

Report from Israel



United Nations
Convention to Combat
Desertification

praus₄

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S0-1: To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality.

S01-1 Trends in land cover

Land area

S01-1.T1: National estimates of the total land area, the area covered by water bodies and total country area

Year	Total land area (km ²)	Water bodies (km ²)	Total country area (km ²)	Comments
2 001			0	
2 005			0	
2 010			0	
2 015			0	
2 019			0	
2 021			0	

Land cover legend and transition matrix

S01-1.T2: Key Degradation Processes

Degradation Process	Starting Land Cover	Ending Land Cover
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Are the seven UNCCD land cover classes sufficient to monitor the key degradation processes in your country?

- Yes
 No

S01-1.T4: UNCCD land cover legend transition matrix

Original/ Final	Tree-covered areas	Grasslands	Croplands	Wetlands	Artificial surfaces	Other Lands	Water bodies
Tree-covered areas	0	-	-	-	-	-	0
Grasslands	+	0	+	-	0	-	0
Croplands	+	-	0	-	0	-	0
Wetlands	-	-	-	0	-	-	0
Artificial surfaces	+	+	+	+	0	+	0
Other Lands	+	+	+	+	-	0	0
Water bodies	0	0	0	0	0	0	0

Land cover

S01-1.T5: National estimates of land cover (km²) for the baseline and reporting period

	Tree-covered areas (km ²)	Grasslands (km ²)	Croplands (km ²)	Wetlands (km ²)	Artificial surfaces (km ²)	Other Lands (km ²)	Water bodies (km ²)	No data (km ²)
2000								
2001								
2002								
2003								
2004								
2005								
2006								
2007								
2008								

SO-1: To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality.

	Tree-covered areas (km ²)	Grasslands (km ²)	Croplands (km ²)	Wetlands (km ²)	Artificial surfaces (km ²)	Other Lands (km ²)	Water bodies (km ²)	No data (km ²)
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018								
2019								
2020								

Land cover change

SO1-1.T6: National estimates of land cover change (km²) for the baseline period

	Tree-covered areas (km ²)	Grasslands (km ²)	Croplands (km ²)	Wetlands (km ²)	Artificial surfaces (km ²)	Other Lands (km ²)	Water bodies (km ²)	Total (km ²)
Tree-covered areas (km ²)								0
Grasslands (km ²)								0
Croplands (km ²)								0
Wetlands (km ²)								0
Artificial surfaces (km ²)								0
Other Lands (km ²)								0
Water bodies (km ²)								0
Total	0	0	0	0	0	0	0	0

SO1-1.T7: National estimates of land cover change (km²) for the reporting period

	Tree-covered areas (km ²)	Grasslands (km ²)	Croplands (km ²)	Wetlands (km ²)	Artificial surfaces (km ²)	Other Lands (km ²)	Water bodies (km ²)	Total land area (km ²)
Tree-covered areas (km ²)								0
Grasslands (km ²)								0
Croplands (km ²)								0
Wetlands (km ²)								0
Artificial surfaces (km ²)								0
Other Lands (km ²)								0
Total	0	0	0	0	0	0	0	0

SO-1: To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality.

	Tree-covered areas (km ²)	Grasslands (km ²)	Croplands (km ²)	Wetlands (km ²)	Artificial surfaces (km ²)	Other Lands (km ²)	Water bodies (km ²)	Total land area (km ²)
Water bodies (km ²)								0
Total	0	0	0	0	0	0	0	

Land cover degradation

SO1-1.T8: National estimates of land cover degradation (km²) in the baseline period

	Area (km ²)	Percent of total land area (%)
Land area with degraded land cover		-
Land area with non-degraded land cover		-
Land area with no land cover data		-

SO1-1.T9: National estimates of land cover degradation (km²) in the reporting period

	Area (km ²)	Percent of total land area (%)
Land area with improved land cover		-
Land area with stable land cover		-
Land area with degraded land cover		-
Land area with no land cover data		-

General comments

SO1-2 Trends in land productivity or functioning of the land

Land productivity dynamics

SO1-2.T1: National estimates of land productivity dynamics (in km²) within each land cover class for the baseline period

Land cover class	Net land productivity dynamics (km ²) for the baseline period					
	Declining (km ²)	Moderate Decline (km ²)	Stressed (km ²)	Stable (km ²)	Increasing (km ²)	No Data (km ²)
Tree-covered areas						
Grasslands						
Croplands						
Wetlands						
Artificial surfaces						
Other Lands						
Water bodies						

SO1-2.T2: National estimates of land productivity dynamics (in km²) within each land cover class for the reporting period.

Land cover class	Net land productivity dynamics (km ²) for the reporting period					
	Declining (km ²)	Moderate Decline (km ²)	Stressed (km ²)	Stable (km ²)	Increasing (km ²)	No Data (km ²)
Tree-covered areas						
Grasslands						
Croplands						
Wetlands						
Artificial surfaces						
Other Lands						
Water bodies						

SO1-2.T3: National estimates of land productivity dynamics for areas where a land conversion to a new land cover class has taken place (in km²) for the baseline period.

Land Conversion		Net land productivity dynamics (km ²) for the baseline period					
From	To	Net area change (km ²)	Declining (km ²)	Moderate Decline (km ²)	Stressed (km ²)	Stable (km ²)	Increasing (km ²)
Other Lands	Artificial surfaces						
Croplands	Artificial surfaces						
Grasslands	Croplands						
Croplands	Tree-covered areas						

SO1-2.T4: National estimates of land productivity dynamics for areas where a land conversion to a new land cover class has taken place (in km²) for the reporting period.

Land Conversion		Net land productivity dynamics (km ²) for the reporting period					
From	To	Net area change (km ²)	Declining (km ²)	Moderate Decline (km ²)	Stressed (km ²)	Stable (km ²)	Increasing (km ²)

SO-1: To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality.

Land Conversion		Net land productivity dynamics (km ²) for the reporting period					
From	To	Net area change (km ²)	Declining (km ²)	Moderate Decline (km ²)	Stressed (km ²)	Stable (km ²)	Increasing (km ²)
Croplands	Artificial surfaces						
Other Lands	Artificial surfaces						
Croplands	Tree-covered areas						
Grasslands	Croplands						

Land Productivity degradation

SO1-2.T5: National estimates of land productivity degradation in the baseline period

	Area (km ²)	Percent of total land area (%)
Land area with degraded land productivity		-
Land area with non-degraded land productivity		-
Land area with no land productivity data		-

SO1-2.T6: National estimates of land productivity degradation in the reporting period

	Area (km ²)	Percent of total land area (%)
Land area with improved land productivity		-
Land area with stable land productivity		-
Land area with degraded land productivity		-
Land area with no land productivity data		-

General comments

SO1-3 Trends in carbon stocks above and below ground

Soil organic carbon stocks

SO1-3.T1: National estimates of the soil organic carbon stock in topsoil (0-30 cm) within each land cover class (in tonnes per hectare).

Year	Soil organic carbon stock in topsoil (t/ha)						
	Tree-covered areas	Grasslands	Croplands	Wetlands	Artificial surfaces	Other Lands	Water bodies
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020							

If you opted not to use default Tier 1 data, what did you use to calculate the estimates above?

- Modified Tier 1 methods and data
- Tier 2 (additional use of country-specific data)
- Tier 3 (more complex methods involving ground measurements and modelling)

SO1-3.T2: National estimates of the change in soil organic carbon stock in soil due to land conversion to a new land cover class in the baseline period

Land Conversion		Soil organic carbon (SOC) stock change in the baseline period					
From	To	Net area change (km ²)	Initial SOC stock (t/ha)	Final SOC stock (t/ha)	Initial SOC stock total (t)	Final SOC stock total (t)	SOC stock change (t)
Croplands	Tree-covered areas		-	-			0
Other Lands	Artificial surfaces		-	-			0
Grasslands	Croplands		-	-			0
Croplands	Artificial surfaces		-	-			0

SO-1: To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality.

SO1-3.T3: National estimates of the change in soil organic carbon stock in soil due to land conversion to a new land cover class in the reporting period

Land Conversion		Soil organic carbon (SOC) stock change in the reporting period					
From	To	Net area change (km ²)	Initial SOC stock (t/ha)	Final SOC stock (t/ha)	Initial SOC stock total (t)	Final SOC stock total (t)	SOC stock change (t)
Croplands	Tree-covered areas		-	-			0
Other Lands	Grasslands		-	-			0
Other Lands	Artificial surfaces		-	-			0
Croplands	Artificial surfaces		-	-			0

Soil organic carbon stock degradation

SO1-3.T4: National estimates of soil organic carbon stock degradation in the baseline period

	Area (km ²)	Percent of total land area (%)
Land area with degraded soil organic carbon (SOC)		-
Land area with non-degraded SOC		-
Land area with no SOC data		-

SO1-3.T5: National estimates of SOC stock degradation in the reporting period

	Area (km ²)	Percent of total land area (%)
Land area with improved SOC		-
Land area with stable SOC		-
Land area with degraded SOC		-
Land area with no SOC data		-

General comments

SO1-4 Proportion of degraded land over the total land area

Proportion of degraded land over the total land area (Sustainable Development Goal Indicator 15.3.1)

SO1-4.T1: National estimates of the total area of degraded land (in km²), and the proportion of degraded land relative to the total land area

	Total area of degraded land (km ²)	Proportion of degraded land over the total land area (%)
Baseline Period		-
Reporting Period		-
Change in degraded extent	0	

Method

Did you use the SO1-1, SO1-2 and SO1-3 indicators (i.e. land cover, land productivity dynamics and soil organic carbon stock) to compute the proportion of degraded land?

