

THE ENVIRONMENTAL IMPACT OF ISRAELI SETTLEMENTS ON THE OCCUPIED PALESTINIAN TERRITORIES

By Sawsan Ramahi

FACT SHEET
March 2012

MEM ●
MIDDLE EAST MONITOR
www.middleeastmonitor.org.uk

The environmental impact of Israeli settlements on the Occupied Palestinian Territories

By Sawsan Ramahi

Human beings are endowed with essential basic rights. These include the right to freedom, equality and prosperous natural living conditions. As such, every individual has a public duty to safeguard and improve the environment for the benefit of present and future generations.

The Draft International Treaty on Third-Generation Rights, which deals with environmental, cultural and developmental rights, devotes two of its articles to the environment:

1. **Article 14** confirms that all persons have the right to a clean environment suitable for their economic, social, cultural and legal growth.
2. **Article 15** demands that Member States commit themselves not to negatively alter normal living conditions in a way which may damage the health of individuals and future generations. Since its inception, the International Labour Organisation has been concerned with working environments, and in 1976 it adopted the international programme to improve working condition in order to make labour more humane.

Israel's abuse of the Palestinian environment

Due to the continuous and permanent depletion of its natural resources alongside incessant pollution by the Israeli occupation, the Palestinian environment and Palestinian environmental rights are under pressure and in rapid decline. Moreover, the scarcity of resources, closures and restrictions on mobility, and high unemployment rates pose an additional impediment to meeting the needs of a rapidly expanding population, and the growing requirements of economic conditions.

Following Israel's occupation of the territory that remained to Palestinians in the wake of the 1967 war, it has continued to pursue a systematic policy for the destruction of the Palestinian environment. The methods adopted, which include the destruction of the cultural heritage of the Palestinian people, are the same as those adopted in gaining control of Palestine following the establishment of the state of Israel in 1948.

The impact of illegal Israeli settlements

Illegal Israeli settlements confer control over Palestinian land and its resources and are, as a result, the heart of the expansionist philosophy upon which the state of Israel has been built.

According to Palestine's Central Bureau of Statistics, in 2010 there were 144 officially recognised (by Israel) settlements in the West Bank and Jerusalem, alongside 221 outposts and 85 other sites bringing the total number of illegal Israeli settlements to 450. The numerous settlements established strategically across the Occupied Palestinian Territories and concentrated in particular areas, aim at facilitating the fragmentation and



eventually annexation of Palestinian areas. They have also become one of the most prominent and serious manifestations of Israel's degradation and destruction of the Palestinian environment.

Settlements have proliferated around Palestinian towns and cities in such a way as to form settlement axes which, while fragmenting the occupied territories, have also isolated Palestinian areas from their environmental surroundings. The settlement axis in the Jordan Valley separates the Valley from the rest of the West Bank in one direction, and separates the West Bank from its natural environment east of the Jordan River in the other. The settlement axis that stretches along the 1948 armistice line again separates the West Bank from the rest of Palestine, and similarly the Ariel axis of 'Trans-Samaria' divides the West Bank into two halves – the northern part incorporates the governorates of Jenin, Qalqilya, Tulkarem, Nablus and Tubas, while the southern part incorporates the provinces of Jericho, Jerusalem, Bethlehem and Hebron.

Settlement blocs around Palestinian cities have had a significant impact on local biodiversity, which in many cases has been altered as wild flora and fauna are unable to reproduce naturally. This is in part the result of building practices adopted during construction of these settlements which include land levelling and excavation, the uprooting of trees, the establishment of military checkpoints and the construction of bypass roads. These practices deprive the Palestinian population of their rights to the use of their land, which has led to the depletion of groundwater reserves and loss of control over its resources.

