TRANSFORMING RESILIENCE INTO PROGRESS

IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS

Voluntary National Review
ISRAEL 2025

Acknowledgments

We would like to acknowledge the representatives of government ministries and agencies and of various organizations for their essential contributions to each chapter of this document. Many of these bodies have been specifically cited within the relevant sections of this document.

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This document was prepared under the guidance and supervision of Ayelet Rosen from the Multilateral Environmental Agreements Department and Adam Schalimtzek from the International Relations Department of the Ministry of Environmental Protection.

Foreword

We are pleased to present the second Voluntary National Review (VNR) on the path to Sustainable Development Goals (SDGs) in Israel. Since pledging to adopt these global goals in September 2015, Israel has made significant strides, yet we acknowledge that challenges remain. As we submit our second review, we reaffirm our commitment to the process and to creating a better and more sustainable future for all.

Since October 7th, 2023, our country has been at war. The brutal attack on Israel from Gaza and subsequent attacks from multiple other fronts (Lebanon, Iran, Yemen, Syria, Iraq and the West Bank), has changed the country and has affected most areas of life, leading to changes in government priorities and public focus. This second VNR is presented in the shadow of the war enforced on Israel and the growing needs to rehabilitate our communities in the north and the south of Israel, and reconstruct infrastructure, economy, social activities, education etc.

Nevertheless, despite the ongoing war, we found it important to prepare this review, showcasing the advancement towards the SDGs in various sectors over recent years. Moreover, as we develop and deploy plans to emerge strongly from the war, the SDG spirit, highlighting the connections between the environmental, social and economic aspects of sustainable development, must be integrated into the reconstruction process. In this process Israel relies on cooperation with our friends and allies to build back better.

This review offers an updated overview of current progress by various Israeli actors in promoting measures to reach, among others, the targets on good health and well-being (SDG 3), clean water and sanitation (SDG 6), decent work and economic growth (SDG 8), Industry, innovation and infrastructure (SDG 9), sustainable cities and communities (SDG 11), climate action (SDG 13), life below water (SDG 14), and Partnerships for the goals (SDG 17). It presents strengths and achievements, but equally important, it underscores areas where additional efforts are needed and planned to enhance the lives of our citizens and communities.

The importance of implementing the SDGs in Israel cannot be overstated. Our nation's diverse society, comprising various ethnic and religious groups, demands that we create a better quality of life for all segments of our population. This diversity is both our strength and our challenge, requiring us to work inclusively with all government entities and sectors of society to achieve our goals.

We recognize the need for systemic, interdisciplinary collaboration embracing government, businesses, civil society, research institutions, and the financial sector. By fostering these partnerships, we can address complex issues such as climate resilience, poverty reduction, food security, biodiversity conservation, and gender equality more effectively.

The implementation of SDGs is of course a global effort requiring cooperation between nations. Israeli innovation and creativity benefit the world in many areas, from addressing water scarcity and land degradation to cutting-edge technology to quality healthcare. This review brings a few examples of projects that could give inspiration for further partnerships, and we believe there is much potential for expanding collaborations bilaterally or in multilateral fora.

As we continue this journey towards sustainability nationally and globally, let us be guided by the wisdom of our ancestors. As it is written in the Jewish "Ethics of the Fathers": *"You are not obligated to complete the work, but neither are you free to desist from it."* This teaching reminds us that while the task ahead may seem complex, it is our responsibility to continue and make progress, and to lay the foundations for further advancement.

Together, through inclusive collaboration and solid dedication, we can create a more sustainable, thriving, and prosperous Israel for generations to come. Let us embrace this opportunity to lead by example and contribute to the global effort of achieving the Sustainable Development Goals.

We look forward to the work that lies ahead, both at home and overseas, and to the harnessing of the creativity, enthusiasm, and optimism which characterizes Israel to the benefit of people everywhere.

Minister of Environmental Protection, Ms. Idit Silman
Minister of Foreign Affairs, Mr. Gideon Sa'ar

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Introduction: Israel's Second Voluntary National Review

Israel has faced many challenges when promoting sustainable development, including tension as a result of the post-October 7th Swords of Iron War, national politics, environmental extremes, climate change, and economic constraints. However, Israel stands in solidarity with all United Nations member states in advancing and implementing the 2030 Agenda for Sustainable Development and closing the considerable gaps in the population's access to economic, social, and environmental resources. We are committed to upholding the universal promise to "leave no one behind", as we work together toward a more equitable and sustainable future.

Policy and enabling environment

The Israeli government's Decision No. 4631 (from 2019) aimed to integrate the United Nations' 2030 Agenda for Sustainable Development into national governmental programs. This decision reflected Israel's commitment to international efforts to implement the SDGs and address challenges such as inequality, climate change, and rapid urbanization by aligning its policies with global sustainability goals, including:

- Policy integration: Initiating a process for ministries to incorporate the 2030 Agenda's 17 Sustainable Development Goals (SDGs) into their planning and working processes.
- Monitoring and reporting: Establishing mechanisms for tracking progress and submitting periodic reports on Israel's implementation of the SDGs.

The government decision tasked the Ministry of Environmental Protection (MoEP) and the Ministry of Foreign Affairs (MFA), in coordination with the National Economic Council and relevant government ministries, with proposing Sustainable Development Indicators and assisting government ministries in incorporating the SDGs in their work plans.

The two ministries established a cross-government mechanism for implementing the SDGs. An inter-ministerial team was formed to facilitate cross-ministerial cooperation; a questionnaire was sent to government ministries to map spheres of activity that can potentially contribute to SDG implementation; relevant guidance was provided to the bodies involved; and specific consultations were arranged with relevant ministries.

However, progress has been limited due to the voluntary nature of this work and the lack of authority of the MoEP and MFA to require the other ministries to integrate SDGs into their work processes – whether separately or in a synergistic manner. Decision No. 4631 did not list specific measures, mandatory requirements, or funding allocations, thus creating a gap between the commitment for policy alignment and the actual implementation of the SDGs and Agenda 2030 as part of the ministries' strategies.

To date, Israel still lacks a mandatory mechanism for integrating SDGs into government work, as well as a formal national cross-sector scheme involving stakeholders in the implementation process. Furthermore, the methods for measuring progress towards achieving the 17 goals remain somehow inconsistent and irregular due to the lack of a body with authority to oversee their implementation across all ministries in a uniform and consistent manner.

There is a need for a national SDG mechanism for obligatory cross-government implementation and reporting led by a body with a suitable mandate, in order to track progress more effectively. A mechanism of this kind would report on successful alignment and identify gaps in the implementation of sustainable development policies in Israel.

Looking ahead, Israel remains committed to enhancing cross-sector collaboration and developing comprehensive and robust national frameworks for implementing the SDGs. This commitment, combined with Israel's creativity and pioneering entrepreneurial spirit, will be pivotal for sustaining progress and ensuring a resilient and equitable future for all.

Methodology and process

Under the guidance of the Director General of Israel’s MoEP, a governmental team led by the MoEP and MFA, in cooperation with the Israel Central Bureau of Statistics (CBS) and in consultation with the Prime Ministers' Office, began preparing Israel’s second Voluntary National Review (VNR) in anticipation of the 2025 United Nations High-Level Political Forum.

Due to the challenging circumstances under which the review was prepared – an ongoing war and limited resources – a decision was taken not to perform a full systematic review of all the SDGs, but to focus instead on a limited number of areas, presenting case studies that show the progress made and the synergetic implementation of certain SDGs. The team and the authors of this review then

reached out to government ministries and other stakeholders relevant to the selected areas. Government ministries were invited to submit their professional inputs on Israel's progress and activities, the remaining challenges, and their future plans towards meeting the targets and goals of Agenda 2030, and to suggest suitable case studies for inclusion in the VNR.

The document therefore reflects a broad, government-wide review, mapping the scope of activity, to best gauge Israel's progress towards achieving the 2030 Agenda. This will serve as an informed basis for comprehensive and coherent policymaking during the next stage of implementation, and as a national baseline for analyzing future progress for the next VNR. The lack of a formal SDG implementation mechanism, as explained above, created challenges with the information and data collection process, as the team faced challenges in coordinating activity with certain governmental bodies and ensuring data consistency. In addition, the differing methodologies and definitions used by international organizations and local agencies posed difficulties in assuring consistency when monitoring the performance indicators. These challenges must be overcome in order to achieve comprehensive and higher-quality reporting in future VNRs.

Although this is a governmental review, the team engaged with other relevant stakeholders in order to showcase projects carried out by non-governmental entities or in partnership between actors from different sectors. The contributions of representatives of civil society, local government, the private sector, and the academia have been integrated throughout the chapters and topics covered by this review.

Submissions were provided by the following organizations:

- *Forum 15 – The Israeli Forum of Self-Government Cities*
- *The Urban Shading Center (in Hebrew)*
- *Tel Aviv University*
- *Haifa University*
- *Aclima – Localized climate solutions*
- *Tel Aviv Municipality*
- *The Joint - TOV Program*
- *JNF-KKL*
- *The Society for the Protection of Nature in Israel*

Structure of the Review

This second VNR presents Israel's efforts to reduce inequality, promote social cohesion, foster recovery, support economic growth, and enhance resilience through innovative interventions. It highlights the importance of extensive interconnectedness for facilitating sustainable development, and describes novel tools for mitigating social challenges, health and emergency response mechanisms, climate resilience action, underwater conservation, sustainable cities, and more.

The review comprises 8 chapters covering the three core pillars of sustainable development – society, economy, and environment. Several leading initiatives that incorporate multiple SDGs are presented for each of these pillars.

The last chapter describes selected international partnerships for promoting the SDGs. Israel's top priority remains active engagement in multistakeholder initiatives designed to aid the extremely poor and most vulnerable in developing and less-developed countries, carried out by organizations of all sectors.

Statistical Annex

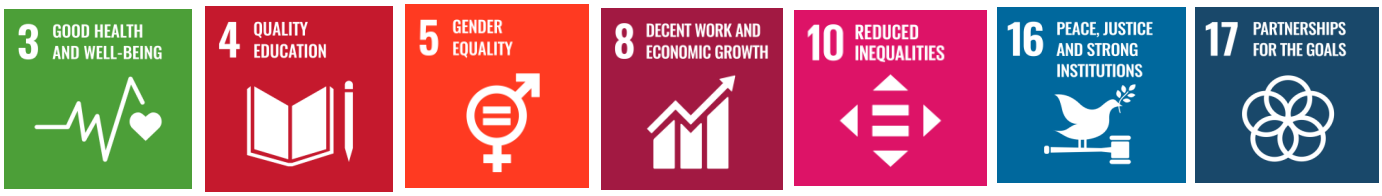
The Israeli Central Bureau of Statistics (CBS) is Israel’s national statistical office and serves as the national focal point for all processes that collect and report SDG indicators. This also includes indicators that are not part of the official statistics produced by CBS or the national statistical system (NSS).

While preparing Israel’s first VNR, CBS began mapping available SDG indicators in its own data and in other governmental agencies, to enable maximum international reporting of all relevant data. This became the basis for the annual report on SDG indicators and gaps, which CBS has submitted each year since 2019 to international bodies.

The data presented in this review serve as a basis for further development of SDG-related statistical analysis at CBS, as well as for strengthening and improving its work, with the aim of building a complete national knowledge platform for monitoring progress towards achieving the SDGs. Available indicators are included in the Statistical Annex of this review, based on CBS data as well as on input received from government ministries and many other organizations.

Chapter 1:

Addressing Social Challenges with Digital Tools



Introduction

In today's rapidly evolving digital landscape, young individuals face a myriad of social challenges, particularly related to online harassment, cyberbullying, and navigating future career paths. These issues not only threaten the mental health and safety of teens, but also complicate their journey toward becoming productive members of society. By harnessing technological tools, the younger generation can effectively address these challenges and help create a safer, more inclusive digital environment.

This chapter presents two case studies in which Israeli authorities have utilized technological solutions to protect and empower young people, and improve their economic, educational, and employment opportunities. These examples demonstrate how digital innovation can address these challenges, and benefit society in the process.

1. The National Child Online Protection Bureau

Online harassment and bullying present significant challenges for today's children and youth, affecting their mental health and wellbeing. These issues can lead to increased anxiety, depression, and isolation, as children and teenagers struggle to navigate the complexities of digital interactions. Addressing these challenges requires concerted efforts from parents and educators, and digital enforcement to ensure safe browsing and create safer online environments.

Unit 105, the Child Online Protection Bureau under Lahav 443 Police Unit, comprises several core departments, including the 105 Hotline, Research and Collaborations, a tailored accessible hotline, the civic 'Cyber Knights' volunteering unit, and TOV Community Support. Through its multi-system portal, the bureau combats online harassment, violence, and cyberbullying targeting children and teens. It serves a variety of populations in Israel, including orthodox, LGBT+, Arab, and people with disabilities.

1.1 The 105 Hotline

The 105 Hotline is a unique national call center, operating since 2018, that receives inquiries and reports from the public and provides professional responses to harm, violence, and offensive and sexual harassment crimes aimed at children and teenagers in cyberspace.

The hotline is staffed by police officers who have undergone training on the fields for which Unit 105 is responsible. It also has a ministerial-civilian partnership desk staffed by experts in online harassment of children, led by the Ministry of National Security and in partnership with the Ministry of Education, Ministry of Health, Ministry of Welfare and Social Affairs and Ministry of Justice.

1.1.1 Purpose and activity

Today's children and teenagers contend with offensive content, bullying, threats, humiliation, privacy violations, internet addiction, loneliness, and physical and verbal violence in cyberspace. The professional 105 Hotline is one-of-its-kind in Israel and worldwide, in which representatives of government ministries and the Israel Police work together to provide optimal and comprehensive solutions for the extensive range of online abuse of children and teenagers. Minors, teenagers, parents, professionals, and the general public can use this hotline to report harmful behavior against minors in cyberspace.

The hotline is operational 24 hours a day, 7 days a week, and can be reached at any time by calling 105, filling in a digital form, or via WhatsApp.
The unit provides consultations and information about safe internet use and the harm that cyberbullying can cause to children and teenagers (from age birth to 18 years). It provides complementary inter-ministerial responses to criminal incidents as well as to minor online incidents and harm that are not classified as criminal (e.g. cyberbullying, online ostracism, and shaming).

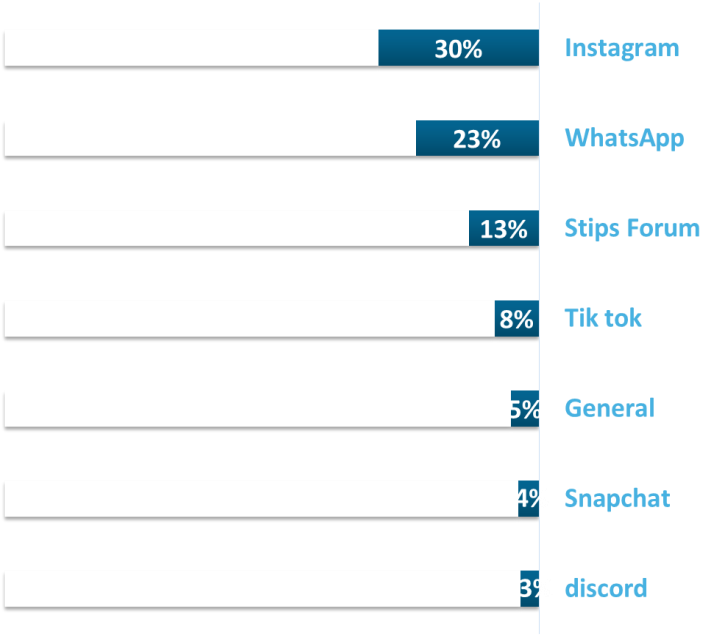
Criminal acts that are reported include:

- Extortion, threats, impersonations, gambling, fraud.
  Online emergencies, distress and suicidal behavior,
- Online sexual abuse, including prostitution, obscene acts, rape or attempted rape, and sexual harassment.
- Cyberbullying: shaming, exclusion, ostracism; and eradicating harmful, abusive, and offensive content.

Each call or message to the 105 hotline is handled by a specialized team with the utmost professionalism and discretion. During the conversation, the responder asks background questions in order to get a better understanding of the problem and find the best solution. Based on the caller's needs and the urgency of the problem, a decision is made about how to proceed. To ensure a comprehensive response, the incidents are forwarded to the partnership desk. The discreet nature of the report is reassuring for callers who may feel hesitant about coming forward with sensitive information, and therefore can be crucial for encouraging people to seek help. By maintaining discretion, the hotline creates a safe environment in which individuals can share their concerns and receive the support they need.

1.1.2 Facts and figures

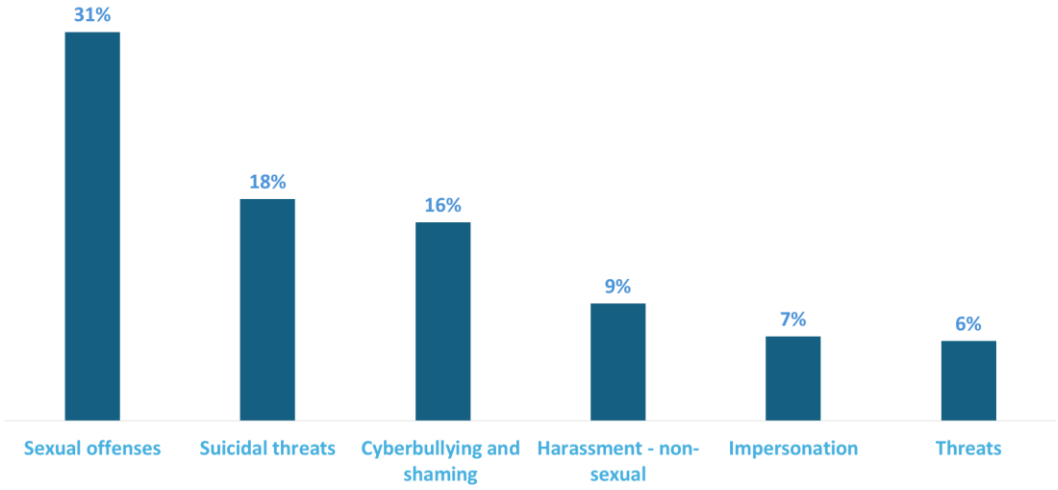
Over 60,000 incidents and events have been reported in the past seven years (2018 – 2024).



Main abuse platforms:

The hotline responded to reports of abuse received via over 80 online platforms. The main ones used were Instagram (30%); WhatsApp (23%); and Stips (13%).

Types of incidents reported:



The top three types of incidents reported are sexual harassment (31%), suicidal threats (18%), and bullying and shaming (16%). Most online reports involved bullying and sexual offenses.

Victims and offenders:

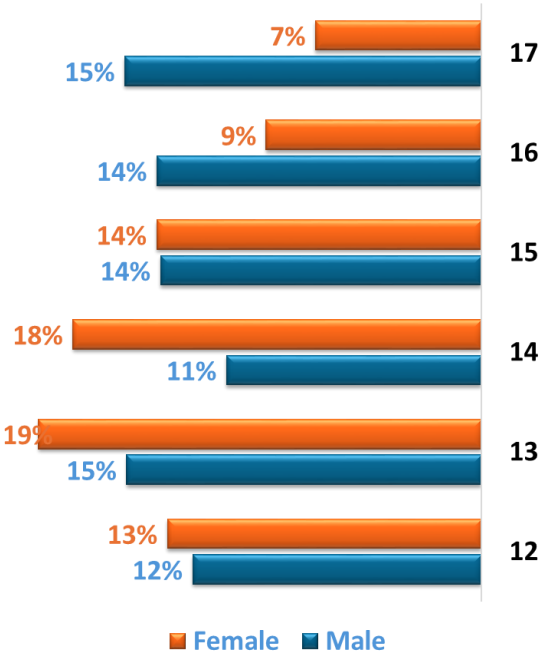
Each year, the age range of victims decreases. The majority of victims are between the ages of 12 and 15 years old. Girls comprise 66% of victims and boys comprise 33%. The majority of female victims were 13–14 years old, and male victims were mostly 15–17 years old.

Surprisingly, most of the sexual offenders are children and teens under 18 years of age. In 71% of reported violent incidents of this kind, teenagers were the offenders, highlighting the fact that violence occurs in places where people interact. Therefore, children and teenagers tend to harm one another when they are physically present in

the same space. Physical space extends into cyberspace, as children today live in both worlds.

The data shows that the majority of identified offenders and victims are in middle school. This information has been shared with the Ministry of Education in order to develop intervention programs. During National Child Online Protection Month, for example, police officers and civilians from Unit 105 are invited to middle schools to teach students how to behave safely online and avoid harm.

*Source: 105 Hotline, 2024 Semi-Annual Report (Hebrew)



1.2 Cross-ministerial effort

An integrated, inter-ministerial response to cybercrime against children and teens is provided through the partnership desk at the 105 Hotline, which coordinates strategies for treating children, teenagers, and minors within their communities:

The Ministry of National Security

The Ministry of National Security coordinates the work done by the partnership desk. A ministry representative works with the hotline commanders and shift officers, channels calls received on the hotline to representatives of the relevant ministries at the desk, and coordinates interministerial cooperation.

The Ministry of Education

The hotline is staffed by representatives of the ministry's psychology and counseling service who specialize in complex cases of online harm to children and adolescents. They keep the hotline in touch with the school system and community. Many incidents reported on the hotline require long-term, ongoing follow-up in the community or at school, and the ministry's representatives guide school personnel through these processes. The Ministry of Education discusses online abuse in circulars published by its director general. Teachers and school counselors receive guidance on how to handle online abuse, whether it occurs on or off school grounds.

The Ministry of Welfare and Social Affairs

If there is reason to believe a minor is being abused online, child protection social workers provide professional advice, solutions, and follow-up. When necessary, the

ministry's representatives will provide protection for victims of online abuse. Youth social workers refer victims' families to the ministry's centers and services for treatment. Depending on the family's desire, they may be referred to local social services when police reporting is not obligatory. In cases in which legal reporting is mandatory, the social workers at the partnership desk will contact the local government's social services.

The Ministry of Health

The hotline's partnership desk is permanently staffed by representatives of the Ministry of Health. They connect the hotline to the entire healthcare system, including national health insurance companies, district psychiatrists, and the relevant ministry divisions. The representatives of the Ministry of Health at the desk belong to the Ministry's Suicide Prevention Unit. They respond to suicidal incidents and online threats of suicide reported to the hotline, and assist in identifying children and adolescents at risk, supporting their physical and emotional needs while developing appropriate treatment plans. Moreover, they educate the public on suicide prevention, handle suicidal messages on social media, identify warning signs, and respond to calls about youth in distress.

The Ministry of Justice - The Office of the State Attorney

When an online criminal offense is suspected, the hotline contacts the Cyber Division at the Office of the State Attorney. The Cyber Division decides whether to limit access to the online content or remove it from the internet, based on legal criteria. In some cases, the poster or service provider (Facebook, Google, YouTube, etc.) will be informed of the alleged legal violations, and in other situations, a court order will be obtained to require the poster either to remove the content or limit access to it.

1.3 Attentive Ear: Call center for the hearing impaired

In addition to the services provided by the regular hotline, tailored responses are provided for specific populations and people with disabilities. “Attentive Ear” is a police hotline and information center for people with hearing impairments, which can be accessed using text messages, emails, and fax messages.

1.4 The Cyber Knights Project

The National Headquarters at the Child Online Protection Bureau has launched a civic, pioneering project for effective prevention and intervention online on behalf of children and teens via a high-quality network of volunteers that is overseen by the Ministry of National Security. The project's goal is to mitigate the dangers and threats to children and teens on social media, applications, and forums, in order to strengthen children's digital resilience and enhance their online safety.

Cyber Knights' responsibilities:

- Identifying minors in distress online.
- Identifying violent or harmful content.
- Contributing to the development of positive online discourse among minors.
- Educating and providing tools for safe browsing.
- Taking action in response to distressing events (that cannot be categorized as criminal or emergency events).
- Reporting criminal and emergency events to Unit 105.
- Referring people to civic aid organizations for psychological support and counseling, when needed.

A total of 36 volunteers have been involved in this project since it was launched in 2022. These include high-tech professionals, military and police personnel, students, civil servants, and retirees. A professional civilian team from the National HQ guides and supervises the volunteer team. The project involves proactive prevention, education, and protection efforts that are generated online, and the volunteers serve as a force multiplier for the 105 Hotline.

1.5 The Tov Center for online therapy

The 105 Hotline handles incidents of abuse on the internet, but victims, the children who harassed them, and their parents may require psychological support to deal with the trauma and distress they experienced.

The Tov Center is an innovative civic initiative led by the National Child Online Protection Bureau, the ELEM Association, and the National Insurance Institute. The program provides online emotional therapy for children and teens who experienced harassment online and reached out to the 105 Hotline for help.

People who are referred to the Tov Center for online therapy participate in a series of up to six sessions led by ELEM experts (psychologists and clinical social workers), who offer free online sessions in Hebrew and Arabic. The therapy sessions aim to provide

a safe space for children and teens in which they can process their emotions, develop coping strategies, and rebuild their confidence. By addressing the psychological impact of online harassment, the Tov Center helps young individuals recover and grow in their digital and personal lives.

1.6 Effectiveness

Unit 105 has been operating for the last 7 years and has handled over 60,000 incidents. A recent survey found that public awareness of the hotline is around 60% and further efforts to raise awareness are constantly being made. When analyzing the positive impact, the research team derived two parallel, but seemingly contradicting insights:

1. Between 2020 and 2022, there was a decline in the overall number of incidents. 8,133 events were reported in 2022, compared to 11,786 in 2021 and 11,855 in 2020. In other words, the 105 Hotline recorded 31% fewer violent and harassment incidents in 2022 compared to previous years.
2. Since then, the number of incidents per year in 2023 and 2024 remained approximately 8500.

Contrary to expectations that the numbers would decrease each year, the analysis found that the data showed a decline and then stabilized. The initial decrease followed by a stable pattern can be attributed to two main factors:

1. Information and awareness-raising activities provided by Unit 105 and other police units, including workshops in middle schools in collaboration with the Ministry of Education, reaching out to parents, and yearly national awareness campaigns for safe use of the internet.
2. Growing awareness of the hotline among children, youth and parents.

1.7 Current challenges and looking ahead: Online violence and artificial intelligence (AI)

To address and reduce cyberbullying, it is crucial to implement advanced AI-driven monitoring systems that can detect and flag potentially harmful content in real-time. On the other hand, AI presents complex challenges in terms of monitoring and responding.

Cyberbullying

The advent of artificial intelligence has increased the availability of harmful behaviors such as cyberbullying, shaming, and creating fake humiliating or sexual pictures and videos. Abusers find it easier to target children.

Artificial intelligence and law enforcement

Adapting cyber enforcement to incorporate technological advancements has become increasingly important for law enforcement purposes. The negative use of AI for generating fake news and deepfake videos can complicate matters, particularly in light of laws such as Amendment 10 to the Prevention of Sexual Harassment Law (The Video Law), which defines sharing offensive videos as sexual harassment.

Educating users about digital literacy and promoting responsible online behavior and regulation can empower individuals to recognize and report abusive activities more effectively. Generation Z, being digital natives, often demonstrate higher awareness of cybersecurity threats and are more proactive in adopting protective measures such as contacting 105, blocking and reporting incidents as soon as they occur, and enabling authentication solutions.

This awareness and adaptability make them valuable allies in the collective effort to combat cybercrime. 105 is actively educating youth on safe online conduct, which is essential for ensuring they understand the potential risks and the importance of verifying information on their website, thus helping to prevent the spread of harmful content and fostering a safer digital environment.

What's Next?

The Child Online Protection Bureau has made significant strides in reducing cyberbullying and online harassment, even amid global challenges such as COVID-19 and national geopolitical conflicts.

The efforts made in the past 8 years have underscored the importance of addressing these issues to create safer digital environments for children and teenagers worldwide. Moving forward, the bureau will focus on finding and developing innovative solutions for AI-related harassment, improving public education, and improving online safety initiatives starting from early childhood.

SDG Alignment

Online harassment prevention via the 105 hotline is aligned with several UN Sustainable Development Goals (SDGs). Youth and teens benefit from a safer digital environment in multiple dimensions.

SDG 3: Good Health and Well-Being.

Target 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

As online bullying can have severe negative impacts on the mental health and overall wellbeing of children and teenagers, reducing online harassment positively impacts mental health.

SDG 4: Quality Education.

Target 4.a: Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.

Preventing online harassment and creating safer online spaces enables better access to educational resources and opportunities for digital learning.

SDG 5: Gender Equality.

Target 5.2: Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.

By addressing and preventing online harassment, which disproportionately affects girls, the Child Online Protection Bureau contributes to gender equality and empowerment.

SDG 10: Reduced Inequalities.

Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

A safer online environment reduces digital inequality and promotes equal participation.

SDG 16: Peace, Justice, and Strong Institutions.

Target 16.1: Significantly reduce all forms of violence and related death rates everywhere.

Target 16.2: End abuse, exploitation, trafficking and all forms of violence against and torture of children.

By identifying and reducing online crimes against children and youth, the Child Online Protection Bureau strengthens institutions and promotes a just society.

SDG 17: Partnerships for the Goals.

Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

The establishment of the Child Online Protection Bureau effectively implements public, public-private, and civil society partnerships.

2. AVODATA: An online portal for navigating the future labor market

Choosing and planning a career path is one of the most important decisions in a person's life and can be an enormous challenge for young people. The AVODATA portal ('Work-Data' in Hebrew) is an online resource for higher education and employment opportunities. The portal helps people plan their education and career paths. AVODATA thus assists society in adapting to a rapidly evolving labor market.

In order to help young adults choose a university major prior to choosing a career, AVODATA provides information on job placements per fields of study, possible career paths, salary ranges, and skills needed for each discipline. It provides tools such as a database of professions and studies, a guidance questionnaire, and options to compare different occupations and fields. Users can filter options by salary, employment rates, academic degrees, and working hours. The portal also offers information on the degrees and qualifications that people in specific positions have attained. The service is currently available in Hebrew and Arabic.

2.1 Purpose and activity

AVODATA serves college graduates, engineers, employees, and educators.
Its goal is to reduce knowledge and awareness gaps regarding education and employment opportunities for the Israeli population, with special attention to vulnerable populations such as women, ultra-orthodox Jews, and Arabs.

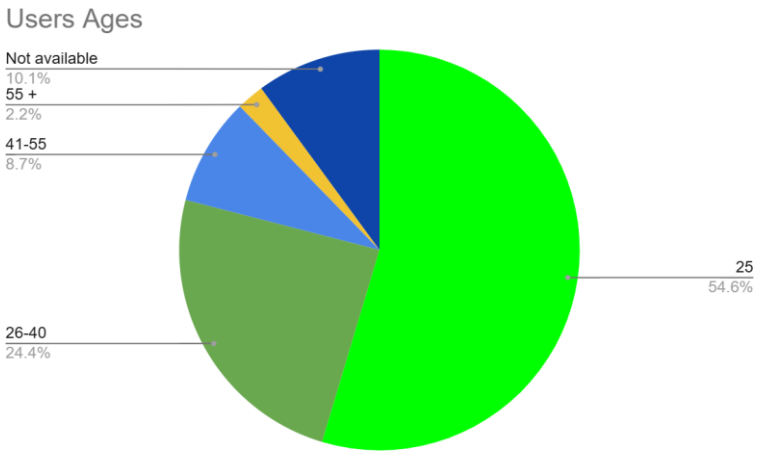
The key employment challenges addressed by the portal include:

- **Inaccessibility of information:** People often have insufficient exposure to the diversity of career options. Many people are only aware of a small selection of career opportunities, and receive information only through their parents or friends. Also, many people are unaware of all the available options and the training requirements for each profession. Young people do not always have access to up-to-date and detailed information about various careers, salaries, and working conditions, which can result in missed opportunities and entering the job market unprepared.
- **Diversity of options:** Today, there is a wide variety of fields, professions, and specializations to choose from, leading to confusion and hesitation over how to narrow your focus to a single domain.
- **Changing labor market conditions:** Technology and globalization cause job demand to spike rapidly. The portal addresses this challenge by highlighting professions with rising wages and job opportunities.
- **External influences:** Parents' expectations, society, and social media make it hard for individuals to identify their own strengths, weaknesses, interests, and

values. This makes it difficult for them to find a career that best suits their personalities.

2.2 Effectiveness

Since the launch of the portal in 2022, 1.3 million users have visited the site, spending an average of at least 3 minutes there. Some 106,000 users have filled out the Personal Interests RIASEC Questionnaire. Among the topics covered are choosing a career, choosing a university, and learning more about dozens of subjects, study programs, and curricula in practical engineer training programs, institutions of higher education, and colleges.



Self-exploration can be achieved by exploring one's interests, strengths, and weaknesses, as well as by researching professions and study paths.

The portal's main functions include:

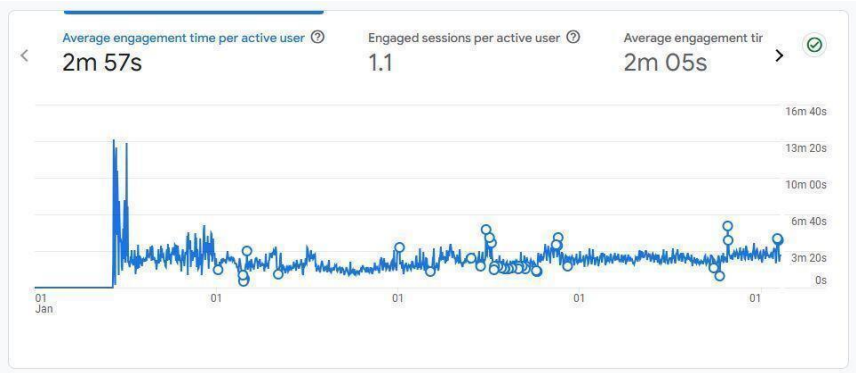
1. **Raising awareness of career possibilities:** The scope of occupations is broadened and made more accessible to all by the portal, which features a database of study programs including academic degrees, practical engineering certification, and vocational training.
2. **Addressing gender terminology:** The AVODATA team discovered that job ads generally use masculine terminology and phrasing in reference to professions such as lawyers, entrepreneurs, and doctors, and feminine conjugations are more often used for caregiving and therapeutic roles. The portal therefore uses the feminine Hebrew form as the default for all the occupations presented, to ensure hits for both feminine and masculine terms in the search engine and mitigate gender bias. However, the portal allows users to switch between feminine and masculine forms according to their choice.
3. **Personalization:** In order to refine the personalized search based on strong competences defined by the user, the portal offers features such as orientation, strength assessments, favorites, comparison tools, and filters, all of which can be used to customize the personalized search.
4. **Future-looking:** Professions that are expected to grow rapidly are marked in green, in order to highlight demand and certainty.

The site provides information about gaps based on population type, sector, gender, geography, age, self-employed vs. salaried workers, and decision-making data for policy makers and government officials.

2.3 Intervention efficacy

Due to its accessibility, the database provides access to information about the skills required for the labor market, including mapping out degrees and professions. Most users expressed satisfaction with the site's layout and content, as the material is arranged according to areas of interest, which is translated into training programs and the types of degrees available.

The strengths and weaknesses questionnaire was filled out by 60% females and 40% males. High school graduates accounted for 48% of the respondents; academic qualifications accounted for 27%; and post-high-school accreditation accounted for 8%.



What's Next?

The AVODATA portal has the potential to make a significant positive impact by reducing information gaps in education and employment, particularly for vulnerable populations, empowering young people to make informed decisions about their education and careers. As a result, it contributes to the development of a more skilled and adaptable workforce, which is crucial for Israel's economic development and competitiveness. AVODATA plays a crucial role in preparing Israeli youth for the challenges and opportunities of the future labor market, while also promoting greater equality and economic inclusion.

The portal has proven to be a successful resource. AVODATA contributes to achieving work and economic growth by empowering individuals and providing valuable information to enable them to make informed career decisions, thus promoting equal opportunities for all.

In the next stages, the portal team plans to add more features, such as prerequisites for vocational training, information about preparatory programs for higher and technological education, university admission requirements and criteria, and an interactive chatbot to allow users to search the website and converse more efficiently. These tools will make it easier for users to navigate their career paths in a rapidly changing, dynamic workforce.

SDG Alignment

SDG 4: Quality Education.

Target 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational, and tertiary education, including at universities.

Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment in quality jobs, and entrepreneurship.

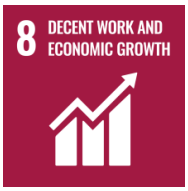
The portal promotes equal access to information, regardless of background or language, thereby reducing information gaps in education and employment, particularly for vulnerable populations.

Providing comprehensive information about various study programs, their career prospects, and potential salaries, helps young people make informed decisions about their education, potentially increasing access to quality higher education.

SDG 5: Gender Equality.

Target 5.1: End all forms of discrimination against all women and girls.

AVODATA contributes to this target by providing equal access to educational and career information for women, potentially alleviating discrimination in education and employment.



SDG 8: Decent Work and Economic Growth.

Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

AVODATA supports this target by providing salary information and career prospects for various professions, helping to promote informed career choices and potentially contributing to more equitable employment opportunities.

Target 8.6: By 2020, substantially reduce the proportion of youth not in employment, education, or training.

The portal addresses this target by guiding young people in their educational and career choices, potentially reducing the risk of unemployment or underemployment.

SDG 10: Reduced Inequalities.

Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion, or economic or other status.

AVODATA contributes to this target by specifically addressing the needs of vulnerable populations, including women, Orthodox Jews, and Arabs. By providing information in both Hebrew and Arabic, it promotes inclusivity and equal access to crucial career and education information.

Chapter 2:

Enhancing and Adapting Health and Emergency Response in Times of War

Introduction

The Swords of Iron War that began following the attack on Israel from Gaza on October 7th 2023, has had a profound impact on Israel's healthcare and emergency response systems.

The conflict presents unprecedented challenges, including managing large-scale evacuations, addressing post-traumatic stress disorder (PTSD), and ensuring the continuity of healthcare services amidst widespread destruction, caused by 27,000 missiles launched at Israel. At the time the review was prepared, a total of 24,205 people had been injured and 143,000 households evacuated. 1,862 people were killed, including 847 soldiers, and over 250 people were kidnapped, out of which 58 are still being held hostage.

The war caused a surge in demand for medical services, with hospitals overwhelmed by the influx of injured civilians and soldiers. The psychological toll was equally significant, with many individuals experiencing PTSD due to the trauma of the war and terror attacks.

The Israeli healthcare system had to rapidly adapt to these challenges. This chapter highlights the emergency response and healthcare solutions. Medical and emergency teams were mobilized to provide immediate medical care for the injured, while mental health professionals were deployed to address the psychological needs of those affected by the war. The government also established temporary medical facilities and shelters to accommodate the displaced population. These efforts were crucial in mitigating the immediate health impacts of the war and ensuring that essential healthcare services remained accessible to all.

In the context of global emergency responses and rehabilitation worldwide, this chapter focuses on the response by the healthcare system in terms of emergency care and national rehabilitation programs established to help individuals recover from injuries sustained during the war.

1. The impact of the war

As a result of the attack on Israel on October 7th 2023, psychological trauma, health complications, physical injuries, and heavy economic consequences have had an unprecedented effect on Israeli citizens.

Post-traumatic symptoms reportedly affected more than 30% of the population during the first few months of the war. In addition to those who were directly affected by the difficult events of October 7th and the evacuation of entire communities, indirect effects are also on the rise. Health professionals, who comprise the first circle of caregivers for trauma victims, find themselves sharing the traumatic reality and experiencing the consequences of the fighting alongside the victims.

More than 70,000 men and women have been recognized as victims of terror attacks, and nearly 13,000 have applied for a permanent disability pension – the vast majority on a psychological basis. The war and the emergency events are taking a heavy economic toll: over 370 million NIS (104 million USD) has been paid to victims eligible for disability compensation, over 250 million NIS (70 million USD) for rehabilitation, and over 1.2 billion NIS (337 million USD) for medical treatments.

Deterioration has also been reported in the medical conditions of people particularly affected by the war. According to a survey conducted among the members of one of the national healthcare providers (Maccabi Health Services), about 80% of the relatives of hostages reported a deterioration in their self-perception of their health, significant weight loss, and an increase in the use of antidepressants and sleeping pills. Among the evacuees, a decline in health status was also recorded. Data shows that about 30% of the evacuated women reported an abnormal physical condition and 60% reported a psychological impact, compared to 20% and 50% in the general population, respectively.

The population living in conflict areas has also suffered severely – a study conducted among clients of Clalit Health Services reported a 200% increase in the consumption of anti-anxiety medications among residents of the Gaza border area compared to 50% increase in the general population. Among security personnel, between the outbreak of the war and October 7, 2024, 726 soldiers fell and 4,576 were hospitalized due to injuries sustained during operational activity. Additionally, about 15,000 soldiers have been diagnosed as suffering stress-related anxiety, who developed symptoms following exposure to a traumatic event. 18% of these soldiers were

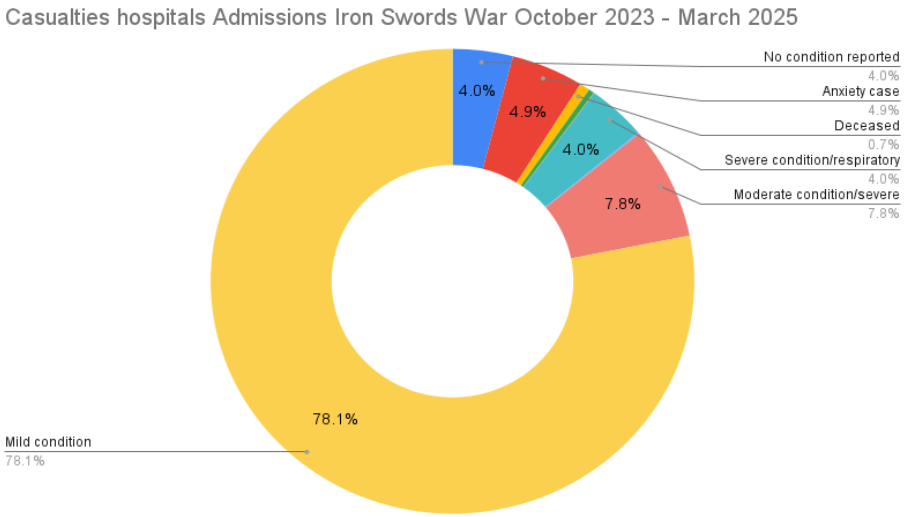
removed from combat. Since the outbreak of the war, approximately 1,000 new patients are admitted each month to the Ministry of Defense rehabilitation departments, most of them reservists, with about 40% of them showing psychological symptoms as well.

2. Health and emergency responses

To address October 7th-related emergency care and health challenges, Israel implemented innovative healthcare solutions backed by robust policies. Between the beginning of the war and March 2025, the following emergency responses were provided for Israel's residents:

- During the war, health institutions made professional preparations for the emergency and responded by adjusting their admission and treatment models in real-time.
- In peripheral locations like the Dead Sea area where evacuees were settled, new infrastructure was required, including Family Care Centers (to provide community public health services, primarily to infants and toddlers), health clinics, and emotional resilience support.
- The responses are monitored to maintain the continuity of the system and its health services and lifesaving activities throughout the war.
- Services provided by healthcare institutions were expanded to meet the needs of vulnerable populations, assisting patients with unique medical needs, evacuating them from their homes, or supplying electrical generators to those who were not evacuated.

2.1 Hospital admissions during the Swords of Iron War: October 2023 - March 2025

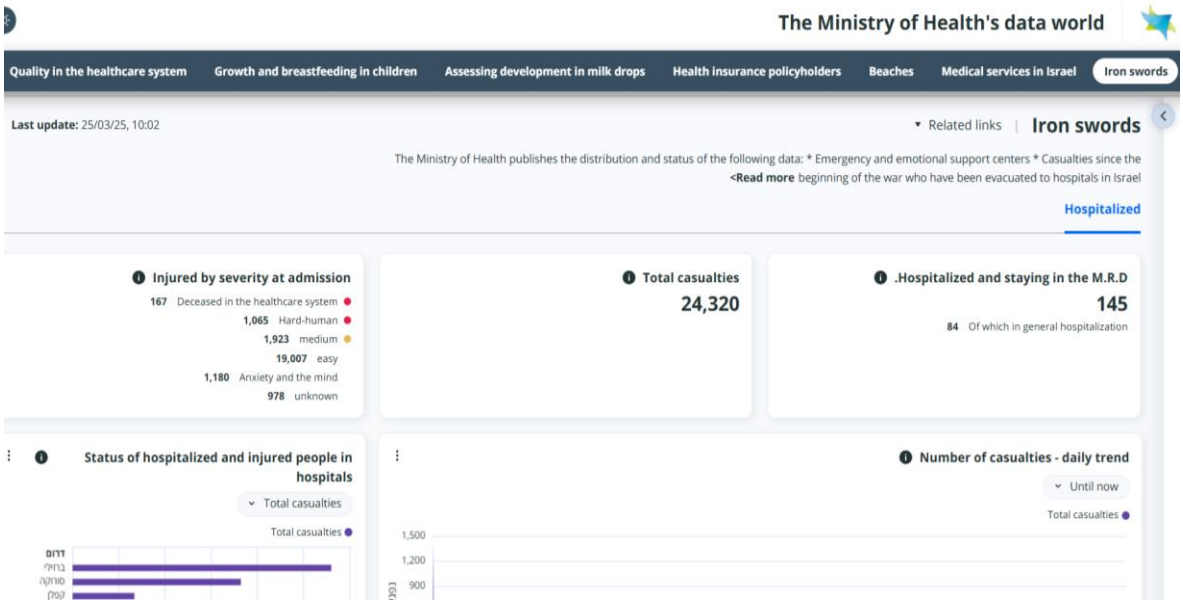


Total admitted: 24,329 patients
**The data does not include prisoners and hostages*

2.2 The Ministry of Health's Swords of Iron War Information Center

To address the challenges posed by the war, the Ministry of Health (MoH) launched an open online database, in Hebrew, Arabic, English, and Russian, offering a one-stop shop for guidance and orientation for all civilians, including emergency hospital contact details, a list of emotional support centers within a defined geographic area, hospital admissions based on severity of injury and location, maps of emergency response centers nationwide, and contact details for emotional support centers.

This database aggregates all health-related physical and mental support mechanisms offered by the State of Israel during the Swords of Iron War. Civilians can access the database through the official MoH website, where they will find a dedicated section for emergency resources. Users can navigate the platform by selecting their preferred language and exploring various categories for up-to-date information.



2.3 Advancing cutting-edge healthcare solutions for emergencies

The Health Initiatives Unit (HIT), established by the MoH, aims to integrate advanced, life-saving, and cost-efficient healthcare initiatives, technologies, and expertise into Israel's health system. The unit connects cutting-edge healthcare and emergency solutions with the necessary policies and regulations to ensure successful implementation and meaningful impact. In an emergency situation and during wartime, these are of utmost importance. The integration of advanced technologies into the healthcare system enables a swift and efficient response to the crisis, mitigating the war's impact on public health.

HIT’s mission is to introduce next-generation healthcare solutions and strengthen collaborations within the Israeli healthcare system, while fostering partnerships with the tech industry to drive advanced knowledge, research, and infrastructure within Israel’s health system. Several emergency war-related solutions have been outlined, including the following:

2.3.1 Drone-based emergency aid

As drone technology becomes more and more advanced, these devices are used to bridge gaps in task execution capabilities around the world. The MoH promotes this technology in emergency situations,

examining the deployment of drones to tackle security challenges, deliver essential supplies, and provide emergency medical aid in hard-to-reach areas. Drones are used to facilitate the rapid delivery of medicines and supplies, ensuring that even the most remote communities receive timely assistance:

1. *Transporting life-saving medicines and equipment:* Drones are ideal for rapid delivery of unique cargo, such as medicines, vaccines, blood products, transplantable organs, and medical equipment. Life-saving medical equipment and medicines can be delivered quickly to dangerous or restricted-access areas.
   HIT leads the formulation of aviation regulations for drones in the healthcare system in Israel, and is formulating an operational model and logistical framework, conducting risk management, and publishing a procedure for transporting medications, blood, and other medical equipment using UAVs/drones during emergencies.

2. *Water sampling:* Maintaining the high quality of water is essential for public health. Laboratory and field tests are conducted in accredited laboratories in accordance with MoH regulations. To ensure the success of any test, proper and professional sampling must be done. Sampling allows for characterization of water components, ensuring quality, and identifying acute quality issues. By facilitating use of drones for water sampling and monitoring, HIT enables water samples to be transported from remote, dangerous, or restricted areas, thus mitigating the risk to workers in emergency situations and enabling quick, tailored interventions in real time.

2.3.2 Extreme events scenarios requiring emergency aid

Water scarcity can be a critical challenge for peripheral hospitals in Israel during an emergency. Ensuring a steady supply of water is essential for maintaining healthcare services. The government has implemented measures to ensure water tanks are supplied to these hospitals to prevent disruptions in medical care. This proactive approach ensures that hospitals can continue to operate effectively, even in the face of water shortages.

The response to water scarcity involves collaboration between various government agencies and private sector partners. Water tanks were strategically placed in areas prone to shortages, and contingency plans were developed to ensure a continuous supply. The use of advanced water purification technologies also played a role in addressing this challenge, ensuring that hospitals have access to clean and safe water at all times. These efforts are crucial for maintaining the functionality of healthcare facilities in times of war.

2.4. Mental health aid

In the weeks following October 7th 2023, the need for psychological assistance for the population increased dramatically, and the MoH was required to provide an appropriate response within a short period of time. The Ministry created a panel of

PTSD experts, psychiatrists, and other mental health experts to evaluate technological solutions for mass diagnosis and treatment.

The first digitized project was a 'mental health first aid' model for assisting civilians during panic attacks or immediately following a traumatic event. The model enables and trains civilians to immediately help and assist close friends in various ways.

Additionally, the team introduced the German DIGA model for evaluating and funding mental health-related technology. The DIGA model serves as a framework for the evaluation, approval, and reimbursement of digital health applications, including mental health technologies. By providing a structured pathway for assessing the efficacy and safety of digital interventions, the model ensures that only effective and reliable technologies are made accessible to the public. This approach not only facilitates the integration of innovative digital tools into healthcare systems, but also encourages the development of new applications tailored to address various mental health needs.

2.4.1 Mental resilience centers for evacuated communities

Early on in the war on October 13, 2023, a decision was made that mental health centers would provide responses in their areas until resilience centers could be established. A regional division was assigned to each medical center, and the hospital staff employed strategies suited to the geographic area, population distribution, and local conditions.

As part of this response, a department was formed consisting of the heads of the mental healthcare centers and the regional directors. Meetings and discussions were held around the clock on a daily basis.
A trauma and resilience training program mapped community needs regularly based on field observations, and mental health professionals worked day and night to provide as comprehensive a response as possible. Volunteers were recruited, who also supported these efforts.

Mental health centers are the most appropriate professional entity to handle such incidents on a national scale, in an efficient, precise manner. To provide an emergency response to approximately 100,000 evacuees, a response module was developed utilizing existing mental healthcare centers, based on geographical location and the size of the evacuated population. Evacuees were classified according to their degree of exposure to the traumatic events, from "high intensity" - direct victims of the events and members of the communities in which the massacres occurred - to "low intensity" - those evacuated due to their proximity to the conflict zone.

3. Rehabilitation measures

3.1 Planned and managed rehabilitation

3.1.1 Background

As a multidisciplinary, complex, and rich field, rehabilitation aims to improve the quality of life for people who have been impaired by illness, injury, or medical treatment, as well as to restore their optimal, independent, and integrated function as much as possible within their living environment. Rehabilitation does not only address the physiological-motor aspects, but also cognitive, sensory, emotional, social, and occupational treatment. Patients undergo rehabilitation in all areas of their lives - at home, in the family, in the community, and even at work.

The World Health Organization (WHO) estimates that 15% of the world's population lives with some form of disability. As the world's population ages, medical treatments improve, survival rates increase, and awareness of rehabilitation rises, the number of people needing rehabilitative care continues to rise.

3.1.2 The challenge

The Israeli context adds additional factors, including injuries associated with military service and security incidents, further emphasizing the importance of this field.

There are many fields of expertise involved in rehabilitation, including physiotherapy, occupational therapy, speech therapy, hydrotherapy, rehabilitation psychology, social work, complementary medicine, and more. As part of a personalized rehabilitation plan, the patient usually receives several forms of treatments each week, sometimes simultaneously. Coordinating and managing all these components of treatment presents a significant challenge—especially since scheduling is often done manually, using whiteboards in medical centers and simple Excel spreadsheets, which are accessible only by the therapeutic and administrative staff.

This creates a burden and inefficiency. It affects the continuity and quality of care, thus highlighting the need for innovative solutions to facilitate the management of the rehabilitation system.

3.1.3 The need

A computerized and automated system for scheduling and managing treatments in the field of rehabilitation can serve as an essential and efficient tool. It would help coordinate the various treatments provided between different rehabilitation centers, optimizing the rehabilitation process for the individual and the system, and ensuring that each patient receives the treatment best-suited to their personal needs.

3.1.4 The intervention

To encourage a significant change in the field of rehabilitation coordination and management, the MoH promoted an incentive program aimed at accelerating the implementation of innovative and technological solutions. A set of clear success metrics was developed to evaluate the model in the field:

1. A process metric for the deployment of a single system (or multiple interfacing systems) across all rehabilitation departments and health funds, enabling a true therapeutic continuum.
2. Implementing automatic patient scheduling, both for inpatient and outpatient rehabilitation, eases the workload for the staff.
3. Examining significant outcome measures, such as adherence to the treatment plan defined for each patient according to the rehabilitation protocol provided, and significantly reducing the no-show rate for treatments.
4. Optimizing therapists' time – ensuring therapists' time is spent on professional and medical treatment rather than administrative tasks – which is expected to improve quality of care and satisfaction with the process.

The entire initiative aims not only to streamline the system but also to develop a much smarter, more advanced, and effective rehabilitation concept that will directly impact the lives of the patients.

3.2 Remote rehabilitation

3.2.1 Background

The transition from rehabilitation departments at hospitals to community care is a significant and particularly challenging stage for victims of security incidents and patients with impairments due to illness or injury. Rehabilitation departments are more than just medical frameworks for many patients. They provide a sense of community, structured therapy, and peer support networks.

3.2.2 The challenge

In the final stages of hospitalization, patients find themselves suddenly separated from the medical staff, who became a second family to them. This creates a sense of disassociation at a crucial stage in their recovery. Currently, patients are forced to move between different medical centers, deal with insufficient appointment availability, and start working with new therapists in each field because there is no single, integrated rehabilitative framework that uses a multidisciplinary continuity approach, including treatment coordination and a supportive peer group.

Disparities are even more pronounced among patients from the peripheral parts of the country, who, unlike patients from central parts of Israel, do not receive continued treatment in hospitals' outpatient rehabilitation frameworks. Their transition to the community is often accompanied by medical isolation and a slowdown or regression in their therapeutic progress.

The chronic period, following a patient's release from the outpatient clinic and return to the community, can also create a significant gap in the rehabilitation process. During this period, the patient does not receive any medical, psychological, administrative, social, or occupational support. Patients are left to manage the rehabilitation and functional process on their own, which can lead to the deterioration of their mental and physical condition and reliance on public entities.

3.2.3 The need

Consequently, a coordinated and systemic response is required, ensuring a continuous therapeutic process, personalized support, and rehabilitative continuity after discharge, ensuring quality of life and optimal rehabilitation for populations dealing with complex and prolonged impairments.

3.2.4 The intervention: The Soft Landing venture

To mitigate these gaps, the Soft Landing venture is being developed to help injured individuals and victims as they rejoin their communities.

Designed to ease the transition from inpatient rehabilitation to community life, this program emphasizes accessibility, continuity, and peripheral support. It is structured as a "rehabilitation satellite" of a hospital and offers a holistic approach – physical, mental, and social – within a friendly, accessible, and pleasant atmosphere, far from traditional medical settings and rooted in the heart of community leisure and sports facilities.

One of the unique features of the program is its integration of technology, research, and interdisciplinarity:

- Maintaining contact with the caregiving team and the social group established during the initial rehabilitation process, to ensure continuity and well-being.
- Creating an environment for learning in which optimal rehabilitation models for orthopedic patients are examined, a multidisciplinary and patient-centered rehabilitation doctrine is developed, and all rehabilitation disciplines are implemented in parallel under centralized supervision.
- Using technology and family guidance as integral components of resuming an active life.

At the time of writing this review, the Soft Landing venture is in the process of implementation. The model requires collaboration with government ministries and public bodies, and will initially be implemented as a six-month pilot in peripheral localities with 15-40 participants.

Programs will be modular and hybrid, offering individual treatments, group sessions, workshops, and a personalized mentoring program. It aims to not only rehabilitate patients, but also to redefine the treatment process and establish a long-term rehabilitation doctrine. A complete therapeutic continuum provides space for growth and healing, and places the patient first, so they can start afresh.

What's Next?

The Swords of Iron war has highlighted the importance of preparedness and the need for robust healthcare infrastructure capable of withstanding and responding to crises. The Israeli MoH and the national emergency authority at the Ministry of Defense demonstrated remarkable agility and flexibility in their response to the healthcare challenges posed by the war. Their ability to create a comprehensive, multidisciplinary response at the national level serves as a pioneering case study in global healthcare, emergency, and trauma strategy. The innovative use of technology, combined interministerial efforts, and focus on physical and mental health rehabilitation have set a new standard for emergency responses worldwide.

The lessons learned from this experience have informed ongoing efforts for enhancing the resilience of Israel's healthcare system, ensuring that it remains capable of addressing future challenges. The collaborative approach, involving various government agencies, private sector partners, and international organizations, has been instrumental in achieving these goals.

The success of Israel's response during the Swords of Iron War could serve as a model for other countries facing similar challenges in coping with emergency situations, demonstrating the power of innovation, coordination, and resilience in overcoming adversity.

SDG Alignment

SDG 3: Good Health and Well-being.

Target 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

PTSD programs directly address trauma-related mental health conditions, reducing long-term disability and suicide risks.

Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Telehealth and other measures enable remote mental health support and chronic disease management and access to quality health-care services.

The rehabilitation solutions and online technologies for assisting evacuated populations facilitate coordination between healthcare institutions to ensure that displaced populations receive timely healthcare services.

SDG 4: Quality Education.

Target 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

Maintaining education routines for displaced students to support uninterrupted access to quality education during emergencies.

SDG 6: Clean Water.

Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

Disaster-resilient water systems prevent shortages during crises.

Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

Integrating resilience-ready water infrastructure minimizes service disruptions during emergencies.

SDG 11: Sustainable Cities and Communities.

Target 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

Earthquake-resistant health infrastructure and early warning systems save lives.

Target 11.b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

The health and emergency responses contribute to effective evacuation planning, real-time monitoring, and resource allocation for affected communities.

The National Emergency Authority (NEMA) dashboard is aligned with the Sendai Framework for Disaster Risk Reduction by promoting risk-informed policies, enhancing preparedness, and integrating disaster risk reduction into national strategies. It supports UN efforts to reduce disaster risks as outlined in the UN Plan of Action on Disaster Risk Reduction for Resilience, contributing to improving disaster response efficiency, ensuring equitable access to essential services during crises, and strengthening institutional capacities for sustainable development while supporting healthcare needs.

SDG 16: Peace, Justice, and Strong Institutions.

Target 16.6: Develop effective, accountable institutions at all levels.

Target 16.a: Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.

The National Emergency Authority (NEMA) dashboard enhances institutional coordination across ministries, ensuring accountability in emergency responses.

SDG 17: Partnerships for the Goals.

Target 17.18: By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.

The National Emergency Authority (NEMA) dashboard provides disaggregated data on evacuees' needs, enabling targeted interventions and informed decision-making. The knowledge could be shared and benefit other countries.

Chapter 3:

Creating a Sustainable Urban Ecosystem

Introduction

Integrating sustainability into local municipal leadership is crucial for fostering prosperous urban environments and implementing national sustainable practices designed to enhance resource efficiency, reduce environmental impact, and improve residents' quality of life.
This commitment to sustainability not only creates healthier, resilient communities but also contributes to the broader national agenda for sustainable development and global environmental stewardship.

In the first section of this chapter, we will cover Green Building implementation, as well as the background and landscape for its adoption in Israel. The second part presents 'Neighborhood 360', a planning and measurement tool that addresses multifaceted development challenges by setting standards for evaluating planning quality, incorporating environmental factors into planning and execution, and promoting healthy and prosperous urban surroundings.

1. Fostering green building in Israeli cities

1.1 Israel's green building regulations

Buildings in Israel and worldwide are a major consumer of energy, and as a result, they are major contributors to carbon emissions, accounting for approximately 40% of Israel's carbon emissions. In addition, buildings are a major consumer of the world's raw materials, potable water, and virgin land. Israel developed a green building standard to help significantly decrease buildings' impact on the environment, on the

construction and operational levels by using energy-efficient designs, repurposed materials, and environment-friendly technologies. Additionally, green buildings often provide improved indoor air quality and promote the wellbeing of their occupants.

1.1.1 The Israeli Green Building Standard (SI 5281) - A history of voluntary adoption

Israeli Standard SI 5281: Sustainable Building, defines the requirements for designing and constructing a certified green building. The standard defines several classification criteria. An initial edition of this standard was published in 2005, followed by revisions in 2011, 2016, and 2022. The next revision is expected to be completed by the end of 2025.

Israel's green building standard was developed by the Standards Institution of Israel in collaboration with global consultants (the creators of the BREEAM rating system), the Ministry of Environmental Protection, and experts on diverse, relevant topics.

Initial adoption of the standard was very limited. In 2009-2010, due to the lack of a systematic government policy on green building, Forum 15 (the forum of Israeli self-government cities) started encouraging municipalities to formulate their own municipal policies, including principles, guidelines, and requirements for green building.

The real shift began with the 2011 revision of the Standard. This version was more comprehensive and robust, highlighting the importance and value of green building. As the standard was still voluntary, a process began to facilitate its accessibility and integration, reaching out to all stakeholders.

The municipalities in Forum 15 and 3 additional municipalities adopted the standard in 2013. Forum 15 mandated the standard in its own jurisdictions, demonstrating the commitment to green construction of the 18 of the largest and most influential municipalities in the country, home to over 3 million people (representing approximately 40% of Israel's population). This included the metropolitan centers of Tel Aviv, Haifa, and Beersheba. Thus, Forum 15's decision to tackle climate change and advance green building has been pivotal in promoting the issue nationwide.

Several other NGOs, including the Israeli Green Building Council (ILGBC), were also very influential in the standard's adoption. ILGBC is a non-profit organization and a member of the World Green Building Council, dedicated to creating change in the Israeli construction market and to making green building the construction standard. As the cities committed to the green building standard, they received backing from ILGBC, assisting the developers, architects and contractors in adapting to it. The

standard ultimately received strong backing from the construction sector as well and, in particular, the construction union.

1.1.2 Going for a mandatory standard

With the successful adoption of the standard by Forum 15, and with the mindset that all residents in Israel deserve to enjoy the benefits of green and sustainable buildings, the Ministry of Environmental Protection along with the Israel Planning Administration made a bold and significant decision to push for mandatory compliance with the standard nationwide.

This came into effect in 2020 as part of the national building code. Green Building regulations were signed by the Interior Minister in August 2020 and came into effect in March 2022. According to the regulations, almost all new residential, office, commercial, health, public, and hospitality buildings must comply with green building requirements.

The regulations were implemented in two phases:

1. *March 2022:* The first phase focused on large-scale projects such as public institutions, office and commercial buildings over 5,000 square meters, and high-rise housing.
2. *September 2023:* The second phase of implementation included small-scale developments, such as office and commercial buildings over 1,000 square meters, and multi-family residential buildings with more than 6 housing units.

In general, the regulations apply to new construction, but the standard can also be applied to existing buildings undergoing renovation. The indices in SI 5281 are divided into nine categories, with scaled min. & max. requirements in categories 1-8:

1. Energy
2. Land
3. Water
4. Materials
5. Health and Wellbeing
6. Waste
7. Transportation
8. Construction management
9. Innovation

In January 2022, Forum 15 adopted a 3rd Mayors' Resolution, amending its original policy to include more ambitious requirements (higher green building certification levels and more types of building than those covered by the national regulations).

1.1.3 Verification

In 2011, The Quality and Certification Department at the Standards Institution of Israel established a verification process for compliance with the green building standard. At the end of the verification process, the institution issued a certificate of compliance with the standard.

In 2015, additional organizations started to engage in verification and certification of green buildings. As of 2019, the activity of these organizations is regulated and they must achieve ISO 17025 accreditation, proving that they have an acceptable quality management system in place and the ability and competence to provide testing and calibration results. Today, there are 7 accredited certification bodies operating in Israel.

1.1.4 Monitoring Israel's green building transformation

The Israeli Ministry of Environmental Protection monitors the overall number of green buildings constructed in Israel.

In March 2022, when the Green Building regulations first came into effect, there were approximately 1200 green buildings in various stages of permit and construction. As of June 2025, there are over 6100 green buildings across Israel in various stages of construction. In this short 3-year period, the number of green buildings has multiplied fivefold.

This information can be accessed through the ministry's Open Database and BI dashboard, categorizing buildings according to their building type, construction permit stage, location, level of green building certification, energy rating, and more.

Green Building Case Study

A kindergarten in Beersheba, designed for children with cancer, holds a 4-star Green Building rating and a zero-energy rating and is IS5281 certified.

Pictures by Larger Than Life

The kindergarten provides educational services, support, and a warm home for approximately 150 children from the southern region of Israel who are sick with cancer or recovering from it, as well as for hundreds of families from hospitals across the country. The kindergarten serves as a vibrant community center in the morning hours, while offering classes, rehabilitation, training, and workshops for parents in the afternoon.

1.2 Reporting on building energy consumption

Approximately 30% of overall electricity consumption in Israel is in residential buildings, thus emphasizing the great importance of energy-efficient construction.

In December 2022, the Ministry of Energy announced a new reporting system, allowing buyers of new apartments to check in advance, at the pre-purchase stage, whether their new home is energy efficient.

This initiative is part of the plan to achieve the goals of the energy sector, including a 17% reduction in electricity consumption, contributing to mitigating emissions and reducing air pollution.

What's Next?

The Israel Green Building Standard is currently undergoing another revision. The goal of this revision is to align the standard and the construction environment with Israel's national goals of decarbonization and ecological conservation and restoration, while meeting current needs. Therefore, the next revision will focus on three central areas of impact:

- Decarbonization
- Ecological conservation and restoration
- Quality of life

In addition to this revision, a number of new environment-oriented regulations are being considered, including:

- Expanding the mandatory requirements for thermal-solar water heating systems in residential buildings.
- Incorporating mandatory requirements to install photovoltaic systems (PV) on some new buildings.

2. Designing sustainable cities: Neighborhood 360°

Introduction

The integration of sustainability requirements into urban planning criteria is essential for creating vibrant and better cities. Incorporating these practices supports the development of livable communities that prioritize resource conservation and promote healthier living environments for residents.

After extensive research, the Ministry of Construction and Housing and the Israeli Green Building Council (ILGBC) developed the Neighborhood 360° tool that allows urban planners to analyze initiatives during planning and execution. The tool is a comprehensive framework for planning, developing, and constructing neighborhoods with sustainability in mind. It evaluates neighborhoods based on criteria such as environmental impact, accessibility, and community integration.

The tool provides a framework for defining evaluation criteria as well as for rating the quality of planning and execution based on sustainability considerations. This is a vital tool for urban planners, cities, and the Ministry of Construction and Housing to ensure that new developments meet high standards of livability and sustainability.

The following case studies are examples of new neighborhoods that are evaluated using the 360^0 tool:

1. Haifa - Harish South
2. Bnei Ayish
3. Ashkelon - Stadium
4. Nahariya - Saar
5. Acre - North Beach

Each neighborhood is assigned one or more 360^o indicators, aligned with SDG Target 11.1 (by 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums). Requirements include incorporating mixed-use planning, integrating neighborhoods into existing structures, ensuring service accessibility, designing the spaces alongside the streets, assessing street density, developing pedestrian-friendly areas and multipurpose areas, and more, to improve urban cohesion.

2.1 Indicator 1: Services are within walking distance of residential buildings

Providing services within walking distance of residential areas reduces the need for private vehicle usage, reduces air pollution, and improves the quality of life. Designing mixed-use neighborhoods with pedestrian traffic can strengthen social cohesion and promote personal security. The result is fewer hours spent on the roads and more leisure time for residents, which improves quality of life. Multiple uses adjacent to one another enhance personal security throughout the day by creating active, crowd-attracting focal points. Mixed-use also contributes to the growth of the local economy.

According to the 360^o requirements, at least 75% of the housing units in a project must be within walking distance of no more than 250 meters from a space designated for commerce, employment, or public institutions. This requirement is met by 100% of the housing units in the Harish Darom project. In addition, the project must feature continuous commercial frontage, a requirement that has been implemented in the plans for all five neighborhoods: Commercial frontage is included in the expansion plan for Bnei Ayish, and the plan for the Saar Complex in Nahariya includes a zero-building line along the entire frontage, ensuring a textured street wall for pedestrians.

The Bnei Ayish expansion plan: A small commercial street in the northwest neighborhood.

2.2 Indicator 2: Integrated land use

Creating vibrant urban spaces, optimizing space, reducing traffic, and enhancing local economics are all benefits of mixing uses. Recent planning trends reflect a noticeable effort to incorporate mixed-use plots, notably along main streets where commercial use is predominant.

In the five case studies covered in this section, this indicator is met to a high extent. A key feature of the Harish South Plan, for example, is mixed-use planning. Residential uses are mixed vertically and horizontally with public buildings and public institutions, and residential spaces are integrated with commerce and employment spaces. Likewise, Bnei Ayish and Ashkelon-stadium plans include ground-floor commercial uses and upper-floor residences or employment areas.

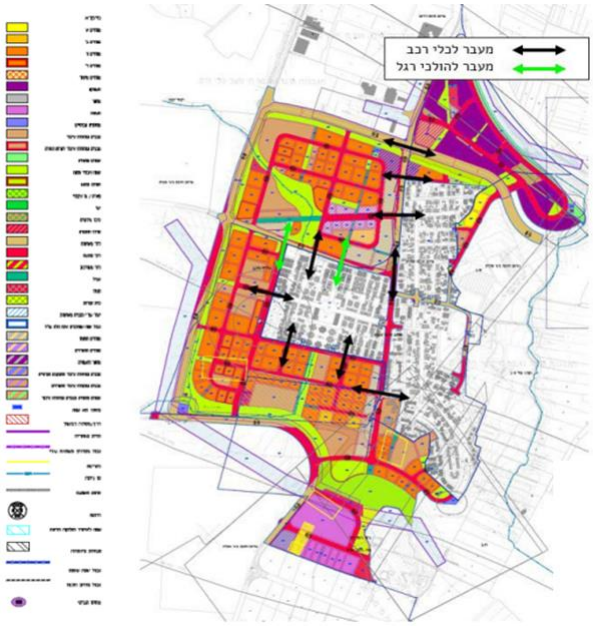
The Harish South plan: Mixed uses and commercial facades.