Which indicators did you use?

- Land Cover
- Land Productivity Dynamics
- SOC Stock

Did you apply the one-out, all-out principle to compute the proportion of degraded land?

- Yes
- No

Level of Confidence

Indicate your country's level of confidence in the assessment of the proportion of degraded land:

- High (based on comprehensive evidence)
- Medium (based on partial evidence)
- Low (based on limited evidence)

Describe why the assessment has been given the level of confidence selected above:

False positives/ False negatives

SO1-4.T3: Justify why any area identified as degraded or non-degraded in the SO1-1, SO1-2 or SO1-3 indicator data should or should not be included in the overall Sustainable Development Goal indicator 15.3.1 calculation.

Location Name	Type	Recode Options	Area (km ²)	Process driving false +/- outcome	Basis for Judgement	Edit Polygon
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Perform qualitative assessments of areas identified as degraded or improved

SO1-4.T4: Degradation hotspots

Hotspots	Location	Area (km ²)	Assessment Process	Direct drivers of land degradation hotspots	Action(s) taken to redress degradation in terms of Land Degradation Neutrality response hierarchy	Remediating action(s) (both forward-looking and current)	Edit Polygon
Total no. of hotspots	0						
Total hotspot area	0						

What is/are the indirect driver(s) of land degradation at the national level?

S0-1: To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality.

- 1.
- 2.
- 3.
- 4.
- 5.

S01-4.T5: Improvement brightspots

Brightspots	Location	Area (km ²)	Assessment Process	What action(s) led to the brightspot in terms of the Land Degradation Neutrality hierarchy?	Implementing action(s) (both forward-looking and current)	Edit Polygon
Total no. of brightspots		0				
Total brightspot area		0				

What are the enabling and instrumental responses at the national level driving the occurrence of brightspots?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

General comments

SO-1: To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality.

S01 Voluntary Targets

S01-VT.T1: Voluntary Land Degradation Neutrality targets and other targets relevant to strategic objective 1

Target	Year	Location(s)	Total Target Area (km ²)	Overarching type of Land Degradation Neutrality (LDN) intervention	Targeted action(s)	Status of target achievement	Is this an LDN target? If so, under which process was it defined/adopted?	Which other important goals are also being addressed by this target?	Edit Polygon
Total			Sum of all targeted areas 0						

S01.IA.T1: Areas of implemented action related to the targets (projects and initiatives on the ground).

Relevant Target	Implemented Action	Location (placename)	Action start date	Extent of action	Total Area Implemented So Far (km ²)	Edit Polygon
					Sum of all areas relevant to actions under the same target	

General comments

SO2-1 Trends in population living below the relative poverty line and/or income inequality in affected areas

Relevant metric

Choose the metric that is relevant to your country:

- Proportion of population below the international poverty line
- Income inequality (Gini Index)

Qualitative assessment

SO2-1.T3: Interpretation of the indicator

Indicator metric	Change in the indicator	Comments
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General comments

This metric is not relevant for Israel. There are no affected areas on a large scale and individual sites for which a decrease in productivity was noted are taken care by the extension service of the Ministry of Agriculture. Moreover, in the case of irrigated crops, water is a national resource in Israel and managed on a nationwide basis by one central agency. Desalination and wastewater treatment provide farmers with enough water irrespective of their location within the country.

SO2-2 Trends in access to safe drinking water in affected areas

Proportion of population using safely managed drinking water services

SO2-2.T1: National estimates of the proportion of population using safely managed drinking water services

Year	Urban (%)	Rural (%)	Total (%)
2000	100	100	100
2001	100	100	100
2002	100	100	100
2003	100	100	100
2004	100	100	100
2005	100	100	100
2006	100	100	100
2007	100	100	100
2008	100	100	100
2009	100	100	100
2010	100	100	100
2011	100	100	100
2012	100	100	100
2013	100	100	100
2014	100	99	100
2015	100	99	100
2016	99	99	99
2017	99	99	99
2018	99	99	99
2019	99	99	99
2020	99	99	99

Qualitative assessment

SO2-2.T2: Interpretation of the indicator

Change in the indicator	Comments
No change	Indicator appears to reflect the actual situation.

General comments

Supplying water to all the urban and rural population is possible because water was declared a national resource and managed by one government agency that decided on the establishment of a national net of pipes and canals throughout the country. It decided to start as well a massive desalination program that ensures that drinking water is available irrespective of drought periods.

SO2-3 Trends in the proportion of population exposed to land degradation disaggregated by sex

Proportion of the population exposed to land degradation disaggregated by sex

SO2-3.T1: National estimates of the proportion of population exposed to land degradation disaggregated by sex.

Time period	Population exposed (count)	Percentage of total population exposed (%)	Female population exposed (count)	Percentage of total female population exposed (%)	Male population exposed (count)	Percentage of total male population exposed (%)
Baseline period		0.0		0.0		0.0
Reporting period		0.0		0.0		0.0

Qualitative assessment

SO2-3.T2: Interpretation of the indicator

Change in the indicator	Comments

General comments

This indicator is not relevant to Israel. There are no large tracts of land affected by desertification and individual sites for which a decrease in productivity was noted are taken care by the extension service of the Ministry of Agriculture.

S0-2: To improve the living conditions of affected populations.

S02 Voluntary Targets

S02-VT.T1

Target	Year	Level of application	Status of target achievement	Comments
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[General comments](#)

SO3-1 Trends in the proportion of land under drought over the total land area

Drought hazard indicator

SO3-1.T1: National estimates of the land area in each drought intensity class as defined by the Standardized Precipitation Index (SPI) or other nationally relevant drought indices

	Drought intensity classes				
	Mild drought (km ²)	Moderate drought (km ²)	Severe drought (km ²)	Extreme drought (km ²)	Non-drought (km ²)
2000	5 417	2 323	667	0	12 362
2001	10 622	0	0	0	10 147
2002	0	0	0	0	20 769
2003	6 483	2 659	30	0	11 597
2004	5 768	0	0	0	15 001
2005	15 044	1 500	732	0	3 493
2006	17 533	622	529	0	2 085
2007	19 940	829	0	0	0
2008	13 978	6 072	719	0	0
2009	12 482	2 499	851	300	4 636
2010	11 361	5 050	0	0	4 358
2011	15 221	829	203	0	4 515
2012	9 255	0	0	0	11 514
2013	2 079	0	0	0	18 690
2014	6 447	692	1 444	1 718	10 468
2015	1 838	2 022	211	0	16 699
2016	6 517	0	0	0	14 252
2017	5 247	7 767	1 767	5 989	0
2018	0	0	0	0	20 769
2019	16 146	262	0	0	4 361
2020					
2021					

SO3-1.T2: Summary table for land area under drought without class break down

	Total area under drought (km ²)	Proportion of land under drought (%)
2000	8 407	In fin ity
2001	10 622	In fin ity
2002	0	-
2003	9 172	In fin ity
2004	5 768	In fin ity
2005	17 276	In fin ity

SO-3: To mitigate, adapt to, and manage the effects of drought in order to enhance resilience of vulnerable populations and ecosystems.

	Total area under drought (km ²)	Proportion of land under drought (%)
2006	18 683	In fin ity
2007	20 769	In fin ity
2008	20 769	In fin ity
2009	16 133	In fin ity
2010	16 411	In fin ity
2011	16 254	In fin ity
2012	9 255	In fin ity
2013	2 079	In fin ity
2014	10 301	In fin ity
2015	4 070	In fin ity
2016	6 517	In fin ity
2017	20 769	In fin ity
2018	0	-
2019	16 408	In fin ity
2020		-
2021		-

Qualitative assessment:

The index appears to correlate well with observed meteorological droughts .

General comments

SO3-2 Trends in the proportion of the population exposed to drought

Drought exposure indicator

Exposure is defined in terms of the number of people who are exposed to drought as calculated from the SO3-1 indicator data.

SO3-2.T1: National estimates of the percentage of the total population within each drought intensity class as well as the total population count and the proportion of the national population exposed to drought regardless of intensity.