The impact of Israeli settlements on the environment of the Occupied Territories falls under the following headings:

- The impact of settlements on Palestinian groundwater supplies
- Contamination by settlement waste water
- The impact of settlements on Palestinian flora and fauna
- Settlement air pollution
- Alteration of the natural Palestinian environment caused by settlements
- The destruction of Palestinian cultural heritage by settlement bypass roads
- Hazardous solid waste pollution by settlements

1. The impact of settlements on Palestinian groundwater supplies

Israel has used its settlements in the West Bank and the Gaza Strip to control and misappropriate Palestinian water supplies. The Oslo Convention estimates the quantity of groundwater in the Palestinian territories (the West Bank and the Gaza Strip) at around 734 million cubic metres. Palestinians are allocated a mere 235 million cubic metres of this water while the remainder goes to meeting Israeli needs.

In 1993, 60 million cubic metres of water were allocated for use in settlements with a then estimated combined population of only 350,000 individuals. This is an extraordinary inequality given that the Palestinian population exceeds three million. Settlers are allocated quantities of fresh water which allow them to cultivate lavish gardens and fill swimming pools while Palestinians suffer severe shortages of drinking water. This massive depletion and misuse of Palestinian water has had a negative overall effect on the water situation in



the Occupied Territories. Aquifers in the West Bank suffer from annual water deficits of around 50 million cubic metres, while in the Gaza Strip the average annual deficit is around 70 million cubic metres.

Since 1993, the settler population has increased massively and continues to increase on an annual basis. According to statistics, in 2008 it had reached an estimated 500,000 and is now headed toward the 1 million mark. This has led to an obvious increase in the amounts of water being used in settlements and a congruent decrease in the amounts of water being allocated for use by Palestinians.

2. Contamination by settlement waste water

Israel has contributed to damaging the Palestinian environment by neglecting the necessary requirements for sanitation in the Occupied Territories. Damage to the environment is largely the result of the actions of Israeli settlements which pump millions of cubic metres of waste water into Palestinian valleys in the Jordan River Basin, as well as onto agricultural lands. The following regions are among those affected most severely:

- Wadi al-Nar— affected by 30,000 cubic metres of waste water per day from the settlements surrounding Jerusalem
- The north eastern region of Hebron - affected by waste water from settlement wineries
- Wadi Qana - affected by waste water from the Ariel settlements and others in the region
- Wadi Qalqilya, Zawata in Nabulus, Jenin and Wadi al-Samn in Hebron are all affected by settlement waste water

Waste water plays a major role in environmental contamination in Palestine by polluting aquifers or surface water. It increases the proportion of salts and nitrates in the water which makes it unfit for human consumption and even unsuitable for agricultural use, as is the case with the water in the River Jordan.

In addition, when the waste water comes into contact with concentrations of sodium salts in agricultural land, it renders the soil unsuitable for agriculture. It also leads to unpleasant smells; the proliferation of harmful insects; the spread of epidemics; and the desertification of the Palestinian territories.

Qou.edu

A report published in 2009 by the Israeli human rights organisation BTselem indicates that large quantities of waste water are being pumped from Israeli settlements into the valleys and streams of the West Bank as well as onto agricultural land causing contamination to both the environment and groundwater.

It confirmed that more than one-third of Israeli settlements dispose of their untreated waste water in this manner with less than two-thirds being linked to reclaimed water plants. This means that every year more than 2 million cubic metres of raw sewage flow into the valleys and streams of the West Bank. The report states that Israel's continued neglect has caused severe damage throughout the West Bank which may eventually lead to the contamination of the mountain groundwater which is considered the most important source of quality water in the area.



While the report states that 60 per cent of the waste water flowing into the valleys in the West Bank comes from Palestinian communities, it states that this is due to Israel's long standing neglect of the need to establish the necessary infrastructure for reclaimed water. Israel's so-called Civil Administration continues to create obstacles to the development of many sewage networks and reclaimed water plants, and impedes the issuance of reclaimed water plant permits. At the same time, for its own benefit, Israel exploits the Palestinian waste water flowing behind the Green Line, recycling it in four private stations set up inside Israel. The treated waste water is re-used in agricultural irrigation among other things.

The report estimates that Palestinian communities in the West Bank produce about 56 million cubic metres of waste water annually and approximately 90 per cent of this goes untreated. Currently, Al-Beirah Plant is the only reclaimed water plant in the West Bank.

