.2	7.3	21.5	0.0	107.7	0.0	0.0	0.0	0.0	0.0	0.0	107.7
1994 / 95	10.6	69.1	50.4	1.6	10.8	3.3	0.5	146.3	0.0	0.0	0.0	0.0	0.0	0.0	146.3
1995 / 96	0.0	3.5	11.0	48.4	6.0	24.7	2.5	96.1	0.0	0.0	0.0	0.0	0.0	0.0	96.1
1996 / 97	1.5	26.5	15.5	38.0	18.1	22.3	0.0	121.9	2.0	0.0	0.0	0.0	0.0	2.0	123.9
1997 / 98	15.0	17.8	30.5	36.3	17.2	25.8	1.3	143.9	0.0	0.0	0.0	0.0	0.0	0.0	143.9
1998 / 99	0.0	0.0	1.5	12.0	29.0	4.0	1.5	48.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0
Max.	32.6	80.0	102.3	161.1	114.8	82.0	55.0	264.0	24.0	0.0	0.0	0.0	0.0	24.0	278.0
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.0	0.0	0.0	0.0	0.0	0.0	0.0	39.0
Mean	3.9	15.8	25.8	30.9	28.6	21.0	5.0	131.0	1.9	0.0	0.0	0.0	0.0	1.9	133.0
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	53.1

Table A2.1.1-2(3) Monthly Average and Annual Rainfall in Zarqa Governorate

Station Name : Qasr El-Hallabat		ID No.: AL0049													
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	0.0	26.5	3.2	33.8	0.3	8.5	3.2	75.5	0.5	0.0	0.0	0.0	0.0	0.5	76.0
1968 / 69	0.0	9.7	9.4	27.5	7.0	57.6	3.2	114.4	0.0	0.0	0.0	0.0	0.0	0.0	114.4
1969 / 70	14.6	0.0	0.0	22.2	7.4	18.6	0.0	62.8	0.2	0.0	0.0	0.0	0.0	0.2	63.0
1970 / 71	0.0	0.0	0.0	28.6	3.0	8.0	71.0	110.6	0.0	0.0	0.0	0.0	0.0	0.0	110.6
1971 / 72	0.0	9.5	58.5	0.0	40.7	30.2	33.6	172.5	2.3	0.0	0.0	0.0	0.0	2.3	174.8
1972 / 73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973 / 74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1974 / 75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975 / 76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978 / 79	3.9	0.0	18.1	13.1	13.8	2.9	4.2	56.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0
1979 / 80	3.0	36.0	44.0	23.2	26.5	64.0	3.8	200.5	0.0	0.0	0.0	0.0	0.0	0.0	200.5
1980 / 81	0.7	4.0	89.0	2.8	30.4	23.0	0.4	150.3	0.0	0.0	0.0	0.0	0.0	0.0	150.3
1981 / 82	0.0	8.5	1.2	26.3	27.2	12.0	14.0	89.2	15.2	0.0	0.0	0.0	0.0	15.2	104.4
1982 / 83	18.0	0.0	0.0	31.0	9.0	12.0	0.0	70.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0
1983 / 84	0.0	0.0	1.4	8.0	0.0	2.0	0.0	11.4	0.0	0.0	0.0	0.0	0.0	0.0	11.4
1984 / 85	7.5	11.0	2.0	6.0	64.0	17.8	0.4	108.7	0.0	0.0	0.0	0.0	0.0	0.0	108.7
1985 / 86	0.0	0.0	21.5	2.5	2.6	0.8	29.8	57.2	3.6	0.0	0.0	0.0	0.0	3.6	60.8
1986 / 87	7.8	38.8	9.4	21.7	4.2	25.2	0.0	107.1	0.0	0.0	0.0	0.0	0.0	0.0	107.1
1987 / 88	40.0	7.0	22.5	33.2	49.6	31.5	5.6	189.4	0.0	0.0	0.0	0.0	0.0	0.0	189.4
1988 / 89	6.0	3.8	118.0	37.0	4.0	7.8	0.0	176.6	0.0	0.0	0.0	0.0	0.0	0.0	176.6
1989 / 90	0.0	6.0	8.8	28.6	19.4	23.5	13.5	99.8	0.0	0.0	0.0	0.0	0.0	0.0	99.8
1990 / 91	5.1	8.5	2.9	46.6	14.0	5.5	0.0	82.6	0.0	0.0	0.0	0.0	0.0	0.0	82.6
1991 / 92	3.5	0.0	59.5	51.1	83.5	7.5	0.0	205.1	0.0	0.0	0.0	0.0	0.0	0.0	205.1
1992 / 93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993 / 94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994 / 95	2.2	34.6	18.4	0.0	6.4	4.4	0.0	66.0	0.0	0.0	0.0	0.0	0.0	0.0	66.0
1995 / 96	0.0	1.3	12.5	43.8	7.0	32.0	0.0	96.6	0.0	0.0	0.0	0.0	0.0	0.0	96.6
1996 / 97	0.0	2.6	3.6	17.6	2.2	0.8	0.0	26.8	0.0	0.0	0.0	0.0	0.0	0.0	26.8
1997 / 98	12.0	15.2	19.0	49.8	0.0	10.0	0.0	106.0	0.0	0.0	0.0	0.0	0.0	0.0	106.0
1998 / 99	0.0	0.0	9.9	0.5	8.6	1.4	0.6	21.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0
Max.	40.0	38.8	118.0	51.1	83.5	64.0	71.0	205.1	15.2	0.0	0.0	0.0	0.0	15.2	205.1
Min.	0.0	0.0	0.0	0.0	0.0	0.8	0.0	11.4	0.0	0.0	0.0	0.0	0.0	0.0	11.4
Mean	5.2	9.3	22.2	23.1	18.0	17.0	7.6	102.3	0.9	0.0	0.0	0.0	0.0	0.9	103.2
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	54.2

Table A2.1.1-2(4) Monthly Average and Annual Rainfall in Zarqa Governorate

Station Name : Wadi Zarqa Gauging Station									ID No.: AL0051						
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1968 / 69	2.1	7.6	69.3	148.4	22.6	133.7	25.1	408.8	0.0	0.0	0.0	0.0	0.0	0.0	408.8
1969 / 70	14.4	24.2	19.9	78.8	28.5	119.2	13.7	298.7	0.0	0.0	0.0	0.0	0.0	0.0	298.7
1970 / 71	2.9	7.2	56.1	46.9	49.6	62.3	180.0	405.0	0.0	0.0	0.0	0.0	0.0	0.0	405.0
1971 / 72	0.0	30.4	96.8	41.0	55.9	37.6	30.9	292.6	2.0	0.0	0.0	0.0	0.0	2.0	294.6
1972 / 73	0.0	30.4	1.8	98.9	21.5	71.0	0.0	223.6	1.3	0.0	0.0	0.0	0.0	1.3	224.9
1973 / 74	0.2	58.4	29.4	243.0	90.6	27.1	33.6	482.3	0.0	0.0	0.0	0.0	0.0	0.0	482.3
1974 / 75	0.0	20.0	28.0	23.2	95.6	57.7	8.4	232.9	0.0	0.0	0.0	0.0	0.0	0.0	232.9
1975 / 76	0.0	17.7	53.6	29.5	69.6	94.0	9.7	274.1	0.0	0.0	0.0	0.0	0.0	0.0	274.1
1976 / 77	1.6	70.6	1.2	72.3	28.1	63.9	29.3	267.0	0.0	0.0	0.0	0.0	0.0	0.0	267.0
1977 / 78	20.0	9.1	106.1	39.2	25.0	66.7	6.5	272.6	0.0	0.0	0.0	0.0	0.0	0.0	272.6
1978 / 79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979 / 80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980 / 81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Max.	20.0	70.6	106.1	243.0	95.6	133.7	180.0	482.3	2.0	0.0	0.0	0.0	0.0	2.0	482.3
Min.	0.0	7.2	1.2	23.2	21.5	27.1	0.0	223.6	0.0	0.0	0.0	0.0	0.0	0.0	224.9
Mean	4.1	27.6	46.2	82.1	48.7	73.3	33.7	315.8	0.3	0.0	0.0	0.0	0.0	0.3	316.1
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	81.4

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

Station Name : El-Umari		ID No.: F0011													
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	0.0	3.9	13.7	0.3	23.4	41.3	11.6	0.0	0.0	0.0	0.0	11.6	52.9
1963 / 64	1.0	0.0	24.7	2.0	4.5	3.5	4.5	40.2	0.0	0.0	0.0	0.0	0.0	0.0	40.2
1964 / 65	0.0	2.5	18.5	40.0	0.5	0.0	3.0	64.5	0.0	0.0	0.0	0.0	0.0	0.0	64.5
1965 / 66	10.0	9.0	3.5	19.0	10.0	14.0	0.0	65.5	0.0	0.0	0.0	0.0	0.0	0.0	65.5
1966 / 67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1967 / 68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1968 / 69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1969 / 70	15.0	0.0	0.0	9.5	2.5	0.0	0.0	27.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0
1970 / 71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971 / 72	0.0	0.0	0.0	0.0	0.0	23.0	26.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0
1972 / 73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973 / 74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1974 / 75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975 / 76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978 / 79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979 / 80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980 / 81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981 / 82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982 / 83	0.0	1.0	0.0	2.0	1.0	6.5	0.0	10.5	0.0	0.0	0.0	0.0	0.0	0.0	10.5
1983 / 84	0.0	2.2	2.6	2.0	0.6	7.6	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
1984 / 85	1.2	2.2	0.8	0.8	0.0	7.8	0.0	12.8	0.0	0.0	0.0	0.0	0.0	0.0	12.8
1985 / 86	2.4	19.2	24.2	0.6	3.0	0.0	18.4	67.8	2.8	0.0	0.0	0.0	0.0	2.8	70.6
1986 / 87	0.0	12.6	0.4	0.6	1.8	16.4	0.0	31.8	0.0	0.0	0.0	0.0	0.0	0.0	31.8
1987 / 88	14.0	0.0	7.6	26.2	0.8	26.4	2.8	77.8	0.4	0.0	0.0	0.0	0.0	0.4	78.2
1988 / 89	6.8	3.4	30.4	14.9	8.6	3.0	0.0	67.1	0.0	0.0	0.0	0.0	0.0	0.0	67.1
1989 / 90	0.0	0.6	0.0	2.7	9.0	4.0	8.6	24.9	0.0	0.0	0.0	0.0	0.0	0.0	24.9
1990 / 91	2.0	0.0	0.0	44.0	1.0	29.0	0.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0
1991 / 92	2.6	0.0	4.0	5.2	2.8	2.0	0.0	16.6	0.0	0.0	0.0	0.0	0.0	0.0	16.6
1992 / 93	0.0	0.0	0.0	4.0	4.5	0.0	2.0	10.5	0.0	0.0	0.0	0.0	0.0	0.0	10.5
1993 / 94	12.8	15.0	11.0	28.2	15.0	14.6	0.0	96.6	0.0	0.0	0.0	0.0	0.0	0.0	96.6
1994 / 95	0.0	55.5	3.0	0.0	4.0	0.0	0.0	62.5	0.0	0.0	0.0	0.0	0.0	0.0	62.5
1995 / 96	0.0	0.0	11.5	12.2	0.0	8.0	0.0	31.7	0.0	0.0	0.0	0.0	0.0	0.0	31.7
1996 / 97	0.0	29.4	26.2	11.0	3.4	6.0	0.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0
1997 / 98	13.2	0.6	11.8	14.2	17.8	5.4	0.0	63.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0
1998 / 99	0.0	0.0	0.2	5.2	9.4	0.0	0.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0	14.8
1999 / 00	0.0	0.0	0.0	1.4	0.0	1.8	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Max.	15.0	55.5	30.4	44.0	17.8	29.0	26.0	96.6	11.6	0.0	0.0	0.0	0.0	11.6	96.6
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Mean	3.4	6.4	7.5	10.4	4.7	7.5	3.7	43.6	0.6	0.0	0.0	0.0	0.0	0.6	44.2
Note: "-" data not available. Source: WIS database of MWI.															Std. Dev. 26.8

Table A2.1.1-3(1) Monthly Average and Annual Rainfall in Mafraq Governorate

Station Name : Rihab			ID No.: AD0017													
Hydrological Year	Wet Season								Dry Season						Annual	
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total		
1945 / 46	3.5	41.5	57.0	11.2	142.0	22.5	0.0	277.7	0.0	0.0	0.0	0.0	0.0	0.0	277.7	
1946 / 47	0.0	0.0	14.0	41.0	19.5	31.0	10.5	116.0	0.0	0.0	0.0	0.0	0.0	0.0	116.0	
1947 / 48	0.0	19.5	5.0	75.5	90.0	126.5	56.0	372.5	0.0	0.0	0.0	0.0	0.0	0.0	372.5	
1948 / 49	0.0	31.5	59.2	46.6	98.0	156.0	71.5	462.8	0.0	0.0	0.0	0.0	0.0	0.0	462.8	
1949 / 50	0.0	0.0	82.9	48.5	25.5	30.8	8.0	195.7	10.5	0.0	0.0	0.0	0.0	10.5	206.2	
1950 / 51	0.0	11.0	24.0	32.8	31.5	4.0	2.0	105.3	0.0	0.0	0.0	0.0	0.0	0.0	105.3	
1951 / 52	0.0	36.0	210.0	38.2	81.4	52.0	0.0	417.6	0.0	0.0	0.0	0.0	0.0	0.0	417.6	
1952 / 53	0.0	0.0	12.5	47.7	100.3	135.8	2.5	298.8	0.0	0.0	0.0	0.0	0.0	0.0	298.8	
1953 / 54	0.0	69.8	65.0	21.9	101.6	9.3	36.5	304.1	0.0	0.0	0.0	0.0	0.0	0.0	304.1	
1954 / 55	0.8	24.7	58.2	1.7	17.0	30.0	8.1	140.5	0.0	0.0	0.0	0.0	0.0	0.0	140.5	
1955 / 56	2.3	116.1	73.5	73.6	9.7	65.0	14.5	354.7	0.0	0.0	0.0	0.0	0.0	0.0	354.7	
1956 / 57	0.0	0.0	51.5	69.3	70.5	62.2	6.8	260.3	15.7	0.0	0.0	0.0	0.0	15.7	276.0	
1957 / 58	0.0	10.8	58.0	114.1	7.4	0.0	1.0	191.3	0.7	0.0	0.0	0.0	0.0	0.7	192.0	
1958 / 59	0.1	0.0	1.3	46.0	154.9	23.3	0.0	225.6	0.0	0.0	0.0	0.0	0.0	0.0	225.6	
1959 / 60	0.0	5.0	15.3	45.3	9.1	34.5	6.4	115.6	0.0	0.0	0.0	0.0	0.0	0.0	115.6	
1960 / 61	0.0	50.1	32.5	77.3	76.4	43.9	14.8	295.0	3.0	0.0	0.0	0.0	0.0	3.0	298.0	
1961 / 62	6.1	6.5	114.1	41.5	57.8	5.3	6.9	238.2	0.0	0.0	0.0	0.0	0.0	0.0	238.2	
1962 / 63	0.0	0.0	7.1	15.6	72.4	16.9	17.9	129.9	0.0	0.0	0.0	0.0	0.0	0.0	129.9	
1963 / 64	16.9	15.6	61.7	51.0	82.8	56.0	0.0	284.0	0.0	0.0	0.0	0.0	0.0	0.0	284.0	
1964 / 65	0.0	33.2	63.1	102.4	8.4	7.7	26.9	241.7	0.0	0.0	0.0	0.0	0.0	0.0	241.7	
1965 / 66	0.0	0.0	22.3	10.7	25.6	54.3	0.0	112.9	0.0	0.0	0.0	0.0	0.0	0.0	112.9	
1966 / 67	7.8	12.4	119.6	67.4	34.4	23.0	0.0	264.6	16.0	0.0	0.0	0.0	0.0	16.0	280.6	
1967 / 68	14.5	24.1	26.9	46.5	28.0	18.5	0.0	158.5	0.0	0.0	0.0	0.0	0.0	0.0	158.5	
1968 / 69	0.0	10.0	78.0	73.1	33.7	103.3	19.5	317.6	0.0	0.0	0.0	0.0	0.0	0.0	317.6	
1969 / 70	27.4	13.3	2.0	33.6	32.4	65.2	12.9	186.8	0.0	0.0	0.0	0.0	0.0	0.0	186.8	
1970 / 71	0.0	0.0	50.2	49.1	26.3	37.1	102.5	265.2	0.0	0.0	0.0	0.0	0.0	0.0	265.2	
1971 / 72	0.0	23.5	108.2	32.5	63.6	32.7	18.8	279.3	0.0	0.0	0.0	0.0	0.0	0.0	279.3	
1972 / 73	0.0	16.0	1.2	36.8	9.0	44.5	8.2	115.7	0.0	0.0	0.0	0.0	0.0	0.0	115.7	
1973 / 74	0.0	93.6	13.0	184.2	55.8	17.0	17.3	380.9	0.0	0.0	0.0	0.0	0.0	0.0	380.9	
1974 / 75	0.0	21.6	23.2	9.6	102.0	24.7	14.0	195.1	0.0	0.0	0.0	0.0	0.0	0.0	195.1	
1975 / 76	0.0	11.5	28.5	7.8	60.7	51.0	6.0	165.5	6.0	0.0	0.0	0.0	0.0	6.0	171.5	
1976 / 77	0.0	0.0	0.0	32.9	13.1	12.0	39.0	97.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	
1977 / 78	6.4	0.5	64.6	20.0	14.2	21.0	6.7	133.4	0.0	0.0	0.0	0.0	0.0	0.0	133.4	
1978 / 79	14.5	6.3	27.1	28.6	34.9	15.2	6.8	133.4	0.0	0.0	0.0	0.0	0.0	0.0	133.4	
1979 / 80	20.2	93.5	98.0	39.9	41.1	34.9	7.7	335.3	0.0	0.0	0.0	0.0	0.0	0.0	335.3	
1980 / 81	6.7	3.9	122.6	19.6	32.4	17.8	6.5	209.5	0.0	0.0	0.0	0.0	0.0	0.0	209.5	
1981 / 82	0.0	18.9	5.6	12.1	39.4	18.5	16.7	111.2	9.8	0.0	0.0	0.0	0.0	9.8	121.0	
1982 / 83	5.0	41.8	6.9	68.4	100.1	40.0	0.0	262.2	0.0	0.0	0.0	0.0	0.0	0.0	262.2	
1983 / 84	1.6	17.4	4.5	36.9	22.6	45.5	4.0	132.5	0.0	0.0	0.0	0.0	0.0	0.0	132.5	
1984 / 85	10.0	15.5	23.7	26.0	113.6	26.4	3.0	218.2	7.0	0.0	0.0	0.0	0.0	7.0	225.2	
1985 / 86	3.2	3.5	24.1	17.6	57.2	3.7	11.7	121.0	7.5	0.0	0.0	0.0	0.0	7.5	128.5	
1986 / 87	12.3	125.7	26.3	48.7	18.7	33.0	0.0	264.7	0.0	0.0	0.0	0.0	0.0	0.0	264.7	
1987 / 88	21.0	9.8	63.3	75.0	123.2	67.1	23.4	382.8	0.0	0.0	0.0	0.0	0.0	0.0	382.8	
1988 / 89	0.2	10.5	102.8	24.9	12.5	20.9	0.0	171.8	0.0	0.0	0.0	0.0	0.0	0.0	171.8	
1989 / 90	4.8	11.1	34.1	63.6	36.5	37.3	17.3	204.7	0.0	0.0	0.0	0.0	0.0	0.0	204.7	
1990 / 91	3.3	11.7	0.0	103.2	38.1	54.2	4.3	214.8	0.0	0.0	0.0	0.0	0.0	0.0	214.8	
1991 / 92	5.5	24.0	132.3	114.5	161.3	16.2	0.0	453.8	0.0	0.0	0.0	0.0	0.0	0.0	453.8	
1992 / 93	0.0	38.7	112.1	44.5	21.5	16.5	0.0	233.3	1.0	0.0	0.0	0.0	0.0	1.0	234.3	
1993 / 94	2.1	8.6	4.1	69.2	30.9	36.8	0.0	151.7	0.0	0.0	0.0	0.0	0.0	0.0	151.7	
1994 / 95	0.0	130.4	52.2	0.0	28.9	4.5	0.0	216.0	0.0	0.0	0.0	0.0	0.0	0.0	216.0	
1995 / 96	0.0	17.5	33.0	39.3	3.5	91.0	5.0	189.3	0.0	0.0	0.0	0.0	0.0	0.0	189.3	
1996 / 97	7.5	25.4	22.1	91.4	100.3	73.6	7.1	327.4	5.0	0.0	0.0	0.0	0.0	5.0	332.4	
1997 / 98	8.5	14.0	32.0	115.8	30.0	97.2	2.8	300.3	0.0	0.0	0.0	0.0	0.0	0.0	300.3	
1998 / 99	0.0	0.0	7.5	39.0	41.5	3.0	1.8	92.8	0.0	0.0	0.0	0.0	0.0	0.0	92.8	
Max.	27.4	130.4	210.0	184.2	161.3	156.0	102.5	462.8	16.0	0.0	0.0	0.0	0.0	16.0	462.8	
Min.	0.0	0.0	0.0	0.0	3.5	0.0	0.0	92.8	0.0	0.0	0.0	0.0	0.0	0.0	92.8	
Mean	3.9	24.6	47.0	49.7	52.7	40.2	12.1	230.1	1.5	0.0	0.0	0.0	0.0	1.5	231.6	
Source: WIS database of MWI															Std. Dev.	94.9

