Targeting of Infrastructure in the Middle East: Occupied Palestinian Territory (oPt) Coding Methodology

What does TIME cover in OPT?

The Targeting of Infrastructure in the Middle East (TIME) project focuses on tracking and analyzing the targeting of civilian infrastructure by parties to selected conflicts in the Middle East and North Africa (MENA). One of the selected conflicts in the TIME database is the conflict in the occupied Palestinian territory (oPt).

The oPt dataset records discrete attacks on civilian infrastructure (agriculture/fishing, energy, energy/water, health, transportation/marketing, and water infrastructure) from 2000 to the present. In addition to tracking the infrastructure targeted, the oPt dataset also records information on the actors involved and targeted in the attack, when available.

This document discusses the data sources used to collect data on the targeting of civilian infrastructure in the conflict in the oPt. Additionally, this document covers the actors and infrastructure recorded in the oPt dataset and the processes by which they are coded and integrated into the dataset.

How are incidents sourced?

Sources used for coding the destruction of infrastructure in the oPt and Israel dataset primarily consist of humanitarian reports, in addition to news articles and reports from non-governmental organizations tasked with tracking the conflict in Israel/Palestine. These sources are primarily in English but may also be in Arabic.

Incidents recorded in the dataset from humanitarian reports are sourced from the United Nations Office for the Coordination of Humanitarian Affairs: Occupied Palestinian Territories (OCHA: oPt)[1]. Incident information coded in the oPt and Israel dataset is obtained from the OCHA oPt database's *Situation Reports* and *Protection of Civilian Reports* which are published every other week and as needed. Incidents were also recorded from other humanitarian organizations such as *Médecins Sans Frontières* (MSF)[2].

Incidents in the dataset from reports published by non-governmental organizations are sourced from B'Tselem, Gisha and Al-Haq, among others. B'Tselem is a human rights organization in Jerusalem that documents human rights violations in the Israeli-occupied Palestinian territories[3]. Incidents in the database from B'Tselem come from their area specific publications, including videos on their website. Al-Haq is a human rights organization based in Ramallah that monitors and documents human rights violations in the oPt[4]. Gisha, a non-profit organization, focuses on protecting the freedom of movement of Palestinians, especially Gaza residents.[5] Incidents in the

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[1] Accessible at https://www.ochaopt.org
[2] Accessible at https://www.msf.org
[3] Accessible at https://www.btselem.org
[4] Accessible at http://www.alhaq.org
[5] Accessible at https://gisha.org/en/

database from Al-Haq are collected from their "Facts on the Ground" campaign within their website.

Incidents of attacks on civilian infrastructure in the oPt and Israel are also sourced from several news sources, including *Ha'*aretz, a respected Israeli newspaper[6] and WAFA, the Palestine News & Info Agency[7]. Other news sources include *Al-Monitor*,[8] *New York Times*, Reuters, and *Agence France Presse*, among others. Reports from government agencies were also accessed, such as the Coastal Municipalities Water Utility in Gaza.[9]

What infrastructure are recorded in the oPt dataset?

The oPt dataset tracks the targeting of civilian infrastructure in the conflict in oPt since 2000. The methodology researchers use to code for infrastructure in the oPt dataset is outlined below.

In the OPT dataset, the civilian infrastructure targeted during the conflict is coded in three tiers, with each tier increasing in specificity.

Infrastructure recorded in the TIME database can be divided into five broad categories:

- **Energy**: infrastructure related to energy exploration, production, and distribution.
- **Water**: infrastructure related to drinking water, purification, irrigation, wastewater treatment, and sanitation.
- **Transportation/Marketing**: infrastructure related to the transportation of people and goods and the marketing, smuggling, and exchange of commodities and goods.
- **Energy/Water**: infrastructure related to both producing energy and water (e.g., a dam where hydropower and irrigation functions cannot be separated).
- **Agriculture/Fishing**: infrastructure related to crop cultivation, harvesting, processing, and distribution, and infrastructure related to fisheries, including fishing vessels.

The oPt dataset first records Infrastructure Type based on the five broad categories of civilian infrastructure presented above. Based on a source's event description, researchers categorize and code the type of infrastructure targeted as energy, water, transportation/marketing, energy/water, health, or agriculture/fishing. For example, if a dam were targeted by airstrikes, the researchers would code the Infrastructure type as energy/water.