Reporting year	Non-exposed		Mild drought		Moderate drought		Severe drought		Extreme drought		Exposed population	
	Population count	%	Population count	%	Population count	%	Population count	%	Population count	%	Population count	%
2000		-		-		-		-		-	0	-
2001		-		-		-		-		-	0	-
2002		-		-		-		-		-	0	-
2003		-		-		-		-		-	0	-
2004		-		-		-		-		-	0	-
2005		-		-		-		-		-	0	-
2006		-		-		-	0	-		-	0	-
2007		-		-		-		-		-	0	-
2008		-		-		-		-		-	0	-
2009		-		-		-		-		-	0	-
2010		-		-		-		-		-	0	-
2011		-		-		-		-		-	0	-
2012		-		-		-		-		-	0	-
2013		-		-		-		-		-	0	-
2014		-		-		-		-		-	0	-
2015		-		-		-		-		-	0	-
2016		-		-		-		-		-	0	-
2017		-		-		-		-		-	0	-
2018		-		-		-		-		-	0	-
2019		-		-		-		-		-	0	-
2020		-		-		-		-		-	-	-
2021		-		-		-		-		-	-	-

SO3-2.T2: National estimates of the percentage of the female population within each drought intensity class.

Reporting year	Non-exposed		Mild drought		Moderate drought		Severe drought		Extreme drought		Exposed female population	
	Population count	%	Population count	%	Population count	%	Population count	%	Population count	%	Population count	%
2000		-		-		-		-		-	0	-
2001		-		-		-		-		-	0	-
2002		-		-		-		-		-	0	-
2003		-		-		-		-		-	0	-
2004		-		-		-		-		-	0	-
2005		-		-		-		-		-	0	-
2006		-		-		-		-		-	0	-
2007		-		-		-		-		-	0	-

SO-3: To mitigate, adapt to, and manage the effects of drought in order to enhance resilience of vulnerable populations and ecosystems.

Reporting year	Non-exposed		Mild drought		Moderate drought		Severe drought		Extreme drought		Exposed female population	
	Population count	%	Population count	%	Population count	%	Population count	%	Population count	%	Population count	%
2008		-		-		-		-		-	0	-
2009		-		-		-		-		-	0	-
2010		-		-		-		-		-	0	-
2011		-		-		-		-		-	0	-
2012		-		-		-		-		-	0	-
2013		-		-		-		-		-	0	-
2014		-		-		-		-		-	0	-
2015		-		-		-		-		-	0	-
2016		-		-		-		-		-	0	-
2017		-		-		-		-		-	0	-
2018		-		-		-		-		-	0	-
2019		-		-		-		-		-	0	-
2020		-		-		-		-		-	-	-
2021		-		-		-		-		-	-	-

SO3-2.T3: National estimates of the percentage of the male population within each drought intensity class.

Reporting year	Non-exposed		Mild drought		Moderate drought		Severe drought		Extreme drought		Exposed male population	
	Population count	%	Population count	%	Population count	%	Population count	%	Population count	%	Population count	%
2000		-		-		-		-		-	0	-
2001		-		-		-		-		-	0	-
2002		-		-		-		-		-	0	-
2003		-		-		-		-		-	0	-
2004		-		-		-		-		-	0	-
2005		-		-		-		-		-	0	-
2006		-		-		-		-		-	0	-
2007		-		-		-		-		-	0	-
2008		-		-		-		-		-	0	-
2009		-		-		-		-		-	0	-
2010		-		-		-		-		-	0	-
2011		-		-		-		-		-	0	-
2012		-		-		-		-		-	0	-
2013		-		-		-		-		-	0	-
2014		-		-		-		-		-	0	-
2015		-		-		-		-		-	0	-
2016		-		-		-		-		-	0	-
2017		-		-		-		-		-	0	-
2018		-		-		-		-		-	0	-
2019		-		-		-		-		-	0	-
2020		-		-		-		-		-	-	-
2021		-		-		-		-		-	-	-

Qualitative assessment

Interpretation of the indicator

General comments

The above tables (SO3-2.T1,T2 and T3), are not relevant to Israel. Water is a national resource and the Government Water and Sewage Authority is responsible for the management, operation, conservation and rehabilitation of the country's natural water resources and the regulation of the water sector in accordance with the government's policies and the rules set by the authority council. The various sources of water for agricultural and domestic use (desalinated, aquifer, overland reservoirs and treated wastewater) are thus jointly managed and supplied throughout the country to the population at large, irrespective of the area being affected by drought or not. There is therefore not a direct link between a drought affected area and the population living in that area. It is important to note in this context that only 0.9 % of the total workforce was employed in agriculture in 2020 (World Bank collection of development indicators, compiled from officially recognized sources. Israel; <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS?locations=IL>). Israel developed a massive desalination program that presently supplies 30% of the total water consumption and more than 70% of domestic water consumption. More than 80 % of the wastewater is treated and used for agriculture and this volume represents more than 50 % of the total water used for irrigation (<https://www.gov.il/he/departments/general/disable-inferior-water-effluents>). As a result of these two national activities (building of desalination and wastewater treatment plants) and the existence of networks of canals and pipes that convey water of different qualities to end users throughout the country, the direct effects of droughts on the population have been avoided. In addition to the mentioned facts Israel's Parliament passed a drought compensation law in 1964 that empowers the government under certain circumstances to provide compensation to farmers for drought damage.

SO3-3 Trends in the degree of drought vulnerability

Drought Vulnerability Index

SO3-3.T1: National estimates of the Drought Vulnerability Index

Year	Total country-level DVI value (tier 1)	Male DVI value (tiers 2 and 3 only)	Female DVI value (tiers 2 and 3 only)
2000			
2001			
2002			
2003			
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			

Method

Which tier level did you use to compute the DVI?

- Tier 1 Vulnerability Assessment ⓘ
- Tier 2 Vulnerability Assessment ⓘ
- Tier 3 Vulnerability Assessment ⓘ

Qualitative assessment

SO3-3.T2: Interpretation of the indicator

Change in the indicator	Comments

General comments

Index not computed by official agency.

S0-3: To mitigate, adapt to, and manage the effects of drought in order to enhance resilience of vulnerable populations and ecosystems.

S03 Voluntary Targets

S03-VT.T1

Target	Year	Level of application	Status of target achievement	Comments
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General comments

S04-1 Trends in carbon stocks above and below ground

Soil organic carbon stocks

Trends in carbon stock above and below ground is a multi-purpose indicator used to measure progress towards both strategic objectives 1 and 4. Quantitative data and a qualitative assessment of trends in this indicator are reported under strategic objective 1, progress indicator S01-3.

SO4-2 Trends in abundance and distribution of selected species

SO4-2.T1: National estimates of the Red List Index of species survival

Year	Red List Index	Lower Bound	Upper Bound	Comment
2000	0.72547	0.71675	0.73062	
2001	0.72494	0.71578	0.72833	
2002	0.72456	0.71486	0.72589	
2003	0.72438	0.71448	0.72576	
2004	0.72422	0.71275	0.7251	
2005	0.72398	0.71212	0.72491	
2006	0.72396	0.71072	0.72472	
2007	0.72396	0.71031	0.72475	
2008	0.7241	0.70882	0.72493	
2009	0.7242	0.70787	0.7251	
2010	0.72436	0.70709	0.72627	
2011	0.72435	0.70498	0.72654	
2012	0.72438	0.70433	0.72801	
2013	0.72439	0.70257	0.72899	
2014	0.72438	0.70093	0.72999	
2015	0.7245	0.69914	0.73161	
2016	0.72446	0.6985	0.73247	
2017	0.72448	0.69697	0.73437	
2018	0.72447	0.69528	0.73386	
2019	0.72449	0.69484	0.73609	
2020	0.72448	0.69279	0.73728	

Qualitative assessment

SO4-2.T2: Interpretation of the indicator

Change in the indicator	Drivers: Direct (Choose one or more items)	Drivers: Indirect (Choose one or more items)	Which levers are being used to reverse negative trends and enable transformative change?	Responses that led to positive RLI trends	Comments

General comments

The red list values have remained constant in the last 20 years even with the increased population and pressure on resources in Israel.

SO4-3 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

SO4-3.T1: National estimates of the average proportion of Terrestrial KBAs covered by protected areas (%)

Year	Protected Areas Coverage(%)	Lower Bound	Upper Bound	Comments
2000				
2001				
2002				
2003				
2004				
2005				
2006				
2007				
2008	14.77	14.77	14.77	
2009	15.58	15.58	15.58	
2010	16.08	16.08	16.08	
2011	16.15	16.15	16.15	
2012	16.21	16.21	16.21	
2013	16.33	16.33	16.33	
2014	16.33	16.33	16.33	
2015	16.37	16.37	16.37	
2016	16.47	16.47	16.47	
2017	16.63	16.63	16.63	
2018	17.03	17.03	17.03	
2019	17.05	17.05	17.05	
2020	17.05	17.05	17.05	

Qualitative assessment

SO4-3.T2: Interpretation of the indicator

Qualitative Assessment	Comment

General comments

The KBA values increased 18.5 % from 2008 to 2020, a clear indication of Israel's commitment to the protection of natural areas for biodiversity conservation.