Table A2.1.1-3(2) Monthly Average and Annual Rainfall in Mafraq Governorate

Station Name : Ibbin		ID No.: AD0018													
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	0.0	26.0	33.0	253.0	192.0	120.0	5.2	629.2	31.5	0.0	0.0	0.0	0.0	31.5	660.7
1938 / 39	0.0	211.4	60.0	83.5	215.0	156.5	10.3	736.7	0.0	0.0	0.0	0.0	0.0	0.0	736.7
1939 / 40	4.0	160.5	57.0	318.0	26.5	64.5	35.0	665.5	0.0	0.0	0.0	0.0	0.0	0.0	665.5
1940 / 41	6.0	74.5	125.5	134.0	22.0	147.0	16.5	525.5	0.0	0.0	0.0	0.0	0.0	0.0	525.5
1941 / 42	19.5	32.0	267.0	106.5	121.0	168.6	11.5	726.1	0.0	0.0	0.0	0.0	0.0	0.0	726.1
1942 / 43	156.0	119.5	33.0	303.5	152.5	180.0	104.0	1,048.5	0.0	0.0	0.0	0.0	0.0	0.0	1,048.5
1943 / 44	1.5	4.0	28.5	233.0	80.7	49.0	41.5	438.2	0.0	0.0	0.0	0.0	0.0	0.0	438.2
1944 / 45	0.2	243.0	170.5	199.0	239.5	41.5	41.0	934.7	0.0	0.0	0.0	0.0	0.0	0.0	934.7
1945 / 46	5.5	68.5	111.7	48.5	246.0	71.1	0.0	551.3	0.0	0.0	0.0	0.0	0.0	0.0	551.3
1946 / 47	1.2	5.5	47.0	161.0	26.3	32.0	16.8	289.8	0.0	0.0	0.0	0.0	0.0	0.0	289.8
1947 / 48	65.0	61.5	33.0	112.5	114.5	139.5	31.5	557.5	0.0	0.0	0.0	0.0	0.0	0.0	557.5
1948 / 49	2.0	69.5	136.5	93.0	173.5	193.5	135.5	803.5	0.0	0.0	0.0	0.0	0.0	0.0	803.5
1949 / 50	0.0	3.0	231.0	209.5	85.5	90.0	35.0	654.0	32.0	0.0	0.0	0.0	0.0	32.0	686.0
1950 / 51	0.0	18.0	15.0	114.0	131.5	53.0	0.0	331.5	0.0	0.0	0.0	0.0	0.0	0.0	331.5
1951 / 52	4.4	47.3	330.5	81.5	182.5	188.0	2.0	836.2	2.0	0.0	0.0	0.0	0.0	2.0	838.2
1952 / 53	14.0	13.0	26.5	129.0	176.5	233.5	15.5	608.0	0.0	0.0	0.0	0.0	0.0	0.0	608.0
1953 / 54	0.0	145.6	118.5	110.8	226.5	31.5	52.7	685.6	0.0	0.0	0.0	0.0	0.0	0.0	685.6
1954 / 55	0.5	49.9	126.7	5.3	57.1	122.7	27.8	390.0	1.5	0.0	0.0	0.0	0.0	1.5	391.5
1955 / 56	15.0	146.8	131.9	172.6	28.0	122.0	34.0	650.3	0.0	0.0	0.0	0.0	0.0	0.0	650.3
1956 / 57	0.0	0.0	170.0	107.5	151.0	172.5	21.5	622.5	35.5	0.0	0.0	0.0	0.0	35.5	658.0
1957 / 58	10.5	36.7	117.3	197.0	13.0	16.0	25.0	415.5	0.0	0.0	0.0	0.0	0.0	0.0	415.5
1958 / 59	0.0	0.0	22.2	116.5	147.2	69.0	7.0	361.9	0.0	0.0	0.0	0.0	0.0	0.0	361.9
1959 / 60	0.0	12.5	8.0	126.7	37.0	135.0	25.0	344.2	0.0	0.0	0.0	0.0	0.0	0.0	344.2
1960 / 61	0.0	110.5	67.5	136.0	128.2	47.5	40.5	530.2	3.0	0.0	0.0	0.0	0.0	3.0	533.2
1961 / 62	2.3	17.2	358.0	107.5	102.0	0.0	31.0	618.0	1.5	0.0	0.0	0.0	0.0	1.5	619.5
1962 / 63	17.5	0.0	65.2	66.7	152.3	85.5	41.7	428.9	31.3	0.0	0.0	0.0	0.0	31.3	460.2
1963 / 64	51.4	40.0	162.8	112.9	189.6	120.8	12.5	690.0	10.0	0.0	0.0	0.0	0.0	10.0	700.0
1964 / 65	0.0	134.8	70.2	183.0	103.0	49.9	68.0	608.9	0.0	0.0	0.0	0.0	0.0	0.0	608.9
1965 / 66	73.4	17.2	75.6	64.9	89.2	131.1	3.8	455.2	0.9	0.0	0.0	0.0	0.0	0.9	456.1
1966 / 67	30.7	14.4	254.5	203.8	94.2	213.9	7.3	818.8	7.2	0.0	0.0	0.0	0.0	7.2	826.0
1967 / 68	19.9	87.4	118.8	168.7	48.3	14.0	19.5	476.6	2.1	0.0	0.0	0.0	0.0	2.1	478.7
1968 / 69	18.0	19.2	208.2	248.3	36.9	186.9	44.9	762.4	0.0	0.0	0.0	0.0	0.0	0.0	762.4
1969 / 70	39.0	35.7	75.0	330.0	51.5	182.9	35.5	749.6	0.0	0.0	0.0	0.0	0.0	0.0	749.6
1970 / 71	0.0	0.0	102.5	64.3	129.5	49.7	251.5	597.5	0.0	0.0	0.0	0.0	0.0	0.0	597.5
1971 / 72	0.0	50.4	179.2	83.0	125.0	75.1	40.5	553.2	0.0	0.0	0.0	0.0	0.0	0.0	553.2
1972 / 73	0.0	32.9	16.4	153.8	27.0	72.0	0.0	302.1	0.0	0.0	0.0	0.0	0.0	0.0	302.1
1973 / 74	9.7	118.8	50.5	221.0	121.5	52.7	31.1	605.3	0.0	0.0	0.0	0.0	0.0	0.0	605.3
1974 / 75	0.0	32.0	68.5	28.5	161.0	141.8	14.0	445.8	0.0	0.0	0.0	0.0	0.0	0.0	445.8
1975 / 76	0.0	52.4	102.3	67.1	104.7	69.3	36.1	431.9	7.0	0.0	0.0	0.0	0.0	7.0	438.9
1976 / 77	8.0	54.2	14.7	120.2	59.2	84.8	83.8	424.9	0.0	0.0	0.0	0.0	0.0	0.0	424.9
1977 / 78	35.4	6.8	166.8	66.5	31.5	89.2	9.0	405.2	0.0	0.0	0.0	0.0	0.0	0.0	405.2
1978 / 79	5.0	2.0	81.4	59.6	49.5	69.0	4.0	270.5	0.0	0.0	0.0	0.0	0.0	0.0	270.5
1979 / 80	0.0	129.5	261.8	134.2	81.0	119.0	22.5	748.0	0.0	0.0	0.0	0.0	0.0	0.0	748.0
1980 / 81	13.2	1.0	122.5	48.5	56.0	22.4	24.3	287.9	0.0	0.0	0.0	0.0	0.0	0.0	287.9
1981 / 82	0.0	42.7	24.6	82.3	176.0	81.2	10.1	416.9	4.9	0.0	0.0	0.0	0.0	4.9	421.8
1982 / 83	0.0	0.0	0.0	0.0	0.0	107.5	65.0	172.5	0.0	0.0	0.0	0.0	0.0	0.0	172.5
1983 / 84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984 / 85	4.5	0.0	0.0	62.0	0.0	31.0	0.0	97.5	0.0	0.0	0.0	0.0	0.0	0.0	97.5
1985 / 86	0.0	0.0	39.0	99.0	111.0	14.0	31.0	294.0	0.0	0.0	0.0	0.0	0.0	0.0	294.0
1986 / 87	22.2	201.4	97.0	175.0	16.0	49.0	0.0	560.6	0.0	0.0	0.0	0.0	0.0	0.0	560.6
1987 / 88	0.0	13.0	73.4	107.0	134.0	98.1	29.0	454.5	0.0	0.0	0.0	0.0	0.0	0.0	454.5
1988 / 89	0.0	34.0	336.0	28.9	50.7	100.0	4.0	553.6	0.0	0.0	0.0	0.0	0.0	0.0	553.6
1989 / 90	0.0	83.0	93.0	193.0	67.2	81.0	36.0	553.2	0.0	0.0	0.0	0.0	0.0	0.0	553.2
1990 / 91	7.0	28.0	9.0	169.5	115.0	135.0	30.0	493.5	0.0	0.0	0.0	0.0	0.0	0.0	493.5
1991 / 92	32.0	76.0	350.0	259.8	397.1	44.1	0.0	1,159.0	7.0	0.0	0.0	0.0	0.0	7.0	1,166.0
1992 / 93	0.0	61.0	214.5	123.5	131.0	58.0	0.0	588.0	26.0	0.0	0.0	0.0	0.0	26.0	614.0
1993 / 94	7.0	29.8	38.0	177.5	94.1	121.5	17.0	484.9	0.0	0.0	0.0	0.0	0.0	0.0	484.9
1994 / 95	14.0	189.9	205.3	36.5	95.9	47.5	30.4	619.5	0.0	0.0	0.0	0.0	0.0	0.0	619.5
1995 / 96	0.4	72.5	50.3	189.8	24.4	220.7	14.1	572.2	0.0	0.0	0.0	0.0	0.0	0.0	572.2
1996 / 97	41.2	32.2	75.8	120.8	241.6	155.0	18.0	684.6	14.5	0.0	0.0	0.0	0.0	14.5	699.1
1997 / 98	36.6	100.4	166.8	197.0	76.0	234.5	16.0	827.3	0.0	0.0	0.0	0.0	0.0	0.0	827.3
1998 / 99	0.0	1.0	43.0	144.6	71.8	46.6	17.0	324.0	0.0	0.0	0.0	0.0	0.0	0.0	324.0
Max.	156.0	243.0	358.0	330.0	397.1	234.5	251.5	1,159.0	35.5	0.0	0.0	0.0	0.0	35.5	1,166.0
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.5	0.0	0.0	0.0	0.0	0.0	0.0	97.5
Mean	13.0	56.9	112.1	135.3	108.0	100.0	30.1	555.3	3.6	0.0	0.0	0.0	0.0	3.6	558.9
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	200.6

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

Station Name : Mafraq Airport										ID No.: AD0019					
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	7.0	5.4	31.6	31.9	46.5	35.8	3.5	161.7	0.0	0.0	0.0	0.0	0.0	0.0	161.7
1964 / 65	0.0	15.5	50.5	85.7	9.7	6.6	18.5	186.5	0.0	0.0	0.0	0.0	0.0	0.0	186.5
1965 / 66	23.4	2.9	8.8	21.6	17.8	67.8	0.5	142.8	0.0	0.0	0.0	0.0	0.0	0.0	142.8
1966 / 67	15.0	17.3	75.1	52.4	23.1	59.7	0.0	242.6	18.3	0.0	0.0	0.0	0.0	18.3	260.9
1967 / 68	28.7	26.1	11.3	38.2	15.0	18.7	15.9	153.9	4.3	0.0	0.0	0.0	0.0	4.3	158.2
1968 / 69	1.3	7.7	32.2	47.3	8.6	50.9	10.8	158.8	4.3	0.0	0.0	0.0	0.0	4.3	163.1
1969 / 70	18.2	15.1	4.1	25.4	16.3	32.6	6.7	118.4	0.0	0.0	0.0	0.0	0.0	0.0	118.4
1970 / 71	2.9	8.2	22.9	36.0	28.8	20.0	52.6	171.4	0.0	0.0	0.0	0.0	0.0	0.0	171.4
1971 / 72	0.1	16.9	51.8	18.1	43.6	0.0	14.4	144.9	1.2	0.0	0.0	0.0	0.0	1.2	146.1
1972 / 73	0.5	24.7	2.3	32.5	2.6	19.4	5.7	87.7	0.5	0.0	0.0	0.0	0.0	0.5	88.2
1973 / 74	0.6	24.6	9.2	99.3	57.5	21.2	12.7	225.1	0.0	0.0	0.0	0.0	0.0	0.0	225.1
1974 / 75	0.0	16.4	22.5	8.6	75.9	21.4	20.5	165.3	0.0	0.0	0.0	0.0	0.0	0.0	165.3
1975 / 76	0.0	11.2	22.1	13.2	32.8	56.1	5.0	140.4	10.0	0.0	0.0	0.0	0.0	10.0	150.4
1976 / 77	4.3	4.5	2.2	35.6	8.3	18.5	15.1	88.5	0.0	0.0	0.0	0.0	0.0	0.0	88.5
1977 / 78	9.1	2.0	38.9	21.2	13.7	19.2	4.5	108.6	0.0	0.0	0.0	0.0	0.0	0.0	108.6
1978 / 79	4.0	1.0	21.7	15.7	17.0	9.4	0.5	69.3	0.0	0.0	0.0	0.0	0.0	0.0	69.3
1979 / 80	22.8	77.6	61.3	37.9	47.7	41.4	11.3	300.0	0.0	0.0	0.0	0.0	0.0	0.0	300.0
1980 / 81	0.0	4.7	93.9	15.8	30.9	32.8	5.1	183.2	0.0	0.0	0.0	0.0	0.0	0.0	183.2
1981 / 82	0.0	15.2	3.7	18.1	24.7	9.7	26.5	97.9	18.9	0.0	0.0	0.0	0.0	18.9	116.8
1982 / 83	4.2	37.3	16.0	21.4	45.1	3.0	0.6	127.6	2.0	0.0	0.0	0.0	0.0	2.0	129.6
1983 / 84	0.0	15.0	3.8	34.2	9.7	49.9	1.6	114.2	0.0	0.0	0.0	0.0	0.0	0.0	114.2
1984 / 85	20.0	16.1	22.6	0.0	84.1	26.2	4.2	173.2	1.4	0.0	0.0	0.0	0.0	1.4	174.6
1985 / 86	0.4	1.5	19.2	17.4	41.3	3.2	3.2	86.2	1.9	0.0	0.0	0.0	0.0	1.9	88.1
1986 / 87	7.6	101.2	17.9	27.7	15.0	28.9	0.0	198.3	0.0	0.0	0.0	0.0	0.0	0.0	198.3
1987 / 88	20.6	6.1	37.2	79.4	70.4	33.3	11.7	258.7	0.0	0.0	0.0	0.0	0.0	0.0	258.7
1988 / 89	0.0	11.9	133.7	30.7	19.5	15.4	0.0	211.2	0.0	0.0	0.0	0.0	0.0	0.0	211.2
1989 / 90	0.0	13.9	29.5	45.9	28.3	36.9	17.0	171.5	0.0	0.0	0.0	0.0	0.0	0.0	171.5
1990 / 91	3.0	17.7	0.0	46.6	28.1	34.4	0.6	130.4	0.0	0.0	0.0	0.0	0.0	0.0	130.4
1991 / 92	10.7	25.3	79.9	195.0	102.0	14.2	0.2	427.3	3.2	0.0	0.0	0.0	0.0	3.2	430.5
1992 / 93	0.0	16.2	49.6	26.4	22.1	15.9	0.0	130.2	3.7	0.0	0.0	0.0	0.0	3.7	133.9
1993 / 94	0.8	6.8	7.5	52.5	21.5	31.7	0.0	120.8	0.0	0.0	0.0	0.0	0.0	0.0	120.8
1994 / 95	7.2	96.8	47.6	0.7	34.4	16.0	2.7	205.4	0.0	0.0	0.0	0.0	0.0	0.0	205.4
1995 / 96	0.0	12.6	9.2	59.2	8.6	53.5	4.6	147.7	0.0	0.0	0.0	0.0	0.0	0.0	147.7
1996 / 97	8.7	20.7	17.9	45.0	39.0	24.6	0.7	156.6	1.2	0.0	0.0	0.0	0.0	1.2	157.8
1997 / 98	11.6	26.3	31.2	33.2	7.5	57.1	5.0	171.9	0.0	0.0	0.0	0.0	0.0	0.0	171.9
1998 / 99	0.0	0.0	0.0	19.0	36.1	2.5	0.7	58.3	0.0	0.0	0.0	0.0	0.0	0.0	58.3
Max.	28.7	101.2	133.7	195.0	102.0	67.8	52.6	427.3	18.9	0.0	0.0	0.0	0.0	18.9	430.5
Min.	0.0	0.0	0.0	0.0	2.6	0.0	0.0	58.3	0.0	0.0	0.0	0.0	0.0	0.0	58.3
Mean	6.5	20.1	30.2	38.6	31.5	27.4	7.9	162.1	2.0	0.0	0.0	0.0	0.0	2.0	164.1
Source: WIS database of MWI.														Std. Dev.	69.0

Table A2.1.1-3(4) Monthly Average and Annual Rainfall in Mafrq Governorate

Station Name : Bal'ama		ID No.: AL0003													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1950 / 51	0.0	19.8	7.0	18.0	31.0	26.0	0.0	101.8	0.0	0.0	0.0	0.0	0.0	0.0	101.8
1951 / 52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1952 / 53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1953 / 54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1954 / 55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1955 / 56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1956 / 57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1957 / 58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1958 / 59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1959 / 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1960 / 61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1961 / 62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1962 / 63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1963 / 64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1964 / 65	0.0	38.4	49.4	12.1	0.0	16.5	42.1	158.5	0.0	0.0	0.0	0.0	0.0	0.0	158.5
1965 / 66	19.0	3.0	18.0	13.0	12.0	92.0	0.0	157.0	0.0	0.0	0.0	0.0	0.0	0.0	157.0
1966 / 67	21.0	6.8	135.0	61.7	24.0	68.0	0.0	316.5	42.0	0.0	0.0	0.0	0.0	42.0	358.5
1967 / 68	13.8	44.6	61.4	78.8	26.0	2.0	0.0	226.6	0.0	0.0	0.0	0.0	0.0	0.0	226.6
1968 / 69	0.0	6.0	53.2	92.9	14.9	85.8	12.5	265.3	0.0	0.0	0.0	0.0	0.0	0.0	265.3
1969 / 70	17.0	13.0	11.3	47.4	30.4	91.7	13.4	224.2	0.0	0.0	0.0	0.0	0.0	0.0	224.2
1970 / 71	0.0	5.5	53.9	40.9	42.4	58.2	163.4	364.3	0.0	0.0	0.0	0.0	0.0	0.0	364.3
1971 / 72	0.0	18.0	80.7	11.7	72.4	50.0	12.7	245.5	0.0	0.0	0.0	0.0	0.0	0.0	245.5
1972 / 73	0.0	33.0	0.4	52.6	15.0	49.6	7.9	158.5	0.0	0.0	0.0	0.0	0.0	0.0	158.5
1973 / 74	0.0	54.5	27.0	130.4	65.3	10.0	14.0	301.2	0.0	0.0	0.0	0.0	0.0	0.0	301.2
1974 / 75	0.0	0.0	20.0	4.3	99.7	45.3	0.0	169.3	0.0	0.0	0.0	0.0	0.0	0.0	169.3
1975 / 76	0.0	11.8	32.6	18.2	50.8	69.0	5.5	187.9	0.0	0.0	0.0	0.0	0.0	0.0	187.9
1976 / 77	5.0	20.0	0.0	38.1	17.0	47.5	27.7	155.3	0.0	0.0	0.0	0.0	0.0	0.0	155.3
1977 / 78	19.8	0.0	63.4	15.5	19.2	40.0	0.0	157.9	0.0	0.0	0.0	0.0	0.0	0.0	157.9
1978 / 79	4.8	0.0	34.0	16.3	29.5	40.5	0.0	125.1	0.0	0.0	0.0	0.0	0.0	0.0	125.1
1979 / 80	15.0	62.7	77.6	70.0	82.0	56.9	13.0	377.2	0.0	0.0	0.0	0.0	0.0	0.0	377.2
1980 / 81	0.0	7.0	72.9	25.5	61.4	28.8	7.6	203.2	0.0	0.0	0.0	0.0	0.0	0.0	203.2
1981 / 82	0.0	15.8	2.2	46.0	46.5	30.9	16.0	157.4	3.0	0.0	0.0	0.0	0.0	3.0	160.4
1982 / 83	7.6	23.1	14.1	81.7	97.5	84.5	1.0	309.5	0.0	0.0	0.0	0.0	0.0	0.0	309.5
1983 / 84	0.0	0.0	0.0	30.0	24.0	85.5	7.6	147.1	0.0	0.0	0.0	0.0	0.0	0.0	147.1
1984 / 85	7.0	15.3	19.7	40.0	114.6	13.1	6.6	216.3	6.0	0.0	0.0	0.0	0.0	6.0	222.3
1985 / 86	5.5	4.2	13.8	19.5	70.0	4.0	7.3	124.3	8.0	0.0	0.0	0.0	0.0	8.0	132.3
1986 / 87	7.0	94.5	25.0	61.8	23.0	31.6	0.0	242.9	0.0	0.0	0.0	0.0	0.0	0.0	242.9
1987 / 88	11.0	5.0	62.1	63.6	137.1	37.7	7.5	324.0	0.0	0.0	0.0	0.0	0.0	0.0	324.0
1988 / 89	13.3	7.7	119.0	32.5	12.5	15.0	0.0	200.0	0.0	0.0	0.0	0.0	0.0	0.0	200.0
1989 / 90	0.0	15.3	13.3	70.6	16.9	19.0	5.5	140.6	0.0	0.0	0.0	0.0	0.0	0.0	140.6
1990 / 91	0.0	5.5	0.0	24.3	18.9	35.7	3.0	87.4	0.0	0.0	0.0	0.0	0.0	0.0	87.4
1991 / 92	2.6	5.0	147.3	11.8	65.8	7.0	0.0	239.5	0.0	0.0	0.0	0.0	0.0	0.0	239.5
1992 / 93	0.0	8.5	27.9	86.0	12.5	0.1	0.0	135.0	3.0	0.0	0.0	0.0	0.0	3.0	138.0
1993 / 94	1.0	4.1	4.0	74.5	19.0	26.0	0.0	128.6	0.0	0.0	0.0	0.0	0.0	0.0	128.6
1994 / 95	0.5	81.0	62.6	0.2	41.5	19.5	4.0	209.3	0.0	0.0	0.0	0.0	0.0	0.0	209.3
1995 / 96	0.0	14.0	5.5	54.0	3.5	82.5	3.0	162.5	0.0	0.0	0.0	0.0	0.0	0.0	162.5
1996 / 97	3.9	38.5	22.5	75.9	74.4	49.5	1.5	266.2	0.0	0.0	0.0	0.0	0.0	0.0	266.2
1997 / 98	5.0	8.5	61.0	103.2	15.5	130.5	3.0	326.7	0.0	0.0	0.0	0.0	0.0	0.0	326.7
1998 / 99	0.0	0.0	0.0	28.5	47.0	0.0	6.5	82.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0
Max.	21.0	94.5	147.3	130.4	137.1	130.5	163.4	377.2	42.0	0.0	0.0	0.0	0.0	42.0	377.2
Min.	0.0	0.0	0.0	0.2	0.0	0.0	0.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0
Mean	5.0	19.2	38.8	45.9	42.6	43.1	10.9	205.4	1.7	0.0	0.0	0.0	0.0	1.7	207.1
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	79.3