Reclaimed water plants operating in the settlements are old, small and suffer from many technical problems. There are no advanced regional reclaimed water plants in the settlements as is the case inside Israel. Contrary to Israeli law, prior to the building of settlement neighbourhoods and industrial settlement areas in the West Bank, Israel does not stipulate the need to include solutions for waste water. There are many settlement neighbourhoods housing tens of thousands of settlers without any provision for the treatment of waste water, which flows into Palestinian valleys and territories.

Despite the obvious seriousness of this issue, Israel's Ministry of Environment ignores the situation and makes no attempt to impose Israeli environmental laws on settlements polluting the West Bank.

The report shows that, annually, about 18 million cubic metres of waste water from West and East Jerusalem flow from settlements into the West Bank. More than 10 million cubic metres flow towards the south-east of Jerusalem without being treated. This water seeps into groundwater reserves causing serious damage to health and the environment.

The report stressed that the contamination of water resources may exacerbate the Palestinian crisis over water as Palestinians are dependent primarily on groundwater supplies for drinking. Similarly, agricultural irrigation using untreated waste water constitutes a major health hazard to Palestinians citizens, as well as the destruction of their livelihood.

Btselem.org



3. The impact of settlements on Palestinian flora and fauna

Despite its small size, Palestine is characterised by its diverse flora and fauna. It has over 2,500 different types of plant families, including cornea, vegetables, cynodon dactylon, cumin and clove.

On the wild life front, studies document the presence of approximately 470 species of birds, 100 species of mammals, 100 species of reptiles and amphibians and about 1000 species of fish. This biodiversity is the result of the diverse climate and natural environment. However, Palestine's biodiversity has come under attack from Israeli practices.

Maan-ctr.org

Since Israel began its occupation, it has constructed roads meant to serve its military bases and settlements. These roads are characterised by the destruction they bring to various elements of the Palestinian environment. This includes damage done to environmental pathways as a result of deep drilling in mountains long used by wild animals. This activity puts the lives of these animals at risk during their natural migrations. Wild animals such as hedgehogs, turtles, monkeys, squirrels and snakes are often seen dead on the verges at the side of these roads.

Road construction has also led to the destruction of the natural habitat of wild animals and birds - their nesting and breeding sites - which has created an imbalance in their numbers threatening their survival. Settlements have played a significant role in depriving wild animals of their natural habitats. This occurs primarily as a result of extensive land levelling and the fencing-off of settlement perimeters which disrupts natural passageways.

Raya.fm

As for the plants, Palestinian experts opine that there are serious risks pertaining to their existence as a result of Israel's systematic practices relating to land, crops and water.

Banan Sheikh - one of the few experts on wild plants in Palestine – asserts that the disappearance and extinction of some wild plants in Palestine is the result of the large scale construction of settlements, particularly in the West Bank; the construction of bypass roads and the separation wall; contamination from settlement waste water; and the military closure of particular areas.

Mr Sheikh also asserts that the West Bank is home to 1,600 plant species, including 400 rare species that are now found in only a handful of sites in Palestine; some plants are on the brink of extinction. He also notes that the plant known as the "iris" which can be found in Faqqu'a near Jenin and Yasid near Nablus is facing extinction. In the area of Wadi Qana between Nablus and Qalqilia, another rare plant known as the "pony tail" is also at risk of extinction as are other rare and native plants in Palestine such as "Alsaraj" and the "Colchicum.



The threats faced by plants in Palestine are numerous, claims Sheikh, and the occupation has had a direct impact on the rapid extinction of several important plants, such as salvia officinalis, thymus and summer savory. In some areas, certain plants are already extinct due to over-picking and the dredging of their environments.

He gives a further example of Wadi Qana, one of the most important nature reserves in the West Bank, where seven settlements have been constructed. According to Mr Sheikh, a rare plant native to northern Palestine used to be found in Wadi Qana but is now threatened with extinction due to the extensive lighting of fires. He stressed that considering that each organism has its role in the environmental chain, the loss of any plant of any kind will have a negative and significant impact on the overall environment. He also states that the building of seven settlements on Wadi Qana has caused the vegetation on the local hills to disappear, resulting in the disappearance of many native wild animals.