Increasing in specificity, the researchers then record the infrastructure under Infrastructure. Based on the event description, researchers use common coding terms for each subset of infrastructure type. Terms used to identify pieces of infrastructure in the oPt dataset under each infrastructure type are:

Energy Infrastructure:

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[6] Accessible at https://www.haaretz.com
[7] Accessible at https://english.wafa.ps
[8] Accessible at https://www.al-monitor.com
[9] Accessible at http://cmwu.ps/en/Default.aspx

- Electrical Grid
- Electricity Lines
- Electricity Tower
- Gas Tank
- Natural Gas Installation
- Power Plant
- Power Station
- Solar panels

Water Infrastructure:

- Sewage Pump
- Wastewater Treatment Plant
- Water Distribution System
- Water Pipeline
- Water Pipes
- Water Sanitation Facility
- Water Station
- Water Tank
- Water Well

Transportation/Marketing Infrastructure:

- Bridge
- Road
- Border Crossing
- Airport
- Tunnel
- Port

Agriculture/Fishing Infrastructure:

- Crops
- Farm
- Livestock
- Plant Nursery
- Fishing Boats

Lastly, researchers code for the specific infrastructure targeted under Specific Infrastructure. the coding under the Specific Infrastructure column includes detailed descriptions of the affected infrastructure and amount of infrastructure targeted when known. Therefore, common terms are not developed for this column in the oPt dataset.

How are actors coded and integrated into the oPt *dataset?*

In addition to information on the infrastructure damaged in an attack, when available, the oPt dataset codes for the actors involved in and targeted by the attack for each incident. A discussion of the actors in the oPt dataset and the methodology used to code for them is presented below.

To enable the comparison of incident data among the oPt and the other countries included in the TIME database, general classifications are maintained in the identification of actors perpetrating and targeted by attacks on civilian infrastructure. While our objective is to maximize comparability among countries in the database, we recognize the imperative for the oPt dataset to capture the unique conflict dynamics and actors party to the conflict. Therefore, the actor classifications attempt to bridge the need for both generalizability and specificity in actor coding, recognizing that classifications of actors require iterative adjustments.

Based on the event description, researchers categorize and code actors for the actors responsible for the targeting of the infrastructure and the actors targeted in the attack following the methodology presented below.

Actors Undertaking Targeting

1. Type of Actor Involved in Destruction:

Based on the event description, researchers first categorize and code actors responsible for the targeting of infrastructure using five broad actor classifications:

- **Internal National Government**: actors operating under state authority as recognized by the international community. While non-state armed groups and movements may end up wielding state-like authority, unless they receive international recognition, they are coded as Internal Non-State Groups.
- **External National Government**: actors operating under an outside state's authority.
- **International Coalition**: actors operating under the authority of a coalition of countries or an intergovernmental military alliance (eg NATO).
- **Internal Non-State Group**: a broad range of actors including non-state armed groups, political militias, and movements.
- **External Non-State Group**: a broad range of actors including non-state armed groups and political militias with origins outside of the conflict-affected state.

2. Actor Involved in Destruction:

The Actor Involved in Destruction column refers to the particular group responsible for the targeting of the infrastructure. To capture the conflict dynamics within oPt, the oPt dataset does not use a prescribed set of coding terms to identify groups. Rather, based on the event description, researchers code either the specific name or the type of group involved, depending on the detail of the description. The groups included in the oPt dataset are presented below.

- Israel
- Egypt

- Israeli Settlers
- Palestinian Civilians

<u>Actors Affected by Targeting</u>

1. Type of Actor Targeted:

Based on the event description, researchers categorize and code actors using the same five broad actor classifications as for the Type of Actor Involved in Destruction, with one additional category:

- Civilians: actors with unknown affiliations, e.g., fishermen, farmers, etc.

2. Actor Targeted:

The Actor Targeted column refers to the particular group affected by the attack. To capture the conflict dynamics within oPt, the oPt dataset does not use a prescribed set of coding terms to identify groups. Rather, based on the event description, researchers code either the specific name or the type of group targeted, depending on the detail of the description. The groups included in the OPT dataset are presented below.

- Israel
- Egypt
- Israeli Settlers
- Palestinian Civilians

"Unknown" coding: What if information on infrastructure and actors is not available?

Given the differences among sources in the level of detail and kinds of information included in their incident descriptions, not all incidents provided information on actors and infrastructure. For incidents where one or more of these categories or information were missing, researchers code "unknown" in the relevant columns. This is done frequently.