

Environmental Injustice Under Military Occupation: A GIS-Based Assessment of Nature Reserves in the West Bank – Palestine

Emad Dawwas

An-Najah National University

Introduction & Literature

- Visiting green spaces and nature is no longer a luxury.
- The environment, in its broadest sense (green spaces and nature) have gained importance as a requirement for a decent life.
- They serve as a refuge during crises and disasters, enhancing the resilience of the population.
- The health dimension encompasses:
 - mental health,
 - physical health,
 - social development, and
 - economic benefits.

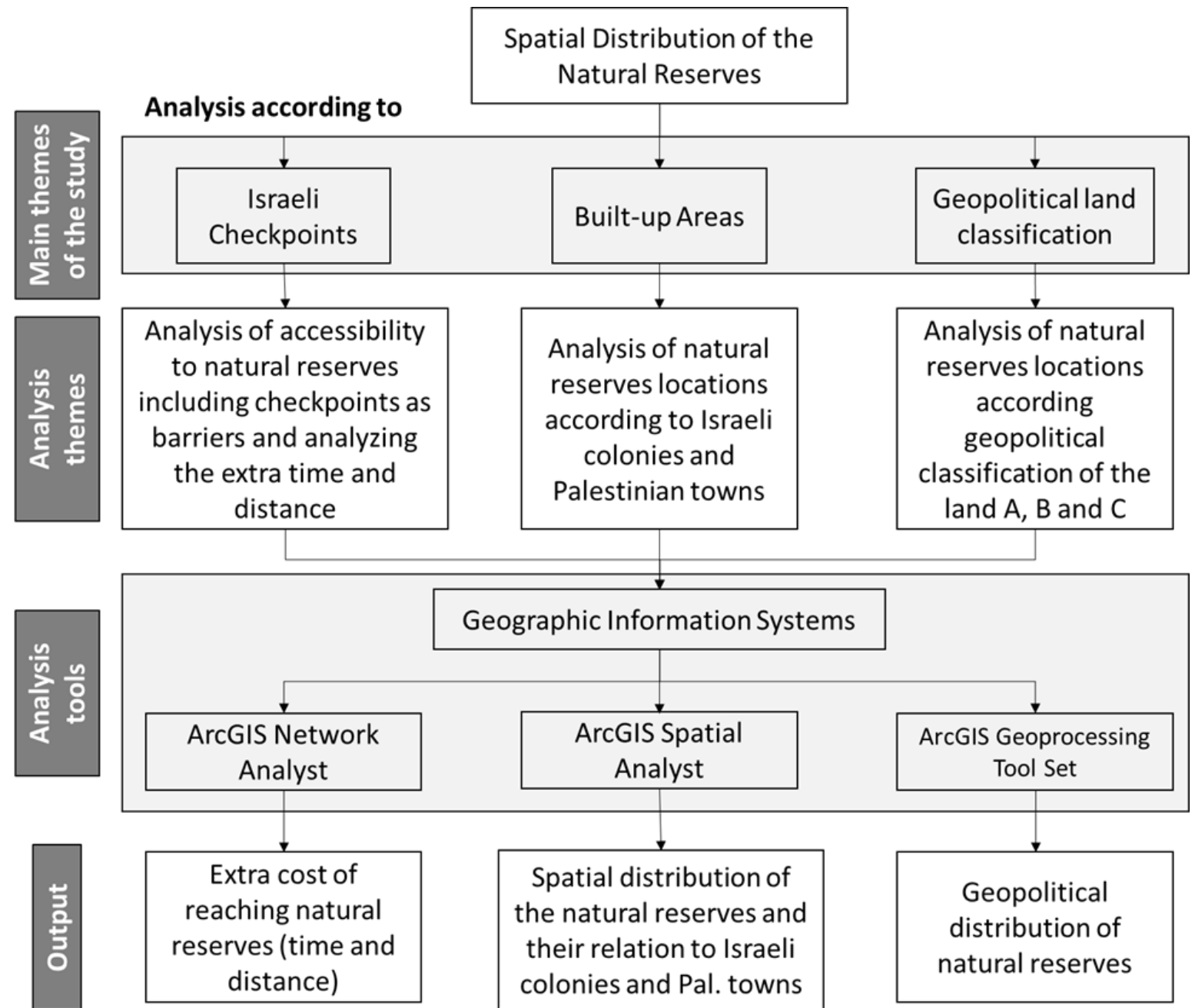
Introduction & Literature

- Environmental justice:
The fair treatment of all people, regardless of race, color, national origin, or income, in the development, implementation, and enforcement of environmental laws, regulations, and policies (Salem, 2020).
- One form of environmental injustice is to deprive any segment of the population in any area of their right to their share of green spaces, or denying them access to these spaces.