Table A2.1.1-3(5) Monthly Average and Annual Rainfall in Mafraq Governorate

Station Name : Khaldiya		ID No.: AL0048													
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	25.5	11.0	9.0	18.0	8.0	19.0	2.5	93.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0
1968 / 69	3.5	22.5	13.4	18.8	6.5	52.2	3.2	120.1	0.0	0.0	0.0	0.0	0.0	0.0	120.1
1969 / 70	6.9	9.6	0.0	15.9	4.1	29.3	4.0	69.8	0.0	0.0	0.0	0.0	0.0	0.0	69.8
1970 / 71	0.0	0.0	14.4	43.7	7.4	11.9	46.8	124.2	0.0	0.0	0.0	0.0	0.0	0.0	124.2
1971 / 72	0.0	0.0	37.2	6.4	25.7	30.4	21.3	121.0	0.0	0.0	0.0	0.0	0.0	0.0	121.0
1972 / 73	0.0	0.0	0.0	20.0	0.0	41.6	5.8	67.4	0.0	0.0	0.0	0.0	0.0	0.0	67.4
1973 / 74	0.0	39.0	16.0	225.5	85.3	5.9	8.0	379.7	0.0	0.0	0.0	0.0	0.0	0.0	379.7
1974 / 75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975 / 76	0.0	0.0	14.8	8.2	42.7	31.6	10.5	107.8	0.0	0.0	0.0	0.0	0.0	0.0	107.8
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	25.5	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-
1978 / 79	0.0	0.0	15.9	23.2	21.3	9.6	0.0	70.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0
1979 / 80	16.0	68.0	65.0	42.0	37.5	60.3	19.2	308.0	0.0	0.0	0.0	0.0	0.0	0.0	308.0
1980 / 81	0.0	2.0	56.6	11.0	20.0	11.0	1.0	101.6	0.0	0.0	0.0	0.0	0.0	0.0	101.6
1981 / 82	0.0	12.3	2.0	43.9	27.5	18.1	7.2	111.0	14.8	0.0	0.0	0.0	0.0	14.8	125.8
1982 / 83	0.0	31.0	14.0	35.0	36.0	37.0	0.0	153.0	18.5	0.0	0.0	0.0	0.0	18.5	171.5
1983 / 84	0.0	0.0	0.0	26.0	17.5	58.2	0.0	101.7	0.0	0.0	0.0	0.0	0.0	0.0	101.7
1984 / 85	32.2	7.8	14.5	5.2	44.8	31.3	1.0	136.8	0.0	0.0	0.0	0.0	0.0	0.0	136.8
1985 / 86	2.0	2.1	11.4	12.0	20.5	2.2	6.3	56.5	3.9	0.0	0.0	0.0	0.0	3.9	60.4
1986 / 87	6.5	75.9	10.2	24.4	9.0	43.4	0.0	169.4	0.0	0.0	0.0	0.0	0.0	0.0	169.4
1987 / 88	22.5	5.7	40.7	49.9	80.1	43.9	12.0	254.8	0.0	0.0	0.0	0.0	0.0	0.0	254.8
1988 / 89	0.5	10.8	100.6	29.8	5.9	10.0	0.0	157.6	0.0	0.0	0.0	0.0	0.0	0.0	157.6
1989 / 90	0.0	19.1	13.9	24.5	22.0	17.9	13.0	110.4	0.0	0.0	0.0	0.0	0.0	0.0	110.4
1990 / 91	5.0	1.5	0.0	42.1	22.7	23.5	0.0	94.8	0.0	0.0	0.0	0.0	0.0	0.0	94.8
1991 / 92	4.1	12.8	89.4	49.6	85.0	4.5	0.0	245.4	0.0	0.0	0.0	0.0	0.0	0.0	245.4
1992 / 93	0.0	24.9	26.6	22.8	15.0	11.8	0.0	101.1	7.3	0.0	0.0	0.0	0.0	7.3	108.4
1993 / 94	2.0	0.4	2.5	41.2	9.3	10.0	0.0	65.4	0.0	0.0	0.0	0.0	0.0	0.0	65.4
1994 / 95	8.9	72.5	47.2	1.2	26.2	12.7	1.3	170.0	0.0	0.0	0.0	0.0	0.0	0.0	170.0
1995 / 96	0.0	11.9	10.2	59.8	0.2	43.2	4.0	129.3	0.0	0.0	0.0	0.0	0.0	0.0	129.3
1996 / 97	3.1	17.1	18.0	67.9	28.6	16.5	0.5	151.7	0.0	0.0	0.0	0.0	0.0	0.0	151.7
1997 / 98	16.2	8.5	30.7	52.5	10.0	54.1	1.5	173.5	0.0	0.0	0.0	0.0	0.0	0.0	173.5
1998 / 99	0.0	0.0	0.0	16.9	22.0	4.7	4.0	47.6	0.0	0.0	0.0	0.0	0.0	0.0	47.6
Max.	32.2	75.9	100.6	225.5	85.3	60.3	46.8	379.7	18.5	0.0	0.0	0.0	0.0	18.5	379.7
Min.	0.0	0.0	0.0	1.2	0.0	2.2	0.0	47.6	0.0	0.0	0.0	0.0	0.0	0.0	47.6
Mean	6.0	16.1	23.2	35.8	25.5	25.7	6.0	137.7	1.5	0.0	0.0	0.0	0.0	1.5	139.2
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	74.6

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

Station Name : Um El-Jumal Evap. Station		ID No.: AL0059													
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	35.0	26.0	2.0	90.0	16.0	19.0	5.0	193.0	3.0	0.0	0.0	0.0	0.0	3.0	196.0
1968 / 69	5.8	21.6	29.2	54.0	10.0	59.7	6.9	187.2	1.8	0.0	0.0	0.0	0.0	1.8	189.0
1969 / 70	12.6	11.6	3.0	16.6	13.3	26.5	7.1	90.7	0.0	0.0	0.0	0.0	0.0	0.0	90.7
1970 / 71	0.0	6.1	25.3	32.3	17.3	19.4	42.8	143.2	0.0	0.0	0.0	0.0	0.0	0.0	143.2
1971 / 72	0.0	21.8	50.1	29.0	36.4	33.5	39.5	210.3	1.0	0.0	0.0	0.0	0.0	1.0	211.3
1972 / 73	1.1	24.8	0.6	31.9	8.3	25.4	7.2	99.3	3.4	0.0	0.0	0.0	0.0	3.4	102.7
1973 / 74	2.0	19.1	6.4	97.9	56.1	8.6	10.3	200.4	0.0	0.0	0.0	0.0	0.0	0.0	200.4
1974 / 75	0.0	12.0	15.6	6.8	70.9	19.1	7.8	132.2	0.0	0.0	0.0	0.0	0.0	0.0	132.2
1975 / 76	0.0	9.2	17.5	0.0	0.0	0.0	0.0	26.7	0.0	0.0	0.0	0.0	0.0	0.0	26.7
1976 / 77	0.0	4.1	0.0	26.7	13.2	18.3	13.7	76.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0
1977 / 78	9.0	2.5	35.6	12.6	5.5	18.2	0.0	83.4	0.0	0.0	0.0	0.0	0.0	0.0	83.4
1978 / 79	3.4	3.0	20.7	16.8	15.7	5.4	5.7	70.7	0.0	0.0	0.0	0.0	0.0	0.0	70.7
1979 / 80	0.0	60.7	53.0	29.8	31.0	35.8	5.8	216.1	0.0	0.0	0.0	0.0	0.0	0.0	216.1
1980 / 81	0.7	1.6	65.6	5.8	26.3	13.9	4.6	118.5	0.0	0.0	0.0	0.0	0.0	0.0	118.5
1981 / 82	0.0	14.0	1.1	28.6	32.7	9.2	16.7	102.3	16.4	0.0	0.0	0.0	0.0	16.4	118.7
1982 / 83	16.0	22.1	10.6	18.4	39.2	24.1	0.9	131.3	13.5	0.0	0.0	0.0	0.0	13.5	144.8
1983 / 84	0.0	13.9	1.4	30.3	9.0	49.2	1.0	104.8	0.0	0.0	0.0	0.0	0.0	0.0	104.8
1984 / 85	8.5	32.2	19.5	11.5	55.2	31.5	2.3	160.7	1.0	0.0	0.0	0.0	0.0	1.0	161.7
1985 / 86	0.0	0.6	18.7	4.1	23.5	0.0	0.0	46.9	0.0	0.0	0.0	0.0	0.0	0.0	46.9
1986 / 87	5.4	85.5	6.8	11.4	6.9	32.2	0.0	148.2	0.0	0.0	0.0	0.0	0.0	0.0	148.2
1987 / 88	5.2	7.5	29.9	70.6	52.5	39.5	14.5	219.7	0.0	0.0	0.0	0.0	0.0	0.0	219.7
1988 / 89	0.0	12.8	41.8	22.4	8.5	16.0	0.0	101.5	0.0	0.0	0.0	0.0	0.0	0.0	101.5
1989 / 90	3.9	8.3	22.5	31.1	25.6	19.5	7.0	117.9	0.0	0.0	0.0	0.0	0.0	0.0	117.9
1990 / 91	2.5	6.0	2.8	51.5	12.4	37.3	0.0	112.5	2.2	0.0	0.0	0.0	0.0	2.2	114.7
1991 / 92	2.7	11.8	68.6	36.1	63.1	8.6	0.0	190.9	0.5	0.0	0.0	0.0	0.0	0.5	191.4
1992 / 93	0.0	9.5	22.7	24.7	17.4	14.6	0.0	88.9	4.0	0.0	0.0	0.0	0.0	4.0	92.9
1993 / 94	0.0	1.5	0.5	30.3	7.6	13.5	0.0	53.4	0.0	0.0	0.0	0.0	0.0	0.0	53.4
1994 / 95	2.0	63.2	29.2	0.0	39.6	7.0	0.0	141.0	0.0	0.0	0.0	0.0	0.0	0.0	141.0
1995 / 96	0.0	6.3	9.3	27.0	4.8	21.7	1.4	70.5	0.0	0.0	0.0	0.0	0.0	0.0	70.5
1996 / 97	6.5	16.0	14.5	33.0	12.0	7.0	0.0	89.0	2.3	0.0	0.0	0.0	0.0	2.3	91.3
1997 / 98	5.5	21.7	22.5	18.2	11.0	29.3	0.0	108.2	0.0	0.0	0.0	0.0	0.0	0.0	108.2
1998 / 99	0.0	0.0	1.5	8.5	4.8	2.2	0.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0
Max.	35.0	85.5	68.6	97.9	70.9	59.7	42.8	219.7	16.4	0.0	0.0	0.0	0.0	16.4	219.7
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0
Mean	4.0	17.4	20.3	28.4	23.3	20.8	6.3	120.4	1.5	0.0	0.0	0.0	0.0	1.5	121.9
Std. Dev.														54.3	

Source: WIS database of MWI.

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

Station Name : Um El-Quttein		ID No.: F0001													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1946 / 47	0.0	11.0	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-
1947 / 48	0.0	5.0	0.0	8.0	30.0	15.0	0.0	58.0	0.0	0.0	0.0	0.0	0.0	0.0	58.0
1948 / 49	0.0	0.0	0.0	32.0	26.0	0.0	0.0	58.0	0.0	0.0	0.0	0.0	0.0	0.0	58.0
1949 / 50	0.0	0.0	81.0	50.0	46.0	21.0	16.0	214.0	15.0	0.0	0.0	0.0	0.0	15.0	229.0
1950 / 51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1951 / 52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1952 / 53	0.0	0.0	22.0	39.0	55.0	106.0	37.0	259.0	0.0	0.0	0.0	0.0	0.0	0.0	259.0
1953 / 54	0.0	20.0	29.0	12.0	69.0	0.0	22.0	152.0	0.0	0.0	0.0	0.0	0.0	0.0	152.0
1954 / 55	0.0	13.0	55.0	0.0	14.0	26.0	3.0	111.0	7.0	0.0	0.0	0.0	0.0	7.0	118.0
1955 / 56	0.0	68.0	56.0	36.0	14.0	47.0	11.0	232.0	0.0	0.0	0.0	0.0	0.0	0.0	232.0
1956 / 57	0.0	2.0	33.0	73.0	43.0	80.0	35.0	266.0	22.0	0.0	0.0	0.0	0.0	22.0	288.0
1957 / 58	0.0	13.0	16.0	58.0	8.0	0.0	8.0	103.0	0.0	0.0	0.0	0.0	0.0	0.0	103.0
1958 / 59	0.0	0.0	0.0	19.0	45.0	18.0	3.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0
1959 / 60	0.0	6.0	11.0	32.0	1.0	33.0	1.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0
1960 / 61	0.0	20.0	13.0	42.0	46.0	14.0	7.0	142.0	0.0	0.0	0.0	0.0	0.0	0.0	142.0
1961 / 62	15.0	15.0	67.0	42.5	34.0	1.0	18.0	192.5	0.0	0.0	0.0	0.0	0.0	0.0	192.5
1962 / 63	1.0	0.0	10.0	6.5	77.5	22.0	14.7	131.7	3.0	0.0	0.0	0.0	0.0	3.0	134.7
1963 / 64	9.0	7.0	46.5	52.0	58.5	42.0	12.0	227.0	0.0	0.0	0.0	0.0	0.0	0.0	227.0
1964 / 65	0.0	33.0	48.0	88.0	18.0	12.5	28.0	227.5	0.0	0.0	0.0	0.0	0.0	0.0	227.5
1965 / 66	33.0	14.5	11.5	24.0	32.0	102.5	0.0	217.5	0.0	0.0	0.0	0.0	0.0	0.0	217.5
1966 / 67	25.5	36.0	83.5	73.0	35.0	89.0	0.0	342.0	32.0	0.0	0.0	0.0	0.0	32.0	374.0
1967 / 68	29.0	40.0	21.5	40.0	20.0	7.0	9.0	166.5	25.0	0.0	0.0	0.0	0.0	25.0	191.5
1968 / 69	7.5	13.5	47.5	37.5	13.0	76.0	11.5	206.5	0.0	0.0	0.0	0.0	0.0	0.0	206.5
1969 / 70	13.0	9.5	0.0	13.5	13.0	46.0	0.0	95.0	0.0	0.0	0.0	0.0	0.0	0.0	95.0
1970 / 71	0.0	16.0	67.5	52.0	43.0	22.0	58.0	258.5	0.0	0.0	0.0	0.0	0.0	0.0	258.5
1971 / 72	0.0	11.0	60.0	14.0	34.0	53.0	40.0	212.0	0.0	0.0	0.0	0.0	0.0	0.0	212.0
1972 / 73	0.0	12.5	0.0	37.0	6.5	26.0	3.5	85.5	0.0	0.0	0.0	0.0	0.0	0.0	85.5
1973 / 74	0.0	25.0	13.5	109.5	93.0	25.0	11.0	277.0	0.0	0.0	0.0	0.0	0.0	0.0	277.0
1974 / 75	0.0	0.0	11.0	26.0	99.3	48.0	5.0	189.3	0.0	0.0	0.0	0.0	0.0	0.0	189.3
1975 / 76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	4.0	1.5	10.1	25.0	14.0	40.5	0.0	95.1	0.0	0.0	0.0	0.0	0.0	0.0	95.1
1978 / 79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979 / 80	8.5	50.0	48.0	38.0	65.7	35.5	9.5	255.2	0.0	0.0	0.0	0.0	0.0	0.0	255.2
1980 / 81	3.0	0.0	82.7	13.9	38.0	17.0	4.0	158.6	0.0	0.0	0.0	0.0	0.0	0.0	158.6
1981 / 82	0.0	14.0	3.5	24.5	21.0	20.5	0.0	83.5	9.2	0.0	0.0	0.0	0.0	9.2	92.7
1982 / 83	8.0	14.0	11.0	32.0	28.0	23.0	0.0	116.0	0.0	0.0	0.0	0.0	0.0	0.0	116.0
1983 / 84	0.0	12.3	5.7	39.6	9.0	39.2	1.2	107.0	0.0	0.0	0.0	0.0	0.0	0.0	107.0
1984 / 85	15.5	26.5	24.0	20.0	52.5	38.8	3.0	180.3	2.0	0.0	0.0	0.0	0.0	2.0	182.3
1985 / 86	2.0	7.0	39.0	15.6	40.4	1.0	10.5	115.5	9.4	0.0	0.0	0.0	0.0	9.4	124.9
1986 / 87	15.8	64.0	9.5	17.8	9.0	13.5	0.0	129.6	0.0	0.0	0.0	0.0	0.0	0.0	129.6
1987 / 88	14.4	3.6	60.4	37.5	20.0	45.1	9.0	190.0	0.6	0.0	0.0	0.0	0.0	0.6	190.6
1988 / 89	0.0	4.0	61.1	19.0	5.5	8.0	0.0	97.6	0.0	0.0	0.0	0.0	0.0	0.0	97.6
1989 / 90	0.2	9.0	24.5	41.0	57.5	28.5	7.5	168.2	0.0	0.0	0.0	0.0	0.0	0.0	168.2
1990 / 91	0.0	9.0	14.0	35.0	42.0	45.5	2.5	148.0	0.0	0.0	0.0	0.0	0.0	0.0	148.0
1991 / 92	1.0	0.0	58.0	44.5	54.0	5.0	0.0	162.5	0.0	0.0	0.0	0.0	0.0	0.0	162.5
1992 / 93	0.0	10.0	30.0	30.0	11.0	13.0	0.0	94.0	33.0	0.0	0.0	0.0	0.0	33.0	127.0
1993 / 94	0.0	2.0	5.0	34.0	24.0	18.5	0.0	83.5	0.0	0.0	0.0	0.0	0.0	0.0	83.5
1994 / 95	10.5	39.0	18.0	0.0	24.0	5.0	0.0	96.5	0.0	0.0	0.0	0.0	0.0	0.0	96.5
1995 / 96	0.0	7.0	2.0	30.0	3.5	28.0	0.0	70.5	0.0	0.0	0.0	0.0	0.0	0.0	70.5
1996 / 97	1.0	13.0	21.0	22.1	31.0	13.0	0.5	101.6	0.0	0.0	0.0	0.0	0.0	0.0	101.6
1997 / 98	40.5	11.6	44.3	50.8	18.1	26.5	12.6	204.4	0.0	0.0	0.0	0.0	0.0	0.0	204.4
1998 / 99	0.0	0.0	0.0	9.0	5.0	1.0	1.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0
1999 / 00	0.0	0.0	2.5	47.0	7.0	8.0	0.0	64.5	0.0	0.0	0.0	0.0	0.0	0.0	64.5
Max.	40.5	68.0	83.5	109.5	99.3	106.0	58.0	342.0	33.0	0.0	0.0	0.0	0.0	33.0	374.0
Min.	0.0	0.0	0.0	0.0	1.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0
Mean	5.3	14.1	28.7	34.2	32.4	29.3	8.6	152.7	3.2	0.0	0.0	0.0	0.0	3.2	156.0
Note: "-" data not available. Source: WIS database of MWI.															Std. Dev.
															73.2