S04 Voluntary Targets

S04-VT.T1

Target	Year	Level of application	Status of target achievement	Comments
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[Complementary information](#)

S05-1 Bilateral and multilateral public resources

Tier 1: Please provide information on the international public resources provided and received for the implementation of the Convention, including information on trends.

Trends in international bilateral and multilateral public resources provided

- Up ↑
 Stable ↔
 Down ↓
 Unknown ∞

Trends in international bilateral and multilateral public resources received

- Up ↑
 Stable ↔
 Down ↓
 Unknown ∞

Resources provided: Israel's official international development cooperation program was launched in late 1957 with the aim of sharing with the rest of the developing world the know-how and technologies which provided the basis for Israel's own rapid development. MASHAV, the Hebrew acronym for Israel's Agency for International Development Cooperation, was established as a division of the Ministry of Foreign Affairs. What started as a modest program focused on grassroots-level human capacity building at a time when Israel itself was still very much a developing country, has blossomed into an extensive program of cooperation throughout the developing world with the aim of ensuring social, economic and environmental sustainable development. Since its establishment, MASHAV has trained close to 270,000 course participants from approximately 132 countries in Israel and abroad and has developed dozens of demonstration projects worldwide. MASHAV has consistently made its priority the goal of poverty alleviation, provision of food security, empowerment of women and upgrade of basic health and education services, supporting farmers in implementing soil and water conservation. The formalization of these priorities in the Millennium Development Goals (MDGs) has only caused us to redouble our longstanding efforts to put Israeli solutions at the service of developing countries in order to further their implementation.

Tier 2: Table 1 Financial resources provided and received

Provided / Received	Year	Total Amount USD	
		Committed	Disbursed / Received
Provided	2016	Committed	Disbursed
Provided	2017	Committed 5 155	Disbursed 5 155
Provided	2018	Committed	Disbursed
Provided	2019	Committed 3 273	Disbursed 3 273
Received	2016	Committed 0	Received 0
Received	2017	Committed 0	Received 0
Received	2018	Committed 0	Received 0
Received	2019	Committed 0	Received 0
Total resources provided:		8 428	8 428
Total resources received:		0	0

Documentation box

	Explanation
Year	calendar
Recipient / Provider	provider of global bi lateral

SO-5: To mobilize substantial and additional financial and non-financial resources to support the implementation of the Convention by building effective partnerships at global and national level

	Explanation
Title of project, programme, activity or other	capacity building programs related to desertification
Total Amount USD	In thousands of dollars, Official exchange rate New Israeli Shekel to US Dollar (3.65), Bank of Israel
Sector	Agriculture, water management, integrated nutrient management,
Capacity Building	yes
Technology Transfer	yes
Gender Equality	yes
Channel	bilateral
Type of flow	official development assistance
Financial Instrument	individual grants
Type of support	directly and indirectly related to DLDD
Amount mobilised through public interventions	
Additional Information	Biannual report (2016 and 2016 reported under 2017, and 2018 and 2019 reported under 2018) Mashav https://mctc.mfa.gov.il/annual_reports

General comments

Israel provides its bilateral development co-operation mostly in the form of capacity building, provided both in Israel and in developing countries.

S05-2 Domestic public resources

Tier 1: Please provide information on the domestic public expenditures, including subsidies, and revenues, including taxes, directly and indirectly related to the implementation of the Convention, including information on trends.

Trends in domestic public expenditures and national level financing for activities relevant to the implementation of the Convention

- Up ↑
 Stable ↔
 Down ↓
 Unknown ~

Trends in domestic public revenues from activities related to the implementation of the Convention

- Up ↑
 Stable ↔
 Down ↓
 Unknown ~

Israel has no national Action Plan to combat desertification and there are therefore no specific funds allocated to this activity. However, the Ministry of Agriculture through its various research and extension units continuously encourages and supports farmers in implementing soil and conservation practices.

Grants are offered by various official entities to companies to promote industrial R&D on topics related to agricultural production on their own or in cooperation with regional R&D offices. One of the interesting new programs is a collaboration with the Innovation Authority to support start-up companies and young women in the initial stages of product development.

Tier 2: Table 2 Domestic public resources

	Year	Amounts	Additional Information
Government expenditures			
Directly related to combat DLDD			
Indirectly related to combat DLDD			
Subsidies			
Subsidies related to combat DLDD			
Total expenditures / total per year			

	Year	Amounts	Additional Information
Government revenues			
Environmental taxes for the conservation of land resources and taxes related to combat DLDD			
Total revenues / total per year			

Documentation box

	Explanation
Government expenditures	
Subsidies	
Government revenues	
Domestic resources directly or indirectly related to combat DLDD	

Has your country set a target for increasing and mobilizing domestic resources for the implementation of the Convention?

- Yes
 No

General comments

SO-5: To mobilize substantial and additional financial and non-financial resources to support the implementation of the Convention by building effective partnerships at global and national level

S05-3 International and domestic private resources

Tier 1: Please provide information on the international and domestic private resources mobilized by the private sector of your country for the implementation of the Convention, including information on trends.

Trends in international private resources

- Up ↑
- Stable ↔
- Down ↓
- Unknown ∞

Trends in domestic private resources

- Up ↑
- Stable ↔
- Down ↓
- Unknown ∞

Tier 2: Table 3 International and domestic private resources

Year	Title of project, programme, activity or other	Total Amount USD	Financial Instrument	Type of institution	Recipient	Additional Information
	Total	0				

Please provide methodological information relevant to data presented in table 3

Has your country taken measures to encourage the private sector as well as non-governmental organizations, foundations and academia to provide international and domestic resources for the implementation of the Convention?

General comments

Israel has no National Action Plan to combat desertification because there are no significant areas undergoing desertification and there is hence no need to mobilize resources.

SO5-4 Technology transfer

Tier 1: Please provide information relevant to the resources provided, received for the transfer of technology for the implementation of the Convention, including information on trends.

Trends in international bilateral and multilateral public resources provided

- Up ↑
 Stable ↔
 Down ↓
 Unknown ↔

Trends in international bilateral and multilateral public resources received

- Up ↑
 Stable ↔
 Down ↓
 Unknown ↔

Resources Israel provided: MASHAV, Israel's Agency for International Development Cooperation, places special emphasis on the most critical issue in the fight against desertification and drought, namely capacity building of the technical personnel that will implement the appropriate technologies. The rationale of this approach is that in order to ensure that new technologies are effectively and sustainably adopted and absorbed in affected areas a cadre of appropriately trained technical personnel is required. To this effect MASHAV offers a wide range of capacity building and training courses. MASHAV offers courses in Israel in various languages (English, French, Spanish and Russian) in which the relevant theoretical background to the various topics is presented and thereafter the participants are exposed to the field implementation of the various techniques. Participants in these courses are therefore exposed to the latest technologies developed in Israel and provided with the necessary theoretical background and tools that will enable them to autonomously implement the aforementioned technologies in the affected areas. In addition, MASHAV also offers courses in the affected areas. These courses are however more targeted towards the specific problems in the region of concern.

Israel received no funds for the implementation of the Convention

Tier 2: Table 4 Resources provided and received for technology transfer measures or activities

Provided/Received	Year	Title of project, programme, activity or other	Amount	Recipient Provider	Description and objectives	Sector	Type of technology	Activities undertaken by	Status of measure or activity	Timeframe of measure or activity	Use, impact and estimated results	Additional Information
<input checked="" type="radio"/> Provided <input type="radio"/> Received	2019	capacity building course	3 163	Other (please specify) Global	capacity building programs held in Israel and abroad	<input checked="" type="checkbox"/> Agriculture <input checked="" type="checkbox"/> Forestry <input checked="" type="checkbox"/> Water and Sanitation <input type="checkbox"/> Cross-cutting <input type="checkbox"/> Other(specify)		Public sector	Completed	Biannual (2018/19)	958 people participated in the courses with long term impact not seen in the short term	
<input checked="" type="radio"/> Provided <input type="radio"/> Received	2019	Short term consultancies (technology transfer)	110		consultancy missions were carried out by Israeli experts on desertification-related issues	<input checked="" type="checkbox"/> Agriculture <input checked="" type="checkbox"/> Forestry <input checked="" type="checkbox"/> Water and Sanitation <input type="checkbox"/> Cross-cutting <input type="checkbox"/> Other(specify)		Public sector	Completed	Biannual (2018/19)	11 missions were carried out ,Impact and results are not immediate and need to be evaluated after a number of years.	
<input checked="" type="radio"/> Provided <input type="radio"/> Received	2017	Capacity building course	3 795	Other (please specify) Global	Capacity building held in Israel and abroad	<input checked="" type="checkbox"/> Agriculture <input checked="" type="checkbox"/> Forestry <input checked="" type="checkbox"/> Water and Sanitation <input type="checkbox"/> Cross-cutting <input type="checkbox"/> Other(specify)		Public sector	Completed	Biannual (2016/17)	2351 people participated. Impact and results are not immediate and need to be evaluated after a number of years.	
<input checked="" type="radio"/> Provided <input type="radio"/> Received	2017	Short term consultancies	1 360		consultancy missions were carried out by Israeli experts	<input checked="" type="checkbox"/> Agriculture <input checked="" type="checkbox"/> Forestry <input checked="" type="checkbox"/> Water and Sanitation <input type="checkbox"/> Cross-cutting <input type="checkbox"/> Other(specify)		Public sector	Completed	Biannual(2016/17)	136 missions were carried out,Impact and results are not immediate and need to be evaluated after a number of years.	
Total provided:			8 428	Total received:			0					
Total per year 2019 provided:			3 273	Total per year 2019 received:			0					
Total per year 2017 provided:			5 155	Total per year 2017 received:			0					

Please provide methodological information relevant to data presented in table 4

Include information on underlying assumptions, definitions and methodologies used to identify and report on technology transfer support provided and/or received and/or required. Please include links to relevant documentation.