2.3 Indicator 3: Linking new neighborhoods to existing ones

Historically, Israeli neighborhoods were designed and built without regard to their accessibility. Among the drawbacks of this model are limited public transportation and reliance on private vehicles.

Connecting a new project to built spaces that already exist or will be built in the future creates a street layout that can increase connectivity and create affinities and connections between urban areas. When planning a street layout and pedestrian network around the project, a strong link is formed between the existing and planned built spaces, creating affinities between various neighborhoods.

Keeping the existing street and road network, and connecting old and new textures, are two central principles of the Bnei Ayish expansion (Appendix 3). The plan for the Acre North Shore also ensures that the street layout and pedestrian network are connected to the new neighborhood. Both Harish South and the Stadium Neighborhood in Ashkelon feature a walking network connecting the project boundaries to the existing walking space in the built-up areas adjacent to them.



Connecting old and new areas in the Bnei Ayish plan.

2.4 Indicator 4: Pedestrians walkability

A network of adjacent intersections encourages pedestrian traffic. The number of intersections per area correlates with the number of movement options that pedestrians have. More intersections make the walk shorter and more pleasant, and

a greater number of pedestrians on city streets increases personal safety. The walking network must contain a minimum number of intersections per square kilometer - 80 intersections per square kilometer in Version 1.0 while Version 1.1 updates the requirement to at least 100 intersections per square kilometer. The Saar Complex plan in Nahariya meets the highest threshold of 159 intersections per square kilometer.

Intersections for walkability in Nahariya Saar Complex plan.

Walking-friendly streets reduce car travel, increase public transportation use, reduce pollution, and improve health. Pedestrian-rich streets facilitate social gatherings as well as local economic development. The study evaluates the relations of sidewalks, walking strips, interactions between sidewalks and built-up areas, and reduction of motor traffic.

The Bnei Ayish expansion plan, for instance, includes walking strips, and considers their interaction with the built surroundings. It includes provisions for ensuring a pleasant walking experience, such as prohibitions against construction of enclosed basements, parking lots, and building foundations facing streets or other public spaces.

A streetscape creates a continuous, built-up element to the street, thus defining it, making it a more attractive and inviting public space, encouraging walking, and providing a variety of opportunities for community interactions. The Harish Darom plan stipulates that in most land designations that include residential buildings, "the construction will be planned so as to create a continuous street wall within the boundaries of the lot". The Bnei Ayish expansion plan also requires that 70% of the frontage of most types of residences be attached to the front building line.

Continuous street walls in the Harish South plan. Building facades that meet the criteria are marked in green.

2.5 Indicator 5: Multi-purpose public buildings

The efficiency of land use and construction infrastructure is increased by incorporating multipurpose structures. However, this is rarely taken into account during the planning stage. Instead, it typically surfaces during use. Nevertheless, planning and construction have the power to enable and encourage multi-purpose public buildings.

In the Acre North Shore Plan, for example, all public buildings can be used for multiple purposes. Dedicated areas include cultural, social, welfare, sports, and health amenities. Schools serve multiple purposes after the school day ends. There are plans to combine public buildings and residential areas in Harish South. Construction guidelines require separate entrances for different functions to prevent disturbances.

Commercial and employment are generally permitted on public-use lots measuring more than six dunams, provided they are beneficial for public use or contribute to street frontages. Whenever possible, public buildings are planned adjacent to squares, streets, or open public spaces.

A New Manual for Mixed-Use Public Buildings

With the assistance of Mifal HaPais (Israel's government-owned lottery company), the Mixed-Use Public Buildings Program is being implemented across the country. This effort has resulted in a new planning and construction manual based on four key considerations:

Firstly, optimal use of land and building resources. It suggests ways of utilizing space in public buildings while combining diverse uses in a single building in an effort to make the most of the space. Secondly, it fosters the concept of usage of integrated public spaces, ensuring the buildings are active all day, every day. Thirdly, it acknowledges that public buildings should serve as economic anchors, based on the belief that they should be economically sustainable, and outlines strategies for constructing buildings that can generate income from ongoing operations, thereby helping local authorities reduce their fiscal burden. As a fourth consideration, public buildings should be integrated into the community and included in the planning strategies.

2.6 The Neighborhood 360º Tool - Version 2.0

Version 2.0 of Neighborhood 360º was released in 2025, and refers to changes in the housing sector in Israel, including soaring construction, increasing housing demand, and steep topography construction criteria.

This new version has updated several indicators, as an innovative step towards introducing social criteria for the first time:

1. *Social considerations in planning:* for the first time, gentrification and population displacement are included in the tool.
2. *Diversity of residential sector beneficiaries:* apartments of different sizes are important for creating a diverse housing mix, to allow residents of varying socio-economic backgrounds and generations to choose a residence that meets their economic capabilities and needs.
3. *Providing affordable and social housing:* for the first time, the affordable housing percentage requirement was linked to the Central Bureau of Statistics (CBS) peripherality index.
4. *Services accessibility:* This issue was incorporated into the mixed-use indicator, with focus on topography, ensuring that residents gain suitable accessibility.
5. *Managing surface runoff water:* The guidelines suggest observing the area's characteristics and purpose, and then determining the appropriate management steps, incorporating solutions that benefit the public, to achieve zero additional runoff post construction.
6. *Trees:* This section was significantly revised in light of work by the Green Building Council, as well as government ministries and other stakeholders, to promote trees as a tool for increasing urban shading and reducing temperatures in urban areas.
7. *Achieving energy net zero by designing renewable energy infrastructure:* Energy net zero is unlikely to be achieved by high energy demands and limited

roof space, as prevalent in tall buildings. In order to align electricity with local needs, neighborhood spaces such as building roofs and sheds should be used for producing renewable energy. This will ensure comprehensive planning and energy efficiency and optimization.

What's Next?

Using tools and metrics for sustainable urban planning contributes to positive outcomes such as better connectivity, walkability, community cohesion, increased urban shading, and efficient use of renewable energy sources. Scaling these initiatives on a national level, however, is challenging, as it requires ensuring equitable and sustainable infrastructure for all citizens while integrating the Neighborhoods 360º tool in existing neighborhoods. To overcome these obstacles, the government and stakeholders must coordinate their planning and investments.

SDG Alignment:

SDG 3: Good Health and Well-Being.

Target 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents.

Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

By promoting walkability and reducing car use, the Neighborhood 360º tool reduces air pollution and encourages physical activity. Green building also reduces the exposure to hazardous chemicals and indoor air pollution.

SDG 7: Affordable and Clean Energy.

Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.

The Neighborhood 360º tool's focus on achieving energy net-zero through renewable energy infrastructure as well as the green building standard support this target.

SDG 10: Reduced Inequalities.

Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

The updated version of the Neighborhood 360º tool (2025) incorporates social considerations, criteria for diverse housing options, and affordable housing linked to the CBS peripherality index.

SDG 11: Sustainable Cities and Communities.

Target 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

The tool promotes mixed-use planning and service accessibility as well as affordable housing for different population groups.

Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

The green building standard and the Neighborhood 360º tool both foster availability of efficient public transportation.

Target 11.3: By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

By focusing on integrated land use and linking new neighborhoods to existing built environments, the Neighborhood 360º tool is aligned with walkability, density, and multi-purpose public buildings.

Target 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

Version 2.0 of the Neighborhood 360º tool deals among other things with managing surface runoff water, in order to prevent damage to infrastructure and flood hazards.

Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

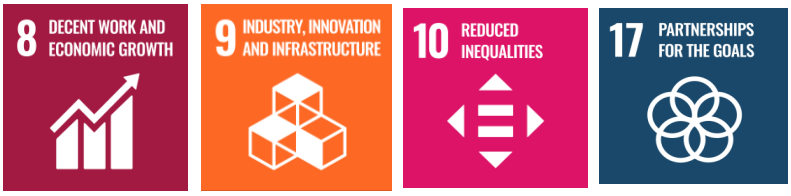
The green building standard deals among other things with reducing municipal and construction waste, and reducing health impacts of air pollution. Also, the Neighborhood 360º aims at reducing air pollution and creating a sustainable urban environment.

SDG 13: Climate Action.

Target 13.2: Integrate climate change measures into national policies, strategies, and planning.

The focus on managing surface runoff water and utilizing trees for urban shading supports climate adaptation strategies.

Chapter 4: Increasing Employment and Economic Growth through Israeli Innovation



Introduction

The Israel Innovation Authority (IIA), founded in 2016, has been instrumental in nurturing entrepreneurship and driving technological advancement, primarily by bolstering the high-tech sector, a key driver of Israel's economic growth. Since it was established, IIA has helped maintain Israel's competitive edge as a global innovation leader.

To expand the reach and impact of Israeli high-tech across diverse demographics and regions, IIA is dedicated to broadening access to innovation and entrepreneurship for both central and peripheral populations. By providing financial support and operational assistance, it has facilitated the establishment of new innovation hubs.

This chapter examines the socioeconomic disparities between Israel's central and peripheral regions and opportunities for addressing them. It explores how innovation centers leverage technological advancements as a means for reducing inequality.

1. The challenge: Reducing geographic disparities

The disparities in unemployment rates between Israel's central regions and its northern and southern periphery stem from several interconnected factors:

1. *Economic Centralization:* Economic activity gravitates towards central regions, creating a robust job market. In contrast, peripheral areas suffer from a "thin" labor market, where employers struggle to find suitable candidates and workers have limited job opportunities.

2. *Opportunity Imbalance:* Central districts boast a higher concentration of academic degree holders, with this gap widening over time. This creates an "opportunity trap" in peripheral areas, where skilled workers have fewer options for career advancement.
3. *High-Tech Distribution:* Israel's high-tech sector, a crucial economic driver, is predominantly clustered in central regions. This exacerbates the employment divide, as the periphery lacks access to this dynamic industry.
4. *Disparities in Wages and Infrastructure:* Significant wage differences exist between central and peripheral regions. Additionally, peripheral areas often lack the advanced infrastructure necessary to attract and support high-tech companies and other innovative industries.
5. *Policy Challenges:* The persistent unemployment gap between central and peripheral districts necessitates targeted policy interventions. However, aligning policies to effectively address these regional disparities remains a challenge.

This combination of factors creates a self-reinforcing cycle of economic inequality between central and peripheral regions. The impact is particularly pronounced for junior-level employees who lack the experience to thrive in a limited job market, resulting in persistently higher unemployment rates in northern and southern Israel.

2. The intervention: Local innovation centers

The IIA forged a strategic partnership with eight government ministries in 2024, allocating 155 million NIS (~45 million USD) to establish 13 innovation centers across Israel's periphery. This initiative, spanning from Kiryat Shmona in the north to Eilat in the south, aims to leverage regional advantages and promote economic and employment growth.

These innovation centers focus on sectors with global potential, including food tech, climate tech, green building, water tech, healthcare, pharma AI, and other cutting-edge technologies. Through strategic investment and development in these sectors, peripheral regions can become hubs of technological advancement, attracting talent and creating new job opportunities.

3. The innovation centers' core objectives

The Innovation Centers offer a variety of tools to promote technological entrepreneurship, including:

1. *Venture acceleration:* Acceleration programs that provide startups with the tools and resources they need to develop their ideas, raise funds, and connect with Israeli and international investors and corporations. Mentorship and investment connections, research and development assistance, and practical training are provided.
2. *Attracting high-tech employers:* Fostering collaborations between research institutions, academia, and local companies in order to encourage high-tech companies to operate or open branches in peripheral areas.
3. *Employment and training:* Industry-specific training tailored to the needs of the local market, and assistance with job placement.
4. *Entrepreneurship-enabling ecosystem:* Onboarding local stakeholders, including farmers, research centers, and industries, to develop agricultural (AgTech), renewable energy, water, and health technology (HealthTech) solutions.
5. *Cross-sector collaborations:* Innovation centers facilitate collaboration between academia, industry, and government. The Magneton and Kamin programs in Israel, for instance, support international collaborations, which facilitate knowledge sharing and technological development.
6. *Utilizing regional advantages:* Regional innovation centers focus on local comparative advantages, e.g. agriculture and water technologies (AgTech), in Israel's periphery.
7. *Economic and infrastructure development:* Early-stage startups can qualify for grants and significant financial assistance. Interested start-up companies can apply for grants from the IIA or from innovation centers. This supportive environment also provides entrepreneurs with access to advanced laboratories and experts in a variety of fields, which are often unavailable to entrepreneurs at their early stages.
8. *Extending collaborations with anchor institutions:* Local anchors and innovation centers collaborate on a variety of projects, seeking to create synergies between various entities in the local ecosystem, to encourage innovation, entrepreneurship, and economic growth. Research institutes that provide scientific infrastructure, attract young talent, and generate new knowledge, can serve as catalysts for collaboration with universities. Innovation centers are established near these institutions in order to take advantage of knowledge and talent and to form venture creation companies.
9. *Access to scientific laboratories:* The program enables entrepreneurs to collaborate and leverage cutting-edge technologies, while also offering significant grants to support the development and validation of their ventures' proof of concept.
10. *Integration with peripheral incubator hubs:* Incubators partner with institutions of higher education and local entrepreneurs, receiving funding

from the Innovation Authority to foster innovation and stimulate startup growth within their respective regions.

11. *Innovation hubs:* Physical spaces that encourage informal interactions between entrepreneurs, researchers, and investors by providing workspaces, state-of-the-art laboratories, and public areas that naturally facilitate professional collaboration.
12. *Community development:* Innovation centers host professional events, acceleration programs, and networking activities designed to connect key stakeholders within the ecosystem and foster new collaborative opportunities.

4. Cross-cutting focus areas

4.1 Enhancing growth using Israel's expertise: The IIA National ClimateTech Program

The climate crisis has created opportunities for a new industry that could substantially benefit Israel's economy. ClimateTech not only diversifies the country's high-tech sector, but also positions Israel at the forefront of the efforts to mitigate global climate change while driving economic growth.

Israel's leadership in climate technology, especially in agricultural advancements and water management, provides a unique opportunity for peripheral innovations. Increasing crop yields and pioneering renewable energy solutions can stimulate innovation in the peripheral areas for economic growth, resulting in reduced income disparities between central and peripheral regions.

IIA has invested $250 million over the past three years, underscoring the strategic importance of ClimateTech as an economic growth engine. With over 1,000 climate startups operating in Israel in 2025, the sector is already yielding impressive results across numerous areas, including energy, water, agriculture, food, carbon capture, and green construction.

IIA offers a comprehensive range of grants for new ventures and startups in all stages, from incubation to the growth stages. Initiatives include Tnufa, Pre-Seed, Seed, Series A, and Pilot programs. These support mechanisms have enabled Israeli entrepreneurs and companies to develop groundbreaking technologies, establish local manufacturing facilities, and compete effectively in the global market.

4.2 Arab society innovation centers

The Arab society in Israel possesses significant untapped potential for integration and leadership in the high-tech sector. Despite representing only 2% of high-tech employees, this potential is evident in the quality workforce, increasing number of graduates in technological fields, and growing recognition of high-tech as a catalyst for economic and social advancement.

Challenges

1. *Limited networking and minimal local ecosystem:* Arab entrepreneurs face significant barriers due to lack of access to mentors, investors, and local innovation infrastructure.
2. *Geographical constraints:* Many Arab communities are situated far from Israel's high-tech hubs, limiting their access to employment opportunities.
3. *Cultural and social barriers:* Risk aversion and historical lack of awareness about high-tech professions hinder the potential of the Arab society in this sector.

Opportunities and interventions

The Israeli government has launched several initiatives to maximize the potential of Arab society in high-tech. These initiatives aim to address the challenges faced by Arab society in integrating into Israel's high-tech sector, and to leverage their potential to contribute significantly to the country's innovation ecosystem and economic growth:

1. *Innovation centers:* Four innovation centers have been established in Arab communities under Government Resolution 550:

- *Hasoub Labs* in Ar'ara
- *NorthMed* in Sachnin
- *Ibtikar BaseCamp* in Kfar Kasem
- *Jinnovate* in East Jerusalem

2. *Support programs:* The IIIA and the Economic Development Authority for the Minority Sector developed the *Taqadum* program, a 5-year strategic plan with a budget of 9.4 billion NIS ($2.6 billion). This program aims to increase opportunities for the Arab population in higher education, employment, skill building, and education.

3. *Tech investment vehicles:* Several angel clubs and accelerators have been established:

- Jump Tau (Tel Aviv University): 4 million NIS investment over 4 years.
- Scientech (Galilee Association, Shefa-'Amr): 4 million NIS investment over 4 years.
- Hasoub Angels: 2.7 million NIS investment over 3 years.

Expected outcomes

1. Reducing gaps between Arab society and the general population in Israel.
2. Enhancing integration of Arab youth into the innovation sectors.
3. Creating a supportive local ecosystem.
4. Boosting the national economy through the integration of high-quality human capital.

Early positive impact

After 18 months, the centers are showing promising results:

1. Increase in the number of startups founded by Arab entrepreneurs.
2. More proposals submitted to the Innovation Authority's Tnufa and Pre-Seed funding tracks.
3. Active recruitment of high-tech companies to open branches in peripheral/Arab areas.
4. Five programs submitted by Kfar Qassem, Sakhnin, Julia, and the Triangle area.
5. Growing communities and frequent meetups.
6. Increased placements in high-tech companies during 2024 compared to similar programs.

5. An innovation network across the country

5.1 Israel's Northern District

Norterra

Norterra is a collaborative initiative aimed at bolstering the high-tech industry in northeastern Israel. This alliance serves as a knowledge and service hub for the northern tech community, attracting leading technology companies to the region while enhancing human capital and fostering regional synergies.

This initiative is the product of years of innovation, research, industry, and academic activities in northern Israel. It is a joint venture comprising the Kinneret Innovation Center (Jordan Valley), Shamir Research Institute (Golan Heights), Invalley (Valley of Springs and Jezreel Valley), numerous leading Israeli companies, and academic institutions.

The initiative receives support from the IIA, Ministry of Economy, Ministry for Development of the Negev and the Galilee, and Ministry of Agriculture.

This diverse coalition of stakeholders has come together for a singular purpose: to propel the high-tech sector in northeastern Israel to new heights.

NorthMed

The NorthMed Innovation Center team and its partners collaborate with Arab entrepreneurs, aspiring entrepreneurs, and healthcare organizations throughout the entrepreneurship journey to develop and scale innovative MedTech companies.

The center is a joint initiative of The Portland Trust, MEDX Xelerator, Alpha Omega, Galilee CBR, and several leading northern Israeli hospitals. This partnership established the Med-Tech Innovation Center in Sakhnin as part of the Growth Engine Program, implemented by the Portland Trust over the past three years.

Additionally, NorthMed proactively promotes quality employment for the Arab community by providing support to encourage international & Israeli companies to open sites in northern Israel. The center functions as the company's northern hub, while assisting with employee training and recruiting, and striving for social integration.

CivicLabs

CivicLabs is a leading innovation center that promotes sustainable innovation and digital transformation in the built environment, i.e. construction, infrastructure, real estate, utilities, and municipal services. Its goal is to redefine the built environment landscape, bridge gaps, and forge strategic partnerships to drive innovation, collaboration, and sustainable progress within the industry. Emphasizing core values such as bold innovation, exemplary expertise, and unwavering support, CivicLabs nurtures a culture of collaboration and flexibility. These values underscore its commitment to fostering startups and driving technological advancements within the built environment, operating in four key areas within the sector:

1. *Startups:* startups can benefit from various exclusive opportunities, including participation in leading industry player accelerators/challenges, exclusive access to the built environment investor ecosystem, and involvement in potential client delegations & events.
2. *Program:* provides early-stage startups and entrepreneurs with hands-on mentorship, R&D support, and the business proficiency necessary to develop world-changing companies in the built environment sector.
3. *VC:* specializing in early-stage deep-tech investments, particularly in hardware, materials, robotics, and AI. The innovation center bridges funding gaps in Israel's built environment sector by leading investment rounds or collaborating with other VCs/CVCs and IIA.
4. *Partnerships:* fostering local, regional, and international partnerships to boost the ecosystem.

GAIA Partners

GAIA Partners is an innovation hub dedicated to advancing AI-for-Climate solutions. Focused on key sectors such as Sustainable Energy, Food-Agritech, Digital Twins, and

Water-Tech, GAIA tackles critical environmental challenges using cutting-edge technology and research. In collaboration with the IIA, Migal Scientific Research Center, Tel Hai University, JVP Investments, Margalit Startup City, and JNF USA, GAIA offers startups unparalleled access to strategic partnerships, mentorship, research resources, and funding opportunities. For over a decade, GAIA's key stakeholders have operated in Kiryat Shmona and the Upper Galilee region, empowering local SMEs and championing women-led initiatives. By bringing together researchers, industry experts, policymakers, multinational corporations, investors, and the local community, GAIA Partners drives sustainable innovation, fostering long-term growth and prosperity in the Galilee region.

Hasoub Labs

Hasoub Labs is an innovation hub founded through a partnership between Hasoub, a grassroots NGO promoting technology and entrepreneurship in the Israeli Arab community, and key high-tech players, including the Afifi Group, Vintage Investment Partners, and Appleseeds.

Serving as a home base, it provides creative support and mentorship to develop new technological ideas. Its core objectives include:

- Encouraging entrepreneurship and high-tech employment within Arab society.
- Increasing exposure to the high-tech industry through professional and business programs.
- Equipping aspiring founders and entrepreneurs with essential tools for success.

The center's mission aligns with Hasoub's broader vision of empowering young Arab entrepreneurs and technology professionals by fostering technical skills and a strong support network.

5.2 Israel's Central-and Jerusalem District

Jinnovate

Jinnovate, East Jerusalem's first innovation hub, nurtures HealthTech startups to become impactful global companies improving medical care. Supported by ARC (Sheba Medical Center's Innovation Center), Mada'ait (Sha'are Zedek Medical Center's research company), Takwin VC, and the IIA, it breaks down socioeconomic barriers for local entrepreneurs. The hub offers resources, mentorship, and international connections to help build successful ventures.

InnovEast

The Innovation Center for Entrepreneurship and High-Tech Development in Judea and Samaria, known as InnovEast, is a collaborative initiative designed to foster technological innovation in the region. This center partners with Ariel University, Ariel

Scientific Knowledge Company, International Software Company TSG (EPR) with Formula Systems, and the Israeli Air Industry.
InnovEast aims to:

- Encourage local entrepreneurship and innovation.
- Connect the region to national and global entrepreneurial ecosystems.
- Promote high-tech development in Judea and Samaria.

By leveraging partnerships with industry leaders, academic institutions, and local authorities, the center seeks to create a thriving environment for startups and technological advancement in the area.

Ibtikar BaseCamp

Ibtikar BaseCamp is a joint initiative operated by BaseCamp in partnership with Sheba-ARC, MindCET, Talenteam, and JTLV. It supports entrepreneurs in transforming their ideas into startups by turning research-based innovations into viable products and creating a platform that maximizes the chances of Israeli-Arab entrepreneurs to secure R&D grants and investments.
The program also collaborates with employers to advance technological training programs, aiming to place skilled workers in high-tech positions. Its mission is to increase the employment rate of Arab graduates in the high-tech industry, while fostering a more diverse and inclusive workforce by connecting talented individuals with job opportunities.

5.3 Israel's Southern District

HamitbaH

This Technological Center for Security and Resilience in the Western Negev promotes and supports innovation in the region, positioning the Western Negev area as a world leader in innovation in the worlds of resilience. Using the assets unique to the region, it creates power-multiplying collaborations to develop a unique ecosystem.
The center's core resilience areas include food security and agro-tech, climate, civil resilience, and border and compound security – HLS.
The center leverages multi-sectoral partnerships with strong regional ties to drive business and economic development. By integrating specialized bodies that implement innovation and entrepreneurship programs, it creates regional impact, prosperity, and resilience.

SeaNovation

SeaNovation, the biotechnology and aquaculture innovation center in Eilat, is a collaboration between Aradg, Ardom, IIA, ILOR, and Ben Gurion University's Eilat Campus via BGN Technologies.

SeaNovation addresses food security, sustainability, and economic growth for Eilat and the region by leveraging the local cutting-edge biotech and aquaculture. It provides facilities, funding, and mentorship to drive innovation and entrepreneurship. Aquaculture innovations optimize sustainability in this sphere and help meet global seafood demands. SeaNovation harnesses the sea's vast potential for a sustainable future.

The DeserTech and Climate Innovation Center (DCIC)

The DeserTech and Climate Innovation Center in the Negev was established to apply the unique knowledge developed in the region, fostering startup companies that address global climate and desert challenges, developing the entrepreneurial ecosystem in the Negev, and increasing and diversifying high-tech employment in the Negev with hundreds of new technological jobs. DCIC was founded by Merage Foundation Israel, InNegev, Israel Innovation Institute, Ben Gurion University, and Group 19, as an outcome of the DeserTech Innovation Community - a joint venture of the Ministry of Environmental Protection, Merage Foundation Israel and Israel Innovation Institute. DCIC is a beacon for groundbreaking DeserTech and climate initiatives, accelerating startup companies, and bringing the high-tech industry to the Negev.

Synergy7

Synergy7 is a leading force in innovation and entrepreneurship, strategically located in Beersheba at the heart of Israel's southern innovation district. Synergy7 drives technological growth in cybersecurity, robotics, and healthcare by operating advanced R&D labs and providing business development services for startups and organizations. The activity of Synergy7 is backed by leading organizations, including the IIA, Dell Technologies, Ben-Gurion University of the Negev, Elbit Systems, Clalit HMO–Soroka Medical Center, and the Merage Foundation Israel.

Synergy7 plays a key role in shaping the future of technology in Israel. By leveraging local growth anchors and fostering a vibrant ecosystem, it is transforming Beersheba into a major technological and economic hub, enabling startups and corporations to thrive locally and expand into global markets.

6. The innovation centers' positive impact

Israel's innovation centers are infusing new human capital capabilities and strategic anchors into Israeli high-tech, to maintain its leadership.

The innovation centers will have a significant impact on the Israeli periphery in several ways:

1. *Equalizing economic and geographical opportunities*: Innovation centers serve as engines of economic growth in the periphery by creating high-quality technology-driven jobs. As a result, regional competitive advantages in agriculture, food, and advanced industry are strengthened, thereby reducing disparities in regional employment and productivity.

2. *Fostering local entrepreneurship:* Peripheral entrepreneurs have access to resources, business tools, industry, and research. Startups are encouraged to set up their headquarters in the area, creating new jobs and strengthening the surrounding ecosystem. Agriculture, renewable energy, and climate change are emphasized as growth engines for a sustainable economy.

3. *Stimulating innovation in strategic areas:* The centers focus on fields like health, biotechnology, desert technology, aquaculture, in collaboration with academic and industrial partners. This enables them to develop innovative solutions for global challenges.

4. *Promoting socio-economic resilience:* Innovation centers provide equal access to opportunities for local communities. Residents benefit from an improved quality of life and a stronger sense of belonging.

5. *Strongly influencing the local economy:* Stimulating local businesses and attracting new investments to innovation centers boost the regional economy. The centers create synergies that promote economic revitalization and new jobs by partnering with local anchor institutions, such as farmers, academics, and industries. The initiatives take advantage of the region's comparative advantages and preserve its high-quality population. The investments also increase productivity and encourage competitiveness.
   In addition, the centers promote upward mobility - Inequalities in social, labor, and economic outcomes can be reduced for disadvantaged populations, including those in the socio-geographic periphery, by providing access to quality jobs that were previously concentrated in urban areas, fostering education and skill development, and actively contributing to the high-tech industry.

What's Next?

Israel's innovation centers are stimulating economic growth in the country's periphery by creating technology-driven jobs, fostering local entrepreneurship through access to resources and training, and focusing on strategic areas like agriculture, renewable energy, and climate change.
These centers provide equal access to opportunities, improve skills, and raise the quality of life of local communities, particularly within Arab society and periphery, boosting the regional economy, and reducing socioeconomic inequalities.

Although the innovation centers' outreach is fostering a thriving local ecosystem, there are still several questions that remain to be addressed:

1. *Long-term operation:* What are the best ways to encourage startup founders to establish and maintain long-term operations in peripheral regions?

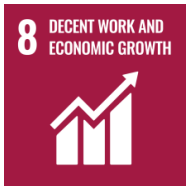
2. *Establishing an ecosystem:* How can the centers create the right conditions for long-term job creation (high-tech offices, infrastructure, quality human resources)?

3. *Setting up infrastructure:* How can innovation be synergized with core infrastructure needed for families in the periphery? This requires cross-ministry collaboration - access to transportation, quality education for families etc.

4. *Inspiring the next generation:* Systemic change requires technological exposure from an early age, which can be achieved by encouraging high-school students to open startups and learn the basics of entrepreneurship. IIA collaborates with the Ministry of Education to provide high school students with entrepreneurship exposure programs. Could those programs be scaled up to create opportunities for young people as well?

SDG Alignment

SDG 8: Decent Work and Economic Growth.



Target 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading, and innovation.

Target 8.3: Promote policies supporting productive activities, decent job creation, entrepreneurship, creativity, and innovation.

Target 8.5: Achieve full and productive employment and decent work for all women and men, including young people and persons with disabilities, with equal pay for equal work.

Target 8.6: Substantially reduce the proportion of youth not engaged in employment, education, or training.

The centers aim to create high-quality, technology-driven jobs in peripheral areas, reducing regional disparities in employment and productivity. Entrepreneurship, startups, and innovation are promoted in diverse globally promising sectors.

SDG 9: Industry, Innovation, and Infrastructure.

Target 9.4: Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

This is achieved by the centers' focus on R&D in sectors such as agriculture, climate-tech, green construction and water-tech.

Target 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, encourage innovation and substantially increase the number of research and development workers per 1 million people and public and private research and development spending.

The very nature of the innovation centers directly aligns with SDG 9 by fostering technological innovation, supporting startups, and promoting research and development. This is achieved through the Innovation Center's scientific partnerships with academic research institutions across Israel.

SDG 10: Reducing Inequalities.

Target 10.1: Progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average.

The innovation centers address the socioeconomic gaps between Israel's central regions and its northern and southern periphery, including Arab society. The centers aim to create high-quality, technology-oriented jobs in the periphery.

Target 10.2: Empower and promote social, economic and political inclusion for all, regardless of age, sex, disability, race, ethnicity, origin, religion, or economic or other status.

The centers are focused on including populations that have traditionally been excluded from the high-tech sector, particularly Arab society, integrating them into high-tech industries, and closing economic and social gaps.

Target 10.4: Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.

The creation of high-quality jobs and the promotion of entrepreneurship contribute to greater economic stability and can influence wage levels in the periphery over time.

SDG 17: Partnerships for the Goals.

Target 17.6: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.

Target 17.8: Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, especially information and communications (ICT) technology.

Target 17.9: Strengthen global support for effective, targeted capacity-building in developing countries to implement national sustainable development goals through North-South, South-South, and triangular cooperation.

Innovation centers can act as catalysts for creating and strengthening partnerships between governments, private sector entities, civil society organizations, and academic institutions. These partnerships can mobilize and share knowledge, expertise, and financial resources to support mechanisms for technology licensing, joint research projects, and collaborative innovation.

The innovation centers facilitate cross-sector collaborations and participate in programs like *Magneton* and *Kamin*, which foster international collaborations, knowledge sharing, and technological development. This directly enhances regional and international collaboration in the fields of science, technology, and innovation.

While not explicitly focused on least-developed countries, the innovation centers enhance the use of enabling technologies within Israel's periphery, a region facing challenges of economic disparity and limited access to employment opportunities. Some centers cooperate with partners in developing countries and international organizations to deploy innovative solutions. In addition, the innovation center model, while focused on Israel's periphery, can inspire similar initiatives in other developing regions. Their emphasis on utilizing local strengths, collaboration, and skills development can be adapted for various contexts.

Chapter 5:

Formulating a National Food Security Plan

Introduction

The UN Food and Agriculture Organization (FAO) and the World Bank define food security as a state in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their preferences and dietary needs for an active and healthy life. The four key components are access to food, availability and affordability of food, supply chain stability, and appropriate conditions for food preparation.

At the national level, food security is impacted by a variety of factors, including climate change, population growth, food cartelization, decreased agricultural human labor forces, rising output costs, disruptions of global supply chains, demand-driven crops and livestock, food regulations, deterioration of flora and fauna, and shifts in trade policies.

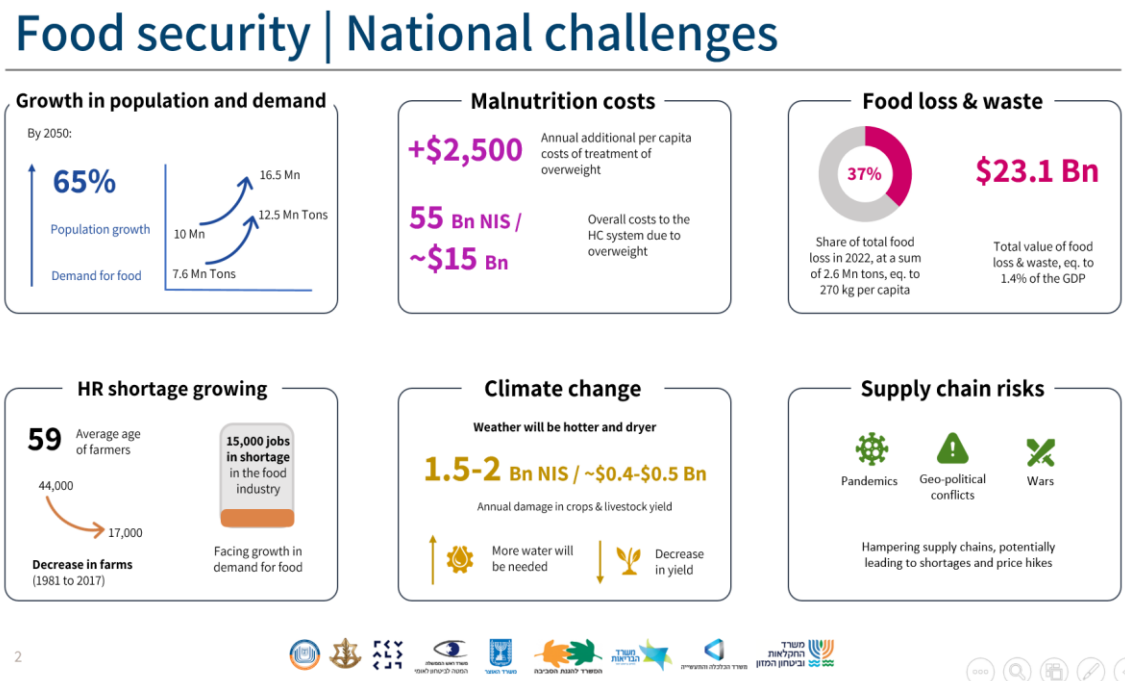
The challenge lies in balancing these diverse factors to ensure a resilient food system. Policymakers must address the impacts of climate change by investing in sustainable agricultural practices and technologies. Additionally, managing population growth and urbanization requires innovative strategies and a self-sufficient approach to enhance food production and distribution networks.

1. Israel's 2050 National Food Security Plan

A resilient food system requires governments to address the key factors discussed above. The National Food Security Plan for Israel 2050, an initiative sponsored by eight government agencies led by the Ministry of Agriculture and Food Security, addresses those complexities.

The process was initiated with a preliminary research and evaluation process on exploring food security implementation strategies and mechanisms, which explored ten countries across the Middle East, Asia, and Europe to create a global benchmark. This gave the team the opportunity to identify Israel's strengths and weaknesses in this area, while adopting globally relevant practices.

A key stage in the process was the creation of a Food Security Bureau with professional expertise and a national mandate, which coordinated verticals and enforced relevant national and international regulations and obligations.

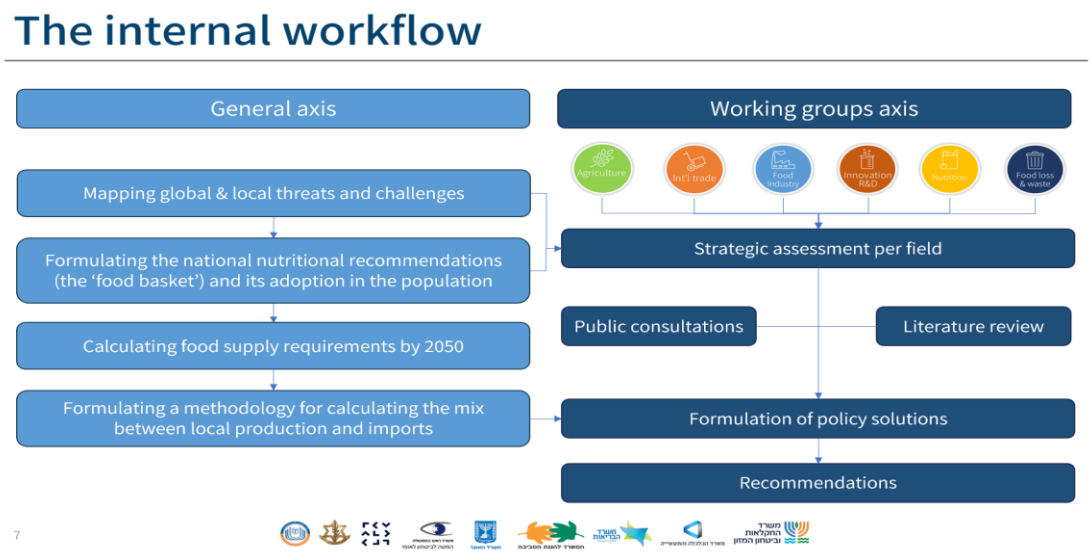


1.1 Key objectives

The aim is to establish a long-term strategic plan that encourages multi-ministerial cooperation, engages all stakeholders, and defines operational steps for joint, integrated, long-term efforts that benefit the Israeli food system. The plan's purpose is to ensure that healthy and affordable food will be available on a regular basis in the medium and long terms, in sufficient quantities, quality, variety, and physical and economic accessibility. It also aims at ensuring a local agricultural and food industry and a climate-adaptable and sustainable food system to facilitate a healthy lifestyle for the entire Israeli population.

Food security requires the government to:

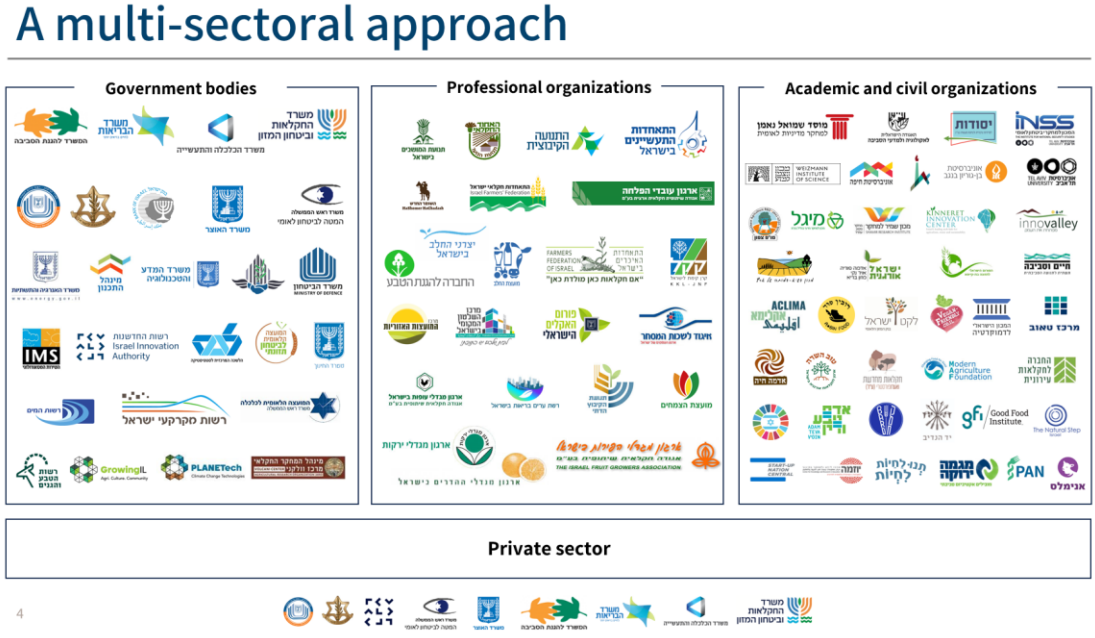
1. Assess production capacity for the next 25 years in order to meet consumption targets.
2. Facilitate conservation and environmental protection by promoting sustainable and climate-adapted production.
3. Maintain a mix of domestic and imported products, while managing risks and promoting competition.
4. Change dietary habits by producing healthier food and promoting its consumption.
5. Boost innovation in the food system.
6. Minimize food loss and waste throughout the food system.



1.2 Interventions

Food systems are composed of subsystems (e.g. farming systems, waste management systems, input supply systems, and others) that interact with each other. As a result, structural changes in one system can affect the others. To examine the different aspects of this complex system, six multi-stakeholder working groups were formed to explore the following topics:

1. Local agriculture
2. International trade
3. Food industry
4. Innovation and R&D
5. The Food Basket program (daily intake recommendations) and consumer behavior
6. Food loss & waste



1.3 Meeting challenges and achieving goals

The strategic plan defines several milestones:

A. In each working group - Identifying the challenges and mapping the barriers, including through roundtables with Israeli ecosystem leaders, NGOs, companies, and opinion leaders.

B. Engaging in an ecosystem participatory process to discuss possible interventions to address challenges and barriers.

C. Formulating a national plan with clear objectives, led by the Ministry of Agriculture and Food Security, together with other relevant ministries, to ensure effective implementation.

2. Main findings of the working groups

2.1 Group 1: Local agriculture

The current local agriculture landscape faces several challenges, including stagnation in the production of fruits and vegetables. This has led to an increased reliance on import and a decline in export, ultimately driving up prices for consumers.

In the local produce sector, the self-sufficiency ratio (SSR) is 115% for potatoes, 95% for milk and eggs, 93% for vegetables and fruits, and 85% for meat production. Significant gaps were found for legumes, nuts and seeds, lipids and oils, cereals, fish, honey, sugar, and sweets (SSR below 30%). Animal feed is heavily dependent on import. As a result, fruits and vegetables have become more expensive, highlighting the need for strategic solutions to boost local production and stabilize the market.

2.1.1 The challenges

Israel faces significant challenges in enhancing its local agricultural production to meet the needs of the growing population and align with nutritional recommendations. These challenges include increasing domestic production and improving long-term production certainty through value chain optimization and competitiveness.

The agricultural sector must adapt to climate change and mitigate environmental impacts, which requires innovative approaches to farming practices on limited agricultural land and further development of water conduit infrastructure. Crop diversity and varying types of farming are crucial for a resilient food system, as is the integration of knowledge and training to implement innovative technologies and improve production efficiency.

This focus on innovation and efficiency aims to increase productivity and reduce dependence on foreign workers, which has been identified as a major obstacle. Additionally, the transition to precision and regenerative agriculture methods, including to mitigate supply chain challenges, are a prerequisite for efficient management of natural resources and adaptation to future agricultural needs.

The group identified 5 overarching challenges:

1. Meeting the food supply targets for 2050.
2. Knowledge and training (maintenance, dissemination, etc.).
3. Variety and diversity (both structural and biological).
4. Climate change.
5. Value chain.

2.1.2 The intervention

Setting production targets based on action taken by the Ministry of Agriculture and Food Security:

1. Determining the tools that are needed to ensure certainty and economic viability in key sectors (nutrition-related sectors with import risks).
2. Enhancing protection of agricultural areas.
3. Attracting new farmers and reducing reliance on foreign workers by making the agricultural sector more appealing.
4. Analyzing local agricultural production structures, factors, strengths, and weaknesses, and identifying potential improvements that can be made to improve efficiency.
5. Setting local agricultural production goals based on supply scenarios, import risks, and competitiveness.
6. Extending production efficiency and identifying barriers to expansion.
7. Implementing measures to promote local agriculture.

These interventions will require cross-ministerial collaboration between the Ministry of Health, Ministry of Economy and Industry, and Ministry of Environmental Protection.

2.1.3 Projected positive impact

1. Increasing local production to help stabilize prices.
2. Increasing the variety of nourishing, locally-grown food for all sectors of the population, including underserved and lower-income groups.
3. Developing local agricultural capabilities to enable Israel to mitigate disruptions and fluctuations in international markets, thus improving produce availability and consistency.
4. Fostering domestic production to support the local economy and create job opportunities, contributing to preserving the agricultural heritage of Israel.

2.2 Group 2: International trade

The aim is to diversify food import sources in order to complement local agricultural production and meet industrial, institutional, and consumer demands, as well as to secure supply and navigate global supply chain risks and threats.

2.2.1 The challenges

Israel faces significant challenges in maintaining food security through international trade and cooperation, primarily due to its heavy reliance on import of animal feed, rice, legumes, and additional products, mainly from a limited number of countries. This results in critical exposure to geopolitical and supply chain disruptions. Volatility in food supply chains can be exacerbated by emerging risks such as pandemics, conflicts, and intentional attacks on Israeli supply routes, and compounded by the impact of climate change on exporting nations, resulting in fluctuations in food availability.

Maintaining continuous import flows proves challenging, making it difficult to secure non-domestic products and balance seasonal demands through processed food imports. These vulnerabilities are intensified by workforce shortages in the agriculture and food industries, while recent regulatory reforms are attempting to streamline the import processes. The combination of these factors underscores the urgent need for comprehensive risk management strategies and international cooperation frameworks to ensure food security amid growing population demands and environmental pressure.

2.2.2 The intervention

1. Establishing a suitable combination of local production and imports (considering costs, risks, origin of food produce, etc.)
2. Establishing a comprehensive risk identification and management apparatus to ensure stable imports.
3. Diversifying food import to ensure continuous and stable food supply and local market competitiveness.

2.2.3 Projected positive impact

1. Improving international trade and cooperation to ensure food supply consistency and reduce food insecurity.

2. Stabilizing global and local supply chains to contend with climate change and supply uncertainties.

2.3 Group 3: The food industry

2.3.1 The challenges

Construction of new food factories in Israel is slowing down. At the same time, expanding innovative food industries, including alternative protein businesses, are still struggling to reach a commercial scale. Growth in productivity and efficiency is steady but slow and investments remain unchanged.

The Israeli industry struggles with the high costs of technological innovation alongside the need to increase productivity and reduce food waste and loss, while overcoming regulatory hurdles. Ensuring business continuity, especially during emergencies, and preparing for growing sustained demand are critical concerns.

Workforce shortages across all skill levels pose a significant barrier to growth. The food sector is vulnerable to global supply chain breakdowns and overreliance on limited raw materials. Additionally, there's a pressing need for cross-sector collaboration and leveraging partnerships with multinational corporations.

These challenges underscore the complexity of balancing health, affordability, sustainability, and resilience in Israel's food system amid growing population demands and environmental pressures.

2.3.2 The intervention

The food industry must focus on enhancing local production capabilities, ensuring resilience during crises, leveraging technological advancements, and addressing challenges in the food supply chain by:

1. Planning for 2050 population growth: Formulating policies to promote local production of healthy and affordable food.
2. Ensuring continuity: Examining the food industry's ability to maintain operational continuity during emergencies.
3. Assessing the potential for improving efficiency through technological innovation.
4. Identifying and mapping the opportunities, challenges, and barriers.
5. Calculating the production input required by the industry to address both emergency and routine scenarios.

2.3.3 Projected positive impact

1. Changing the product mix to meet consumer demands for healthier products.
2. Supporting the establishment of commercial production capabilities for the food technology sector in Israel.
3. Building up the workforce and providing training at all levels.
4. Forming an inter-ministerial team to promote the expansion of local Israeli food factories.

2.4 Group 4: Innovation and R&D

Israel is regarded as a leading innovator on a global scale, and is consecutively ranked among the Top 20 innovative countries in the World Economic Forum's Global Innovation Index. Israel's Innovation Strengths are usually identified as follows:

1. *Strong innovation ecosystem:* Israel is known for its robust innovation ecosystem. This includes a high level of entrepreneurial activity and a strong "startup nation" culture. There is high tolerance for entrepreneurial risk, which fosters innovation.
2. *Research and Development (R&D):* Israel invests a significant portion of its GDP in R&D, which is a key driver of innovation. It demonstrates strength in knowledge and technology outputs.
3. *Venture capital availability:* Israel has strong venture capital availability, which supports the growth of innovative companies.
4. *Information and Communication Technology (ICT):* Israel is a strong exporter of ICT services.
5. *Patent activity:* Israel has a high rate of patent applications.

On the contrary, reports show relatively weaker performance in Israel's innovation inputs compared to its innovation outputs. This means that while it excels at producing innovative results, some of the foundational elements should be improved.

2.4.1 The challenges

The main challenges include the need for maintaining and further developing the infrastructure that connects researchers, entrepreneurs, investors and VCs, industry and regulators, to enhance competitiveness and ensure future solutions to local and global food systems challenges.

2.4.2 The intervention

1. *R&D infrastructure:* Analyzing challenges and risks associated with the implementation of R&D and agricultural innovation in academic institutions and the industry, and building an ecosystem for infrastructure scale-up.
2. *Prioritization:* Understanding the current landscape, while mapping supporting mechanisms for food innovation. Supporting research and professional knowledge networks, including removing barriers for AI and Big Data, supporting entrepreneurship in the fields of AgriTech, FoodTech and AquaTech
3. *From R&D to production:* Developing a framework to promote R&D and innovation, in accordance with their economic and social potential and their impact on the economy. A key element of long-term global food security is promoting alternatives to animal protein.

2.4.3 Projected positive impact

1. Enhancing agriculture, research, entrepreneurship, and industry knowledge infrastructure.
2. Implementing new models and inter-ministerial collaboration to support R&D and innovation.
3. Supporting the growth and development of agro-food tech clusters and communities.
4. Establishing dedicated agro-food tech industrial zones for industrial agriculture.

2.5 Group 5: Consumption patterns

2.5.1 The challenges

The challenges in promoting healthy nutrition and food literacy in Israel are multifaceted and interconnected. Key barriers for consumers are:

1. Insufficient health literacy and unequal nutritional knowledge across different population segments.
2. Inconsistent messaging about healthy eating guidelines from the various ministries, institutions, and professionals.
3. Lack of motivation to make dietary changes, and underestimation of health and environmental risks, especially among youth.
4. Cultural norms surrounding food consumption, particularly during celebrations and events.
5. Early exposure to processed foods, making it difficult to change habits later in life.

6. Food insecurity due to limited access to healthy foods, inadequate preparation tools, and high costs of nutritious options.
7. Prevalence of unhealthy food options and stressful lifestyles that discourage preparation of home-cooked meals.

The challenges in promoting healthy nutrition are significantly compounded by issues related to food commercialization and government-level instruments:

1. *Commercial pressure:* The intensive marketing of unhealthy foods overshadows healthier options, with no restrictions on children's exposure to harmful products. The food retail industry often lacks diversity in healthy choices, and public spaces frequently fail to provide access to nutritious options.
2. *Governmental limitations:* At the government level, there is a struggle to effectively regulate and enforce food system policies, despite recommendations from global health organizations. This is exacerbated by a lack of incentives for producing and marketing healthy food. Furthermore, there is a lack of synchronization between different government ministries' policies regarding healthy diets, insufficient budget allocation for promoting nutritious eating, and inadequate health-oriented research infrastructure for developing agricultural variety and healthy food products.

2.5.2 The intervention

1. Setting up a sustainable 'food basket' based on national nutritional guidelines and providing it to citizens.
2. Formulating a comprehensive approach to changing the food system based on health and environmental considerations in Israel.

The items chosen for the calculations on which the food basket is based are foods that are consumed in relatively large quantities and are an integral part of Israeli eating culture, inexpensive, have potential for local cultivation, and have low wastage rates during cultivation or production. These include grains, legumes, starchy and green vegetables, fruit, tofu, nuts and seeds, sesame, olive oil, dairy products, eggs, meat, and fish. Each item represents a food group and has a wide range of substitutes, as described in the Ministry of Health's substitute group definitions. Ultra-processed foods from any food group were not included in the menus.

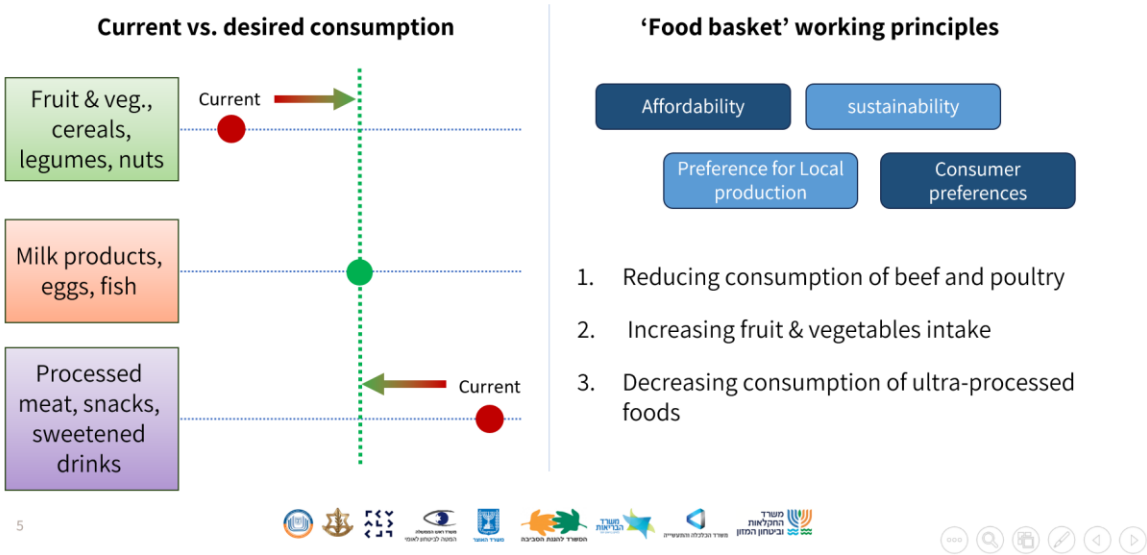
Menus were composed from the above list of foods for different age and gender groups in the Israeli population. Adequate nutritional needs were defined based on RDA (Recommended Dietary Allowances) definitions for nutritional needs in the USA,

and DRVs (Dietary Reference Value)–the nutritional reference values set for the EU population by the EFSA (European Food Safety Authority).

Food menus were composed for each age and gender group considering their need for calories, macronutrients, and selected micronutrients: calcium, iron, B12, etc. Each menu contains all the foods on the above list, adjusting the quantities of each based on the nutritional values they provide. Information about the nutritional values of these foods was taken from the national nutrition database. In addition, information is provided about the mineral content of drinking water. The menus are provided based on age and gender, with specific menus for omnivores, vegans, and those who avoid dairy products.

Pictures: Ministry of Agriculture and food Security; Ministry of health

Israel's national dietary recommendations promote a Mediterranean-style diet due to its health, environmental, social, and economic benefits. This diet emphasizes whole foods, limits processed items, and is the foundation for the national food security program. The program outlines specific food categories and nutritional targets (calories, macronutrients, and micronutrients) to ensure adequate nutrition for diverse populations, including vegans and non- dairy eaters. Key dietary recommendations are also included, specifying food groups and nutritional requirements designed to meet the needs of various population groups in Israel.



2.5.3 Potential positive impact

1. Enhancing traditional food industries and supporting food-tech startups.
2. Educating about healthy eating in early childhood.
3. Defining and enforcing food regulations.
4. Changing the public's perception of healthy eating.
5. Improving the quality of agricultural produce.

The working group formulated several food supply scenarios:

A. *Business as usual:* Maintaining current consumption, adjusting for population growth, and ignoring rising obesity.
B. *Ideal:* Aligned with health recommendations, significantly reducing obesity and food waste.
C. *Intermediate:* Reaching a compromise between the two previous scenarios, resulting in moderate reductions in obesity and waste.

Food basket consumption was translated into future agricultural production targets and metrics to ensure resilience while highlighting the following:

1. Prioritizing production of healthy, recommended foods.
2. Increasing local production of high-import-risk foods.
3. Focusing on fruits and vegetables.
4. Promoting efficient and innovative farming practices.
5. Maintaining diverse agricultural sectors.

2.6 Group 6: Food loss

2.6.1 The challenge

The loss of 2.6 million tons of food in 2023 (38% of produced food) resulted in a loss of 24.3 billion NIS in economic value, a loss of 4.1 billion NIS in environmental costs, and a loss of 5.5 billion NIS in health costs due to food insecurity, according to the Leket Israel 2023-2024 Food Waste report, prepared in partnership between Leket Israel (an NGO focusing on rescuing and distributing surplus food), the Ministry of Environmental Protection and the Ministry of Health.

This situation is the result of information gaps, economic gaps, regulatory gaps, and behavior and infrastructure gaps. Eliminating food loss along the supply chain and mitigating environmental impacts can help minimize economic losses, damage to the environment, and food insecurity. Analysis shows that 1.2 million tons of food can be rescued.

2.6.2 The intervention

In January 2025, a strategic process was launched to develop a national plan for the reduction of food loss and waste in Israel. The process was guided by an inter-ministerial committee comprising the ministries of Environmental Protection, Agriculture, Economy, Welfare, Health and Finance as well as the Federation of Local Authorities, the Center for Regional Councils and the Central Bureau of Statistics (CBS).

The process included extensive stakeholder consultation across various sectors, including a series of consultation meetings with approximately 130 key stakeholders from all sectors, in-depth interviews with stakeholders and subject-matter experts, a literature review and qualitative analysis of national food loss and waste strategies in other countries and field visits focusing on food rescue initiatives.

Through the consultation process, approximately 20 barriers were identified—some specific to particular segments of the food supply chain, and others relevant across multiple segments. Subsequently, the solutions proposed by stakeholders were mapped and categorized under one of five policy measures:

1. Coordination and Synchronization
2. Scaling Up Food Rescue
3. Education and Behavioral Change
4. Food Waste Regulation
5. Information Policy

These measures were further classified into two strategic action channels: (1) prevention and reduction at source, and (2) food rescue. Each policy channel is currently being assessed in terms of feasibility and potential impact, based on input from an expert survey.

2.6.3 Potential positive impact

The initiative aims to drive a fundamental shift in how food loss and waste are managed in Israel. The key objectives of the strategic plan include:

- Setting measurable and achievable targets, and tracking progress toward these goals through a structured methodology and nationally agreed indicators.
- Removing barriers to food donation, with a focus on fostering value-creating regional collaborations among food rescue organizations, local authorities, farmers, community NGOs, research institutions, and other relevant actors.
- Advancing data-driven decision-making, particularly through systematic analysis of crop planting and demand volumes, in order to prevent market oversaturation and reducing food loss already at the production stage.
- Promoting a cultural and behavioral shift, implemented gradually and in a manner tailored to the diverse sectors and communities within Israeli society.

What's Next?

An operational work plan is currently being developed, and will be presented during Q3 2025. The following key milestones and objectives have been identified:

1. Identifying global and local threats to the Israeli food system.
2. Setting up a household "Food Basket" – daily intake recommendations – in coordination with the Ministry of Health, and assessing the food supply targets for the next 25 years.
3. Defining a framework and methodology for combining domestic and imported products, setting production goals, and preparing import-export projections.
4. Identifying and mapping challenges and barriers across the food system value chain.

The National Food Security Plan will be translated into working plans for each of the Ministries involved in its implementation and for the inter-ministerial teams and specialized working groups that were formed as part of the formulation of the plan.

Additional work will be undertaken in order to lay the foundations for the development of ministerial and inter-ministerial policies and pathways.

The Food Security Bureau will bring together the leaders of the working groups and relevant experts to oversee the upcoming developments and monitor progress. A major challenge will be securing the necessary budget to enable the plan to be approved and implemented.

SDG Alignment

SDG 2: Zero Hunger.

Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

The plan ensures physical and economic accessibility to diverse, nutritious food by incentivizing localized production (reaching 50% self-sufficiency by 2050) and implementing price stabilization mechanisms. This directly supports hunger reduction by prioritizing vulnerable populations.

Target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

By promoting climate-resilient agricultural practices and R&D investments, Israel aims to double yields for small-scale farmers through precision agriculture and drought-resistant crops.

Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

The plan integrates agro-ecological practices, vertical farming, and reduced water use to enhance sustainability. 95% of perishables (fruits/vegetables) will be domestically produced by 2050 to minimize supply-chain carbon footprints.

Target 2.a: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.

Proposed large-scale investments in agritech R&D by 2030 will boost innovation in the alternative proteins sector (e.g., cultivated meat) and advance automation, enhancing productivity in arid regions.

SDG 3: Good Health and Well-being.

Target 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

Aligned with the EAT-Lancet dietary guidelines, the plan reduces diet-related diseases as defined by Target 3.4 by ensuring that households meet national nutrition standards by 2050.

SDG 12: Responsible Consumption and Production.

Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.

Increasing plant-based and cultivated protein consumption to 30% by 2050 to reduce environmental strain.

Target 12.3: By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

Israel aims to achieve 50% reduction in food loss by 2030 through improved supply-chain technologies and consumer education.

SDG 13: Climate Action.

Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Strengthen climate-adaptive practices to mitigate yield losses as a result of extreme weather, which is expected to increase by 2050.

SDG 15: Life on Land.

Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

Target 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

Regenerative agriculture practices aim to restore 20% of degraded soil by 2035.

SDG 17: Partnerships for the Goals.

Target 17.14: Enhance policy coherence for sustainable development.

Target 17.16: Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

The multi-stakeholder roundtables (e.g., local agriculture, trade, R&D) is a good example of inclusive partnerships. The Food Security Bureau coordinates efforts across eight government agencies, NGOs, corporations, and international bodies.

Chapter 6:

Preparing for the Impacts of Climate Change

Introduction

The Middle East is one of the regions most vulnerable to climate change, as reflected in rising temperatures, droughts, extreme weather, and a rise in sea levels.

Israeli cities are expected to experience an increase of about 4 degrees by the end of the century, and temperatures are already increasing three times faster than the global average. The Israeli meteorological service has reported that the summer of 2024 was the hottest ever recorded in Israel, and by 2050, the average temperature in Israeli cities will exceed 35 degrees 90 days a year, tripled from 30 days in the past. A decrease in water availability might affect agriculture and pose a threat to food security, while the country's infrastructure and coastal communities may face severe dangers due to extreme weather conditions and coastal erosion.

This chapter presents Israel's efforts to combat climate change and its impacts in three phases: **First,** a brief description of mitigation measures and preparedness plans drafted at the governmental and municipal levels; **Second**, plans for future scenarios; and **Third,** examples of implementation by local governments and others.

1. Climate action and preparedness plans

1.1 Israel's Climate Mitigation Plan

In accordance with the Paris Agreement, Israel drafted a climate mitigation plan in 2021 that sets a target to reduce net greenhouse gas (GHG) emissions by 27% compared to 2015 levels by 2030, and by 85% by 2050. The plan addresses key sectors including electricity generation, transportation, waste management, and industry,

with specific targets and measures. Israel is actively tracking its progress towards these goals, with a focus on transitioning to a low-carbon economy.

The plan includes a variety of policies and measures, such as carbon pricing, investments in public transportation and renewable energy, and initiatives to improve energy efficiency and waste management. The transition away from coal-fired electricity generation and the promotion of zero-emission vehicles are significant components of the strategy. Progress varies across sectors – some have achieved their emission reduction targets while others still face challenges, indicating the need for further enhanced efforts for Israel to meet its climate objectives.
Key measures include:

1.1.1 Energy

Israel has set targets to reduce greenhouse gas emissions from electricity generation by at least 30% by 2030 and by 85% by 2050, compared to 2015 levels.
Israel plans to phase out coal-fired power generation by 2026 and increase the use of natural gas and renewable energy sources for electricity generation.
The goal is for electricity consumption from renewable energy sources to reach 30% by 2030. In 2022, 10.4% of Israel's electricity was generated from renewable energy sources.

1.1.2 Waste

Emissions from waste include emissions from solid waste landfills and biological treatment of solid waste.
Israel is working to reduce emissions from burning agricultural waste, promote source separation of organic waste, and deploy organic waste treatment facilities.
Plans include mandatory treatment of organic waste, bans on landfilling unsorted and untreated organic waste, and compliance with electronic waste treatment standards.

1.1.3 Transportation

Israel aims to reduce emissions from the transportation sector.
The measures include developing public transit infrastructure, electrification and expansion of public bus services, electrification of the passenger train network, transitioning to zero-emission vehicles, and developing dedicated cycling lanes.
There are also plans to reduce emissions from heavy-duty vehicles and set emission targets for new light vehicles.

1.1.4 Industry

The broader objective is to reduce reliance on fossil fuels and accelerate the shift towards sustainable energy within the industrial sector.
Implemented measures include promoting energy efficiency and transitioning industrial facilities to cleaner energy sources, supporting transition to green refrigerants, and promoting industrial symbiosis projects that facilitate the use of one organization's waste as raw material for another.
Planned measures include regulations to restrict the import of products containing Freon-based refrigerants and adopt standards for the use of recycled raw materials.

For further details of the mitigation roadmap see Israel's first Biennial Transparency Report and fourth National Communication Report.

1.2 Developing the Israeli Climate Law

The Climate Law constitutes a governmental-administrative framework aimed at reducing greenhouse gas emissions in Israel and preparing for the effects resulting from climate change. The proposed Israeli Climate Bill is designed to protect human life, promote sustainable development, and reduce emissions. The bill sets targets for emissions reduction and mandates the preparation of national plans for adapting to climate change and seeks to integrate environmental, economic, and social measures. The enforcement mechanisms and quantitative commitments will require ongoing monitoring and review to ensure its successful implementation.

While efforts have been made to promote climate legislation in Israel for several years, as of May 2025, these efforts have not yet matured into a clear, targeted, binding law. The bill has passed its first review in the Israeli Knesset and is awaiting its second and third review for final approval. The main challenge is to gain political awareness of the importance of tackling climate change and of the need for a strong, effective law, containing a clear commitment and tangible regulatory enforcement mechanisms, in order to deliver desired change. This must be achieved by overcoming political disputes and balancing short vs. long-term interests.

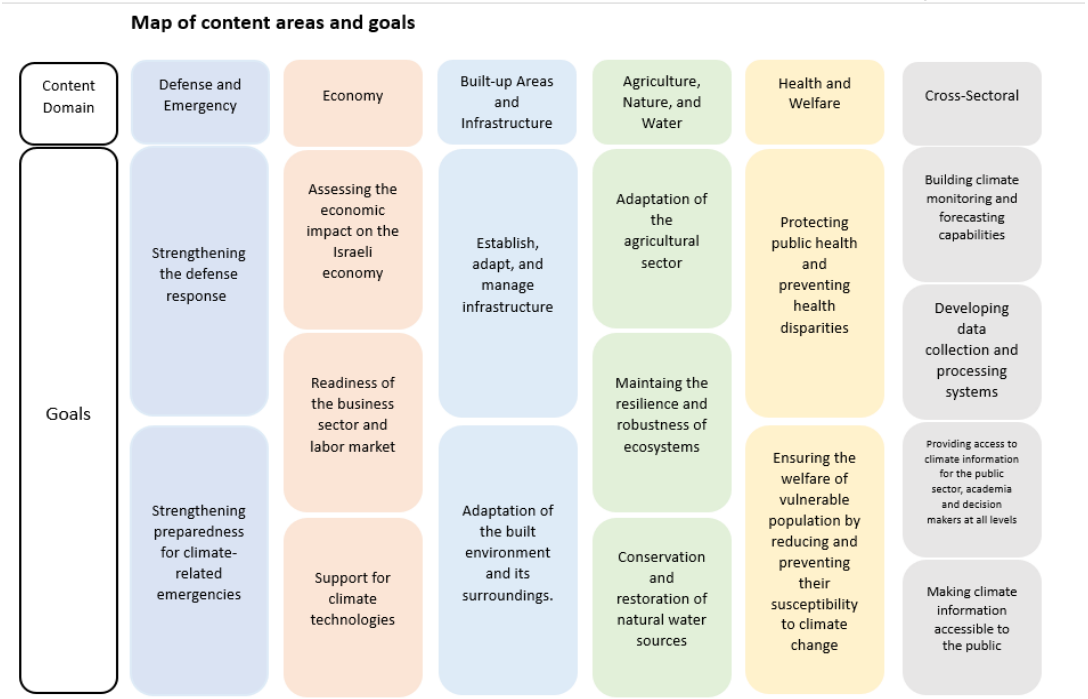
1.3 Israel's Climate Adaptation Secretariate

In 2018, the government adopted resolution 4079 on "Israel's Preparedness for Adaptation to Climate Change: Implementation of the Recommendations for a National Strategy and Action Plan." To implement the resolution, a Climate Change Adaptation Secretariate was established, including representatives from 35 entities

such as government ministries, state authorities, local government organizations, and non-governmental organizations (NGOs) (hereinafter "the Secretariate").

In 2021, the Secretariate published its first report— "Israel's Climate Change Adaptation Report" – containing empirical data constituting the foundation for its work and operational conclusions for promoting strategies for contending with climate change. The report outlined steps to be taken at both the national and local levels, proposing a budget of 2.5 billion NIS over five years for implementation.

On July 1, 2024, the Ministry of Environmental Protection published the first phase of the National Climate Adaptation Plan (The National Adaptation Plan, Mapping Stage). The National Adaptation Plan (NAP) is being promoted by virtue of Government Decisions 4079 and 1902.



Source: Climate Adaptation Plan - Mapping

The goals of the NAP are to diagnose and map the areas affected by climate change in Israel, identify how they are affected, and prioritize and formulate key actions for reducing risks and seizing opportunities in these areas. An initial process was a cost-benefit analysis of the actions and tasks of the mapping phase. The plan includes 48 primary actions and 200 tasks that over 30 ministries and government bodies must promote and carry out in the coming years to improve Israel's adaptation to the climate crisis.

Approximately 50% of the actions in the plan deal with establishing and developing knowledge infrastructure, as well as executing and implementing measures according to five (5) principles that form the basis for the adaptation strategy. These principles reflect the priorities and the need for a flexible, inclusive, integrative, and multi-sectoral strategy. They serve as guidelines for the implementation of Israel's initial climate change adaptation plan and for future adaptation initiatives:

1. *Consideration for vulnerable populations in implementation:* Adapting immediate and long-term responses to the most climate-vulnerable populations as part of building resilience for all.
2. *Risk reduction while preserving nature*: Policies, planning, and regulations that support nature-based solutions, with an emphasis on protecting, enhancing, and restoring nature.
3. *Modular solutions enabling adaptation for multiple scenarios:* Planning actions and decisions in a way that allows flexibility and adaptation to various scenarios.
4. *Forming multi-sectoral and international collaborations:* Promoting collective expertise and joint efforts in tackling complex climate challenges in Israel and globally.
5. *Local municipalities as key partners:* Local municipalities' familiarity with their communities, and the integration of their knowledge and resources, play a vital role in building climate resilience.

1.4 Government ministries' adaptation plans

The ministries' adaptation plans are being promoted by virtue of Government Decisions 4079 and 1902 as described above. According to the monitoring report released by the MOEP (in Hebrew) in July 2024, of the 33 ministries and subsidiary units, 14 submitted adaptation plans (41%); nine are at initial stages or have not started (27%); and five are at an advanced stage in the process (15%). The October 7th war caused delays in preparation and submission of ministerial plans, yet the urgency of adapting to climate change, which has been defined as a threat to the State of Israel, requires attention and resources despite these challenges.