Table A2.1.1-4(1) Monthly Average and Annual Rainfall in Irbid Governorate

Station Name : Al-Tayiba		ID No.: AB0001													
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	39.0	9.0	38.0	247.5	139.5	66.1	0.0	539.1	21.3	0.0	0.0	0.0	0.0	21.3	560.4
1938 / 39	0.0	160.5	47.2	78.0	128.0	136.7	42.0	592.4	0.0	0.0	0.0	0.0	0.0	0.0	592.4
1939 / 40	2.0	102.5	63.5	224.0	27.0	45.0	6.0	470.0	0.0	0.0	0.0	0.0	0.0	0.0	470.0
1940 / 41	26.3	75.0	101.2	104.5	28.5	103.5	6.5	445.5	0.0	0.0	0.0	0.0	0.0	0.0	445.5
1941 / 42	20.2	4.5	220.5	67.5	78.0	113.7	0.0	504.4	0.0	0.0	0.0	0.0	0.0	0.0	504.4
1942 / 43	104.8	90.0	10.5	248.8	80.7	118.9	79.0	732.7	0.0	0.0	0.0	0.0	0.0	0.0	732.7
1943 / 44	0.0	0.0	38.8	215.5	93.7	51.4	17.0	416.4	0.0	0.0	0.0	0.0	0.0	0.0	416.4
1944 / 45	3.0	195.1	158.2	188.0	170.8	47.0	32.5	794.6	0.0	0.0	0.0	0.0	0.0	0.0	794.6
1945 / 46	3.5	30.5	99.2	30.0	255.9	49.7	6.0	474.8	0.0	0.0	0.0	0.0	0.0	0.0	474.8
1946 / 47	4.0	0.0	60.5	161.0	18.0	84.5	17.5	345.5	0.0	0.0	0.0	0.0	0.0	0.0	345.5
1947 / 48	9.0	75.5	30.0	78.5	105.5	165.5	29.0	493.0	0.0	0.0	0.0	0.0	0.0	0.0	493.0
1948 / 49	0.0	54.5	126.5	100.5	110.5	171.5	167.5	731.0	0.0	0.0	0.0	0.0	0.0	0.0	731.0
1949 / 50	0.0	0.0	192.0	64.5	97.0	79.0	33.0	465.5	41.0	0.0	0.0	0.0	0.0	41.0	506.5
1950 / 51	26.5	31.0	18.0	74.0	132.0	40.0	12.0	333.5	0.0	0.0	0.0	0.0	0.0	0.0	333.5
1951 / 52	13.5	49.0	242.5	87.5	120.0	101.0	0.0	613.5	0.0	0.0	0.0	0.0	0.0	0.0	613.5
1952 / 53	16.5	14.5	41.5	181.0	142.0	140.0	21.5	557.0	0.0	0.0	0.0	0.0	0.0	0.0	557.0
1953 / 54	2.0	205.0	95.0	126.0	237.0	26.5	70.0	761.5	0.0	0.0	0.0	0.0	0.0	0.0	761.5
1954 / 55	6.5	42.0	104.5	3.0	46.5	86.0	21.5	310.0	3.0	0.0	0.0	0.0	0.0	3.0	313.0
1955 / 56	8.0	145.5	112.0	100.0	35.0	112.0	16.0	528.5	0.0	0.0	0.0	0.0	0.0	0.0	528.5
1956 / 57	0.0	13.6	147.9	94.0	116.4	127.0	45.6	544.5	9.0	0.0	0.0	0.0	0.0	9.0	553.5
1957 / 58	0.0	67.3	185.2	155.8	18.6	11.0	9.5	447.4	1.4	0.0	0.0	0.0	0.0	1.4	448.8
1958 / 59	0.0	0.0	21.1	74.7	144.6	29.6	14.3	284.3	0.0	0.0	0.0	0.0	0.0	0.0	284.3
1959 / 60	0.0	21.2	6.1	77.5	27.0	113.1	28.5	273.4	0.0	0.0	0.0	0.0	0.0	0.0	273.4
1960 / 61	0.0	79.0	61.0	76.0	143.0	36.7	39.0	434.7	16.0	0.0	0.0	0.0	0.0	16.0	450.7
1961 / 62	2.5	27.9	290.0	87.5	65.5	4.0	13.0	490.4	5.0	0.0	0.0	0.0	0.0	5.0	495.4
1962 / 63	15.3	0.0	101.8	88.5	134.5	59.0	38.3	437.4	38.9	0.0	0.0	0.0	0.0	38.9	476.3
1963 / 64	26.5	32.0	117.0	121.0	189.0	123.5	3.5	612.5	9.0	0.0	0.0	0.0	0.0	9.0	621.5
1964 / 65	0.0	138.7	53.7	203.3	55.0	52.5	37.0	540.2	0.0	0.0	0.0	0.0	0.0	0.0	540.2
1965 / 66	111.8	30.6	66.3	45.0	67.0	73.5	0.0	394.2	0.0	0.0	0.0	0.0	0.0	0.0	394.2
1966 / 67	42.8	27.2	194.6	208.5	92.5	167.5	7.0	740.1	16.3	0.0	0.0	0.0	0.0	16.3	756.4
1967 / 68	12.2	66.9	81.9	218.5	52.0	38.8	20.5	490.8	0.0	0.0	0.0	0.0	0.0	0.0	490.8
1968 / 69	10.6	42.9	178.1	184.5	24.5	135.5	7.5	583.6	0.0	0.0	0.0	0.0	0.0	0.0	583.6
1969 / 70	37.0	67.2	25.5	148.3	56.2	173.4	29.8	537.4	0.0	0.0	0.0	0.0	0.0	0.0	537.4
1970 / 71	2.2	15.5	78.6	103.3	184.4	17.5	193.9	595.4	0.0	0.0	0.0	0.0	0.0	0.0	595.4
1971 / 72	0.0	30.0	146.9	100.4	128.8	116.4	22.0	544.5	0.0	0.0	0.0	0.0	0.0	0.0	544.5
1972 / 73	5.0	11.9	38.5	136.6	13.2	77.0	7.0	289.2	16.5	0.0	0.0	0.0	0.0	16.5	305.7
1973 / 74	9.0	79.3	27.0	259.5	74.2	30.4	64.6	544.0	0.0	0.0	0.0	0.0	0.0	0.0	544.0
1974 / 75	0.0	31.4	82.7	48.3	131.2	74.8	0.0	368.4	0.0	0.0	0.0	0.0	0.0	0.0	368.4
1975 / 76	0.0	10.8	95.5	65.0	116.3	76.7	41.6	405.9	0.0	0.0	0.0	0.0	0.0	0.0	405.9
1976 / 77	34.3	101.4	46.5	109.7	38.2	109.9	85.3	525.3	0.0	0.0	0.0	0.0	0.0	0.0	525.3
1977 / 78	36.2	0.8	158.1	49.3	20.6	88.5	9.8	363.3	0.0	0.0	0.0	0.0	0.0	0.0	363.3
1978 / 79	35.1	26.0	67.1	79.2	44.5	71.9	21.2	345.0	0.0	0.0	0.0	0.0	0.0	0.0	345.0
1979 / 80	25.0	108.5	227.0	139.4	136.1	115.7	20.8	772.5	0.0	0.0	0.0	0.0	0.0	0.0	772.5
1980 / 81	13.2	12.0	150.9	167.7	82.3	63.5	17.8	507.4	0.0	0.0	0.0	0.0	0.0	0.0	507.4
1981 / 82	0.0	51.0	28.2	58.2	98.4	78.6	6.2	320.6	2.1	0.0	0.0	0.0	0.0	2.1	322.7
1982 / 83	0.0	65.6	47.3	117.0	166.7	114.2	12.1	522.9	0.0	0.0	0.0	0.0	0.0	0.0	522.9
1983 / 84	2.0	54.5	17.0	104.8	31.8	95.4	98.8	404.3	0.0	0.0	0.0	0.0	0.0	0.0	404.3
1984 / 85	-	-	-	-	-	20.5	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	-
1985 / 86	13.8	19.5	50.5	98.6	105.6	38.1	14.8	340.9	51.0	0.0	0.0	0.0	0.0	51.0	391.9
1986 / 87	11.5	196.6	84.7	69.0	31.1	74.3	2.0	469.2	0.0	0.0	0.0	0.0	0.0	0.0	469.2
1987 / 88	21.8	7.5	153.0	120.3	159.0	101.5	13.5	576.6	0.0	0.0	0.0	0.0	0.0	0.0	576.6
1988 / 89	7.5	37.5	93.2	23.4	55.5	77.5	0.0	294.6	0.0	0.0	0.0	0.0	0.0	0.0	294.6
1989 / 90	19.4	22.6	46.3	146.8	37.9	55.9	2.0	330.9	0.0	0.0	0.0	0.0	0.0	0.0	330.9
1990 / 91	0.0	17.8	38.6	187.0	48.5	143.7	32.1	467.7	6.5	0.0	0.0	0.0	0.0	6.5	474.2
1991 / 92	0.0	101.4	285.9	217.0	219.6	39.6	3.8	867.3	19.5	0.0	0.0	0.0	0.0	19.5	886.8
1992 / 93	0.0	45.4	198.4	54.2	51.1	47.9	0.0	397.0	53.0	0.0	0.0	0.0	0.0	53.0	450.0
1993 / 94	8.2	25.0	21.0	135.1	85.7	84.1	1.1	360.2	0.0	0.0	0.0	0.0	0.0	0.0	360.2
1994 / 95	16.4	171.8	112.3	15.6	81.2	43.3	23.9	464.5	0.0	0.0	0.0	0.0	0.0	0.0	464.5
1995 / 96	0.0	46.7	33.4	164.2	23.5	158.5	14.0	440.3	0.0	0.0	0.0	0.0	0.0	0.0	440.3
1996 / 97	30.5	16.3	51.1	73.3	211.8	67.2	14.7	464.9	2.2	0.0	0.0	0.0	0.0	2.2	467.1
1997 / 98	13.3	29.6	160.9	45.7	56.5	179.8	7.8	493.6	0.0	0.0	0.0	0.0	0.0	0.0	493.6
1998 / 99	0.0	0.0	18.8	71.6	47.1	36.0	7.4	180.9	0.0	0.0	0.0	0.0	0.0	0.0	180.9
Max.	111.8	205.0	290.0	259.5	255.9	179.8	193.9	867.3	53.0	0.0	0.0	0.0	0.0	53.0	886.8
Min.	0.0	0.0	6.1	3.0	13.2	4.0	0.0	180.9	0.0	0.0	0.0	0.0	0.0	0.0	180.9
Mean	13.9	53.0	96.5	116.8	93.6	83.6	25.9	484.9	5.0	0.0	0.0	0.0	0.0	5.0	490.0
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	140.1

Table A2.1.1-4(2) Monthly Average and Annual Rainfall in Irbid Governorate

Station Name : Kh. El-Wahadneh									ID No.: AB0004						
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1950 / 51	1.7	11.6	20.9	55.5	89.1	27.9	7.6	214.3	0.0	0.0	0.0	0.0	0.0	0.0	214.3
1951 / 52	0.0	39.0	216.4	87.1	75.6	78.6	4.0	500.7	0.0	0.0	0.0	0.0	0.0	0.0	500.7
1952 / 53	10.0	20.9	15.6	112.4	123.2	134.6	8.5	425.2	0.0	0.0	0.0	0.0	0.0	0.0	425.2
1953 / 54	0.3	157.9	110.5	94.3	147.0	5.3	23.3	538.6	0.0	0.0	0.0	0.0	0.0	0.0	538.6
1954 / 55	5.0	44.6	119.0	3.0	26.2	39.4	14.1	251.3	3.5	0.0	0.0	0.0	0.0	3.5	254.8
1955 / 56	9.7	110.9	137.8	132.2	11.0	31.5	3.0	436.1	3.0	0.0	0.0	0.0	0.0	3.0	439.1
1956 / 57	0.0	13.5	116.8	66.0	97.7	133.0	17.0	444.0	13.0	0.0	0.0	0.0	0.0	13.0	457.0
1957 / 58	0.0	49.0	107.0	146.6	2.0	7.5	22.0	334.1	0.0	0.0	0.0	0.0	0.0	0.0	334.1
1958 / 59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1959 / 60	0.0	21.0	1.0	45.0	10.0	128.5	0.0	205.5	0.0	0.0	0.0	0.0	0.0	0.0	205.5
1960 / 61	0.0	98.6	55.4	117.4	115.0	18.7	38.8	443.9	14.0	0.0	0.0	0.0	0.0	14.0	457.9
1961 / 62	0.0	5.0	221.1	80.0	49.5	8.0	43.0	406.6	0.0	0.0	0.0	0.0	0.0	0.0	406.6
1962 / 63	10.0	5.5	72.8	68.4	67.7	28.6	15.2	268.2	35.5	0.0	0.0	0.0	0.0	35.5	303.7
1963 / 64	83.8	56.7	127.7	65.5	185.0	99.5	0.7	618.9	0.0	0.0	0.0	0.0	0.0	0.0	618.9
1964 / 65	0.0	94.0	71.0	173.5	40.0	34.0	24.0	436.5	0.0	0.0	0.0	0.0	0.0	0.0	436.5
1965 / 66	70.0	47.0	59.0	36.0	97.3	82.0	0.0	391.3	0.0	0.0	0.0	0.0	0.0	0.0	391.3
1966 / 67	33.0	4.0	198.0	161.0	81.0	140.0	10.0	627.0	32.0	0.0	0.0	0.0	0.0	32.0	659.0
1967 / 68	28.4	54.1	33.3	118.6	36.6	21.6	28.3	320.9	1.7	0.0	0.0	0.0	0.0	1.7	322.6
1968 / 69	30.5	22.3	118.2	111.0	26.7	116.5	5.8	431.0	0.0	0.0	0.0	0.0	0.0	0.0	431.0
1969 / 70	14.2	36.6	23.2	115.1	23.1	114.7	14.2	341.1	0.0	0.0	0.0	0.0	0.0	0.0	341.1
1970 / 71	2.5	4.0	69.2	85.3	83.8	20.1	138.8	403.7	0.0	0.0	0.0	0.0	0.0	0.0	403.7
1971 / 72	0.0	54.2	135.3	60.0	103.7	87.5	30.2	470.9	0.0	0.0	0.0	0.0	0.0	0.0	470.9
1972 / 73	0.0	24.3	19.8	89.5	4.4	73.0	0.0	211.0	8.5	0.0	0.0	0.0	0.0	8.5	219.5
1973 / 74	0.0	92.6	25.9	244.9	99.5	41.0	50.0	553.9	0.0	0.0	0.0	0.0	0.0	0.0	553.9
1974 / 75	0.0	39.4	88.5	36.3	183.1	44.4	2.5	394.2	0.0	0.0	0.0	0.0	0.0	0.0	394.2
1975 / 76	0.0	18.3	96.7	47.2	133.3	99.8	41.6	436.9	0.0	0.0	0.0	0.0	0.0	0.0	436.9
1976 / 77	11.0	120.1	13.1	74.9	41.1	80.7	52.5	393.4	0.0	0.0	0.0	0.0	0.0	0.0	393.4
1977 / 78	34.0	0.0	123.9	38.0	20.0	41.0	9.5	266.4	0.0	0.0	0.0	0.0	0.0	0.0	266.4
1978 / 79	80.0	27.5	48.3	71.5	16.0	31.2	3.5	278.0	0.0	0.0	0.0	0.0	0.0	0.0	278.0
1979 / 80	0.0	114.2	294.0	55.5	40.3	99.7	12.7	616.4	0.0	0.0	0.0	0.0	0.0	0.0	616.4
1980 / 81	2.5	5.0	172.8	104.5	69.3	31.2	25.0	410.3	0.0	0.0	0.0	0.0	0.0	0.0	410.3
1981 / 82	0.0	36.5	4.5	16.5	34.0	36.0	8.4	135.9	3.4	0.0	0.0	0.0	0.0	3.4	139.3
1982 / 83	2.0	70.5	42.0	165.3	125.1	102.5	28.0	535.4	0.0	0.0	0.0	0.0	0.0	0.0	535.4
1983 / 84	1.0	30.5	11.0	93.0	40.7	71.5	30.5	278.2	0.0	0.0	0.0	0.0	0.0	0.0	278.2
1984 / 85	22.0	22.5	29.8	2.0	152.5	20.1	39.0	287.9	0.0	0.0	0.0	0.0	0.0	0.0	287.9
1985 / 86	9.0	10.8	37.8	92.8	125.7	25.1	7.4	308.6	29.2	0.0	0.0	0.0	0.0	29.2	337.8
1986 / 87	43.6	241.9	50.0	52.6	28.0	37.3	0.5	453.9	0.0	0.0	0.0	0.0	0.0	0.0	453.9
1987 / 88	26.5	5.0	99.0	91.0	142.5	40.5	11.5	416.0	0.0	0.0	0.0	0.0	0.0	0.0	416.0
1988 / 89	5.8	35.5	137.8	41.3	29.0	92.5	0.0	341.9	0.0	0.0	0.0	0.0	0.0	0.0	341.9
1989 / 90	22.0	78.0	75.5	113.8	45.3	65.5	24.0	424.1	0.0	0.0	0.0	0.0	0.0	0.0	424.1
1990 / 91	3.0	14.0	1.5	127.1	44.7	155.7	12.0	358.0	0.0	0.0	0.0	0.0	0.0	0.0	358.0
1991 / 92	8.0	100.0	330.5	152.6	313.0	25.1	0.0	929.2	8.0	0.0	0.0	0.0	0.0	8.0	937.2
1992 / 93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993 / 94	8.0	20.5	6.2	89.2	47.7	70.0	10.0	251.6	0.0	0.0	0.0	0.0	0.0	0.0	251.6
1994 / 95	20.3	133.8	79.5	19.0	41.5	11.6	14.0	319.7	0.0	0.0	0.0	0.0	0.0	0.0	319.7
1995 / 96	0.0	14.2	26.0	80.4	15.6	93.3	20.3	249.8	0.0	0.0	0.0	0.0	0.0	0.0	249.8
1996 / 97	40.7	8.1	44.1	102.8	207.1	109.1	8.1	520.0	13.8	0.0	0.0	0.0	0.0	13.8	533.8
1997 / 98	9.1	43.7	120.0	105.1	67.3	143.3	18.0	506.5	0.0	0.0	0.0	0.0	0.0	0.0	506.5
1998 / 99	0.0	17.1	7.7	70.9	25.4	39.8	20.0	180.9	0.0	0.0	0.0	0.0	0.0	0.0	180.9
Max.	83.8	241.9	330.5	244.9	313.0	155.7	138.8	929.2	35.5	0.0	0.0	0.0	0.0	35.5	937.2
Min.	0.0	0.0	1.0	2.0	2.0	5.3	0.0	135.9	0.0	0.0	0.0	0.0	0.0	0.0	139.3
Mean	13.8	48.4	85.4	87.5	76.2	64.6	19.1	395.1	3.5	0.0	0.0	0.0	0.0	3.5	398.6
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	142.7