The underlying assumption is that the most efficient way to transfer technology is by training and educating the cadre of professionals and technicians from the affected countries that will eventually introduce the appropriate technologies. Data is from 2016/17 and 2018/19 in these tables, with amounts in thousands of dollars. Mashav reports annually on all the projects that are carried out in and outside of Israel. <https://www.gov.il/en/departments/mashav-office/govil-landing-page>

Please provide information on the types of new or current technologies required by your country to address desertification, land degradation and drought (DLDD), and the challenges encountered in acquiring or developing such technologies.

Israel develops the tools for addressing DLDD and technology in Israel and disseminating to other countries in need. Some of developed are advanced drip irrigation systems, precision agriculture,

SO-5: To mobilize substantial and additional financial and non-financial resources to support the implementation of the Convention by building effective partnerships at global and national level

use of treated wastewater for agriculture, soil and water conservation techniques.

General comments

Israel does not receive any funds from other countries for combating desertification. Israel develops technology and transfers the knowledge gained by successfully and sustainably settling its desert to affected countries across the globe.

SO5-5 Future support for activities related to the implementation of the Convention

SO5-5.1: Planned provision and mobilization of domestic public and private resources

Please provide information relevant to the planned provision and mobilization of domestic resources for the implementation of the Convention, including information relevant to indicator SO5-2, as well as information on projected levels of public financial resources, target sectors and planned domestic policies.

N/A

SO5-5.2: Planned provision and mobilization of international public and private resources

Please provide information relevant to the planned provision and mobilization of international resources for the implementation of the Convention, including information on projected levels of public financial resources and support to capacity building and transfer of technology, target regions or countries, and planned programmes, policies and priorities.

N/A

SO5-5.3: Resources needed

Please provide information relevant to the financial resources needed for the implementation of the Convention, including on the projects and regions which needs most support and on which your country has focused to the greatest extent.

N/A

General comments

Israel uses its own resources for technology development for sustainable land management.

Financial and Non-Financial Sources

Increasing the mobilization of resources:

Would you like to share an experience on how your country has increased the mobilization of resources within the reporting period?

- Yes
 No

Using Land Degradation Neutrality as a framework to increase investment:

From your perspective, would you consider that you have taken advantage of the LDN concept to enhance the coherence, effectiveness and multiple benefits of investments?

- Yes
 No

Improving existing and/or innovative financial processes and institutions

From your perspective, do you consider that your country has improved the use of existing and/or innovative financial processes and institutions?

- Yes
 No

Policy and Planning

Action Programmes:

Has your country developed or helped develop, implement, revise or regularly monitor your national action programme?

- Yes
 No

Policies and enabling environment:

During the reporting period, has your country established or helped establish policies and enabling environments to promote and/or implement solutions to combat desertification/land degradation and mitigate the effects of drought?

- Yes
 No

These policies and enabling environments were aimed at (check all that apply):

- Promoting solutions to combat desertification, land degradation and drought (DLDD)
 Implementing solutions to combat DLDD
 Protecting women's land rights
 Enhancing women's access to natural, productive and/or financial resources
 Other (please specify)

Increasing the capacity of desalination plants in order to increase the total water available for all purposes. Woman have equal rights and there was therefore no need to protect their land rights or enhance their access to resources during the reporting period.

How best to describe these experiences (check all that apply):

- Prevention of the effects of DLDD
 Relief efforts after DLDD has caused environmental and or socioeconomic stress on ecosystems and or populations
 Recovery efforts after DLDD has caused environmental and or socioeconomic stress on ecosystems and or populations
 Engagement of women in decision - making
 Implementation and promotion of women's land rights and access to land resources
 Building women's capacity for effective UNCCD implementation
 Other (please specify)

Use the space below to share more details about your country/sub-region/region/institution's experience.

Israel established policies and enabling environments during the early fifties and late sixties, the main one being that water was declared a national resource and that the Government Water and Sewage Authority is responsible for the management, operation, conservation and rehabilitation of the country's natural water resources and the regulation of the water sector in accordance with the government's policies and the rules set by the authority council. The various sources of water for agricultural and domestic use (desalinated, aquifer, overland reservoirs and treated wastewater) are thus jointly managed and supplied throughout the country to the population at large, irrespective of the area being affected by drought or not. During the last twenty years, including the reporting period, Israel is developing a massive desalination program that presently supplies 30% of the total water consumption and more than 70% of domestic water consumption. More than 75 % of the wastewater is treated and used for agriculture and this volume represents close to 50 % of the total water used for irrigation (<https://www.gov.il/he/departments/general/disable-inferior-water-effluents>). As a result of these two national activities (building of desalination and wastewater treatment plants) and the existence of networks of canals and pipes that convey water of different qualities to end users throughout the country, the direct effects of droughts on the population have been avoided. In addition to the mentioned facts Israel's Parliament passed a drought compensation law in 1964 that under certain circumstances empowers the government to provide compensation to farmers for drought damage.

Do you consider these policies to be successful in promoting or implementing solutions to address DLDD, including prevention, relief and recovery, and what do you consider the main factors of success or lack thereof?

These measures were extremely successful in minimizing drought effects. In addition, the establishment of research institutes and

extension services within the Ministry of Agriculture provides solutions to farmer's problems and disseminates among them the latest agricultural technologies, the latter being relevant to preventing land degradation by developing soil and water conservation techniques.

What were the challenges faced, if any?

Once the respective laws were enacted the challenges were minor and related to organizational issues.

What would you consider to be the lessons learned?

Appropriate laws and central management of critical resources (e.g. water) are essential.

Has your country supported other countries in establishing policies and enabling environments to promote and implement solutions to combat desertification/land degradation and mitigate the effects of drought, including prevention, relief and recovery?

Yes

No

Synergies:

From your perspective, has your country leveraged synergies and integrated DLDD into national plans related to other MEAs, particularly the other Rio Conventions and other international commitments?

Yes

No

Your country's actions were aimed at (please check all that apply):

- Leveraging DLDD with other national plans related to the other Rio Conventions
- Integrating DLDD into national plans
- Leveraging synergies with other strategies to combat DLDD
- Integrating DLDD into other international commitments
- Other (please specify)

Use the space below to describe your country's experience.

The efficient use of water in agriculture by implementing advanced irrigation techniques, soil and water conservation techniques, desalination to provide mainly water for domestic uses and treatment of wastewater for use in agriculture decrease dramatically the pernicious effects of draughts. The results of all the previously mention activities result in high crop yields, ensuring domestic water for all the population and decreasing productive soil losses are all related to the MEAs. It is worthwhile noting that these are ongoing activities that started with the massive introduction of drip irrigation in the seventies of the last century.

Do you consider this experience a success and, if so, what do you consider the reasons behind this success (or lack thereof)?

Yes, the reason for the success is the coordinated and centralized management of national water resources and a well developed agricultural extension service.

What were the challenges faced, if any?

Decision taking related to the desalination and water treatment programs as these are very expensive infrastructures and have to be budgeted for.

What would you consider to be the lessons learned?

Mainstreaming desertification, land degradation and drought:

From your perspective, did your country take specific actions to mainstream, DLDD in economic, environmental and social policies, with a view to increasing the impact and effectiveness of the implementation of the Convention?

Yes

No

Drought-related policies:

Has your country established or is your country establishing national policies, measures and governance for drought preparedness and management?

Yes

No

Use the space below to describe your country's experience.

Israel established policies and enabling environments during the early fifties and late sixties, the main one being that water was declared a national resource and that the Government Water and Sewage Authority is responsible for the management, operation, conservation and rehabilitation of the country's natural water resources and the regulation of the water sector in accordance with the government's policies and the rules set by the authority council. The various sources of water for agricultural and domestic use (desalinated, aquifer, overland reservoirs and treated wastewater) are thus jointly managed and supplied throughout the country to the population at large, irrespective of the area being affected by drought or not. During the last twenty years, including the reporting period, Israel is developing a massive desalination program that presently supplies 30% of the total water consumption and more than 70% of domestic water consumption. More than 80 % of the wastewater is treated and used for agriculture and this volume represents close to 50 % of the total water used for irrigation (<https://www.gov.il/he/departments/general/disable-inferior-water-effluents>). As a result of these two national activities (building of desalination and wastewater treatment plants) and the existence of networks of canals and pipes that convey water of different qualities to end users throughout the country, the direct effects of droughts on the population have been avoided. In addition to the mentioned facts Israel's Parliament passed a drought compensation law in 1964 that under certain circumstances empowers the government to provide compensation to farmers for drought damage.