Maan-ctr.org

The director of the Palestinian Centre for Environmental Development at Al-Quds Open University, Jamal Sabra, states that the extinction of many wild plants as a result of Israeli practices comes as no surprise and noted that settlements have had a significant adverse environmental impact on plants in general.

Mr Sabra asserted that the closure of Palestinian towns has led to the restriction of certain grazing areas, as is the case in villages east of Nablus and al-Aghwar, which has in turn led to excessive grazing in other areas, decimating green spots. This, alongside the negative impact of pollution emitted by settlement industrial zones, has had a marked effect on vegetation. Sabra also highlights the Israeli practice of releasing wild pigs in the vicinity of settlements – a practice which impacts on wild plants.

Similarly, various closures and rocketing numbers of unemployed people has led to a black market in oak trees which are being cut down and sold to be used in woodworking in southern West Bank cities like Bethlehem and Beit Jala.

pnn.ps

Here reference is made to the extensive damage to forests which used to cover the Palestinian wilderness, but which have today become barren as a result of human exploitation, particularly by the occupation which has erected settlements in their place.

Statistics indicate that 70.7% of the total forest area of the West Bank has been damaged, and that no more than 29.3% of it is left. They indicate that most of this damage results from the construction of Israeli settlements in addition to the confiscation of land for the construction of military sites, closed zones and bypass roads.