Table A2.1.1-4(3) Monthly Average and Annual Rainfall in Irbid Governorate

Station Name : Kufrawan		ID No.: AB0008														
Hydrological	Wet Season								Dry Season							
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	Annual	
1937 / 38	30.0	44.0	29.5	221.0	176.5	98.5	2.5	602.0	24.0	0.0	0.0	0.0	0.0	24.0	626.0	
1938 / 39	0.0	151.5	47.5	70.0	133.0	126.0	30.5	558.5	0.0	0.0	0.0	0.0	0.0	0.0	558.5	
1939 / 40	4.0	109.0	56.0	218.5	27.0	44.0	13.0	471.5	0.0	0.0	0.0	0.0	0.0	0.0	471.5	
1940 / 41	28.0	49.5	91.5	63.5	14.0	137.0	3.5	387.0	0.0	0.0	0.0	0.0	0.0	0.0	387.0	
1941 / 42	22.0	3.5	212.0	49.2	75.5	73.5	2.5	438.2	0.0	0.0	0.0	0.0	0.0	0.0	438.2	
1942 / 43	125.0	110.7	15.0	283.5	92.3	125.8	56.0	808.3	0.0	0.0	0.0	0.0	0.0	0.0	808.3	
1943 / 44	0.2	21.0	34.0	184.0	99.0	62.5	10.0	410.7	0.0	0.0	0.0	0.0	0.0	0.0	410.7	
1944 / 45	0.0	209.5	160.5	162.0	139.0	56.0	46.0	773.0	0.0	0.0	0.0	0.0	0.0	0.0	773.0	
1945 / 46	6.0	49.5	127.0	42.0	196.0	56.0	0.0	476.5	0.0	0.0	0.0	0.0	0.0	0.0	476.5	
1946 / 47	2.0	3.0	59.0	122.0	17.0	28.0	22.0	253.0	0.0	0.0	0.0	0.0	0.0	0.0	253.0	
1947 / 48	7.0	48.0	27.5	107.0	125.0	163.0	46.5	524.0	0.0	0.0	0.0	0.0	0.0	0.0	524.0	
1948 / 49	0.0	54.0	129.5	126.5	135.5	169.0	145.7	760.2	0.0	0.0	0.0	0.0	0.0	0.0	760.2	
1949 / 50	0.0	0.0	232.8	245.0	106.0	73.0	20.0	676.8	39.0	0.0	0.0	0.0	0.0	39.0	715.8	
1950 / 51	17.0	2.0	2.0	55.0	120.5	37.0	7.0	240.5	0.0	0.0	0.0	0.0	0.0	0.0	240.5	
1951 / 52	36.0	44.3	301.5	105.5	123.0	127.0	12.0	749.3	0.0	0.0	0.0	0.0	0.0	0.0	749.3	
1952 / 53	55.0	24.5	40.0	188.5	167.0	226.5	10.0	711.5	0.0	0.0	0.0	0.0	0.0	0.0	711.5	
1953 / 54	0.0	143.3	77.5	104.1	163.3	15.3	48.5	552.0	0.0	0.0	0.0	0.0	0.0	0.0	552.0	
1954 / 55	0.0	45.7	96.5	1.5	48.5	86.5	23.5	302.2	0.0	0.0	0.0	0.0	0.0	0.0	302.2	
1955 / 56	4.3	156.8	154.8	107.5	26.5	100.3	23.5	573.7	0.0	0.0	0.0	0.0	0.0	0.0	573.7	
1956 / 57	0.0	10.5	143.0	131.1	101.5	164.0	31.3	581.4	0.0	0.0	0.0	0.0	0.0	0.0	581.4	
1957 / 58	25.6	65.3	179.8	161.9	14.5	11.0	38.5	496.6	4.5	0.0	0.0	0.0	0.0	4.5	501.1	
1958 / 59	3.2	0.0	39.7	95.2	146.5	44.8	10.0	339.4	0.0	0.0	0.0	0.0	0.0	0.0	339.4	
1959 / 60	0.0	18.8	6.4	93.5	25.7	112.6	18.8	275.8	0.0	0.0	0.0	0.0	0.0	0.0	275.8	
1960 / 61	0.0	59.8	59.0	96.1	131.4	31.0	88.0	465.3	10.7	0.0	0.0	0.0	0.0	10.7	476.0	
1961 / 62	0.0	25.1	256.8	86.2	69.0	6.7	9.1	452.9	0.0	0.0	0.0	0.0	0.0	0.0	452.9	
1962 / 63	31.1	0.0	99.0	97.0	111.2	52.2	25.0	415.5	28.5	0.0	0.0	0.0	0.0	28.5	444.0	
1963 / 64	46.5	33.6	134.0	57.5	170.2	92.4	0.0	534.2	0.0	0.0	0.0	0.0	0.0	0.0	534.2	
1964 / 65	0.0	112.7	64.6	183.3	54.6	58.5	54.6	528.3	0.0	0.0	0.0	0.0	0.0	0.0	528.3	
1965 / 66	88.7	39.1	81.7	47.4	96.9	97.7	0.0	451.5	0.0	0.0	0.0	0.0	0.0	0.0	451.5	
1966 / 67	23.2	3.7	217.1	213.4	99.6	178.7	3.7	739.4	12.8	0.0	0.0	0.0	0.0	12.8	752.2	
1967 / 68	15.5	70.3	55.9	148.3	43.9	9.9	15.8	359.6	5.6	0.0	0.0	0.0	0.0	5.6	365.2	
1968 / 69	0.0	26.1	157.9	158.8	40.4	131.4	18.8	533.4	0.0	0.0	0.0	0.0	0.0	0.0	533.4	
1969 / 70	19.0	40.9	18.5	189.2	17.0	140.0	37.3	461.9	0.0	0.0	0.0	0.0	0.0	0.0	461.9	
1970 / 71	0.0	0.0	80.4	83.5	132.3	12.2	164.0	472.4	0.0	0.0	0.0	0.0	0.0	0.0	472.4	
1971 / 72	0.0	39.4	161.2	45.8	118.6	59.3	21.8	446.1	0.0	0.0	0.0	0.0	0.0	0.0	446.1	
1972 / 73	0.0	25.8	30.3	110.3	22.5	67.3	3.8	260.0	0.0	0.0	0.0	0.0	0.0	0.0	260.0	
1973 / 74	5.3	89.3	38.0	217.5	45.7	50.3	29.5	475.6	0.0	0.0	0.0	0.0	0.0	0.0	475.6	
1974 / 75	0.0	16.9	81.6	65.0	118.4	61.4	0.0	343.3	0.0	0.0	0.0	0.0	0.0	0.0	343.3	
1975 / 76	0.0	72.4	87.1	46.1	103.4	66.3	29.0	404.3	5.2	0.0	0.0	0.0	0.0	5.2	409.5	
1976 / 77	27.0	57.3	32.9	94.8	39.9	115.9	76.1	443.9	0.0	0.0	0.0	0.0	0.0	0.0	443.9	
1977 / 78	24.5	0.0	143.0	47.3	31.6	64.6	15.7	326.7	0.0	0.0	0.0	0.0	0.0	0.0	326.7	
1978 / 79	0.0	0.0	67.1	53.5	26.6	80.8	3.2	231.2	0.0	0.0	0.0	0.0	0.0	0.0	231.2	
1979 / 80	0.0	107.0	144.0	100.1	112.9	115.5	19.6	599.1	0.0	0.0	0.0	0.0	0.0	0.0	599.1	
1980 / 81	9.2	12.0	154.1	86.3	74.9	27.2	31.2	394.9	0.0	0.0	0.0	0.0	0.0	0.0	394.9	
1981 / 82	0.0	66.4	25.2	57.1	108.0	71.3	6.6	334.6	0.0	0.0	0.0	0.0	0.0	0.0	334.6	
1982 / 83	5.3	77.2	45.6	144.2	152.7	107.1	27.2	559.3	13.2	0.0	0.0	0.0	0.0	13.2	572.5	
1983 / 84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1984 / 85	10.0	15.8	26.5	36.8	257.6	21.9	22.5	391.1	0.0	0.0	0.0	0.0	0.0	0.0	391.1	
1985 / 86	24.0	10.5	40.3	82.0	103.6	32.4	13.4	306.2	28.7	0.0	0.0	0.0	0.0	28.7	334.9	
1986 / 87	30.0	139.0	96.8	61.9	45.5	89.4	2.6	465.2	0.0	0.0	0.0	0.0	0.0	0.0	465.2	
1987 / 88	7.0	2.4	184.5	188.2	181.3	71.4	17.4	652.2	0.0	0.0	0.0	0.0	0.0	0.0	652.2	
1988 / 89	18.6	44.3	159.7	78.2	51.4	51.3	0.0	403.5	0.0	0.0	0.0	0.0	0.0	0.0	403.5	
1989 / 90	6.7	57.8	72.5	125.5	52.8	107.3	28.6	451.2	0.0	0.0	0.0	0.0	0.0	0.0	451.2	
1990 / 91	37.5	29.2	14.3	118.4	96.3	110.6	30.0	436.3	0.0	0.0	0.0	0.0	0.0	0.0	436.3	
1991 / 92	0.0	63.0	326.5	230.0	406.0	21.0	0.0	1,046.5	18.0	0.0	0.0	0.0	0.0	18.0	1,064.5	
1992 / 93	0.0	35.0	235.5	68.0	86.5	40.0	0.0	465.0	50.0	0.0	0.0	0.0	0.0	50.0	515.0	
1993 / 94	0.5	7.5	24.5	121.0	100.5	68.5	13.0	335.5	0.0	0.0	0.0	0.0	0.0	0.0	335.5	
1994 / 95	28.5	219.5	46.0	26.0	77.0	29.0	23.5	449.5	0.0	0.0	0.0	0.0	0.0	0.0	449.5	
1995 / 96	0.0	41.0	28.7	147.9	45.2	154.5	29.4	446.7	0.0	0.0	0.0	0.0	0.0	0.0	446.7	
1996 / 97	24.7	17.5	85.5	76.0	190.0	100.7	3.0	497.4	9.4	0.0	0.0	0.0	0.0	9.4	506.8	
1997 / 98	13.4	33.0	163.5	120.0	65.2	174.0	10.0	579.1	1.3	0.0	0.0	0.0	0.0	1.3	580.4	
1998 / 99	0.0	1.3	26.5	73.0	35.0	44.8	22.6	203.2	0.0	0.0	0.0	0.0	0.0	0.0	203.2	
Max.	125.0	219.5	326.5	283.5	406.0	226.5	164.0	1,046.5	50.0	0.0	0.0	0.0	0.0	50.0	1,064.5	
Min.	0.0	0.0	2.0	1.5	14.0	6.7	0.0	203.2	0.0	0.0	0.0	0.0	0.0	0.0	203.2	
Mean	14.1	50.1	98.8	113.4	98.2	81.2	24.9	480.7	4.1	0.0	0.0	0.0	0.0	4.1	484.8	
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	159.6	

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

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

Station Name : Kartha		ID No.: AD0002													
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	0.0	38.0	178.5	54.1	120.5	94.0	0.0	485.1	0.0	0.0	0.0	0.0	0.0	0.0	485.1
1952 / 53	26.0	11.9	34.3	144.8	117.3	170.5	9.5	514.3	0.0	0.0	0.0	0.0	0.0	0.0	514.3
1953 / 54	0.0	134.4	71.2	107.6	184.4	23.7	62.7	584.0	0.0	0.0	0.0	0.0	0.0	0.0	584.0
1954 / 55	0.0	37.2	62.5	1.5	38.2	74.0	15.8	229.2	13.3	0.0	0.0	0.0	0.0	13.3	242.5
1955 / 56	10.0	115.0	107.6	128.4	24.7	77.0	11.0	473.7	0.0	0.0	0.0	0.0	0.0	0.0	473.7
1956 / 57	0.0	5.6	88.9	98.8	94.6	84.8	23.6	396.3	22.0	0.0	0.0	0.0	0.0	22.0	418.3
1957 / 58	2.3	46.3	131.5	115.1	16.1	28.3	6.0	345.6	13.4	0.0	0.0	0.0	0.0	13.4	359.0
1958 / 59	0.0	0.0	31.7	59.9	112.7	31.6	16.8	252.7	0.0	0.0	0.0	0.0	0.0	0.0	252.7
1959 / 60	2.9	15.7	12.3	72.3	13.8	104.7	14.3	236.0	0.0	0.0	0.0	0.0	0.0	0.0	236.0
1960 / 61	0.8	61.7	49.1	49.5	120.0	20.3	33.2	334.6	8.7	0.0	0.0	0.0	0.0	8.7	343.3
1961 / 62	8.0	35.4	204.5	111.1	66.0	5.1	13.0	443.1	5.4	0.0	0.0	0.0	0.0	5.4	448.5
1962 / 63	0.0	0.0	81.0	47.2	108.0	60.9	40.2	337.3	24.2	0.0	0.0	0.0	0.0	24.2	361.5
1963 / 64	24.7	31.7	121.1	111.9	161.7	124.1	8.0	583.2	7.0	0.0	0.0	0.0	0.0	7.0	590.2
1964 / 65	0.0	91.4	60.2	131.3	74.3	32.7	47.1	437.0	1.0	0.0	0.0	0.0	0.0	1.0	438.0
1965 / 66	37.5	9.7	62.9	82.8	54.0	90.9	5.0	342.8	0.0	0.0	0.0	0.0	0.0	0.0	342.8
1966 / 67	14.0	1.1	165.3	131.0	88.0	173.5	6.2	579.1	15.6	0.0	0.0	0.0	0.0	15.6	594.7
1967 / 68	8.0	65.5	104.3	228.9	57.0	22.7	28.0	514.4	11.0	0.0	0.0	0.0	0.0	11.0	525.4
1968 / 69	6.0	24.8	159.1	161.1	34.4	156.4	29.8	571.6	0.0	0.0	0.0	0.0	0.0	0.0	571.6
1969 / 70	56.8	32.5	55.0	146.6	40.2	151.7	25.0	507.8	4.0	0.0	0.0	0.0	0.0	4.0	511.8
1970 / 71	6.0	3.6	69.7	59.9	203.5	73.4	194.5	610.6	0.0	0.0	0.0	0.0	0.0	0.0	610.6
1971 / 72	0.0	41.0	128.4	83.6	104.1	41.7	48.0	446.8	3.0	0.0	0.0	0.0	0.0	3.0	449.8
1972 / 73	0.0	0.0	15.0	144.0	12.0	58.2	4.0	233.2	8.0	0.0	0.0	0.0	0.0	8.0	241.2
1973 / 74	9.0	77.0	39.0	132.3	87.2	39.0	41.0	424.5	0.0	0.0	0.0	0.0	0.0	0.0	424.5
1974 / 75	0.0	27.5	67.5	50.4	131.0	48.8	11.0	336.2	0.0	0.0	0.0	0.0	0.0	0.0	336.2
1975 / 76	0.0	28.0	84.6	64.6	95.3	94.0	35.0	401.5	0.0	0.0	0.0	0.0	0.0	0.0	401.5
1976 / 77	33.0	107.2	30.5	91.7	32.0	88.7	63.8	446.9	0.0	0.0	0.0	0.0	0.0	0.0	446.9
1977 / 78	20.5	0.0	137.3	44.7	27.7	69.3	6.5	306.0	0.0	0.0	0.0	0.0	0.0	0.0	306.0
1978 / 79	0.0	0.0	49.3	29.7	25.5	57.0	16.1	177.6	0.0	0.0	0.0	0.0	0.0	0.0	177.6
1979 / 80	10.5	98.6	176.8	124.8	108.3	68.0	38.5	625.5	0.0	0.0	0.0	0.0	0.0	0.0	625.5
1980 / 81	4.2	5.7	132.5	134.4	69.7	38.6	36.0	421.1	0.0	0.0	0.0	0.0	0.0	0.0	421.1
1981 / 82	0.0	32.9	10.3	49.4	90.0	46.4	2.8	231.8	1.3	0.0	0.0	0.0	0.0	1.3	233.1
1982 / 83	8.2	41.4	83.5	117.5	202.4	83.8	15.0	551.8	0.0	0.0	0.0	0.0	0.0	0.0	551.8
1983 / 84	0.0	66.5	14.0	103.2	41.5	128.0	97.5	450.7	0.0	0.0	0.0	0.0	0.0	0.0	450.7
1984 / 85	28.0	42.1	38.5	67.5	157.6	21.0	10.5	365.2	0.0	0.0	0.0	0.0	0.0	0.0	365.2
1985 / 86	13.5	21.7	40.8	51.5	70.0	26.0	14.6	238.1	28.5	0.0	0.0	0.0	0.0	28.5	266.6
1986 / 87	25.0	173.0	98.0	96.0	54.1	112.0	6.0	564.1	0.0	0.0	0.0	0.0	0.0	0.0	564.1
1987 / 88	12.0	5.5	141.0	136.4	146.0	117.5	14.0	572.4	0.0	0.0	0.0	0.0	0.0	0.0	572.4
1988 / 89	0.0	37.9	107.0	18.5	31.0	54.0	0.0	248.4	0.0	0.0	0.0	0.0	0.0	0.0	248.4
1989 / 90	0.0	29.0	35.0	151.0	63.0	108.0	24.0	410.0	0.0	0.0	0.0	0.0	0.0	0.0	410.0
1990 / 91	6.0	21.5	44.0	121.0	44.0	100.0	43.0	379.5	0.0	0.0	0.0	0.0	0.0	0.0	379.5
1991 / 92	0.0	92.0	208.0	165.6	312.6	25.0	0.0	803.2	4.0	0.0	0.0	0.0	0.0	4.0	807.2
1992 / 93	0.0	45.0	198.0	71.0	44.5	50.0	0.0	408.5	10.0	0.0	0.0	0.0	0.0	10.0	418.5
1993 / 94	32.0	33.0	11.0	123.1	76.5	104.0	5.0	384.6	0.0	0.0	0.0	0.0	0.0	0.0	384.6
1994 / 95	4.0	145.0	95.3	23.0	71.0	21.0	16.0	375.3	0.0	0.0	0.0	0.0	0.0	0.0	375.3
1995 / 96	0.0	56.0	25.0	111.0	39.0	111.0	12.0	354.0	0.0	0.0	0.0	0.0	0.0	0.0	354.0
1996 / 97	23.0	12.0	25.0	55.0	89.0	59.0	12.4	275.4	2.0	0.0	0.0	0.0	0.0	2.0	277.4
1997 / 98	30.9	11.8	78.0	110.0	50.0	96.0	15.0	391.7	0.0	0.0	0.0	0.0	0.0	0.0	391.7
1998 / 99	0.0	0.0	31.5	83.0	50.0	44.5	8.0	217.0	0.0	0.0	0.0	0.0	0.0	0.0	217.0
Max.	56.8	173.0	208.0	228.9	312.6	173.5	194.5	803.2	28.5	0.0	0.0	0.0	0.0	28.5	807.2
Min.	0.0	0.0	10.3	1.5	12.0	5.1	0.0	177.6	0.0	0.0	0.0	0.0	0.0	0.0	177.6
Mean	9.6	41.9	83.2	95.8	84.5	73.1	24.7	412.9	3.8	0.0	0.0	0.0	0.0	3.8	416.7
Source: WIS database of MWI.														Std. Dev.	131.0

Table A2.1.1-4(5) Monthly Average and Annual Rainfall in Irbid Governorate

Station Name : Kufr Saum		ID No.: AD0003													
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	10.5	40.5	19.0	121.5	141.5	79.5	4.5	417.0	20.5	0.0	0.0	0.0	0.0	20.5	437.5
1938 / 39	0.0	150.0	31.2	128.0	179.0	133.1	83.0	704.3	0.0	0.0	0.0	0.0	0.0	0.0	704.3
1939 / 40	1.0	138.5	48.0	221.5	24.0	52.5	5.0	490.5	0.0	0.0	0.0	0.0	0.0	0.0	490.5
1940 / 41	5.0	71.0	90.5	111.5	69.5	149.5	0.0	497.0	0.0	0.0	0.0	0.0	0.0	0.0	497.0
1941 / 42	9.5	10.0	169.5	107.5	91.0	117.0	1.5	506.0	0.0	0.0	0.0	0.0	0.0	0.0	506.0
1942 / 43	89.0	96.7	24.1	240.8	50.4	119.6	72.7	693.3	0.0	0.0	0.0	0.0	0.0	0.0	693.3
1943 / 44	0.0	17.7	52.3	287.1	72.0	44.8	22.0	495.9	0.0	0.0	0.0	0.0	0.0	0.0	495.9
1944 / 45	0.9	232.9	190.5	172.8	169.4	50.9	35.2	852.6	0.0	0.0	0.0	0.0	0.0	0.0	852.6
1945 / 46	0.0	171.0	70.0	32.0	291.6	80.6	11.8	657.0	0.0	0.0	0.0	0.0	0.0	0.0	657.0
1946 / 47	3.2	6.5	39.8	206.4	28.0	29.0	16.0	328.9	0.0	0.0	0.0	0.0	0.0	0.0	328.9
1947 / 48	0.0	56.5	21.0	70.5	129.2	143.0	46.5	466.7	0.0	0.0	0.0	0.0	0.0	0.0	466.7
1948 / 49	0.0	45.3	112.0	106.0	123.0	163.0	123.0	672.3	0.0	0.0	0.0	0.0	0.0	0.0	672.3
1949 / 50	0.0	0.0	146.0	240.0	83.0	71.5	28.0	568.5	28.0	0.0	0.0	0.0	0.0	28.0	596.5
1950 / 51	7.2	6.0	8.6	66.6	84.2	27.5	14.5	214.6	0.0	0.0	0.0	0.0	0.0	0.0	214.6
1951 / 52	6.0	36.8	206.0	52.9	115.5	104.1	0.0	521.3	0.0	0.0	0.0	0.0	0.0	0.0	521.3
1952 / 53	19.0	8.3	33.7	185.5	169.0	239.1	0.0	654.6	0.0	0.0	0.0	0.0	0.0	0.0	654.6
1953 / 54	0.0	178.2	90.2	149.6	215.8	22.4	92.3	748.5	0.0	0.0	0.0	0.0	0.0	0.0	748.5
1954 / 55	0.0	55.6	67.4	0.0	48.0	96.7	17.3	285.0	17.0	0.0	0.0	0.0	0.0	17.0	302.0
1955 / 56	9.0	136.8	125.7	142.2	42.0	104.0	12.0	571.7	5.0	0.0	0.0	0.0	0.0	5.0	576.7
1956 / 57	0.0	0.0	103.1	104.0	102.6	98.4	6.1	414.2	26.0	0.0	0.0	0.0	0.0	26.0	440.2
1957 / 58	2.0	39.0	166.2	151.0	7.0	27.0	5.0	397.2	15.0	0.0	0.0	0.0	0.0	15.0	412.2
1958 / 59	2.5	2.5	24.7	81.6	174.1	29.0	12.5	326.9	0.0	0.0	0.0	0.0	0.0	0.0	326.9
1959 / 60	0.0	12.4	0.0	113.5	15.8	99.5	28.0	269.2	0.0	0.0	0.0	0.0	0.0	0.0	269.2
1960 / 61	0.0	70.8	57.0	76.3	142.5	18.6	22.0	387.2	14.1	0.0	0.0	0.0	0.0	14.1	401.3
1961 / 62	5.2	45.5	278.8	86.5	72.0	5.7	5.0	498.7	3.6	0.0	0.0	0.0	0.0	3.6	502.3
1962 / 63	0.0	0.0	99.3	63.7	142.6	93.3	29.0	427.9	38.0	0.0	0.0	0.0	0.0	38.0	465.9
1963 / 64	26.5	32.4	126.3	141.8	216.8	135.0	0.0	678.8	10.9	0.0	0.0	0.0	0.0	10.9	689.7
1964 / 65	0.0	143.0	47.0	210.5	80.6	42.5	45.4	569.0	1.5	0.0	0.0	0.0	0.0	1.5	570.5
1965 / 66	37.3	14.0	70.0	83.7	71.0	90.0	0.0	366.0	0.0	0.0	0.0	0.0	0.0	0.0	366.0
1966 / 67	16.0	0.0	186.0	168.0	114.0	202.3	10.0	696.3	9.0	0.0	0.0	0.0	0.0	9.0	705.3
1967 / 68	1.5	51.5	120.5	245.5	61.0	22.0	39.8	541.8	0.0	0.0	0.0	0.0	0.0	0.0	541.8
1968 / 69	17.0	59.0	211.3	192.5	37.5	163.9	41.7	722.9	0.0	0.0	0.0	0.0	0.0	0.0	722.9
1969 / 70	48.0	47.0	43.5	164.1	43.0	171.5	29.5	546.6	2.0	0.0	0.0	0.0	0.0	2.0	548.6
1970 / 71	0.0	0.0	79.7	71.0	217.5	55.0	250.1	673.3	0.0	0.0	0.0	0.0	0.0	0.0	673.3
1971 / 72	0.0	43.5	133.0	76.0	94.1	42.5	37.1	426.2	0.0	0.0	0.0	0.0	0.0	0.0	426.2
1972 / 73	5.1	15.9	18.2	158.2	15.8	55.8	3.2	272.2	15.2	0.0	0.0	0.0	0.0	15.2	287.4
1973 / 74	8.6	75.2	63.2	163.0	91.9	31.6	45.2	478.7	0.0	0.0	0.0	0.0	0.0	0.0	478.7
1974 / 75	0.0	25.5	67.0	25.0	124.0	95.0	7.0	343.5	0.0	0.0	0.0	0.0	0.0	0.0	343.5
1975 / 76	0.0	25.0	80.5	29.0	105.3	95.6	35.6	371.0	3.0	0.0	0.0	0.0	0.0	3.0	374.0
1976 / 77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1977 / 78	0.0	0.0	162.3	91.0	58.5	127.1	8.5	447.4	0.0	0.0	0.0	0.0	0.0	0.0	447.4
1978 / 79	16.2	8.7	41.0	54.0	34.2	20.0	13.6	187.7	0.0	0.0	0.0	0.0	0.0	0.0	187.7
1979 / 80	23.5	127.3	207.3	113.7	127.7	133.8	41.6	774.9	0.0	0.0	0.0	0.0	0.0	0.0	774.9
1980 / 81	35.2	8.5	186.1	172.1	94.2	50.0	39.5	585.6	0.0	0.0	0.0	0.0	0.0	0.0	585.6
1981 / 82	0.0	55.8	12.5	52.3	105.3	65.1	3.0	294.0	1.5	0.0	0.0	0.0	0.0	1.5	295.5
1982 / 83	0.0	51.0	96.7	142.5	166.4	104.5	23.9	585.0	6.0	0.0	0.0	0.0	0.0	6.0	591.0
1983 / 84	0.0	60.0	25.0	127.0	44.5	123.7	108.1	488.3	0.0	0.0	0.0	0.0	0.0	0.0	488.3
1984 / 85	35.0	51.9	41.3	59.5	195.2	24.6	21.1	428.6	0.0	0.0	0.0	0.0	0.0	0.0	428.6
1985 / 86	14.3	16.4	38.0	61.9	69.3	12.1	12.0	224.0	41.8	0.0	0.0	0.0	0.0	41.8	265.8
1986 / 87	26.3	200.6	107.9	94.3	47.6	112.1	0.0	588.8	0.0	0.0	0.0	0.0	0.0	0.0	588.8
1987 / 88	19.0	9.0	135.4	101.0	151.3	78.8	36.0	530.5	0.0	0.0	0.0	0.0	0.0	0.0	530.5
1988 / 89	3.4	40.7	115.4	33.2	32.9	50.3	0.0	275.9	0.0	0.0	0.0	0.0	0.0	0.0	275.9
1989 / 90	9.4	6.5	48.0	151.0	55.4	132.6	27.3	430.2	5.5	0.0	0.0	0.0	0.0	5.5	435.7
1990 / 91	7.7	28.6	45.0	122.2	57.0	131.0	49.5	441.0	0.0	0.0	0.0	0.0	0.0	0.0	441.0
1991 / 92	0.0	72.9	167.1	298.7	337.0	40.5	7.9	924.1	12.5	0.0	0.0	0.0	0.0	12.5	936.6
1992 / 93	0.0	76.0	299.4	84.8	91.0	76.0	0.0	627.2	10.2	0.0	0.0	0.0	0.0	10.2	637.4
1993 / 94	9.2	61.6	25.0	100.5	92.0	86.2	0.0	374.5	0.0	0.0	0.0	0.0	0.0	0.0	374.5
1994 / 95	0.0	163.5	113.0	7.0	82.5	24.5	21.0	411.5	0.0	0.0	0.0	0.0	0.0	0.0	411.5
1995 / 96	0.0	45.4	29.9	137.5	39.4	157.7	5.2	415.1	0.0	0.0	0.0	0.0	0.0	0.0	415.1
1996 / 97	23.2	21.1	41.7	86.2	166.0	76.2	14.3	428.7	7.5	0.0	0.0	0.0	0.0	7.5	436.2
1997 / 98	19.7	45.7	115.7	156.1	68.2	175.6	24.8	605.8	2.8	0.0	0.0	0.0	0.0	2.8	608.6
1998 / 99	0.0	0.0	49.6	94.1	56.3	38.5	20.6	259.1	0.0	0.0	0.0	0.0	0.0	0.0	259.1
Max.	89.0	232.9	299.4	298.7	337.0	239.1	250.1	924.1	41.8	0.0	0.0	0.0	0.0	41.8	936.6
Min.	0.0	0.0	0.0	0.0	7.0	5.7	0.0	187.7	0.0	0.0	0.0	0.0	0.0	0.0	187.7
Mean	9.4	54.3	92.2	121.1	102.1	85.9	28.1	493.1	4.9	0.0	0.0	0.0	0.0	4.9	498.0
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	160.4