The following is a review of the key elements of the adaptation plans submitted by several ministries:

- *Ministry of Defense (December 2023)*
  Ensuring full function and operational efficiency under changing climate conditions; preparing for climate-related geo-strategic challenges; ensuring climate-resilience of military systems, supply chains and infrastructure;

international assistance considering extreme climate events; and reducing the carbon footprint to meet national targets. For further information.

- *Ministry of Agriculture and Food Security (July 2024)*
  Assessing risks to agricultural sectors and food security as a result of floods and heat waves; developing adaptation measures for local agricultural production; formulating a national food security plan addressing climate impact (see Chapter 5); urban heat reduction plans through forestation and shading; improving agricultural-sector greenhouse gas balance; and promoting conservation farming.

- *Ministry of Transportation and Road Safety (March 2024)*
  Mapping vulnerable rivers and road crossings impacting main transportation routes; assessing climate scenarios and their effects on infrastructure; reviewing and adapting standards; collecting road-specific climate vulnerability data; maintaining continuity of transportation; and increasing coordinating with national infrastructure companies.

- *The Planning Administration*
  Incorporating climate change considerations into strategic spatial planning; addressing rising sea levels with updated policies and mapping; mitigating flood damage through statutory planning for runoff management; promoting climate-adapted urban design with guidelines for mitigating urban heat; updating open space plans to enhance ecological corridors; enhancing urban nature in planning; improving building ventilation standards; and publishing a beneficial roof usage policy.

1.5 Climate adaptation in the water sector

Israel already has vast experience with dealing with water scarcity and climate-driven desertification. It has transformed its arid landscape (over 60% desert) into a model of water resilience through advanced technologies and integrated management systems. The country achieves water security via large-scale seawater desalination, reuse of over 85% of treated wastewater for agriculture, and precision irrigation systems that maximize crop yields in desert regions.

The Water Authority's adaptation plan focuses on ensuring the long-term reliability of the water supply. The plan addresses the potential increase in desalination capacity in Israel in various scenarios, considering the expected trend of a declining natural water supply and extensive water reuse. Below is an elaboration of two innovative water projects aimed at enhancing water security.

1.5.1 National Carrier Flow Reversal Project (Video)

The Israeli National Water Carrier has been delivering water from the Sea of Galilee for decades. The Israeli government has responded to the growing demand for desalinated water by reversing the flow of the National Water Carrier, sending it northward.

This is the largest water infrastructure project of its kind in northern Israel, which includes a new water pipeline system that will transport desalinated seawater from the Mediterranean Sea to the Sea of Galilee.
This infrastructural project is estimated at around one billion shekels (USD 280 million), capable of maintaining the level of the Sea of Galilee in years when the natural rainfall is below average. As part of the National Carrier Flow Reversal Project, Israel has increased water supply to northern communities and fulfilled its commitment to provide water to the neighboring Kingdom of Jordan.

Photo: Water Authority

The project commenced in 2018 and was conducted under challenging timelines with statutory and environmental collaborations involving a very large number of stakeholders. Beyond the engineering complexity, **Mekorot** (Israel's national water company), along with the Water Authority, faced the issue of continuously pumping desalinated water into a natural water reservoir, making it one of the world's most unique water management projects.

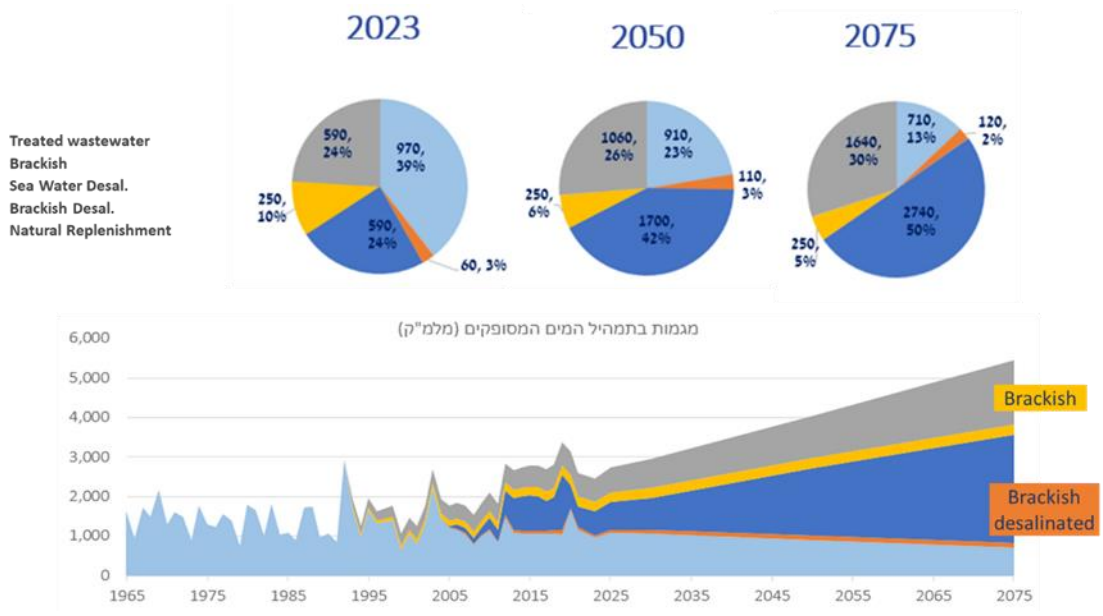
The challenge of nature restoration was also considered, and therefore the water is channeled into the streambed throughout the last section of the line between the Zalmon Stream and the Sea of Galilee in order to restore the flow that existed there in the past.

The status of the Sea of Galilee as a strategic national source of water was maintained through this project, which became operational in early 2023. In dealing with climate change, ensuring sustainable water supply, protecting Israel's natural resources, and maintaining the Sea of Galilee as a strategic reservoir, the project is a great example of innovative thinking and creative planning.

1.5.2 Developing a machine learning model to estimate natural replenishment

In this groundbreaking, applied-scientific study, extensive professional knowledge is combined with an innovative approach to developing models for predicting rainfall, to plan enrichment systems and prepare water sources. This can serve as a model for long-term water sector planning as climate change takes hold. In order to develop resilient water demand management strategies, historical water solutions as well as future plans were analyzed.

This research and analytical work are being conducted by the Hydrological Service of the Water Authority. The first phase (historical trends) and the second phase (forecast until 2050) have already been published in official publications. Results from this phase indicate a significant decrease in natural replenishment, ranging from 5% to 20% by 2050. The extent of this decline varies across basins and climate scenarios. The team's projections estimate an overall reduction in natural replenishment in Israel of



approximately 200 million cubic meters per year (MCM/year) under the SSP2 4.5 scenario, and 300 MCM/year under the SSP2 8.5 scenario, by 2050.

A third phase of the enrichment series forecast until 2100 is currently being conducted. The outcomes of the prediction of natural water resources replenishment in Israel as a basis for water sector development have already been implemented by the Planning Division of the Israel Water Authority in the Master Plan to 2075, to ensure a reliable water supply for Israel through the construction of desalination facilities.
For more information please see:

A. Livshitz, Y., 2023: Natural Water Resources In Israel
B. Isaac, J. & Livshitz, Y., 2023: Natural Water Resources Replenishment in Israel. Second stage: until 2050, Development Machine learning model

2. Future scenario planning

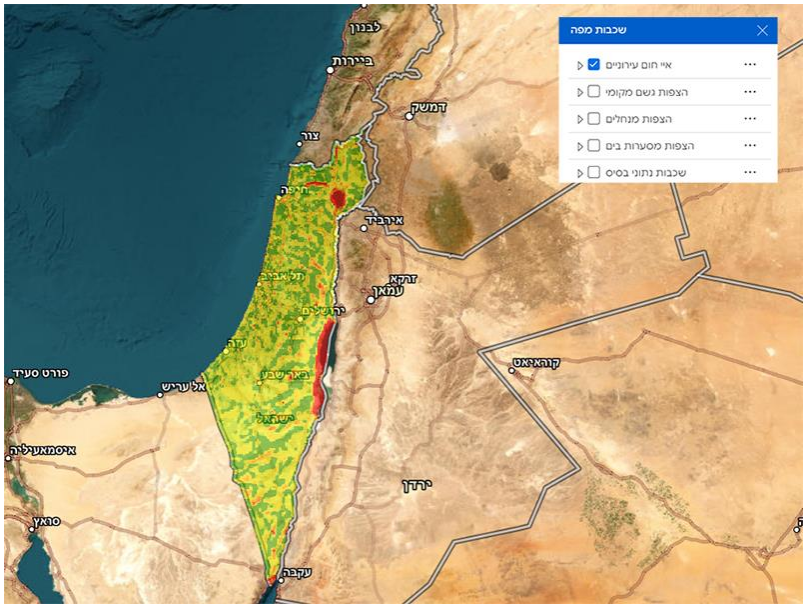
2.1 Israel´s Climate Risk Map

Climate change will be evident in Israel in four ways:

1. Warmer (increasing temperatures)
2. Drier (decreased precipitation)
3. Higher (increasing sea levels),
4. Increased frequency of weather extremes

Each of these trends poses enormous destructive potential for Israel. A national climate risk mapping system is currently being developed under an interministerial steering committee led by the Ministry of Environmental Protection. The key purposes of this system are to assist decision-makers in making informed decisions based on science and knowledge, as well as to set priorities in planning and implementing climate change adaptation.

An interactive demonstrative map showing current extreme climatic events at high resolution is available to the public. Physical climate threats are displayed on the map in information layers showing flood risks, heat stress, and coastal storms. To increase Israel's climate resilience, the maps will be updated and improved over time. In the future, extreme climate events will be mapped to reflect threats such as wildfires, sea level rise, and physical climate changes.



This map was developed in collaboration with the Central Bureau of Statistics, the Israeli Mapping Center, the Israeli Meteorological Service, and the Ministry of Agriculture. The Climate Risk Map is an open source that can be accessed by the public.

2.2 Scenario Planning

The MoEP analyzed the following scenarios in order to develop proper adaptation policies to address future impact:

2.2.1 Sea Level Rise

Israel's Adaptation Secretariat worked with relevant stakeholders to set interim targets for a sea-level rise mitigation plan. The research used the IPCC 3 scenarios (SSP1-2.6, SSP2-4.5, SSP5-8.5) to project sea level rise, focusing on the medium level rise projected for Israel. Projections are uncertain, especially regarding melting of ice sheets.

Projected Impact

- Coastal erosion
- Saltwater intrusion into aquifers
- Increased flooding risk, especially in low-lying coastal areas
- Damage to property and infrastructure

Recommendations

- The committee recommends using a temporary scenario of a 1.06-meter rise by 2100 for planning purposes. For urban coastal areas, planning should consider a 1.86-meter rise to account for extreme events.
- More research is needed, especially regarding the Red Sea coast, for which more research must be conducted.
- Within two years, a permanent scenario should be defined.

2.2.2 Extreme Heat Waves

Heatwaves are included in Israel's national emergency plans, which recognize them as a significant threat alongside floods and fires. The plan emphasizes events that are "severe but probable," rather than extreme scenarios. "Heatwaves" refer to periods of intense heat, lasting at least three days, which are unusual for the season or location, with high temperatures at night. Heatwaves are defined based on temperatures that exceed regional thresholds.

Projected Impact

Heatwaves can disrupt daily life, undermine the economy, and even result in loss of life. Although air conditioning is widespread in Israel, certain populations remain vulnerable, such as outdoor workers, the homeless, low-income individuals, infants, and the elderly. Power outages can also occur because of the strain on the electrical grid.

Recommendations

- Weather forecasts and warnings: There is generally about a five-day warning period for heatwaves. The severity of the predicted heatwave will determine the severity of warnings.
- Five-year Future Reference Scenario led by the National Emergency Authority (NEA): A reference scenario for heatwaves is being developed, characterized by high temperatures and low humidity in inland and mountainous areas, and humid conditions on the coast. Very high daytime temperatures persist.

2.2.3 Extreme Floods

The scenario addresses both national-level floods (affecting large portions of the population or extensive areas) and local flooding (impacting specific drainage basins). It focuses on the impacts of accumulated runoff in streams causing flooding and inundation, not flooding due to inadequate drainage infrastructure in urban areas. It addresses "severe yet probable" events, not extreme outliers.

For each type of flood event, the scenario defines the relevant season, duration of the event, availability of warnings, a description of the event, and potential damage scenarios.

- Definition: Distinguishes between a "flood" and "inundation", defining inundation as the overflowing of a stream beyond its normal channel onto the surrounding floodplain.
- Damage mitigation: Structural and non-structural means of flood mitigation. Structural methods involve modifying the stream channel, while non-structural methods involve protecting people and property.
- Methodology: Determined based on historical data and expert analysis from the Soil Conservation and Drainage Division of the Ministry of Agriculture; the Hydrological Service at the Water Authority; and the Meteorological Service at the Ministry of Transport, coordinated by the National Emergency Authority.

Recommendations

The document provides a framework for national and local authorities to prepare for and respond to significant flood events in Israel over the period 2022-2026.

3. Climate action at the local level and by academic institutions

Local government plays a central role in addressing the climate crisis, ensuring community resilience, and reducing greenhouse gas emissions significantly. Adaptation actions aim to improve the local authority's preparedness and resilience in a changing climate and under dynamic conditions, including by strengthening the municipal emergency system and adapting it to a changing climate, planting trees, managing drainage systems, deploying shading solutions, etc.

As of today, 70 local authorities have written or are in the process of writing municipal climate preparedness plans, and in 2025, 32 more authorities are expected to complete the process, with financial and professional support from the Ministry of Environmental Protection.

Many local authorities have also promoted mitigation actions to reduce GHG emissions released from energy production, transportation, waste, and more. Together, adaptation and mitigation actions enable municipal authorities to reduce resource consumption, increase economic growth, and improve quality of life while improving resilience to climate change.

3.1 Municipal-level climate plans - case studies

Below are examples of actions taken by municipalities to address climate change:

3.1.1 Tel Aviv-Yafo Climate Action Plan

In 2020, Tel Aviv-Yafo launched its Climate Change Adaptation Action Plan, focusing on cooling the city and upgrading water management by 2030. The plan, based on C40 methodology, prioritizes vulnerable populations and natural systems.

By the end of 2024, most tasks were completed or in progress. Concurrently, the city developed an Emission Reduction and Green Growth Plan, setting ambitious targets for 2030 and 2050, which was approved by C40 in early 2024.

In February 2025, an updated five-year adaptation plan was introduced. Despite facing geopolitical challenges, COVID-19, the Sword of Iron war, and intensifying climate change effects, the city maintained its commitment to climate action, presenting a holistic approach, and integrating adaptation and mitigation efforts based on six key tasks and clear targets for 2030, reflecting the city's ongoing dedication to promoting climate resilience and reducing emissions.

Within the Action Plan framework, six guiding pillars were developed that define clear actions and metrics, including targets for 2030:

1. Urban cooling
2. Water management
3. Natural ecological systems resilience
4. Community engagement
5. Urban Net Zero - energy, waste, transportation, and food systems
6. Innovation and green economic growth

Each pillar has a set of actions, key metrics, and performance indicators. For more information, see Tel Aviv-Yafo Climate Adaptation Action Plan.

3.1.2 Jerusalem Climate Action Plan

The Jerusalem Municipality's climate strategy focuses on adaptations for extreme climate risks (heatwaves, floods, urban heat islands) through initiatives such as the EU-led I-CHANGE Jerusalem Living Lab, collaborating with Tel Aviv University and local schools to monitor microclimates using civilian science and innovative research.

The strategy focuses on five key goals: Climate-adapted streets; cooling public spaces; preserving urban nature, building community resilience; energy management; and clean air initiatives. Adaptation measures include planting trees for shading, implementing sustainable water management, and protecting biodiversity. Mitigation actions involve electrifying the municipal vehicle fleet and public transportation, developing light rail lines, expanding bicycle paths, restricting polluting vehicles, and transitioning to LED street lighting.

The municipality is committed to maintaining 38% open spaces, installing solar panels on rooftops, adopting green building standards for public buildings, and creating clean transportation zones. The strategy also emphasizes community engagement, education on sustainability, and support for vulnerable populations during extreme weather conditions. For more information, click here [Hebrew].

3.1.3 Beersheba Municipality - urban heat policy

The city of Beersheba, with a population of 212,000, is in the Negev Desert in Southern Israel. Beersheba's municipal policy aims to prepare for and manage extreme heat events and coordinate actions in real time. Each department and administration in the municipality is required to implement appropriate steps to mitigate the adverse effects of the heatwave according to population type and infrastructure, and to maintain operational cohesion. For further information, click here [Hebrew].

3.1.4 Ashdod Municipality - urban model for extreme weather

Ashdod published an extreme weather events adaptation policy that includes preparatory measures to clean drainage systems, preparations by municipal departments for specific synoptic systems, forecasting and setting alert levels based on severity scales, notifying residents, activating various municipal units, and outlining lessons learned. For further information, click here [Hebrew].

3.1.5 Jaljulia Climate Action Plan

Driven by the ambition to become a leading authority in sustainability and achieve complete energy neutrality through an innovative project, the Jaljulia Local Council is tackling the lack of environmental awareness that is prevalent in Arab communities. About 20% of the country's population has a lower quality of life due to the lack awareness of sustainability and environmental issues, cleanliness and pollution.

The municipality's goals include achieving full energy neutrality by implementing solar projects, promoting electric vehicles, and developing energy storage and local solar

production solutions. The project fosters environmental awareness and climate preparedness within the community, aiming to serve as a model for other authorities, particularly in addressing the unique challenges faced by vulnerable populations, and enhancing the local environment through stream rehabilitation, green spaces, and bicycle path development. For more information, click here [Arabic].

3.1.6 Gezer Regional Council Climate Plan

The challenge of regional councils is different from the challenges of urban municipalities and local councils in relation to climate change preparedness, both due to the open and agricultural areas they include, and due to the two-tiered governance structure.

The Gezer Regional Council covers an area of approximately 120,000 dunams, and about 72% of the council is defined as open fields (comprising diverse open habitats and agricultural land). The council prioritizes sustainable development and open space preservation through collaborative efforts involving various internal and external stakeholders, aiming to develop a comprehensive model for open space management with a structured work plan and to implement an interdisciplinary management platform.

This is a joint effort by the council's divisions and departments, along with other stakeholders, including the drainage authorities, KKL-JNF, the Nature and Parks Authority, the Center of Regional Councils, road-infrastructure company Netivei Israel, and more. The initiative also involves government ministries, residents (Environmental Quality Committee, Agricultural Committee, the community, ecological gardening leaders, environmental activists, etc.), farmers, and agricultural associations. For further information, click here [Hebrew].

3.2 Municipal-level climate implementation efforts

3.2.1 The Forum 15 Climate Advocacy

Forum 15 is an Israeli organization comprising the 15 largest independent cities in Israel. These cities collaborate on issues of common interest and advocate for their needs with the national government. Urban empowerment is a vision that leads Forum 15's activity for promoting sustainable urbanism and climate protection. The forum has initiated the Forum 15's Climate Convention (2008) (Aligned with the global ICELI Cities Convention), Cities Alliance for Quality of Life & Environment (2018), and the Urban Resilience document (2020).

The forum has published several handbooks and guidelines for addressing climate mitigation and adaptation issues in urban planning, including checklists, practical guidance, and action plans for urban sustainability interventions. The forum also offers online and in-person seminars on topics such as heatwave strategies, climate risk assessments, climate justice for the elderly population, gender equality, and urban nature, among many others.

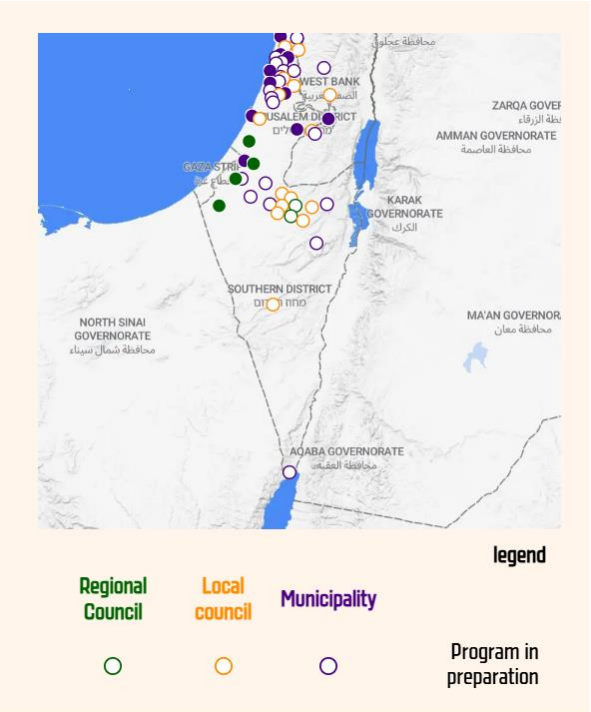
Education and training

One of the main training programs offered by Forum 15 is called Israeli City 2030: Out-of-the-Box Urban Planning. The program is designed to address key dilemmas including: How can we create a quality living environment and contend with challenges and crises during an era of change? What can we do to make public spaces vibrant and lively? Training is conducted in collaboration with the Merhav Movement for Israeli Urbanism and the Technion.

3.2.2 Mapping National Municipal Climate Action

Another civil society climate program is led by multiple NGOs, focusing on the 259 municipal climate plans supported by the central government. Aclima is a knowledge repository that guides authorities on climate preparedness. It has launched the Climate Frequency tool in conjunction with the Yesodot Institute.

As part of the effort to increase transparency, this tool is a climate plan implementation repository, a search engine used by local authorities that allows users to view the tasks the authorities have committed to and analyze their priorities. The



Pictures: Aclima

repository is also used for peer learning, mapping municipalities based on demographics, understanding topography, examining the authorities' coping strategies, comparing authorities based on their actions, and sharing knowledge.

3.2.3 The Center for Urban Forestry and Shading

The Center for Urban Forestry and Shading (In Hebrew: 'Derech Tzel') aims to improve the quality of life for Israeli citizens by making cities cool, shaded, and green. As a member of the Israeli Green Building Council, the center assists municipalities with urban afforestation and complementary shading solutions, in partnership with the Rothschild Foundation and the Ministry of Environmental Protection.

The center was established as a part of Government Decision 1022, using street trees to shade and cool urban areas. According to the approved national plan, approximately 450,000 trees will be planted along 3 million meters of streets in Israel, with an estimated investment of 2.25 billion NIS by 2040.

The center is working to advance the planning and development of urban forests in Israeli cities and to establish the status of trees as vital infrastructure in urban space, alongside promoting complementary shading measures. The ongoing efforts to promote the planning and development of the urban forest define trees as essential infrastructure, and offer additional shading solutions, include the following:

1. Building a team of leading cities to implement the local forest project.
2. Providing hands-on support for urban afforestation projects.
3. Managing and disseminating knowledge.

The center provides professional support for 21 local authorities that won a tender from the Ministry of Environmental Protection. The support includes mentoring, expert consulting, professional training, and tree planting according to a structured methodology. A "Leading Cities in Urban Afforestation and Shading" program was launched, aimed at creating a pool of cities committed to making a significant leap in the planning and management of urban forests. At the core of the program is the creation of a new role called Urban Afforestation and Shading Leader, who will promote the implementation of the urban afforestation program within the local authority, coordinating between the municipal units in charge of trees. Beersheba, Holon, Hod Hasharon, and Sderot were the first four cities to join the program.

Most of the sections of Decision 1022 remain unimplemented (58%), and clear targets were missed at the municipal level. As of 2025, the timetable for executing the decision has not yet been met, and some parts of the program are still under

development and at various stages of implementation. However, it should be noted that this is a long-term decision set for 2040.

3.3 Climate action at academic institutions

3.3.1 University of Haifa

The University of Haifa promotes social and environmental sustainability through its internal conduct. The University of Haifa was the first in Israel to be certified with the ISO14001 standard by the Israeli Standards Institute and to earn the title "Green Campus" from the Ministry of Environmental Protection.

Haifa University was also recognized as one of the world's top SDG leaders by the Times Higher Education's Impact Rankings, ranking 95th with an overall score of 89.5 along with Sorbonne and MIT.

3.3.2 Tel Aviv University

Tel Aviv University (TAU) has established a comprehensive climate strategy that is centered on interdisciplinary research, institutional sustainability, and societal impact.

- *Urban resilience:* The Urban Innovation and Sustainability Laboratory addresses urban heat islands and promotes smart-city procurement strategies.
- *PlanNet Zero:* This program coordinates over 70 researchers across disciplines to develop tech, policy, and risk-management solutions.

What's Next?

Israel has established institutional frameworks for both adaptation and mitigation, recognizing climate change as a significant challenge requiring coordinated action across government and society.

According to a report published by the OECD, in the moderate scenario selected for 2080 – 2099, Israelis will likely be exposed to about 80 days per year on which the maximum temperature will exceed 35 degrees Celsius. This increase is the highest among all OECD countries and the partner countries examined.

This means that the population in the State of Israel will be exposed to temperatures above 35 degrees Celsius for at least two additional months during the year. This is true not only for daytime temperatures but for nighttime temperatures as well. In the years 2080–2100, Israelis will experience about 45 additional warm nights per year. These warm nights have significant impacts, as they prevent the cooling of the urban environment during the night and therefore contribute to the development of urban heat islands. Droughts are expected to be longer and more frequent, and their direct impact will damage agriculture and local food production, leading to food insecurity.

Considering these extreme weather developments, Israel has embarked on a path to develop a national climate adaptation secretariat and national and local-level strategies. Nevertheless, without coherent, goal-oriented climate legislation that will monitor and enforce responses, the goals will be difficult to reach. Securing sufficient funding, coordinating efforts across various sectors, and ensuring public engagement and awareness are also crucial but challenging aspects of successful policy implementation.

SDG Alignment

SDG 6: Clean Water and Sanitation.

Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

Target 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

The National Carrier Flow Reversal Project ensures sustainable water supply by channeling desalinated water to the Sea of Galilee, addressing declining natural water availability.

Israel's Water Authority focuses on expanding desalination capacity and maintaining the Sea of Galilee as a strategic reservoir.

SDG 7: Affordable and Clean Energy.

Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.

Israel aims to increase the percentage of renewable energy sources in electricity generation (30% in 2030 compared to 10.4% in 2022) and phase out coal by 2026.

Target 7.3: By 2030, double the global rate of improvement in energy efficiency.

The Climate Mitigation Plan emphasizes energy efficiency in industries and buildings.

SDG 9: Industry, Innovation, and Infrastructure.

Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

The National Adaptation Plan includes infrastructure resilience measures for transportation and energy systems.

Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

Climate policy promotes energy and resource efficiency in industry. Investments in public transit electrification and zero-emission vehicles highlight innovation in low-carbon transport.

SDG 11: Sustainable Cities and Communities.

Target 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

Target 11.7: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

Target 11.b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

Municipal climate action plans, as well as central and local government initiatives address flood and urban heat mitigation through the development of green infrastructure and implementation of other measures.

SDG 13: Climate Action.

Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

The National Adaptation Plan (2024) has identified actions taken by 33 ministries to address climate risks and promotes action by local government.

Target 13.2: Integrate climate change measures into national policies, strategies and planning.

Israel's Climate Mitigation Plan sets GHG reduction targets under the Paris Agreement including sectoral goals.

Chapter 7:

Enhancing the Sustainability of Marine Ecosystems

Introduction

This chapter presents initiatives implemented or expanded in recent years to make Israel's marine and coastal environment more sustainable. It explores various strategies for preserving subaquatic life, including the designation of marine protected areas to safeguard critical habitats. It also discusses the importance of monitoring illegal fishery, which can have devastating effects on marine species. In addition, the chapter covers the findings of monitoring and research that assist in maintaining marine biodiversity. Several challenges, hazards and gaps are also explored, as well as recommendations for the future.

1. Fighting illegal fishing

Illegal fishing can severely harm natural habitats by overexploiting fish populations, destroying habitats such as coral reefs, and disrupting the food chain. This can lead to a decline in biodiversity and jeopardize the sustainability of ocean resources for future generations.

1.1 Establishing a marine ranger unit

Since June 2018, the Marine Enforcement Unit (MEU) of Israel's Nature and Parks Authority has worked in Israel's territorial waters in the Mediterranean and the Red Sea to inspect vessels and enforce fishing laws and directives as well as marine nature reserve laws. This includes intelligence-led inspections, and reports regarding seizures and incidents.

As part of MEU's focused efforts to patrol coastal areas and prevent overfishing, a task force was established that focuses on law enforcement, training, capacity building, and education. Over the years, MEU rangers have received equipment to support

enforcement efforts, including boats, ships, and drones, with day and night monitoring capabilities. Between 2020 and 2024, inspections and enforcement activities (including seizure of violators' vessels) led to a decline in the number of incidents.

1.2 Outreach and awareness building

Alongside enforcement activities, MEU emphasizes maintaining a direct, ongoing connection with the public to create significant change. To encourage responsible fishing among professional and recreational fishermen, educational sessions are provided, and informative materials are distributed. MEU has issued an informational booklet about Israel's fishing regulations in Hebrew, Arabic, Russian, and English. Additionally, Thai and Chinese informational brochures were distributed to foreign professionals working in the fishing sector.

All licensed fishermen receive text messages from MEU with instructions about important dates (like the reproduction season), and signs are posted containing clear language (in Hebrew and Arabic) and illustrations to inform them about the reproduction season and relevant directives.

1.3 Better enforcement of fishery regulations

The Israel Nature and Parks Authority collaborated with the Ministry of Agriculture's Fishery Division to develop a dedicated track for filing joint indictments against violators of the nature protection and fishing laws.
As a result of this technical change, offenders receive their rightful punishment more effectively.

MEU participates in the INTERPOL operation IKATERE, which targets illegal, unregulated, and unreported (IUU) fishing. This has strengthened the unit's communication network with other national law enforcement agencies.

1.4 Next steps

Its intensive, professional activity at sea and on land have made MEU a valuable and influential player in Israel's fishery sector. The fishermen generally cooperate and abide by the law. Collaboration between the authorities and the fishery sector has yielded excellent results and must be nurtured and reinforced even further.

However, illegal professional fishing is still present, as some fishermen conceal their offenses in a way that makes it difficult to collect evidence of violations. To enhance enforcement efforts, a working collaboration with the Israel Navy is being examined, focusing on areas farther off the coast. This will be the focus of the MEU's work in the

coming years, including equipment acquisition, training, drills, recruitment, and developing a full technological and operational envelope for the work.

2. Expanding marine protected areas

The importance of protecting the marine environment is becoming increasingly evident. Globally, Marine Protected Areas (MPAs) play a crucial role in preserving and restoring ecosystems through the maintenance of their natural habitats, flora, and fauna.

MPAs are a tried and tested approach to conservation of ocean biodiversity and ecosystems, improving long-term food security, preventing over-fishing activities, and protecting ocean-based livelihoods. MPAs are being established, sustainable fishing regulations are being revised, and monitoring schemes are being put in place to prevent illegal fishing, especially in marine nature reserves.

2.1 Israel declares new MPAs and commits to further protect its marine area

In the last few decades, the Israeli Mediterranean Sea ecosystem has been suffering due to massive fishing, habitat destruction, pollution, climate change, and invasive species.

Israel has signed two voluntary initiatives for a global goal of what's known as 30 by 30, committing to protecting 30% of its marine area by 2030. These initiatives are part of the HAC – High Ambition Coalition – which refers to both land and sea protected areas, and GOA – the Global Oceans Alliance – which covers only marine protected areas.

In support of increasing marine protected areas, in 2022 Israel completed the process of declaring the "Palmachim Disturbance" sea area within its Extended Economic Zone (EEZ) as an MPA, according to the National Parks and Nature Reserves Regulations, 1968.

The Palmachim Disturbance has special natural features, including rare habitats of cold- and deep-water corals and saltwater pools, spawning and fostering areas for deep sea sharks that must be protected, also enabling ongoing monitoring and research. It is a large and unique geological structure at the edge of Israel's continental shelf, 15 - 65 kilometers from Israel's coastline, south of Tel Aviv opposite the Palmachim Beach, at a depth of about 100 - 1,250 meters.

The protected area includes four complexes and covers a total area of about 600 square kilometers. This doubled the size of Israel's MPAs at the time of the declaration. Since 2019, Israel has increased its marine protected areas from 0.3% to 4% of its coastal waters, with a masterplan to achieve the full 30% MPAs goal by the end of the decade.

2.2 Monitoring aquatic biodiversity in MPAs

A marine biological monitoring survey ('Marine Bioblitz') has been conducted by the Israeli Nature and Parks Authority. A major purpose of the survey was to take inventory of fish, sessile invertebrates, and algae in and outside nature reserves, as well as examine whether Israel's Mediterranean coast marine reserves protect the fauna and flora within their territory.

A total of four natural reserves were surveyed, and three key parameters were analyzed:

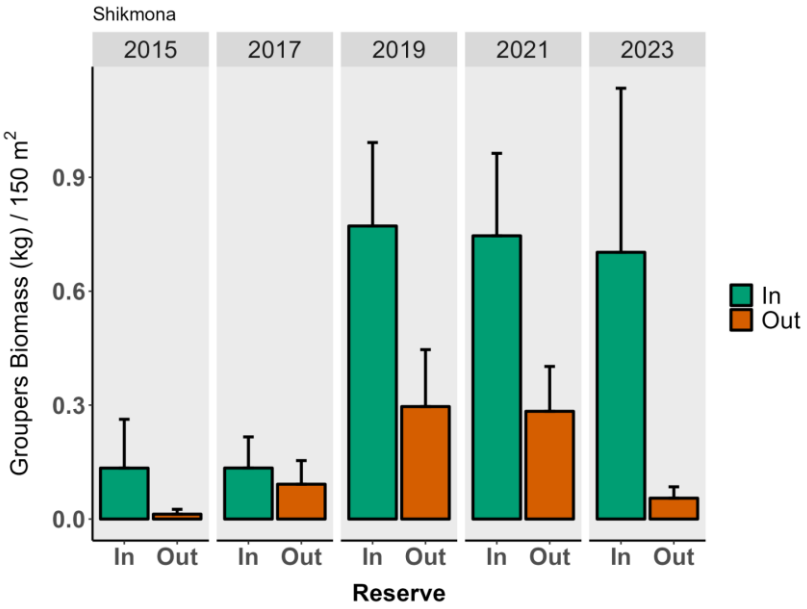
1. The relationship between fishing and nature reserves
2. Dynamics of fish observed
3. The dynamics of aquatic invertebrate and algae communities (sedimentary invertebrates and alga)

Marine nature reserves have been proven to be effective tools for replenishing fish populations, particularly commercial species that are sources of livelihood and food, such as snapper species. The findings of the Bioblitz indeed indicate that commercial

fish species are more abundant within reserves than in control areas outside them, and larger individuals are more prevalent.

2.2.1 Shikmona Nature Reserve

The following graph illustrates the change in the average biomass of damselfish in the Shikmona Reserve over the years. There has been an increase in the disparity between average biomass values of damselfish within the reserve compared to control areas since 2019, according to preliminary survey results conducted in 2023.



The results show improvements in the Shikmona MPA since measuring began in 2015, and an improvement trend between 2016, when enforcement began, and 2024.

2.2.2 Akhziv Nature Reserve

There are species of rock borers that reached reproductive size only within Akhziv Reserve but were rarely encountered in any other reserves. It was also within this reserve that most sea urchin reached reproductive size.

2.2.3 Rosh HaNikra-Akko Nature Reserve

Since dolphin populations worldwide are on the decline, the improved status of dolphin populations in the Rosh HaNikra-Akko Nature Reserve (and likewise in other MPAs surveyed) is particularly encouraging, strengthening the recognition of marine nature reserves as a means of protecting fishery resources.

2.4 Next steps

Natural reserves play a crucial role in preserving sea biodiversity by providing protected areas where native species can thrive without the pressures of human activity. They help maintain the natural balance of ecosystems and allow for the study and monitoring of species, which can inform conservation efforts. However, addressing the challenge of invasive species such as those observed in the Bioblitz survey is essential and can be managed through targeted removal efforts, stricter regulations on ballast water discharge, and public awareness campaigns to prevent their spread. Implementing habitat restoration projects within reserves can enhance biodiversity by restoring or improving environments that support native species. Establishing marine corridors to connect isolated reserves may also promote genetic diversity and resilience by facilitating species migration. Additionally, involving local communities in conservation efforts and decision-making processes can

Photo: Guy Raanan

3. The National Monitoring Program

The ocean plays a vital role in regulating the Earth's temperature, supporting biodiversity, and providing essential ecosystem services. However, growing threats such as pollution, overfishing, invasive species, and climate change threaten the

health and sustainability of marine ecosystems. Climate change is causing the eastern Mediterranean to warm at a rate significantly higher than the global average, and sea levels have risen by 15 cm over the past three decades. Additionally, plastic pollution continues to threaten the sea and coastlines.

To address these challenges, marine monitoring programs have emerged as crucial tools for gathering scientific data and informing effective marine protection policies, such as the National Monitoring Program of Israel's Mediterranean Waters (NMP). Israel's NMP has been operating since 2019, jointly funded by the Marine Pollution Prevention Fund at the Ministry of Environmental Protection and the Ministry of Energy and Infrastructure. The implementation is conducted by the Israel Oceanographic and Limnological Research (IOLR), as part of Israel's commitment to the Barcelona Convention.

3.1 Yearly reporting

The NMP unifies the coastal water monitoring program of the Ministry of Environmental Protection that has been in place since 1978 and the deep-sea monitoring of the Ministry of Energy and Infrastructure which has been operated since 2012. The NMP encompasses the entire Israeli Exclusive Economic Zone (EEZ), extending from the coastline to offshore areas, including water, sediments, and the atmosphere.

This multidisciplinary program employs a diverse range of research vessels and scientific tools, such as operational oceanographic models, molecular analysis, advanced taxonomic and microscopic techniques utilizing generative AI, radioisotope applications, underwater gliders with different sensors, remote sensing, and more.

Each year, Israel Oceanographic and Limnological Research (IOLR) publishes a monitoring report, presenting information on marine pollution, marine biodiversity, sedimentology, and marine litter. The report's findings create a long-term scientific basis for the state of the marine environment and thus influence the determination of environmental policy, regulatory planning, and enforcement from a broad and future-oriented perspective.

3.2 2023 Key findings

The recent 2023 report presented a troubling picture of the state of Israel's Mediterranean Sea area. Below is a summary of the main findings, for further information please see the full report (Hebrew).

3.2.1 Climate Change

1. *Rapid warming of sea water:* Contrary to the IPCC forecasts which predict a global warming of about 0.055 degrees per year, the report indicates that the eastern Mediterranean Sea is warming at nearly double that rate, with a 0.12 C^{o} rise in temperatures per year. Accordingly, the slow increase in seawater salinity reported in previous reports continues.
2. *Rise in sea level*: Between the years 1992 and 2023, the sea level rose by approximately 15 cm in the eastern Mediterranean Sea, constituting an average rate of about 4.7 mm per year. This rate is considered fast compared to the global rate of 3.4 mm per year, as published by the IPCC. The rise in sea level will affect the entire coastline of the State of Israel. As the level rises, the danger of flooding during storms increases.
3. *Ocean acidification continues:* Acidification occurs due to the increase in the percentage of carbon dioxide in the air, which penetrates the marine system. Changes in ocean acidity can affect calcifying animals and the entire food web.

3.2.2 Biodiversity

1. *An increase in algal species:* Overall, a long-term trend of increasing diversity and number of algal species was observed between 2002 and approximately 2012, followed by no clear trend until 2023. These trends are likely related to the reduction of nutrient loads from terrestrial sources.
2. *Disappearance of local species:* In 2023, two local fish species that were previously common in the region were notably absent: the red mullet and the striped mullet. Due to the increase in seawater temperatures and/or competition with invasive species for food, local species may be pushed out of their habitat and may be at risk of extinction. A multi-year trend continues of the disappearance of local algae from rocky shore habitats followed by replacement by invasive algae. The local algae created tall "forests" that served as a habitat for small animals, while the invasive algae are smaller and do not create such conditions, which affects the entire ecosystem.

3.2.3 Pollution

This section includes measurements of pollutants in seawater, seabed, and river estuaries, and of marine organisms living in seas and marinas along Israel's shores. Results can be used to monitor discharges and dumping into the sea.

Through targeted initiatives, Israel has achieved a 90% reduction of industrial and municipal pollution loads to the sea, as well as significant reduction of nutrient loads to waterways, allowing the return of diverse aquatic life.

However, challenges remain. In Haifa Bay, approximately 65% of commercially harvested coastal fish are contaminated with mercury. High mercury concentrations (exceeding regulatory limits) have also been measured in the deep sea of the Levant Basin. In addition, mercury levels have increased over time in deep sea sharks.

Fertilizers and organic waste pollute most coastal rivers' estuaries.
Untreated sewage dumped into the sea along the coast of the Gaza Strip has decreased the quality of seawater in the shallow continental shelf.
There is potential for the transport of organic pollutants from the Nile Delta region as well. To assess this issue, it is recommended to conduct a complementary survey in the southernmost part of the economic waters.

3.2.4 Marine and coastal litter

Marine plastic pollution is threatening marine life, harming coastal communities, and even entering our food chain. The most common waste items found were plastic bags and packaging, comprising more than 50% of all recorded items. A recurring phenomenon of plastic waste accumulation has been observed in a 200-meter-deep seabed strip. There is evidence that non-biodegradable plastic waste accumulates on the seabed. In 79% of the sea turtles examined between 2020 and 2023, plastic waste was found in their digestive systems. Unlike Mediterranean Sea waste, most of the waste in the Red Sea (Eilat/Aqaba Bay) comes from boating and fishing - ropes, metal structures, and concrete sinkers.

There has been a decrease in the number of plastic bags among all beach waste since 2021. Several initiatives promoted by the Ministry of Environmental Protection may account for this improvement, including the Clean Beach Program, the Plastic Bag Law, and the retrieval of bags from urban drainage openings.

In 2023, Ashdod marine area and the Yarkon River had the highest concentrations of microplastics. The source of pollution in Ashdod may be neighboring countries, but the findings in the Yarkon suggest that the coastal rivers in Israel are no less polluted.

3.3 NMP Reports' contribution to policy

A key goal of the NMP is to facilitate planning, decision-making, and laying long-term scientific foundations for marine environmental protection policies, including through enforcement of maritime pollution prevention laws and international agreements. Several case studies illustrate how the NMP findings have influenced government decisions:

1. *Oil Pollution Damage Fund:* In February 2021, Israel's shorelines were damaged by tar pollution caused by an unidentified source. Through operational model simulations and scientific investigations conducted immediately after the first signs of tar were detected, the State of Israel filed a claim with the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992 (FUND1992), seeking compensation for oil pollution damage.
2. *Desalination Plant Location:* The location selected for a sixth seawater desalination plant in Western Galilee was based on NMP water quality findings, local current patterns, and assessed water residence time at potential sites. Data from in-situ sensors deployed by the NMP, along with wave height and general current data, were used to run brine dispersal models and design the intake pipe for the Hadera desalination plant.
3. *Eutrophication criteria:* Using NMP findings, reference values of nutrients and algal biomass at the Israeli Mediterranean coast were assessed, and criteria for eutrophication to achieve and preserve good environmental status were partially adopted by the relevant governmental ministries. These recommendations and guidelines contributed to the modification of local monitoring programs at plants that release effluents into the Israeli coastal area.
4. *Selecting marine protected areas:* Biodiversity monitoring data collected by the NMP on infaunal and epifaunal communities are utilized to evaluate and declare marine protected areas within the Israeli EEZ.

3.4 Summary

The NMP findings show the changes the marine system is undergoing due to climate change and human activities, which have been significantly accelerated in the past decade with the expansion of ports and the promotion of natural gas and oil exploration. The findings indicate the ongoing impacts of pollution events and harm to marine life, and the difficulty of recovering from them under changing sea conditions due to climate change and sea warming.

What's Next?

This chapter illustrates the importance of marine natural reserves, yearly national marine surveys, and the restriction of illegal fishing as positive sea preservation steps.

Findings show that although the Mediterranean Sea and the Red Sea are large bodies of water shared by many countries, the main impact on the marine ecosystem in Israel's maritime area stems from human activities originating in Israel. However, the results also indicate that government regulation is successful at reducing human exploitation of the marine environment, such as reducing pollutants discharged into the sea, cleaning beaches and preventing waste from reaching the sea, and more orderly management of fishing.

Further policy management and courageous decision-making are required to improve the marine environment. Reducing exploitation and human activity at the local level is a crucial step for significant improvement and change in the state of the marine system, enabling it to withstand the impending challenges of climate change.

SDG Alignment

SDG 14: Life Below Water.

Target 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.

Marine Protected Areas (including marine reserves) directly contribute to this by providing protected areas for marine life to thrive, restoring degraded habitats, and enhancing ecosystem resilience.

Target 14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.

Target 14.a: Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.

Regular marine surveys generate crucial data on biodiversity, fish stocks, habitat health, and the impacts of pollution and climate change. The yearly NMP information is essential for informed decision-making, adaptive management of marine resources, and tracking progress, and could also assist neighboring countries in protecting their marine areas.

Target 14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

Combating illegal fishing is critical for preventing overexploitation of fish stocks, protecting marine habitats, and ensuring the long-term sustainability of fisheries.

Target 14.5: By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

Establishing and effectively managing marine reserves helps achieve this target by increasing the spatial coverage of protected areas.

SDG 16: Peace, Justice and Strong Institutions.

Target 16.3: Promote the rule of law at the national and international levels and ensure equal access to justice for all.

Target 16.4: By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime.

Illegal fishing is often linked to lack of governance and transparency. The efforts made by ranger forces to combat illegal fishery contribute to broader goals of promoting peace, justice, and strong institutions.

Chapter 8:
Promoting Equality and Prosperity through Israeli Technology and Aid

Introduction

Israel has been a major contributor to reducing global disparities in developing countries and emerging markets and to implementing the Sustainable Development Goals (SDGs) through its ongoing international support for the past 67 years.

By leveraging Israeli innovations and expertise, these efforts aim to reduce inequalities, improve healthcare systems, reduce food-water scarcity, and enhance international collaboration. This chapter highlights two international development pioneering ventures – the TOV Program and Mashav activities – both promoting Israel's stewardship through knowledge sharing that alleviates the key challenges facing developing countries, contributing to long-term sustainability and resilience.

1. Fostering Resilient Food Systems in Ethiopia: The TOV Program

The TOV program, also known as 'Tikkun-Olam Ventures' (*Bettering the World* in Hebrew), develops and implements agricultural digital finance tools and training programs that improve the livelihoods of thousands of small-scale farmers in Ethiopia.

The program was launched in 2018 by the Joint (JDC) and supports climate friendly Israeli technology and unique market connections worldwide in order to bring sustainable change to the agricultural sector through advanced data collection and in-field monitoring to increase crops and income for small farm owners.

Pictures: TOV, JDC

1.1 Purpose and activity

Around 500 million people in the developing world depend on agriculture to survive. Over 90% of Ethiopia's crops are produced by smallholders and family farms, who still practice traditional methods and live on just a few dollars a day. Changing crop cycles, droughts, and eroding soil are some of the challenges these farmers face due to climate instability, threatening their livelihood as well as their basic nutritional needs.

JDC's TOV program leverages Israeli technology to transform the lives of smallholders in Ethiopia. TOV brings change to the horticulture sector through drip irrigation, hybrid seeds, crop diversity, agronomic training, and access to financing and market connections. Over the past years, TOV has helped significantly increase crops and agricultural yields.

Further to these achievements, TOV is now using its international partnerships to develop a module for pooling all the data collected by the various stakeholders, in order to increase the impact of its programs. Impact will be enhanced by offering financial incentives to farmers who pay for technology, which will help them scale-up their crops and build up their income as smallholder farmers, resulting in significant environmental, social, and financial benefits.

1.2 Scope of the program

To ensure financial, social, and environmental benefits, TOV has adopted a market-driven approach that is based on three principles – access to technology, innovative finance incentives and know-how. These principles are aimed at improving the income and livelihood of smallholders, reducing poverty, and ensuring long-term sustainability of the program.

Due to economic, geopolitical, environmental, health, and technological instability – both globally and in Ethiopia – the TOV team continuously has adapted and fine-tuned the program since its inception. Today, TOV is active in six regions, improving the livelihood of thousands of farmers and their families, and aspiring to help many more in the future.

The Israeli Ministry of Economy has partnered with TOV in order to deepen Israel's impact on the "base of the pyramid" in Africa. TOV also works closely in strategic alignment with Ethiopian government officials at the local and federal levels and has forged partnerships within the private sector and with international NGOs (TOV Video).

1.3 Positive Impact

TOV has enabled farmers to increase their crop yields and income, helping them feed their families, save money, and expand their businesses. By the end of 2024 TOV helped Ethiopian farmers and community stakeholders achieve the following:

- 2.5x higher income than the national average agricultural income.
- 3x higher yield than the national average.
- More nutritious food intake at home due to diversified vegetable production (reported by 75% of all farmers).
- Up to 30% water and fertilizer savings due to sustainable drip irrigation technology.
- 50% reduction in farm-related expenses.
- Better business tracking.

- More female involvement in decision-making (in households that adopted drip technology).
- Superior access to hybrid seeds.

Picture: TOV, JDC

SDG alignment

SDG 1: No Poverty.

Target 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day.

Target 1.2: By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.

TOV directly facilitates poverty reduction by increasing farmers' income and crop yields.

SDG 2: Zero Hunger.

Target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

The program contributes to food security and improves nutrition through increased crop yields and diversified vegetable production.

SDG 5: Gender Equality.

Target 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

TOV promotes greater female involvement in decision-making within farming households.

SDG 6: Clean Water and Sanitation.

Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

The program's use of sustainable drip irrigation technology contributes to water conservation, in alignment with– increasing water-use efficiency.

SDG 8: Decent Work and Economic Growth.

Target 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.

Target 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

TOV enables farmers to expand their businesses and increase their income.

SDG 9: Industry, Innovation and Infrastructure.

Target 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.

TOV is introducing innovative Israeli agricultural technologies to Ethiopian farmers.

SDG 10: Reduced Inequalities.

Target 10.1: By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.

TOV's focus on smallholder farmers contributes to reducing inequalities.

SDG 13: Climate Action.

Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

TOV implements climate-friendly technologies and improves resource efficiency.

SDG 17: Partnerships for the Goals.

Target 17.16: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.

TOV exemplifies partnerships between Israeli organizations, Ethiopian government officials, private sector entities, and international NGOs.

2. Promoting Sustainable Development through Mashav, Israel's International Development Agency

MASHAV, Israel's Agency for International Development Cooperation in the Ministry of Foreign Affairs, has operated since 1958 in key sectors where Israel has accumulated expertise and a comparative advantage. Agriculture, food security and water management, education for all, medicine, public health and emergency preparedness, community resilience, gender equality and women's empowerment, innovation and entrepreneurship, R&D, and humanitarian aid are among the sectors prioritized by the agency.

Israel shares its own development experience, innovative technologies, and tested methodologies with partner countries through MASHAV's capacity-building programs, based on the 'training the trainers' approach. All MASHAV's initiatives align with UN SDGs and focus on empowering communities and fostering self-sufficiency and long-term impact.

MASHAV's multilateral partnership with governments, international organizations, and local stakeholders ensures sustainable long-term development. The following case studies outline MASHAV's impactful and scalable solutions for empowering communities:

2.1 Ukraine: Humanitarian assistance, capacity building and rehabilitation

Since the beginning of the war in Ukraine, MASHAV has been at the forefront of humanitarian assistance, offering vast capacity-building and rehabilitation initiatives.

MASHAV has supported those affected by the crisis through rapid response operations and long-term strategic programs.

2.1.1 Humanitarian assistance

Throughout the war, MASHAV has provided immediate humanitarian response and emergency aid to address immediate humanitarian needs. These include:

- *Airlift of essential supplies:* Airlifts of over 200 tons of humanitarian aid to Poland, to be transferred to Ukraine, including winter clothing, medical supplies, water purification systems and six mega-generators capable of powering hospitals and other critical infrastructure. In 2024, MASHAV donated mobile EcoFlow power stations to Ukrainian communities, ensuring electricity supply despite damage to the national grid.
- *Field hospital in Mostica:* A fully equipped field hospital was established by MASHAV in collaboration with Israel's Ministry of Health, Sheba Medical Center, Clalit Health Services, and the American Jewish Joint Distribution Committee (JDC) near the Polish border, where over 6,200 Ukrainian civilians received medical treatment. More than 270 Israeli doctors and medical professionals took part in the operation, providing not only direct care, but also capacity-building workshops for 42 Ukrainian hospitals and clinics.

Photo: Mashav

- *Food and water:* Distributing hundreds of thousands of meals and water containers, and convoys of food and water to affected communities, including Kherson after the Khakovka Dam attack.
- *Assisting refugees:* MASHAV provided critical aid to Ukrainian refugees in neighboring countries, delivering food, medical supplies, and winter essentials to displaced populations in Poland, Moldova, Romania, and Hungary. MASHAV also financially supported nine Israeli NGOs that helped Ukrainian refugees – providing psychological counseling for displaced populations, special programs for people with disabilities, and humanitarian initiatives for women and children.

Photo: Mashav

2.1.2 Capacity Building - Supporting Ukrainian Recovery

Recognizing the long-term impact of the war, MASHAV implemented extensive training programs to strengthen Ukrainian resilience.

Between 2022 and 2025, MASHAV provided approximately 40 courses, both in Israel and online. These included psychological first aid during crises, emergency first aid under fire, special education for children suffering trauma, early childhood therapy in wartime, first aid for chemical warfare victims, psychological support for children during war, grief counseling for bereaved families, volunteer burnout prevention and suicide prevention, rehabilitation for war-injured civilians, and plans for emergency education infrastructure.

Photo: Mashav

2.1.3 Rehabilitation

- *Mental Health and Trauma Support:* In partnership with the Israeli Trauma Coalition, the Government of Canada and Kyiv Municipality, MASHAV established the Kyiv Psychological Resilience Center, staffed by MASHAV's resilience program alumni. Based on the Israeli model, the center has assisted thousands of war-affected civilians, including children, soldiers' families, and vulnerable populations. It also serves as a hub for ongoing rehabilitation and

medical support. The establishment of the Ukrainian resilience center has produced a network of resilience centers, and more are under construction.

- *Rehabilitating Wounded Soldiers:* Ukrainian servicemen in need of orthopedic prosthetics were brought to Israel for rehabilitation and treatment.
- *Providing support for Ukrainian children:* Among other things, the Kyiv Center for Rehabilitation of Children with Disabilities received 30 wheelchairs, and MASHAV transported Ukrainian children requiring oncological treatment to leading Israeli hospitals with their families.

Photo: Mashav

SDG Alignment

SDG 3: Good Health and Well-being.

Target 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

The establishment of the Kyiv Psychological Resilience Center and the extensive training programs on psychological first aid and trauma support address these goals and illustrate MASHAV's achievements in this crucial sector.

SDG 4: Quality Education.

Target 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

Target 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

MASHAV supports these targets through training courses on emergency education, infrastructure planning, special education for children with trauma, the donation of 600 tablet devices for refugee education and tailor-made training for educators in Ukraine, including for heads of the regional educational councils and their leaders.

SDG 16: Peace, Justice and Strong Institutions.

Target 16.1: Significantly reduce all forms of violence and related death rates everywhere.

MASHAV's overall approach contributes to reducing all forms of violence, by addressing the psychological impacts of conflict and building resilience among the affected population. MASHAV offers yearly courses entitled Combating Gender-Based Violence, as well as special workshops for Ukrainian therapists working with the victims of sexual violence during the war.

SDG 17: Partnerships for the Goals.

Target 17.9: Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation.

Through partnerships with Israeli ministries, Ukrainian institutions, Israeli NGOs, and international organizations, MASHAV continues to play a vital role in addressing the ongoing challenges posed by the war, offering expertise, resources, and hope to those in need.

2.2 Centers of Excellence (CoE) in Guatemala

The Center for Agricultural Modernization and Training in Guatemala was built in 2022 as part of a collaboration between MASHAV, the Guatemalan Ministry of Agriculture and Livestock, and the Escuela Nacional Central de Agricultura (ENCA). It serves as a national hub for knowledge sharing, and for equipping farmers, agronomists, and agricultural students with efficient, affordable farming techniques suited to their unique needs.
Using Israeli agricultural technology and expertise, the center offers smallholder and mid-sized farmers practical training that increases productivity, improves crop quality, and provides access to markets year-round.

2.2.1 Purpose and activity

Located at ENCA in Villa Nueva, the Center for Agricultural Modernization offers a structured training program that combines theoretical knowledge with hands-on field experience. The center has already trained over 1,500 farmers, agronomists, and technicians, providing them with modern agricultural tools and techniques to enhance their livelihoods.

Key activities include:

- Practical training sessions focused on irrigation, protected cultivation, and resource-efficient farming.
- Workshops for professionals in the agricultural sector, including agronomists, government officials, and cooperative representatives.
- On-site and off-site training, ensuring that knowledge reaches farmers in both urban and rural areas.

Picture: Mashav, The Center for Agricultural Modernization and Training, Guatemala

2.2.3 Introducing Israeli innovations

The center features a demo farm designed to introduce Israeli agricultural innovations adapted to local conditions. This is an important tool for improving farmers' practical training by providing hands-on experience with innovative agricultural techniques and sustainable practices. This initiative not only enhances local farmers' skills but also boosts agricultural productivity and food security in the region. Among others, it includes:

- Five greenhouse structures featuring irrigation and cultivation methods.
- An irrigation control room, optimizing water management and efficiency.
- A nursery that provides over 200,000 seedlings every 35 days at full capacity.
- Low-pressure irrigation systems offering affordable solutions for smallholders, and high-pressure systems demonstrating scalable irrigation technologies.

2.2.4 Positive impact

The Center for Agricultural Modernization and Training in Guatemala serves as a model for effective international cooperation in sustainable agriculture. By combining Israeli expertise with local knowledge and needs, it creates lasting impact and contributes significantly to Guatemala's agricultural resilience development and food security goals. This hands-on approach ensures that farmers can implement practical, cost-effective techniques without relying on expensive or inaccessible technologies.

SDG Alignment

SDG 2: Zero Hunger.

Target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous

peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

The center is training agricultural practitioners, aiming to double the agricultural productivity and incomes of small-scale food producers.

SDG 6: Clean Water and Sanitation.

Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

The introduction of efficient irrigation systems aligns with this target. The irrigation control room and various irrigation systems demonstrate water management techniques that are crucial for sustainable agriculture.

SDG 8: Decent Work and Economic Growth.

Target 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.

By empowering farmers to become more self-sufficient, resilient, and competitive, the center contributes to higher levels of economic productivity through diversification and innovation, thereby increasing farmers' yields.

SDG 9: Industry, Innovation and Infrastructure.

Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

The center's focus on introducing Israeli agricultural innovations adapted to local conditions supports better and more sustainable infrastructure and industries.

SDG 12: Responsible Consumption and Production.

Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.

Resource-efficient farming techniques help to achieve sustainable conservation and sustainable use of natural resources.

SDG 17: Partnerships for the Goals.

Target 17.9: Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation.

The collaboration between MASHAV, the Guatemalan Ministry of Agriculture and Livestock, and ENCA exemplifies joint work for implementing effective and targeted capacity-building in developing countries.

2.3 Trauma and emergency unit in Togo: A sustainable model for emergency care

This case study focuses on Togo, where a trauma and emergency unit was established in Atakpamé. The location was strategically chosen as it lies along a central transportation route connecting the Gulf of Guinea to the northern regions, an area with a high prevalence of road accidents.

2.3.1 The MASHAV model

MASHAV's model follows a structured and cost-effective approach, ensuring long-term sustainability of trauma units:

1. *Planning, construction, and equipment installation:* MASHAV oversaw the entire process, from finding an existing hospital with the ability to support a fully operational trauma unit, to developing infrastructure, installing medical systems, and supplying medical equipment.
2. *Local training and capacity building:* While the construction was underway, local teams – doctors, nurses and paramedics – received training on operating the unit.
3. *Follow-up training:* Upon completing the first year of operation, a follow-up training session was conducted to refine skills and address practical challenges.

Follow up conversations were carried out during the subsequent years, followed by a refresher training course provided by Israeli trauma and emergency care specialists in late 2024.

A key aspect of this model is the direct sourcing of medical equipment from Israeli suppliers, which ensures financial efficiency and high professional standards. Eliminating the overhead costs usually associated with third parties creates a highly cost-effective model.

Picture: Mashav, Togo Emergency Team

2.3.2 Implementation and local responsibility

MASHAV was responsible for executing the project, while the local administration facilitated logistics and bureaucracy, including securing a suitable location, setting up a team, and bringing medical equipment through customs.

The construction team on-site was primarily Israeli, with local workers assisting with basic tasks. Atakpamé's unit was built and fully functional within four weeks.

The unit was set up within an existing hospital to ensure access to complementary medical services such as laboratories, water lines, and electricity. The building allocated for the unit was demolished and entirely rebuilt to meet international standards. MASHAV's team also installed critical support systems, including oxygen, fire safety systems, and additional essential infrastructure. Throughout the construction process, local

personnel were trained on-site to oversee future maintenance and operations effectively.

2.3.3 Training and operational guidance

While construction was underway, a second team of three clinical instructors arrived to train the local medical staff on how to operate the facility and handle trauma cases effectively. The training emphasized practical experience to ensure medical professionals could adapt to real-life scenarios. 40 professionals participated in a structured training course, including:

- Physicians specializing in trauma and emergency medicine (when available).
- Nurses involved in emergency and trauma care.
- Technicians responsible for maintaining medical support systems.

2.3.4 Scaling and regional impact

Beyond serving Atakpamé, the project aimed to create a scalable model that could be replicated throughout Togo and other West African countries. The unit served as a training hub, an enabling platform for medical professionals from neighboring hospitals to receive advanced trauma training.

A year later, the project was assessed based on its ongoing functionality. Although the facility wasn't maintained at optimal standards, it was still operational and impactful.

The success of the Atakpamé unit led to collaboration with ECOWAS (Economic Community of West African States), bringing experts from multiple West African countries to observe and learn from the project's infrastructure and operational model. MASHAV sponsored regional representatives from various nations to participate in hands-on training and workshops.

2.3.5 The project's impact

The project introduced two key innovations in emergency and trauma care:

1. *Enhanced Trauma and Emergency Unit:* Traditional trauma units often function as temporary stabilization points before patient transfer. This unit was designed not just as a referral center but as an active treatment facility capable of addressing medical emergencies on-site.
2. *Mass Casualty Preparedness Training:* Training exceeded routine trauma care, preparing healthcare professionals to also manage mass casualty incidents (MCI). This additional course was provided not only for hospital staff, but also military personnel and other emergency response teams, ensuring a coordinated emergency response strategy.

These innovations demonstrate Israel's leadership in scalable, high-impact medical interventions, focusing on practical, cost-effective projects rather than large-scale and less trauma-focused initiatives, as seen in other aid models.

Over the years, MASHAV has built trauma and emergency care units in South Sudan, Chad, Guinea, Tanzania, and many other African countries. Most trauma units have proven to be highly effective, providing technologically and medically advanced emergency care in regions where such services were previously inadequate or nonexistent. Institutional obstacles have created operational challenges related to location, increasing the need for strict adherence to selection criteria to ensure long-term effectiveness.

By building local capacity, MASHAV continues to strengthen healthcare systems in developing countries. It improves emergency medical care by making lifesaving services available to thousands of patients in regions previously lacking such capabilities. Projects have contributed to different aspects:

1. *Enhanced local capacity:* Through comprehensive training programs, local medical staff have acquired advanced skills in trauma care and emergency response. Periodical refresher training courses continue to serve this goal.
2. *Strengthened healthcare systems:* By establishing these units, MASHAV has contributed to strengthening overall healthcare in partnering countries.
3. *Sustainable infrastructure development:* The units are designed for long-term sustainability, with locally manageable maintenance solutions and integration with existing hospital systems.
4. *Knowledge transfer:* The project enables sharing of Israeli expertise in emergency medicine with developing countries, improving overall healthcare standards. Future initiatives will expand on this success, bringing advanced trauma care to additional regions in need.

Israel’s expertise in trauma response and emergency medicine stems from its extensive experience in crisis management. Unlike other countries that focus on large-scale hospital infrastructure, Israel's model emphasizes compact yet highly effective projects that prioritize rapid response, hands-on training, and sustainability. By creating lean but highly functional trauma units, MASHAV provides a practical, replicable model that can be expanded across regions in need, ensuring lifesaving emergency care in previously underserved communities.

SDG Alignment

SDG 3: Good Health and Well-being.

Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

By providing advanced emergency care in regions where such services were previously inadequate or nonexistent, MASHAV is significantly improving healthcare in developing countries.

SDG 9: Industry, Innovation and Infrastructure.

Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

The introduction of innovative methodologies and advanced equipment, the careful selection of hospital sites, and the rebuilding of facilities to meet international standards, all contribute to this goal.

SDG 17: Partnerships for the Goals.

Target 17.9: Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation.

MASHAV's approach exemplifies the enhancing of international support for implementing effective and targeted capacity-building in developing countries. The collaboration between Israeli experts and local medical professionals demonstrates effective knowledge transfer and skill development.

What’s Next?

MASHAV continues to provide technical guidance and expertise, ensuring the ongoing success of the programs. As the Centers of Excellence model expands, it is inspiring similar initiatives across developing regions, strengthening the country’s capacity for modern and sustainable healthcare while cooperating with the local government to ensure full transition and future successful management by the authorities.

Mashav's mission will remain to increase global resilience in light of extreme social, political, and weather uncertainties. MASHAV plays a crucial role in enhancing global resilience by sharing its expertise and innovative solutions with countries facing diverse challenges. By offering tailored training programs and sustainable development models, MASHAV empowers communities to better prepare for and respond to emergencies and crises. Its commitment to both in-person and remote support ensures that vital knowledge and resources are accessible worldwide, fostering a more resilient global community.

Statistical Annex – Indicators for Sustainable Development Goals in Israel

PREFACE

This statistical report presents data on selected indicators showing the current state and trends with respect to measuring Israel's progress towards meeting the SDGs. The indicators in the report are based on available data in the Israeli national statistical office, the Central Bureau of Statistics (ICBS), and on available data existing in additional government agencies that are responsible for producing official statistics under the framework of the National Statistical System (NSS).

The ICBS serves as the national focal point for all processes connected to collecting and reporting data on SDG indicators. This also includes indicators that are not part of the official statistics produced by the ICBS and the NSS. Such indicators mainly refer to policy measures and legislation related to the SDGs.

Structure and content

ICBS data for this report are based on three main types of data sources:

- Surveys conducted on an ongoing basis by the ICBS. These include surveys such as the labor force survey, household expenditure survey, social survey, victimization survey and more.
- Administrative sources such as the population register, social security and tax authority files, administrative files of the health and education systems and others.
- Reports submitted by other government agencies responsible for implementing policy related to SDG goals and targets.

Data for the selected indicators in this report include presentation of the current state at the national level and wherever possible the trend of at least the past ten years as

well as international comparisons and any relevant disaggregation of the indicators (e.g., by sex, population group, age and more). The data presented in the report also include statistics and indicators that do not match precisely the international UN SDG indicator definition, but contain relevant data that can serve as proxies of information that help understand the state of the target and goal.

As of March 2025, data for 131 SDG indicators are available, of which 77 have already been reported through the coordination role of ICBS to different international custodian agencies. All data collection and publication are conducted in accordance with the Israeli Statistical Ordinance1. The Statistical Ordinance defines the role of the national statistician as responsible for all official statistics in Israel and, as such, responsible for all SDG indicators data reported by the ICBS or other members of the NSS.

This statistical annex also includes an analysis of the distance from achieving the targets in Israel. This analysis is based on OECD for measuring the distance from achieving the targets and up to date national statistics.

Statistics and Indicators

General background data

AREA AND LAND USE

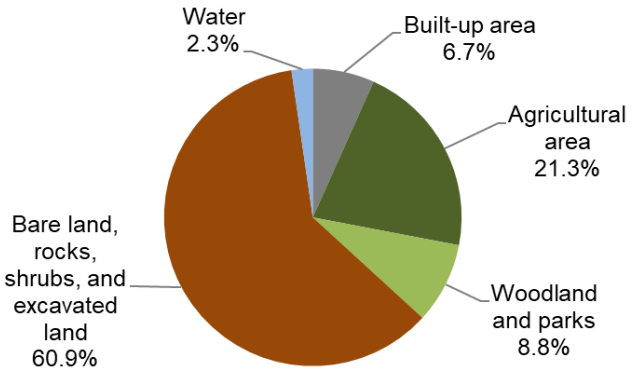
Total area, land area, lakes and districts (sq. km.)

Israel - Grand Total	**22,072**
Land Area - Total	21,643
Area of Lakes - Total	429
Jerusalem District	653
Northern District	4,473
Haifa District	866
Central District	1,294
Tel Aviv District	172

[1] https://www.cbs.gov.il/en/About/Documents/statistics_ordinance_e.pdf

Southern District	14,185

Land use 2021



POPULATION 2023[2]

Total Population (end of year) - 9,914,700

Jews and Others - 77.0%

Arabs - 20.8%

Foreigners - 2.2%

Annual population growth rate - 1.6%

Immigration to Israel

Immigrants since the establishment of the state (1948) - 3.46 million

Immigrants to Israel in 2023 - 46,033

Migration of Israelis abroad[3]

Departed from Israel - 55,300

Returned to Israel - 27,800

Households and families

Private households - 2,920,300

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[2] The population estimates for 2023 are preliminary estimates, based on the results of the 2022 Census.

[3] The year in which the migrants were determined to be long-term departures or returnees, which is 365 days from the determining date of departure or return.

Average number of persons per household - 3.19
Nuclear families - 2,297,400

Live births and fertility

Live newborns - 178,724
Total fertility rate, average number of children per woman - 2.85

Population density per sq. km. by district

District	1990	1995	2008	2017	2023
GRAND TOTAL	220.4	247.4	323.1	387.4	434.8
Jerusalem District	922.4	1,035.60	1,384.60	1,698.10	1,988.20
Northern District	178.9	211.4	277.7	318.7	351
Haifa District	768.4	860.9	1,025.70	1,170.80	1,326.40
Central District	830.7	953.2	1,368.20	1,667.30	1,840.20
Tel Aviv District	6,439.40	6,678.60	7,318.50	8,176.80	8,875.20
Southern District	40.7	53	75.2	89.7	104.7

Projection of population

According to the projection for the years 2015-2065, the population in Israel is expected to reach 10 million residents by the year 2024 (78.8% Jews and others and 21.2% Arabs). By the year 2065, the population is expected to reach 20 million (80.7% Jews and others and 19.3% Arabs).