Objectives

- Analyzing the impact of the occupation's measures and policies on areas designated as nature reserves within the West Bank.
- Providing a spatial analysis of the nature reserve locations in relation to:
 - the geopolitical classification of Palestinian lands,
 - Israeli settlements, and
 - Palestinian towns,
- Analyzing the impact of movement restrictions imposed by the military occupation

Methodology

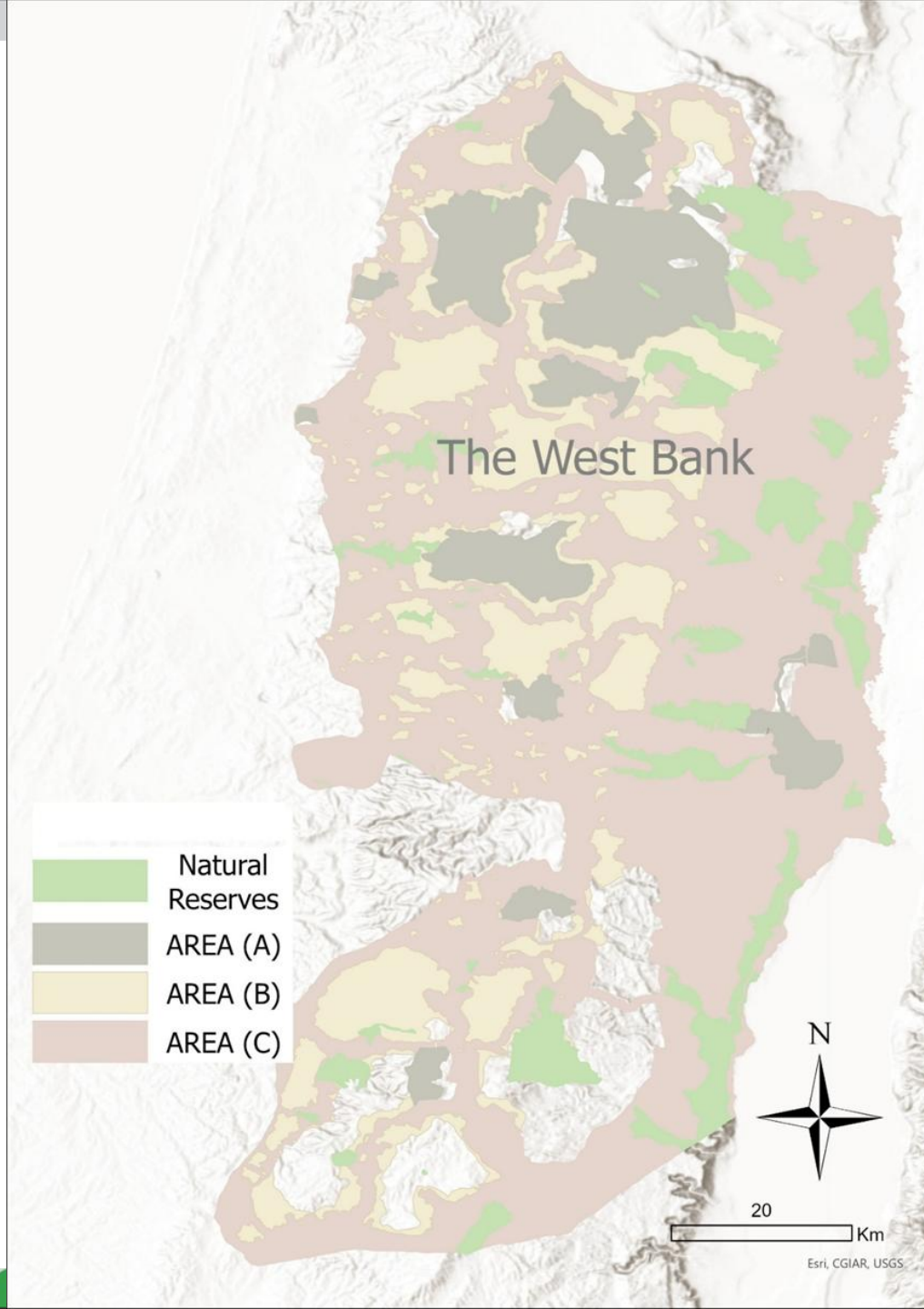


Results

3.1 Analysis of Nature Reserves as to Geopolitical Land Division

Table 1: Spatial distribution of natural reserves according to geopolitical location

Status	Count	Area
Completely within area A	2	1.75 Km ²
Completely within area B	0	0
Divided between area A and B	2	1.25Km ²
Completely within area C	24	300Km ²
Divided into areas A, B and C	18	227Km ²



Results

3.2 Analysis of Nature Reserves as to the Populated Areas

Table 3: Number and percentage of settlements located within one kilometer of the nearest nature reserve compared to Palestinian towns

Palestinian Communities			Israeli Settlements		
Percentage	Total number	Number within 1 km	Percentage	Total number	Number within 1 km
%12.3	640	79	% 31.5	241	76