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

Station Name : Um Qeis		ID No.: AD0005												
Hydrological Year	Wet Season							Dry Season					Sub-total	Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.		
1937 / 38	32.0	28.5	18.0	222.0	123.0	84.5	2.5	510.5	22.0	0.0	0.0	0.0	22.0	532.5
1938 / 39	0.0	159.0	26.0	124.5	201.5	142.0	43.0	696.0	0.0	0.0	0.0	0.0	0.0	696.0
1939 / 40	0.0	98.4	48.5	176.5	40.8	53.3	4.0	421.5	0.0	0.0	0.0	0.0	0.0	421.5
1940 / 41	21.0	63.2	75.3	53.7	60.5	116.0	3.7	393.4	0.0	0.0	0.0	0.0	0.0	393.4
1941 / 42	10.0	11.0	204.0	42.2	67.0	88.7	3.8	426.7	0.0	0.0	0.0	0.0	0.0	426.7
1942 / 43	121.0	122.0	16.5	244.5	47.0	79.0	63.0	693.0	0.0	0.0	0.0	0.0	0.0	693.0
1943 / 44	11.7	2.0	53.0	244.5	78.5	53.5	22.5	465.7	0.0	0.0	0.0	0.0	0.0	465.7
1944 / 45	0.0	246.5	181.0	206.0	145.0	48.0	31.5	858.0	0.0	0.0	0.0	0.0	0.0	858.0
1945 / 46	10.0	57.5	94.0	25.5	190.0	69.5	0.0	446.5	0.0	0.0	0.0	0.0	0.0	446.5
1946 / 47	0.5	0.0	44.0	156.5	24.5	67.5	9.0	302.0	0.0	0.0	0.0	0.0	0.0	302.0
1947 / 48	0.0	62.0	11.8	63.5	138.5	151.5	31.0	458.3	0.0	0.0	0.0	0.0	0.0	458.3
1948 / 49	0.0	53.0	130.5	119.5	119.5	125.5	122.0	670.0	0.0	0.0	0.0	0.0	0.0	670.0
1949 / 50	0.0	0.0	161.0	225.0	58.5	51.5	34.0	530.0	22.0	0.0	0.0	0.0	22.0	552.0
1950 / 51	18.0	31.0	17.5	62.5	95.5	26.0	15.5	266.0	0.0	0.0	0.0	0.0	0.0	266.0
1951 / 52	5.2	45.9	208.4	89.0	112.5	76.0	0.0	537.0	0.0	0.0	0.0	0.0	0.0	537.0
1952 / 53	9.0	16.5	67.3	175.5	91.2	125.3	4.5	489.3	0.0	0.0	0.0	0.0	0.0	489.3
1953 / 54	17.0	153.0	57.0	156.6	142.5	10.7	19.5	556.3	0.0	0.0	0.0	0.0	0.0	556.3
1954 / 55	0.0	47.4	121.8	0.5	25.8	101.7	6.2	303.4	0.0	0.0	0.0	0.0	0.0	303.4
1955 / 56	3.8	125.8	124.0	106.3	29.1	90.0	18.0	497.0	0.0	0.0	0.0	0.0	0.0	497.0
1956 / 57	0.0	0.0	84.6	66.6	124.7	127.6	13.4	416.9	46.6	0.0	0.0	0.0	46.6	463.5
1957 / 58	2.4	53.2	206.0	166.4	4.7	9.9	0.0	442.6	18.0	0.0	0.0	0.0	18.0	460.6
1958 / 59	2.0	0.0	34.9	102.3	148.2	34.6	18.0	340.0	0.0	0.0	0.0	0.0	0.0	340.0
1959 / 60	0.0	22.2	5.3	110.7	19.3	103.5	10.0	271.0	0.0	0.0	0.0	0.0	0.0	271.0
1960 / 61	0.0	110.4	54.0	88.2	212.0	40.0	50.0	554.6	0.0	0.0	0.0	0.0	0.0	554.6
1961 / 62	0.0	35.5	312.6	128.5	48.7	3.3	16.6	545.2	7.6	0.0	0.0	0.0	7.6	552.8
1962 / 63	5.0	0.0	112.6	78.8	68.2	31.1	25.5	321.2	49.6	0.0	0.0	0.0	49.6	370.8
1963 / 64	32.2	67.9	126.6	96.0	138.1	117.0	3.0	580.8	0.0	0.0	0.0	0.0	0.0	580.8
1964 / 65	0.0	142.0	66.8	142.4	49.5	50.2	25.4	476.3	0.0	0.0	0.0	0.0	0.0	476.3
1965 / 66	70.2	10.0	75.1	82.5	70.2	68.0	0.0	376.0	0.0	0.0	0.0	0.0	0.0	376.0
1966 / 67	18.5	0.0	176.8	134.4	134.2	124.7	4.0	592.6	28.7	0.0	0.0	0.0	28.7	621.3
1967 / 68	13.8	94.8	72.2	126.4	57.9	38.6	26.5	430.2	15.5	0.0	0.0	0.0	15.5	445.7
1968 / 69	27.0	49.2	224.9	194.1	24.5	128.7	9.3	657.7	0.0	0.0	0.0	0.0	0.0	657.7
1969 / 70	50.5	35.4	41.1	168.3	34.9	108.2	33.9	472.3	0.0	0.0	0.0	0.0	0.0	472.3
1970 / 71	0.0	0.0	66.4	95.0	197.7	26.4	187.8	573.3	0.0	0.0	0.0	0.0	0.0	573.3
1971 / 72	0.0	30.0	110.3	102.9	87.5	56.6	47.5	434.8	0.0	0.0	0.0	0.0	0.0	434.8
1972 / 73	0.0	12.5	32.2	149.7	8.8	74.5	4.4	282.1	17.0	0.0	0.0	0.0	17.0	299.1
1973 / 74	10.0	58.2	66.8	236.5	103.3	21.9	60.5	557.2	0.0	0.0	0.0	0.0	0.0	557.2
1974 / 75	0.0	28.5	89.6	59.0	125.4	47.7	14.5	364.7	0.0	0.0	0.0	0.0	0.0	364.7
1975 / 76	0.0	19.3	88.1	51.4	97.3	65.5	48.5	370.1	2.0	0.0	0.0	0.0	2.0	372.1
1976 / 77	24.0	136.0	54.9	73.6	18.5	78.8	85.2	471.0	0.0	0.0	0.0	0.0	0.0	471.0
1977 / 78	36.5	0.0	169.0	27.0	60.5	82.2	7.6	382.8	0.0	0.0	0.0	0.0	0.0	382.8
1978 / 79	0.0	0.0	66.9	45.8	28.0	58.7	0.0	199.4	0.0	0.0	0.0	0.0	0.0	199.4
1979 / 80	0.0	5.3	231.2	127.7	150.5	95.4	34.2	624.3	0.0	0.0	0.0	0.0	0.0	624.3
1980 / 81	5.0	11.1	123.5	168.0	91.5	52.5	28.5	480.1	0.0	0.0	0.0	0.0	0.0	480.1
1981 / 82	0.0	40.0	7.3	40.5	80.8	55.9	4.2	228.7	2.0	0.0	0.0	0.0	2.0	230.7
1982 / 83	0.0	54.5	47.0	200.0	205.2	35.5	19.0	561.2	0.0	0.0	0.0	0.0	0.0	561.2
1983 / 84	0.0	53.6	13.0	86.0	25.0	70.4	72.8	320.8	0.0	0.0	0.0	0.0	0.0	320.8
1984 / 85	7.0	76.5	46.2	22.5	178.5	18.5	27.0	376.2	0.0	0.0	0.0	0.0	0.0	376.2
1985 / 86	10.0	16.5	36.5	77.0	100.0	20.5	12.5	273.0	50.6	0.0	0.0	0.0	50.6	323.6
1986 / 87	15.5	199.0	91.5	72.0	46.5	83.0	0.0	507.5	0.0	0.0	0.0	0.0	0.0	507.5
1987 / 88	8.2	3.0	163.0	92.5	84.7	74.5	16.5	442.4	0.0	0.0	0.0	0.0	0.0	442.4
1988 / 89	7.0	59.6	95.0	31.7	31.3	45.7	0.0	270.3	0.0	0.0	0.0	0.0	0.0	270.3
1989 / 90	14.3	49.2	39.8	170.7	53.6	96.5	44.0	468.1	0.0	0.0	0.0	0.0	0.0	468.1
1990 / 91	11.0	11.3	45.1	137.7	47.1	96.1	27.4	375.7	6.6	0.0	0.0	0.0	6.6	382.3
1991 / 92	0.0	106.3	220.0	187.5	284.0	17.8	7.0	822.6	8.4	0.0	0.0	0.0	8.4	831.0
1992 / 93	0.0	43.0	223.2	68.4	52.7	36.7	0.0	424.0	25.5	0.0	0.0	0.0	25.5	449.5
1993 / 94	0.0	47.2	8.4	150.4	108.1	63.3	11.5	388.9	0.0	0.0	0.0	0.0	0.0	388.9
1994 / 95	5.5	182.4	97.2	34.6	96.2	16.9	14.4	447.2	0.0	0.0	0.0	0.0	0.0	447.2
1995 / 96	0.0	30.0	33.6	129.5	20.0	129.6	3.9	346.6	0.0	0.0	0.0	0.0	0.0	346.6
1996 / 97	25.2	13.1	39.8	58.7	170.8	54.8	5.2	367.6	11.8	0.0	0.0	0.0	11.8	379.4
1997 / 98	10.6	22.1	121.0	155.9	51.3	132.7	39.0	532.6	3.4	0.0	0.0	0.0	3.4	536.0
1998 / 99	2.0	0.0	64.5	71.1	37.6	32.7	29.2	237.1	0.0	0.0	0.0	0.0	0.0	237.1
Max.	121.0	246.5	312.6	244.5	284.0	151.5	187.8	858.0	50.6	0.0	0.0	0.0	50.6	858.0
Min.	0.0	0.0	5.3	0.5	4.7	3.3	0.0	199.4	0.0	0.0	0.0	0.0	0.0	199.4
Mean	10.8	52.4	92.6	114.6	89.5	69.1	24.5	453.7	5.4	0.0	0.0	0.0	5.4	459.1
Source: WIS database of MWI.													Std. Dev.	135.5

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

Station Name : Kawwara		ID No.: AD0009													
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	0.0	85.1	3.2	62.9	64.0	46.6	0.0	261.8	22.0	0.0	0.0	0.0	0.0	22.0	283.8
1938 / 39	0.0	82.9	25.9	30.2	57.5	120.4	46.8	363.7	0.0	0.0	0.0	0.0	0.0	0.0	363.7
1939 / 40	1.8	122.0	31.3	215.6	20.0	21.6	22.5	434.8	0.0	0.0	0.0	0.0	0.0	0.0	434.8
1940 / 41	5.6	52.4	81.5	99.1	17.0	67.9	8.1	331.6	0.0	0.0	0.0	0.0	0.0	0.0	331.6
1941 / 42	13.8	19.0	152.0	97.6	96.7	109.9	3.5	492.5	0.0	0.0	0.0	0.0	0.0	0.0	492.5
1942 / 43	64.3	60.0	17.1	164.8	56.4	97.0	63.0	522.6	0.0	0.0	0.0	0.0	0.0	0.0	522.6
1943 / 44	0.4	3.0	12.4	184.9	67.3	29.5	8.3	305.8	0.0	0.0	0.0	0.0	0.0	0.0	305.8
1944 / 45	0.4	124.1	140.2	138.2	120.5	58.2	21.8	603.4	0.0	0.0	0.0	0.0	0.0	0.0	603.4
1945 / 46	1.1	31.8	51.8	13.1	211.9	37.1	0.0	346.8	0.0	0.0	0.0	0.0	0.0	0.0	346.8
1946 / 47	3.7	2.7	33.6	124.4	22.2	28.0	14.5	229.1	0.0	0.0	0.0	0.0	0.0	0.0	229.1
1947 / 48	0.0	39.3	20.0	72.5	90.0	117.6	30.9	370.3	0.0	0.0	0.0	0.0	0.0	0.0	370.3
1948 / 49	0.0	41.7	64.1	42.5	110.6	141.4	104.1	504.4	0.0	0.0	0.0	0.0	0.0	0.0	504.4
1949 / 50	0.0	1.2	130.5	144.4	104.2	61.7	22.2	464.2	21.8	0.0	0.0	0.0	0.0	21.8	486.0
1950 / 51	16.5	6.8	13.5	35.4	94.3	30.4	17.6	214.5	0.0	0.0	0.0	0.0	0.0	0.0	214.5
1951 / 52	3.2	30.0	174.8	40.8	150.6	94.3	2.8	496.5	0.0	0.0	0.0	0.0	0.0	0.0	496.5
1952 / 53	25.7	2.9	25.4	85.9	160.5	178.7	4.3	483.4	0.0	0.0	0.0	0.0	0.0	0.0	483.4
1953 / 54	0.0	86.3	55.0	50.3	130.8	27.8	39.4	389.6	0.0	0.0	0.0	0.0	0.0	0.0	389.6
1954 / 55	0.0	55.7	44.5	0.6	24.2	67.9	18.7	211.6	0.0	0.0	0.0	0.0	0.0	0.0	211.6
1955 / 56	21.0	152.6	75.5	75.1	29.0	74.4	15.8	443.4	5.6	0.0	0.0	0.0	0.0	5.6	449.0
1956 / 57	0.0	5.0	103.2	62.2	98.4	86.0	8.2	363.0	14.0	0.0	0.0	0.0	0.0	14.0	377.0
1957 / 58	1.2	35.5	79.8	146.5	3.0	6.2	19.5	291.7	25.0	0.0	0.0	0.0	0.0	25.0	316.7
1958 / 59	0.0	0.0	8.6	51.6	88.1	22.2	15.3	185.8	8.0	0.0	0.0	0.0	0.0	8.0	193.8
1959 / 60	0.0	7.2	9.3	35.6	29.8	70.4	12.7	165.0	0.0	0.0	0.0	0.0	0.0	0.0	165.0
1960 / 61	0.0	69.5	51.5	69.0	68.0	17.0	16.0	291.0	0.0	0.0	0.0	0.0	0.0	0.0	291.0
1961 / 62	0.0	27.0	217.3	56.0	61.0	0.0	7.5	368.8	7.5	0.0	0.0	0.0	0.0	7.5	376.3
1962 / 63	0.0	0.0	40.8	29.8	96.5	58.2	15.0	240.3	13.6	0.0	0.0	0.0	0.0	13.6	253.9
1963 / 64	31.3	17.5	86.9	77.7	108.5	82.8	5.0	409.7	9.0	0.0	0.0	0.0	0.0	9.0	418.7
1964 / 65	0.0	75.9	44.4	113.1	48.8	27.2	28.0	337.4	0.0	0.0	0.0	0.0	0.0	0.0	337.4
1965 / 66	85.0	14.0	53.0	24.2	60.2	151.6	5.0	393.0	0.0	0.0	0.0	0.0	0.0	0.0	393.0
1966 / 67	15.5	47.1	174.0	0.0	0.0	0.0	0.0	236.6	0.0	0.0	0.0	0.0	0.0	0.0	236.6
1967 / 68	8.0	30.2	45.5	99.5	31.5	9.0	11.0	234.7	6.0	0.0	0.0	0.0	0.0	6.0	240.7
1968 / 69	10.5	19.5	90.0	77.0	25.0	88.5	12.5	323.0	0.0	0.0	0.0	0.0	0.0	0.0	323.0
1969 / 70	13.0	34.0	18.7	115.0	32.5	113.2	19.0	345.4	0.0	0.0	0.0	0.0	0.0	0.0	345.4
1970 / 71	5.7	16.1	53.4	52.4	103.4	65.5	140.0	436.5	0.0	0.0	0.0	0.0	0.0	0.0	436.5
1971 / 72	0.0	17.5	142.0	63.0	94.5	50.0	22.5	389.5	1.0	0.0	0.0	0.0	0.0	1.0	390.5
1972 / 73	4.0	13.5	13.0	114.0	2.5	23.0	2.0	172.0	4.5	0.0	0.0	0.0	0.0	4.5	176.5
1973 / 74	4.0	70.5	44.0	205.5	73.0	39.0	25.5	461.5	0.0	0.0	0.0	0.0	0.0	0.0	461.5
1974 / 75	0.0	17.0	32.0	20.0	120.5	59.0	3.0	251.5	0.0	0.0	0.0	0.0	0.0	0.0	251.5
1975 / 76	0.0	28.0	69.0	47.0	85.5	60.0	27.0	316.5	0.0	0.0	0.0	0.0	0.0	0.0	316.5
1976 / 77	0.0	46.0	5.0	84.0	25.0	64.5	46.5	271.0	0.0	0.0	0.0	0.0	0.0	0.0	271.0
1977 / 78	6.0	0.0	89.0	58.0	17.5	84.0	11.0	265.5	0.0	0.0	0.0	0.0	0.0	0.0	265.5
1978 / 79	26.0	4.6	27.3	41.6	26.0	50.9	8.2	184.6	0.0	0.0	0.0	0.0	0.0	0.0	184.6
1979 / 80	25.6	91.1	153.9	117.0	39.3	119.5	14.2	560.6	0.0	0.0	0.0	0.0	0.0	0.0	560.6
1980 / 81	14.4	6.9	118.0	71.0	49.1	28.1	16.3	303.8	0.0	0.0	0.0	0.0	0.0	0.0	303.8
1981 / 82	0.0	44.2	20.5	50.0	75.5	65.0	8.1	263.3	17.8	0.0	0.0	0.0	0.0	17.8	281.1
1982 / 83	0.0	43.0	21.0	74.0	127.0	79.0	17.0	361.0	0.0	0.0	0.0	0.0	0.0	0.0	361.0
1983 / 84	0.0	32.0	11.0	56.5	23.0	127.0	37.0	286.5	0.0	0.0	0.0	0.0	0.0	0.0	286.5
1984 / 85	28.0	25.0	57.2	13.0	157.0	19.5	8.0	307.7	0.0	0.0	0.0	0.0	0.0	0.0	307.7
1985 / 86	8.0	27.0	23.3	80.0	82.0	10.0	14.0	244.3	8.0	0.0	0.0	0.0	0.0	8.0	252.3
1986 / 87	25.0	163.2	73.1	69.0	30.2	92.6	0.0	453.1	0.0	0.0	0.0	0.0	0.0	0.0	453.1
1987 / 88	3.7	1.1	78.6	107.6	126.0	100.8	27.5	445.3	0.0	0.0	0.0	0.0	0.0	0.0	445.3
1988 / 89	5.7	23.4	58.8	22.8	34.5	39.5	0.0	184.7	0.0	0.0	0.0	0.0	0.0	0.0	184.7
1989 / 90	3.5	43.2	40.0	134.1	66.0	66.0	25.3	378.1	0.0	0.0	0.0	0.0	0.0	0.0	378.1
1990 / 91	0.0	21.2	25.5	130.0	44.7	77.0	32.6	331.0	3.5	0.0	0.0	0.0	0.0	3.5	334.5
1991 / 92	0.0	47.2	156.6	162.0	258.5	33.8	2.5	660.6	5.2	0.0	0.0	0.0	0.0	5.2	665.8
1992 / 93	0.0	50.6	140.3	56.0	45.5	22.0	0.0	314.4	26.8	0.0	0.0	0.0	0.0	26.8	341.2
1993 / 94	6.8	11.5	12.0	74.3	40.0	77.5	2.0	224.1	0.0	0.0	0.0	0.0	0.0	0.0	224.1
1994 / 95	6.4	106.6	92.3	4.8	44.0	30.6	15.5	300.2	0.0	0.0	0.0	0.0	0.0	0.0	300.2
1995 / 96	0.0	62.4	21.8	78.8	8.8	88.7	9.9	270.4	0.0	0.0	0.0	0.0	0.0	0.0	270.4
1996 / 97	32.7	15.7	36.1	65.8	147.2	68.7	10.8	377.0	0.7	0.0	0.0	0.0	0.0	0.7	377.7
1997 / 98	17.7	39.0	79.8	99.5	46.5	152.7	6.5	441.7	0.0	0.0	0.0	0.0	0.0	0.0	441.7
1998 / 99	0.0	0.0	19.7	57.7	57.3	26.1	4.3	165.1	0.0	0.0	0.0	0.0	0.0	0.0	165.1
Max.	85.0	163.2	217.3	215.6	258.5	178.7	140.0	660.6	26.8	0.0	0.0	0.0	0.0	26.8	665.8
Min.	0.0	0.0	3.2	0.0	0.0	0.0	0.0	165.0	0.0	0.0	0.0	0.0	0.0	0.0	165.0
Mean	8.8	39.5	62.7	78.1	71.4	63.9	18.6	343.2	3.2	0.0	0.0	0.0	0.0	3.2	346.4
Source: WIS database of MWI.														Std. Dev.	111.1