Local authorities and characterization and classification of geographical units by the socio-economic level of the population

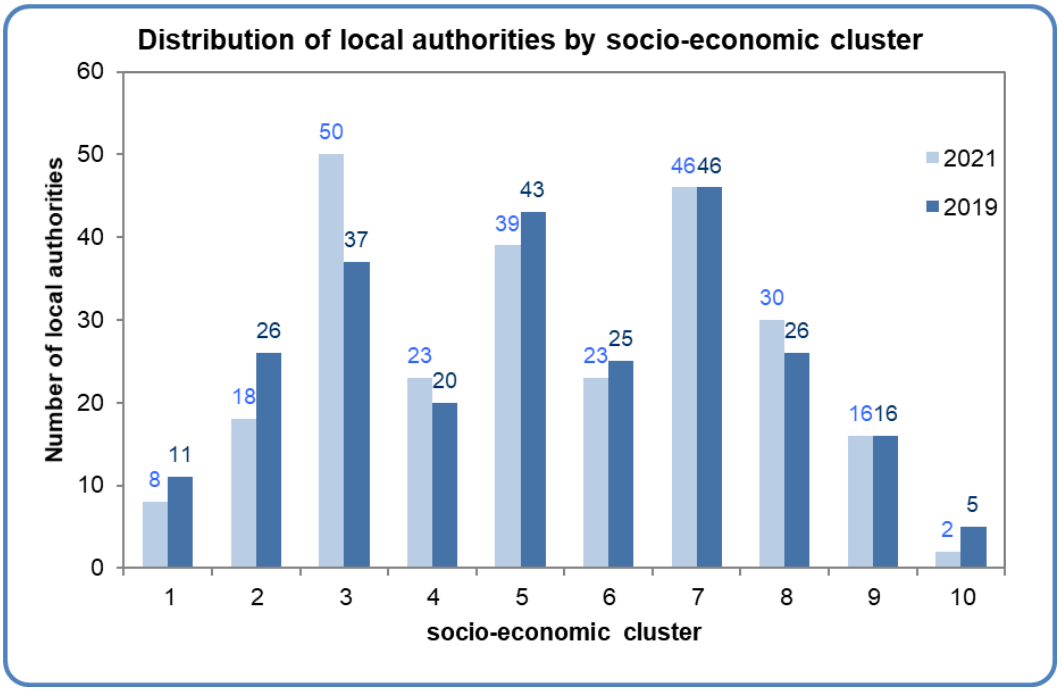
Local authorities in Israel administer the local affairs of a locality or group of localities. They are divided according to their municipal status into municipalities (cities), local councils, and regional councils (a regional council includes several forms of localities, such as moshavim, kibbutzim, and rural localities).
As of 2022, there are 256 local authorities in Israel (not including 2 industrial local authorities). 74.6% of the population resided in municipalities (cities), 14.3% of the population in local councils, 10.3% of the population in regional councils and 0.7% of the population in localities with no municipal status

The concept of socio-economic level of the population of a geographical unit reflects a combination of basic characteristics of a specific geographical unit investigated (for example, the population of a local authority).

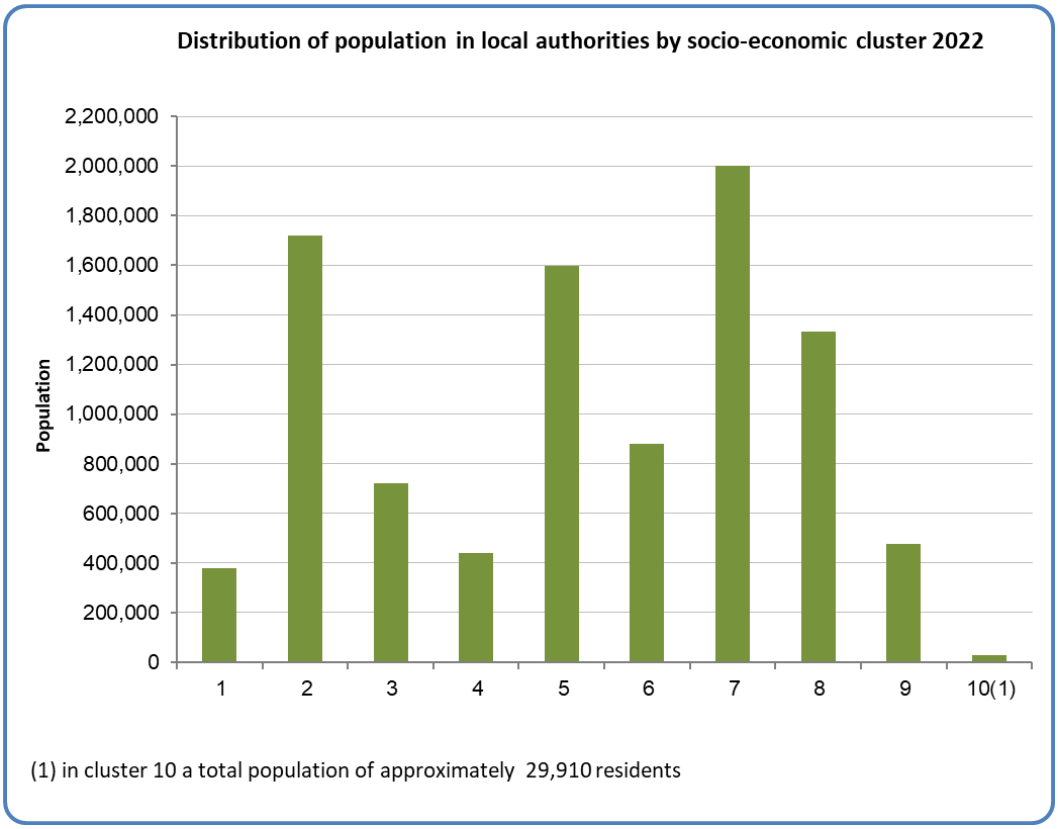
The central aspects that comprise the socio-economic level of residents of a geographical unit are:

- Financial resources of the residents (from work, benefits, etc.)
- Housing – density, quality, and other components of this aspect
- Home appliances, e.g., air conditioner, dishwasher, personal computer
- Motorization level – quantitative and qualitative
- Education
- Employment and unemployment characteristics
- Various types of socio-economic distress
- Demographic characteristics

The ICBS produces socio-economic indices based on these characteristics. The socio-economic index for local authorities characterizes each local authority by the socio-economic level of the population consisting of its residents relative to the socio-economic level of the populations in all other local authorities.
Based on the socio-economic index, all local authorities were grouped into 10 clusters, whereby cluster 1 represents localities of lowest socio-economic level and cluster 10 represents localities of highest socio-economic level.



Distribution of population in local authorities by socio-economic cluster 2021



Measuring the distance from achieving SDG goals in Israel 2021-2023

Based on the list of SDG targets and the indicators, the Organisation for Economic Co-operation and Development (OECD) defined 183 indicators relevant to monitoring the implementation of the goals by the member countries of the organization.

In the OECD's analysis for 2022,[4] some of the indicators were broken down, so that each of them consists of several data series.[5] The indicators consist of 537 data series in total. Out of this list, for 145 indicators – consisting of 360 data series – a value was defined for achieving the target in measuring the distances for Israel.

[4] See publication: OECD (2022). *The Short and Winding Road to 2030: Measuring Distance to the SDG Targets*.

[5] Latin letters are used to mark the data series for each indicator.

Of the indicators with data available for Israel, 103 indicators – consisting of 219 data series – were included in the distance analysis to achieving the defined targets. The list of targets and indicators are presented in Tables 1 and 2.

Out of the 219 indicators[6] included in the distance analysis, Israel is close to achieving or has already achieved the targets of 86 indicators (39%). Despite this, Israel does not meet the targets of 133 indicators comprising 61% of the indicators included in the analysis. However, 60% of the indicators for which the target has not been achieved have already passed the 50% threshold for the target to be achieved, and in most cases much higher than that.

Indicators for Which the Target Has Been Achieved Or Is Close to Being Achieved

• Good health is particularly notable as 15 indicators have been achieved or are close to being achieved (Goal 3).

• The proportion of the population living below the international poverty line (Goal 1).

• Severe food insecurity (Goal 2).

• Quality education, which includes indicators in the field of socio-economic equality, in the framework of indicators of education, as well as indicators in the field of schools that provide basic infrastructure (Goal 4).

• Gender equality: the proportion of women and girls who were exposed to violence by their partner (Goal 5).

• Basic drinking water and the efficient treatment of water and effluents for which indicators are substantially higher than the target value to be achieved (Goal 6).

• The proportion of the population with access to electricity (Goal 7).

• Average hourly wage of employees (Goal 8).

[6] Henceforth, the data series will be referred to as indicators because each data series corresponds to a main indicator which functions as an independent indicator in itself (for details see Explanations).

• Expenditure on research and development as a proportion of the GDP (gross domestic product) (Goal 9).

• Policy indicators:[7] the execution of a national action plan for responsible consumption and production (Goal 12).

• Legislation and regulation to prevent invasive species (biodiversity conservation – Goal 15).

• Peaceful societies: the number of victims of targeted killing per 100,000 persons; persons aged 20 and over who were injured by violence; the proportion of the population by sex that was a victim of robbery in the previous 12 months; as well as a policy indicator on public access to information and freedom of information (Goal 16).

• Policy indicators that aim to achieve the goals through cooperation: statistical legislation that complies with the basic principles of official statistics, a national statistical plan that is fully funded and implemented by the source of the funding; the proportion of countries that conducted at least one population census in the last 10 years, and achieved the registration of 90% of the births and the registration of 75% of the deaths (Goal 17).

Indicators for Which the Target Has Not Been Achieved

• Poverty rate according to the national poverty line (Goal 1).

• Health – the proportion of household expenditures on health out of income, and the proportion of smokers among persons aged 15 and over, as well as among persons aged 21 and over (Goal 3).

• Quality education: in the indicator of minimum proficiency in mathematics and reading among children, and in participation rates in educational and training frameworks among persons aged 15 to 24 (Goal 4).

• Gender equality and eradication of discrimination against women: the existence of legislative frameworks regulating gender equality and non-discrimination; the

[7] Policy indicators have a value of 0 or 1, meaning that there is a policy (1) and/or legislation and regulation on a certain issue, or it does not exist (0).

proportion of women serving in the national parliament (the Knesset); the gender gap in the proportion of women in managerial positions (Goal 5).

• Renewable energy from total electricity production and renewable energy from total energy consumption (Goal 7).

• Decent work and economic growth: the annual growth rate of real GDP per capita, the annual real growth rate of GDP per employed person, and the proportion of unemployed persons in the labour force (Goal 8).

• Emissions of carbon dioxide (CO_2) per unit of GDP and per unit of added value in manufacturing (Goal 9).

• Poverty rate – from the goal of reducing inequality (Goal 10).

• Food waste per capita (Goal 12).

• Greenhouse gas emissions per year (Goal 13).

• Conservation of marine and terrestrial ecosystems (Goals 14 and 15).

• Policy indicators for conservation of plant genetic resources for food and agriculture (Goal 15).

• Indicators for peaceful societies: the proportion of persons who feel safe walking alone in their area of residence, the number of victims of human trafficking per 100,000 persons, the rate of reporting robbery to the police, and detainees without conviction as a proportion of the total prison population (Goal 16).

• Foreign aid – net Official Development Assistance (ODA)[8] as a proportion of the gross national income (Goal 17).

• However, 60% of the indicators for which the target has not been achieved have already passed the 50% threshold for the target to be achieved, and in most cases a larger number.

The majority of them are in the following targets: issues of food security (Goal 2), good health (3), promoting education (4), eradicating violence and sexual exploitation against women and girls (5), industry, innovation and infrastructure (9), and reducing inequality (10).

[8] Foreign aid is the Official Development Assistance (ODA) that the State of Israel transfers every year to developing countries.

General Overview[9]

From the general overview of the distance from the achievement of measurable targets in Israel, it is evident that out of the 219 indicators analysed, the target has been fully achieved or is very close to being achieved in 86 indicators (39%),[10] while in 133 indicators the target has not been achieved.

Prominent goals are Goal 1 (No Poverty), for which 50% of the indicators have been achieved or are close to being achieved; Goal 3 (Good Health), 54%; and Goal 4 (Quality Education), 48%.

For Goal 5 (Gender Equality), 10% of the indicators have been achieved or are close to being achieved; for Goal 6 (Clean Water and Sanitation), 60%; for Goal 8 (Decent Work and Economic Growth), 30% of the indicators have been achieved or are close to being achieved; and for Goal 13 (Climate Action), there is one indicator whose goal has not been achieved.

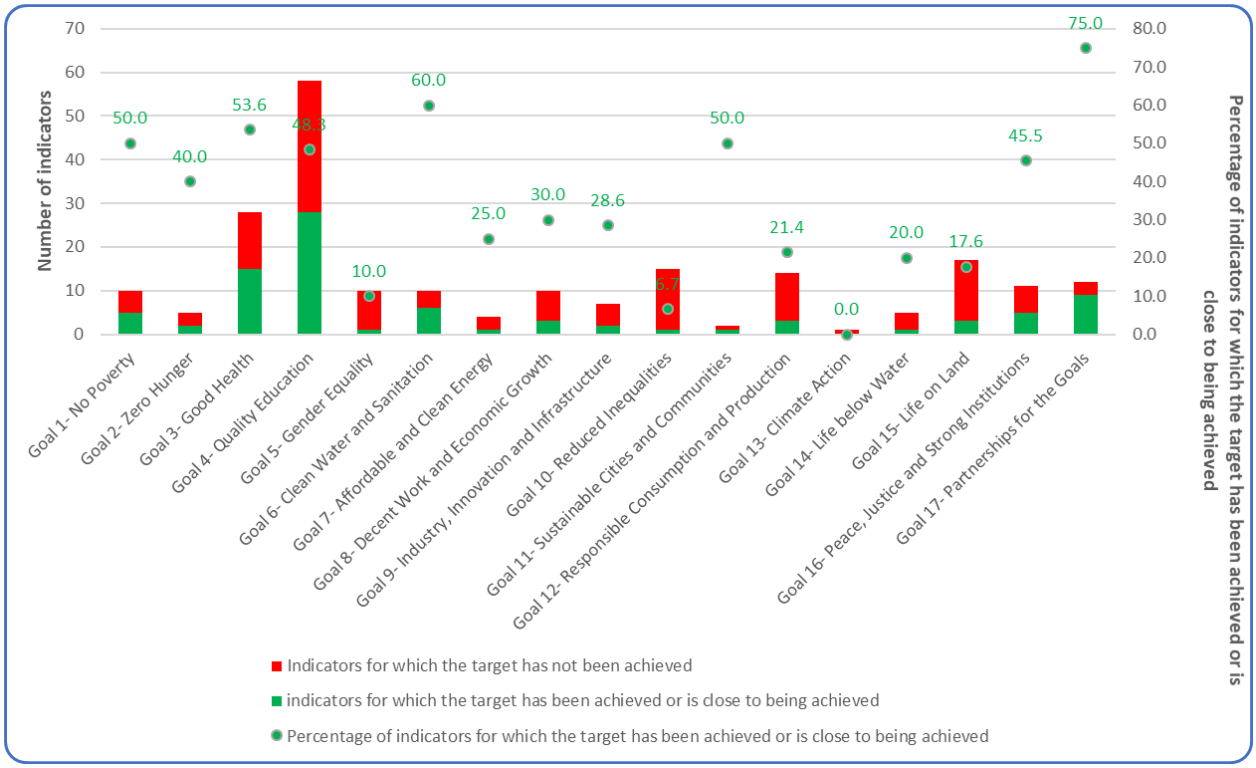
For Goal 14 (conservation of marine resources) and for Goal 15 (conservation of biodiversity), about 20% of the indicators have been achieved or are close to being achieved. For Goal 16 (Peace, Justice, and Strong Institutions), 45% of the indicators have been achieved or are close to being achieved; and for Goal 17 (cooperation to achieve the goals), 75% of the indicators.
However, out of the 133 indicators that were analysed, where the target has not been achieved, 80 indicators (60%) have already passed the 50% threshold for the target to be achieved, and in most cases much higher than the 50% threshold.

The detailed targets and indicators and the distance from the targets to be achieved are detailed below.

[9] The OECD has readjusted the indicators and targets set by the United Nations to ensure their relevance for the developed countries that are members of the organization. Therefore, both the indicators and their definitions, as well as the targets to achieve them may differ from those originally defined by the United Nations.

[10] Indicators for which the targets are close to being achieved have distances smaller than 0.01 from the target, which is 1 (see Footnote 11).

Diagram 1 – SDG Indicators – General Overview – the Percentage of Indicators for Which the Target Has Been Achieved Or Is Close to Being Achieved According to the Primary Goals, 2021–2023



The OECD customarily grouped the 17 goals for sustainable development into five broad themes (the "5Ps"): People, Prosperity, Planet, and Peace and Partnerships. Due to the extensive amount of information and for the convenience of presentation, this Grouping has been adopted here as well. For details on the distribution of the goals (see Methodology – The Measurement in the OECD).

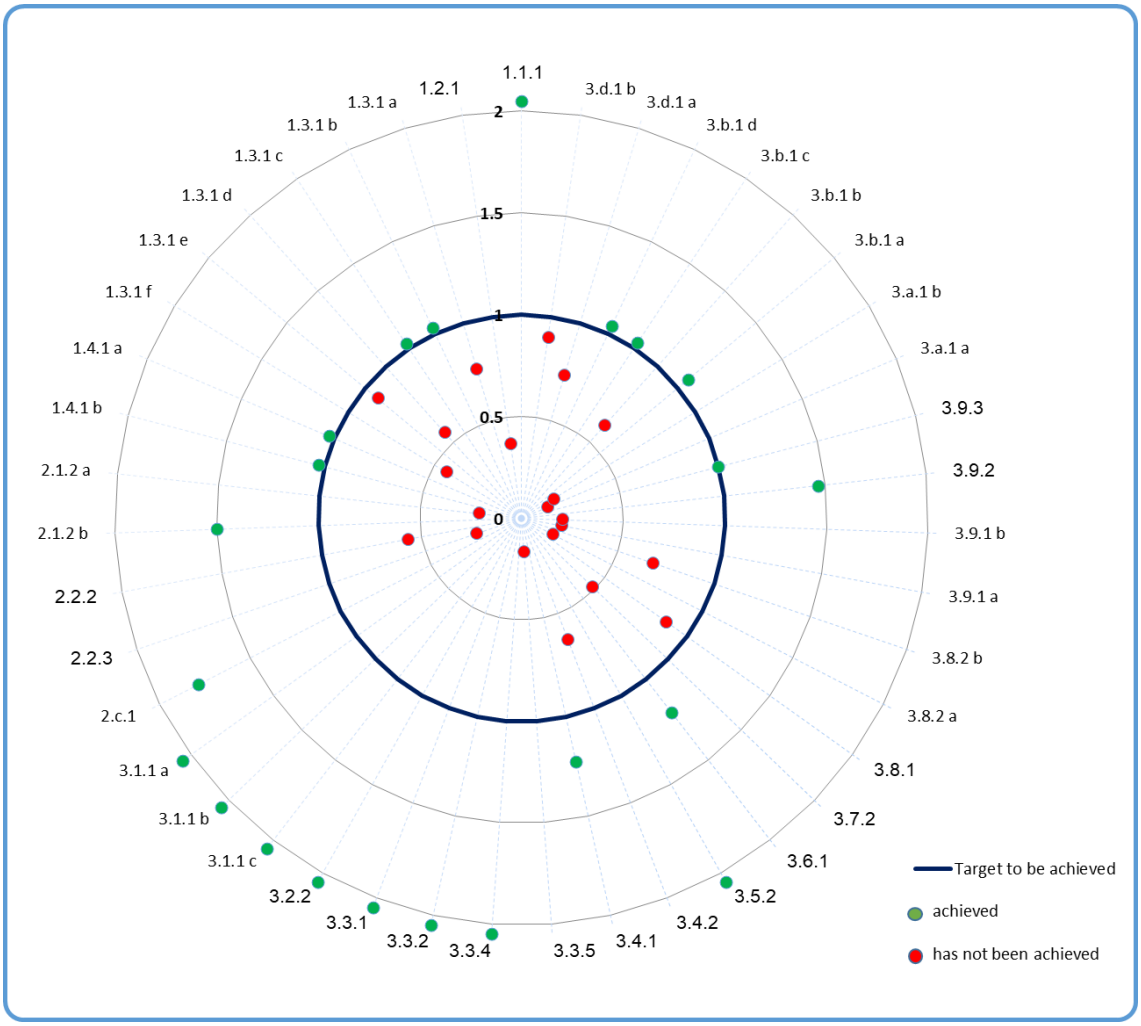
People

Includes: No Poverty (Goal 1); Zero Hunger (Goal 2); Good Health and Well-Being (Goal 3); Quality Education (Goal 4); Gender Equality (Goal 5)

Diagram 2a (Goals 1–3) and Diagram 2b (Goals 4–5) present a general overview of the distance from achieving these goals.

The analysis of the findings shows that out of the 43 indicators shown in Diagram 2a, the target has been achieved in 22 indicators, whereas in 21 indicators the target has not been achieved. Of Goals 1–3, more than half of the targets of the indicators were fully achieved. The value of some of the indicators for which the target has been achieved was considerably higher than the value of the target to be achieved (more than twice the target). These indicators appear outside the borders of Diagram 2a (for details of the exact distances, see Diagram 3a).

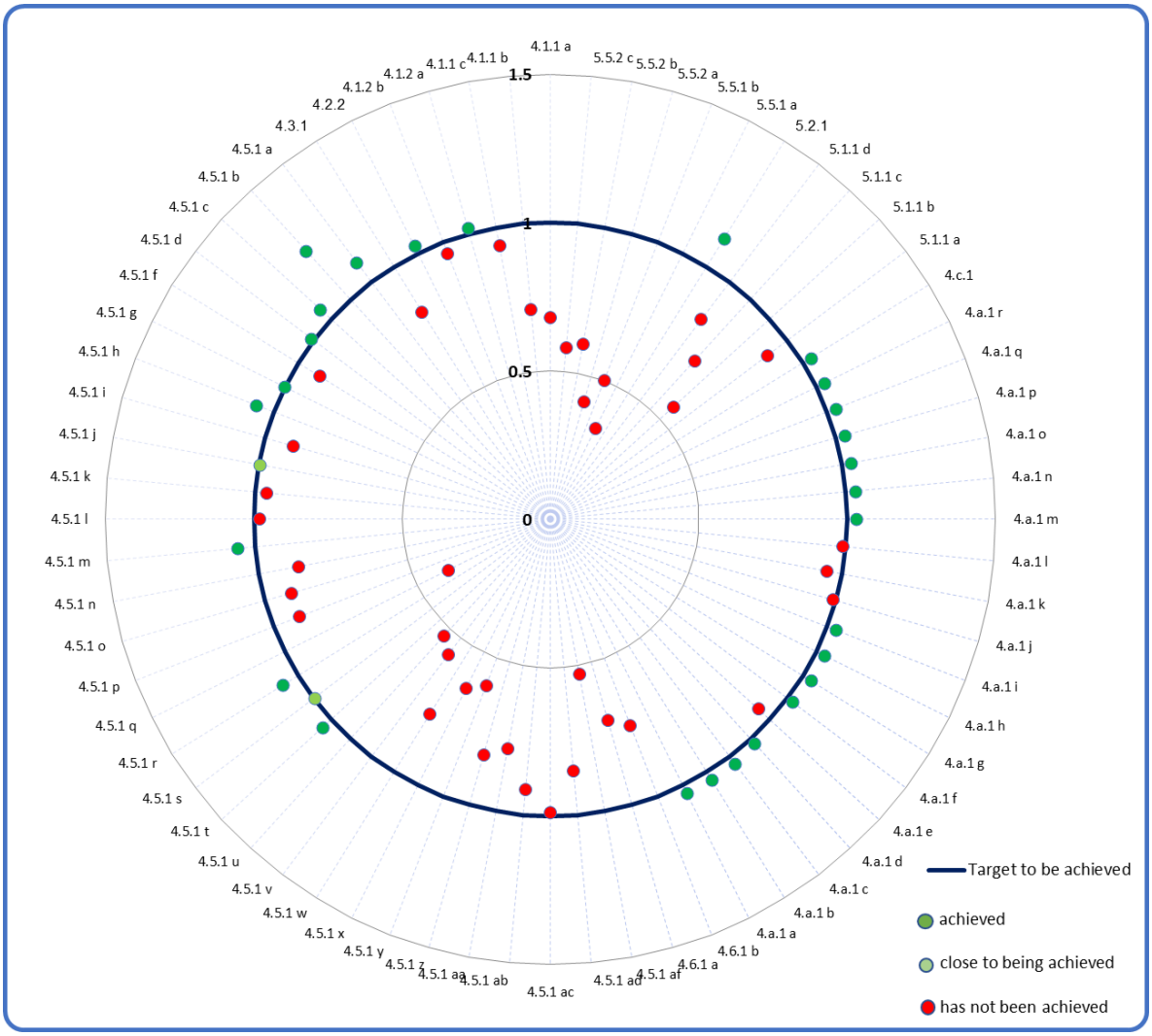
Diagram 2a – SDG Indicators on the Theme of People – Israel's Distance From Achieving SDG Targets, Goals 1–3, 2021–2023



Of the 68 indicators shown in Diagram 2b, for 29 indicators the target has been achieved or is very close to being achieved,[11] and for 39 indicators the target has not been achieved. That is, in the Goals Quality Education and Gender Equality, 43% of the targets of the indicators were achieved or were very close to being achieved. Most of the indicators that appear in the diagram belong to Goal 4 – Quality Education (for details of the exact distances, see Diagram 3b).

[11] Indicators for which the targets are close to being achieved have distances smaller than 0.01 from the target, which is 1 (the normalized value is between 0.99 and 1), usually these are indicators for which the absolute target value to aim for is 0. For example: for indicator 8.8.1.a – fatal occupational injuries among workers (per 100,000 workers) in Israel, the value is 1.39 cases per 100,000 persons in the population (1.39/100,000), and the target to aim for is 0. Therefore, the target is very close to being achieved.

Diagram 2b – SDG Indicators on the Theme of People – Israel's Distance From Achieving SDG Targets, Goals 4–5, 2021–2023



Indicators for Which the Target Has Been Achieved

Diagram 3a (Goals 1–3) and Diagram 3b (Goals 4–5) present the distances from achieving the targets of indicators for which the target has been achieved.

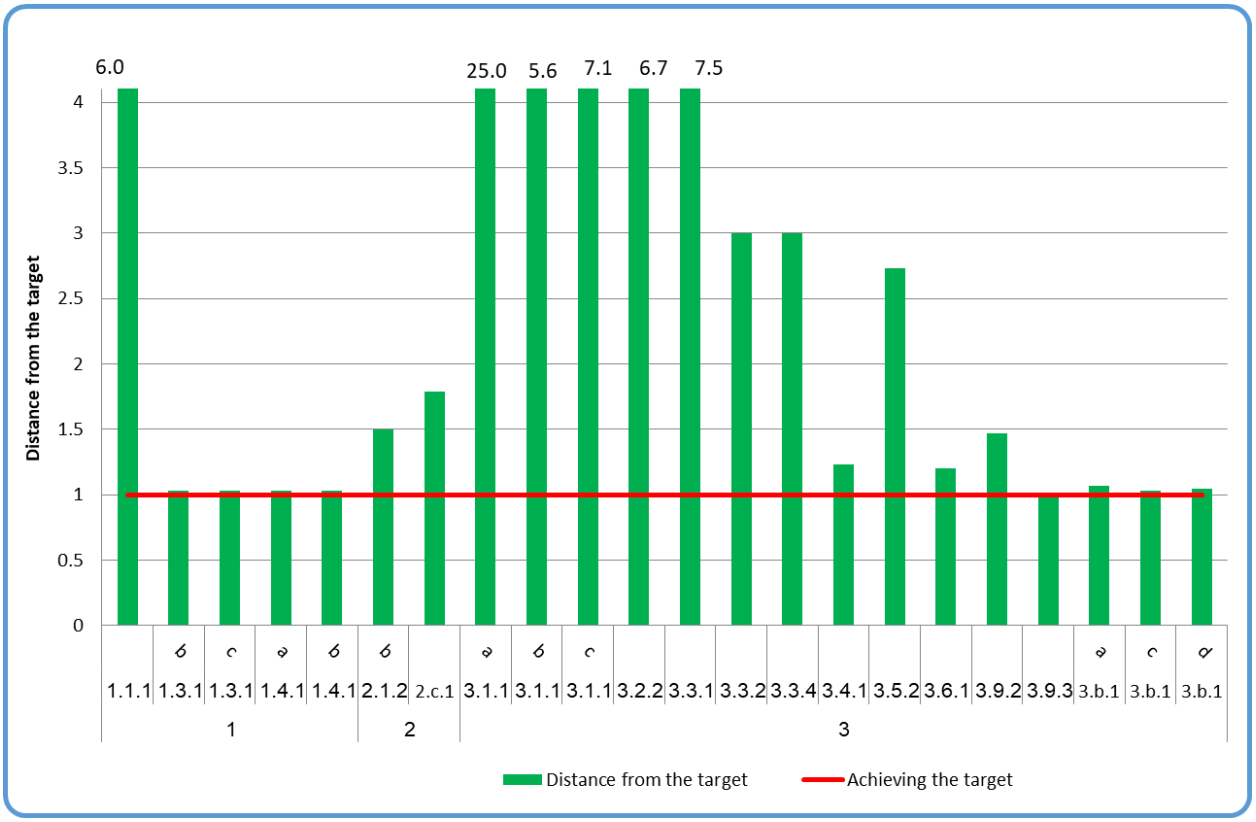
Israel is close to achieving or has achieved the targets of 51 of the 111 indicators included in the analysis of these indicators (46%). In most of them (49 indicators) the target has been fully achieved, and for two indicators the target was very close to being achieved.

Among the 49 indicators for which the target has been achieved, there are indicators for which the indicator is precisely equal to the target (that is, equal to 1). In some, it

is greater than the target (greater than 1), and for 9 of them the indicator value is twice as high as the target to be achieved.

Among these indicators, in Israel, good health (Goal 3) stands out, for which 15 indicators have been achieved or are close to being achieved (see Diagram 3a). Other notable indicators for which the target has been achieved include the proportion of the population below the international poverty line (Goal 1), and severe food insecurity (Goal 2).

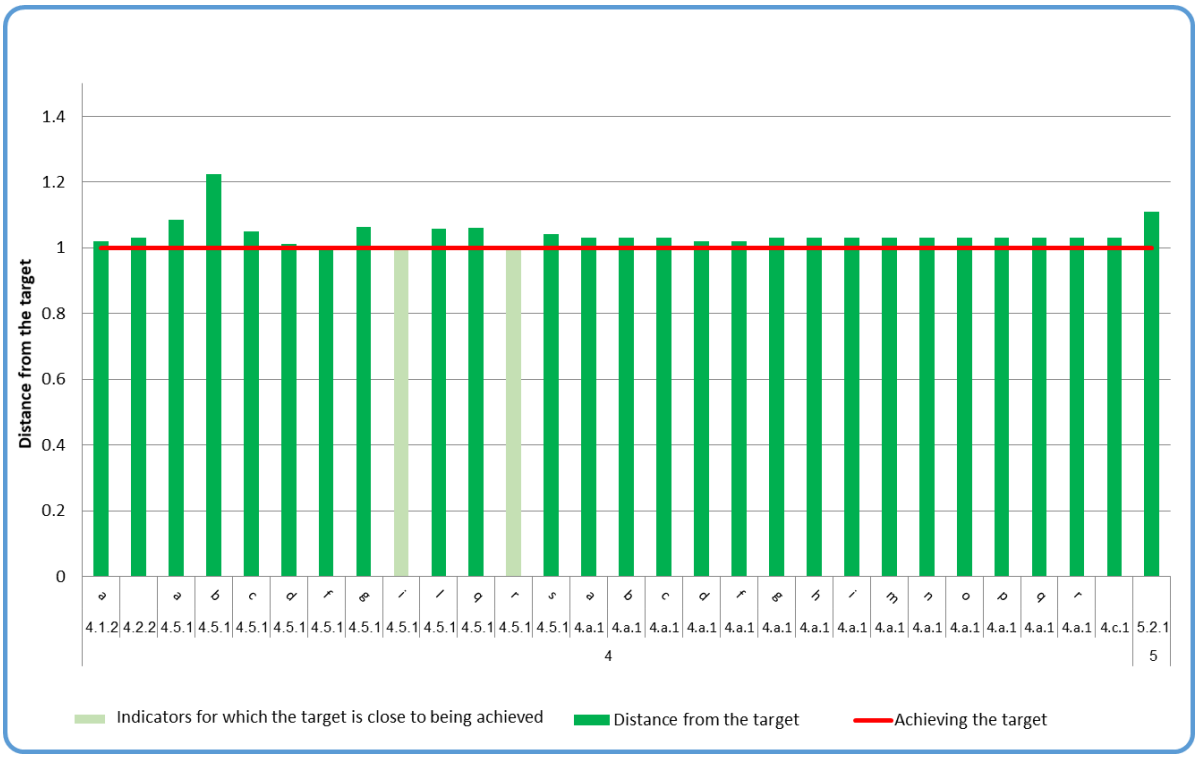
Diagram 3a – SDG Indicators on the Theme of People – Israel's Distance From Achieved SDG Targets, Goals 1–3, 2021–2023



Other notable indicators for which the target has been achieved or is close to being achieved include quality education (Goal 4), which includes indicators for the field of socio-economic equality for indicators of education, such as proficiency in literacy and mathematics, as well as indicators for the field of proportion of schools providing basic infrastructure, such as drinking water, adequate sanitary conditions, and access to the internet for educational purposes.

The goal in the field of gender equality (Goal 5) has also been achieved, regarding the proportion of women and girls who were exposed to physical, sexual, or psychological violence by their partner (see Diagram 3b).

Diagram 3b – SDG Indicators on the Theme of People – Israel's Distance From Achieved SDG Targets, and From the Targets That Are Close to Being Achieved, Goals 4–5, 2021–2023



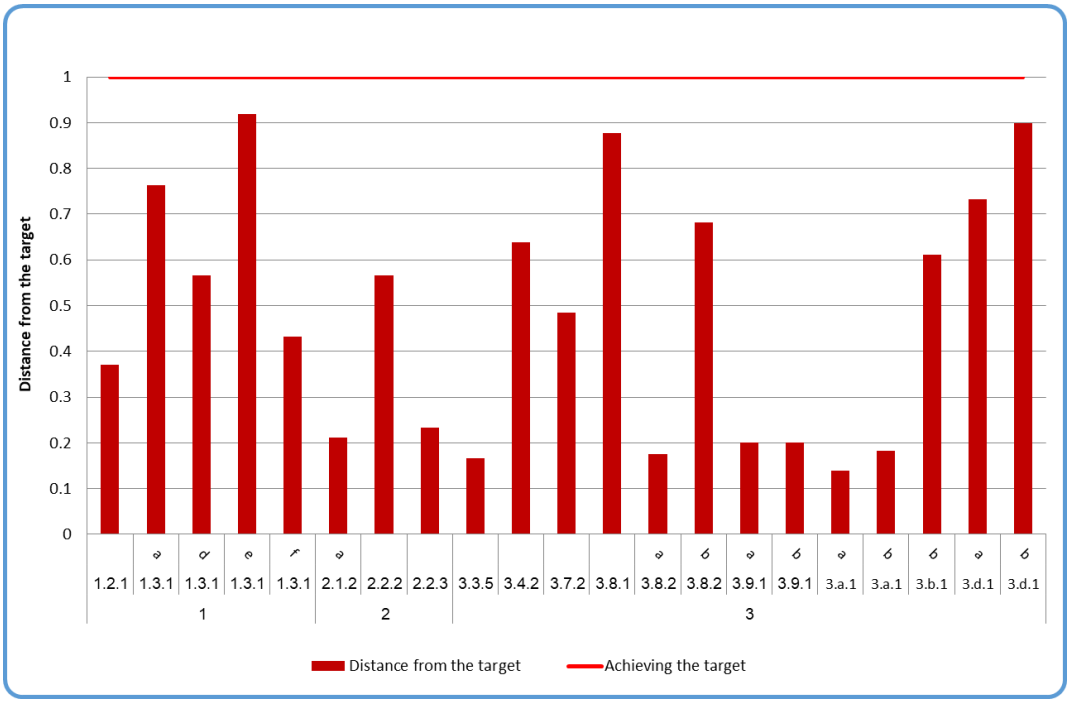
Indicators for Which the Target Has Not Been Achieved

Diagram 4a (Goals 1–3) and Diagram 4b (Goals 4–5) present the distances from achieving the target for the indicators where it has not been achieved.

Israel does not meet the targets of 60 indicators comprising 54% of the indicators included in the analysis of these targets. These include relative poverty rate according to the national poverty line (Goal 1), prevalence of moderate or severe food insecurity in the adult population (Goal 2), as well as indicators in the field of health (Goal 3),

such as the proportion of household expenditure on health out of income, the proportion of smokers among persons aged 15 and over, and that of persons aged 21 and over (Diagram 4a).

Diagram 4a – SDG Indicators on the Theme of People – Israel's Distance From Unachieved SDG Targets, Goals 1–3, 2021–2023

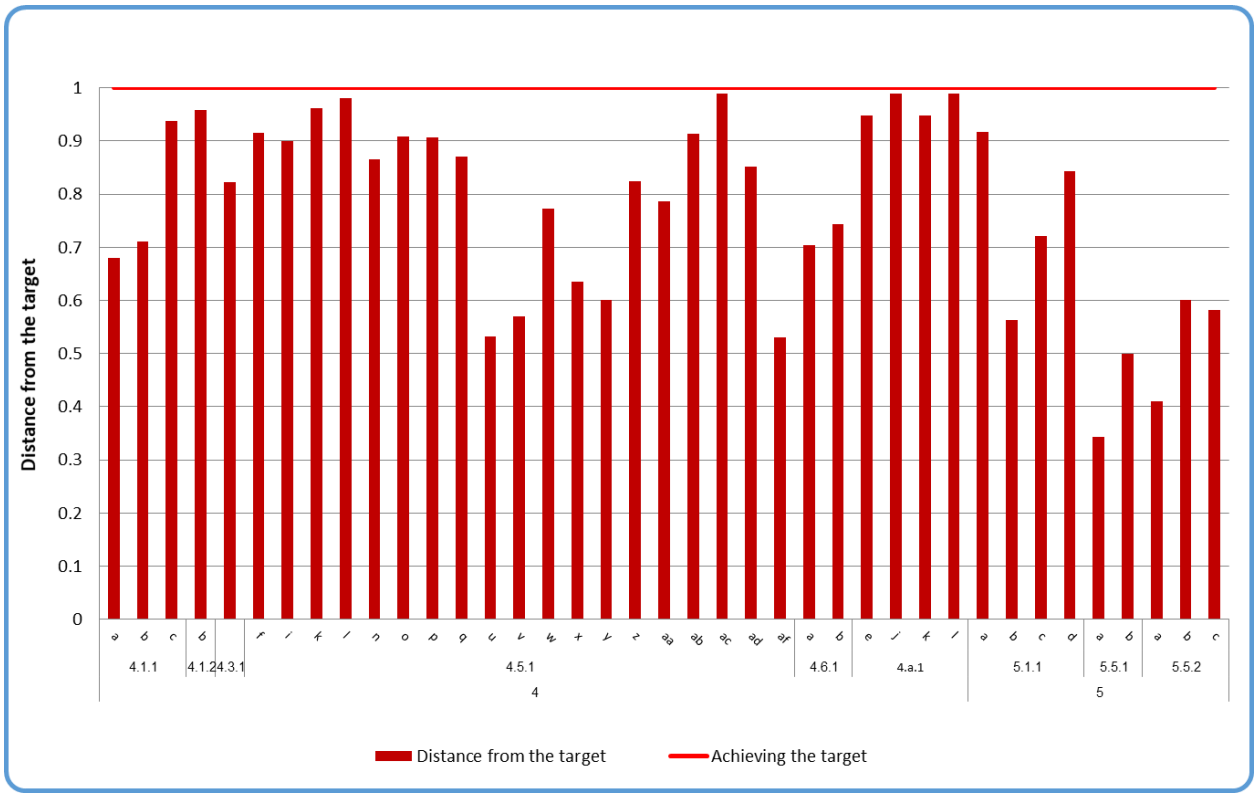


Also, the target has not been achieved in the following fields: quality education (Goal 4), the target has not been achieved for the indicator of minimum proficiency in mathematics and reading among children, for participation rates in educational and training frameworks among persons aged 15 to 24, as well as for indicators in the field of socio-economic equality in the framework of indicators of education.[12]
The target of eradicating discrimination against women, and gender equality, has not yet been achieved (Goal 5), as follows: the existence of legislative frameworks regulating gender equality and non-discrimination, the proportion of women serving

[12] Some of the indicators in this field were achieved (see in Diagram 3b all of the series belonging to indicator 4.5.1), but most of them were not achieved (see in Diagram 4b all of the series belonging to indicator 4.5.1).

in the national parliament (the Knesset), and the gender gap in the proportion of women in managerial positions.

Diagram 4b – SDG Indicators on the Theme of People – Israel's Distance From Unachieved SDG Targets, Goals 4–5, 2021–2023



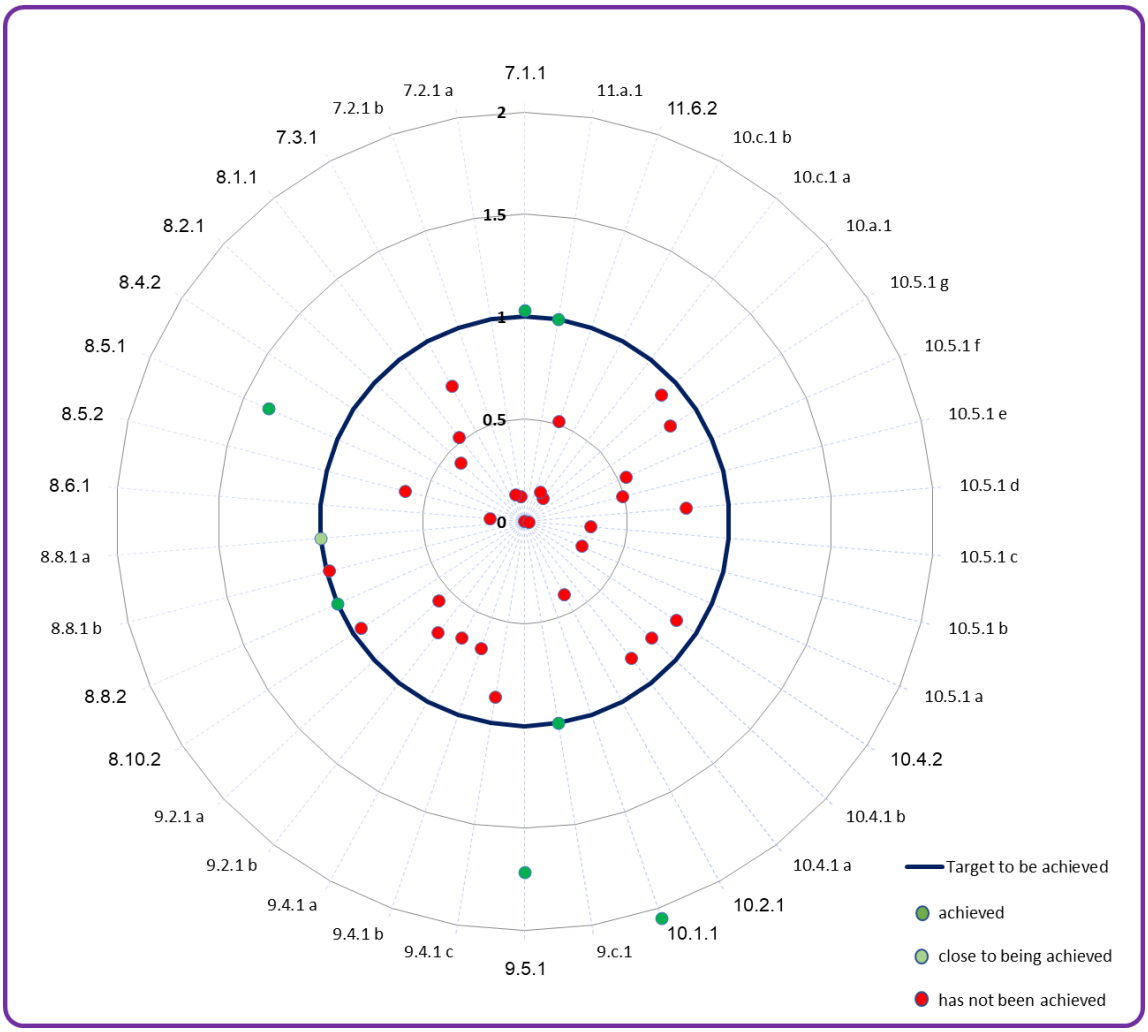
However, of the 60 indicators for which the target has not been achieved, that were included in the analysis of these targets, 47 indicators (78%) have already passed the 50% threshold for the target to be achieved, and in most cases a larger number, most of them in Good Health (3), Quality Education (4), and Gender Equality (5).

Prosperity

Includes: Affordable and Clean Energy (Goal 7); Decent Work and Economic Growth (Goal 8); Industry, Innovation and Infrastructure (Goal 9); Reduced Inequalities (Goal 10); Sustainable Cities and Communities (Goal 11)

Diagram 5 (Goals 7–11) presents a general overview of the distances from achieving these goals. The analysis of the findings shows that out of the 38 indicators tested, for 8 indicators the target has been achieved or is very close to being achieved (21%), and for 30 indicators the target has not been achieved (for details of the exact distances, see Diagrams 6 and 7).

Diagram 5 – SDG Indicators on the Theme of Prosperity – Israel's Distance From Achieving SDG Targets, Goals 7–11, 2021–2023



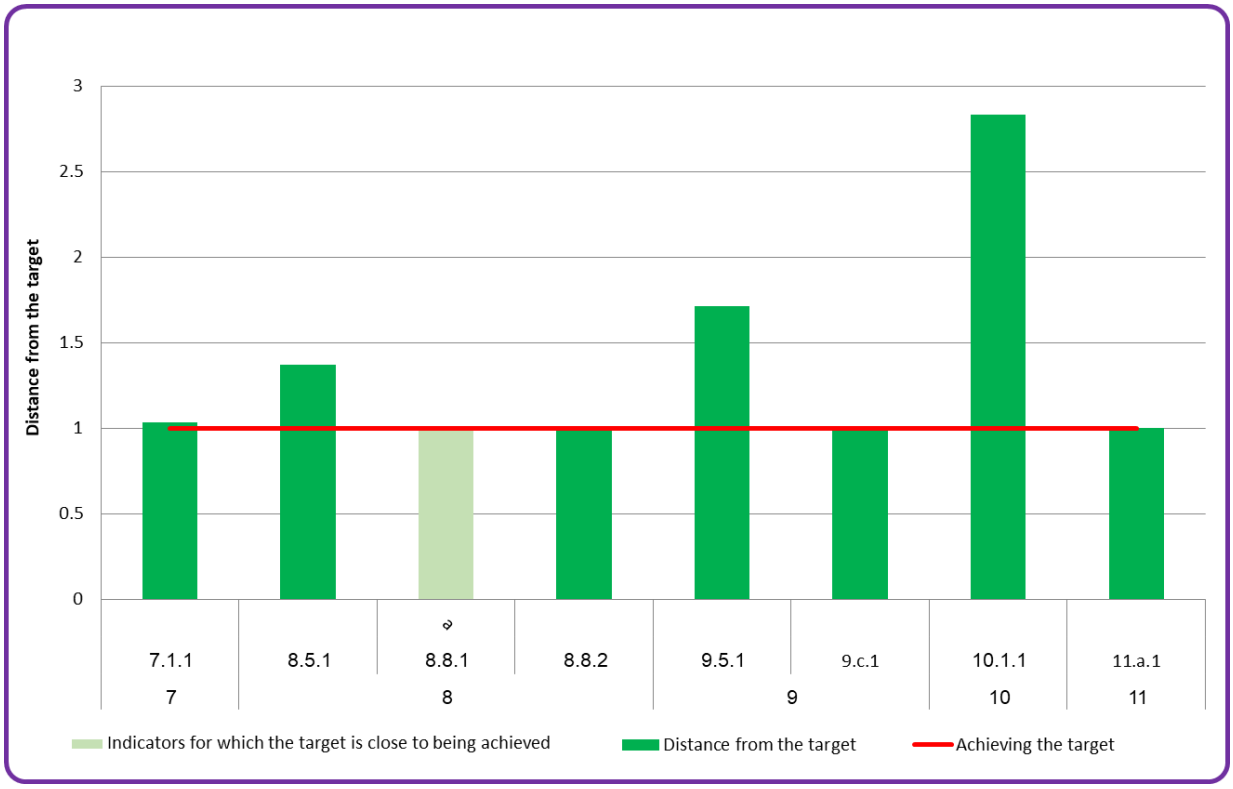
Indicators for Which the Target Has Been Achieved

Israel is close to achieving or has achieved the targets of 8 of the 38 indicators included in the analysis of these targets (21%). For most of them (7 indicators) the target has been fully achieved (and even exceeded), and for one indicator the target was very close to being achieved.

The 7 indicators for which the target has not been achieved include, among others: the proportion of the population with access to electricity (Goal 7), the average hourly wage of employees (Goal 8), expenditure on research and development as a proportion of GDP (Goal 9), and growth rates of household expenditures or income

(Goal 10).The target that has almost been achieved, is a part of fatal occupational injuries per 100,000 workers, by sex and migrant status (Goal 8).

Diagram 6 – SDG Indicators on the Theme of Prosperity – Israel's Distance From Achieved SDG Targets, and From Targets That Are Close to Being Achieved, Goals 7–11, 2021–2023

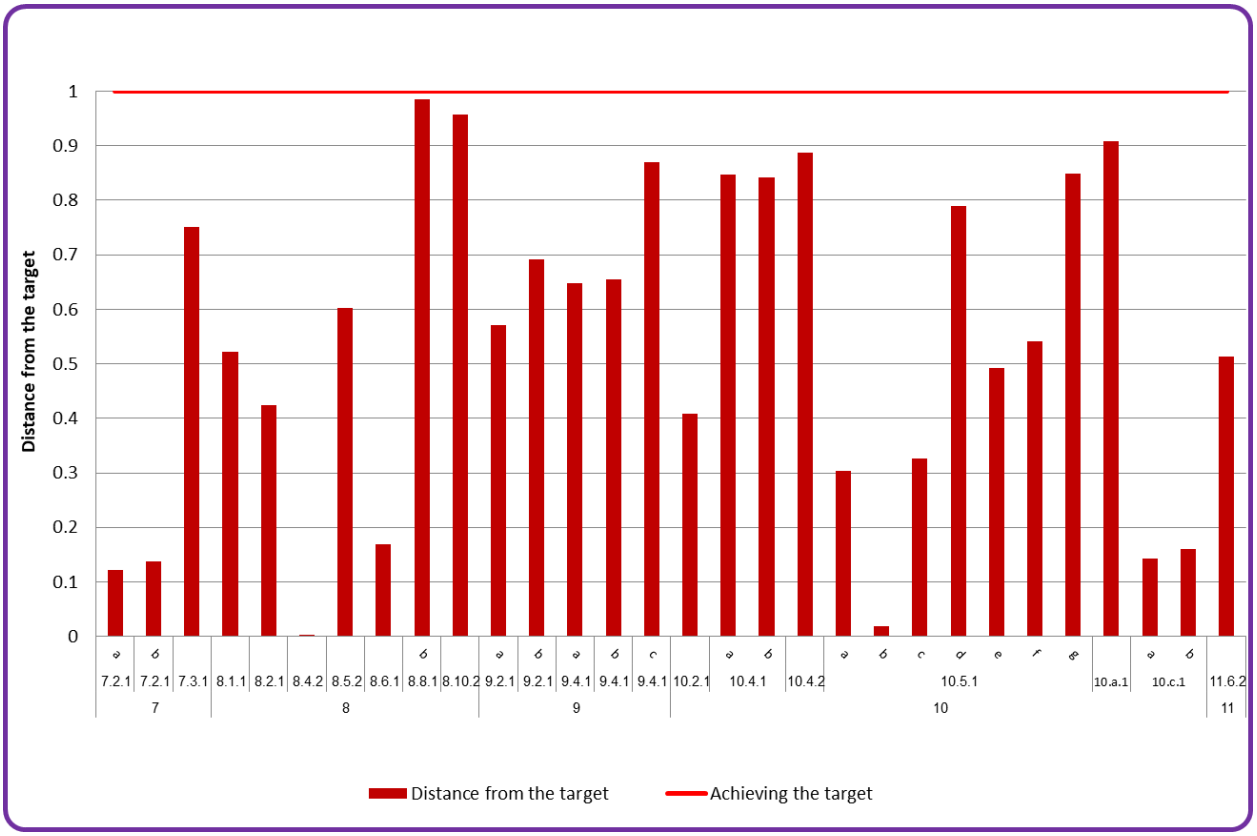


Indicators for Which the Target Has Not Been Achieved

Israel does not meet the targets of 30 indicators comprising 79% of the indicators included in the analysis of these targets (Diagram 7). These include renewable energy from total electricity production and renewable energy from total energy consumption (Goal 7); annual growth rate of real GDP per capita – average of 15 years; annual real growth rate of GDP per employed person – average of 15 years; and the proportion of unemployed persons in the labour force (Goal 8). Additionally, the target has not been achieved for carbon dioxide (CO_2) emissions per unit of GDP and per unit of added value in production (Goal 9) and for the indicators from the target of reducing inequality (Goal 10): poverty rate (persons living below 50% of the median

net income per standard person), and indicators from the field of financial stability. The target for average population exposure to fine particulate matter ($PM_{2.5}$) in cities has not been achieved (Goal 11 – Sustainable Cities and Communities).

Diagram 7 – SDG indicators on the Theme of Prosperity – Israel's Distance From Unachieved SDG Targets, Goals 7–11, 2021–2023

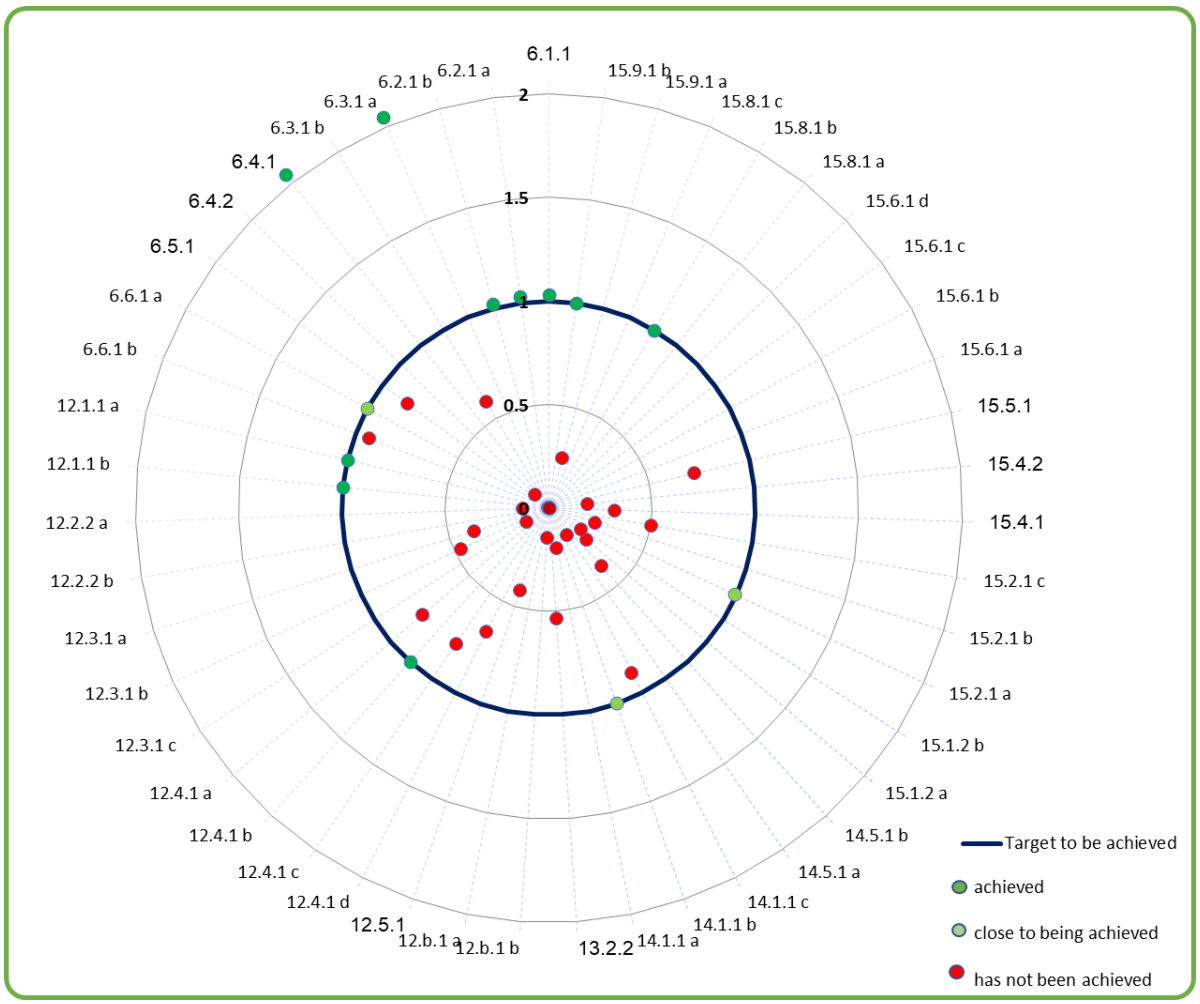


Planet

Includes: Improved Water and Sanitation (Goal 6); Sustainable Consumption and Production (Goal 12); Climate Change (Goal 13); Conservation of Marine Resources (Goal 14); Conservation of Biodiversity (Goal 15)

Diagram 8 (Goals 6, 12–15) presents the general overview of the distances from achieving these goals. The analysis of the findings shows that out of the 47 indicators tested, for 13 indicators the target has been achieved or is very close to being achieved (28%), and for 34 indicators the goal has not been achieved (for details of the exact distances, see Diagrams 9 and 10).

Diagram 8 – SDG Indicators on the Theme of Plant – Israel's Distance From Achieving SDG Targets, Goals 6, 12–15, 2021–2023



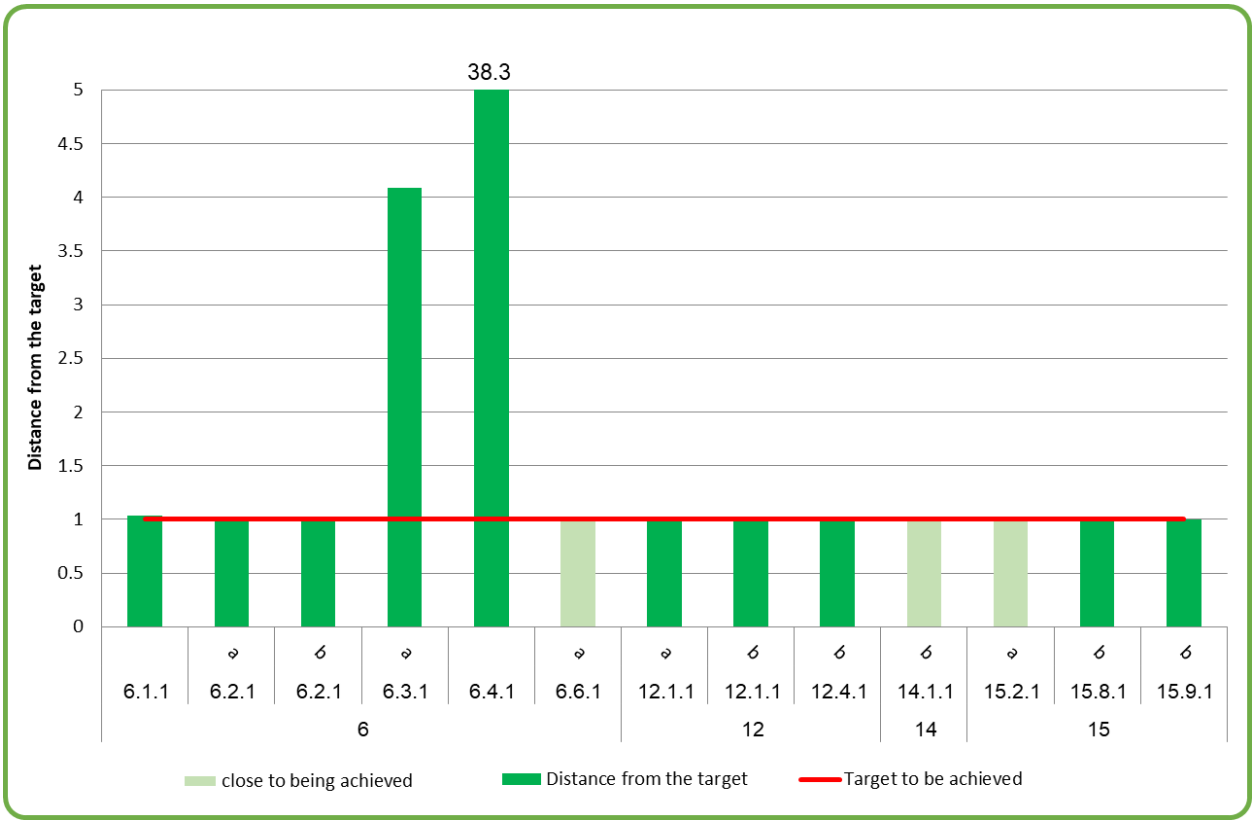
Indicators for Which the Target has Been Achieved

Israel is close to achieving or has achieved the targets of 13 of the 47 indicators included in the analysis of these targets (28%). For most of them (10 indicators) the target has been fully achieved (and even exceeded), and for three indicators the target was very close to being achieved.

The 10 indicators for which the target has been achieved include, among others, indicators from the field of improved drinking water and the efficient treatment of water and effluents (Goal 6), some of which are considerably higher than the target value to be achieved. The target has been achieved in policy indicators:[13] the existence of a national action plan for responsible consumption and production (Goal 12), and in the field of legislation and regulation to prevent invasive species (biodiversity conservation – Goal 15). The target of the indicator for the levels of chlorophyll concentration in the sea has almost been achieved (conservation of marine resources – Goal 14).

Diagram 9 – SDG Indicators on the Theme of Planet – Israel's Distance From Achieved Targets, and Targets That Are Close to Being Achieved, Goals 6, 12–15, 2021–2023

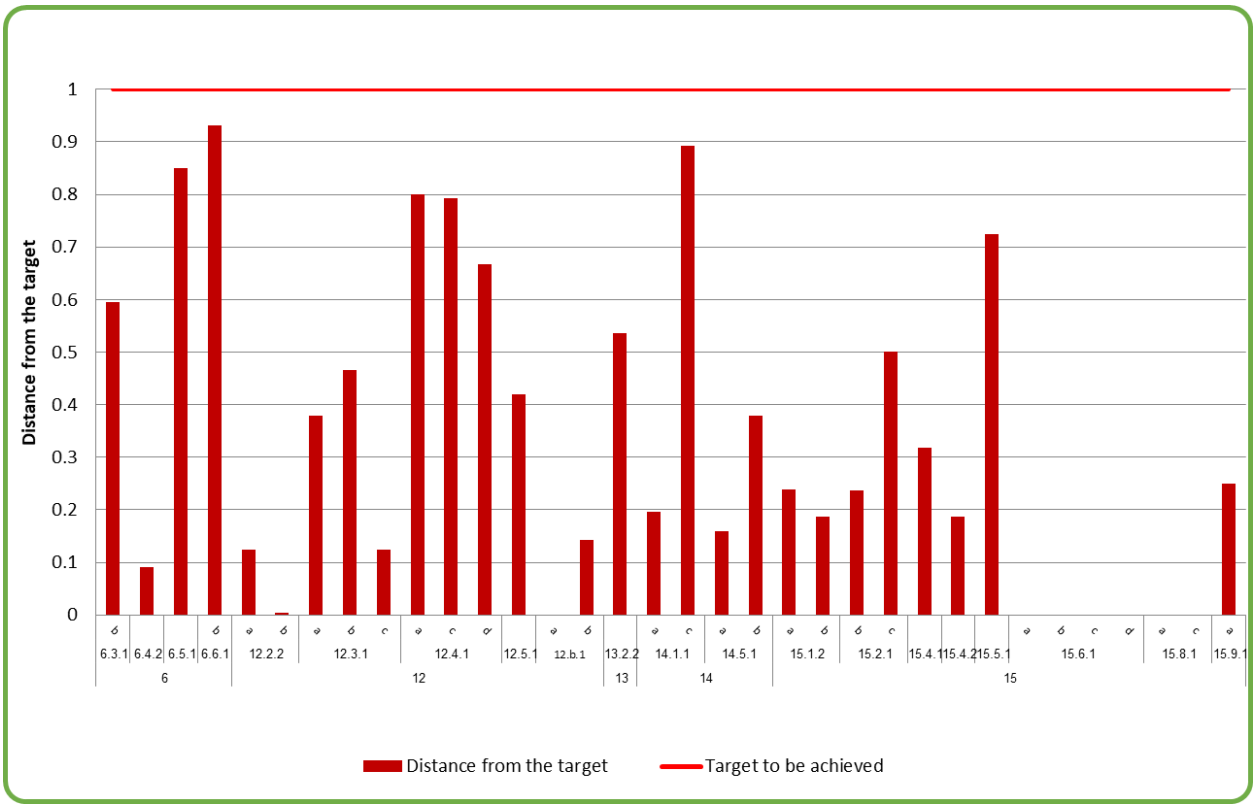
[13] Policy indicators have a value of 0 or 1, meaning that there is a policy (1) and/or legislation and regulation on a certain issue, or it does not exist (0).



Indicators for Which the Target Has Not Been Achieved

Israel has not achieved the targets of 34 indicators, which constitute 72% of the indicators included in the analysis of these targets (Diagram 10). These include water quality in lakes (Goal 6), local consumption per capita by type of raw material and food waste per capita (Goal 12), annual greenhouse gas emissions (goal 14), as well as the conservation of marine and terrestrial ecosystems (Goals 14 and 15). The target has not yet been achieved in policy indicators regarding the conservation of plant genetic resources for food and agriculture (Goal 15).

Diagram 10 – SDG Indicators on the Theme of Planet – Israel's Distance From Unachieved SDG Targets, Goals 6, 12–15, 2021–2023

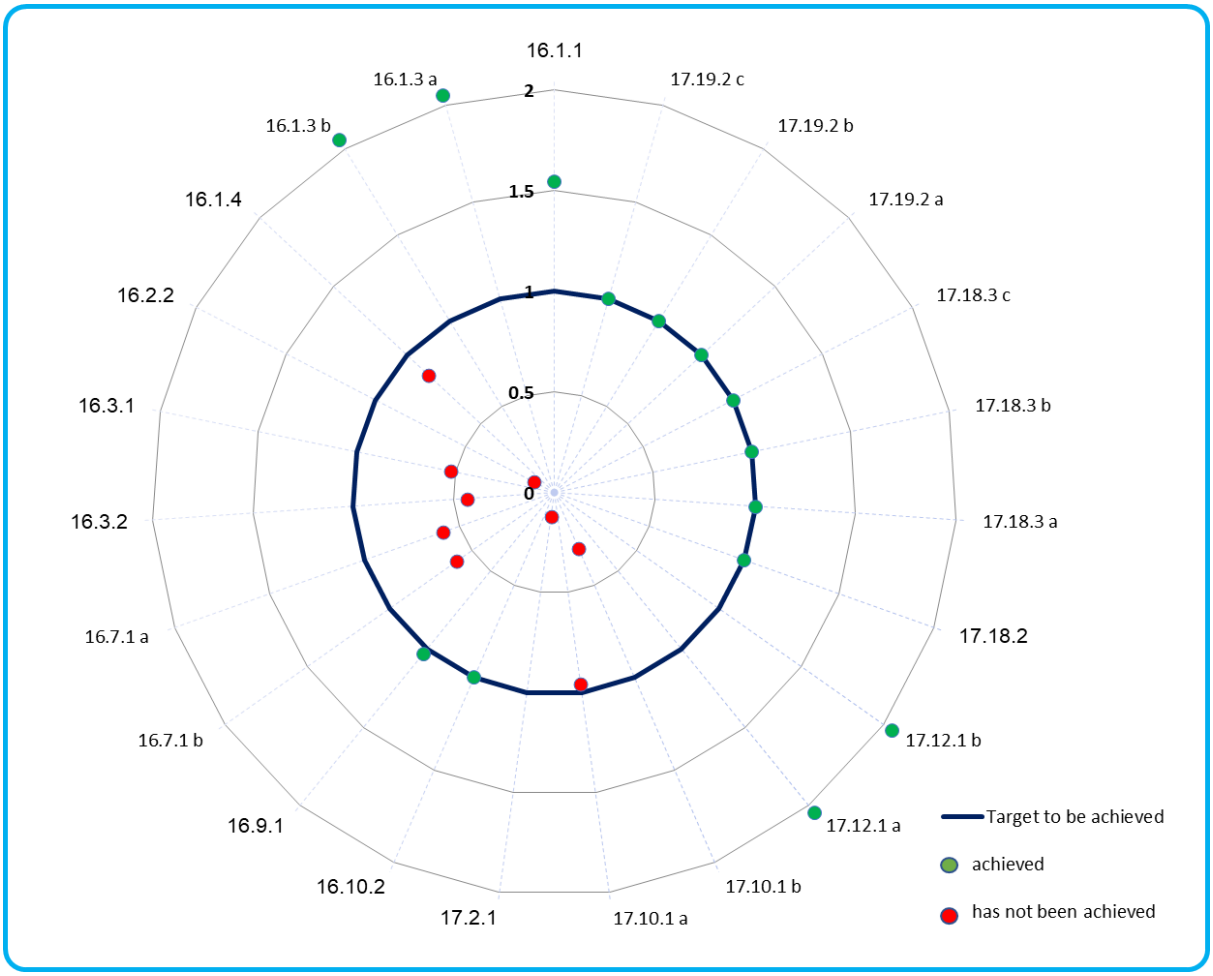


Peace and Prosperity

Includes: Peace, Justice and Strong Institutions (Goal 6); Partnerships for the Goals (Goal 17)

Diagram 11 (Goals 16–17) presents the general overview of the distances from achieving these goals. The analysis of the findings shows that out of the 23 indicators tested, for 14 indicators the target has been achieved (61%), and for 9 indicators the target has not been achieved (for details of the exact distances, see Diagrams 12 and 13).