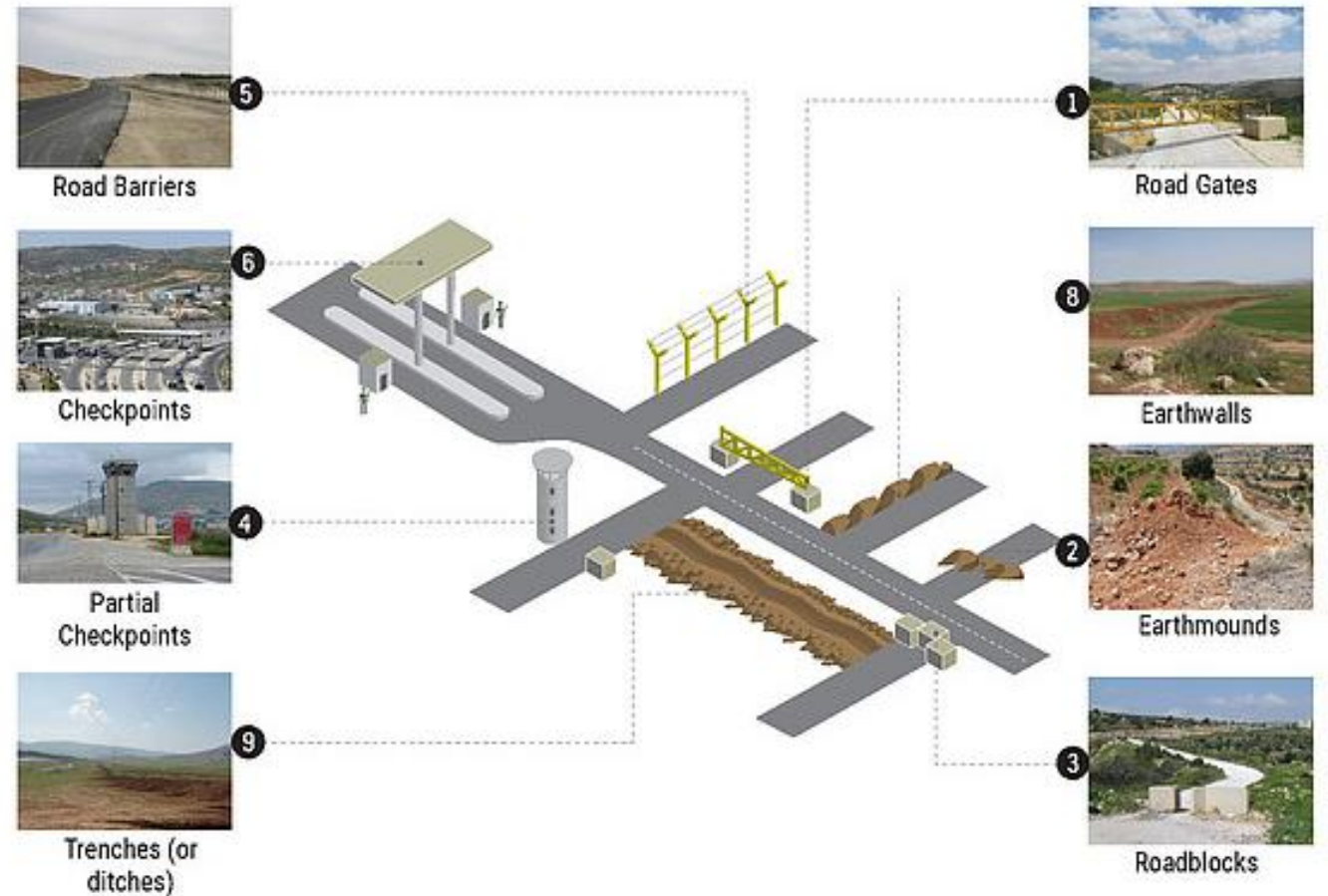
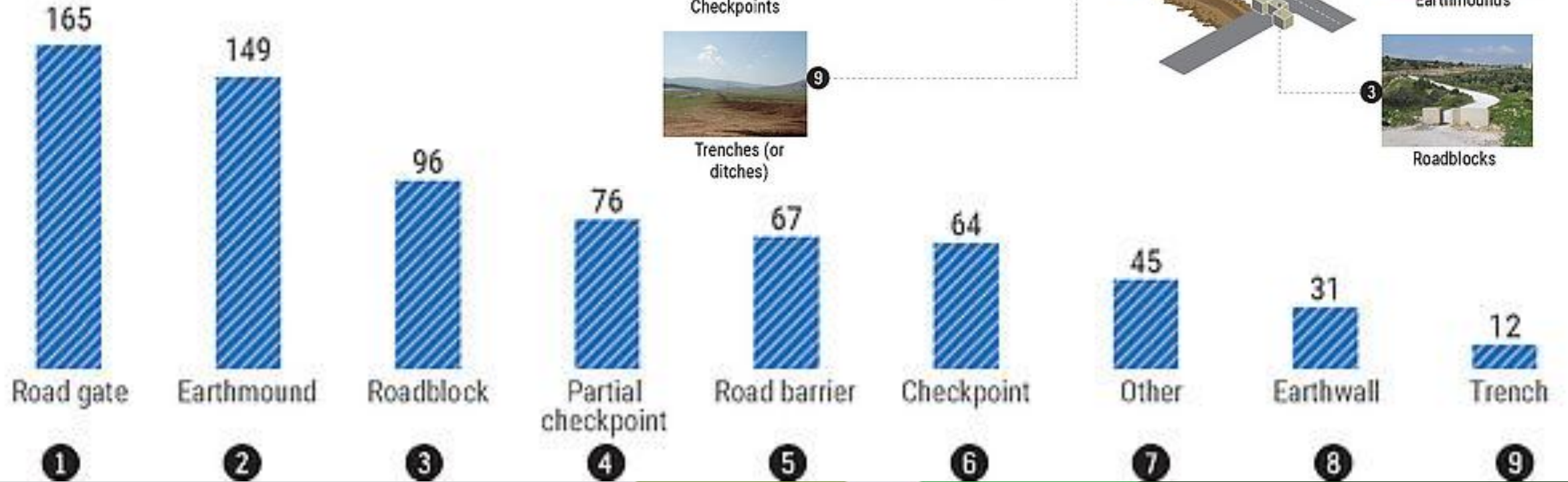


Results

3.3 Analysis of Nature Reserves as to the Location of Military Checkpoints:

Source:

<https://www.ochaopt.org/ar/content/700>



Results

3.3 Analysis of Nature Reserves as to the Location of Military Checkpoints:

Table 4: Comparison of the average distances with and without barriers.