Table A2.1.1-4(8) Monthly Average and Annual Rainfall in Irbid Governorate

Station Name : En Nueiyime		ID No.: AD0011													
Hydrological Year	Wet Season								Dry Season						Annual
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total	
1955 / 56	7.8	112.1	79.5	63.7	24.1	57.8	10.0	355.0	0.0	0.0	0.0	0.0	0.0	0.0	355.0
1956 / 57	0.0	0.0	71.1	89.9	57.8	51.9	8.3	279.0	11.2	0.0	0.0	0.0	0.0	11.2	290.2
1957 / 58	6.2	22.0	61.9	159.2	3.6	9.0	20.0	281.9	2.0	0.0	0.0	0.0	0.0	2.0	283.9
1958 / 59	6.2	22.0	4.3	56.0	85.5	14.6	4.0	192.6	0.0	0.0	0.0	0.0	0.0	0.0	192.6
1959 / 60	0.0	5.0	7.5	30.3	11.4	49.0	2.6	105.8	0.0	0.0	0.0	0.0	0.0	0.0	105.8
1960 / 61	0.0	46.4	31.2	56.9	67.7	11.4	18.0	231.6	0.0	0.0	0.0	0.0	0.0	0.0	231.6
1961 / 62	2.0	31.5	185.4	49.9	128.9	6.4	8.1	412.2	0.0	0.0	0.0	0.0	0.0	0.0	412.2
1962 / 63	3.3	0.0	27.5	23.0	88.3	44.8	14.3	201.2	18.3	0.0	0.0	0.0	0.0	18.3	219.5
1963 / 64	21.8	15.5	92.2	67.5	103.5	57.5	7.2	365.2	10.0	0.0	0.0	0.0	0.0	10.0	375.2
1964 / 65	0.0	67.7	73.1	102.6	62.7	24.5	57.0	387.6	0.0	0.0	0.0	0.0	0.0	0.0	387.6
1965 / 66	46.8	4.1	38.2	31.4	37.0	126.0	2.0	285.5	0.0	0.0	0.0	0.0	0.0	0.0	285.5
1966 / 67	14.9	4.5	170.0	125.1	38.2	146.0	2.0	500.7	12.0	0.0	0.0	0.0	0.0	12.0	512.7
1967 / 68	17.5	59.4	82.5	153.6	29.7	14.5	10.0	367.2	0.0	0.0	0.0	0.0	0.0	0.0	367.2
1968 / 69	0.0	13.8	112.8	143.5	43.3	110.6	18.6	442.6	0.0	0.0	0.0	0.0	0.0	0.0	442.6
1969 / 70	10.5	27.8	14.3	102.7	45.9	127.3	28.7	357.2	0.0	0.0	0.0	0.0	0.0	0.0	357.2
1970 / 71	3.2	13.3	43.2	48.3	91.1	51.4	178.2	428.7	0.0	0.0	0.0	0.0	0.0	0.0	428.7
1971 / 72	0.0	28.1	135.7	24.6	90.1	49.9	29.0	357.4	3.6	0.0	0.0	0.0	0.0	3.6	361.0
1972 / 73	0.0	25.1	4.4	80.3	26.5	68.0	3.0	207.3	0.8	0.0	0.0	0.0	0.0	0.8	208.1
1973 / 74	10.0	72.0	37.5	136.5	71.5	26.0	25.5	379.0	0.0	0.0	0.0	0.0	0.0	0.0	379.0
1974 / 75	0.0	11.8	25.8	12.5	123.0	53.5	13.0	239.6	0.0	0.0	0.0	0.0	0.0	0.0	239.6
1975 / 76	0.0	48.5	48.0	27.5	74.0	79.5	7.2	284.7	0.0	0.0	0.0	0.0	0.0	0.0	284.7
1976 / 77	7.0	26.3	1.5	90.8	26.5	59.3	46.0	257.4	0.0	0.0	0.0	0.0	0.0	0.0	257.4
1977 / 78	17.5	2.5	90.0	45.5	18.0	88.5	15.0	277.0	0.0	0.0	0.0	0.0	0.0	0.0	277.0
1978 / 79	23.9	5.1	43.1	21.0	10.6	35.5	5.3	144.5	0.0	0.0	0.0	0.0	0.0	0.0	144.5
1979 / 80	18.5	104.4	126.3	68.0	58.5	85.5	16.5	477.7	1.6	0.0	0.0	0.0	0.0	1.6	479.3
1980 / 81	7.8	1.5	114.8	48.8	48.6	20.7	26.0	268.2	0.0	0.0	0.0	0.0	0.0	0.0	268.2
1981 / 82	0.0	32.5	12.0	53.5	99.6	36.2	16.8	250.6	0.0	0.0	0.0	0.0	0.0	0.0	250.6
1982 / 83	15.0	27.7	16.7	82.4	129.5	67.0	12.2	350.5	6.0	0.0	0.0	0.0	0.0	6.0	356.5
1983 / 84	3.5	25.0	9.0	77.5	35.0	110.0	8.5	268.5	0.0	0.0	0.0	0.0	0.0	0.0	268.5
1984 / 85	17.0	20.0	6.0	32.0	181.0	21.0	9.0	286.0	0.0	0.0	0.0	0.0	0.0	0.0	286.0
1985 / 86	10.0	1.0	19.9	44.9	85.4	6.4	21.8	189.4	14.8	0.0	0.0	0.0	0.0	14.8	204.2
1986 / 87	9.4	138.8	53.1	51.0	22.9	60.6	0.0	335.8	0.0	0.0	0.0	0.0	0.0	0.0	335.8
1987 / 88	3.2	14.9	62.8	94.3	107.7	66.4	15.2	364.5	0.0	0.0	0.0	0.0	0.0	0.0	364.5
1988 / 89	4.0	24.0	86.5	25.5	22.5	36.0	0.0	198.5	0.0	0.0	0.0	0.0	0.0	0.0	198.5
1989 / 90	4.8	31.8	33.6	71.1	46.8	49.1	8.8	246.0	0.0	0.0	0.0	0.0	0.0	0.0	246.0
1990 / 91	2.8	6.9	5.0	81.4	31.5	51.7	9.7	189.0	0.4	0.0	0.0	0.0	0.0	0.4	189.4
1991 / 92	0.8	46.9	139.9	104.3	182.4	12.5	0.0	486.8	3.8	0.0	0.0	0.0	0.0	3.8	490.6
1992 / 93	0.0	35.8	113.0	43.4	23.6	23.9	2.0	241.7	24.3	0.0	0.0	0.0	0.0	24.3	266.0
1993 / 94	3.7	17.0	7.8	69.2	28.8	73.1	2.0	201.6	0.0	0.0	0.0	0.0	0.0	0.0	201.6
1994 / 95	2.3	95.5	81.8	4.0	31.9	26.3	1.8	243.6	0.0	0.0	0.0	0.0	0.0	0.0	243.6
1995 / 96	0.0	34.8	6.6	63.0	9.9	73.0	4.6	191.9	0.0	0.0	0.0	0.0	0.0	0.0	191.9
1996 / 97	22.7	25.9	41.8	57.0	111.8	42.0	15.5	316.7	0.0	0.0	0.0	0.0	0.0	0.0	316.7
1997 / 98	8.0	15.5	71.0	76.5	36.5	108.3	7.0	322.8	0.0	0.0	0.0	0.0	0.0	0.0	322.8
1998 / 99	0.0	0.0	6.8	39.0	43.0	9.0	4.3	102.1	0.0	0.0	0.0	0.0	0.0	0.0	102.1
Max.	46.8	138.8	185.4	159.2	182.4	146.0	178.2	500.7	24.3	0.0	0.0	0.0	0.0	24.3	512.7
Min.	0.0	0.0	1.5	4.0	3.6	6.4	0.0	102.1	0.0	0.0	0.0	0.0	0.0	0.0	102.1
Mean	7.5	31.0	56.7	66.6	61.3	53.2	16.2	292.6	2.5	0.0	0.0	0.0	0.0	2.5	295.0
Source: WIS database of MWI.														Std. Dev.	96.5

Table A2.1.1-4(9) Monthly Average and Annual Rainfall in Irbid Governorate

Station Name : Ramtha Boys School		ID No.: AD0012													
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	2.0	32.0	6.0	93.5	79.5	63.5	0.0	276.5	20.5	0.0	0.0	0.0	0.0	20.5	297.0
1938 / 39	0.0	105.6	29.5	26.5	58.0	116.0	41.0	376.6	0.0	0.0	0.0	0.0	0.0	0.0	376.6
1939 / 40	3.0	94.1	29.7	149.1	13.6	14.4	12.8	316.7	0.0	0.0	0.0	0.0	0.0	0.0	316.7
1940 / 41	3.1	41.5	74.4	72.7	18.1	71.8	7.3	288.9	0.0	0.0	0.0	0.0	0.0	0.0	288.9
1941 / 42	9.3	9.0	125.3	88.1	71.7	92.5	0.0	395.9	0.0	0.0	0.0	0.0	0.0	0.0	395.9
1942 / 43	42.3	41.8	20.1	119.9	30.8	89.5	51.4	395.8	0.0	0.0	0.0	0.0	0.0	0.0	395.8
1943 / 44	0.0	2.5	24.7	131.9	43.7	29.8	18.0	250.6	0.0	0.0	0.0	0.0	0.0	0.0	250.6
1944 / 45	0.0	125.0	127.6	96.7	88.4	25.5	25.0	488.2	0.0	0.0	0.0	0.0	0.0	0.0	488.2
1945 / 46	0.0	35.0	55.7	12.3	163.0	42.8	0.0	308.8	0.0	0.0	0.0	0.0	0.0	0.0	308.8
1946 / 47	3.6	2.0	23.0	91.5	10.5	18.0	10.7	159.3	0.0	0.0	0.0	0.0	0.0	0.0	159.3
1947 / 48	0.0	28.1	14.2	49.6	53.9	95.6	32.1	273.5	11.1	0.0	0.0	0.0	0.0	11.1	284.6
1948 / 49	0.0	19.1	59.7	29.8	80.6	104.4	83.7	377.3	0.0	0.0	0.0	0.0	0.0	0.0	377.3
1949 / 50	0.0	0.0	92.6	99.6	77.2	60.2	20.6	350.2	7.2	0.0	0.0	0.0	0.0	7.2	357.4
1950 / 51	0.8	2.2	7.1	21.1	58.4	21.3	5.0	115.9	0.0	0.0	0.0	0.0	0.0	0.0	115.9
1951 / 52	0.0	32.9	102.5	32.4	94.3	52.5	3.2	317.8	0.0	0.0	0.0	0.0	0.0	0.0	317.8
1952 / 53	10.5	7.5	24.6	57.3	90.6	119.9	17.6	328.0	0.0	0.0	0.0	0.0	0.0	0.0	328.0
1953 / 54	0.0	77.8	45.9	52.6	103.3	24.6	36.5	340.7	0.0	0.0	0.0	0.0	0.0	0.0	340.7
1954 / 55	0.0	25.3	36.8	1.3	20.0	43.4	13.8	140.6	0.0	0.0	0.0	0.0	0.0	0.0	140.6
1955 / 56	3.0	156.7	68.4	56.2	15.3	48.3	11.5	359.4	0.0	0.0	0.0	0.0	0.0	0.0	359.4
1956 / 57	0.0	0.0	81.4	75.1	69.3	58.8	6.5	291.1	12.5	0.0	0.0	0.0	0.0	12.5	303.6
1957 / 58	0.0	43.5	66.2	105.5	2.8	1.5	0.0	219.5	0.0	0.0	0.0	0.0	0.0	0.0	219.5
1958 / 59	0.0	0.0	3.5	28.1	110.5	11.5	4.5	158.1	3.0	0.0	0.0	0.0	0.0	3.0	161.1
1959 / 60	0.0	9.0	9.5	34.5	20.0	77.0	1.5	151.5	0.0	0.0	0.0	0.0	0.0	0.0	151.5
1960 / 61	0.0	69.5	48.0	71.9	73.8	30.5	29.0	322.7	0.0	0.0	0.0	0.0	0.0	0.0	322.7
1961 / 62	1.0	24.0	190.5	64.5	60.5	2.5	13.0	356.0	0.0	0.0	0.0	0.0	0.0	0.0	356.0
1962 / 63	0.0	0.0	28.3	18.0	62.7	24.0	13.5	146.5	17.5	0.0	0.0	0.0	0.0	17.5	164.0
1963 / 64	24.3	9.5	84.0	46.0	75.2	49.5	3.5	292.0	4.5	0.0	0.0	0.0	0.0	4.5	296.5
1964 / 65	0.0	38.9	44.2	106.5	33.5	16.3	25.0	264.4	0.0	0.0	0.0	0.0	0.0	0.0	264.4
1965 / 66	33.0	4.0	25.0	20.0	37.5	45.5	0.0	165.0	0.0	0.0	0.0	0.0	0.0	0.0	165.0
1966 / 67	21.7	16.0	110.5	72.5	33.3	120.7	2.0	376.7	9.0	0.0	0.0	0.0	0.0	9.0	385.7
1967 / 68	11.0	31.1	54.0	245.5	27.5	7.1	27.8	404.0	4.0	0.0	0.0	0.0	0.0	4.0	408.0
1968 / 69	7.5	13.0	75.1	80.3	18.4	73.5	23.2	291.0	2.3	0.0	0.0	0.0	0.0	2.3	293.3
1969 / 70	11.7	25.7	17.5	74.2	21.0	73.5	6.7	230.3	0.0	0.0	0.0	0.0	0.0	0.0	230.3
1970 / 71	0.6	8.5	37.3	64.1	78.2	44.0	99.5	332.2	0.0	0.0	0.0	0.0	0.0	0.0	332.2
1971 / 72	0.0	32.5	99.0	58.5	64.4	42.0	35.1	331.5	0.0	0.0	0.0	0.0	0.0	0.0	331.5
1972 / 73	1.2	20.2	20.5	75.0	20.5	47.4	2.0	186.8	1.5	0.0	0.0	0.0	0.0	1.5	188.3
1973 / 74	3.5	36.5	28.0	184.2	70.5	32.0	21.9	376.6	0.0	0.0	0.0	0.0	0.0	0.0	376.6
1974 / 75	0.0	17.0	20.5	20.3	82.7	34.0	17.0	191.5	0.0	0.0	0.0	0.0	0.0	0.0	191.5
1975 / 76	0.0	19.5	52.2	27.5	75.5	50.5	16.0	241.2	0.0	0.0	0.0	0.0	0.0	0.0	241.2
1976 / 77	15.0	24.5	2.0	69.3	11.5	40.5	28.2	191.0	0.0	0.0	0.0	0.0	0.0	0.0	191.0
1977 / 78	18.3	0.5	67.5	31.0	33.0	53.0	3.0	206.3	0.0	0.0	0.0	0.0	0.0	0.0	206.3
1978 / 79	12.0	0.0	39.0	26.2	27.9	21.2	3.9	130.2	0.0	0.0	0.0	0.0	0.0	0.0	130.2
1979 / 80	0.0	69.1	114.7	76.9	48.9	73.4	12.5	395.5	0.2	0.0	0.0	0.0	0.0	0.2	395.7
1980 / 81	9.6	3.0	93.8	47.0	36.6	16.6	11.9	218.5	0.0	0.0	0.0	0.0	0.0	0.0	218.5
1981 / 82	0.0	25.7	12.9	39.8	48.6	41.4	10.6	179.0	26.4	0.0	0.0	0.0	0.0	26.4	205.4
1982 / 83	5.6	41.9	21.3	59.3	98.3	49.8	9.0	285.2	7.9	0.0	0.0	0.0	0.0	7.9	293.1
1983 / 84	1.2	30.4	12.2	49.4	24.0	87.1	17.4	221.7	0.0	0.0	0.0	0.0	0.0	0.0	221.7
1984 / 85	29.9	22.7	13.9	25.3	103.9	22.5	5.1	223.3	0.0	0.0	0.0	0.0	0.0	0.0	223.3
1985 / 86	9.3	5.7	15.4	38.4	54.3	6.9	27.5	157.5	2.0	0.0	0.0	0.0	0.0	2.0	159.5
1986 / 87	13.2	109.9	48.6	40.9	23.9	72.4	0.0	308.9	0.0	0.0	0.0	0.0	0.0	0.0	308.9
1987 / 88	4.0	6.5	49.1	96.3	78.1	86.4	8.2	328.6	0.0	0.0	0.0	0.0	0.0	0.0	328.6
1988 / 89	5.6	18.5	89.8	19.9	26.9	28.6	0.0	189.3	0.0	0.0	0.0	0.0	0.0	0.0	189.3
1989 / 90	6.0	23.4	38.7	118.6	53.2	59.1	35.9	334.9	0.0	0.0	0.0	0.0	0.0	0.0	334.9
1990 / 91	0.4	14.4	28.9	96.1	25.7	67.1	23.1	255.7	5.0	0.0	0.0	0.0	0.0	5.0	260.7
1991 / 92	2.7	42.4	118.5	124.9	173.1	14.8	0.2	476.6	3.1	0.0	0.0	0.0	0.0	3.1	479.7
1992 / 93	0.0	31.9	84.4	28.5	34.3	18.3	0.0	197.4	12.7	0.0	0.0	0.0	0.0	12.7	210.1
1993 / 94	15.1	13.9	7.8	62.5	33.0	50.1	0.7	183.1	0.0	0.0	0.0	0.0	0.0	0.0	183.1
1994 / 95	2.2	119.7	74.0	9.5	22.0	17.5	5.0	249.9	0.0	0.0	0.0	0.0	0.0	0.0	249.9
1995 / 96	0.5	29.9	21.2	46.9	5.5	58.0	6.5	168.5	0.0	0.0	0.0	0.0	0.0	0.0	168.5
1996 / 97	16.4	21.6	22.4	60.5	60.0	36.9	16.5	234.3	2.5	0.0	0.0	0.0	0.0	2.5	236.8
1997 / 98	21.4	23.4	55.2	76.7	28.2	69.0	12.5	286.4	3.8	0.0	0.0	0.0	0.0	3.8	290.2
1998 / 99	0.0	0.0	11.6	28.7	39.8	11.6	3.1	94.8	0.0	0.0	0.0	0.0	0.0	0.0	94.8
Max.	42.3	156.7	190.5	245.5	173.1	120.7	99.5	488.2	26.4	0.0	0.0	0.0	0.0	26.4	488.2
Min.	0.0	0.0	2.0	1.3	2.8	1.5	0.0	94.8	0.0	0.0	0.0	0.0	0.0	0.0	94.8
Mean	6.2	31.2	50.1	65.0	53.2	48.0	15.8	269.5	2.5	0.0	0.0	0.0	0.0	2.5	272.0
Source: WIS database of MWI.														Std. Dev.	89.8