Diagram 11 – SDG Indicators on the Theme of Peace and Partnership – Israel's Distance From Achieving SDG Targets, Goals 16–17, 2021–2023



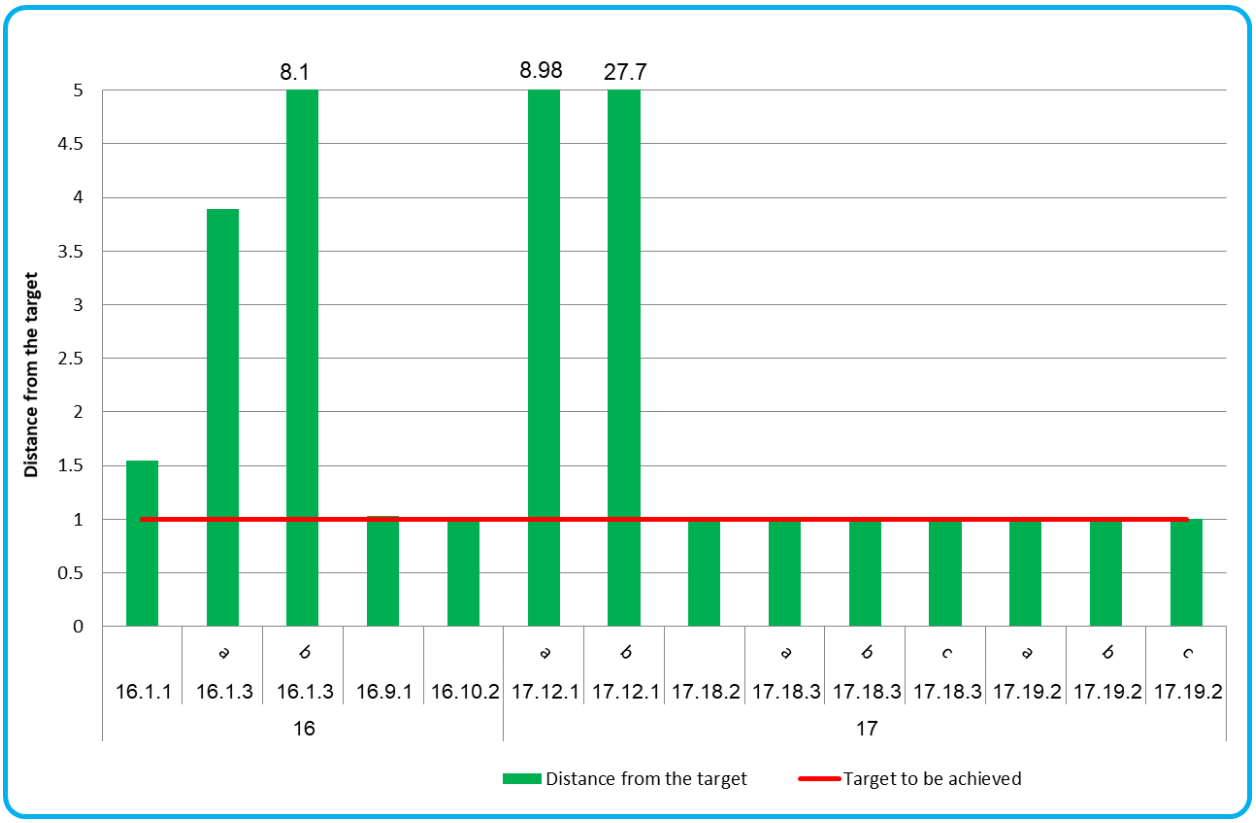
Indicators for Which the Target Has Been Achieved

Israel has achieved the targets of 14 of the 23 indicators included in the analysis of these targets (61%).

The 14 indicators for which the target has been achieved are indicators for which the target has been fully achieved (and even exceeded). They include, among other indicators, indicators from Goal 16 such as the number of victims of targeted killing per 100,000 persons, the proportion of persons aged 20 and over who were injured by physical violence, the proportion of the population that was the victim of a robbery in the previous 12 months by sex, as well as a policy indicator on public access to

information and freedom of information. The target has also been achieved in policy indicators regarding cooperation to achieve the goals (Goal 17), such as statistical legislation that complies with the basic principles of official statistics, a national statistical plan that is fully funded and implemented by the source of the funding, conducting at least one population census in the previous 10 years, and achieving the registration of 90% of births and the registration of 75% of deaths.

Diagram 12 – SDG Indicators on the Theme of Peace and Partnership – Israel's Distance From Achieved SDG Targets, Goals 16–17, 2021–2023



Indicators for Which the Target Has Not Been Achieved

Israel does not meet the targets of 9 indicators comprising 39% of the indicators included in the analysis of these targets (Diagram 13). These include the proportion of persons who feel safe walking alone in their area of residence, the number of victims of human trafficking per 100,000 persons, the rate of reporting a robbery to the police, and detainees who have not faced trial as a proportion of all prisoners (Goal 16).

The target in foreign aid has not yet been achieved – net official development assistance (ODA)[14] as a proportion of gross national income (Goal 17).

[14] Foreign aid is the Official Development Assistance (ODA) that the State of Israel transfers every year to developing countries.

Diagram 13 – SDG indicators on the Theme of Peace and Partnership – Israel's Distance From Unachieved SDG Targets, Goals 16–17, 2021–2023

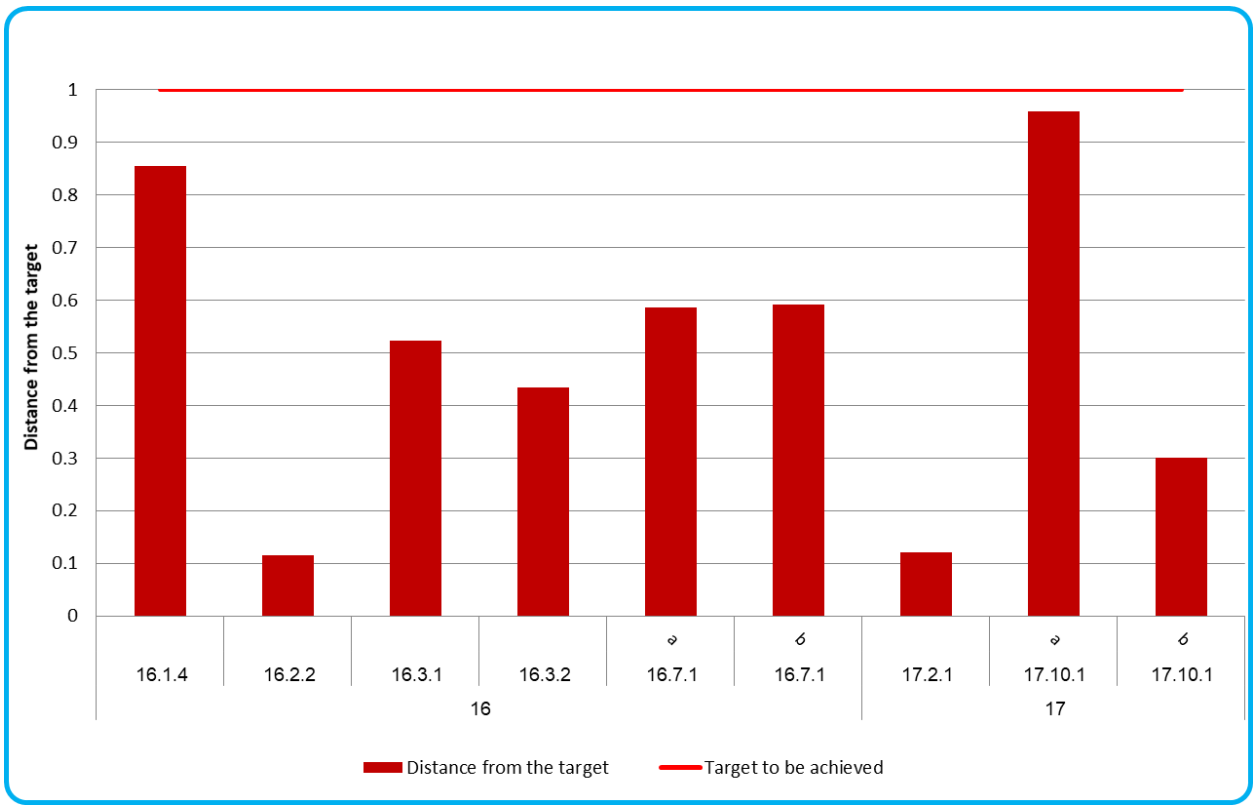


Table 1 – List of Indicators Included in Israel's Distance Analysis[15]

[15] A breakdown of the goals, targets, and values appears in Table 2.

Indicator number	Series	Indicator
1.1.1	-	Proportion of the population below international poverty line[1]
1.2.1	-	Relative poverty rate based on 50% of the net median income per standard person (according to OECD definitions)
1.3.1	a	Proportion of employed population covered by social protection in case of work injury[2]
	b	Proportion of mothers of newborns receiving maternity benefits[2]
	c	Proportion of population over the legal retirement age receiving a pension[2]
	d	Proportion of population covered by at least one social protection cash benefit[2]
	e	Proportion of population with severe disability receiving disability cash benefit
	f	Proportion of unemployed persons receiving unemployment cash benefit
1.4.1	a	Proportion of population using basic drinking-water services[2]
	b	Proportion of population using basic sanitation services[2]
2.1.2	a	Prevalence of moderate or severe food insecurity
	b	Prevalence of severe food insecurity
2.2.2	-	Obesity rate
2.2.3	-	Proportion of women aged 15–49 with anaemia[1]
2.c.1	-	Indicator of food price anomalies[1]
3.1.1	a	Maternal mortality ratio, deaths per 100,000 live births
	b	Infant mortality rate, deaths per 1,000 live births
	c	Under-five mortality rate, deaths per 1,000 live births
3.2.2	-	Neonatal mortality rate, deaths per 1,000 live births
3.3.1	-	Number of new HIV cases per 1,000 persons in the population
3.3.2	-	Death rate due to Tuberculosis per 100,000 persons in the population
3.3.4	-	Hepatitis B incidence per 100,000 persons in the population
3.3.5	-	Number of persons requiring interventions against neglected tropical diseases per 100,000 persons in the population
3.4.1	-	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease, number per 100,000 persons in the population
3.4.2	-	Suicide mortality rate, deaths per 100,000 persons in the population
3.5.2	-	Consumption of pure alcohol per capita (aged 15 and over) within a calendar year
3.6.1	-	Death rate due to road traffic injuries, per 100,000 persons in the population[1]

Indicator number	Series	Indicator
3.7.2	-	Adolescent birth rate per 1,000 women aged 15–19
3.8.1	-	Universal health-care coverage indicator[2]
3.8.2	a	Proportion of households that spend up to 10% of total household income on health
	b	Proportion of households that spend between 10% and 25% of total household income on health
3.9.1	a	Age-standardized mortality rate attributed to ambient air pollution, deaths per 100,000 persons in the population[2]
	b	Age-standardized mortality rate attributed to household and ambient air pollution, deaths per 100,000 persons in the population[2]
3.9.2	-	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (diarrhea, intestinal nematode infections, malnutrition, and acute respiratory infections), deaths per 100,000 persons in the population[2]
3.9.3	-	Mortality rate attributed to unintentional poisoning, deaths per 100,000 persons in the population[1]
3.a.1	a	Age-standardized prevalence of tobacco use among persons aged 15 and over[2]
	b	Proportion of smokers aged 21 and over
3.b.1	a	Proportion of the target population vaccinated with three doses of diphtheria-tetanus-pertussis vaccine (DTP4)
	b	Proportion of the target population with access to affordable medicines and vaccines on a sustainable basis, human papillomavirus (HPV)[2]
	c	Proportion of the target population with access to the second dose of measles vaccine (MCV2)[2]
	d	Proportion of the target population with access to the third dose of pneumococcal vaccine (PCV3 pneumonia)
3.d.1	a	International Health Regulations capacity, by type (IHR)
	b	International Health Regulations capacity, by type (SPAR)
4.1.1	a	Proportion of students at the end of upper secondary education achieving at least a minimum proficiency level in mathematics

Indicator number	Series	Indicator
	b	Proportion of students at the end of lower secondary education achieving at least a minimum proficiency level in reading
	c	Proportion of students in Grade 2 or 3 of primary education achieving at least a minimum proficiency level in reading
4.1.2	a	Completion rate of lower secondary education[1]
	b	Completion rate of upper secondary education[1]
4.2.2	-	Participation rate of adults aged 15–24 in organized learning (one year before the official primary entry age)[1]
4.3.1	-	Participation rate of youth and adults (aged 15–24) in formal and non-formal education and training (last 4 weeks)
4.5.1	a	Adjusted gender parity index for achieving a minimum proficiency level in mathematics, lower secondary education
	b	Adjusted gender parity index for achieving a minimum proficiency level in reading, lower secondary education[1]
	c	Adjusted gender parity index for achieving a minimum proficiency level in reading, primary education
	d	Adjusted gender parity index for achieving at least a fixed level of proficiency in functional skills, by literacy skills[1]
	e	Adjusted gender parity index for achieving at least a fixed level of proficiency in functional skills, by numeracy skills[1]
	f	Adjusted gender parity index for completion rate, by location, wealth quintile, and education level, lower secondary education[1]
	g	Adjusted gender parity index for completion rate, by location, wealth quintile, and education level, upper secondary education[1]
	h	Adjusted gender parity index for participation rate in formal and non-formal education and training[1]
	i	Adjusted gender parity index for participation rate in organized learning (one year before the official primary entry age)[2]

Indicator number	Series	Indicator
	j	Adjusted immigration status parity index for achieving a minimum proficiency level in mathematics, lower secondary education[1]
	k	Adjusted immigration status parity index for achieving a minimum proficiency level in reading, lower secondary education[1]
	l	Adjusted immigration status parity index for achieving a minimum proficiency level in reading, primary education[1]
	m	Adjusted immigration status parity index for achieving at least a fixed level of proficiency in functional skills, by literacy skills (age 26–65)[1]
	n	Adjusted immigration status parity index for achieving at least a fixed level of proficiency in functional skills, by numeracy skills (age 26–65)1
	o	Adjusted language test parity index for achieving a minimum proficiency level in mathematics, lower secondary education[1]
	p	Adjusted language test parity index for achieving a minimum proficiency level in reading, lower secondary education[1]
	q	Adjusted language test parity index for achieving a minimum proficiency level in reading, primary education[1]
	r	Adjusted location parity index for completion rate, by sex, wealth quintile, and education level, lower secondary education
	s	Adjusted location parity index for completion rate, by sex, wealth quintile, and education level, upper secondary education[1]
	t	Adjusted low to high socio-economic parity index for achieving a minimum proficiency level in mathematics, lower secondary education[1]
	u	Adjusted low to high socio-economic parity index for achieving a minimum proficiency level in reading, lower secondary education[1]
	v	Adjusted low to high socio-economic parity index for achieving a minimum proficiency level in reading, primary education[1]
	w	Adjusted low to high socio-economic parity status index for achieving at least a fixed level of proficiency in functional skills, by literacy skills, ages 16–65[1]

Indicator number	Series	Indicator
	x	Adjusted low to high socio-economic parity status index for achieving at least a fixed level of proficiency in functional skills, by numeracy skills, ages 16–65[1]
	y	Adjusted rural to urban parity index for achieving a minimum proficiency level in mathematics, lower secondary education[1]
	aa	Adjusted rural to urban parity index for achieving a minimum proficiency level in reading, lower secondary education[1]
	ab	Adjusted rural to urban parity index for achieving a minimum proficiency level in reading, primary education[1]
	ac	Adjusted wealth parity index for completion rate, by sex, location and education level, lower secondary education[1]
	ad	Adjusted wealth parity index for completion rate, by sex, location and education level, upper secondary education[1]
	ae	Socio-economic parity index (based on PISA ESCS Index) - mathematics
4.6.1	a	Proportion of population in a given age group, achieving a fixed level of proficiency in numeracy skills
	b	Proportion of population in a given age group, achieving a basic level of proficiency in reading literacy
4.a.1	a	Proportion of schools with access to basic drinking water, lower-secondary education
	b	Proportion of schools with access to basic drinking water, primary education
	c	Proportion of schools with access to basic drinking water, upper-secondary education
	d	Proportion of schools with access to the internet for pedagogical purposes, lower secondary education
	e	Proportion of schools with access to the internet for pedagogical purposes, primary education
	f	Proportion of schools with access to the internet for pedagogical purposes, upper secondary education

Indicator number	Series	Indicator
	g	Proportion of schools with access to single-sex basic sanitation, lower secondary education
	h	Proportion of schools with access to single-sex basic sanitation, primary education
	i	Proportion of schools with access to single-sex basic sanitation, upper- secondary education
	j	Proportion of schools with access to computers for pedagogical purposes, lower secondary education
	k	Proportion of schools with access to computers for pedagogical purposes, primary education
	l	Proportion of schools with access to computers for pedagogical purposes, upper secondary education
	m	Proportion of schools with access to electricity, lower secondary education
	n	Proportion of schools with access to electricity, primary education
	o	Proportion of schools with access to electricity, upper secondary education
	p	Proportion of schools with basic handwashing facilities, lower secondary education
	q	Proportion of schools with basic handwashing facilities, primary education
	r	Proportion of schools with basic handwashing facilities, upper secondary education
4.c.1	-	Proportion of teachers who received in-service training in the previous 12 months
5.1.1	a	Legal frameworks that promote, enforce and monitor gender equality – violence against women
	b	Legal frameworks that promote, enforce and monitor gender equality – overarching legal frameworks and public life
	c	Legal frameworks that promote, enforce and monitor gender equality – employment and economic benefits
	d	Legal frameworks that promote, enforce and monitor gender equality – marriage and family

Indicator number	Series	Indicator
5.2.1	-	Proportion of women and girls aged 20 and over who were subjected to violence or threat of violence in the previous 12 months
5.5.1	a	Proportion of elected seats held by women in deliberative bodies of local government[1]
	b	Proportion of seats held by women in the national parliament (the Knesset)[1]
5.5.2	a	Gender gap in the proportion of women in managerial positions (ratio of women vs. men)
	b	Proportion of women in senior and middle management positions
	c	Proportion of women in managerial positions[1]
6.1.1	-	Proportion of population using safely managed drinking water
6.2.1	a	Proportion of population practicing open defecation
	b	Proportion of the population with sustainable access to improved sanitation
6.3.1	a	Population that is not connected to public sewerage treatment
	b	Proportion of domestic wastewater flows that is not safely treated
6.4.1	-	Water Use Efficiency[1]
6.4.2	-	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources[1]
6.5.1	-	Degree of integrated water resources management implementation[1]
6.6.1	a	Lake water quality[2]
	b	Lake water quality, extreme turbidity[2]
7.1.1	-	Proportion of population with access to electricity
7.2.1	a	Proportion of renewable energy out of electricity production
	b	Proportion of renewable energy share in the total final energy consumption[2]
7.3.1	-	Primary energy supply MJ/ GDP$ PPP
8.1.1	-	Annual growth rate of real GDP per capita – average of 15 years
8.2.1	-	Annual growth rate of real GDP per employed person – average of 15 years
8.4.2	-	Domestic material consumption per GDP, by type of raw material (kilograms per constant 2015 USD)
8.5.1	-	Average hourly earnings of employees

Indicator number	Series	Indicator
8.5.2	-	Unemployment rate
8.6.1	-	Proportion of youth (aged 15–24) not in education, employment, or training
8.8.1	a	Fatal occupational injuries among employees, per 100,000 employees
	b	Non-fatal occupational injuries per 100,000 workers
8.8.2		Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation[1]
8.10.2		Proportion of adults (15 years and over) with an account at a financial institution or mobile-money-service provider[1]
9.2.1	a	Manufacturing value added (constant prices in USD 2015) as a proportion of GDP[1]
	b	Manufacturing value added per capita – in USD
9.4.1	a	CO_2 emission per unit of value added
	b	CO_2 emissions per unit of GDP by purchasing power parity (2017 prices)[2]
	c	CO_2 emissions per unit of manufacturing value added (2015 prices)[2]
9.5.1		Research and development expenditure as a proportion of GDP
9.c.1		Proportion of population covered by at least a 4G mobile network[1]
10.1.1		Growth rates of household expenditure or income per capita[1]
10.2.1		Poverty rate: persons living below 50% of the median net income per standard person, and by sex (according to OECD definitions)
10.4.1	a	Total compensation of employees as a percentage of GDP
	b	Labour share of GDP[1]
10.4.2		Redistributive impact of fiscal policy, Gini index[1]
10.5.1	a	Liquid assets to short term liabilities[1]
	b	Net open position in foreign exchange to capital[1]
	c	Non-performing loans net of provisions to capital[1]
	d	Non-performing loans to total gross loans[1]
	e	Regulatory capital to risk-weighted assets[1]
	f	Regulatory capital to assets[1]
	g	Return on assets[1]

Indicator number	Series	Indicator
10.a.1		Proportion of tariff lines applied to imports with zero-tariff[1]
10.c.1	a	Average remittance costs of sending $200 in a corridor as a proportion of the amount remitted[1]
	b	SmaRT average remittance costs of sending $200 in a corridor as a proportion of the amount remitted[1]
11.6.2	-	Annual mean levels of fine particulate matter[1] ($PM_{2.5}$)
11.a.1	-	Countries that have national urban policies or regional development plans that respond to population dynamics; ensure balanced territorial development; and increase local fiscal space[1]
12.1.1	a	Countries with policy instrument for sustainable consumption and production
	b	Countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or target into national policies
12.2.2	a	Domestic material consumption per capita, by type of raw material (tons)[1]
	b	Domestic material consumption per unit of GDP, by type of raw material (kilograms per constant 2015 USD)[2]
12.3.1	a	Food waste per capita in a household[2]
	b	Food waste per capita, out-of-home consumption[2]
	c	Food waste per capita retail[2]
12.4.1	a	Compliance with the Basel Convention on hazardous waste and other chemicals[1]
	b	Compliance with the Montreal Protocol on hazardous waste and other chemicals[1]
	c	Compliance with the Rotterdam Convention on hazardous waste and other chemicals[1]
	d	Compliance with the Stockholm Convention on hazardous waste and other chemicals[1]
12.5.1	-	Municipal waste recycling rate
12.b.1	a	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability (system of environmental-economic accounting)[1]

Indicator number	Series	Indicator
	b	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability (tables from the tourism satellite account)[1]
13.2.2	-	Greenhouse gas emission intensity per GDP
14.1.1	a	Beach litter per square kilometer[2]
	b	Chlorophyll-a anomaly, remote sensing[2]
	c	Chlorophyll-a deviation, remote sensing[2]
14.5.1	a	Average proportion of Marine Key Biodiversity Areas (KBAs) covered by protected areas[1]
	b	Proportion of marine protected areas
15.1.2	a	Average proportion of Freshwater Key Biodiversity Areas (KBAs) covered by protected areas[1]
	b	Average proportion of Terrestrial Key Biodiversity Areas (KBAs) covered by protected areas[1]
15.2.1	a	Annual forest area change rate[1]
	b	Proportion of forest area with a long-term management plan[1]
	c	Proportion of forest area within legally established protected areas[1]
15.4.1	-	Average proportion of Mountain Key Biodiversity Areas (KBAs) covered by protected areas[1]
15.4.2	-	Mountain Green Cover Index
15.5.1	-	Red List Index[2]
15.6.1	a	Countries that are contracting Parties to the International Treaty on Plant Genetic Resources for Food and Agriculture
	b	Countries that are parties to the Nagoya Protocol[1]
	c	Countries that have legislative, administrative and policy framework or measures reported through the Online Reporting System on Compliance of the International Treaty on Plant Genetic Resources for Food and Agriculture[1]
	d	Countries that have legislative, administrative and policy framework or measures reported to the Access and Benefit-Sharing Clearing-House[1]

Indicator number	Series	Indicator
15.8.1	a	Countries with an allocation from the national budget to manage the threat of invasive alien species[1]
	b	Legislation, Regulation, Act related to the prevention of introduction and management of Invasive Alien Species[1]
	c	National Biodiversity Strategy and Action Plan (NBSAP) targets alignment to Aichi Biodiversity target 9 set out in the Strategic Plan for Biodiversity[1]
15.9.1	a	Countries that established national targets in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020 in their National Biodiversity Strategy and Action Plans[1]
	b	Countries with integrated biodiversity values into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting[1]
16.1.1		Number of victims of intentional homicide per 100,000 population
16.1.3	a	Persons aged 20 and over who were injured by violence (use of physical force)
	b	Proportion of population subjected to robbery in the previous 12 months[1]
16.1.4	-	Proportion of population that feel safe walking alone around the area they live after dark
16.2.2	-	Number of victims of human trafficking per 100,000 persons in the population
16.3.1	-	Police reporting rate for robbery
16.3.2	-	Unsentenced detainees, as a proportion of overall prison population
16.7.1	a	Ratio of women in the Knesset to all women in the national population (with the age of eligibility as a lower bound boundary)[1]
	b	Ratio of young members (aged 45 and under) in the Knesset to all young persons in the population (with the age of eligibility as a lower bound boundary)
16.9.1	-	Proportion of children under 5 years of age whose births have been registered with a civil authority/population register

16.10.2	-	Countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information (freedom of information)
17.2.1	-	Net Official Development Assistance (ODA) as a proportion of gross national income (GNI)
17.10.1	a	Worldwide weighted tariff-average, most-favoured-nation status[1]
	b	Worldwide weighted tariff-average, preferential status[1]
17.12.1	a	Average tariff applied by developed countries, most- favoured nation status[1]
	b	Average tariff applied by developed countries, preferential status[1]
17.18.2		Countries with national statistical legislation exists that complies with the Fundamental Principles of Official Statistics[1]
17.18.3	a	Countries with national statistical plans that are fully funded[1]
	b	Countries with national statistical plans that are under implementation[1]
	c	Countries with national statistical plans with funding from Government[1]
17.19.2	a	Countries that have conducted at least one population and housing census in the last 10 years
	b	Countries with birth registration data that are at least 90 percent complete
	c	Countries with death registration data that are at least 75

[1] Based on a UN international processing of national data (taken from the UN SDG database)

[2] Based on UN estimates (taken from UN SDG database)

Background and Methodological Explanations

Measurement in the OECD

The SDG indicators, which relate to a wide range of issues, are tailored to the various needs and characteristics of all countries. Therefore, not all indicators are relevant and suitable for all countries. The OECD defined the targets and indicators relevant to the member countries of the organization, and in certain cases also formulated them in a different way than the indicators are defined in the original list by the United Nations. Additionally, relevant target values were selected for achieving each target based on 4 categories for determining target values (see below). In this process, a total of 183 indicators (537 data series) were determined for the OECD countries. For these indicators, and based on data availability, the OECD examined each country's distance from achieving the goals, relative to other member countries in the organization and relative to the target values. In the new publication, predictions for achieving the goals by the year 2030 were also included.[16]

[16] See publication: OECD (2022). *The Short and Winding Road to 2030: Measuring Distance to the SDG Targets*.

The OECD customarily groups the 17 goals for sustainable development into five broad themes (the "5Ps"): People, Prosperity, Planet, and Peace and Partnerships.

According to this division:

People

Goal 1 – No Poverty

Goal 2 – Zero Hunger

Goal 3 – Good Health and Well-Being

Goal 4 – Quality Education

Goal 5 – Gender Equality

Prosperity

Goal 7 – Affordable and Clean Energy

Goal 8 – Decent Work and Economic Growth

Goal 9 – Industry, Innovation and Infrastructure

Goal 10 – Reduced Inequalities

Goal 11 – Sustainable Cities and Communities

Planet

Goal 6 – Clean Water and Sanitation

Goal 12 – Responsible Consumption and Production

Goal 13 – Climate Action

Goal 14 – Life Below Water

Goal 15 – Life on Land

Peace & Partnerships

Goal 16 – Peace, Justice and Strong Institutions

Goal 17 – Partnership for the Goals

The Measurement in Israel

Based on the OECD's distance analysis methodology, the division of the goals according to the themes mentioned above was adopted, and Israel's official statistical data were adjusted to the definitions of the indicators as well as to the values of the defined targets. Also, a methodological adjustment was made to the examination of the absolute distance from achieving the target of the indicator.[17]

The distance analysis to achieving the SDG goals in Israel involves the 103 indicators (219 data series) out of the 145 indicators (360 data series) from the OECD indicators framework having a defined a target value for the goal. The distances depict the most updated snapshot at the data series level in accordance with the availability of the data for each indicator.

For the complete list of the indicators included in Israel's distance analysis to achieving the SDG goals, and for more information on how the distance from the goal is calculated, see Tables 1 and 2, and "The Methodological Adjustment Process in Israel" below.

The Process of Selecting the Indicators in the OECD

The recommended indicators were determined based on 4 categories for setting a target:

- Category A is based on the original goals set for the SDGs (and determined as appropriate for the OECD countries), where A1 indicates a target of an absolute number to be achieved, and A2 indicates a relative goal to be achieved.
- The data in category B are based on targets established in treaties and agreements, on recommendations published by international organizations, or on the opinions of experts (here, too, the numbers 1 and 2 indicate an absolute or relative target).

[17] The target to be achieved in all indicators (and for all units of measurement) is "normalized" to a value of 1. In this way, it is possible to present uniformly for which of the indicators the target has been achieved (greater than or equal to 1), for which of them the target is close to being achieved (equal to or greater than 0.99 but less than 1), and for which indicators the target has not yet been achieved (smaller than 0.99).

- Category C is determined according to the countries in the top decile for each indicator. This category is based on the concept of best performance of a country (or group of countries). In most cases, the leading country in a certain field is considered an outlier, and therefore the target is not determined based on it.
- Category D includes indicators without a final target to achieve, as they lack a clear normative direction. Mostly, these are indicators related to foreign aid (ODA) for which the final target is known, but the path to achieve it varies in each country, or indicators related to gross domestic product (GDP) where it is impossible to define a single target suitable for all countries.

Shown below are the types of targets to achieve, examples, and the number of indicators in each category.

Types of Targets

	Type of target level	Means of setting 2030 end-value	
A1	SDG-based, absolute target in the future	End-value referred to in SDGs, e.g. infant mortality at 12 per 1,000 lives	47
A2	SDG-based, target relative to starting position	End-value referred to in SDGs, e.g. reduce by the proportion of people living in poverty	5
B1	Other international agreement or shared aspirations, absolute target in the future	End-value set by international Agreements, Good Practices or other Established Frameworks, e.g. reduce PM2.5 pollution to less than 10 micrograms per cubic meter (WHO)	19
B2	Other international agreement or shared aspirations, target relative to starting position	End-value set by international Agreements, Good Practices or other Established Frameworks, e.g. double the share of renewables in consumption (IRENA)	2
C	No explicit value; performance benchmarked against OECD top performers	End-value set at the 90th percentile of OECD countries in 2010	36
D	No normative direction		23

Source: OECD (2019). *Measuring Distance to the SDG Targets 2019: An Assessment of Where OECD Countries Stand*

The data on the countries are obtained from the countries' reports to the OECD or from the SDG database.

For each country, the distance from the target to be achieved set for a certain indicator expresses the number of standard deviations from the indicator's target. The standard deviations of the indicators were calculated based on all the OECD countries participating in the analysis, making the distance from the target relative to all the OECD countries.

In this way, distances from achieving the targets of the indicators were also calculated for Israel in the OECD. A distance analysis was performed for 145 indicators that include 360 data series for which a distance could be calculated, subject to the existence of a target to be achieved and/or data availability.

The Methodological Adjustment Process in Israel

For the distance analysis to achieving the targets in Israel, a process of checking compatibility with the definitions and targets of the indicators participating OECD's analysis was conducted. A methodological adjustment was also conducted to examine the absolute distance from achieving the target of the indicator. Since in the OECD a distance analysis was performed **relative** to the other member countries, it was not possible to perform the same analysis with reference to Israel alone. However, it was possible to define that for each indicator that has an available data point and a target to be achieved, one can say that the normalized value of the indicator (when the target to be achieved is also normalized to 1) is:

$$(1)\ N_i = \frac{n_i - T_i}{T_i} + \frac{T_i}{T_i} = \frac{n_i}{T_i} - 1 + 1 = \frac{n_i}{T_i}$$

Where

N_i – the normalized value of the indicator i.

n_i – the absolute value of the indicator i.

T_i – the absolute target of the indicator *i*.

Equation (1) is correct for indicators where the desired direction is an increase. However, for indicators whose desired direction is a decrease, a preliminary step of inversing the indicator (and the target) was performed, to present a uniform picture. Therefore, for indicators for which the desired direction is a decrease, the equation is inversed:

$$(2)\ N_i = \frac{1/n_i}{1/T_i} - 1 + 1 = \frac{T_i}{n_i}$$

Thus, for each indicator (its units of measurement being unimportant), if it is greater than or equal to 1, then its target has been achieved, and if it is less than 1, then its target has not yet been achieved. This is correct for indicators for which the desired

direction is an increase, **as well as** for indicators for which the desired direction is a decrease.[18]

For certain indicators, a target to be achieved was set: 0. That is, $T_i = 0$, so equations (1) or (2) could not be used for them. In order to maintain uniformity in the presentation of the analysis, for such indicators special treatment is required to present the distance from achieving the target. In all these indicators, the desired direction is a decrease (we always aim for 0 at a minimum). Second, the units of measurement of all these indicators will always be a percentage out of a defined size (or a rate of a specified size), for example: indicator 8.8.1.a – fatal injuries among workers (per 100,000 workers). In Israel, the value is 1.39 cases per 100,000 persons in the population (1.39/100,000), and the desired target is 0. Therefore, for such indicators we use a third equation:

$$(3)\ N_i = 1 - n_i$$

For example, in the example we used,

$(3)\ N_i = 1 - \frac{1.39}{100{,}000}$ =0.99999861

and therefore, the goal (0) is very close to being achieved.

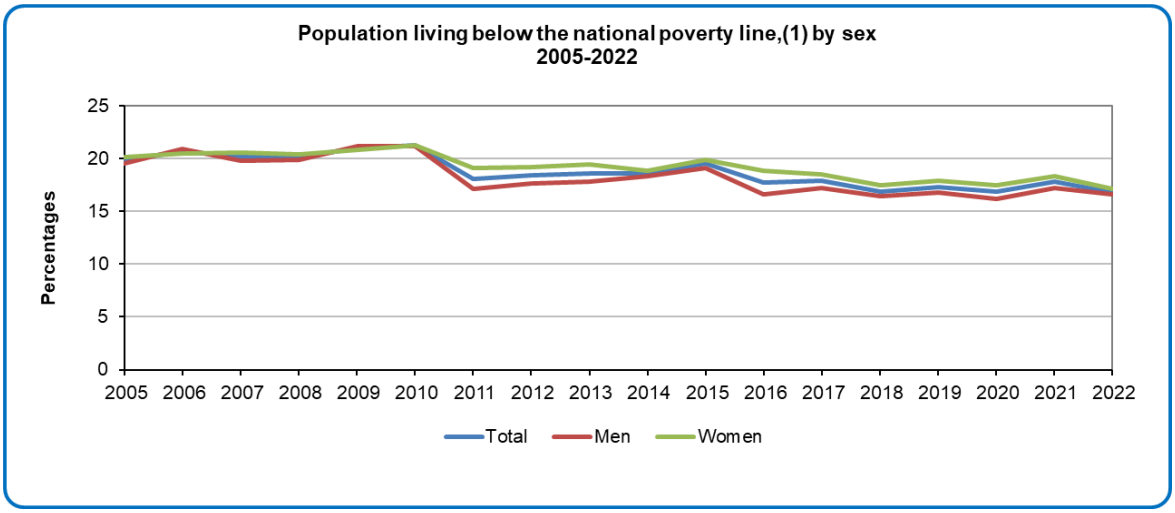
[18] It should be emphasised that in this form of presentation, a **quantitative** comparison of the achievement of the target is possible only relative to the indicator itself and not in comparison to other indicators because the original units of the indicators are completely different from each other in many cases. For example, it can be said that a certain indicator is 50% smaller than the target defined for it, but it cannot be said that it is 50% smaller than another indicator. However, a **qualitative** comparison (target achieved or not achieved), is possible also among indicators from different fields.

Selected SDG indicators and data

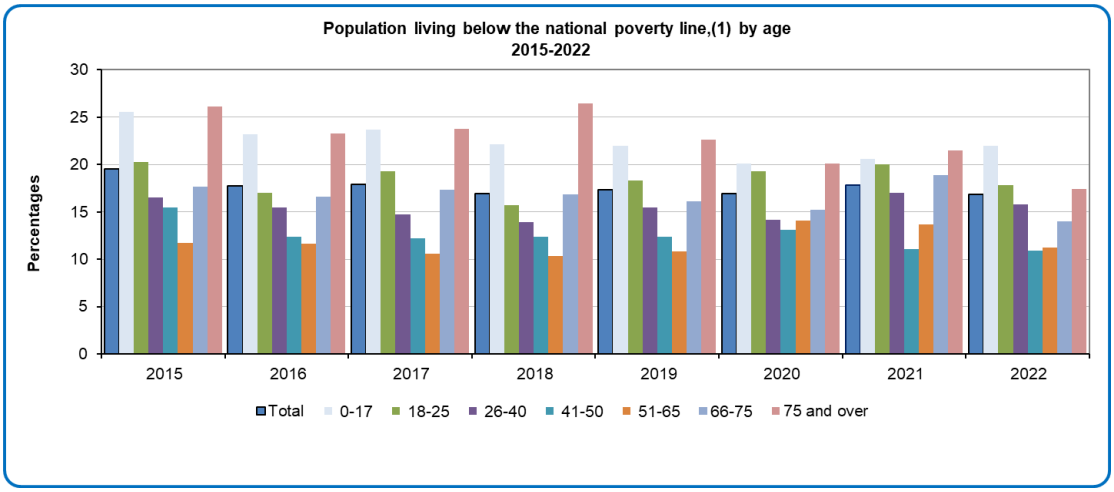
Goal 1 - End poverty in all its forms everywhere

1.2.1 Proportion of population living below the national poverty line, by sex and age

The national poverty line is defined as 50 percent of median income.



(1) According to the OECD poverty definitions.

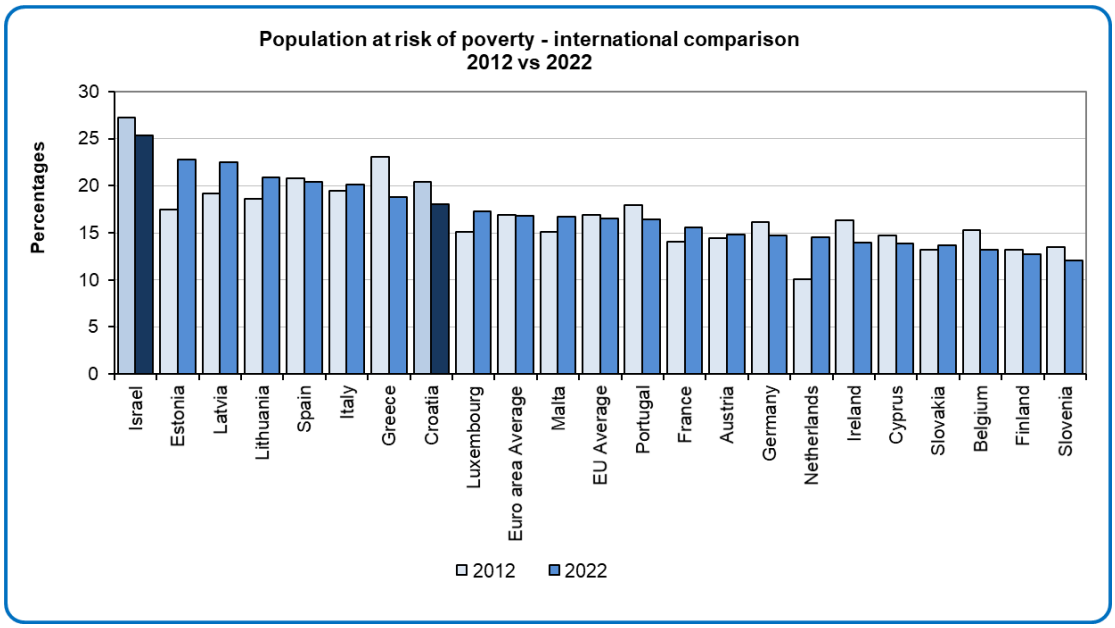


Source: EU data and Household Expenditure survey ,CBS.

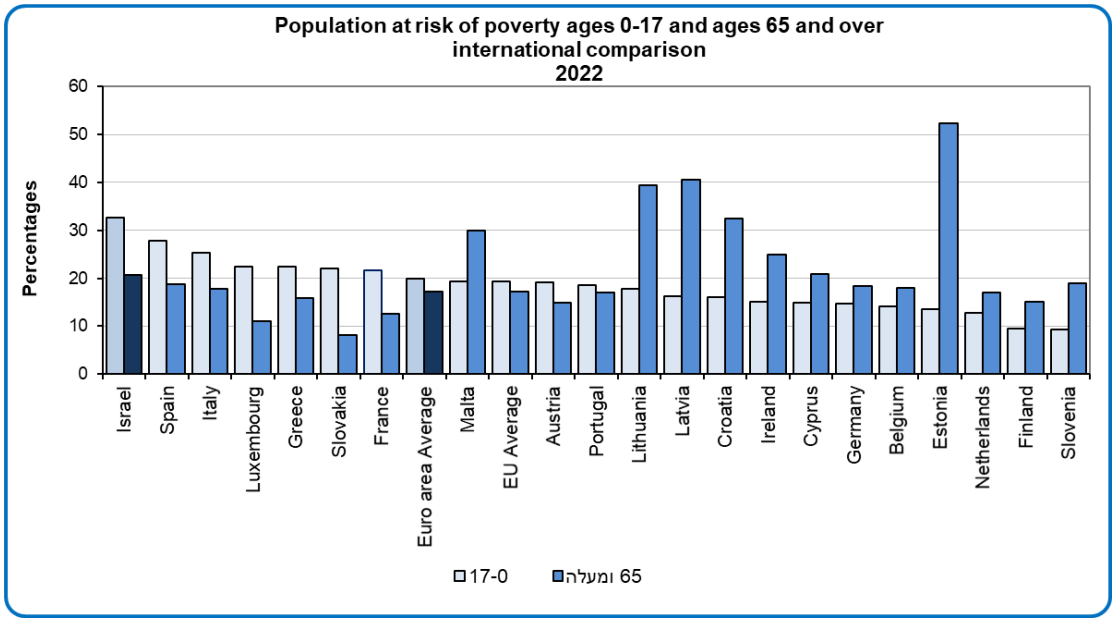
(1) According to the OECD Poverty definitions.

1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

Based on EU definitions of poverty and social exclusion, 25.3% of the population were at risk of poverty in 2022, higher than the EU average (16.5%). The net money income per standard person in the upper quintile was 6.7 times higher than the income in the lower quintile. This gap is higher than the average gap in the EU (4.8).



Source: EU data and Household Expenditure Survey of the CBS.



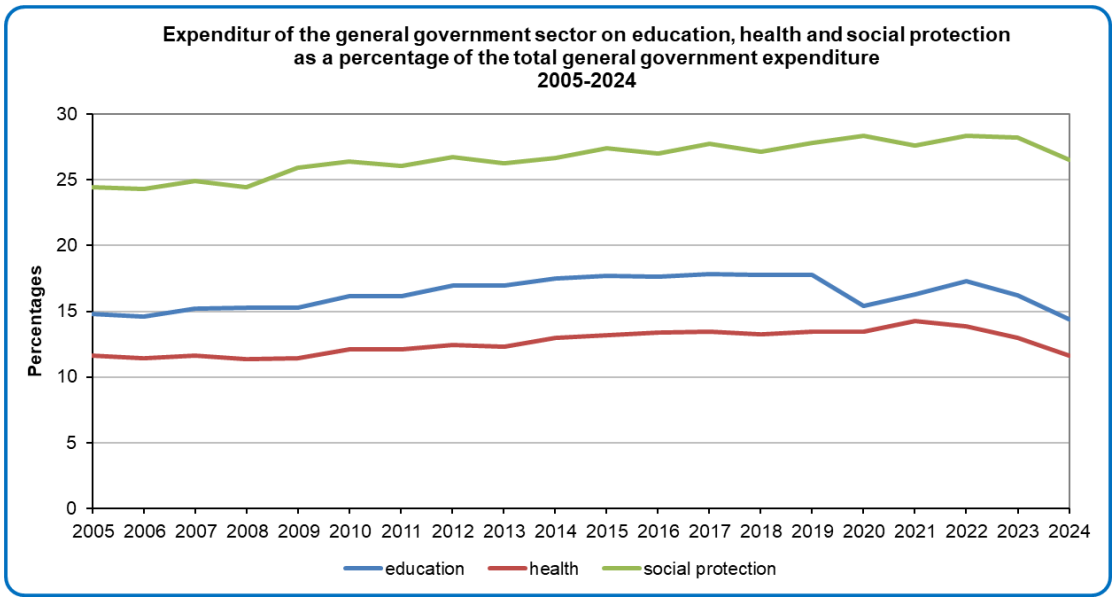
Source: EU data and Household Expenditure Survey of the CBS.

1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable

Percentage of persons age 15 and over covered by social protection systems								
	2010	2015	2017	2018	2019	2020	2021	2022
Total	37.1	38.6	38.4	38.7	39.3	45.7	43.9	40.4
Men	19.5	18.6	18.7	19.2	20.3	27.7	26.6	21.1
Women	53.7	57.4	57.0	57.2	57.4	62.9	60.3	58.7

The social protection systems included are: family (children's) allowances, old age pension, survivor pension, work damages allowance, general disability, unemployment benefits, income support, other allowance, nursing allowance and birth allowance.

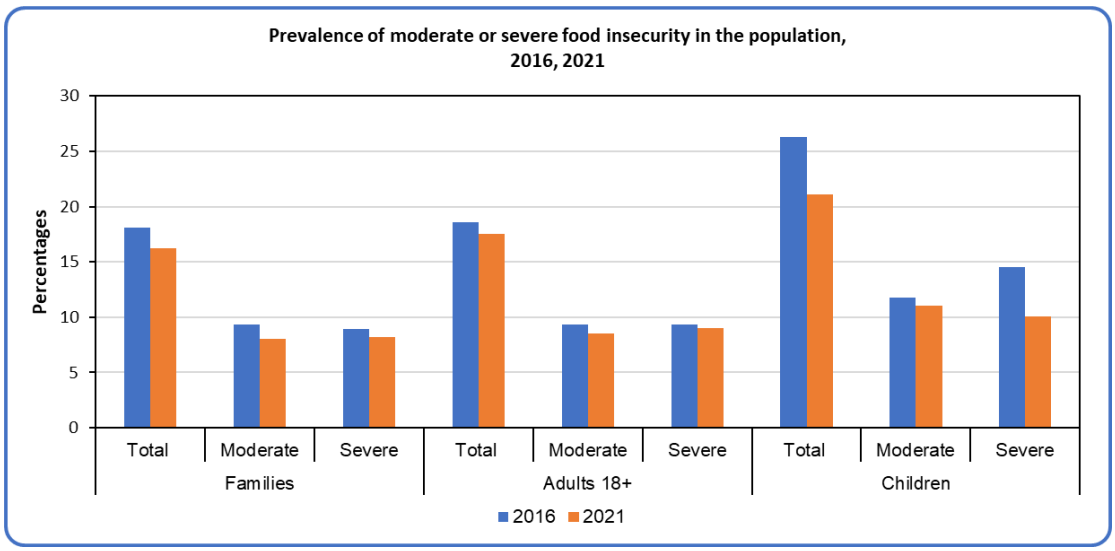
1.a.2 Proportion of total government spending on essential services (education, health and social protection



General Government expenditure on health, education and social protection as a percentage of the total general government expenditure, according to COFOG (Classification of Functions of Government).
The government sector includes government ministries, the National Insurance Institute, national institutions, local authorities and public non-profit institutions whose expenditures were mostly financed by the government.

Goal 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture

2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)

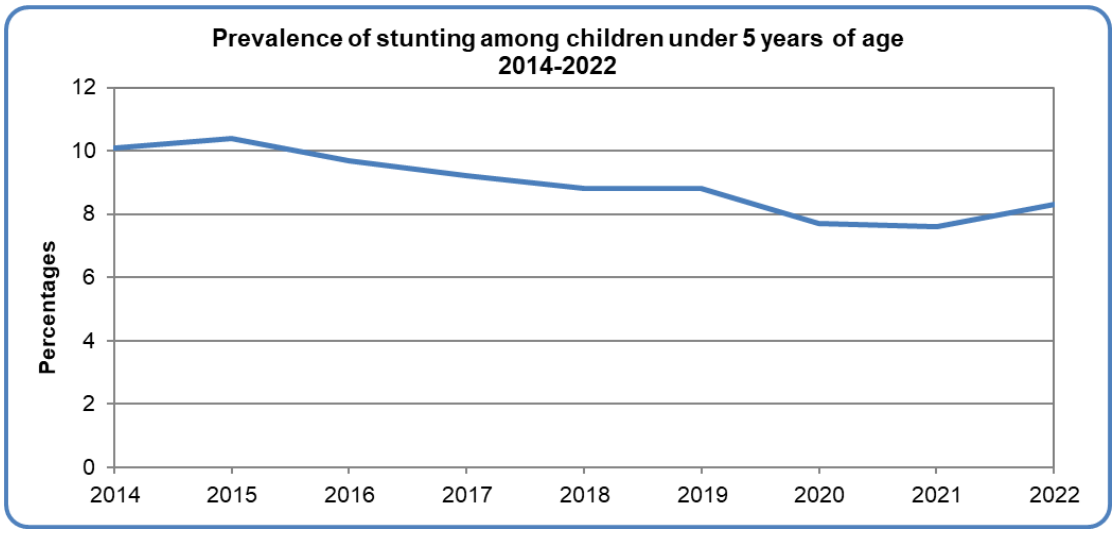


Source: National Insurance Institute.

The 2021 Food Security Survey[19] is the fourth survey carried out nationwide by the Research and Planning Administration of the National Insurance Institute of Israel (NII).

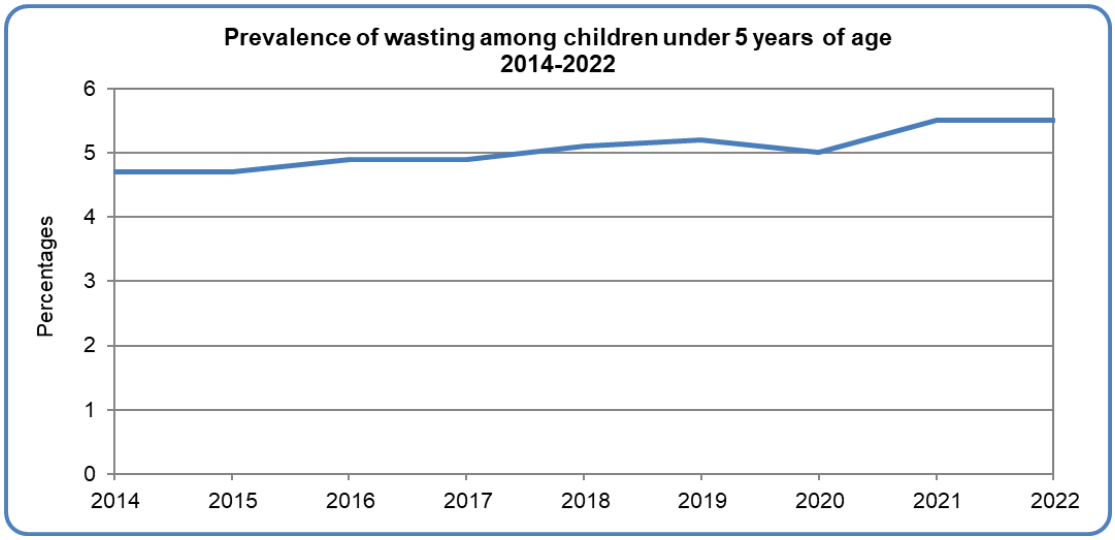
[19] "Food Security Survey 2021 The Course of Survey and Main Findings," Miri Endeweld, Lahav Karadi. 2023

2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age

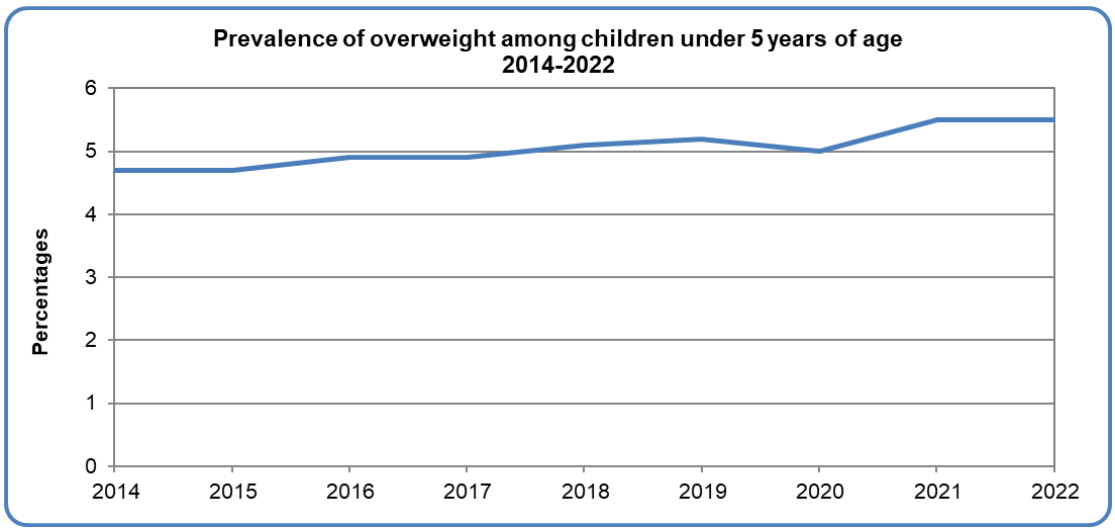


Source: Ministry of Health

2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)

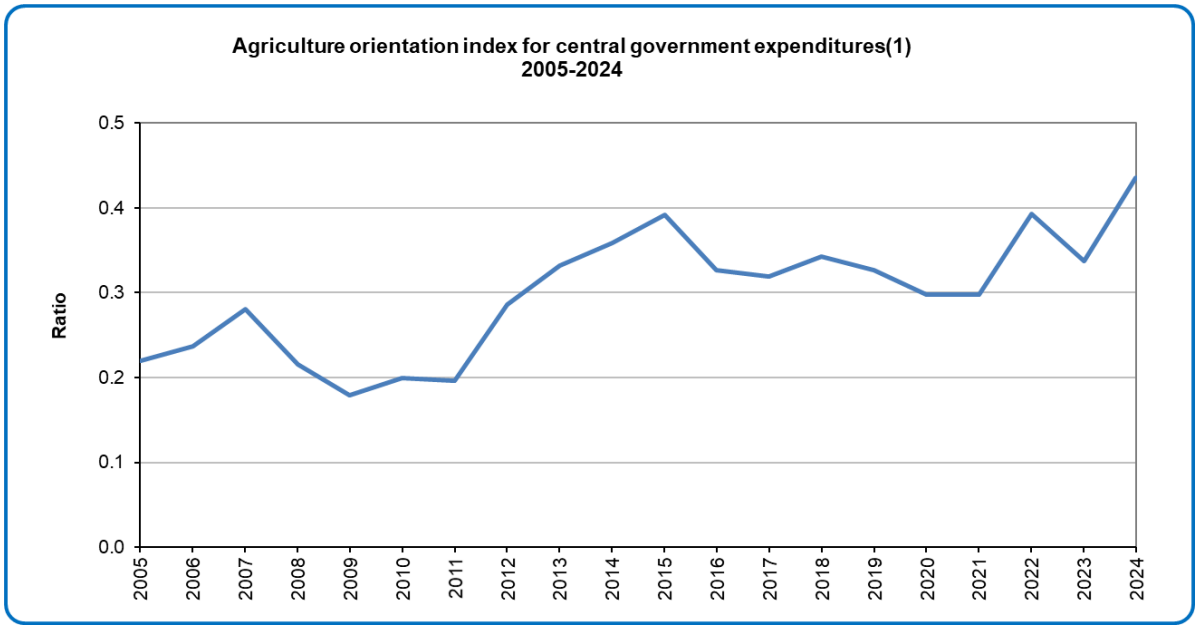


Source: Ministry of Health

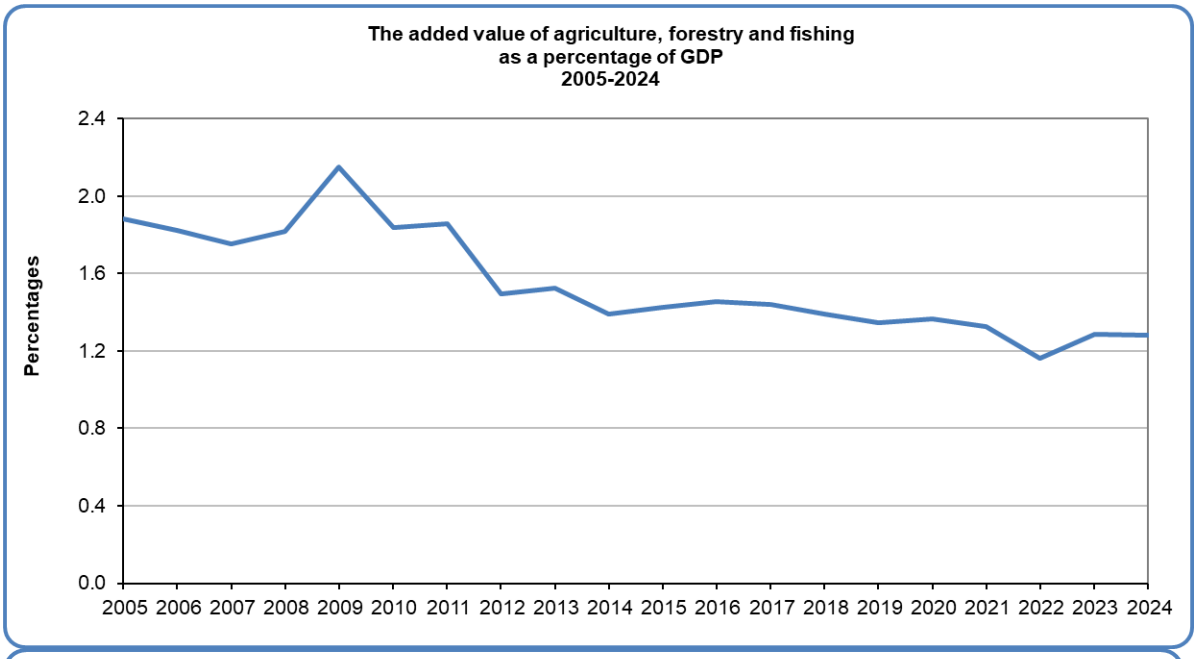


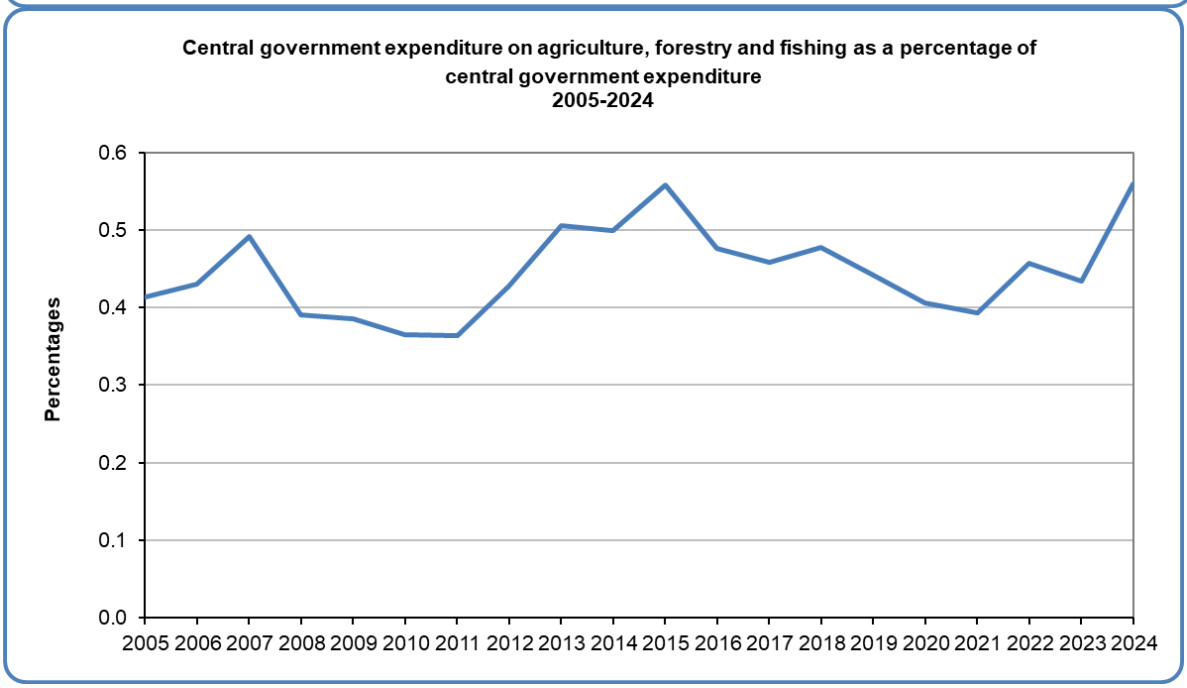
Source: Ministry of Health

2.a.1 The agriculture orientation index for government expenditures



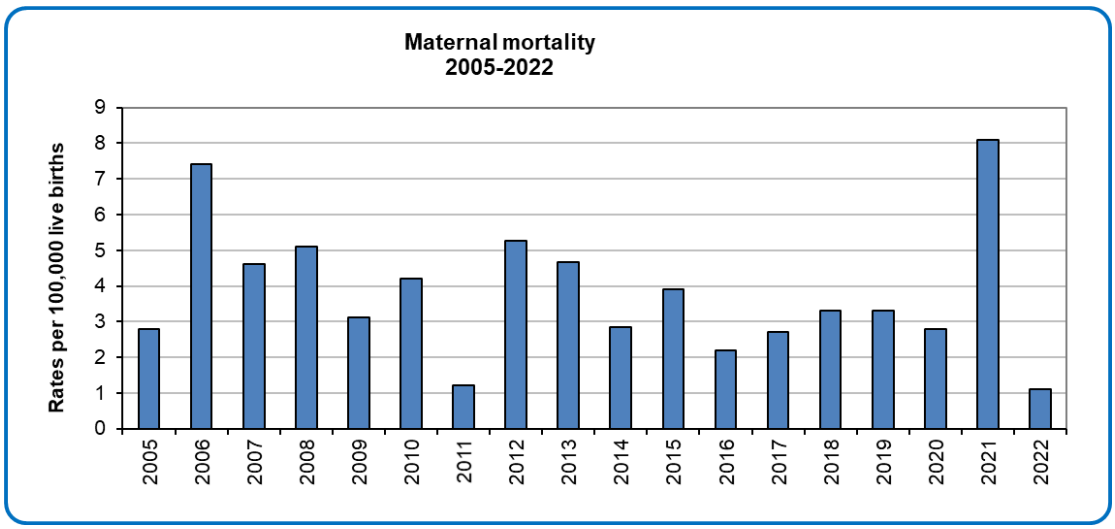
(1) The agriculture orientation index for central government (AOI) = (Agriculture share of central government expenditures) / (Agriculture share of GDP)


The added value of agriculture, forestry and fishing
as a percentage of GDP
2005-2024
Percentages
2.4
2.0
1.6
1.2
0.8
0.4
0.0
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024


Central government expenditure on agriculture, forestry and fishing as a percentage of
central government expenditure
2005-2024
Percentages
0.6
0.5
0.4
0.3
0.2
0.1
0.0
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Goal 3 - Ensure healthy lives and promote well-being for all at all ages

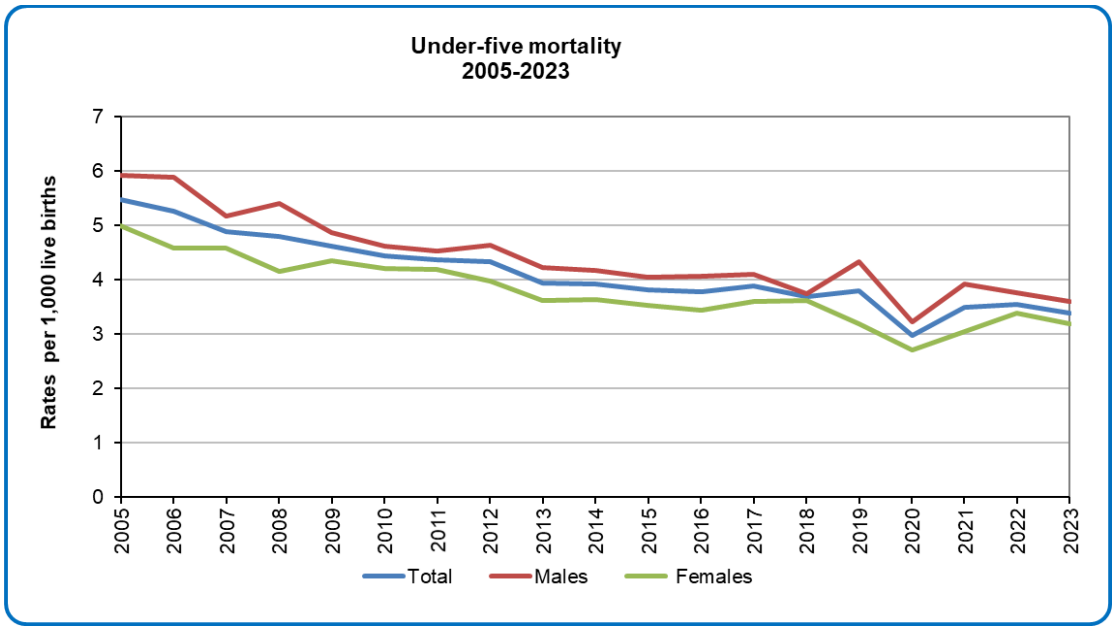
3.1.1 Maternal mortality ratio



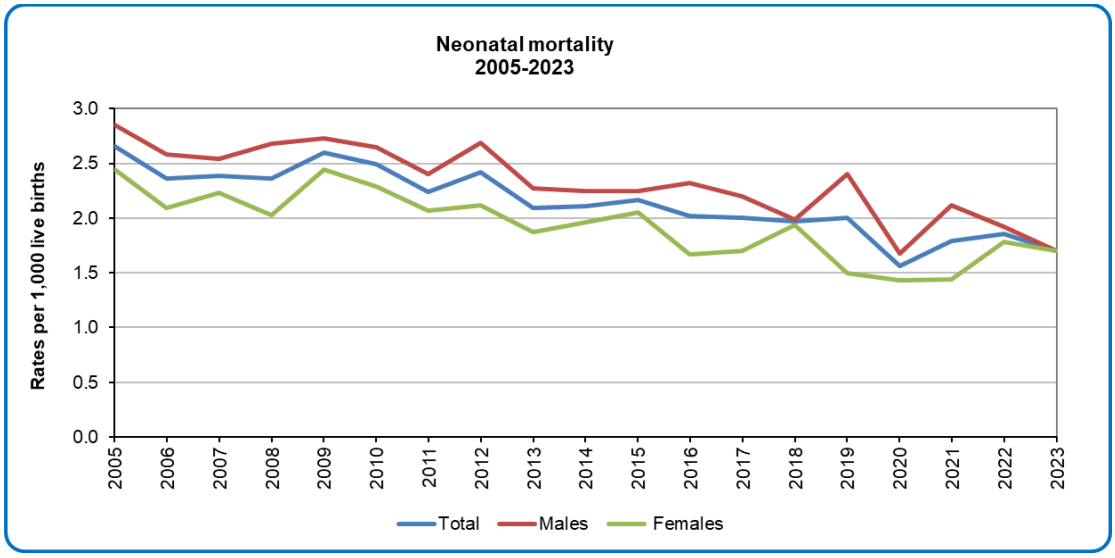
3.1.2 Proportion of births attended by skilled health personnel

The proportion of births attended by skilled health personnel in Israel is estimated at 100%.

3.2.1 Under-five mortality rate



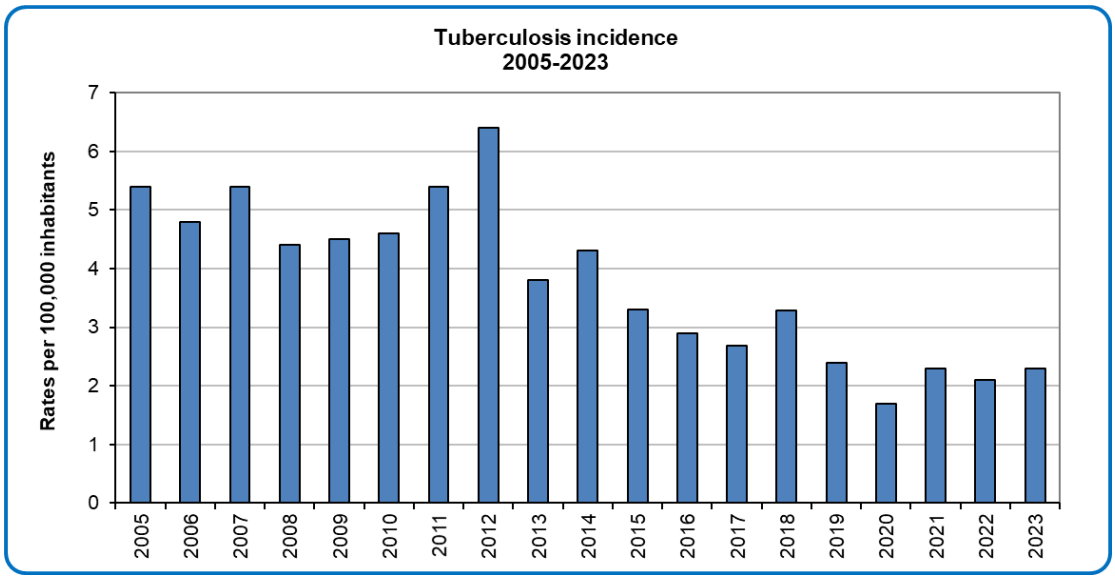
3.2.2 Neonatal mortality rate



3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations

The number of new HIV infections per 1,000 uninfected population in Israel is very low, less than 0.1 per 1,000.