ajrasal3awda.ahlamontada.net

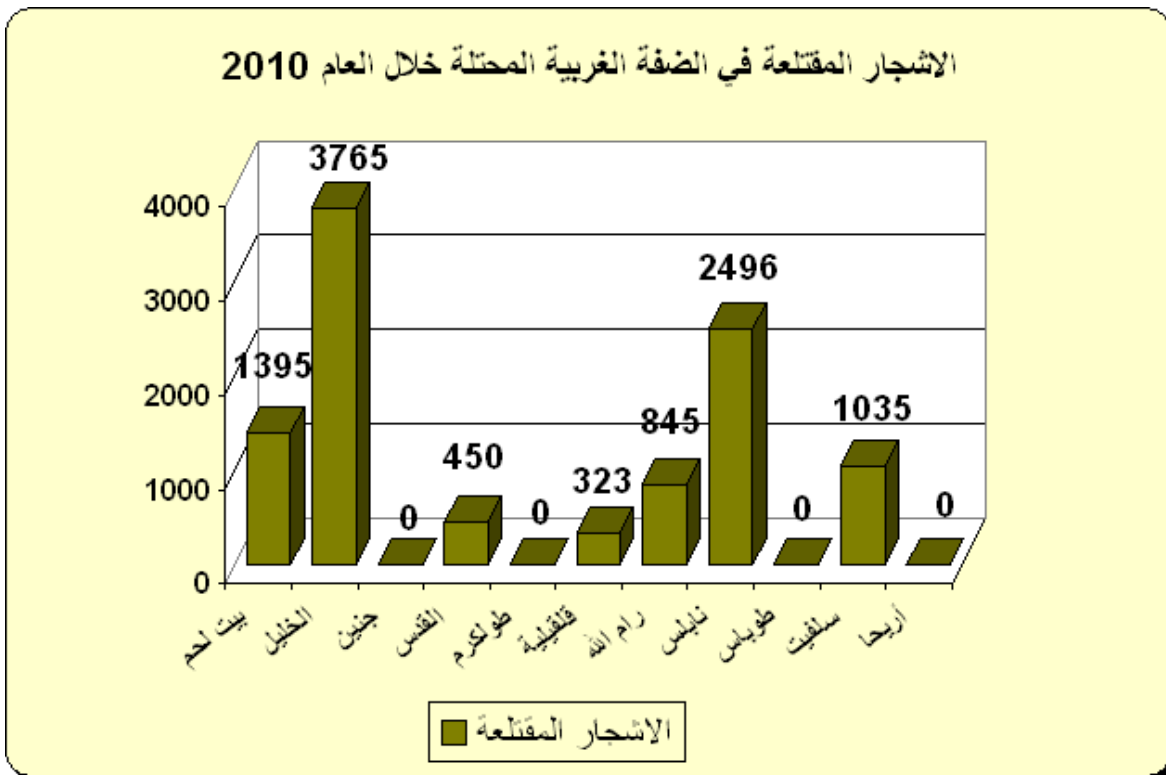


The uprooting of fruit trees in the Occupied Palestinian Territories during 2010

Israeli violations do not stop at the confiscation of Palestinian land and prohibiting land owners from accessing or benefitting from their lands; Israel also digs up the land and uproots and burns fruit-bearing trees. Such violations have had a significant impact on the agricultural sector and the Palestinian economy as fruit trees, and particularly olive trees, are a major source of income for Palestinians. The uprooting of fruit trees is carried out under various Israeli security pretexts which essentially serve a single goal; the construction of new settlements and the expansion of existing ones alongside the development of the infrastructure in preparation for further military expansion into the Occupied Palestinian Territories.

Table 1 below shows that during 2010, 10,591 fruit-bearing trees were uprooted, dug up, or burned in the occupied West Bank, with the districts of Hebron, Nablus, Bethlehem and Salfit experiencing the largest number of their trees being destroyed. Israeli violations, whether carried out at the hands of settlers or the army, have a significant impact on the agricultural sector, particularly given that most of the uprooted trees are olive trees and constitute an essential source of income for Palestinian families.

Article 23 of the Hague Convention 1907 warns against the destruction or seizure of enemy property, except if the necessities of war absolutely dictate the need for such destruction or seizure.



poica.org



4. Settlement air pollution

Israeli violations against the Palestinian environment and atmosphere have been extensive. In addition to pollution resulting from the use of local transportation in populated areas, Israeli construction of dozens of factories in settlements in the West Bank and the Gaza Strip contribute significantly to increasing levels of pollution. These factories emit millions of tons of toxic gases into the air which cause damage to public health.

One of the most prominent air pollutants are the huge amounts of dust produced by West Bank quarries. When these dust particles fall on agricultural crops and trees, they also cause significant damage to them. Indeed, vast areas of agricultural land in Deir Sharaf in the governorate of Nablus, Beit Fajar in the governorate of Bethlehem and Bani Naim in the governorate of Hebron have been exposed to dust particles which prevent plants and trees from growing.

In addition to dust, and as a result of the close geographic proximity, large quantities of toxic gasses and noxious by-products from Israeli factories located inside Israel's borders are blown towards Palestinian airspace. Similarly, smoke and gases generated by coal-fired power stations in Ashdod and al-Majdal reach the Gaza Strip through wind action, increasing the degree of air pollution.

E-joussour.net

5. Alteration of the natural Palestinian environment by settlements

The total length of bypass roads constructed on confiscated Palestinian territory to link between existing Israeli settlements, those under construction and Israel itself is approximately 700 kilometres. These roads serve as a transportation link between the settlements and also act to fragment Palestinian territory and separate from one another various Palestinian population centres located in a single geographic location. The presence of this network, alongside the network of Palestinian roads, has contributed to the choking of Palestinian infrastructure. Palestinians are prohibited from using bypass roads, while the Israeli army has ceased control of many Palestinian roads forcing Palestinians to seek longer and poorer quality alternative routes to reach their destinations.

idsc.gov.ps

To a significant extent, bypass and spin-off roads contribute to the fragmentation of the Palestinian territory and the prevention of geographic continuity between Palestinian population centres. In addition to the long term environmental impact of these roads, they also facilitate the siege imposed by Israeli forces on Palestinian cities and villages.



6. The destruction of Palestinian cultural heritage by settlement bypass roads

Throughout the ages, Palestine has been a crossroads of civilisations and it is only natural that it is home to numerous important archaeological and historical sites. Palestinian cities like Jerusalem, Gaza, Jericho and Hebron are among the oldest cities in the world and contain a large numbers of artefacts including architectural monuments like temples, churches, mosques, cemeteries, water wells, irrigation channels and houses that attract tourists and visitors from various parts of the world.