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

Station Name :		Khanasira								ID No.:						AD0013	
Hydrological	Wet Season								Dry Season						Annual		
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sub-total	May	Jun.	Jul.	Aug.	Sep.	Sub-total			
1950 / 51	0.0	29.5	7.7	22.3	30.1	12.2	0.0	101.8	0.0	0.0	0.0	0.0	0.0	0.0	101.8		
1951 / 52	0.0	28.7	127.1	28.0	63.9	45.2	0.0	292.9	0.0	0.0	0.0	0.0	0.0	0.0	292.9		
1952 / 53	3.1	15.0	6.6	33.3	121.3	69.9	0.0	249.2	0.0	0.0	0.0	0.0	0.0	0.0	249.2		
1953 / 54	0.0	50.3	26.9	12.5	78.2	9.2	12.0	189.1	0.0	0.0	0.0	0.0	0.0	0.0	189.1		
1954 / 55	0.0	23.2	29.9	0.0	11.9	19.3	0.0	84.3	0.0	0.0	0.0	0.0	0.0	0.0	84.3		
1955 / 56	1.2	78.3	69.7	47.3	5.9	53.9	9.7	266.0	0.0	0.0	0.0	0.0	0.0	0.0	266.0		
1956 / 57	0.0	0.6	56.0	45.6	45.8	54.6	2.6	205.2	7.0	0.0	0.0	0.0	0.0	7.0	212.2		
1957 / 58	0.0	12.2	30.9	116.8	0.0	0.0	1.3	161.2	0.0	0.0	0.0	0.0	0.0	0.0	161.2		
1958 / 59	0.0	0.0	5.3	31.6	78.8	17.1	3.3	136.1	0.0	0.0	0.0	0.0	0.0	0.0	136.1		
1959 / 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1960 / 61	0.0	39.8	25.7	65.1	67.2	40.3	18.4	256.5	0.0	0.0	0.0	0.0	0.0	0.0	256.5		
1961 / 62	5.3	3.4	80.8	61.2	28.6	10.7	9.9	199.9	0.0	0.0	0.0	0.0	0.0	0.0	199.9		
1962 / 63	3.4	0.0	20.6	14.4	63.0	16.5	35.6	153.5	0.0	0.0	0.0	0.0	0.0	0.0	153.5		
1963 / 64	21.0	11.0	88.7	62.6	91.2	90.7	14.0	379.2	7.9	0.0	0.0	0.0	0.0	7.9	387.1		
1964 / 65	0.0	37.3	65.8	115.6	29.1	27.0	40.1	314.9	0.0	0.0	0.0	0.0	0.0	0.0	314.9		
1965 / 66	22.5	0.0	24.1	13.0	10.0	81.1	0.0	150.7	0.0	0.0	0.0	0.0	0.0	0.0	150.7		
1966 / 67	12.8	33.2	113.8	73.4	34.5	92.9	0.0	360.6	11.8	0.0	0.0	0.0	0.0	11.8	372.4		
1967 / 68	12.4	26.8	34.0	96.3	25.9	20.8	20.4	236.6	6.0	0.0	0.0	0.0	0.0	6.0	242.6		
1968 / 69	0.0	11.8	56.1	105.4	17.5	93.0	24.4	308.2	0.0	0.0	0.0	0.0	0.0	0.0	308.2		
1969 / 70	19.9	15.6	7.7	43.6	0.0	0.0	0.0	86.8	0.0	0.0	0.0	0.0	0.0	0.0	86.8		
1970 / 71	0.0	7.5	49.9	45.0	54.3	26.1	89.0	271.8	0.0	0.0	0.0	0.0	0.0	0.0	271.8		
1971 / 72	0.0	13.3	93.9	29.5	49.8	34.0	20.5	241.0	3.0	0.0	0.0	0.0	0.0	3.0	244.0		
1972 / 73	0.0	9.3	2.9	58.3	21.3	40.7	3.6	136.1	0.0	0.0	0.0	0.0	0.0	0.0	136.1		
1973 / 74	0.0	6.0	11.0	148.0	50.1	20.1	10.4	245.6	0.0	0.0	0.0	0.0	0.0	0.0	245.6		
1974 / 75	0.0	12.0	12.4	4.5	82.8	29.0	8.5	149.2	0.0	0.0	0.0	0.0	0.0	0.0	149.2		
1975 / 76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1976 / 77	0.0	13.5	0.0	57.3	16.0	26.0	22.0	134.8	0.0	0.0	0.0	0.0	0.0	0.0	134.8		
1977 / 78	19.9	0.0	60.3	23.5	6.0	31.3	0.0	141.0	0.0	0.0	0.0	0.0	0.0	0.0	141.0		
1978 / 79	0.0	3.5	39.8	19.6	17.7	15.9	0.0	96.5	0.0	0.0	0.0	0.0	0.0	0.0	96.5		
1979 / 80	8.2	85.6	98.2	76.1	52.9	74.4	11.2	406.6	0.0	0.0	0.0	0.0	0.0	0.0	406.6		
1980 / 81	2.4	2.6	96.4	22.1	54.2	11.8	0.0	189.5	0.0	0.0	0.0	0.0	0.0	0.0	189.5		
1981 / 82	0.0	22.3	13.5	36.8	44.1	20.5	0.0	137.2	4.6	0.0	0.0	0.0	0.0	4.6	141.8		
1982 / 83	21.5	27.5	9.0	56.0	86.0	49.5	0.0	249.5	0.0	0.0	0.0	0.0	0.0	0.0	249.5		
1983 / 84	0.0	19.2	6.4	34.1	18.7	61.6	1.5	141.5	0.0	0.0	0.0	0.0	0.0	0.0	141.5		
1984 / 85	9.6	16.5	26.4	4.6	120.4	17.3	3.0	197.8	0.0	0.0	0.0	0.0	0.0	0.0	197.8		
1985 / 86	0.0	4.0	62.0	15.5	49.3	6.5	13.0	150.3	16.0	0.0	0.0	0.0	0.0	16.0	166.3		
1986 / 87	2.5	114.7	29.5	43.6	33.8	44.5	0.0	268.6	0.0	0.0	0.0	0.0	0.0	0.0	268.6		
1987 / 88	9.0	15.0	45.0	75.5	71.7	32.0	6.6	254.8	0.0	0.0	0.0	0.0	0.0	0.0	254.8		
1988 / 89	2.0	14.8	50.9	18.1	17.7	21.2	0.0	124.7	0.0	0.0	0.0	0.0	0.0	0.0	124.7		
1989 / 90	2.0	16.3	22.7	46.0	26.0	21.7	18.0	152.7	0.0	0.0	0.0	0.0	0.0	0.0	152.7		
1990 / 91	7.1	5.4	0.5	65.2	17.8	36.2	12.8	145.0	0.0	0.0	0.0	0.0	0.0	0.0	145.0		
1991 / 92	5.3	27.6	75.2	64.1	122.5	10.3	0.0	305.0	1.0	0.0	0.0	0.0	0.0	1.0	306.0		
1992 / 93	0.0	24.5	48.1	30.5	25.8	7.6	0.0	136.5	1.5	0.0	0.0	0.0	0.0	1.5	138.0		
1993 / 94	0.0	10.4	3.0	41.4	41.6	106.1	1.5	204.0	0.0	0.0	0.0	0.0	0.0	0.0	204.0		
1994 / 95	7.0	133.7	44.1	0.8	35.0	15.9	4.5	241.0	0.0	0.0	0.0	0.0	0.0	0.0	241.0		
1995 / 96	0.0	12.0	4.0	45.8	3.0	40.0	4.5	109.3	0.0	0.0	0.0	0.0	0.0	0.0	109.3		
1996 / 97	10.0	15.0	10.5	46.1	61.0	29.5	4.5	176.6	0.0	0.0	0.0	0.0	0.0	0.0	176.6		
1997 / 98	9.0	7.0	40.5	52.7	13.2	68.3	4.0	194.7	0.0	0.0	0.0	0.0	0.0	0.0	194.7		
1998 / 99	0.0	0.0	0.0	21.9	27.0	2.0	1.5	52.4	0.0	0.0	0.0	0.0	0.0	0.0	52.4		
1999 / 00	0.0	0.0	4.5	86.4	16.0	11.0	0.0	117.9	0.0	0.0	0.0	0.0	0.0	0.0	117.9		
Max.	22.5	133.7	127.1	148.0	122.5	106.1	89.0	406.6	16.0	0.0	0.0	0.0	0.0	16.0	406.6		
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.4	0.0	0.0	0.0	0.0	0.0	0.0	52.4		
Mean	4.5	22.0	38.3	47.0	42.5	34.7	9.0	198.0	1.2	0.0	0.0	0.0	0.0	1.2	199.2		
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	81.2		

Table A2.1.1-4(11) Monthly Average and Annual Rainfall in Irbid Governorate

Station Name : Irbid Agr. Station		ID No.: AE0002													
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	0.6	49.3	60.4	2.6	28.6	79.4	25.9	246.8	3.9	0.0	0.0	0.0	0.0	3.9	250.7
1955 / 56	16.0	152.0	97.3	88.6	32.2	85.2	15.1	486.4	0.9	0.0	0.0	0.0	0.0	0.9	487.3
1956 / 57	0.0	7.8	113.1	88.3	95.4	108.5	18.4	431.5	15.1	0.0	0.0	0.0	0.0	15.1	446.6
1957 / 58	2.7	46.4	115.0	173.0	7.7	8.2	28.6	381.6	40.4	0.0	0.0	0.0	0.0	40.4	422.0
1958 / 59	4.2	0.0	12.9	72.5	127.2	29.5	12.4	258.7	5.3	0.0	0.0	0.0	0.0	5.3	264.0
1959 / 60	0.6	14.3	8.5	45.1	24.8	91.4	26.0	210.7	1.0	0.0	0.0	0.0	0.0	1.0	211.7
1960 / 61	0.0	84.3	68.3	74.2	89.4	33.6	23.1	372.9	3.6	0.0	0.0	0.0	0.0	3.6	376.5
1961 / 62	3.4	34.5	251.1	54.2	91.1	3.7	15.6	453.6	0.0	0.0	0.0	0.0	0.0	0.0	453.6
1962 / 63	3.4	0.0	73.6	52.5	135.7	73.6	26.7	365.5	23.8	0.0	0.0	0.0	0.0	23.8	389.3
1963 / 64	37.5	22.7	97.5	87.1	155.4	102.3	4.9	507.4	12.5	0.0	0.0	0.0	0.0	12.5	519.9
1964 / 65	0.0	107.7	55.0	146.8	67.9	43.7	44.2	465.3	0.0	0.0	0.0	0.0	0.0	0.0	465.3
1965 / 66	52.0	19.9	68.2	46.0	70.9	127.3	6.9	391.2	3.5	0.0	0.0	0.0	0.0	3.5	394.7
1966 / 67	38.3	32.5	191.3	188.1	74.8	215.0	4.8	744.8	8.7	0.0	0.0	0.0	0.0	8.7	753.5
1967 / 68	13.3	76.2	78.2	245.6	46.8	31.8	21.0	512.9	14.7	0.0	0.0	0.0	0.0	14.7	527.6
1968 / 69	10.6	36.6	156.5	162.3	43.9	143.2	14.6	567.7	0.0	0.0	0.0	0.0	0.0	0.0	567.7
1969 / 70	29.8	44.3	29.8	138.7	47.0	154.8	28.6	473.0	0.7	0.0	0.0	0.0	0.0	0.7	473.7
1970 / 71	10.1	18.7	84.8	74.5	150.7	67.8	192.6	599.2	0.0	0.0	0.0	0.0	0.0	0.0	599.2
1971 / 72	0.0	22.4	163.7	81.7	115.3	60.0	33.9	477.0	0.0	0.0	0.0	0.0	0.0	0.0	477.0
1972 / 73	6.6	28.5	10.7	144.1	33.0	97.1	4.4	324.4	7.0	0.0	0.0	0.0	0.0	7.0	331.4
1973 / 74	9.0	88.1	56.9	272.3	94.7	69.5	40.1	630.6	0.0	0.0	0.0	0.0	0.0	0.0	630.6
1974 / 75	0.0	20.5	49.6	37.5	154.0	79.5	5.7	346.8	0.0	0.0	0.0	0.0	0.0	0.0	346.8
1975 / 76	0.0	54.1	116.3	61.5	107.4	82.5	31.6	453.4	0.0	0.0	0.0	0.0	0.0	0.0	453.4
1976 / 77	16.8	59.5	29.6	45.7	25.9	92.7	76.0	346.2	0.0	0.0	0.0	0.0	0.0	0.0	346.2
1977 / 78	17.0	11.9	131.5	64.6	45.9	121.9	13.5	406.3	0.0	0.0	0.0	0.0	0.0	0.0	406.3
1978 / 79	15.6	23.2	40.6	45.3	21.4	73.5	6.8	226.4	0.0	0.0	0.0	0.0	0.0	0.0	226.4
1979 / 80	7.7	109.7	198.1	116.3	107.2	143.8	19.3	702.1	3.6	0.0	0.0	0.0	0.0	3.6	705.7
1980 / 81	21.0	7.8	152.1	110.9	80.0	47.6	18.8	438.2	0.0	0.0	0.0	0.0	0.0	0.0	438.2
1981 / 82	0.0	36.2	30.9	71.0	113.9	94.8	5.3	352.1	0.0	0.0	0.0	0.0	0.0	0.0	352.1
1982 / 83	4.1	62.3	51.1	145.7	219.3	111.0	20.2	613.7	5.0	0.0	0.0	0.0	0.0	5.0	618.7
1983 / 84	2.4	61.8	13.7	117.6	42.9	148.5	77.4	464.3	0.0	0.0	0.0	0.0	0.0	0.0	464.3
1984 / 85	30.6	51.9	72.8	48.1	245.9	22.5	13.2	485.0	0.0	0.0	0.0	0.0	0.0	0.0	485.0
1985 / 86	18.5	35.0	31.5	104.3	106.3	37.3	16.9	349.8	0.0	0.0	0.0	0.0	0.0	0.0	349.8
1986 / 87	32.0	214.3	102.9	89.7	48.0	114.4	1.2	602.5	0.0	0.0	0.0	0.0	0.0	0.0	602.5
1987 / 88	15.3	5.2	126.4	132.3	147.3	119.8	16.2	562.5	0.0	0.0	0.0	0.0	0.0	0.0	562.5
1988 / 89	5.4	35.3	106.9	48.1	46.9	54.9	0.0	297.5	0.0	0.0	0.0	0.0	0.0	0.0	297.5
1989 / 90	2.5	54.0	50.3	152.0	67.5	97.7	29.7	453.7	0.0	0.0	0.0	0.0	0.0	0.0	453.7
1990 / 91	4.2	22.9	30.3	165.7	48.4	116.5	43.6	431.6	2.7	0.0	0.0	0.0	0.0	2.7	434.3
1991 / 92	0.0	62.3	233.3	214.6	346.0	36.2	4.4	896.8	12.1	0.0	0.0	0.0	0.0	12.1	908.9
1992 / 93	0.0	58.9	197.5	73.4	62.8	34.4	0.0	427.0	33.2	0.0	0.0	0.0	0.0	33.2	460.2
1993 / 94	17.3	17.0	20.8	118.1	65.5	98.8	4.0	341.5	0.4	0.0	0.0	0.0	0.0	0.4	341.9
1994 / 95	29.0	152.3	120.0	17.8	63.3	54.3	23.7	460.4	0.0	0.0	0.0	0.0	0.0	0.0	460.4
1995 / 96	5.5	67.3	19.2	138.0	17.0	100.3	14.9	362.2	0.0	0.0	0.0	0.0	0.0	0.0	362.2
1996 / 97	36.5	25.1	53.0	54.3	192.4	92.4	21.6	475.3	2.6	0.0	0.0	0.0	0.0	2.6	477.9
1997 / 98	17.6	43.4	95.1	122.8	58.9	169.3	10.8	517.9	2.6	0.0	0.0	0.0	0.0	2.6	520.5
1998 / 99	2.0	1.7	28.4	69.0	66.3	35.3	7.6	210.3	0.0	0.0	0.0	0.0	0.0	0.0	210.3
Max.	52.0	214.3	251.1	272.3	346.0	215.0	192.6	896.8	40.4	0.0	0.0	0.0	0.0	40.4	908.9
Min.	0.0	0.0	8.5	2.6	7.7	3.7	0.0	210.3	0.0	0.0	0.0	0.0	0.0	0.0	210.3
Mean	12.0	48.4	86.5	102.3	89.6	84.6	23.8	447.2	4.5	0.0	0.0	0.0	0.0	4.5	451.7
Source: WIS database of MWI.														Std. Dev.	139.4

Table A2.1.1-4(12) Monthly Average and Annual Rainfall in Irbid Governorate

Station Name : Wadi El-Yabis		ID No.: AH0002													
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	21.0	10.5	74.0	19.7	32.5	24.5	15.2	197.4	27.5	0.0	0.0	0.0	0.0	27.5	224.9
1963 / 64	18.3	27.8	101.6	36.2	96.7	52.5	0.0	333.1	0.0	0.0	0.0	0.0	0.0	0.0	333.1
1964 / 65	0.0	65.4	52.3	121.6	24.0	41.9	19.4	324.6	0.0	0.0	0.0	0.0	0.0	0.0	324.6
1965 / 66	56.3	27.2	26.5	24.0	41.5	53.6	0.0	229.1	0.0	0.0	0.0	0.0	0.0	0.0	229.1
1966 / 67	18.3	27.5	138.1	95.0	52.2	72.4	1.0	404.5	8.5	0.0	0.0	0.0	0.0	8.5	413.0
1967 / 68	23.0	42.1	33.1	65.5	17.9	21.3	27.2	230.1	0.8	0.0	0.0	0.0	0.0	0.8	230.9
1968 / 69	10.5	14.3	92.6	76.9	14.4	78.5	2.4	289.6	0.0	0.0	0.0	0.0	0.0	0.0	289.6
1969 / 70	15.1	25.1	18.5	104.3	21.2	94.8	26.2	305.2	0.0	0.0	0.0	0.0	0.0	0.0	305.2
1970 / 71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971 / 72	0.0	37.8	0.0	45.3	66.3	72.6	32.5	254.5	0.0	0.0	0.0	0.0	0.0	0.0	254.5
1972 / 73	0.0	13.9	43.2	73.7	2.7	57.2	1.6	192.3	7.1	0.0	0.0	0.0	0.0	7.1	199.4
1973 / 74	3.6	52.0	22.1	206.2	86.9	23.0	11.8	405.6	0.0	0.0	0.0	0.0	0.0	0.0	405.6
1974 / 75	0.0	21.6	66.1	21.8	102.1	28.7	0.6	240.9	0.0	0.0	0.0	0.0	0.0	0.0	240.9
1975 / 76	1.8	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-
1976 / 77	8.4	48.6	22.7	47.7	23.0	68.4	56.6	275.4	0.0	0.0	0.0	0.0	0.0	0.0	275.4
1977 / 78	25.7	4.5	77.1	35.4	17.2	26.2	3.6	189.7	0.0	0.0	0.0	0.0	0.0	0.0	189.7
1978 / 79	8.8	18.3	59.8	24.4	12.5	27.1	1.6	152.5	0.0	0.0	0.0	0.0	0.0	0.0	152.5
1979 / 80	75.8	65.1	70.8	63.9	54.1	55.1	8.9	393.7	0.0	0.0	0.0	0.0	0.0	0.0	393.7
1980 / 81	5.9	6.3	94.9	78.2	37.4	35.5	17.2	275.4	0.0	0.0	0.0	0.0	0.0	0.0	275.4
1981 / 82	0.0	39.6	13.8	25.5	83.6	34.6	1.2	198.3	0.0	0.0	0.0	0.0	0.0	0.0	198.3
1982 / 83	3.7	61.1	33.5	80.1	60.9	78.0	27.2	344.5	1.6	0.0	0.0	0.0	0.0	1.6	346.1
1983 / 84	2.1	46.8	14.9	88.1	20.3	46.7	14.1	233.0	0.0	0.0	0.0	0.0	0.0	0.0	233.0
1984 / 85	9.0	11.5	25.1	40.0	72.7	23.7	28.4	210.4	0.3	0.0	0.0	0.0	0.0	0.3	210.7
1985 / 86	14.5	20.1	27.7	65.5	92.9	16.2	10.0	246.9	25.9	0.0	0.0	0.0	0.0	25.9	272.8
1986 / 87	16.5	153.8	65.7	42.6	25.9	34.2	1.7	340.4	0.0	0.0	0.0	0.0	0.0	0.0	340.4
1987 / 88	47.6	1.2	107.5	111.6	144.9	38.1	10.5	461.4	0.0	0.0	0.0	0.0	0.0	0.0	461.4
1988 / 89	4.2	40.2	89.2	38.8	25.9	59.4	0.0	257.7	0.0	0.0	0.0	0.0	0.0	0.0	257.7
1989 / 90	10.8	55.2	68.0	124.0	36.6	41.8	20.6	357.0	0.0	0.0	0.0	0.0	0.0	0.0	357.0
1990 / 91	17.3	7.0	0.3	122.0	40.3	79.8	12.9	279.6	0.0	0.0	0.0	0.0	0.0	0.0	279.6
1991 / 92	2.2	92.0	186.6	162.5	230.2	20.4	0.0	693.9	12.3	0.0	0.0	0.0	0.0	12.3	706.2
1992 / 93	0.0	31.3	165.4	55.0	50.1	27.2	0.0	329.0	32.7	0.0	0.0	0.0	0.0	32.7	361.7
1993 / 94	8.7	16.3	4.0	85.6	47.0	30.4	2.8	194.8	0.0	0.0	0.0	0.0	0.0	0.0	194.8
1994 / 95	32.3	158.2	53.9	8.0	60.5	12.2	13.6	338.7	0.0	0.0	0.0	0.0	0.0	0.0	338.7
1995 / 96	0.0	20.1	14.8	105.5	10.8	105.0	28.0	284.2	0.0	0.0	0.0	0.0	0.0	0.0	284.2
1996 / 97	22.8	25.9	36.5	81.2	165.6	80.6	3.8	416.4	3.1	0.0	0.0	0.0	0.0	3.1	419.5
1997 / 98	27.4	32.5	98.9	78.0	34.9	82.1	12.6	366.4	5.5	0.0	0.0	0.0	0.0	5.5	371.9
1998 / 99	0.6	0.8	7.5	46.2	10.8	34.4	15.0	115.3	0.0	0.0	0.0	0.0	0.0	0.0	115.3
Max.	75.8	158.2	186.6	206.2	230.2	105.0	56.6	693.9	32.7	0.0	0.0	0.0	0.0	32.7	706.2
Min.	0.0	0.8	0.0	8.0	2.7	12.2	0.0	115.3	0.0	0.0	0.0	0.0	0.0	0.0	115.3
Mean	14.2	37.8	57.3	71.4	54.8	47.9	12.2	296.0	3.5	0.0	0.0	0.0	0.0	3.5	299.6
Note: "-" data not available. Source: WIS database of MWI.														Std. Dev.	106.2