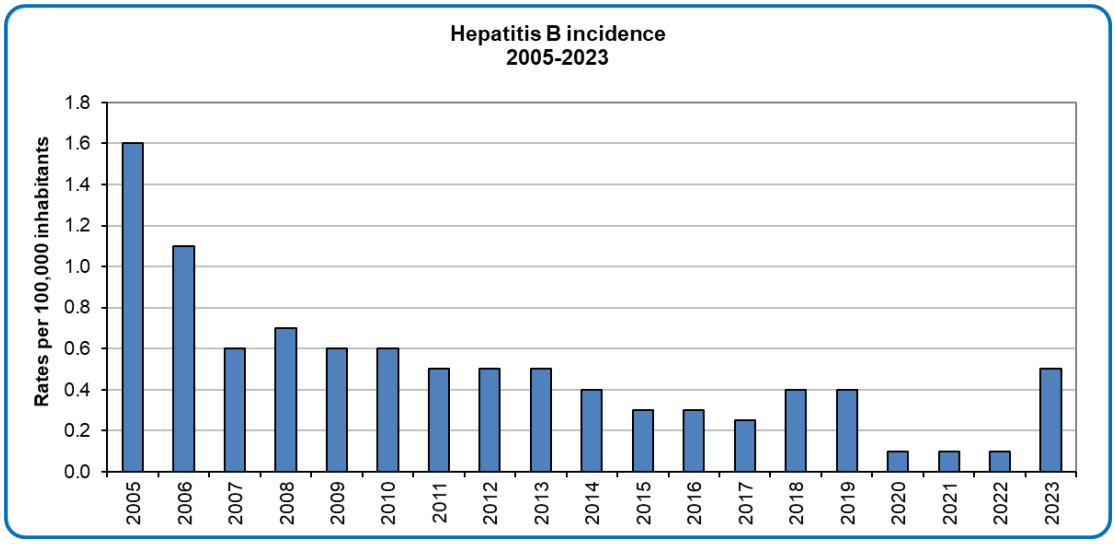
3.3.2 Tuberculosis incidence per 1,000 population



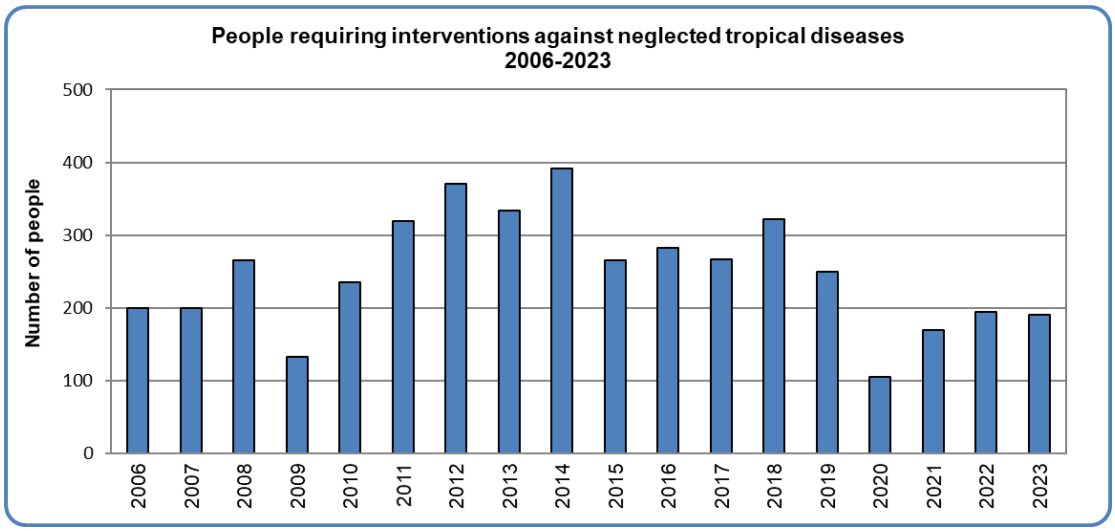
3.3.3 Malaria incidence per 1,000 population

All cases of malaria in Israel are imported and therefore are not included in the indicator.

3.3.4 Hepatitis B incidence per 100,000 population

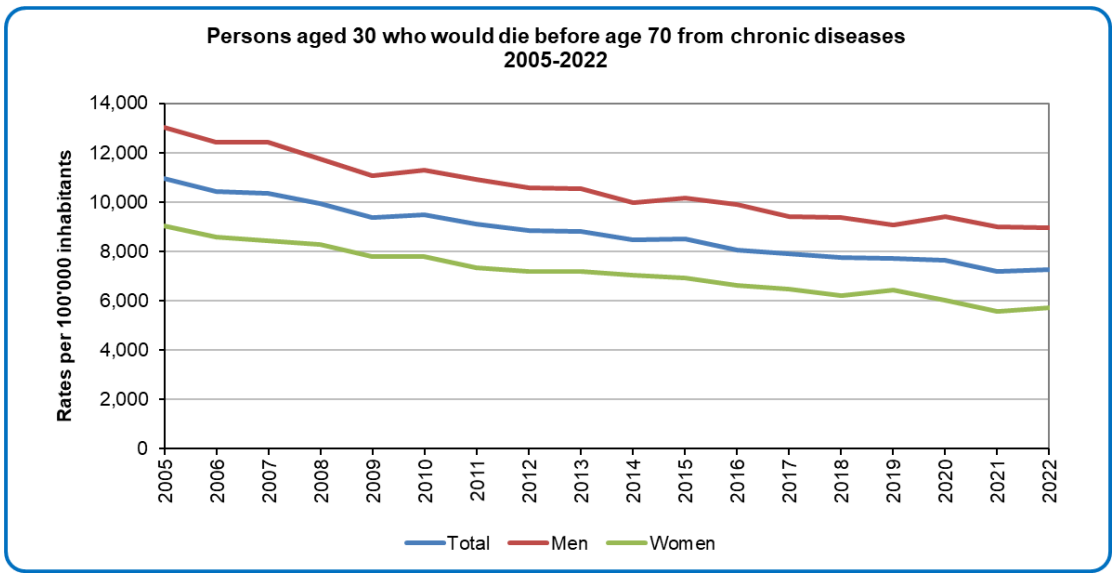


3.3.5 Number of people requiring interventions against neglected tropical diseases



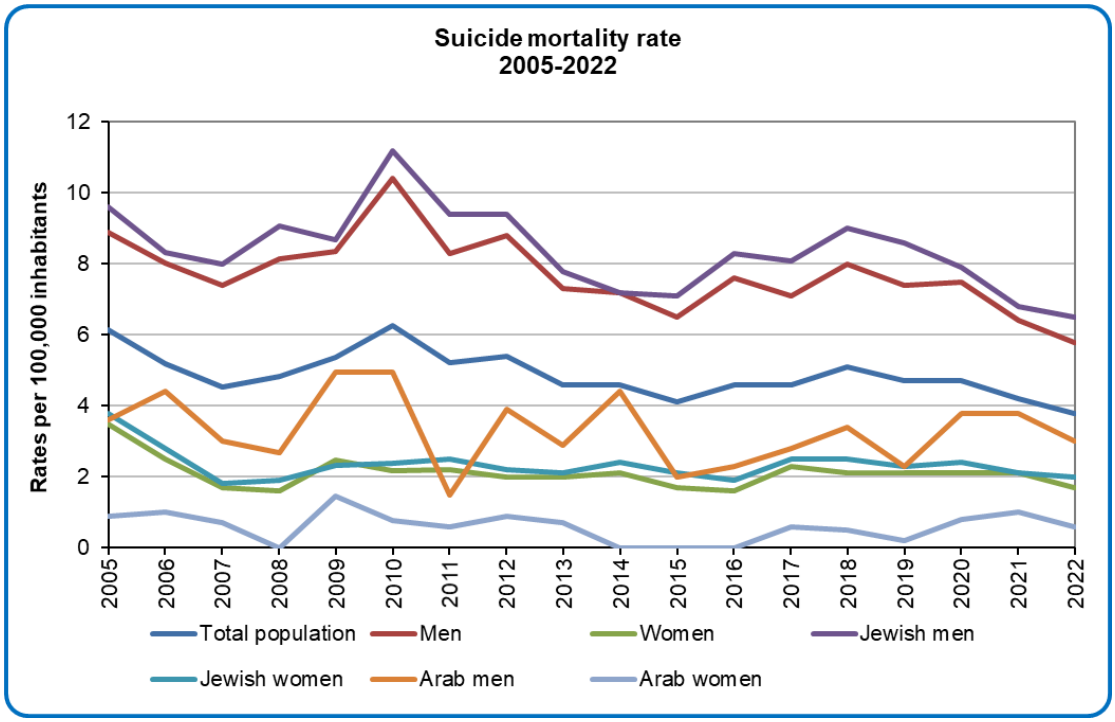
During the years 2006-2023 most cases of neglected tropical diseases were cases of leishmaniosis.

3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

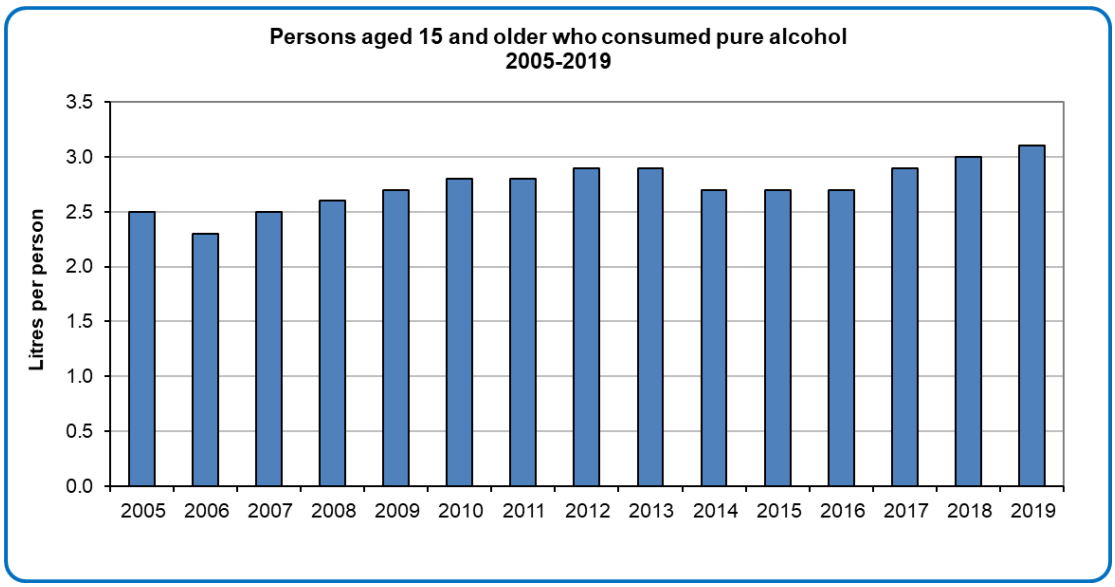


In 2022 22.5% of the deaths in Israel were caused by malignant neoplasms (cancer) and 12.5% were caused by heart disease.

3.4.2 Suicide mortality rate



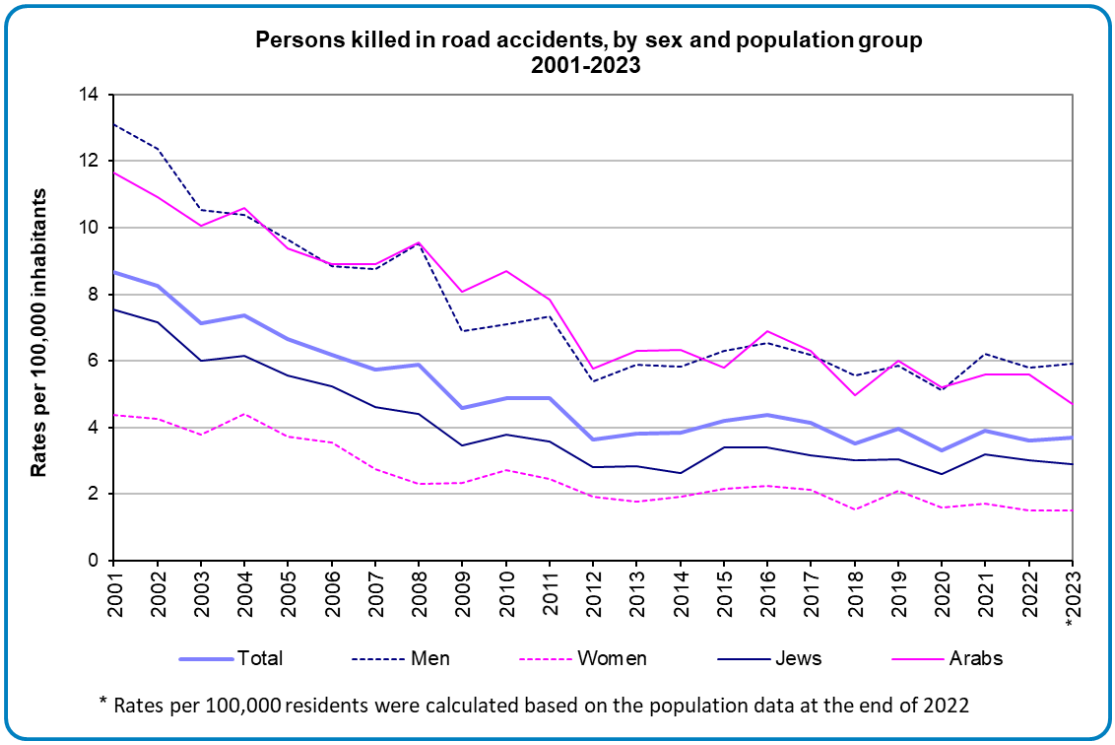
3.5.2 Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol

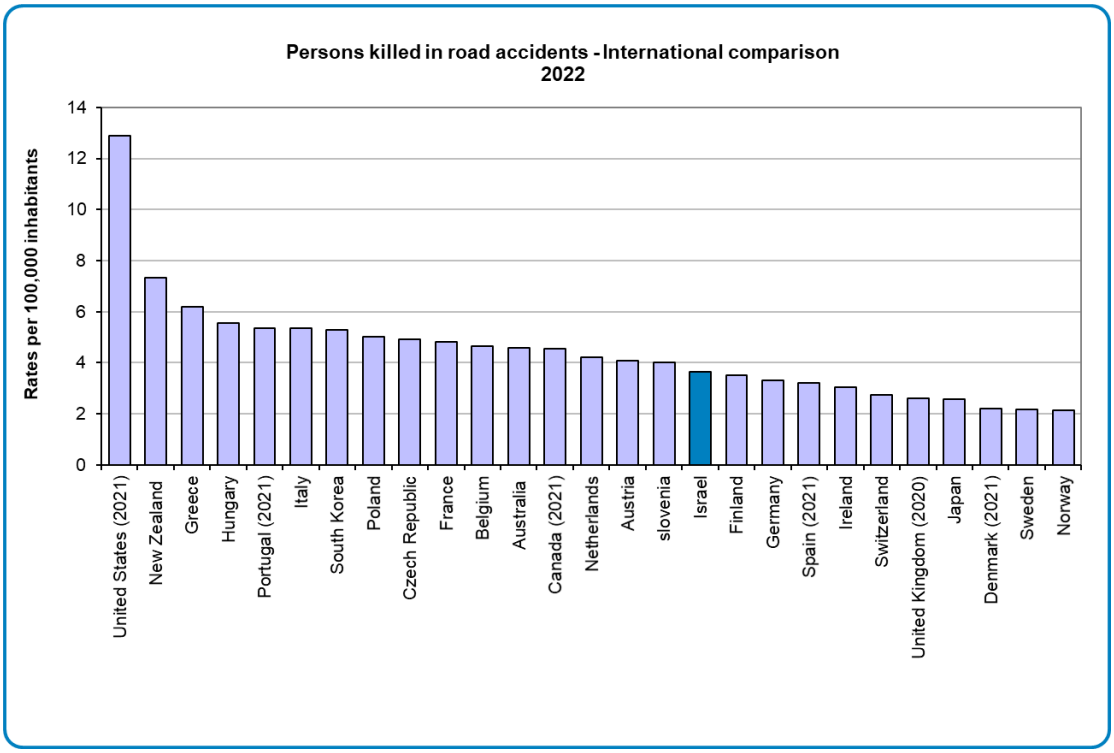


Source: WHO Global Information System on Alcohol and Health (GISAH).

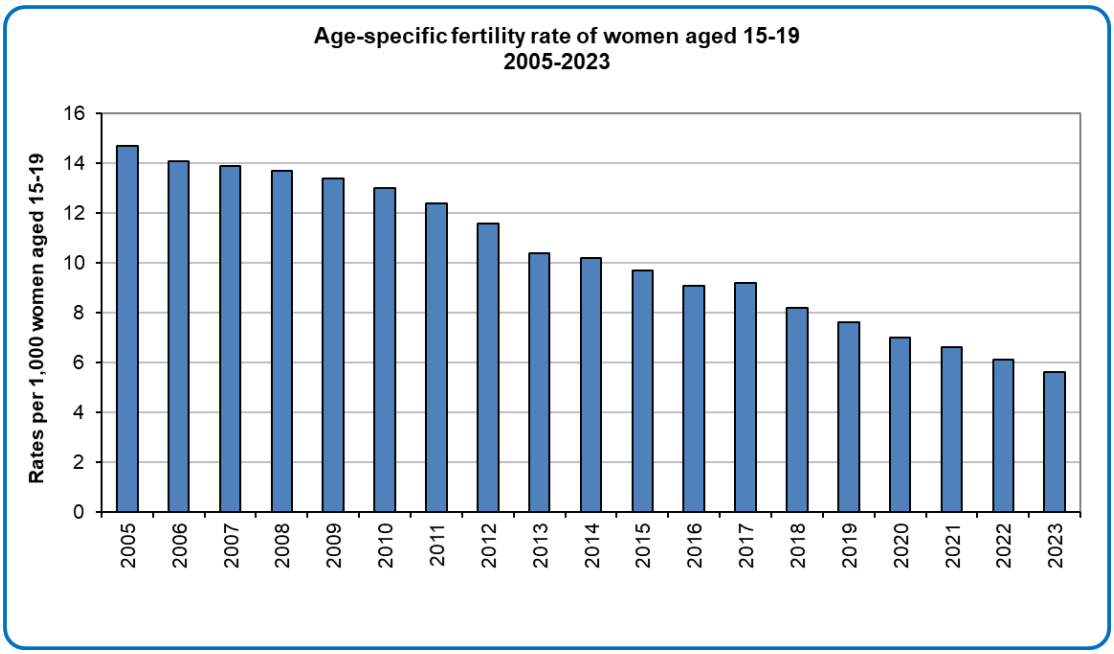
3.6.1 Death rate due to road traffic injuries

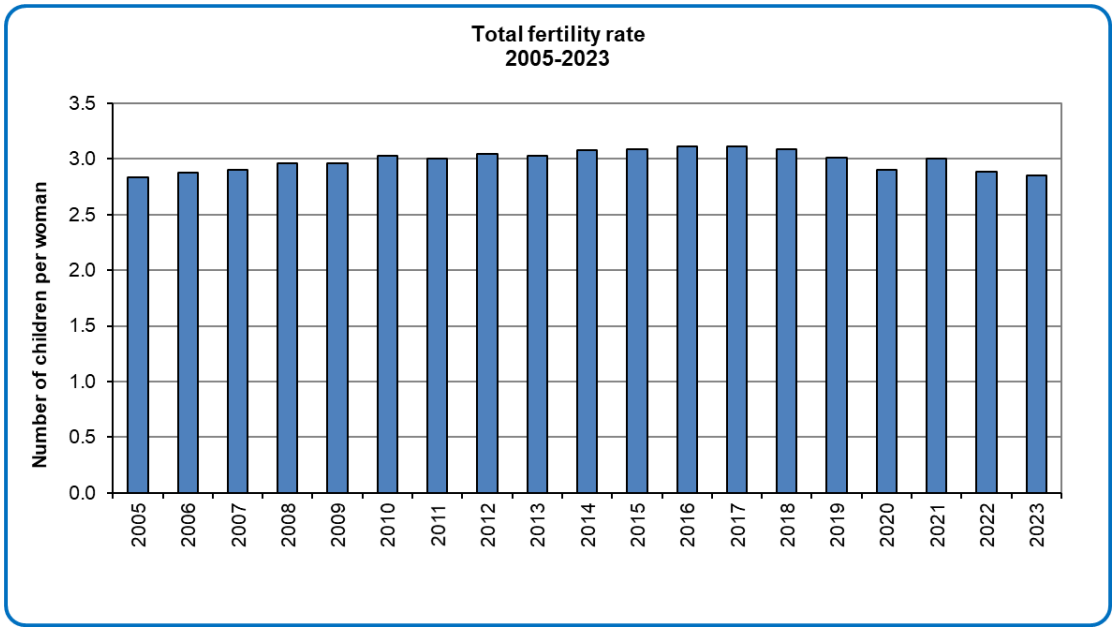
361 people were killed in road accidents in Israel in 2023, 28% of whom were pedestrians.





3.7.2 Adolescent birth rate (aged 15-19 years) per 1,000 women in that age group





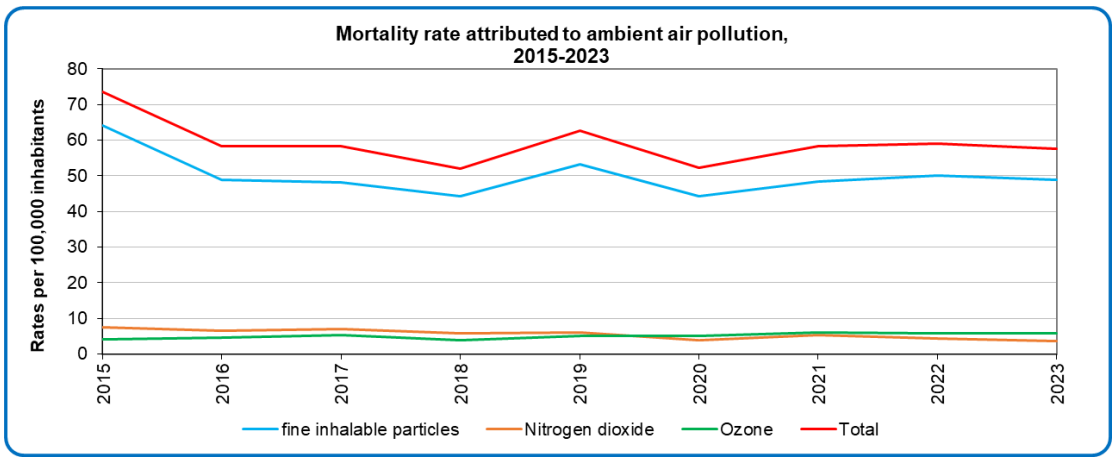
3.8.1 Coverage of essential health services

Based on Israeli legislation, 100% of the population have coverage for essential health services.

3.8.2 Proportion of population with large household expenditures on health as a share of total household expenditure or income

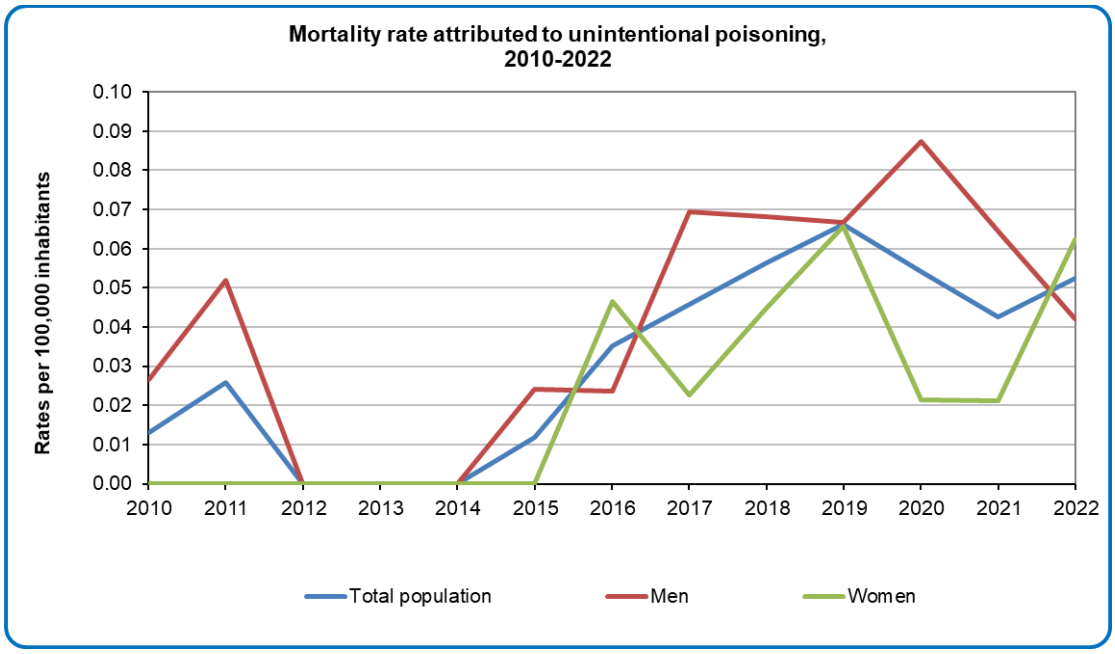
	2022	
Expenditures on health	Health expenditure \ Total household income	Health expenditure \ Total household expenditure
Up to 10%	21.9	29.0
10% to 25%	5.6	6.1

3.9.1 Mortality rate attributed to household and ambient air pollution



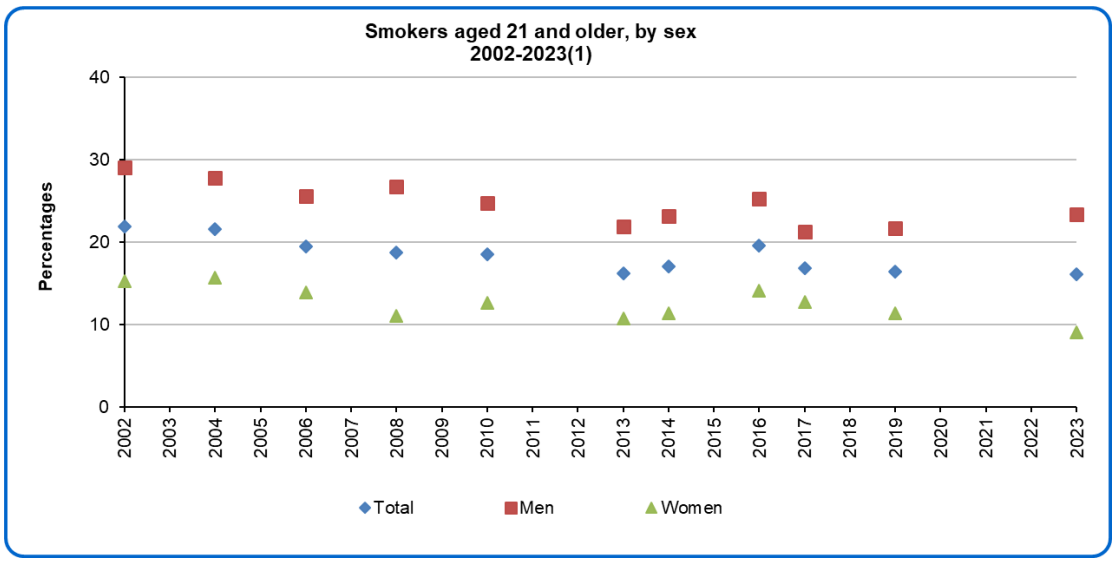
Source: Ministry of Environmental Protection and Ministry of Health.

3.9.3 Mortality rate attributed to unintentional poisoning

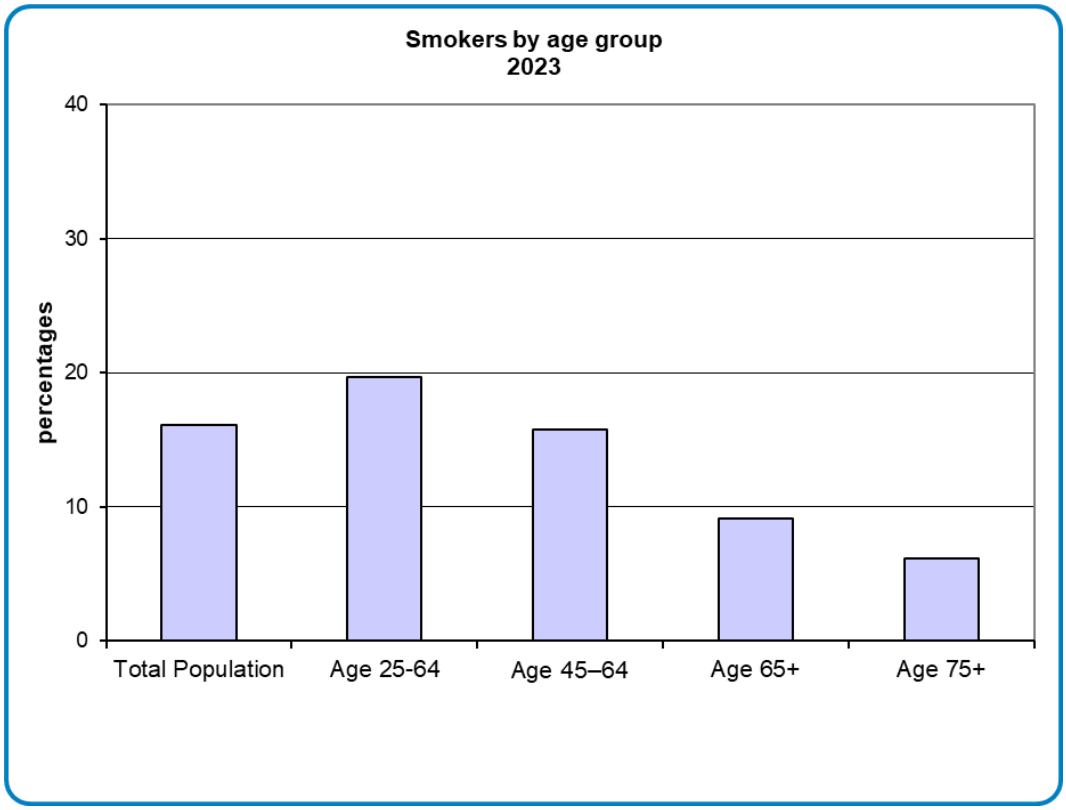


3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older

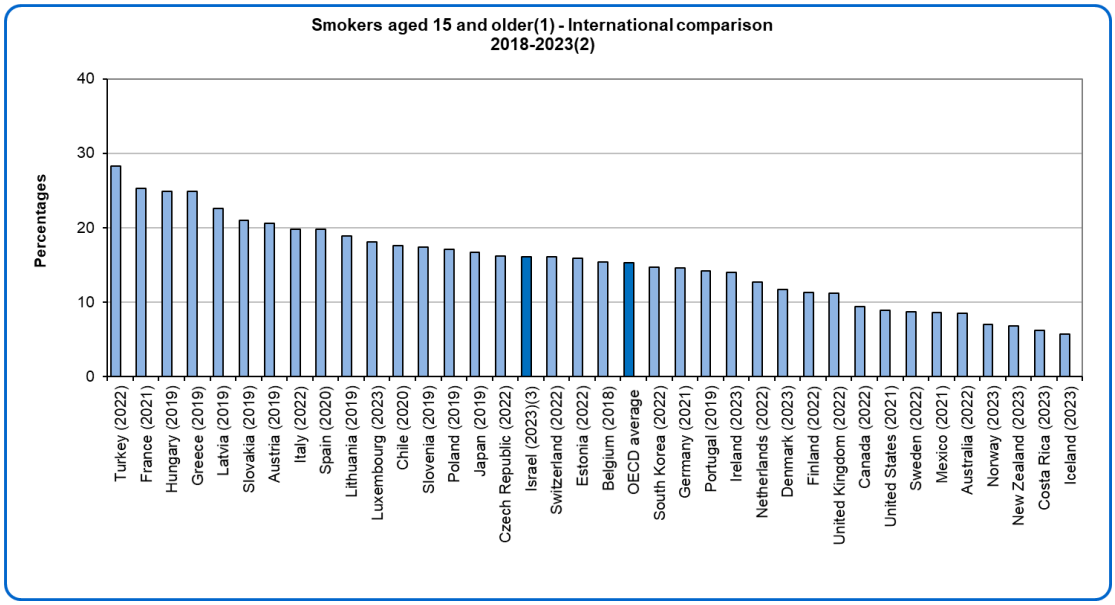
The data refer to people who reported having smoked at least one cigarette a day (daily smokers).



(1) Data for 2002-2013 and 2017 data are based on KAP surveys; 2014 data are based on the 2014 INHIS survey; 2016 data are based on the 2016 Physical Activity Survey, Ministry of Health; 2019 data are based on the INHIS-4 survey, Ministry of Health. 2023 data are based on KAP-2023 survey, Ministry of Health.



Source: KAP-2023 survey, Ministry of Health.



Source: OECD.

(1) In most countries − those aged 15 and later; In Israel − those aged 21 and later.

(2) Next to each country is indicated the year of the last update of the indicator.

(3) INHIS-4 Survey, Ministry of Health.

3.b.1 Proportion of the target population covered by all vaccines included in their national program

Year | reported	Rota 3	Pneumo-coccal infection	Varicella	Hepatitis A	Measles, Mumps, Rubella	Poliomyelitis		Diphtheria, Tetanus, Pertussis	Haemophilus influenzae b	Hepatitis B
		PCV 3	VAR 1	HAV 1	MMR 1	IPV 4(3)	OPV 3(2)	DTP 4	Hib 4	HBV 3
1991					94		95	94		
1992					94	92	93	90		
1993					95	93	93	92		
1994					94	92	92	91		92
1995					95	95	95	94		93
1996					94	93	92	93	92	96
1997					95	92	92	92	92	97
1998					94	92	92	93	94	97
1999					94	92	92	92	93	96
2000				89	95	93	93	94	93	98
2001				91	95	93	93	92	94	96
2002				89	95	91	92	90	91	98
2003				88	96	93	93	93	93	98
2004				93	97	95	94	95	95	100
2005				90	94	95	95	93	93	96
2006				87	96	94	81	95	94	96
2007				93	97	95		95	95	99
2008				93	98	94		94	94	99
2009				94	97	96		96	96	98
2010			91	93	96	95		95	95	97
2011		92	95	93	97	94		94	94	98
2012	82	93	95	93	96	94		94	94	97
2013	80	94	96	96	98	96		96	96	97
2014	81	94	96	94	97	95		95	95	97
2015	80	94	96	95	98	95		95	95	96
2016	80	95	97	95	99	96		96	96	97
2017	79	94	97	92	99	95		95	95	96
2018	79	94	97	91	99	96		96	95	96
2019	91	97	93	92	94	98		98	98	98
2020	90	97	96	92	96	99		99	99	98
2021	90	97	95	92	95	99		98	98	98
2022	91	97	94	90	94	98		98	98	98
2023	90	96	92	88	93	98		97	97	97

Source: Ministry of Health.

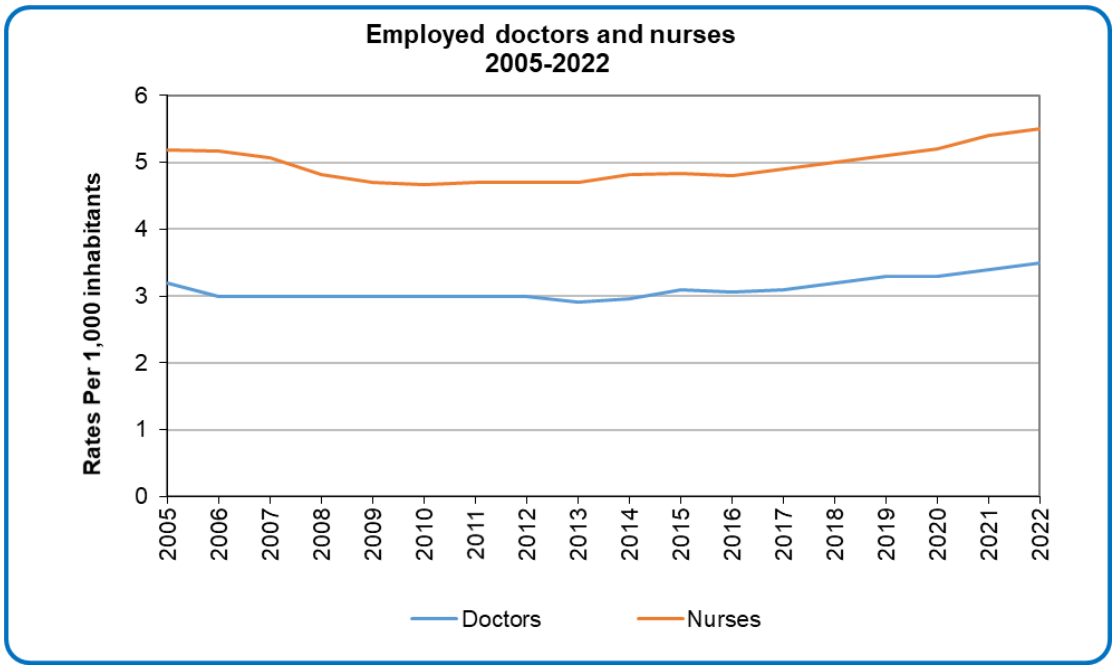
1. Up to age 2, with the exception of HAV 1 (up to age 3).

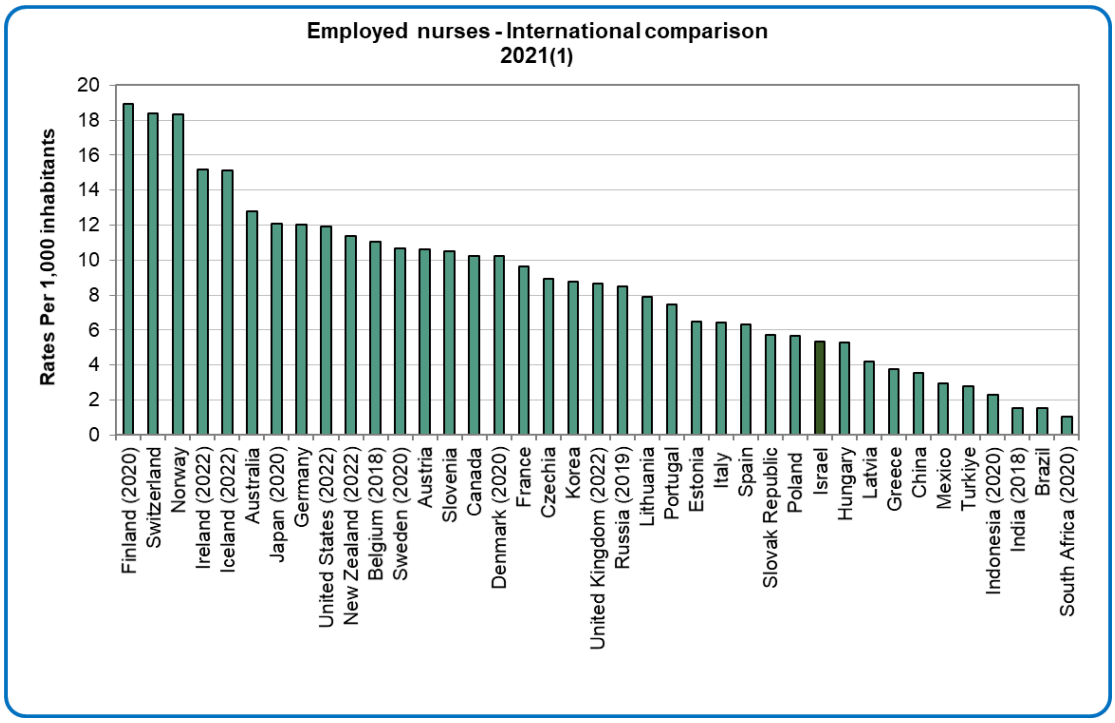
2. In the years 2007-2012, children were not vaccinated with the inactivated.

The vaccine was reinstated in 2013.

3. Until 2006 - IPV 3.

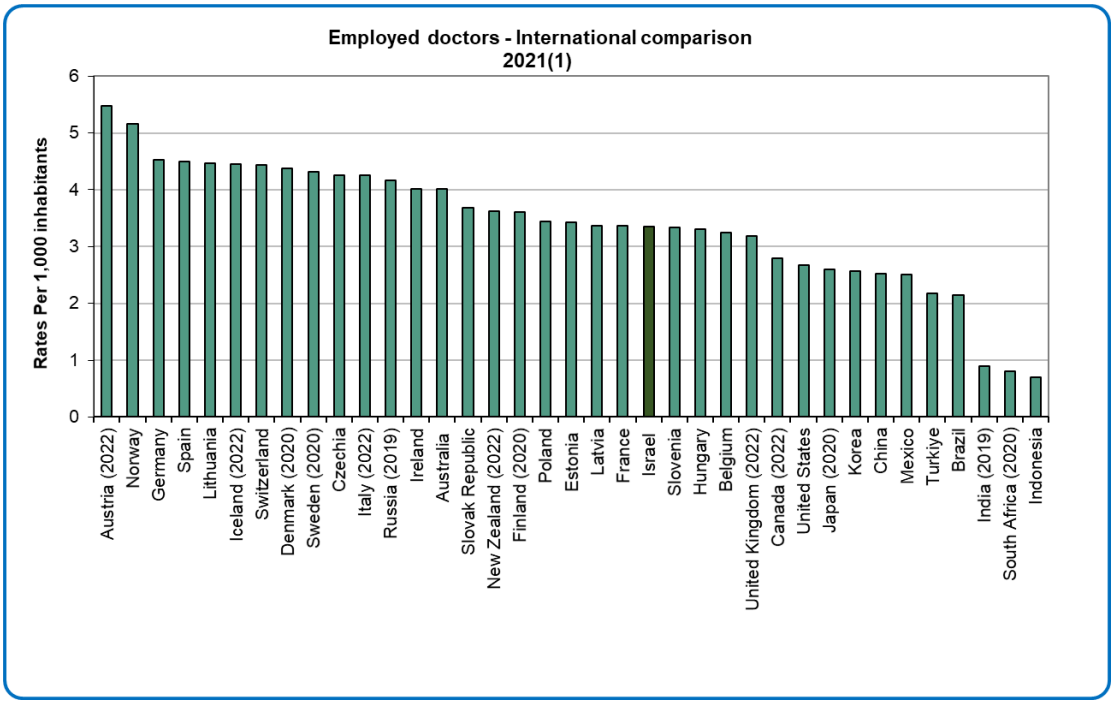
3.c.1 Health worker density and distribution





Source: OECD.

(1) In most countries the last update year is 2021, unless otherwise noted.

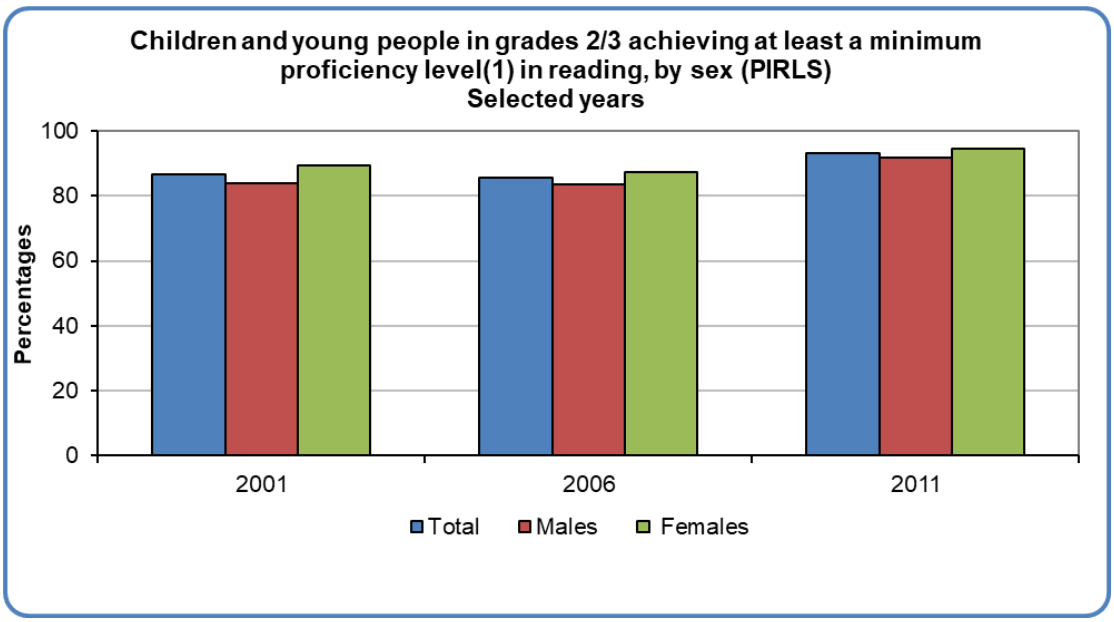


Source: OECD.

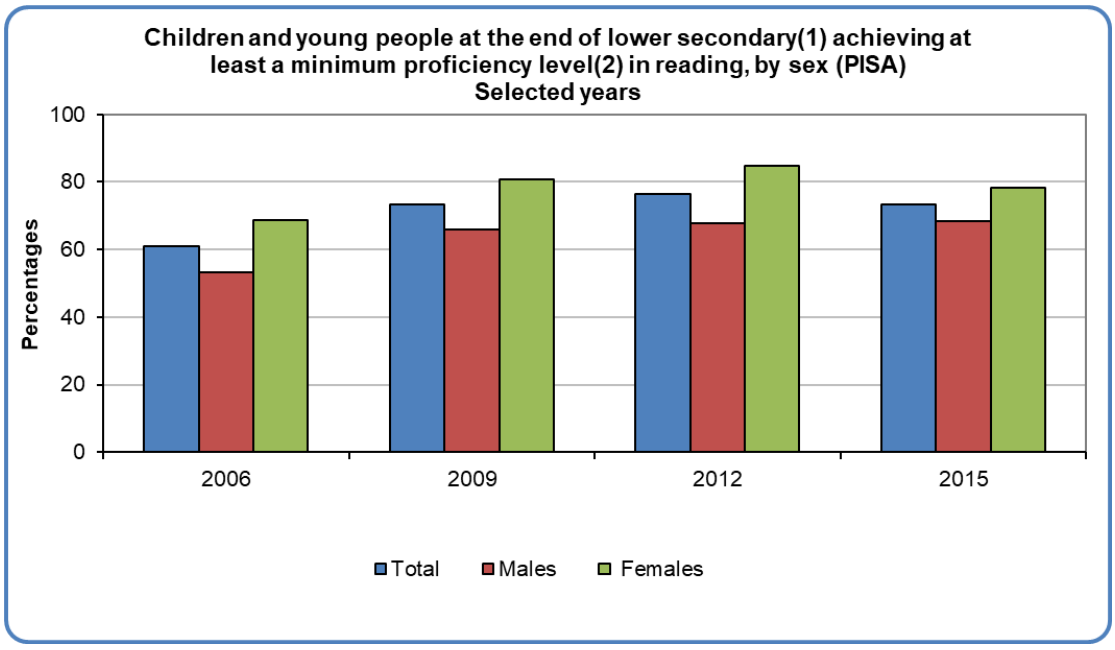
(1) In most countries the last update year is 2021, unless otherwise noted.

Goal 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.1.1 Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

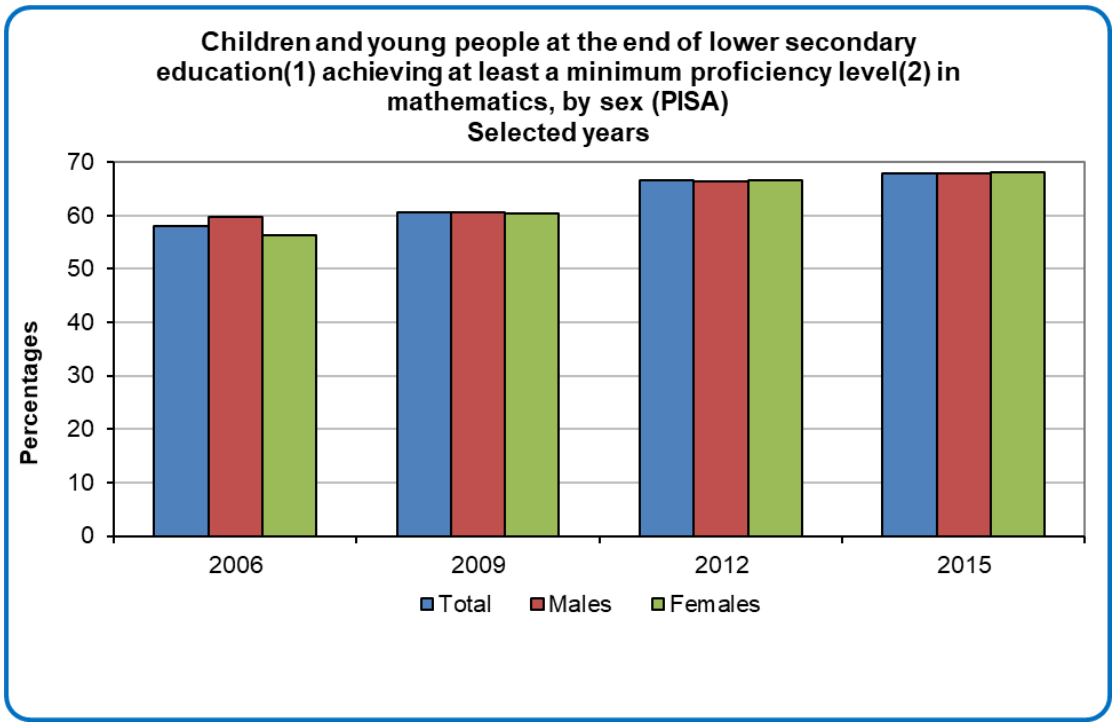


(1) Minimum proficiency level - proficiency level 2 and above.



(1) Age 15-16.

(2) Minimum proficiency level - proficiency level 2 and above.

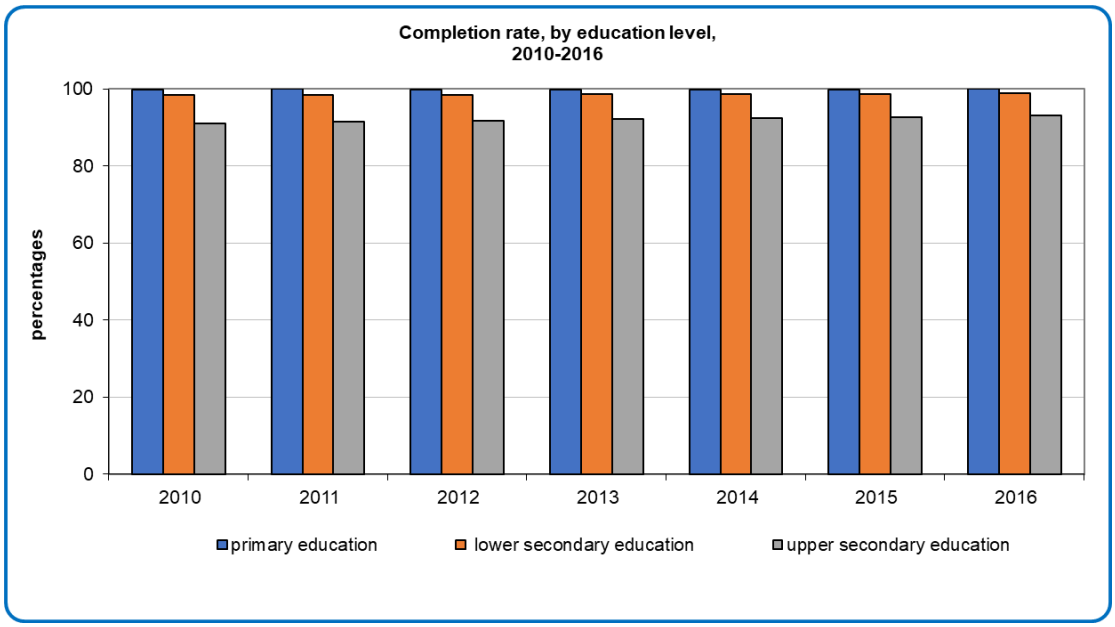


(1) Age 15-16.

(2) Minimum proficiency level - proficiency level 2 and above.

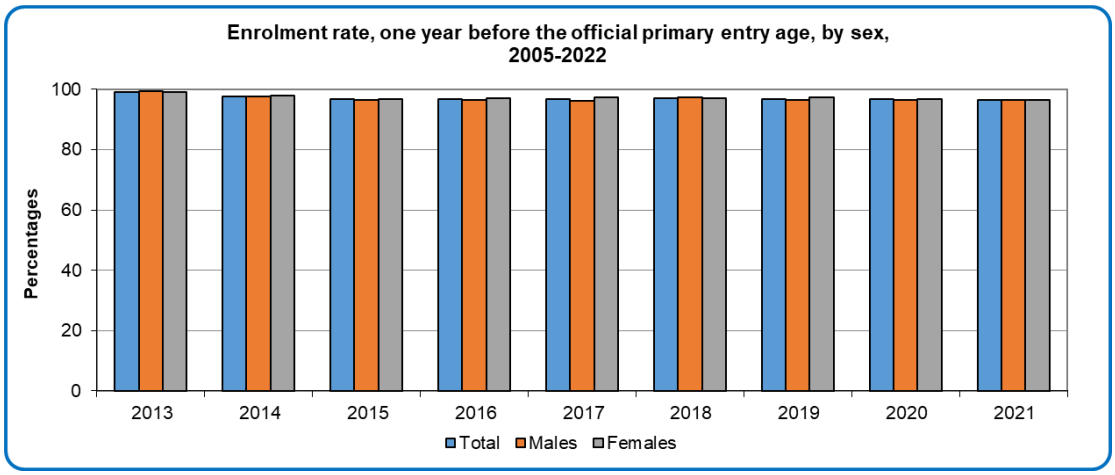
Results for this indicator should only be compared within the same type of learning assessment. For example, PISA results with PISA, TIMSS results with TIMSS, etc.

4.1.2 Completion rate (primary education, lower secondary education, upper secondary education)



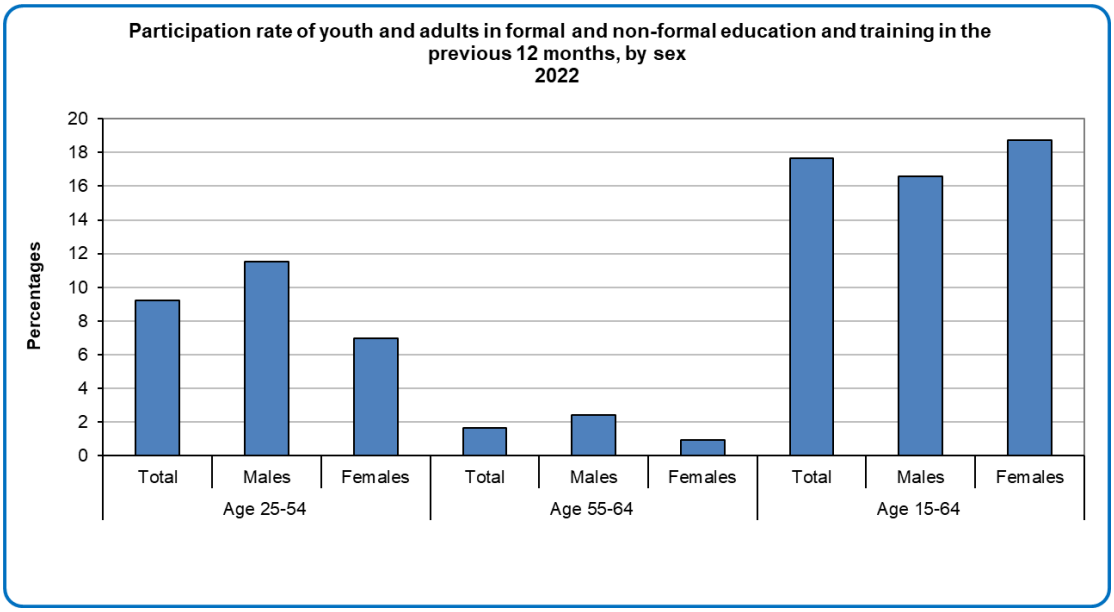
Calculation of the indicator was done by UNESCO based on national data.

4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex

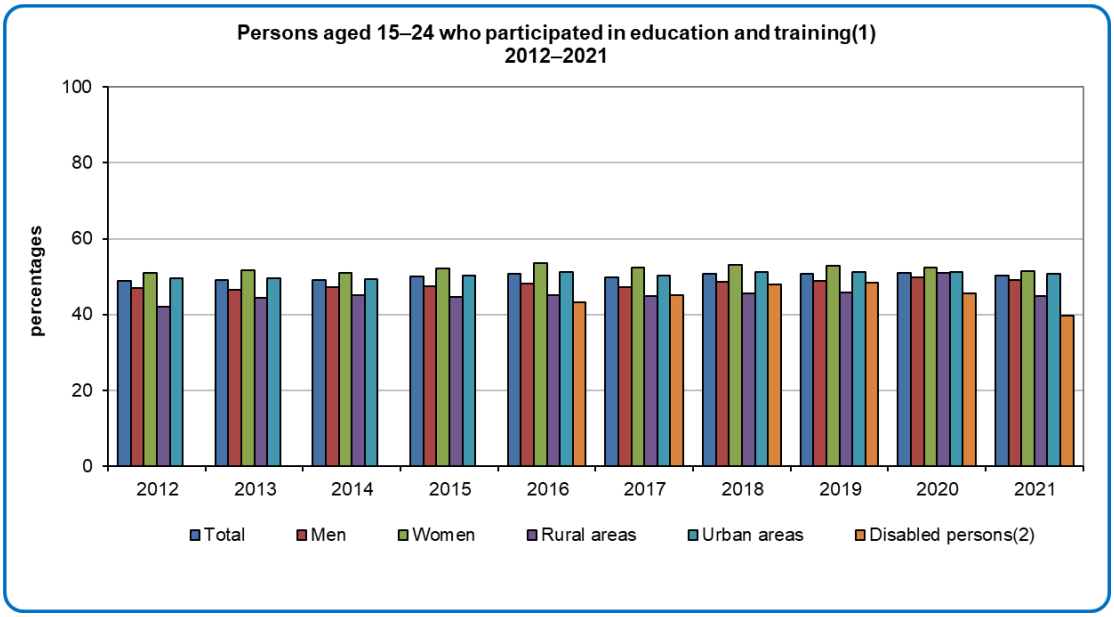


Calculation of the indicator was done by UNESCO based on national data.

4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

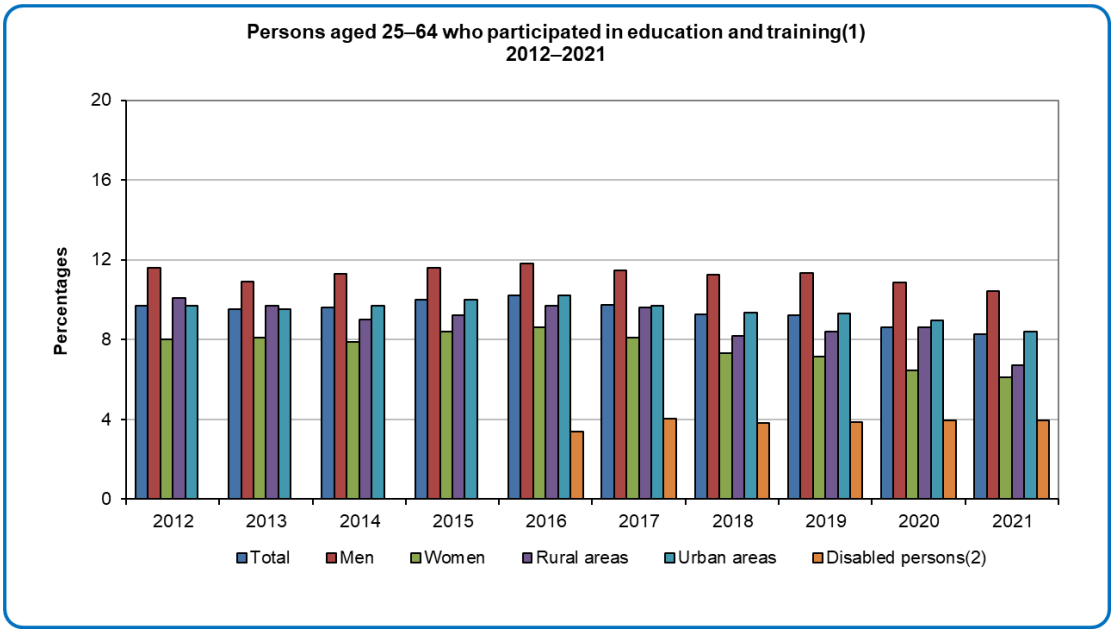


Calculation of the indicator was done by UNESCO based on national data.



(1) In the Labor Force Survey, question is asked: "Did you attend or do you attend school? (including studies at university, yeshiva, in a course lasting at least one year, etc.)".

(2) Data on persons with disabilities began to be collected in the Labor Force Survey in 2016.



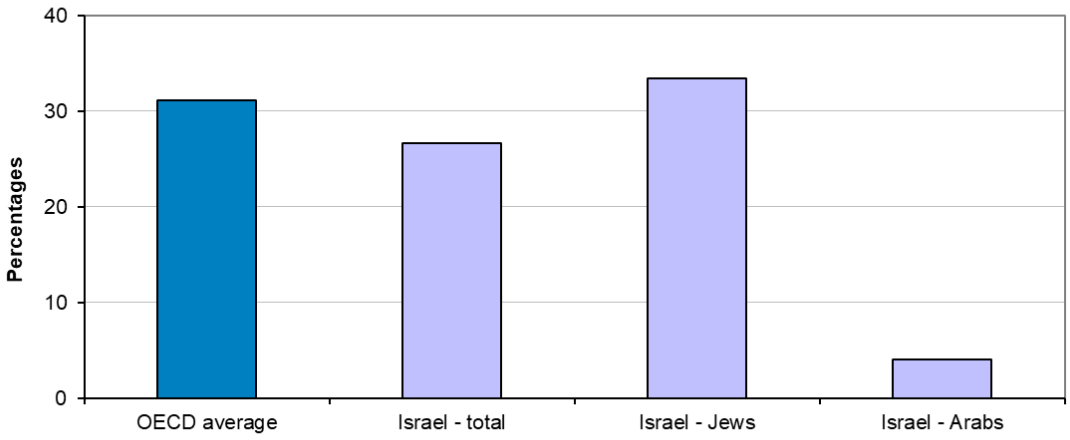
(1) In the Labor Force Survey, question is asked: "Did you attend or do you attend school? (including studies at university, yeshiva, in a course lasting at least one year, etc.)".

(2) Data on persons with disabilities began to be collected in the Labor Force Survey in 2016.

4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

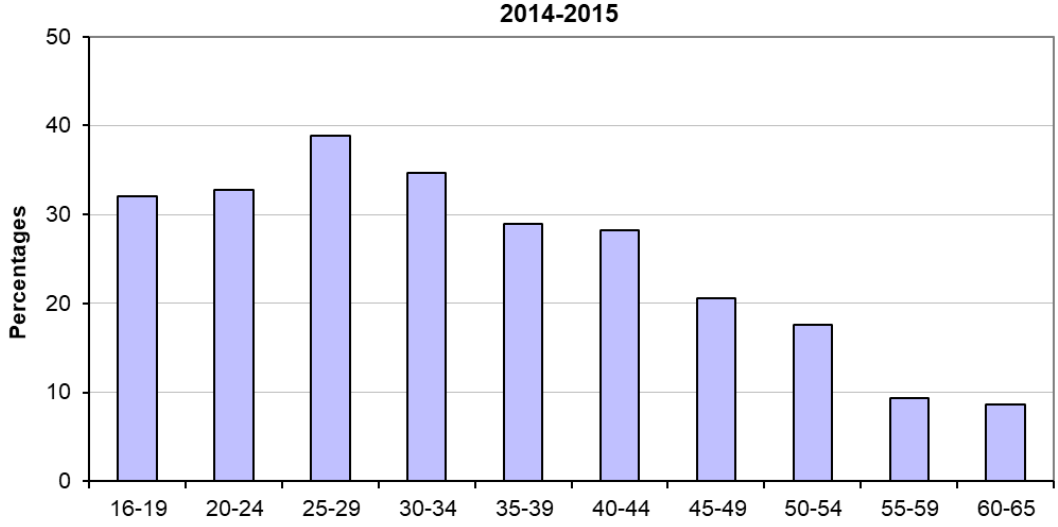
Data presented as proxy for this indicator are direct measures of the skill levels from the 2015 PIAAC skill assessment survey. The survey of adult skills defines problem-solving in technology-rich environments as "using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks." It focuses on "the abilities to solve problems for personal, work and civic purposes by setting up appropriate goals and plans, and accessing and making use of information through computers and computer networks."

Youth and adults with proficiency level 2 or 3 in problem-solving in a technology-rich environment, in Israel (by population group) and OECD countries (average) 2014-2015



Source: Survey of Adult Skills (PIAAC).

Youth and adults with proficiency level 2 or 3 in problem-solving in a technology-rich environment, by age 2014-2015



Source: Survey of Adult Skills (PIAAC).

4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available)

Ratio

	Reading					
	Grades 2/3 of primary education(1)			End of lower secondary education(2)		
	Parity Index (Girls/Boys)	Parity Index (Students of rural school/Students of urban school)	Parity Index (Low socio-economic status/High socio-economic status)	Parity Index (Girls/Boys)	Parity Index (Students of rural school/Students of urban school)	Parity Index (Low socio-economic status/High socio-economic status)
	PIRLS			PISA		
2001	1.06	0.79	1.20			
2006	1.05	0.89	1.12	1.23	0.71	0.61
2009				1.18	1.00	0.66
2011	1.03	0.93	0.87			
2012				1.20	0.97	0.71
2015				1.13	0.92	0.68
2018				1.22		

Calculation of the indicator was done by UNESCO based on national data.

(1) Forth grade.

(2) Teens in age 15-16.

Ratio

	Mathematics		
	End of lower secondary education		
	Parity Index (Girls/Boys)	Parity Index (Students of rural school/Students of urban school)	Parity Index (Low socio-economic status/High socio-economic status)
2003(1)	1.01	0.96	
2006(2)	0.94	0.68	0.51
2007(1)	1.04	0.93	
2009(2)	1.00	1.10	0.47
2011(1)	1.06	0.94	0.78
2012(2)	1.00	0.92	0.52
2015(2)	1.00	0.98	0.60
2018	1.09		0.53

Calculation of the indicator was done by UNESCO based on national data.

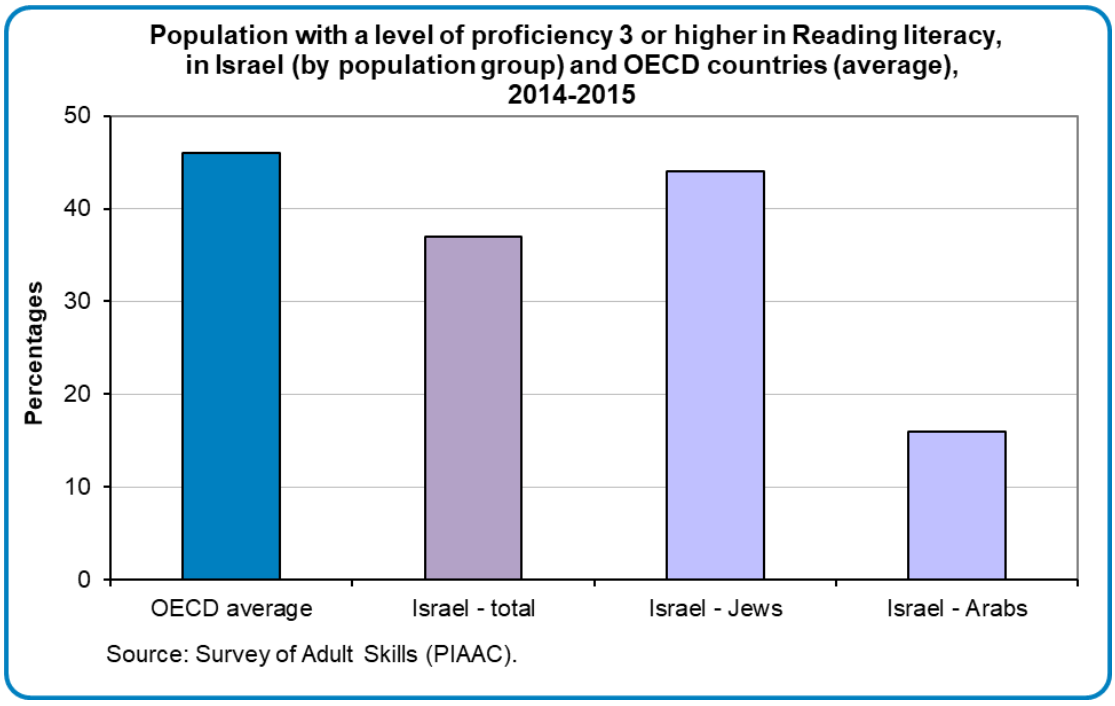
(1) TIMSS

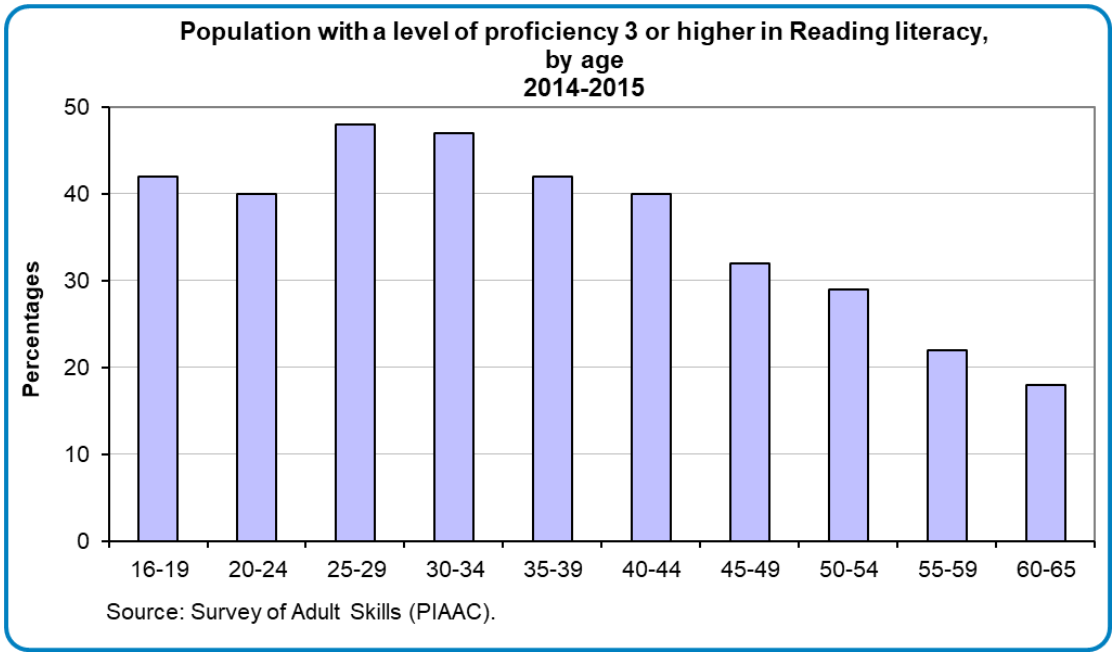
(2) PISA

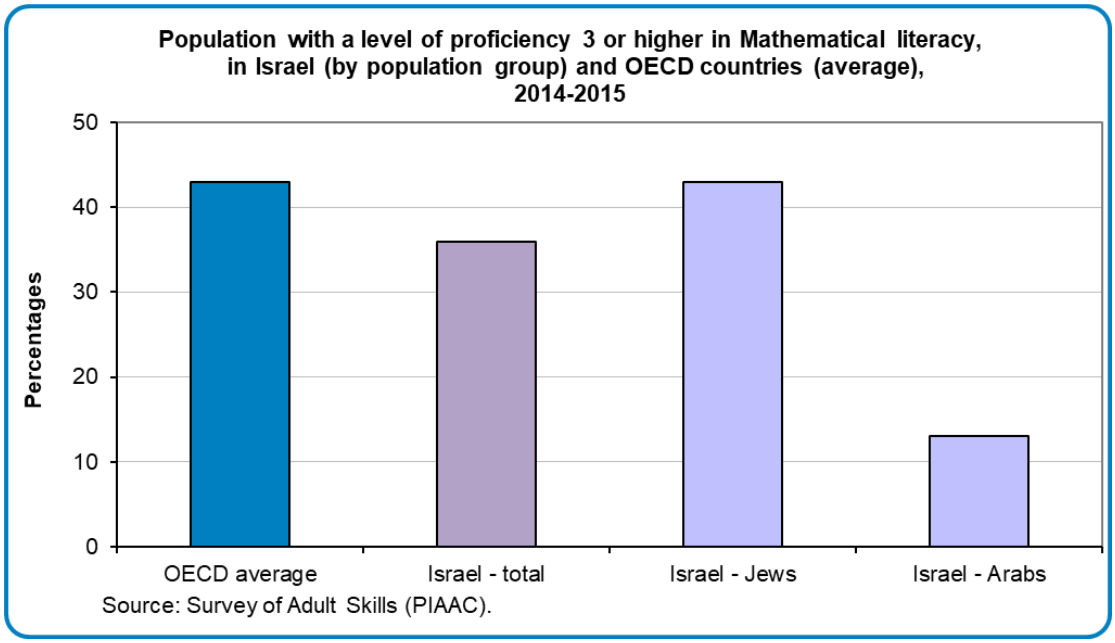
4.6.1 Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex

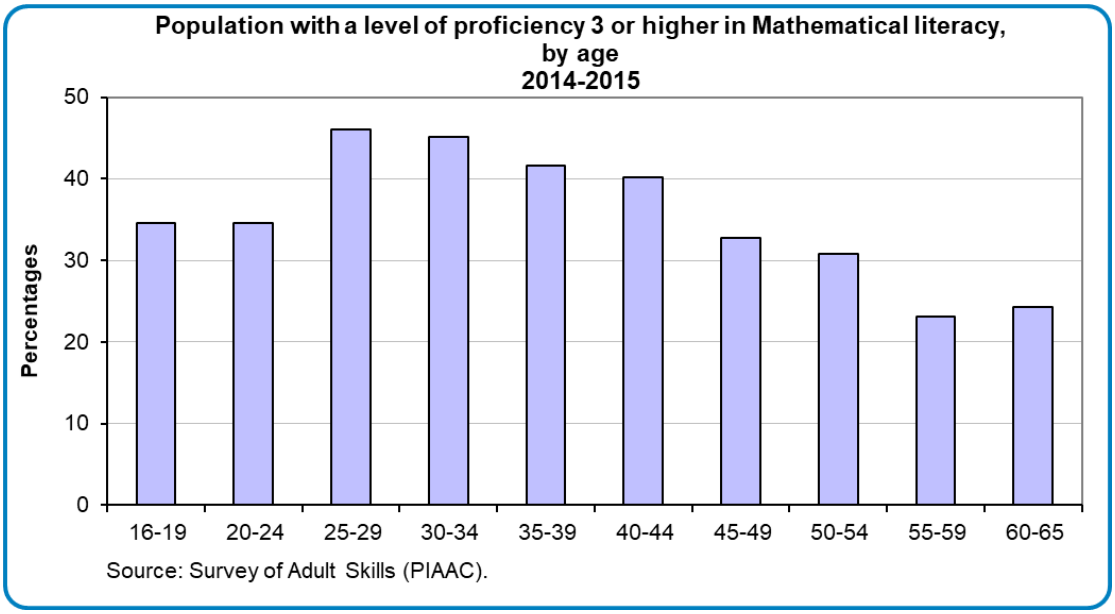
The proportion of the population aged 16-65 achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills based on PIAAC survey (level 2 or higher) is as follows: literacy – 72.2%, numeracy skills – 68.3%.