Nature Reserve	No checkpoints	With checkpoints
Ein al-Sakut	75.7 Km	80.1 Km
Wadi Qana	65.7 Km	72.5 Km
Wadi al-Quf	79.4 Km	86.3 Km



**Flying
Checkpoints**



**Permanent
Checkpoints**



**Permanent
Gates**

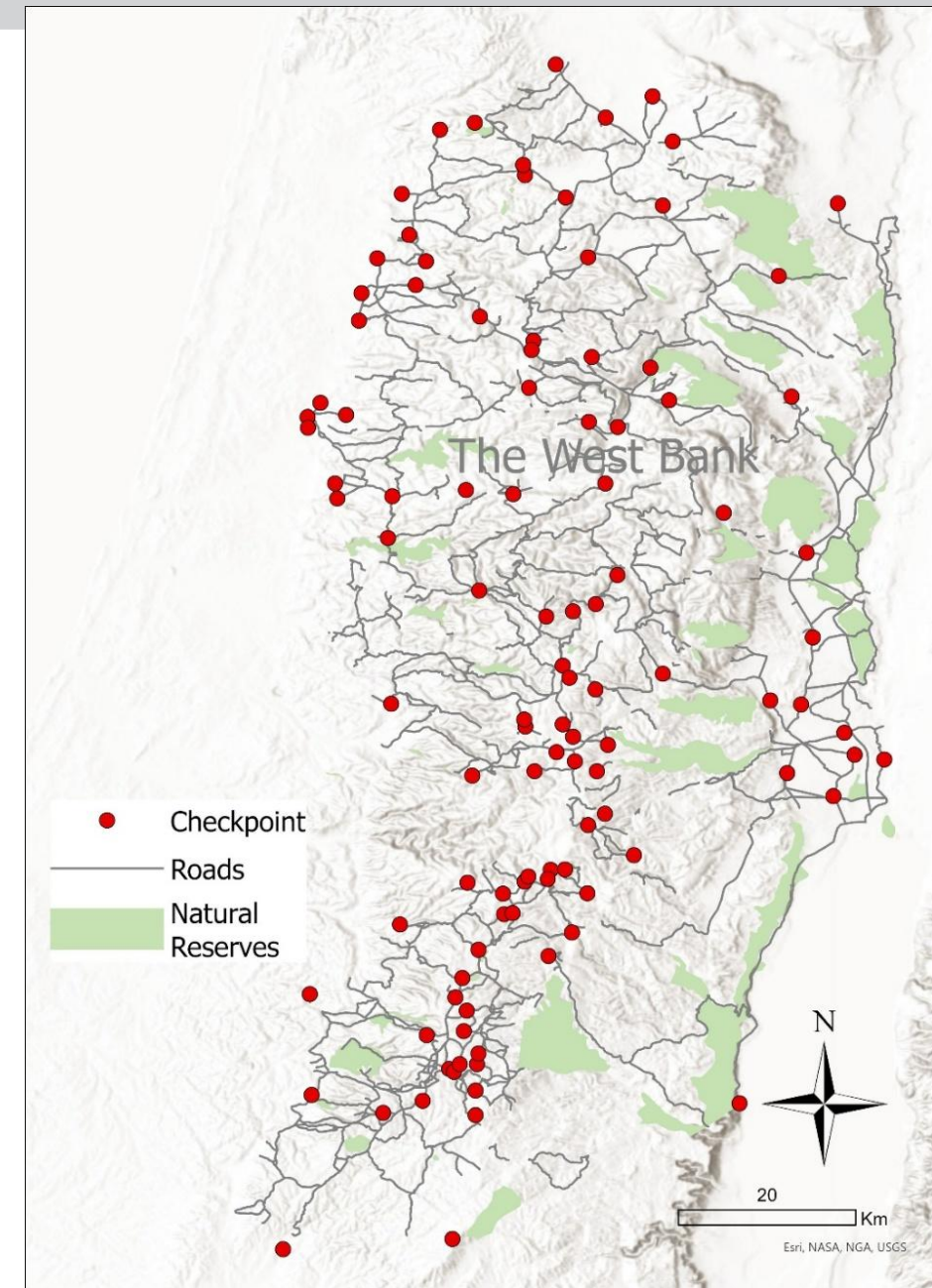


Figure 3: Israeli checkpoints distribution in the West Bank

Conclusion

- The environmental injustice resulting from the occupation's actions includes:
 1. Almost complete control over the nature reserves
 2. The denial of Palestinian access to them;
 3. The exploitation of nature reserves for political purposes (building settlements within them or on parts of them);

Recommendations

- Pursuing diplomatic channels to hold the occupying authorities internationally accountable for their environmental crimes in nature reserves.
- Developing plans to counter the displacement of Palestinians through national tourism routes and regular trips.
- Activating nature reserves as sites for national environmental gatherings and events.