Over the past three decades, these artefacts have come under attacks by the Israeli occupation forces exemplified through:

- a) The digging up of sand hills which contain numerous archaeological treasures, particularly in the Gaza Strip.
- b) The carrying out of operations to steal Palestinian antiquities and transfer them into Israel, such as the theft of the crown of the Virgin Mary from the Church of the Resurrection and the transformation of the Palestinian Museum into the headquarters of the Israeli Antiquities Board along with the looting of the antiques that it contained.
- c) The burning or demolition of historic sites such as the burning of Al-Aqsa Mosque in 1968; the burning of the Bible on the Mount of Olives; and the burning of four Christian archaeological centres in Jerusalem. In 1997 the Maghariba District adjacent to the Wailing Wall was demolished, and tunnels have been dug beneath the southern walls of Al-Aqsa Mosque exposing large sections to the danger of cracking and collapse. A similar situation exists in five segments of the Noble Sanctuary (the Haram al-Sharif).
- d) Neglecting to provide sufficiently experienced maintenance specialists which has led to the demise of many archaeological monuments, such as the mosaic floors of churches and the Roman harbour on the beach in Gaza.
- e) Erecting residential dwellings on the ruins of ancient archaeological buildings as is the case in certain neighbourhoods of Gaza City like al-Shujaiah, al-Daraj, and al-Zaytoun.

E-joussour.net

- f) Several historical houses have been destroyed in Bethlehem, which remains one of the most important Christian cities in the world. Israeli tanks destroyed streets and many of its historic houses. A side door of the Church of the Nativity in Bethlehem was also blown up and its distinctive mosaic was fragmented. Several of the city's historic buildings were destroyed including the al-Khadra Mosques, the Great Mosque, the Orthodox Church in the Jasmine District and 60 houses. The same thing also happened in Nablus and Hebron; together the three cities are known as the historic centres of the Palestinian Territories and contain hundreds of artefacts, buildings and places of worship on streets which go back to the Roman period.



- g) Efforts to obliterate the Arab Palestinian identity by changing and substituting the names of ancient Palestinian archaeological sites and areas with Judaised names. In this way, the Israeli authorities have violated all world charters and international conventions for the protection of world cultural and natural heritage by attempting to get rid of the names by which places were known and which were used in registers of historic sites and buildings dating back to before 1948. Not only this, the Hajj route from Mecca to Jerusalem, as well as the Jordan valley, the Gulf of Aqaba and several other sites situated outside the 'borders' of Israel, are considered to be Israeli archaeological sites by the state of Israel.

News-bank.net

7. Hazardous solid waste pollution by settlements

- a) Solid waste

Solid waste products from Israeli settlements are disposed of inside the Occupied Palestinian Territories contributing to pollution. The city of Abu Dis has a huge rubbish dump which services a number of Israeli settlements and covers an estimated 3000 dunams (around 3 million square metres). The same goes for the area of Jayous to the west of Qaliqilya where the rubbish dump serving the settlements of Karni Shamron, Qadumim, Tasufim, and Maale Tashumaron, covers an estimated area of 12 dunams.

The following table shows some Israeli settlements and where they dispose of their waste:

Settlement	Disposal site
The Ariel Settlement	Agricultural land in Salfit
Israeli military camps around the 1967 borders near to the governorate of Jenin	The lands of Araba in Jenin
Israeli military camps	The city of Tubas
The Yitsar Settlement	The Abdali region of Abu Dis
The Alon Morieh Settlement	The lands belonging to the village of Beit Fourik in Nablus

This solid waste poses numerous risks, including being the source of a terrible smell, insects and epidemics. In addition, it contributes to the pollution of large tracts of agricultural land, soil and drinking water reserves as liquids from these solids seep into the subterranean reservoir. Similarly, the disposal of this waste by means of incineration causes air pollution.