Level 3 and higher is considered high in the Israeli well-being indicators set.



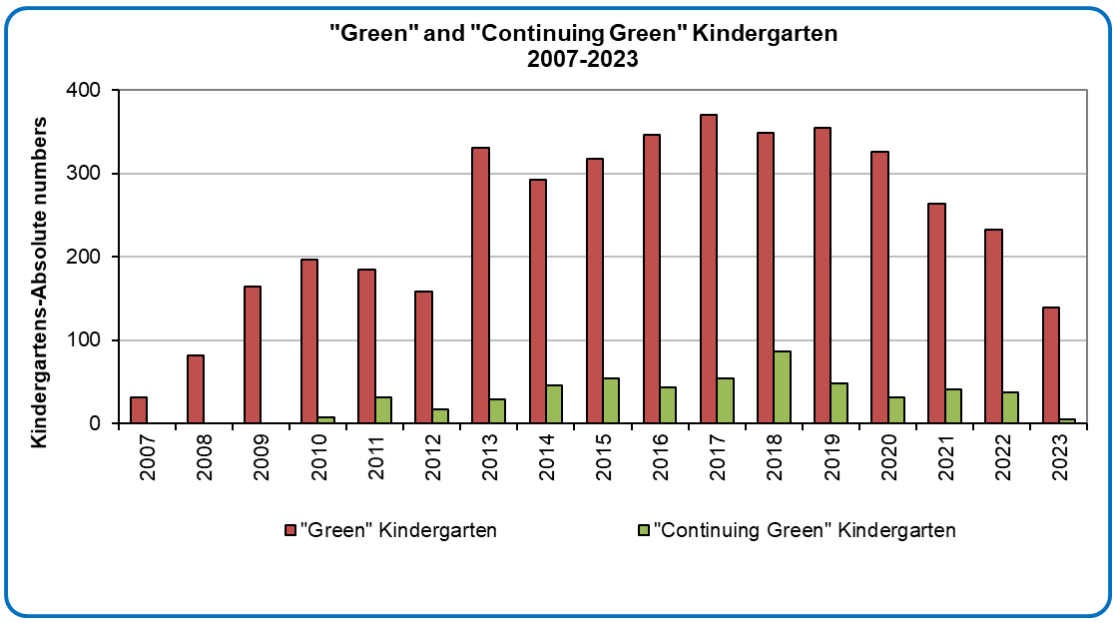


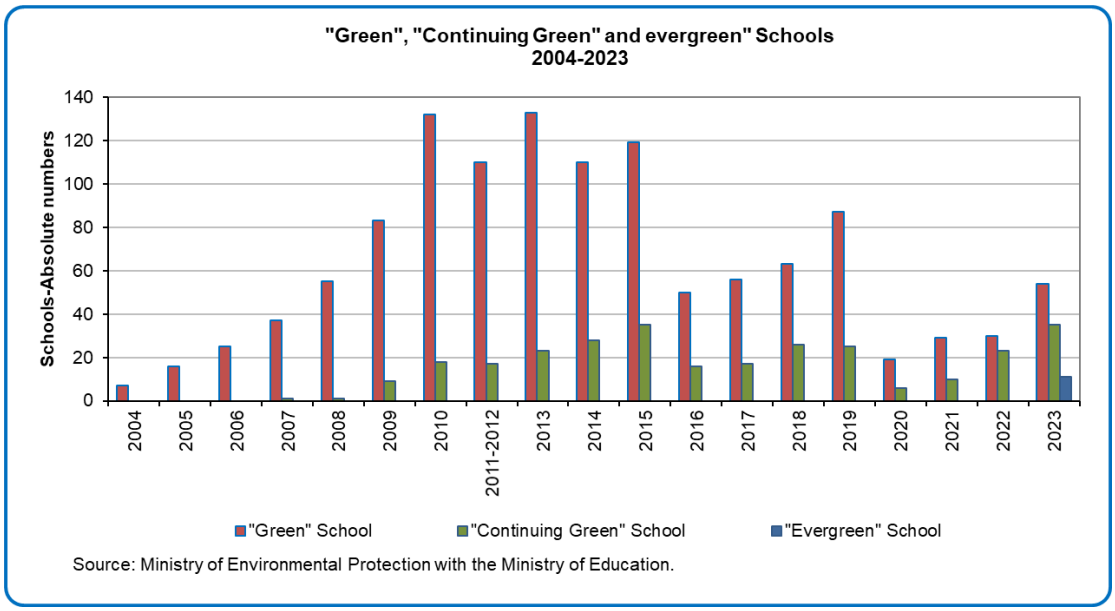




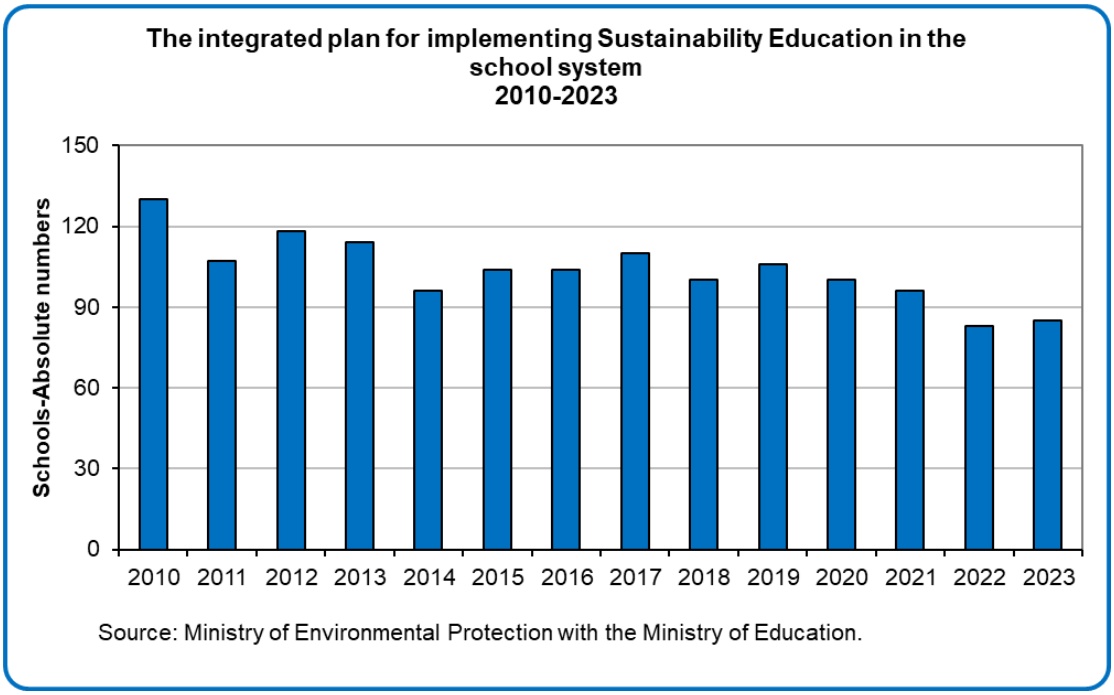
4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment

The Ministry of Environmental Protection in collaboration with the Ministry of Education has led the certification process for Green Schools since 2003. The purpose of the process is to implement sustainability principles in schools. Accreditation reflects the recognition of significant environmental education in a school and outlines a possible course of action for schools that want to start environmental activities based on existing frameworks.





Green School - two-year certification.
Continuing Green School - Two additional years of certification are required.
Evergreen School- To receive this accreditation, the school is required to carry out a socio-economic environmental project that deals with an environmental issue such as the climate crisis, circular economy, consumer culture, the commons, food loss, biodiversity, and open spaces.
A professional development program for teachers implements education for sustainability principles with an emphasis on action for the environment by means of teacher training accompanied by professional guidelines.



4.a.1 Proportion of schools offering basic services, by type of service

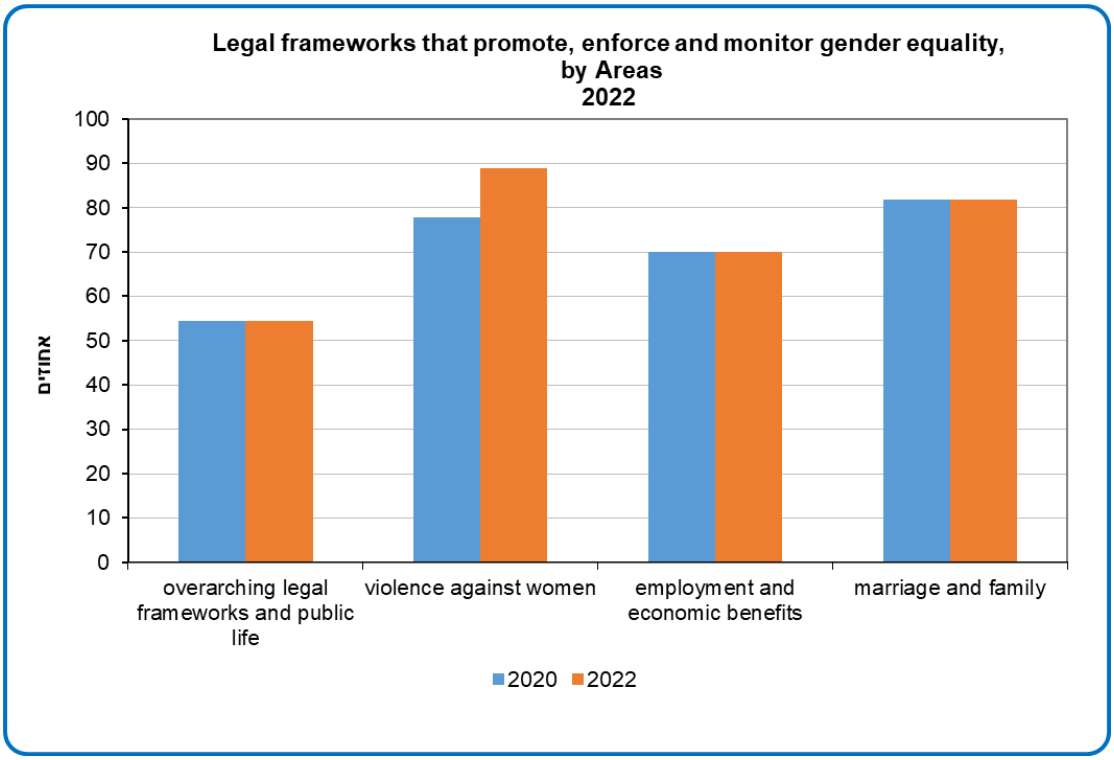
Access to electricity; basic drinking water; Internet for pedagogical purposes; computers for pedagogical purposes; drinking water; basic handwashing facilities (as per the WASH indicator definitions); is 100% at all levels of education.

4.c.1 Proportion of teachers with the minimum required qualifications, by education level

	pre-primary schools	primary schools	lower secondary schools	upper secondary schools
2010	88.92	85.79	90.19	83.97
2011	95.63	83.62	92.78	87.31
2012	94.90	83.35	92.68	86.81
2013	92.87	88.38	87.73	87.06
2014	92.36	82.52	91.87	87.26
2015	92.24	81.99	91.61	88.02
2016	92.30	81.98	91.91	88.08
2017	92.84	81.97	92.26	88.51
2018	93.22	81.85	92.60	89.67
2019	93.26	84.73	93.51	90.68
2020	95.00	86.00	94.70	91.60
2021	95.10	85.50	94.80	92.40
2022	94.50	85.90	94.90	92.50
2023	94.37	85.12	93.13	93.72
2024	94.43	89.77	93.79	93.60

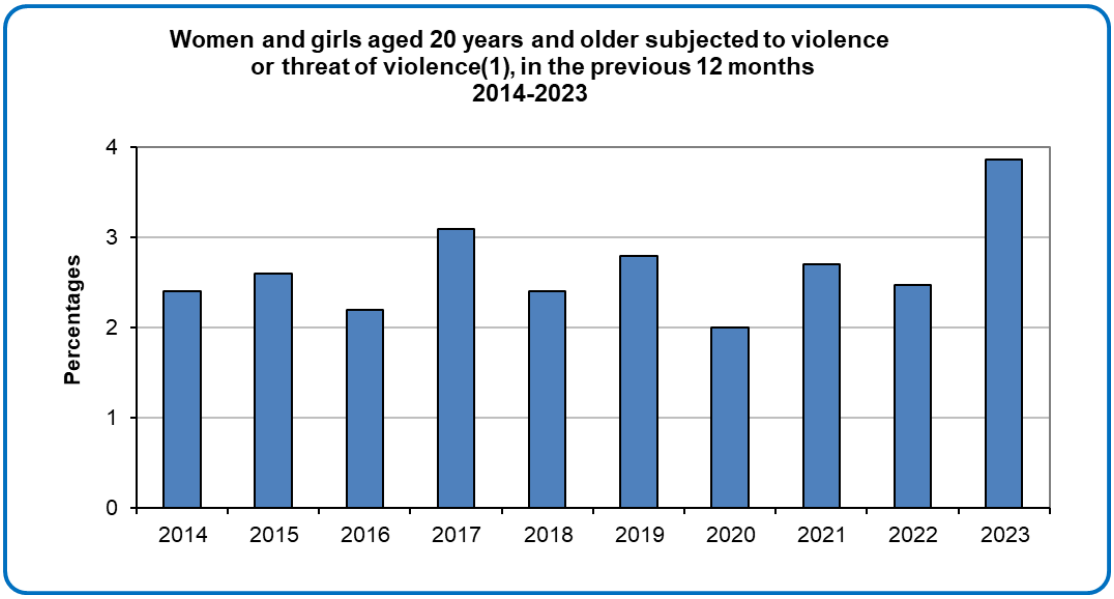
Goal 5 - Achieve gender equality and empower all women and girls

5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex



Source: Calculated by UN Women, Based on reports from the Ministry of Justice.

5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age



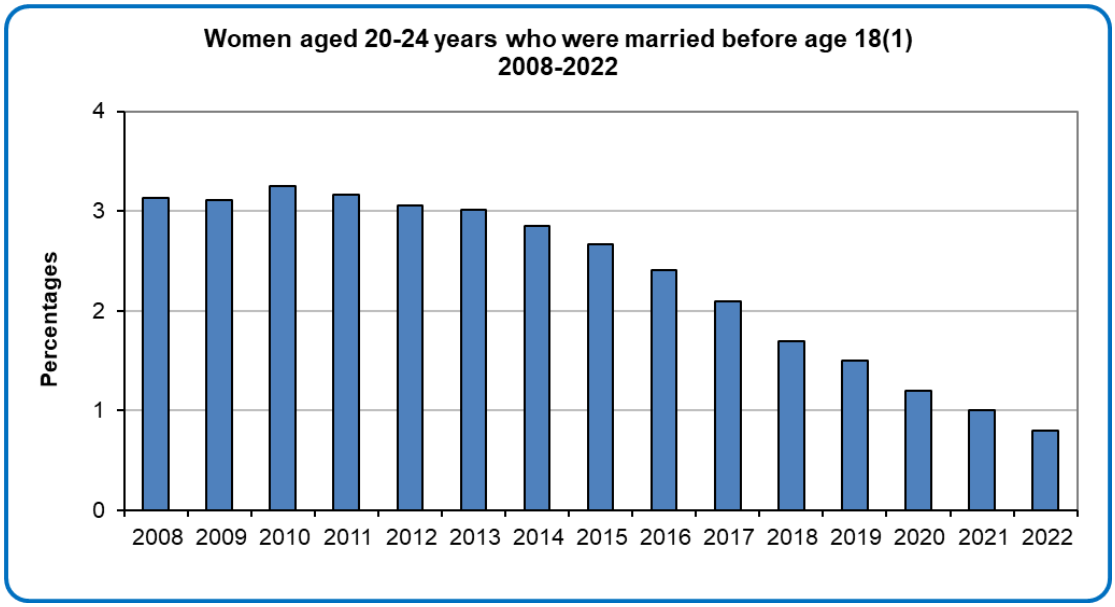
(1) Data for women subject to violence by intimate partner cannot be displayed due to high sampling errors.

5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence

Data cannot be displayed due to high sampling errors.

5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18

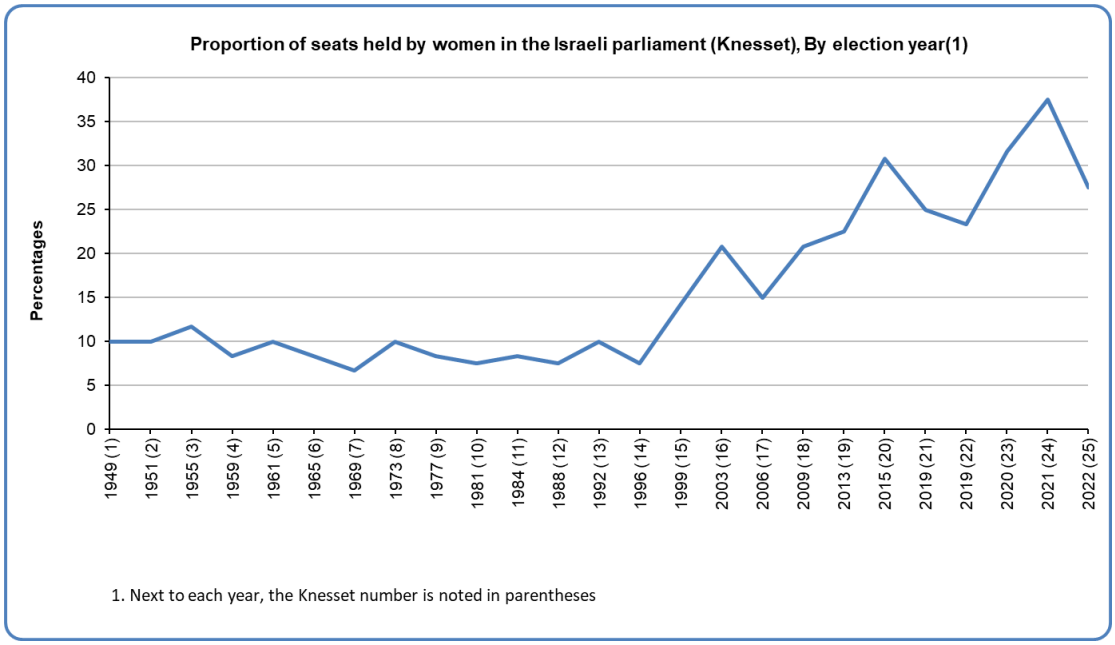
Data for Israel are available only for women aged 20-24 years who were married or in a union before age 18. The data refers to first marriage and does not include other kinds of union.



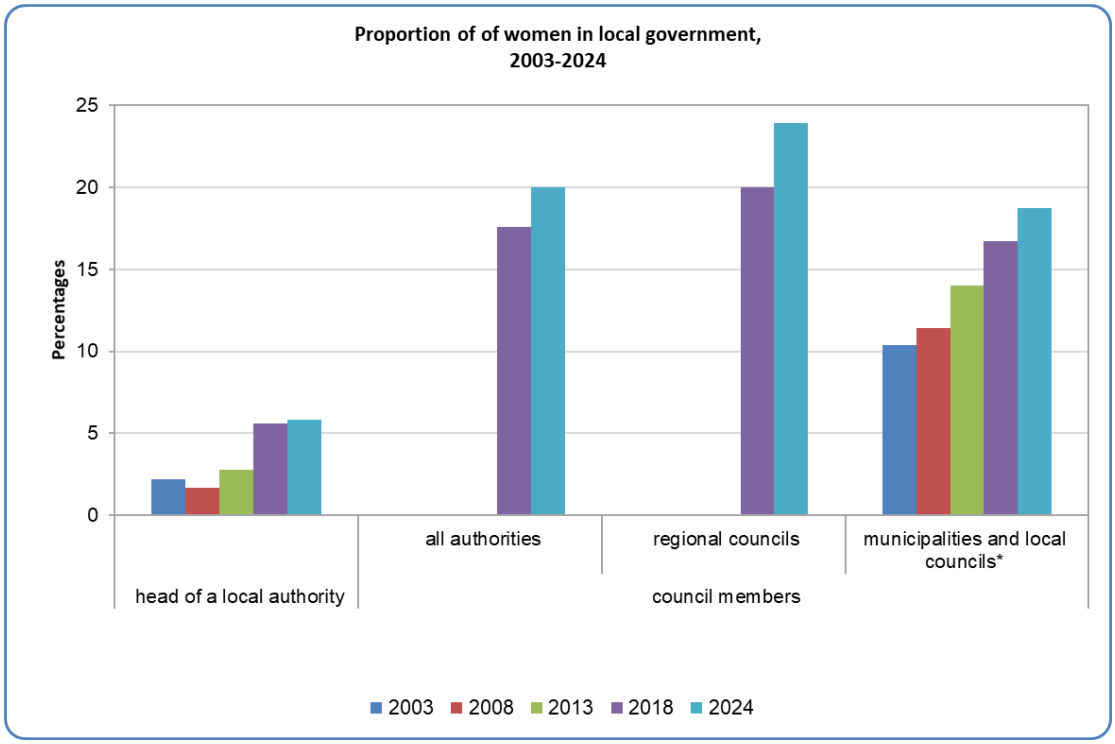
(1) The data refers to first marriage and do not include other kinds of union.

5.5.1 Proportion of seats held by women in national parliaments and local governments

The Knesset, the Israeli parliament, is the legislative branch having exclusive authority in the country to enact laws. The Knesset has 120 members. The data present the proportion of women in the Knesset from the first Knesset (1949) to the current Twenty-Fifth Knesset (from 2015).



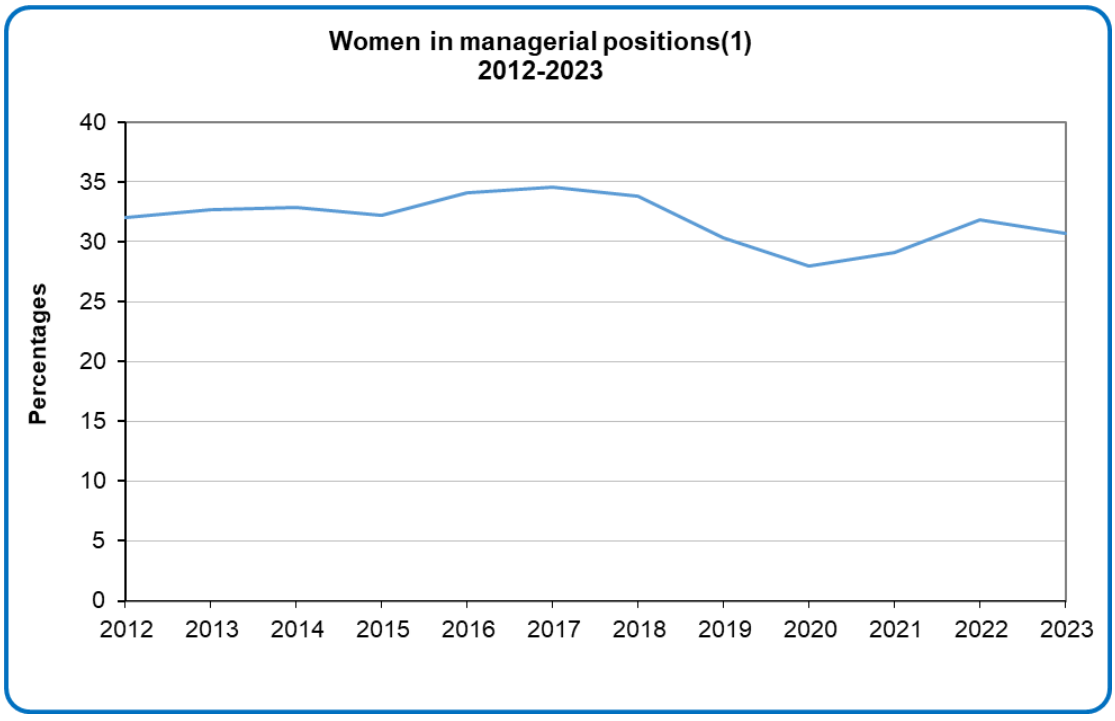
1. Next to each year, the Knesset number is noted in parentheses



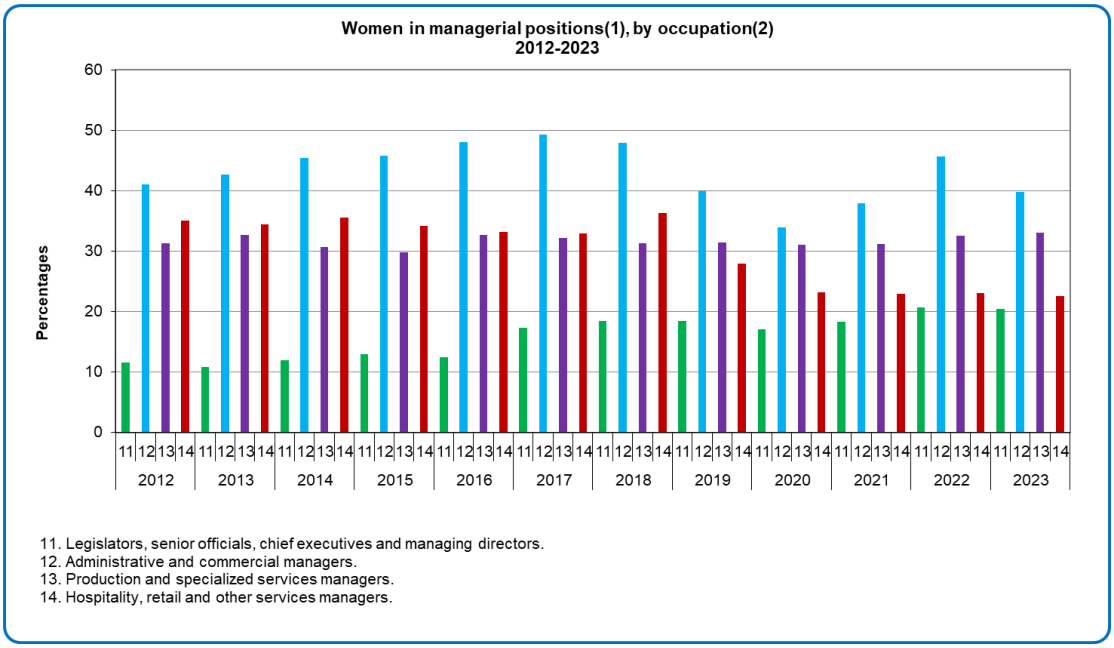
Source: Calculated by the Israel Democracy Institute based on data from the Ministry of Interior.

5.5.2 Proportion of women in managerial positions

In 2023, 30.7% of the managerial positions were held by women. In the public sector, 42.4% of the managerial positions were held by women.

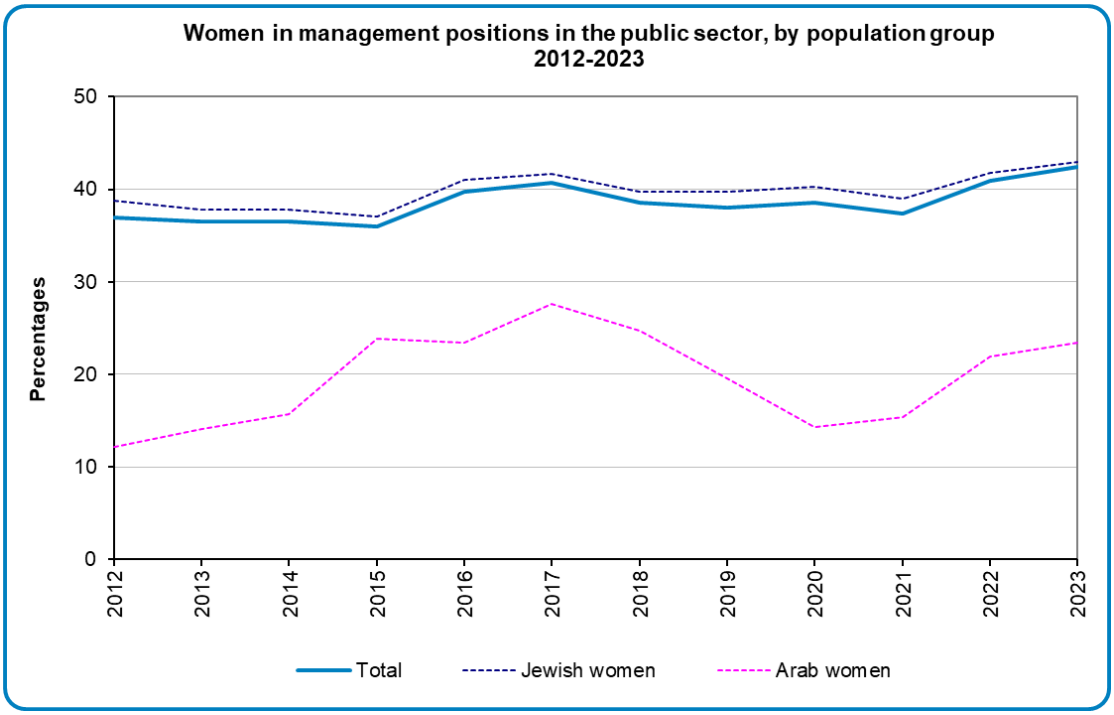


(1) Managerial positions – positions in "managers" occupation (group 1) according to the Standard Classification of Occupations 2011.



(1) Managerial positions – positions in "managers" occupation (group 1) according to the Standard Classification of Occupations 2011.

(2) According to the International Standard Classification of Occupations 2011.



5.6.2 Number of countries with laws and regulations that guarantee women aged 15-49 years access to sexual and reproductive health care, information and education

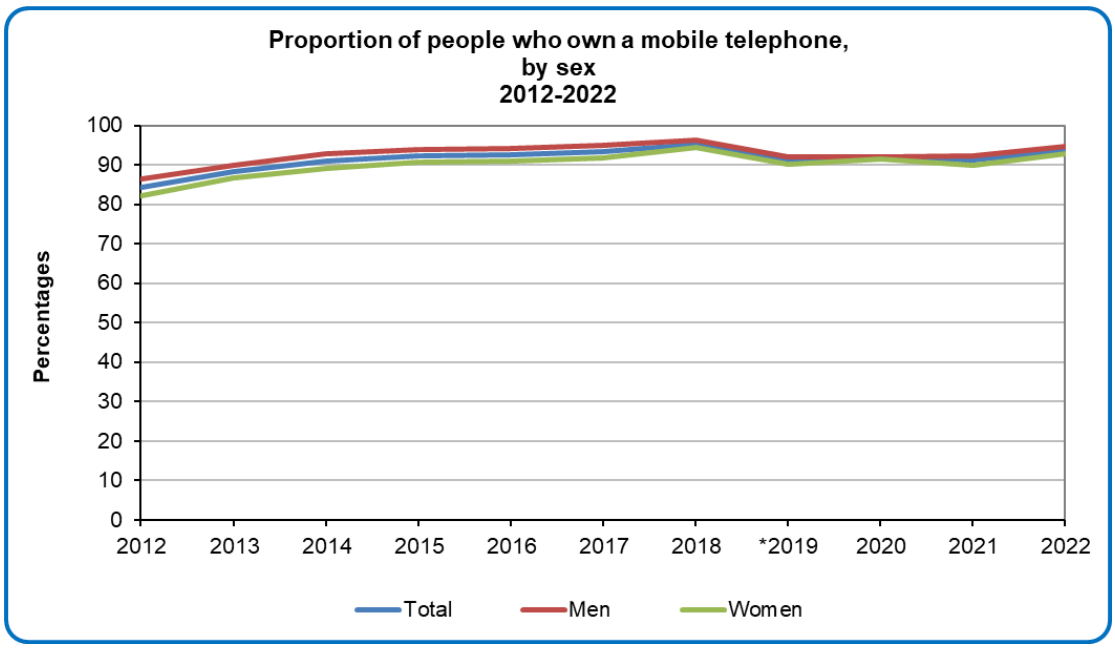
The National Health Insurance Law (1994) guarantees all women in Israel access to these services.

5.a.2 Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control

Israel demonstrates a strong legal framework that supports women's equal rights to land ownership, in alignment with Sustainable Development Goal (SDG) Indicator 5.a.2. The legal system in Israel guarantees equal rights for women and men in matters related to property and land. Women can enter into contracts, own land independently, and have the same inheritance rights as men. These legal rights are enshrined in statutory laws and upheld by the civil courts, which have jurisdiction over matters of property and inheritance.

While personal status matters, such as marriage and divorce, may fall under religious jurisdiction in Israel, these do not interfere with women's statutory property rights. This ensures that all women, regardless of marital status or religious affiliation, have equal legal access and rights to land. Overall, Israel's legal framework effectively upholds gender equality in land ownership and control, fulfilling the requirements of SDG Indicator 5.a.2.

5.b.1 Proportion of individuals who own a mobile telephone, by sex



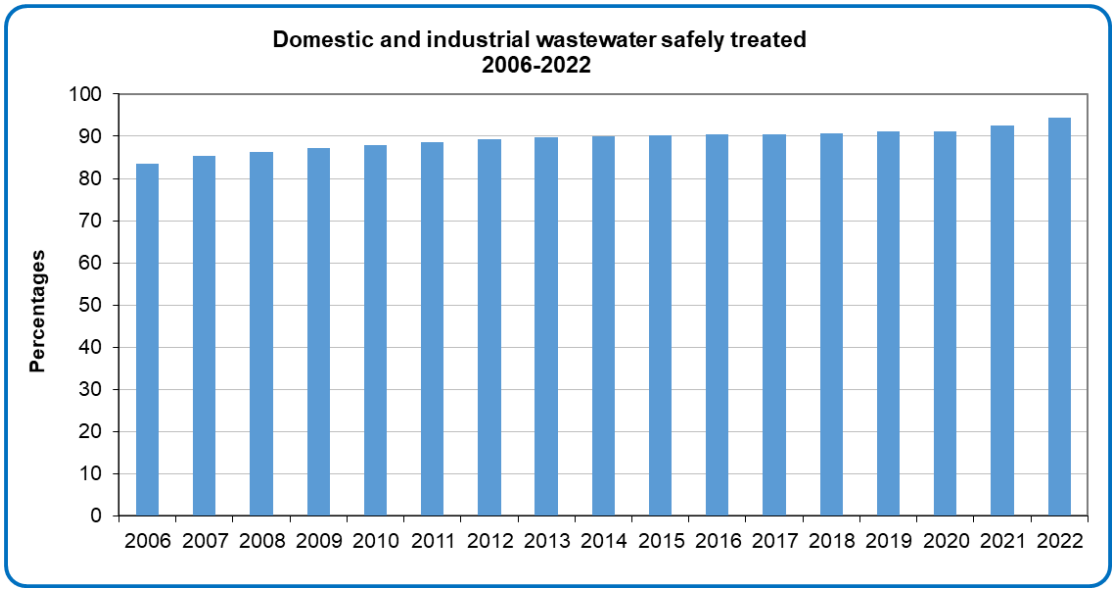
Goal 6 - Ensure availability and sustainable management of water and sanitation for all

6.1.1 Proportion of population using safely managed drinking water services

6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water

For the above two indicators, the proportion of the population that has access to safely managed drinking water services and to safely managed sanitation services is 100% in urban areas and more than 99% in rural areas.

6.3.1 Proportion of wastewater safely treated



63.2% of the population are connected to tertiary wastewater treatment. The majority of the population not connected to wastewater treatment is the Bedouin population that lives in localities with no municipal status.

6.4.1 Change in water-use efficiency over time

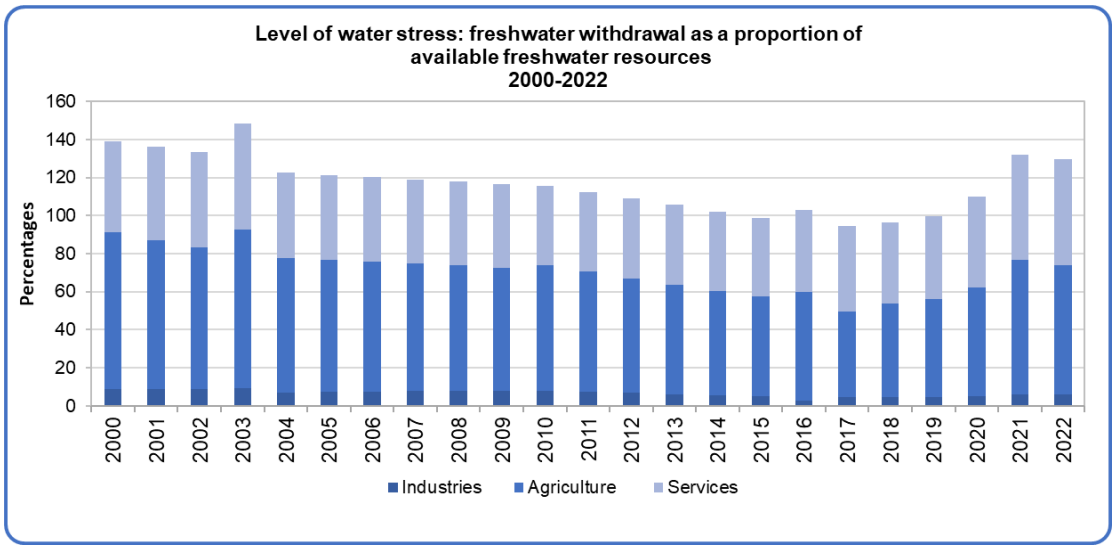
Water Use Efficiency (United States dollars per cubic meter)

Activity	Total	Agricoltura	Services	Industries
	USD/m3			
2000	83.00	1.28	179.78	316.24
2001	85.25	1.52	180.82	295.59
2002	86.38	1.62	176.42	287.98
2003	86.32	1.55	177.70	298.25
2004	86.22	1.47	183.71	318.76

2005	91.03	1.88	191.12	330.67
2006	97.74	2.00	202.72	349.04
2007	104.86	2.06	214.74	369.23
2008	110.99	2.23	227.67	365.81
2009	113.58	2.68	233.79	344.61
2010	116.17	2.61	251.50	359.75
2011	120.45	2.74	252.62	384.70
2012	121.86	2.23	246.81	415.44
2013	124.38	2.33	246.48	429.08
2014	126.23	2.18	245.40	441.48
2015	127.27	2.24	239.64	476.26
2016	125.44	2.11	242.66	992.20
2017	128.80	3.09	239.78	517.59
2018	136.29	2.66	248.59	551.44
2019	139.72	2.63	260.88	570.99
2020	139.11	2.53	259.74	545.13
2021	144.59	2.45	283.41	564.00
2022	158.58	2.56	297.80	638.33

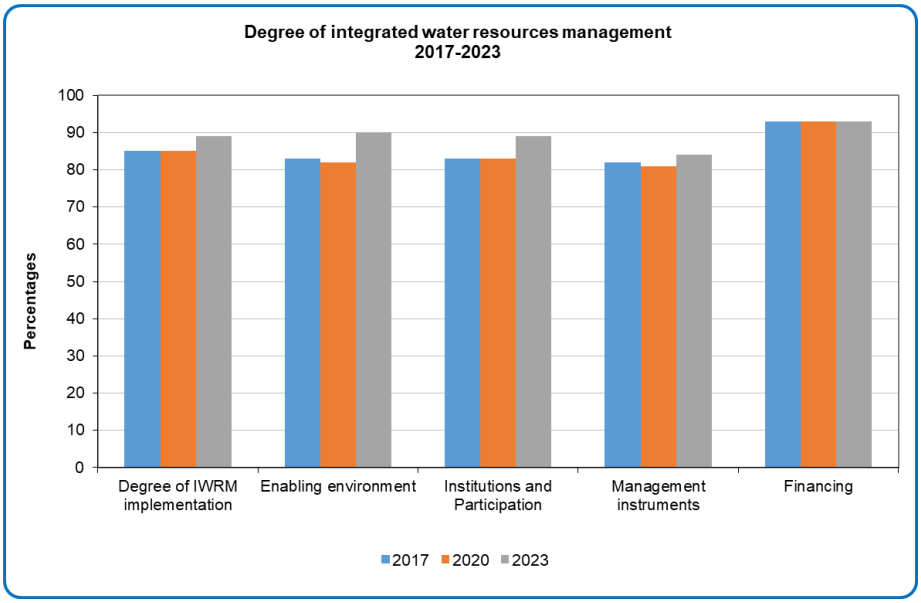
Source: UN Global SDG Indicators database, April 2025. based on data from Israel Water Authority

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources



Source: UN Global SDG Indicators database, April 2025. based on data from Israel Water Authority

6.5.1 Degree of integrated water resources management

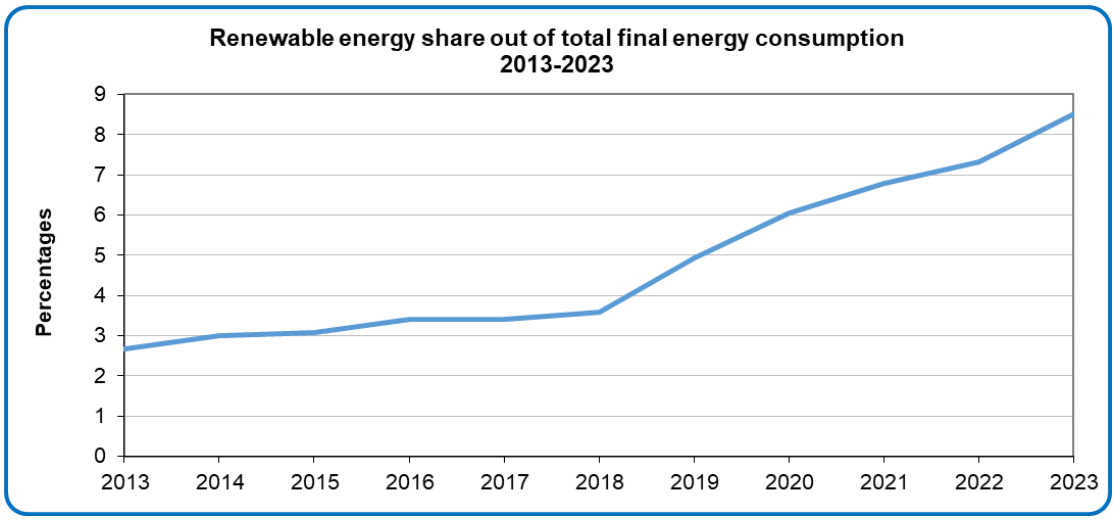


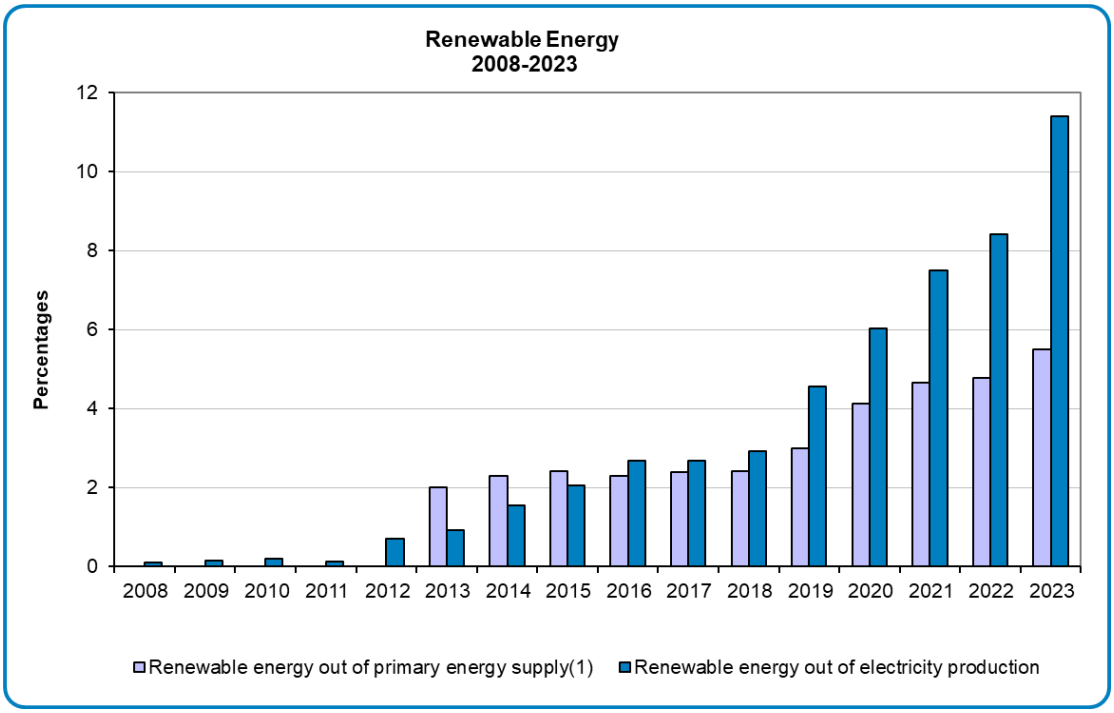
Goal 7 - Ensure access to affordable, reliable, sustainable and modern energy for all

7.1.1 Proportion of population with access to electricity

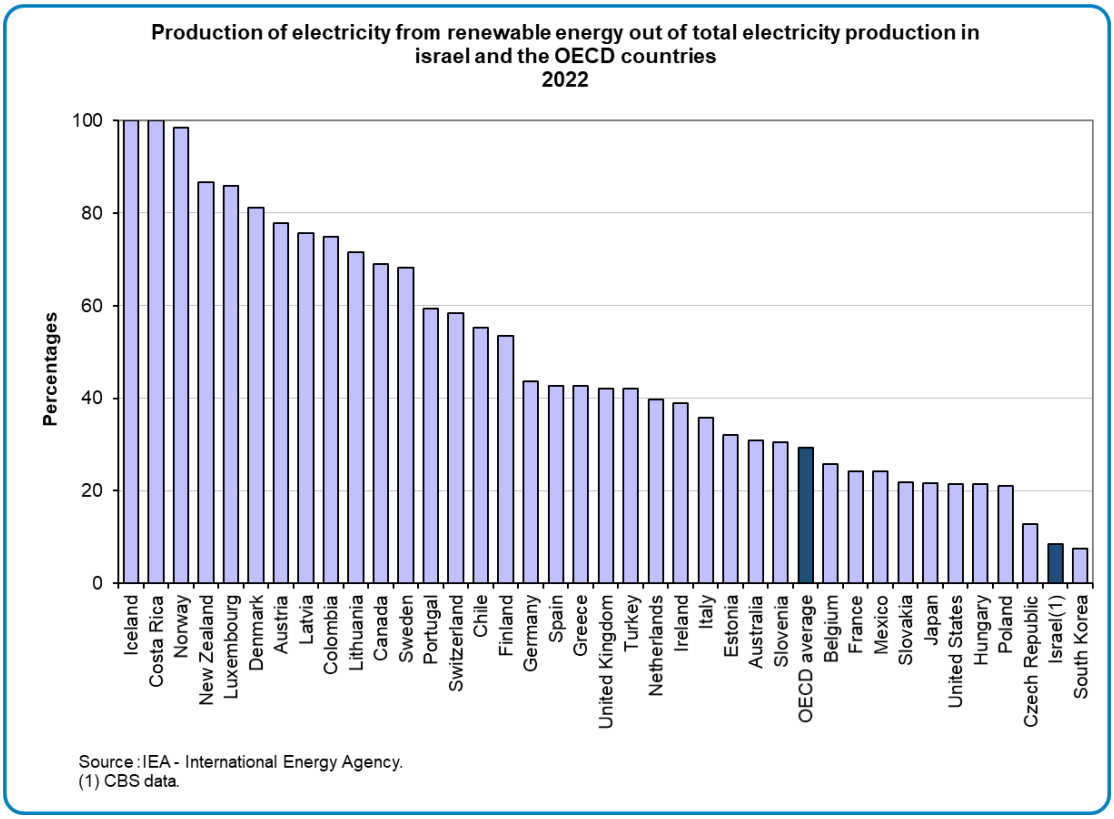
The proportion of the population in Israel with access to electricity is very high and close to 100%.

7.2.1 Renewable energy share in the total final energy consumption

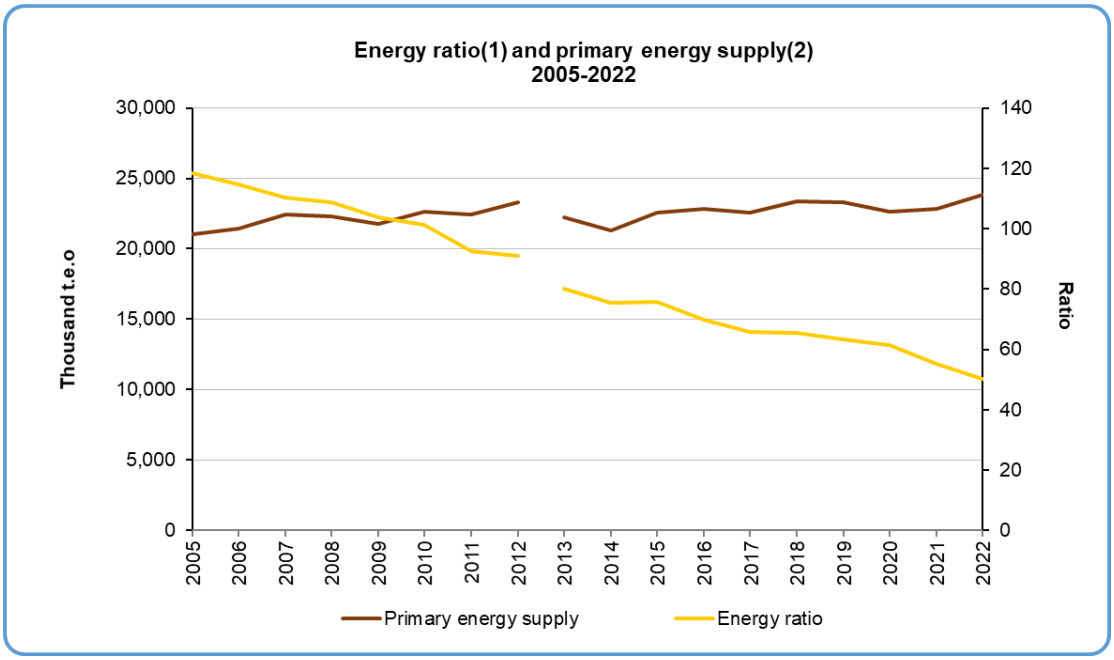




(1) As of 2013, the calculation method for primary energy supply has been updated.



7.3.1 Energy intensity measured in terms of primary energy and GDP

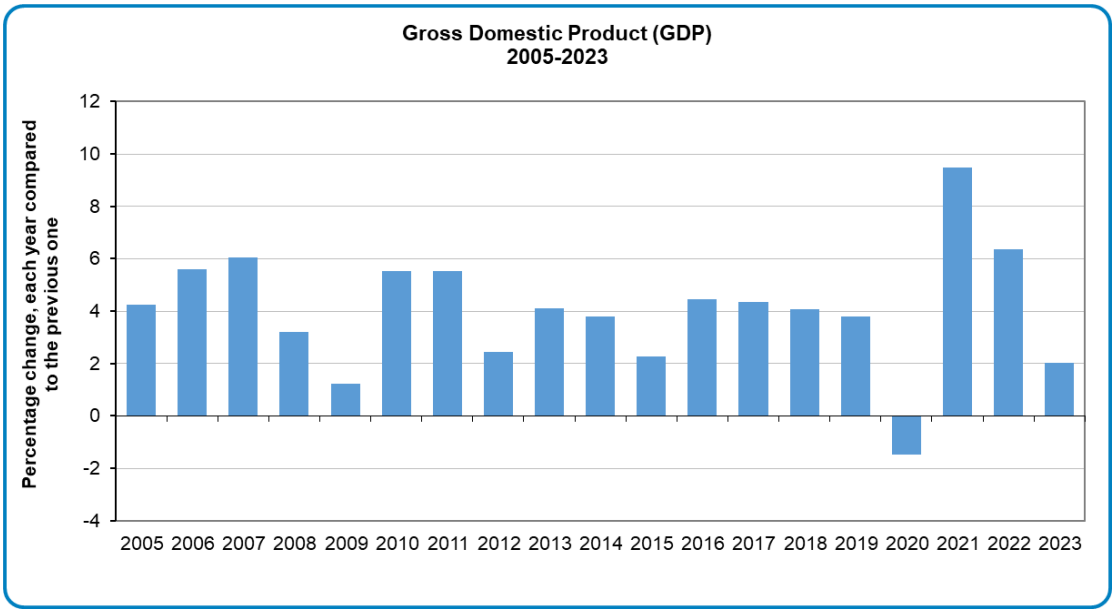


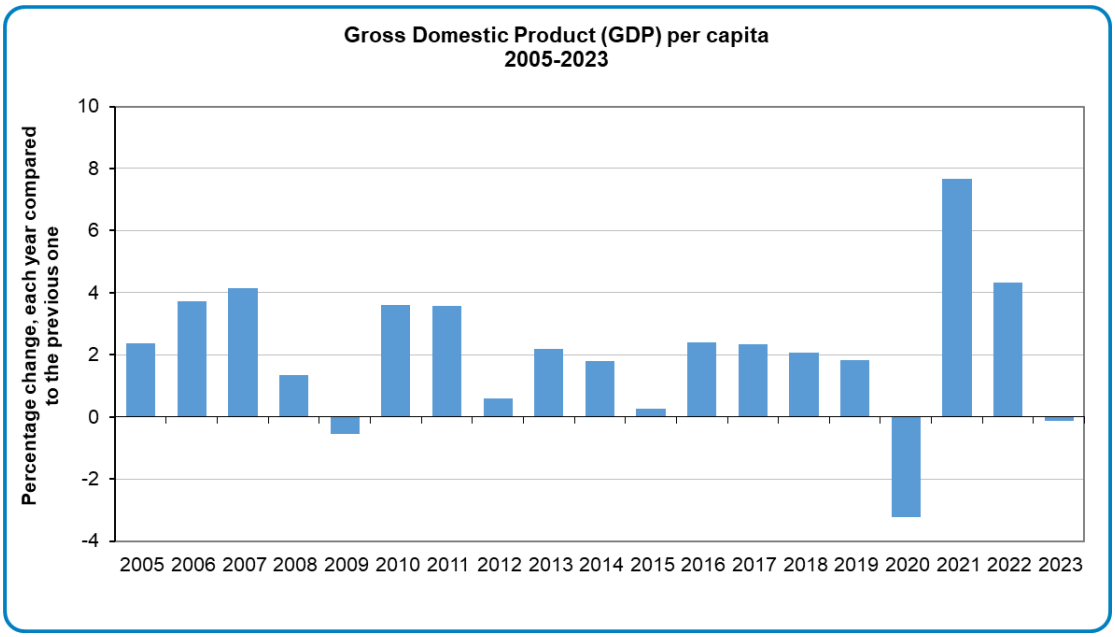
(1) Energy ratio – total primary energy supply\GDP (t.e.o to milion ppp$)
(2) In 2013, the method for calculating primary energy supply was changed. Therefore comparisons cannot be made with previous years.

Goal 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

There were 4.477 million participants in the labor force (persons aged 15 and over) in 2023, of which 2,227. million were employed men and 2.097 million were employed women.

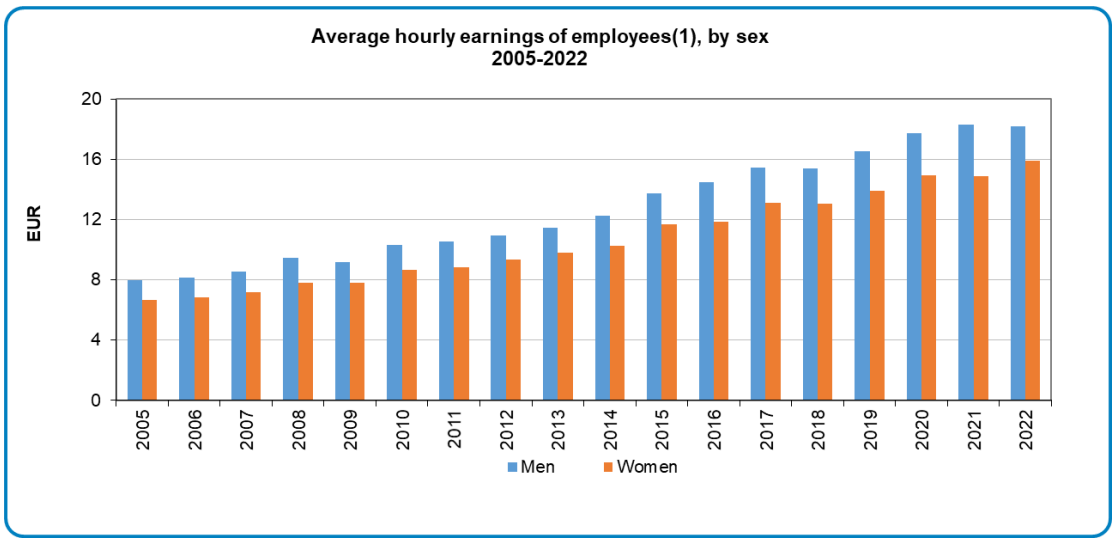
8.1.1 Annual growth rate of real GDP per capita



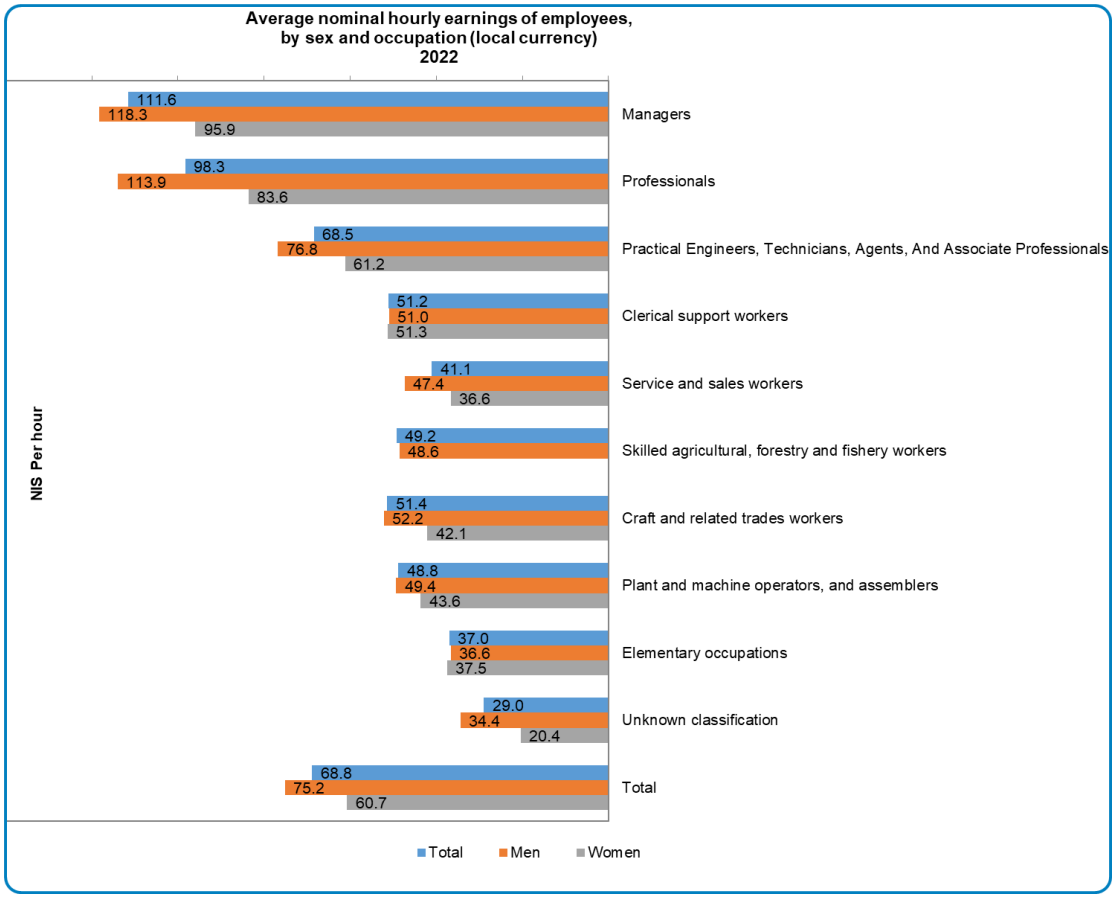


8.2.1 Annual growth rate of real GDP per employed person

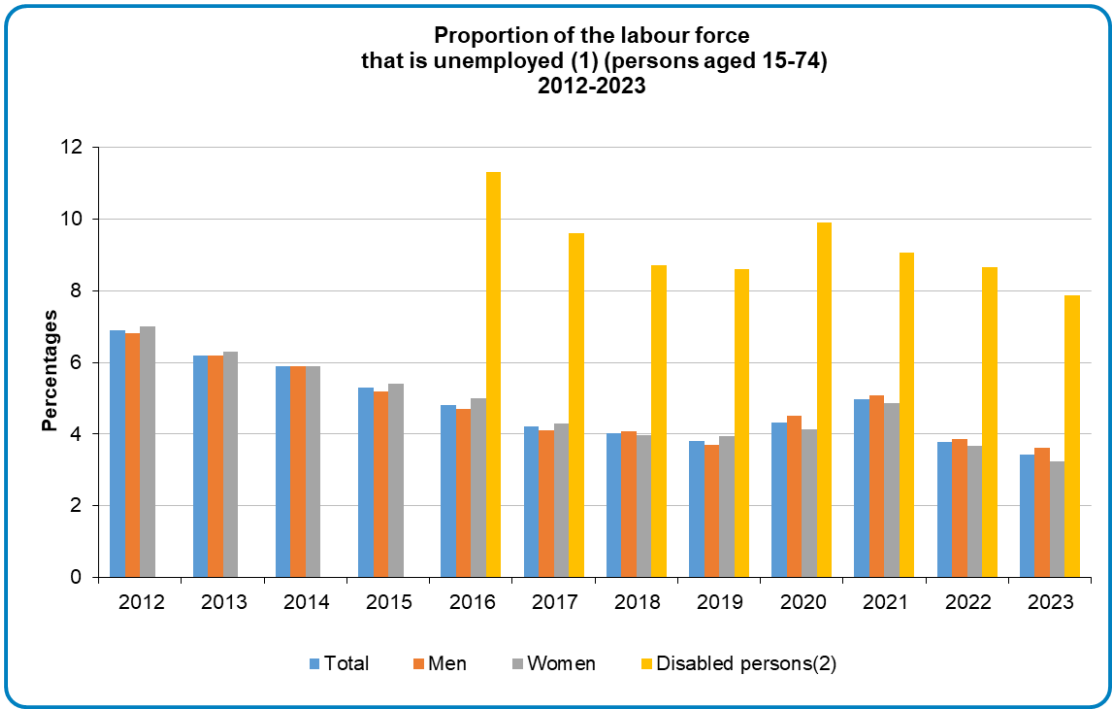
8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities



(1) Persons aged 15 and over.

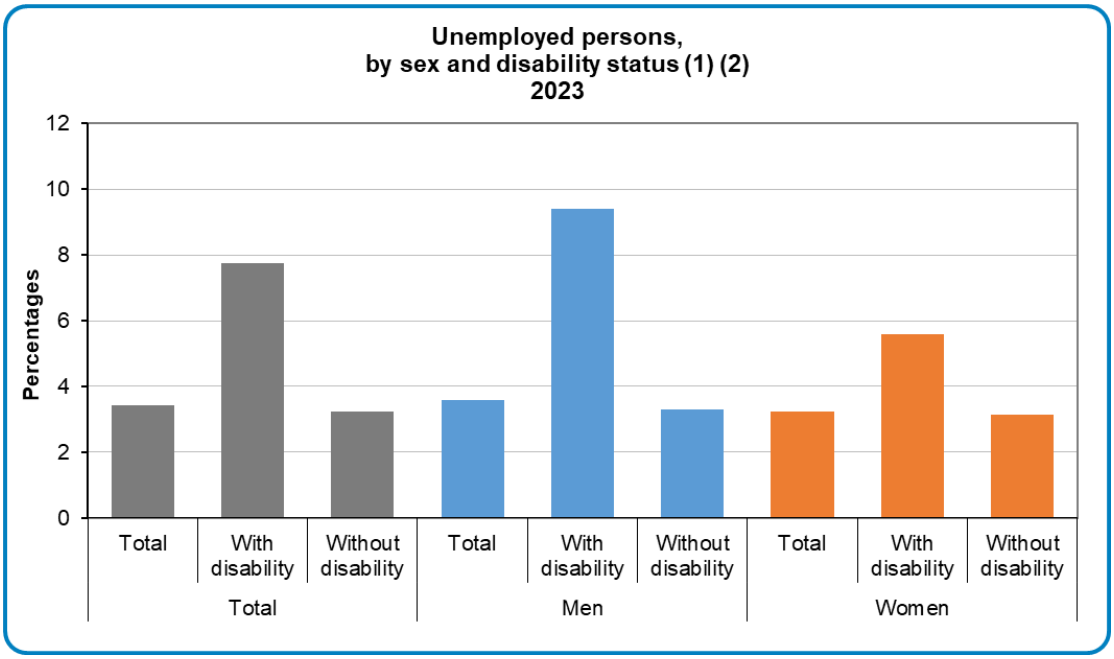


8.5.2 Unemployment rate, by sex, age and persons with disabilities



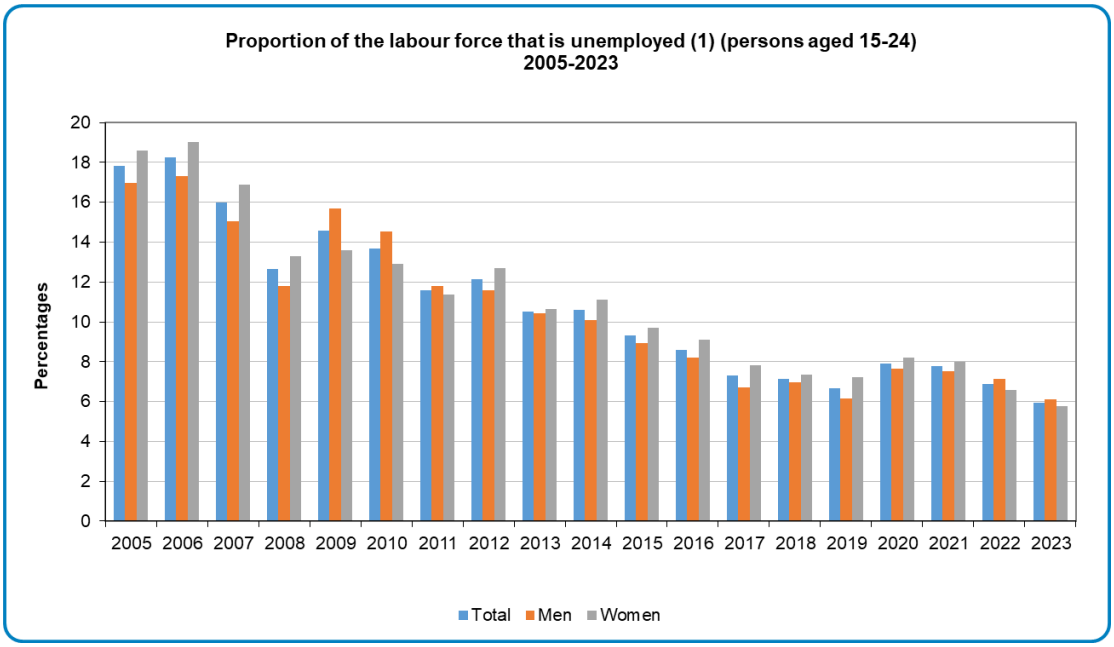
(1) Excludes persons living outside localities (Bedouins in the South) or in institutions (permanent samples).

(2) Data on persons with disabilities began to be collected in the Labor Force Survey in 2016.