Do you consider this experience a success and, if so, what do you consider the reasons behind this success (or lack thereof)?

Israel successfully coped with droughts and managed to settle large tracts of arid lands due to the implementation of policies that enabled the coordinated management of water resources at a national level. There were few challenges in this aspect. Financing the massive infrastructures required for desalination and wastewater treatments required time and convincing the national authorities of the importance.

What were the challenges faced, if any?

After Israel's Parliament passed a drought compensation law in 1964 that under certain circumstances empowers the government to provide compensation to farmers for drought damage there were very few challenges.

What would you consider to be the lessons learned?

Has your country supported other countries in establishing policies, measures and governance for drought preparedness and management, in accordance with the mandate of the Convention?

Yes

No

Action on the Ground

Sustainable land management practices:

Has your country implemented or is your country implementing sustainable land management (SLM) practices to address DLDD?

- Yes
 No

What types of SLM practices are being implemented?

- Agroforestry
 Area closure (stop use, support restoration)
 Beekeeping, fishfarming, etc
 Cross-slope measure
 Ecosystem-based disaster risk reduction
 Energy efficiency
 Forest plantation management
 Home gardens
 Improved ground/vegetation cover
 Improved plant varieties animal breeds
 Integrated crop-livestock management
 Integrated pest and disease management (incl. organic agriculture)
 Integrated soil fertility management
 Irrigation management (incl. water supply, drainage)
 Minimal soil disturbance
 Natural and semi-natural forest management
 Pastoralism and grazing land management
 Post-harvest measures
 Rotational system (crop rotation, fallows, shifting, cultivation)
 Surface water management (spring, river, lakes, sea)
 Water diversion and drainage
 Water harvesting
 Wetland protection/management
 Windbreak/Shelterbelt
 Waste management / Waste water management
 Other (please specify)

Use the space below to share more details about your country's experience:

Israel has no national action plan to combat desertification but nevertheless actively implements SLM's. It is worthwhile noting in this context that Israel has successfully settled parts of its southern desert, an activity that may be termed "reverse desertification", as a result of the implementation of novel irrigation techniques (drip irrigation) and the use of marginal waters for agricultural production (treated wastewater, brackish water).

Would you consider the implemented practices successful and what do you consider the main factors of success?

The implemented practices were successful and the success can be ascribed to the existence of the well developed extension service of the Ministry of Agriculture, the involvement of Universities in all the aspects related to agricultural production and land management and the high level of educational of the farmers themselves.

What were the challenges faced, if any?

What do you consider to be the lessons learned?

Education of farmers, supporting higher education and research and the development of extension services are essential in order to ensure the implementation of SLM.

How did you engage women and youth in these activities?

Has your country supported other countries in the implementation of SLM practices?

- Yes
 No

Use the space below to share more details about your country's experience:

Would you consider the implemented practices successful and what do you consider the main factors of success?

What were the challenges faced, if any?

What do you consider to be the lessons learned?

Restoration and Rehabilitation:

Has your country implemented or is your country implementing restoration and rehabilitation practices in order to assist with the recovery of ecosystem functions and services?

- Yes
 No

What types of rehabilitation and restoration practices are being implemented?

- Restore/improve tree-covered areas
- Increase tree-covered area extent
- Restore/improve croplands
- Restore/improve grasslands
- Restore/improve wetlands
- Increase soil fertility and carbon stock
- Manage artificial surfaces
- Restore/improve protected areas
- Increase protected areas
- Improve coastal management
- General instrument (e.g. policies, economic incentives)
- Restore/improve multiple land uses
- Reduce/halt conversion of multiple land uses
- Restore/improve multiple functions
- Restore productivity and soil organic carbon stock in croplands and grasslands
- Other/general/unspecified

Use the space below to share more details about your country's experience:

Afforestation is one of the main activities implemented, the main objective being to arrest erosion and conserve water. In the southern region which is arid (receives less than 150 mm of rain per year) water harvesting is used in order to provide the trees with enough water for their development and rewilding projects are happening as well in a few wetlands in Israel.

Would you consider the implemented practices successful and what do you consider the main factors of success?

Extremely successful. The reasons for the success of the afforestation projects are careful planning and the use of the appropriate techniques.(e.g. water harvesting, contour planting)

What were the challenges faced, if any?

What do you consider to be the lessons learned?

How did you engage women and youth in SLM activities?

Woman are part of all the spheres of activity and children are invited to take part in the traditional spring tree planting of the forestation agency.

Has your country supported other countries with restoration and rehabilitation practices in order to assist with the recovery of ecosystem functions and services?

Yes

No

Drought risk management and early warning systems:

Is your country developing a drought risk management plan, monitoring or early warning systems and safety net programmes to address DLDD?

Yes

No

If so, DLDD was mainstreamed into (check all that apply):

A drought risk management plan

Monitoring and early warning systems

Safety net programmes

Use the space below to describe your country's experience.

Israel developed a two pronged approach to tackle drought which has been implemented since the 90s. One prong is the efficient use of water at all levels, in particular agriculture and the other is the "production" of water in order to decrease the dependence on rainfall and other natural water sources. The first aspect was achieved by implementing and continuously improving irrigation systems and the second one by building water desalination plants and waste water treatment plants. The former is mainly used to supply domestic needs while the latter provides more than 50% of the water used in agriculture. In addition Israel's Meteorological Service provides monitoring and early warning for drought. In addition Israel's Parliament passed a drought compensation law in 1964 that under certain circumstances empowers the government to provide compensation to farmers for drought damage.

Do you consider this experience a success and, if so, what do you consider the reasons behind this success (or lack thereof)?

Very successful through centralized management.

If you have or are developing a drought risk management plan as part of the Drought Initiative, please share here your experience on activities undertaken?

What were the challenges faced, if any?

What would you consider to be the lessons learned?

Has your country supported other countries in developing drought risk management, monitoring and early warning systems and safety net programmes to address DLDD?

- Yes
- No

Alternative livelihoods:

Does your country promote alternative livelihoods practice in the context of DLDD?

- Yes
- No

Do you consider your country to be taking special measures to engage women and youth in promoting alternative livelihoods?

- Yes
- No

Establishing knowledge sharing systems:

Has your country established systems for sharing information and knowledge and facilitating networking on best practices and approaches to drought management?

- Yes
- No

Please use this space to share/list the established systems available in your country for sharing information and knowledge and facilitating networking on best practices and approaches to drought management.

The dissemination of knowledge by the extension service of the Ministry of Agriculture (Shaham) and their support to the farmers is a key ingredient that was pivotal in the development of the success story of Israel's agriculture

Do you consider this experience a success and, if so, what do you consider the reasons behind this success (or lack thereof)?

Yes successful through centralized management and legislature.

What were the challenges faced, if any?

What would you consider to be the lessons learned?

Do you consider that your country has implemented specific actions that promote women's access to knowledge and

technology?

Yes

No

Please elaborate

Women have equal rights in Israeli society and in all sectors of life, i.e. there is no need for additional legislation, but there are programs that encourage women to pursue studies in the natural and exact sciences, fields in which traditionally the female participation was low. There has been a marked improvement in the institutions of higher education of the number of female faculty and graduates in these areas.

Do you consider this experience a success and, if so, what do you consider the reasons behind this success (or lack thereof)?

It is an ongoing effort that is successful but not yet completed.

What were the challenges faced, if any?

It was necessary to overcome the common prejudices of society (e.g. certain professions not being for women) and create the environment that allows women to compete with males on an equal footing.

What would you consider to be the lessons learned?