The practice of transferring Israeli factories outside Israel’s never-declared ‘borders’ has resulted in a proliferation of factories inside settlements causing environmental damage. The number of factories inside Israeli settlements is now estimated at 200. They produce products for the various chemical and other industries including aluminium, leather, batteries, plastics, cement, food cans, glass wool, rubber, alcohol, porcelain, marble, chemical cleaners, gas, pesticides and secret military items.

The following table shows some of the factories that leak hazardous waste into the Palestinian territories:

Governorate	Settlement	Factories	Environmental impact
Ramallah	Atrut	Aluminium; food containers; plastic	Emptying of alkaline substances that lead to desertification
	Kafrit	Avocado	The release of unpleasant odours and harmful residues
	Nili	Aluminium	The emptying of alkaline substances that lead to desertification
	Halmish	Leather	The use of chromium and arsenic which is harmful to the soil at the waste disposal site causing serious damage to health.
Hebron	Kiryat Arba	Alcohols	The link between the settlement sewage and Hebron’s drainage network leads to an increase in the load on the network
	Siramiks	-	The establishment of a 6 hectare waste burial site in Yatta and a incineration site near Hebron
Nablus	Chumash	Aluminium	The settlement gets rids of industrial waste near to Araba, Qalqiliya, Biqa and Wadi Sebastia.
Nablus	-	Chemical cleaners	-
	Alon Morieh	Aluminium	Sewage causes damage to olive groves
	Shiloh	Aluminium	Sewage causes damage to olive groves
	-	Leather	-
	Itmar	Aluminium	-



Jenin	Chumash	Batteries	The factory uses toxic cadmium which when mixed with water causes harm to land and agriculture
	-	Candle wax	-
	Jananit	Gas	-
Tulkarm	Non-governmental settlement factories	Pesticides	Gaseous and liquid waste harmful to residents and agriculture. The factory was situated in the village of Irtah/Tulkarm until 1982. It used to be situated in Kfar Saba but was closed by military order, but demonstrations forced it to relocate to Tulkarm in 1987.
		Wool insulation and asbestos	Manufactures glass wool from polyester, and when wastes are burned, toxic substances are emitted.
		Dioxin for gas manufacture	Emits bad odours and stores large amounts of gas that could lead to environmental disaster. It used to be situated near Netanya, but has now been relocated to Tulkarm
		Chemical fertilisers, tubes and water filters	Emits large amounts of dust
Salfit	The Birqan district - over 80 factories	3 Aluminium factories	The largest Israeli industrial area in the West Bank which buries its waste in agricultural land.
		Wool insulation	-
		Numerous plastic factories	-
Ariha	Khan al-Ahmar –the second largest Israeli industrial region in the West Bank	Plastics	Noise and air pollution



	-	Rubber and leather	Noise and air pollution
	-	The Extal Aluminium Factory	Uses toxic materials in production and the Israeli environmental authorities have protested against its industrial waste.
	-	The White Room Aluminium Factory	Emits thick black smoke
	-	The Dutara Factory	The products are unknown as tinned Containers enter and exit the factory in absolute secrecy and are buried near the region of Eizariya.

b) Hazardous waste

The hazardous waste consists of:

1. Industrial waste from poisonous chemical substance like lead, zinc and nickel
2. Solid and liquid medical waste
3. Radioactive waste

Over the years of its occupation, Israel has used the Palestinian Territories as ground for getting rid of its hazardous waste, and has resorted to transferring many of its factories into its illegal settlements in the West Bank and the Gaza Strip. Similarly, it has used over 50 Palestinian sites as dumping grounds for hazardous material which it either dumps or buries, thus directly and indirectly exposing the Palestinian territories to harm. Residents close to the 'border' with Israel are also exposed to toxic gasses emitted by factories inside the state and carried on the wind. There have been numerous recorded incidents inside factories or during the transportation process involving hazard substances.

The following recorded instances highlight Israeli transport and smuggling of hazardous material into the Occupied Palestinian Territories:

- In 1987, Israel buried solid waste in land belonging to the village of Azron near Qalqiliya. It is believed that this dump site is a source of danger to citizens as there has been an increase in the diagnoses of cancer here compared to numbers in neighbouring areas.
- Large quantities of toxic waste from chemical remnants were found near to the villages of Azron, Juyus and Tel Sufin near to Qalqiliya.



- In March 1999, 250 barrels containing unknown toxic substances were discovered dumped in the villages of Umm al-Tout and Jenin.
- A dump for solid waste was established near the settlement of Yafit in the Jordan valley after being transferred from the region of Afula inside Israel.

Pollution by radioactive substances

Israel is developing weapons and ammunition using depleted uranium and has carried out numerous tests and experiments in the Gulf of Aqaba. This has resulted in dangerous levels of radioactivity in neighbouring Arab countries. For 12 hours a day for 32 days, Israel conducted experiments and tested weapons containing depleted uranium on Palestinian citizens.

Depleted uranium is the same substance as natural uranium after the active element 237 is isolated from it. Its use in the manufacture of ammunition and projectiles gives it an enormous penetration capability and increases the force of tank shields. It is a high density material and is 1.7% denser than lead; it is able to self-combust upon collision, resulting in the emission of minute volatile particles dispersed in the air which can be inhaled easily.

A number of international organisations, including the International Action Centre (US) and Laka Foundation (The Netherlands), have revealed Israel's use of depleted uranium tank rockets and ammunition against Palestinian civilians. The result has been the death of hundreds and the wounding of thousands of others with injuries never encountered previously by medical staff. The bullets being used explode inside the bodies of the victims leading to the disintegration of the wounded parts of the body. This ammunition is proscribed internationally and known as "dumdum" bullets.

According to several scientists, including Dr Fawzi Hamad, the former Chairman of the Egyptian Energy Board, and Dr Tarek Nimr, munitions and rockets made using depleted uranium contain toxic radiation and cause serious damage to public health; various kinds of cancer, birth defects and chronic diseases; and also contaminates water and enters the food chain.

Israel's use of such depleted uranium rockets, ammunition and tanks in civilian areas of the Gaza Strip and the West Bank has exposed the Palestinian Territories to dangerous levels of radioactivity. The International Action Centre confirmed previously in one of its reports following a study carried out in parts of the West Bank and the Gaza Strip that in November 2000, Israel bombed numerous residential buildings and public utilities with munitions manufactured using depleted uranium.

nbprs.ps



Where is Israel to dispose of its nuclear waste?

It is said that Israel disposes and has disposed of its nuclear waste in the following area:

- The Mediterranean Sea
- The mountains of Hebron in the West Bank
- The Negev Desert
- The al-Halosa region on the border with Egypt
- The Syrian Golan Heights

All of these sites are close to a geological fault exhibiting seismic activity. Some experts believe that there is a serious environmental and geological risk involved in burying nuclear waste products at these sites, particularly from the perspective of polluting the subterranean water reserves with nuclear materials as well as the possible threats posed by the interaction between the nuclear material and the earth's crust, which is weak in these areas.

Anti-radioactivity pills only for Jews

The serious threat posed by the Dimona reactor has forced the Israeli government to make the decision to distribute anti-radioactivity pills to Jewish residents living in the neighbouring districts in anticipation of an emergency. This includes the residents of Yarouham, Dimona and Yafna.

Maan-ctr.org

Conclusion

From the aforementioned, we find that Israeli settlements constitute the most prominent threat faced by the Palestinian environment, and threaten all aspects of natural and human life alike. Similarly, procedures carried out by the Israeli occupation have wrought fundamental changes to Palestine's natural life, including severe and rapid damage to the Palestinian environment and the natural environments of neighbouring Arab states.

All the things that have been mentioned constitute an environmental threat to the Occupied Palestinian Territories and those living on them. The threat is ongoing with serious effects on everyday life, from the scarcity and pollution of water resources to the status of refugees; changes in the climate; the desertification and degeneration of the soil; and the degradation of agriculture, culminating in the Apartheid Wall which has impacted on natural agricultural life for the Palestinians.

In contrast to the slow pace of global environmental degradation, the Palestinian environmental system is deteriorating at record rates. This calls for making the environment a necessary and urgent priority in efforts to resist the Israeli occupation.