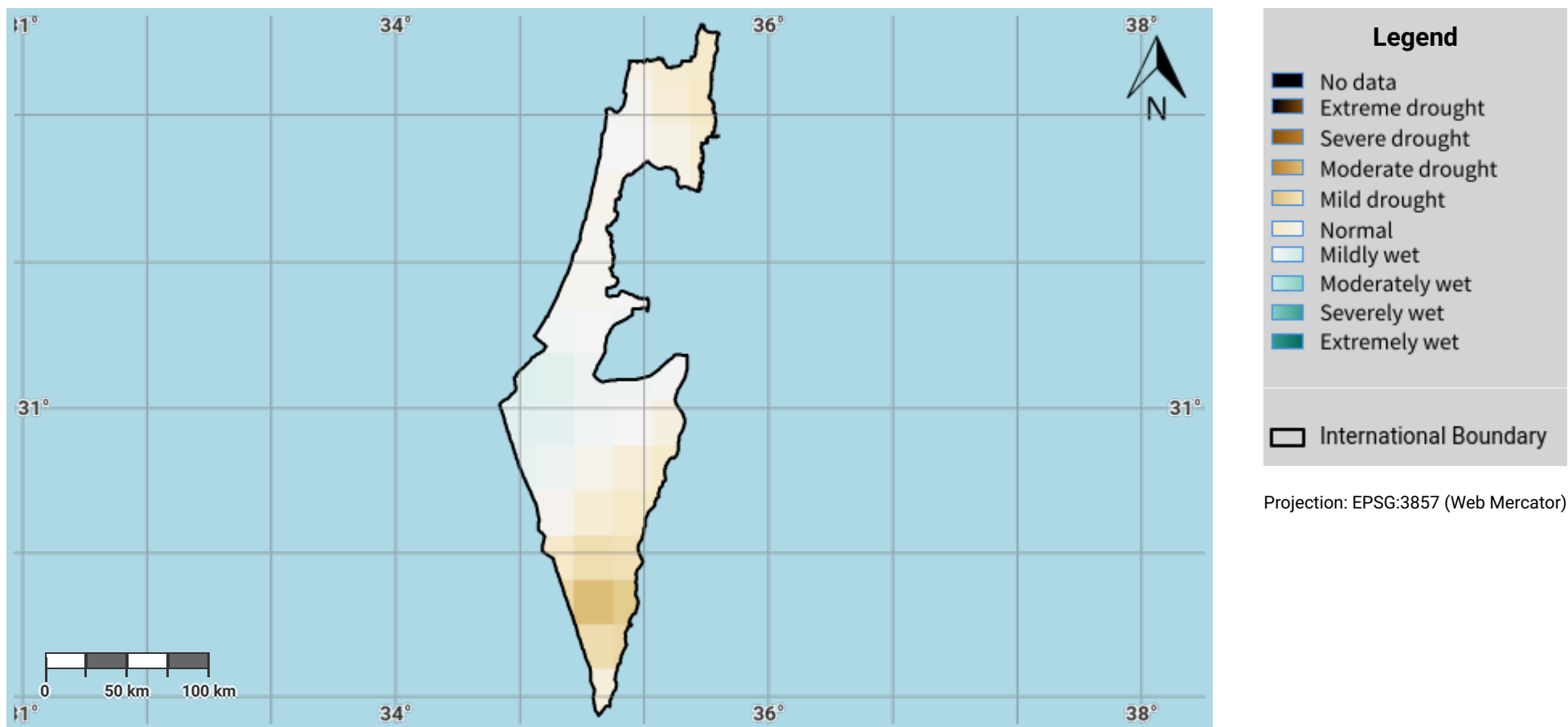
AI: Additional indicators

Which additional indicator is your country using to measure progress towards strategic objectives 1, 2, 3 and 4?

Indicator	Relevant strategic objective	Change in the indicator	Comments
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Israel – S03-1.M1

Drought hazard in first epoch of baseline period



Disclaimer

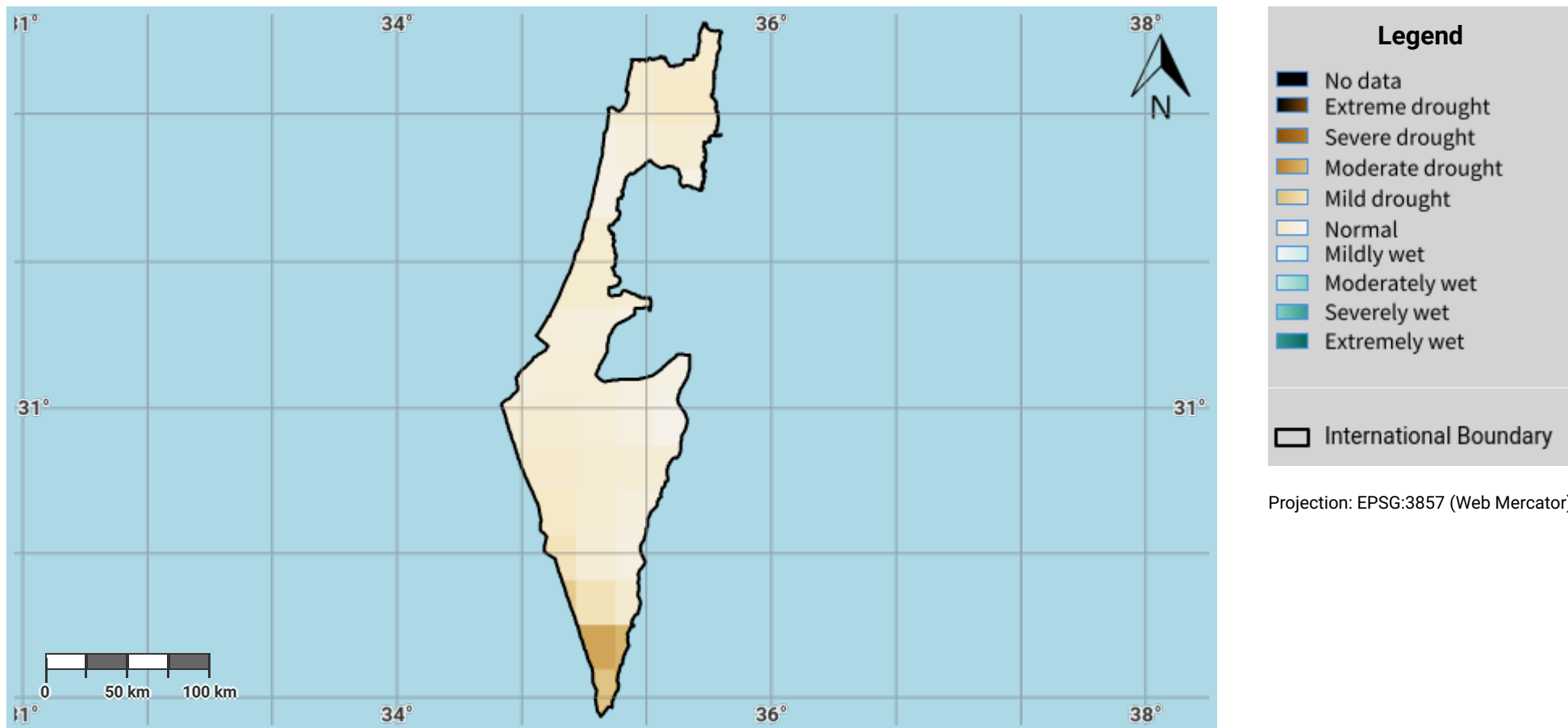
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Israel – S03-1.M2

Drought hazard in second epoch of baseline period



Disclaimer

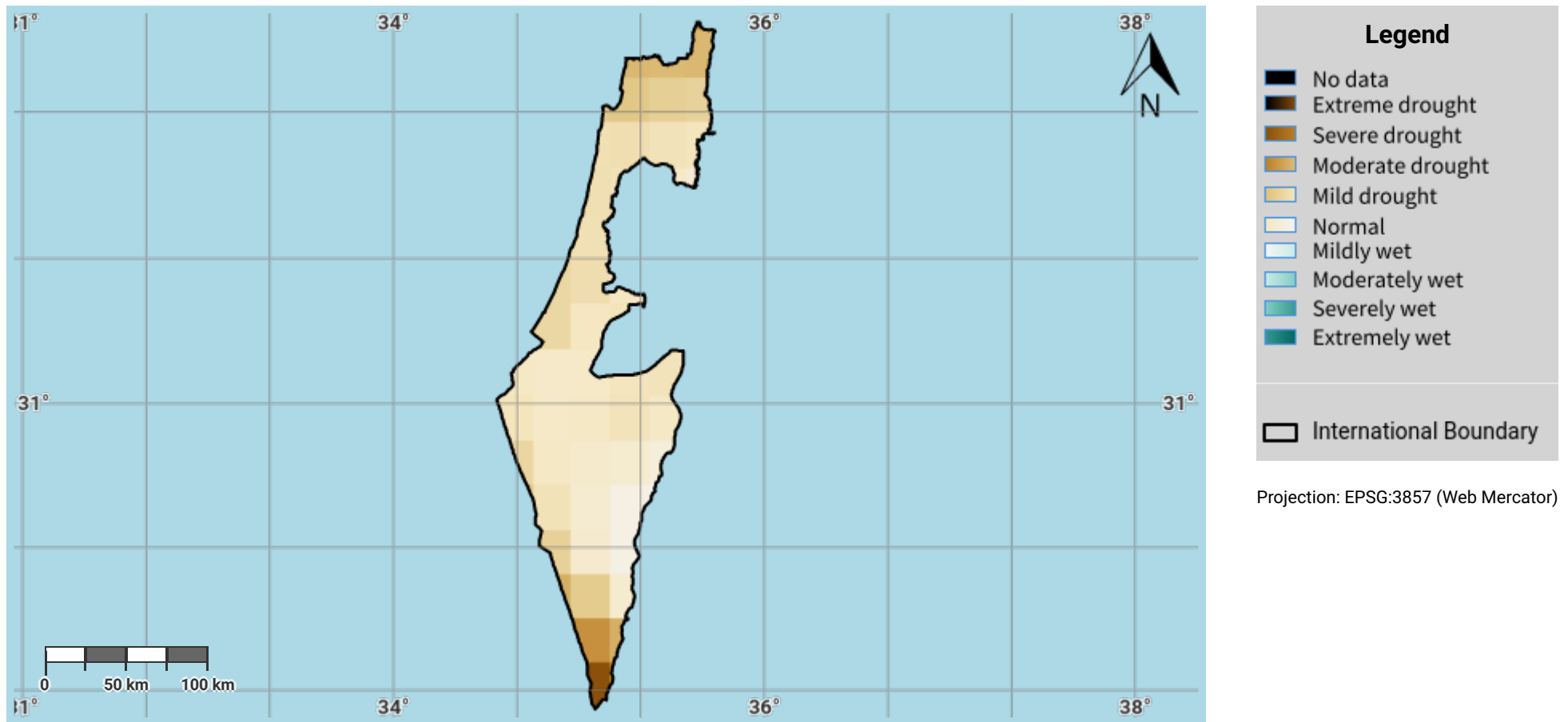
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Israel – S03-1.M3

Drought hazard in third epoch of baseline period



Disclaimer

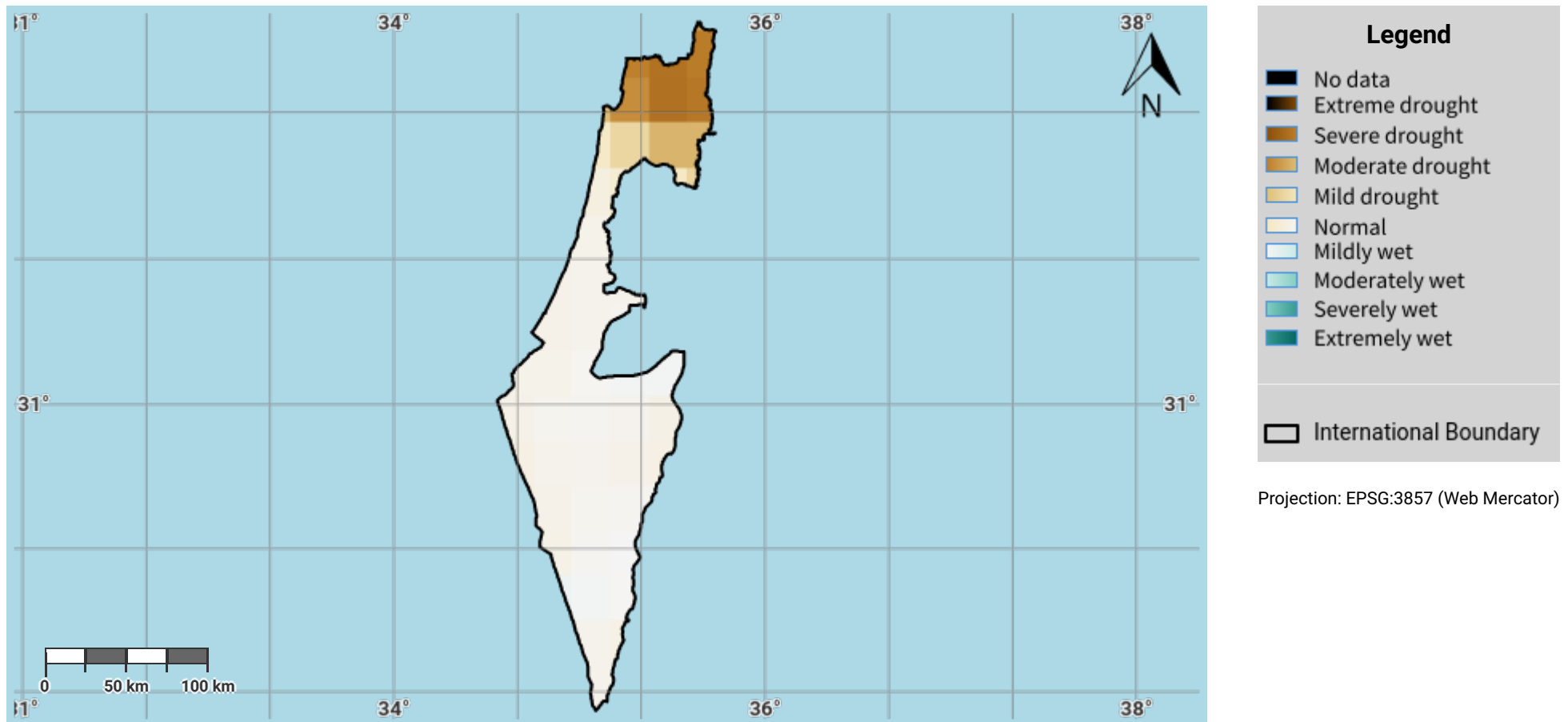
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Israel – S03-1.M4

Drought hazard in fourth epoch of baseline period



Disclaimer

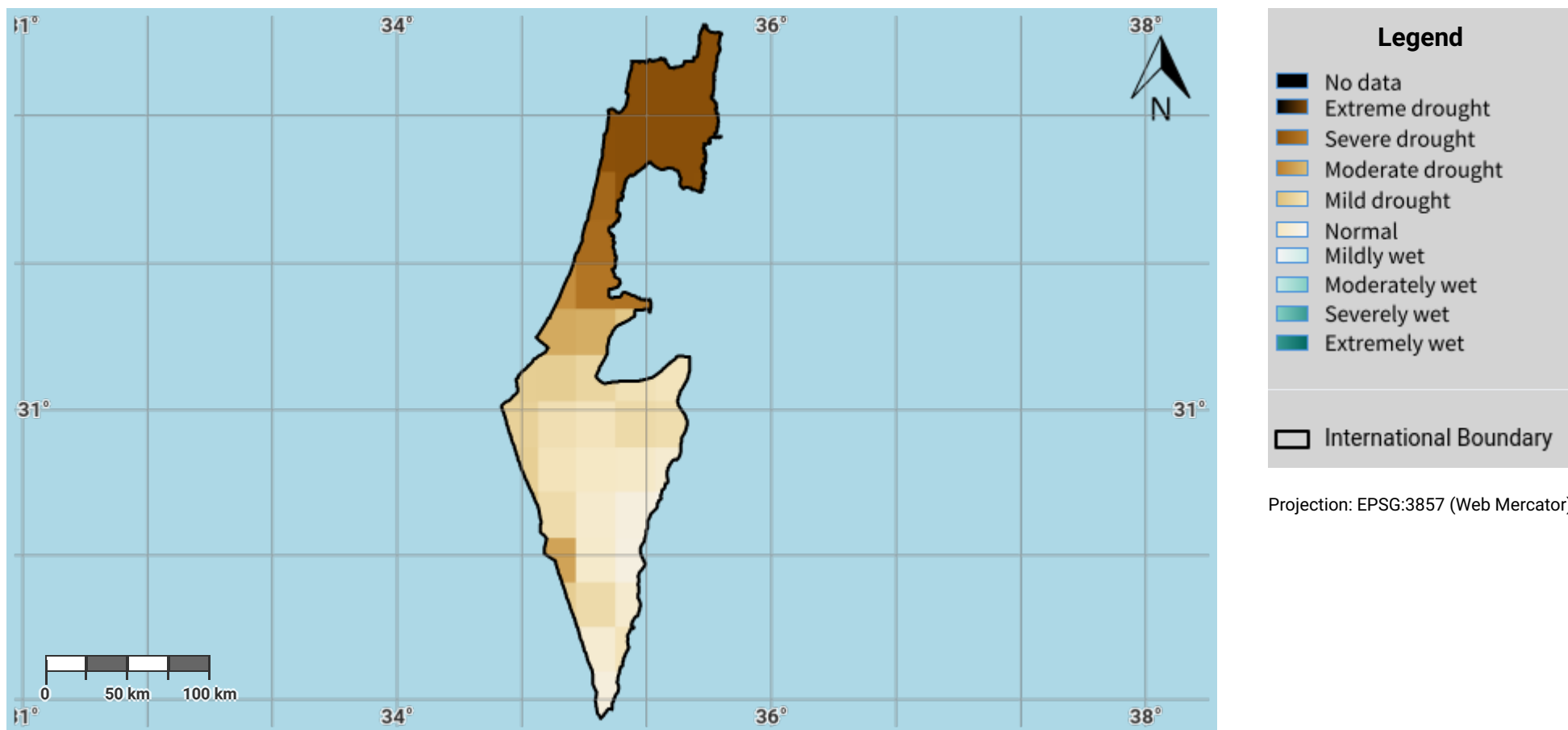
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Israel – S03-1.M5

Drought hazard in the reporting period



Disclaimer

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