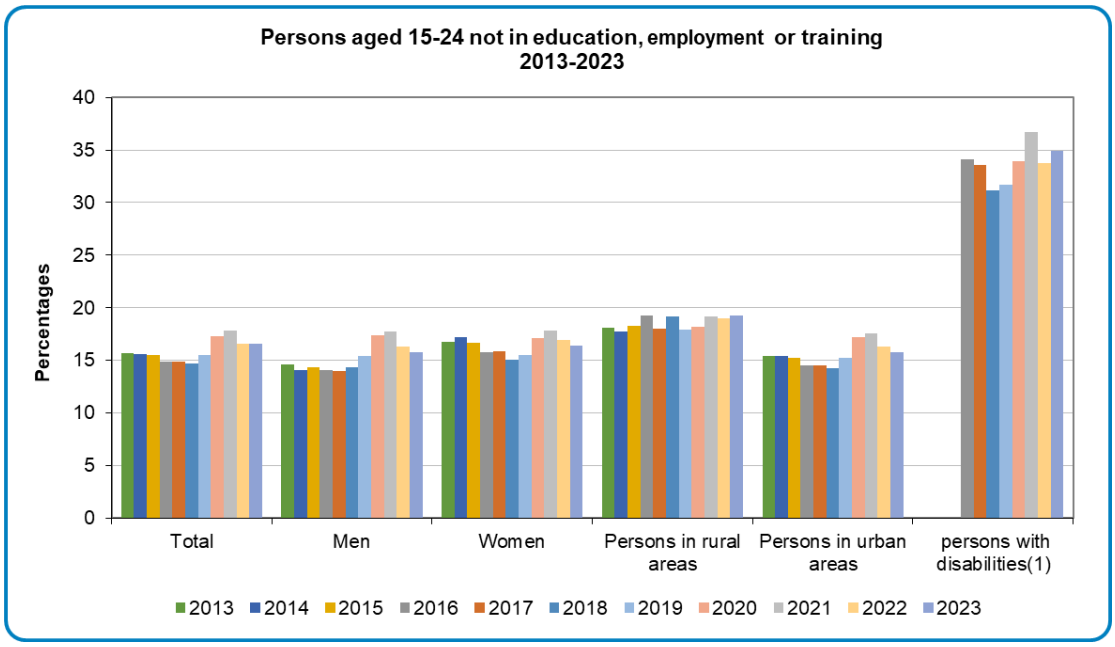
(1) Excludes persons living outside localities (Bedouins in the South) or in institutions (permanent samples).

(2) Excludes unknown if disability.



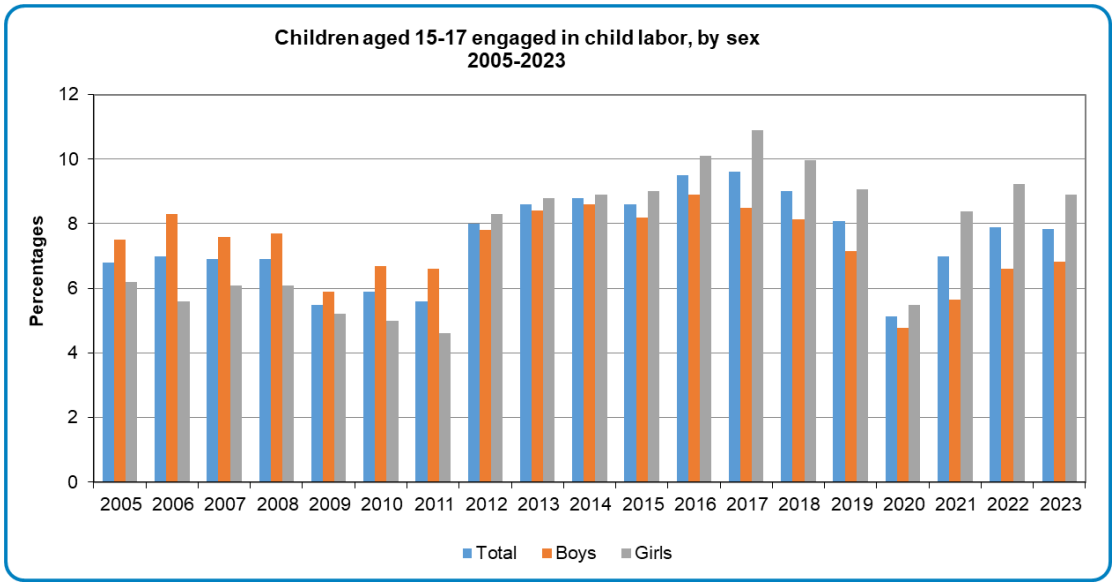
(1) Excludes persons living outside localities (Bedouins in the South) or in institutions (permanent samples).

8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training



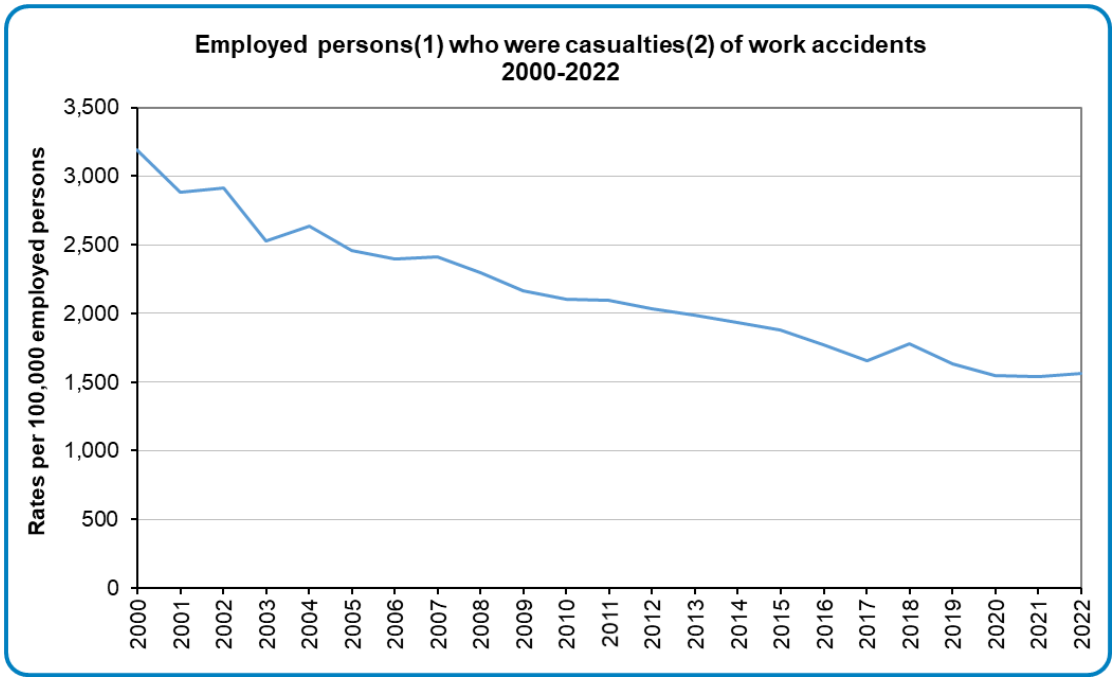
(1) Data on persons with disabilities began to be collected in the Labor Force Survey in 2016.

8.7.1 Proportion and number of children aged 5-17 years engaged in child labor, by sex and age



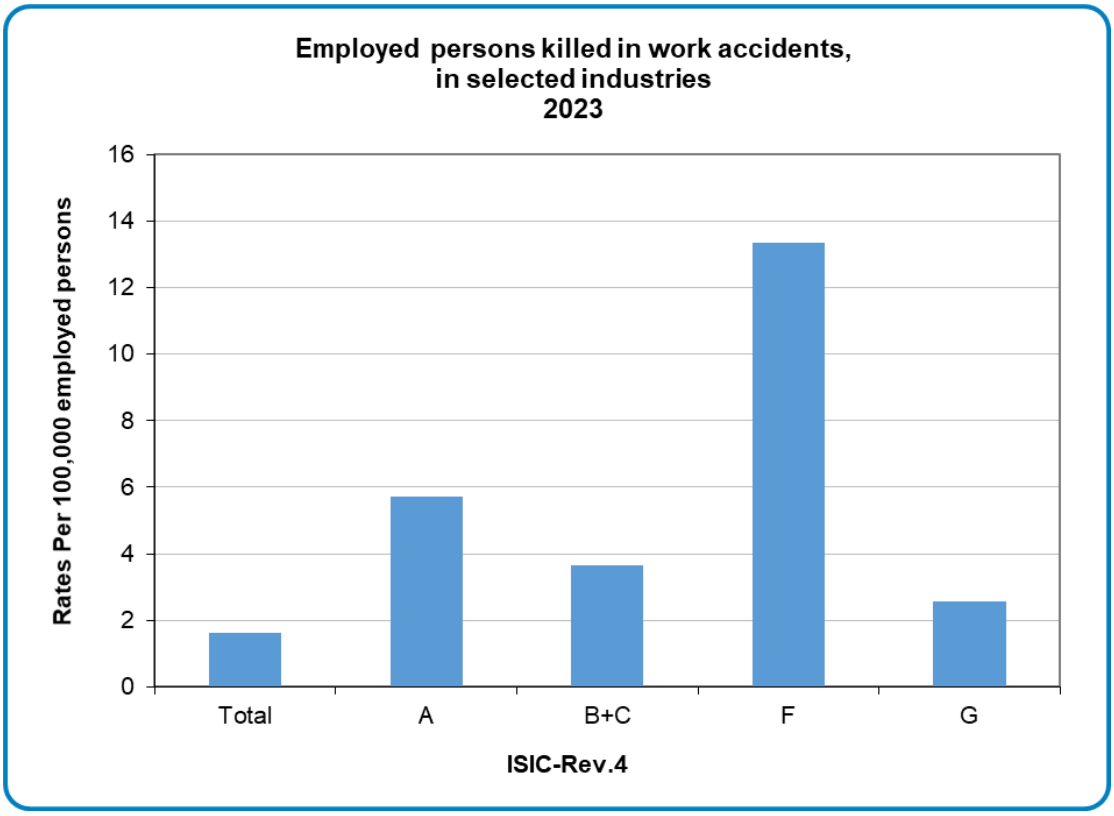
Data for Israel are available for ages 15-17.

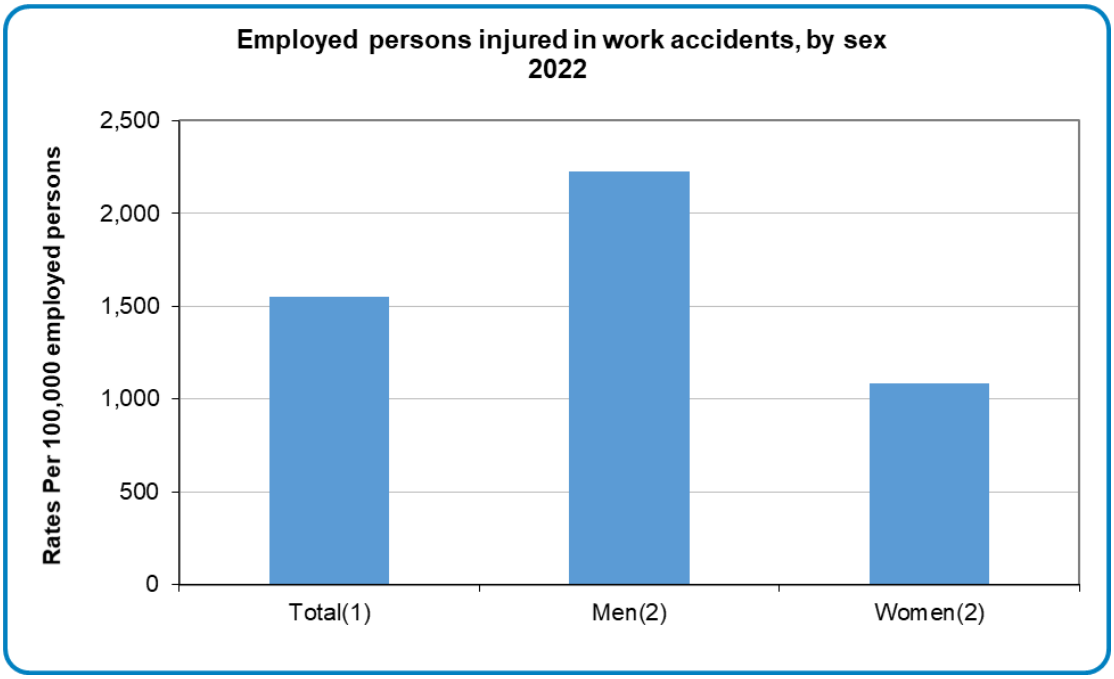
8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status



(1) Includes employed persons according to labor force surveys, as well as data from the national accounts on employed persons from abroad and on employed persons resident in the Judea & Samaria Area.

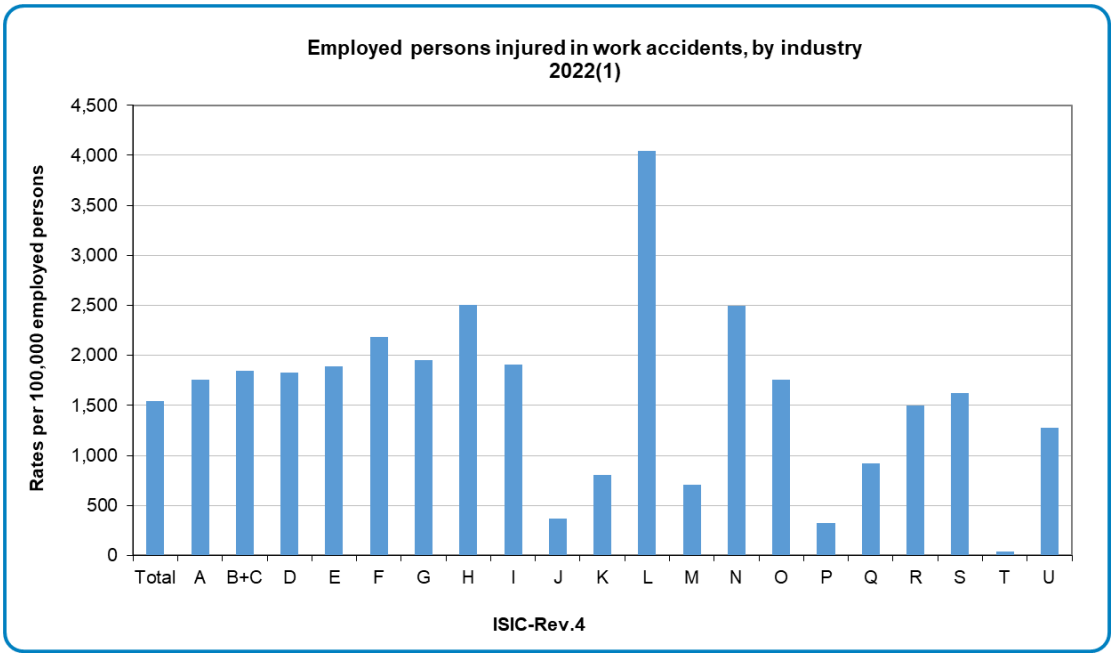
(2) Employed persons receiving injury benefits due to injury or death in a work accident.





(1) The total number includes workers from abroad and the data is calculated by pay in the same year, source: National Accounts.

(2) (2) Data by sex exclude workers from abroad and the data is calculated by pay in the same year and includes cases from previous years.



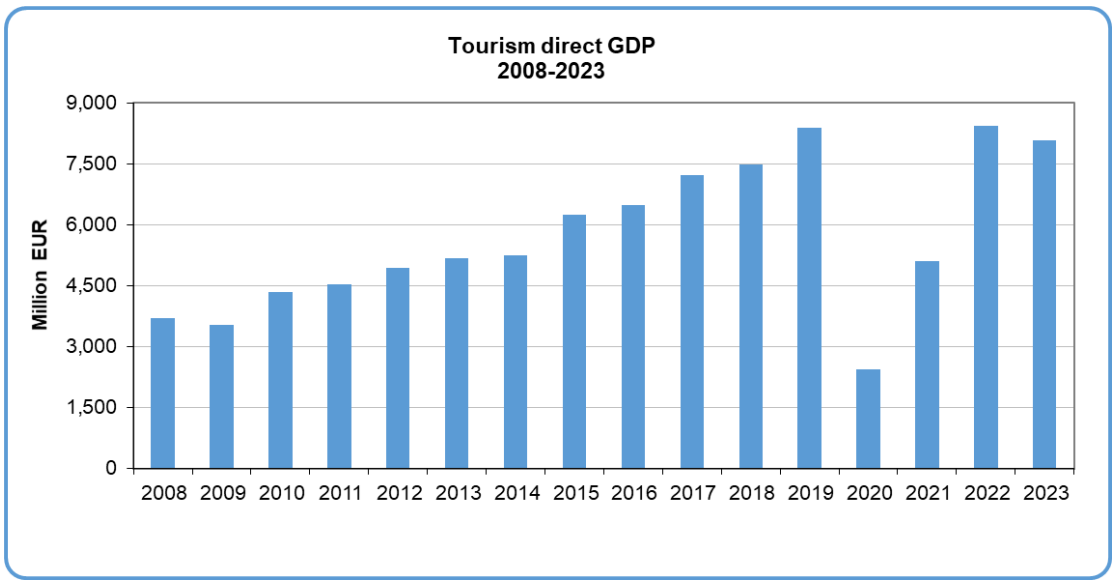
(1) Data calculated by cases that occurred in the same year.

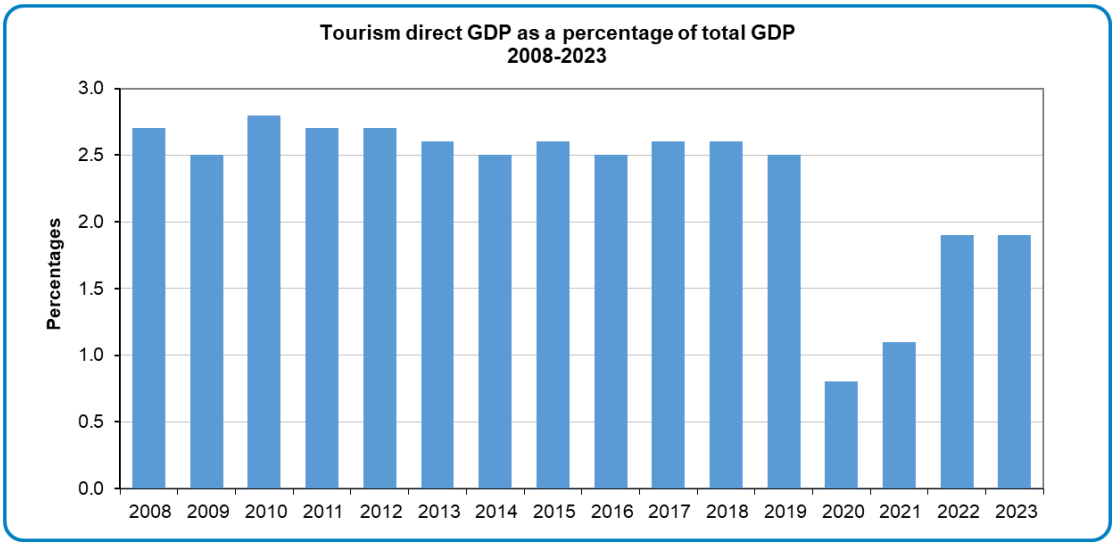
Non-fatal occupational injuries per 100,000 workers by economic activity (rate)

ISIC-Rev.4		2022
Total	**Total**	1,541
A. Agriculture; forestry and fishing	A	1,761
B. Mining and quarrying	B	
C. Manufacturing	B+C	1,846
D. Electricity; gas, steam and air conditioning supply	D	1,825
E. Water supply; sewerage, waste management and remediation activities	E	1,887
F. Construction	F	2,183
G. Wholesale and retail trade; repair of motor vehicles and motorcycles	G	1,949
H. Transportation and storage	H	2,503
I. Accommodation and food service activities	I	1,906
J. Information and communication	J	368
K. Financial and insurance activities	K	804
L. Real estate activities	L	4,046
M. Professional, scientific and technical activities	M	705
N. Administrative and support service activities	N	2,495
O. Public administration and defense; compulsory social security	O	1,756
P. Education	P	323
Q. Human health and social work activities	Q	917

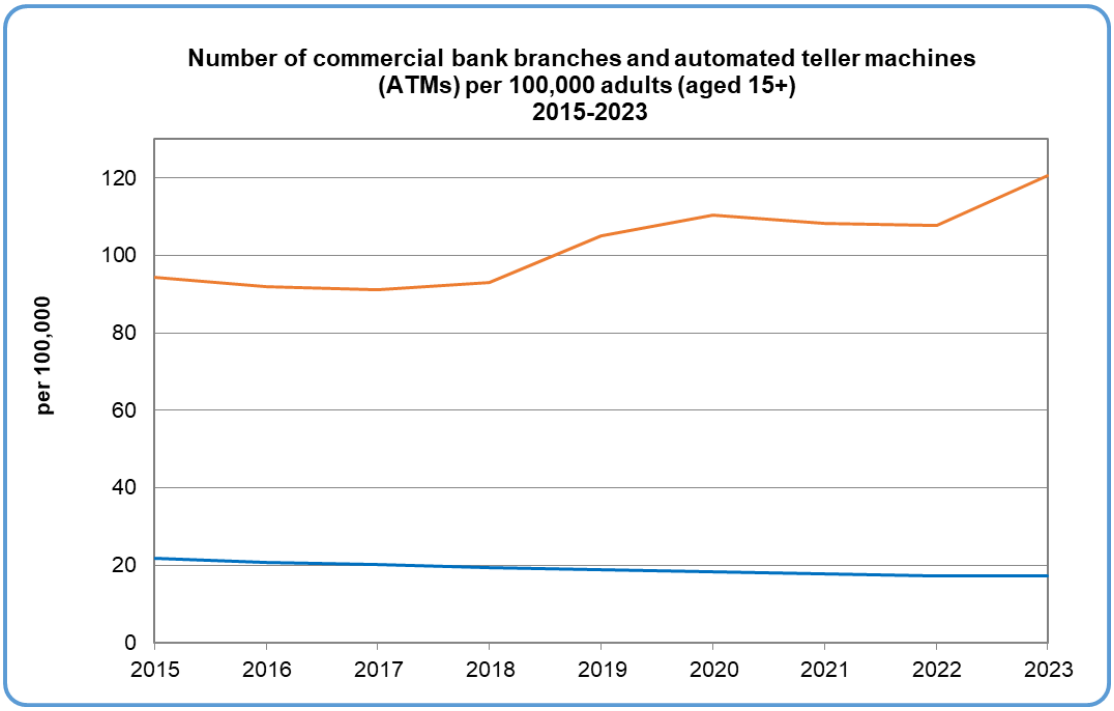
R. Arts, entertainment and recreation	R	1,497
S. Other service activities	S	1,621
T. Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	T	42
U. Activities of extraterritorial organizations and bodies	U	1,277

8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate





8.10.1 Number of commercial bank branches and automated teller machines (ATMs) per 100,000 adults

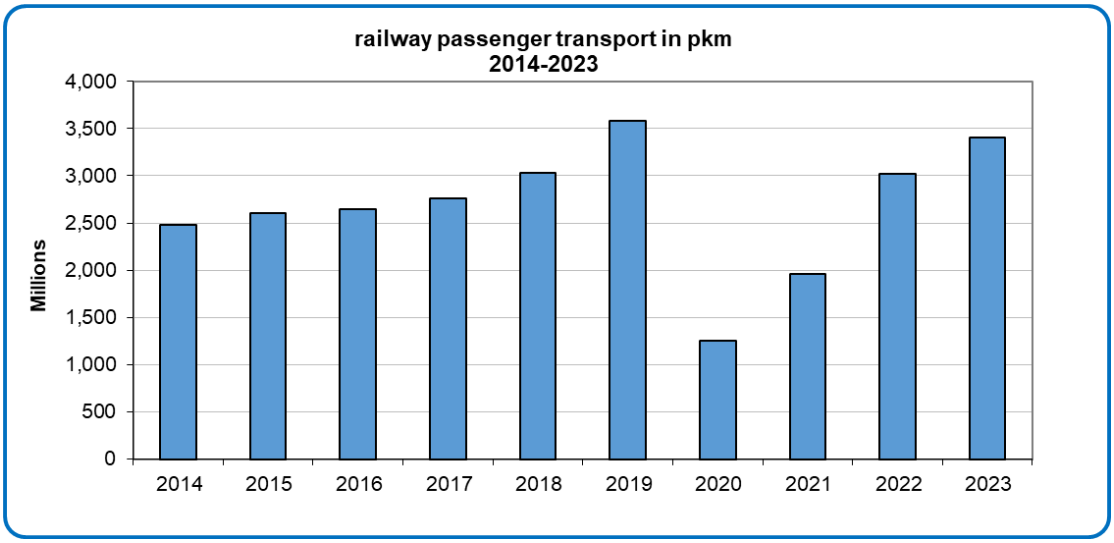


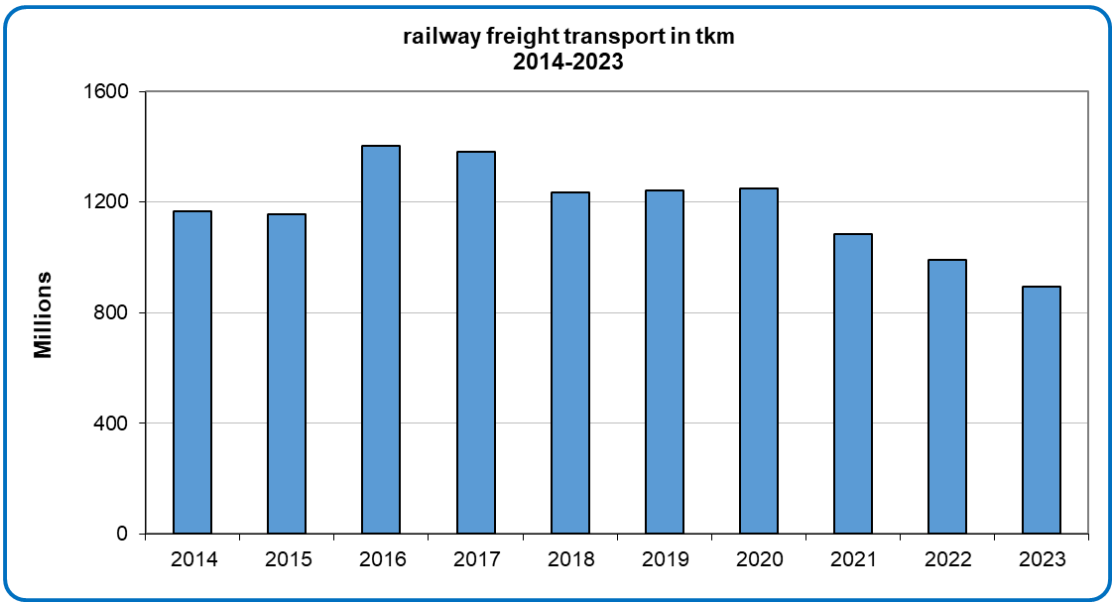
Goal 9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

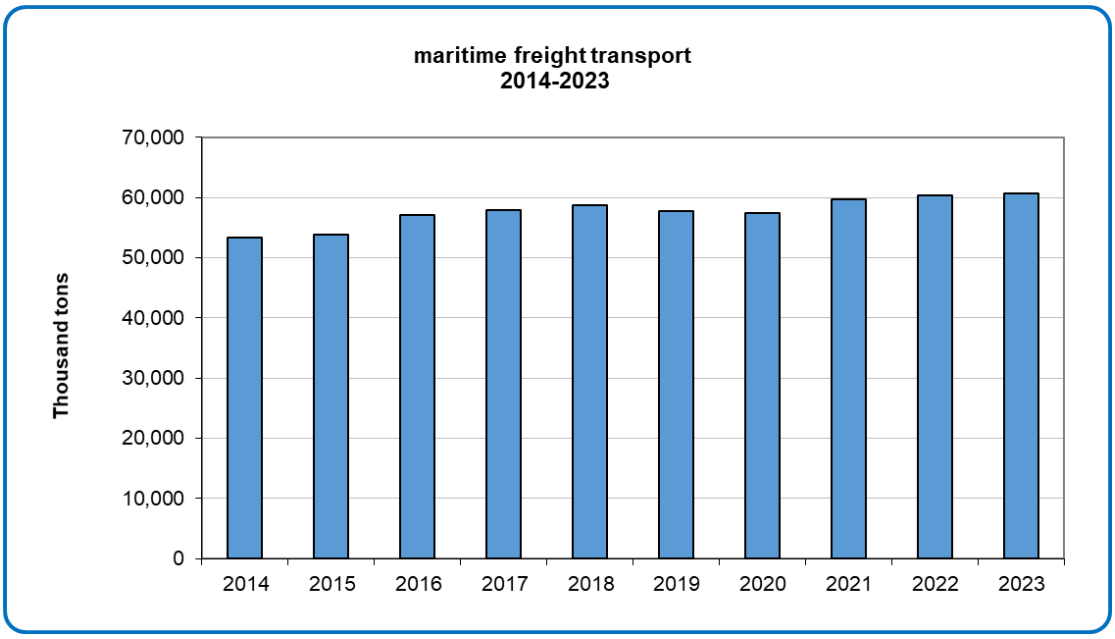
9.1.1 Proportion of the rural population who live within 2 km of an all-season road

In Israel, nearly 100% of the population lives within 2 km of an all-season road.

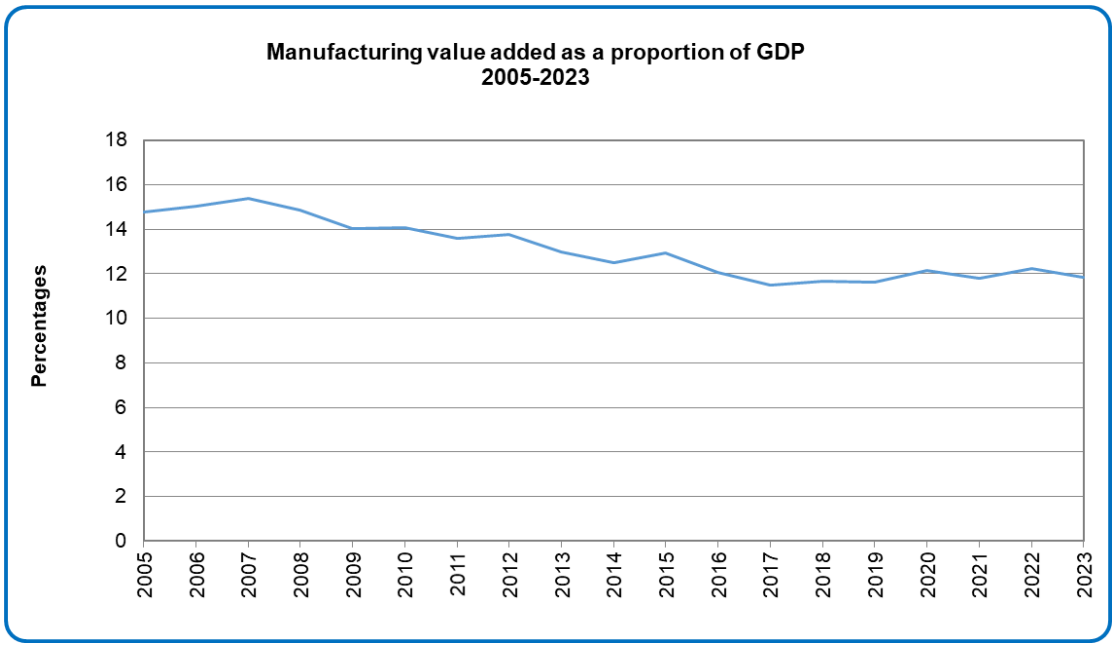
9.1.2 Passenger and freight volumes, by mode of transport

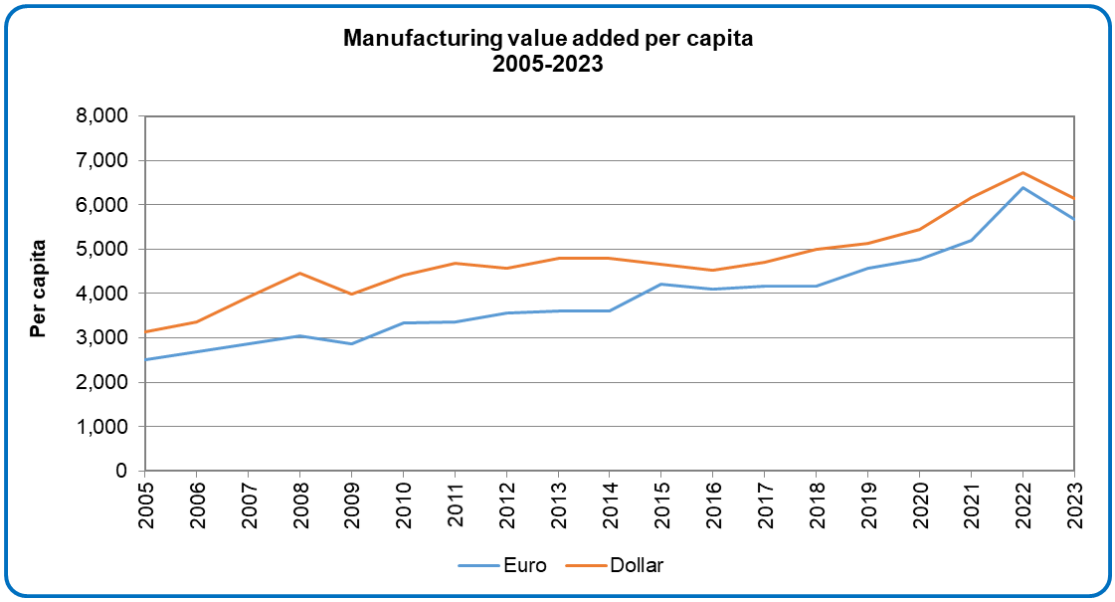



railway freight transport in tkm
2014-2023
Millions
1600
1200
800
400
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

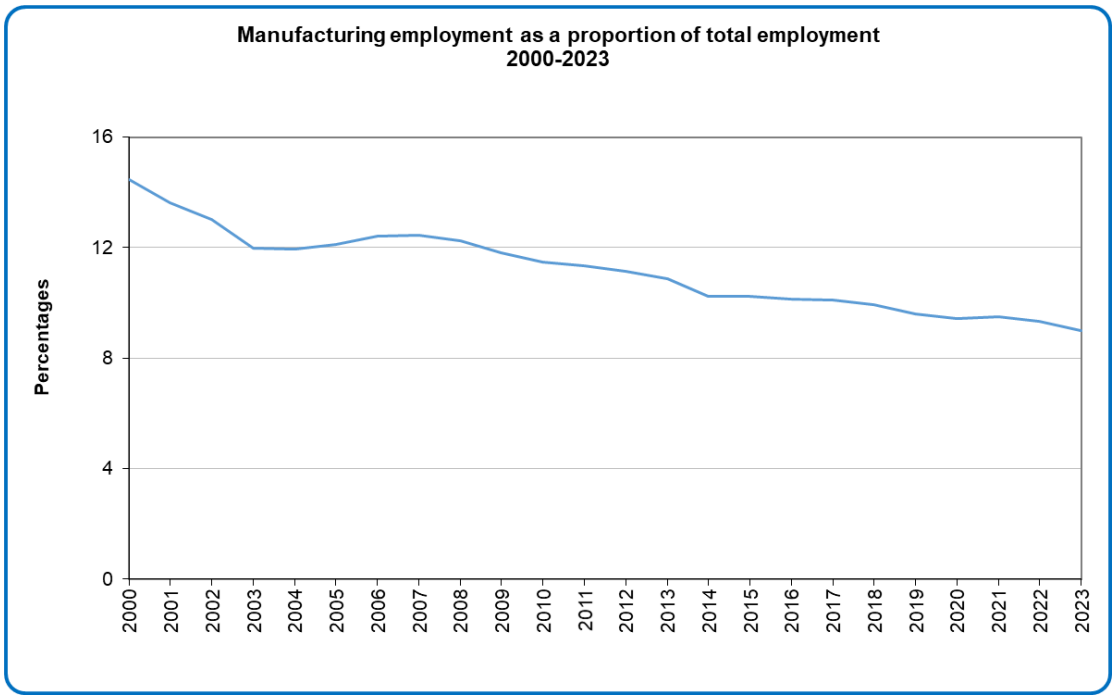

maritime freight transport
2014-2023
Thousand tons
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

9.2.1 Manufacturing value added as a proportion of GDP and per capita

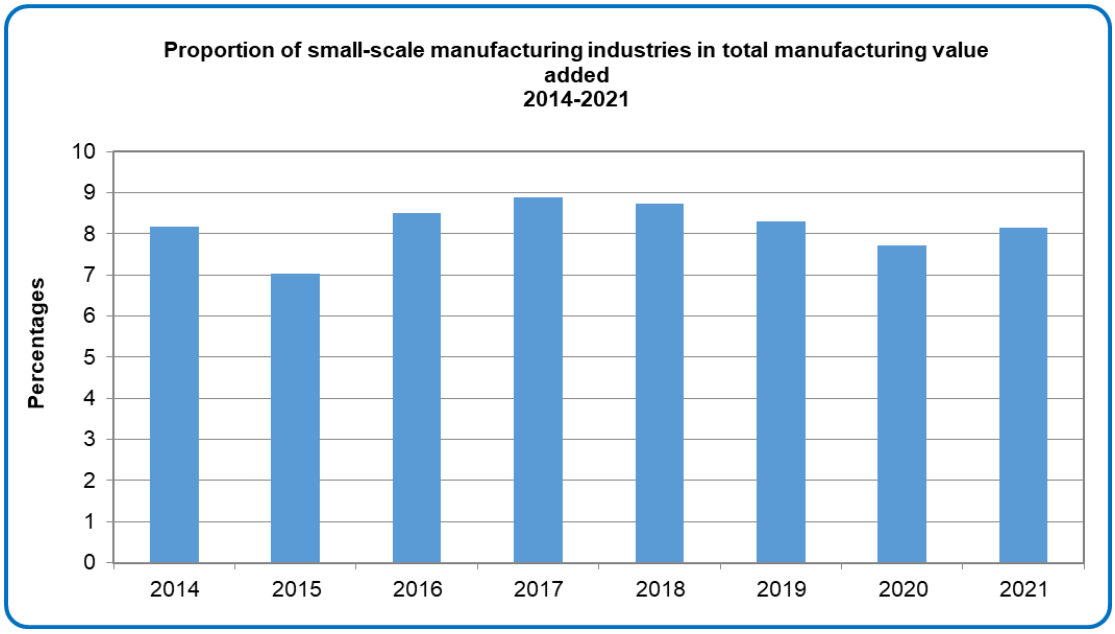




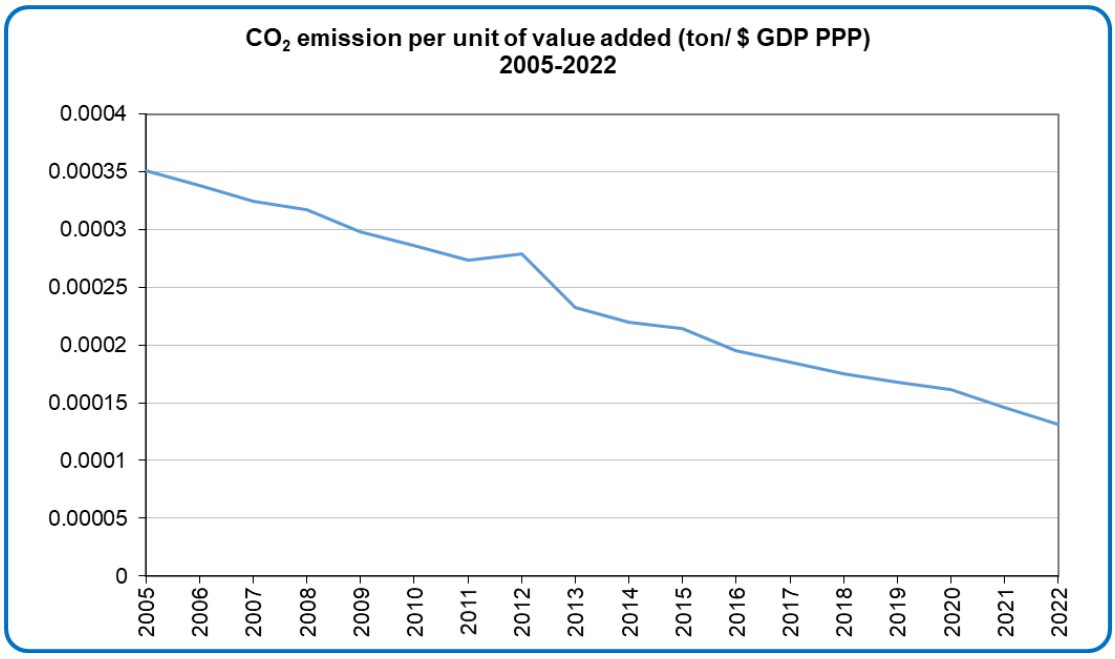
9.2.2 Manufacturing employment as a proportion of total employment



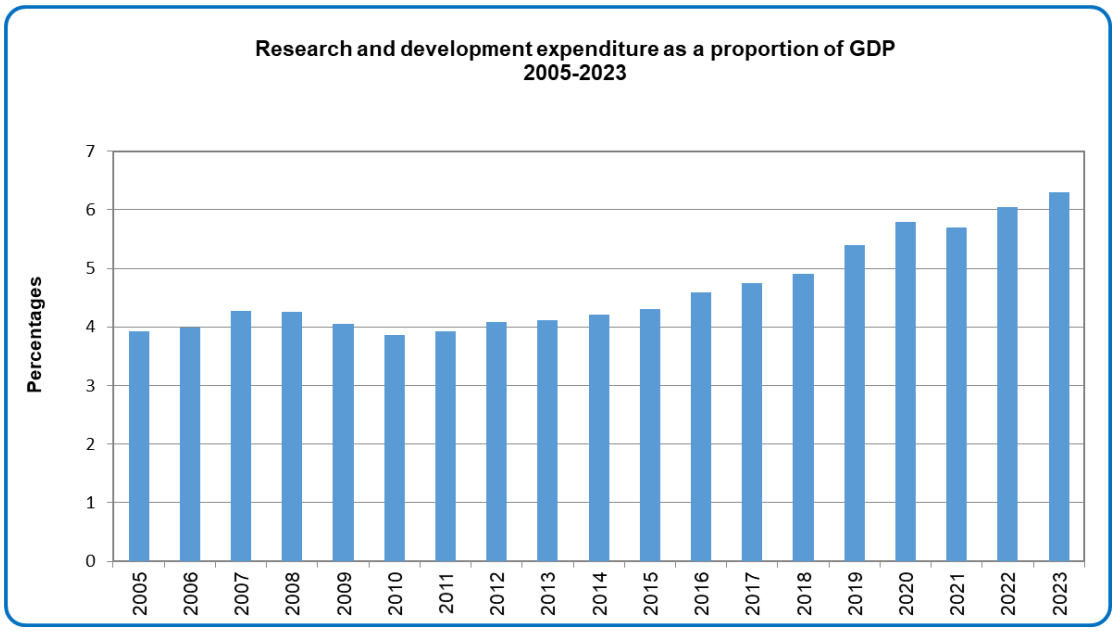
9.3.1 Proportion of small-scale industries in total industry value added

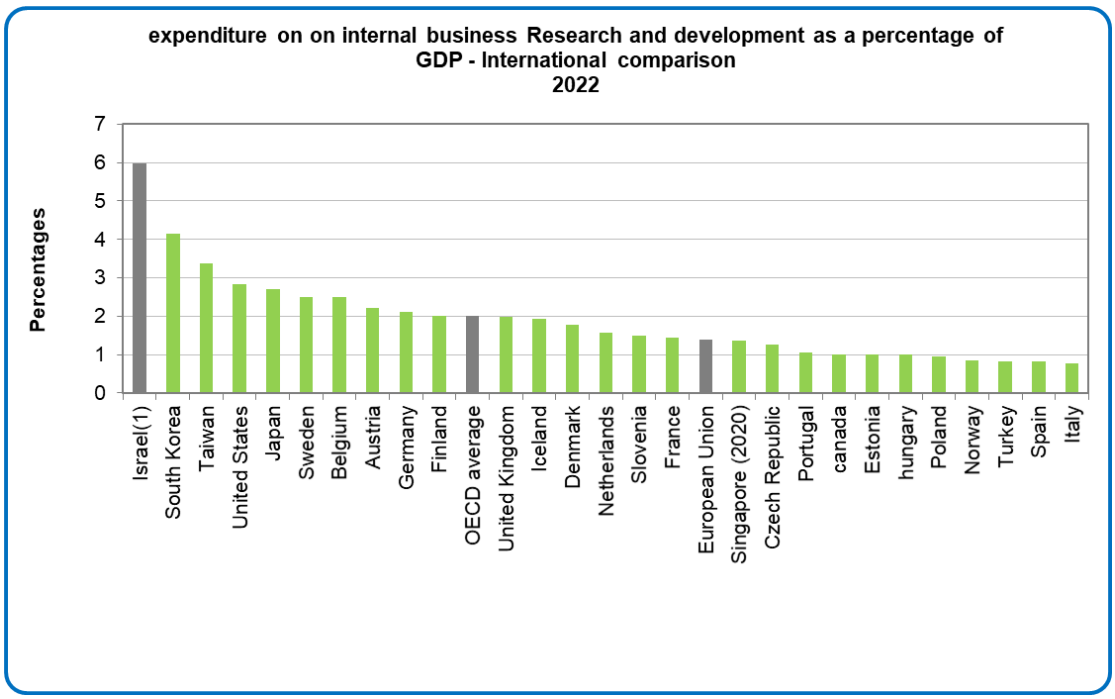


9.4.1 CO_2 emission per unit of value added



9.5.1 Research and development expenditure as a proportion of GDP

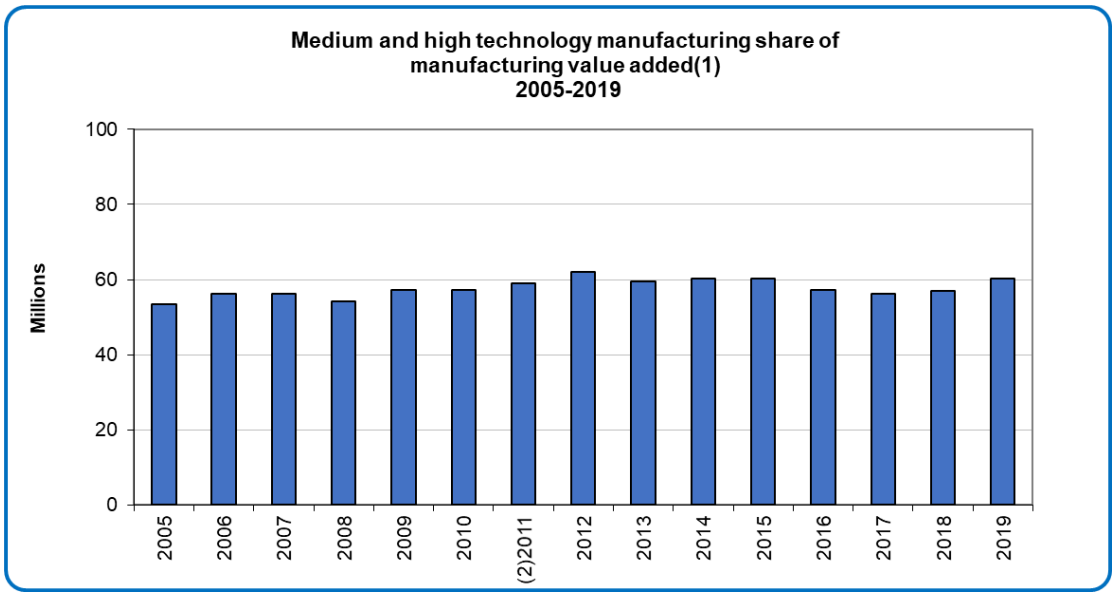




Source: OECD

(1) ICBS data.

9.b.1 Proportion of medium and high-tech industry value added in total value added



(1) Break caused by change in classification of economic activities. Until 2010 ,data presented according to the Standard Classification of All Economic Industries, 1993 (ISIC Rev .3).

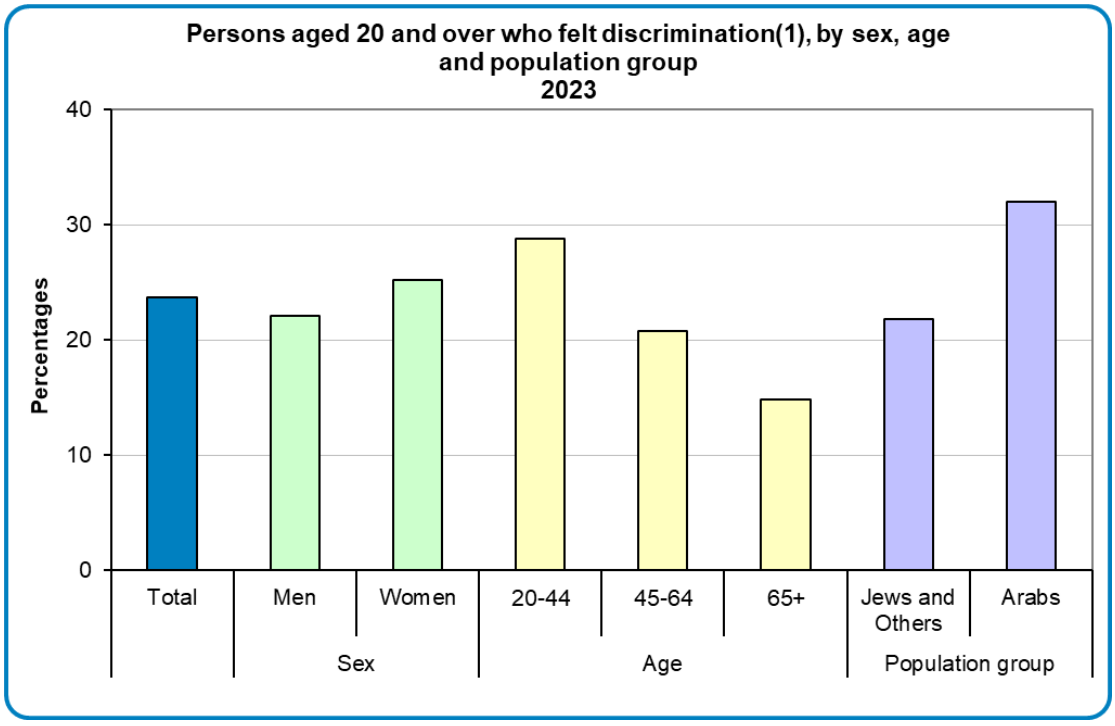
(2) data are presented according to the Standard Classification of All Economic Industries, 2011 (ISIC Rev 4).

Goal 10 - Reduce inequality within and among countries

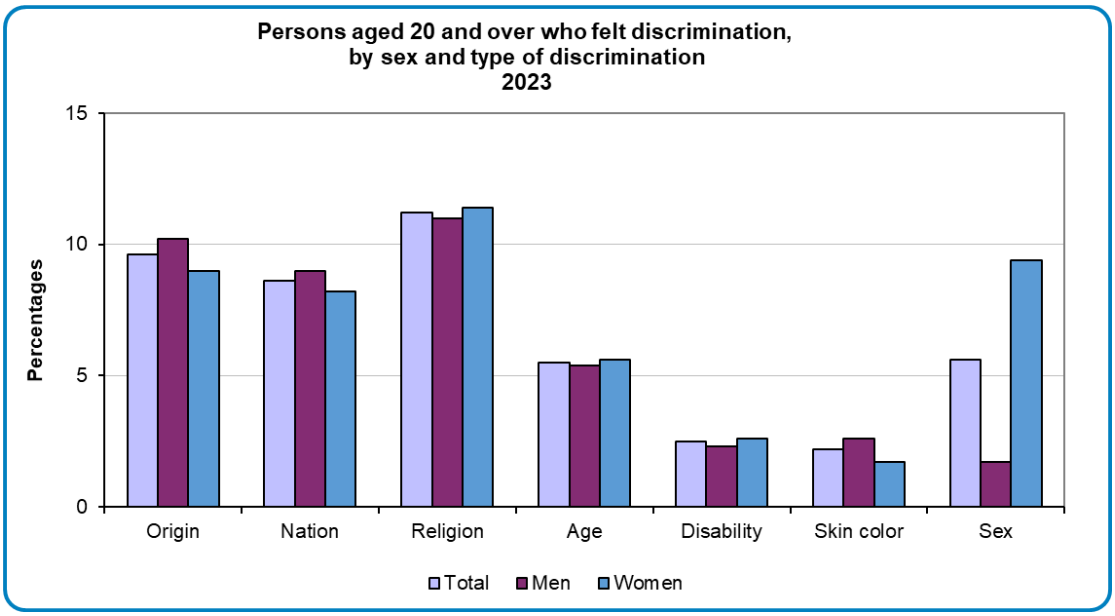
10.2.1 Proportion of people living below 50 percent of median income, by age, sex and persons with disabilities

See indicator 1.2.1

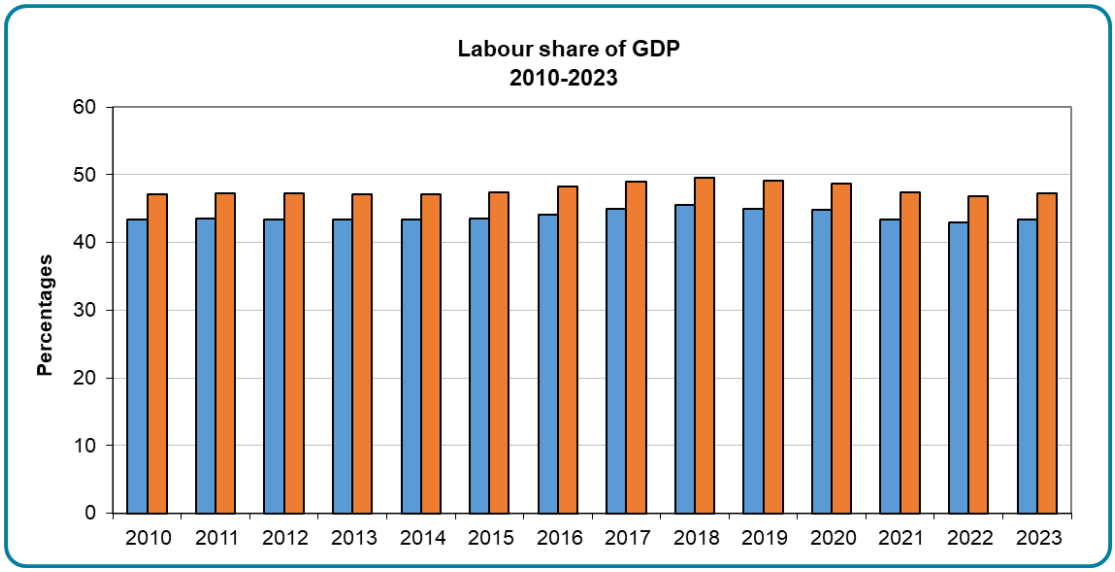
10.3.1 Proportion of the population reporting having personally felt discriminated



(1) felt discrimination based on age, nationality, origin, religion, gender, disability, or skin color.



10.4.1 Labor share of GDP, comprising wages and social protection transfers



Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

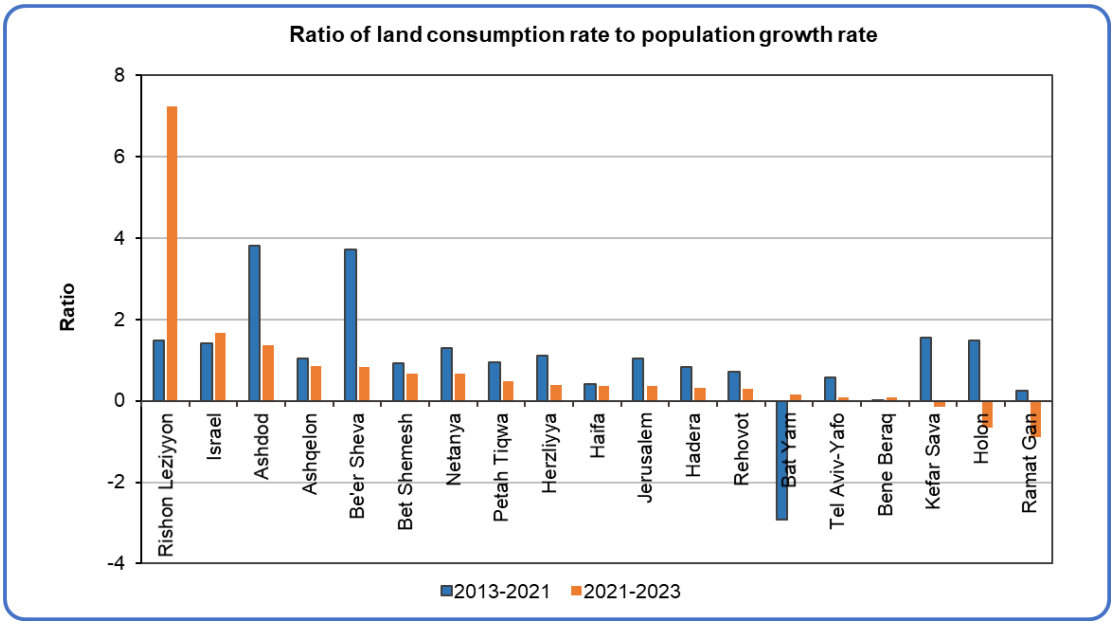
11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities

Population with convenient access to public transport, 2020

Percentages

	low capacity PT systems (e.g. bus, Bus Rapid Transit)	high capacity PT systems (e.g. rail, metro, ferry)
Ashdod	99	1
Jerusalem	79	35
Haifa	96	36
Tel Aviv - Yafo	98	20
Netanya	96	5
Petah Tiqwa	97	1
Rishon Leziyyon	94	6
Be'er Sheva	94	9

11.3.1 Ratio of land consumption rate to population growth rate

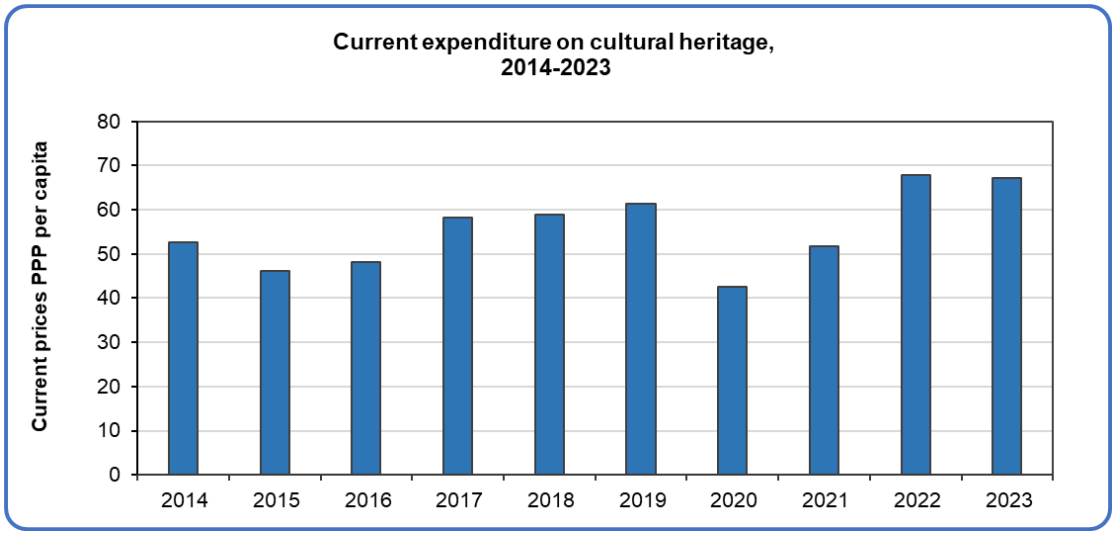


11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically

Planning processes in all cities in Israel are transparent to the public at some level through planning committees. Nonetheless, the level of participation varies from cases where citizens may express their opposition to a project to cases where a much wider public participation process exists.

11.4.1 Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)

Data are available only for expenditure on cultural heritage as a percentage of total government expenditure.

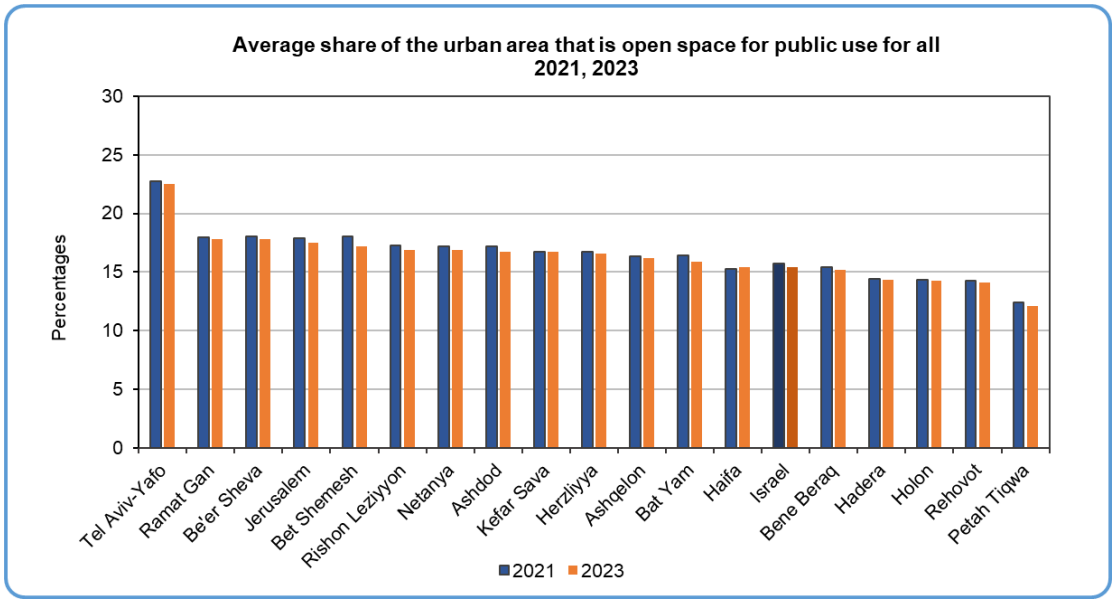


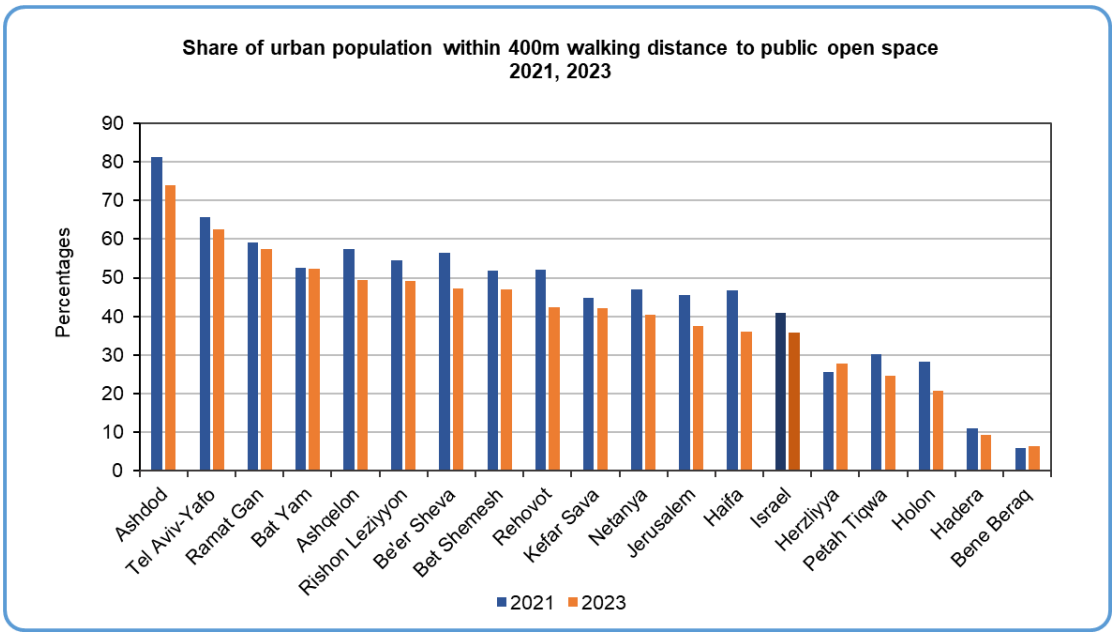
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities

Percentages

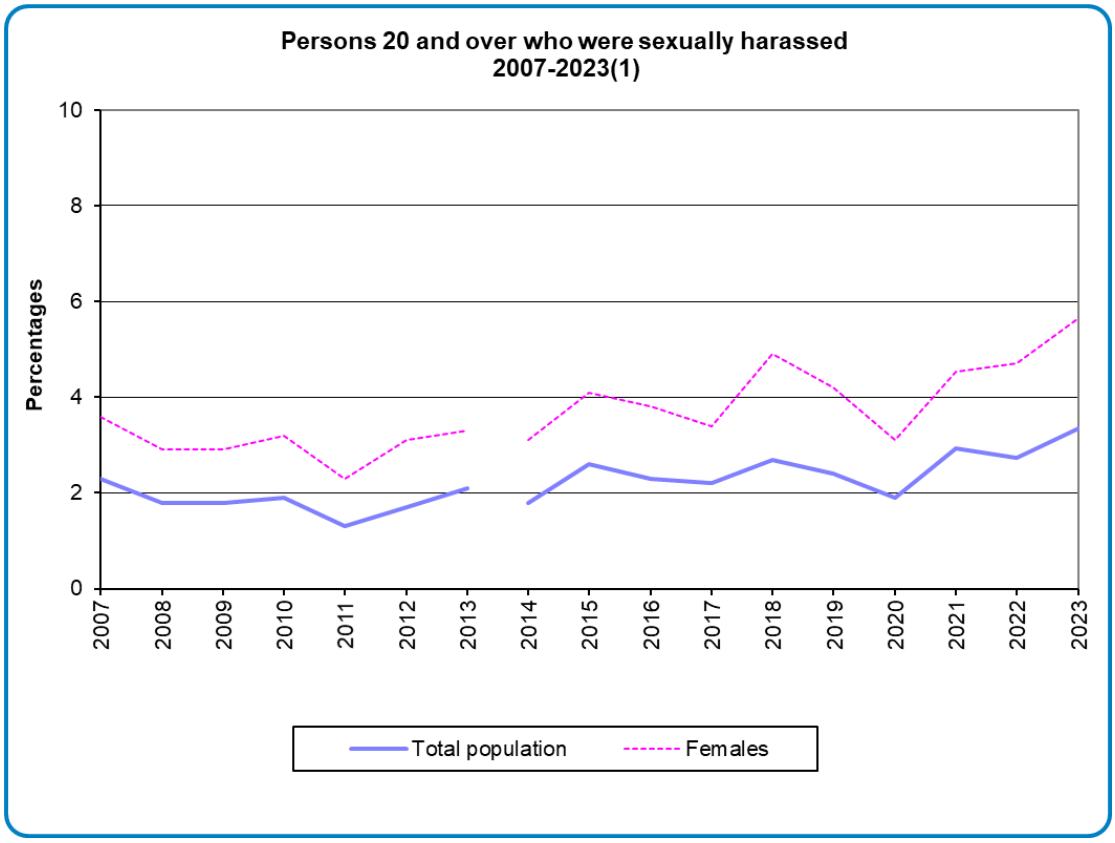
	solid waste collected and managed in controlled facilities
2005	99.5
2006	99.6
2007	99.6
2008	99.8
2009	99.8
2010	99.8
2011	99.7
2012	99.6
2013	99.7
2014	99.7
2015	99.7
2016	99.7
2017	99.7
2018	99.7
2019	99.7
2020	99.7
2021	99.7
2022	99.7
2023	99.7

11.7.1: Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities

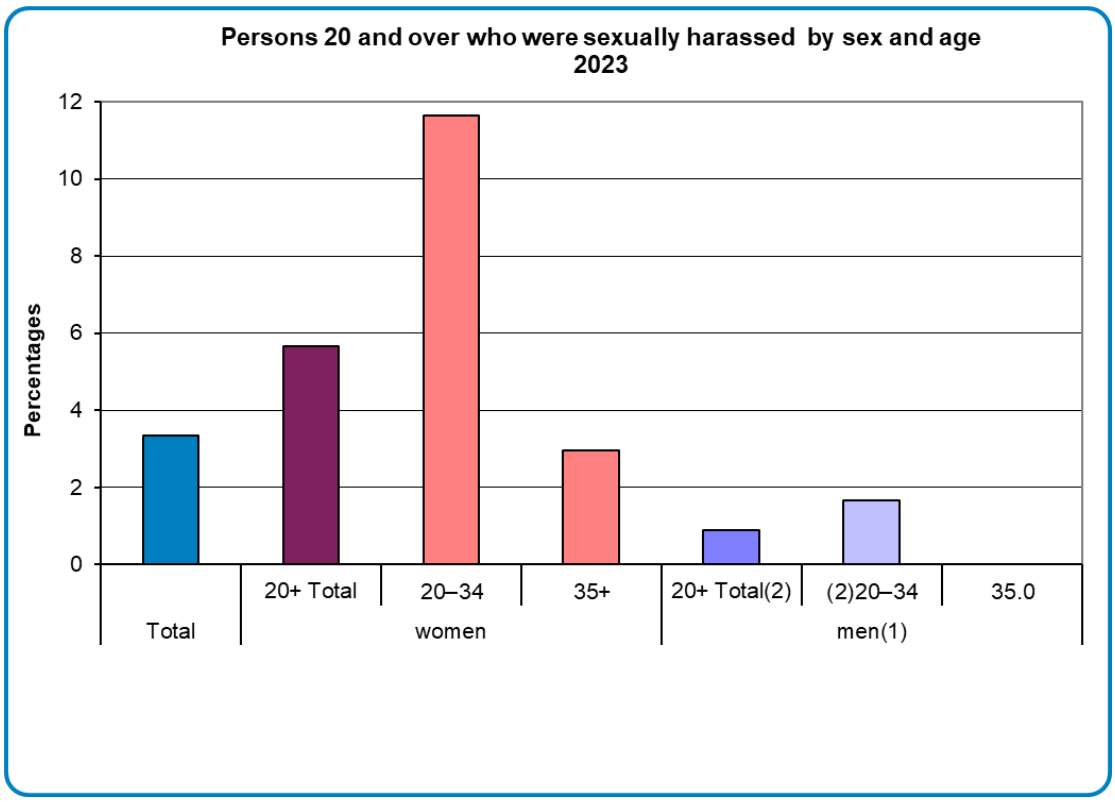




11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months



(1) Until 2013, the data was based on the Social Survey. From 2014, the data was based on the Israel's Crime Victimization Survey (ICVS).



(1) Data on injuries among men aged 35 and over cannot be published due to a relative sampling error higher than 30%.

(2) The data are presented with a sampling error of 15%–30%.

11.a.1: Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city

Planning processes in all cities in Israel involve urban and regional development plans through district planning committees.

Goal 12 - Ensure sustainable consumption and production patterns

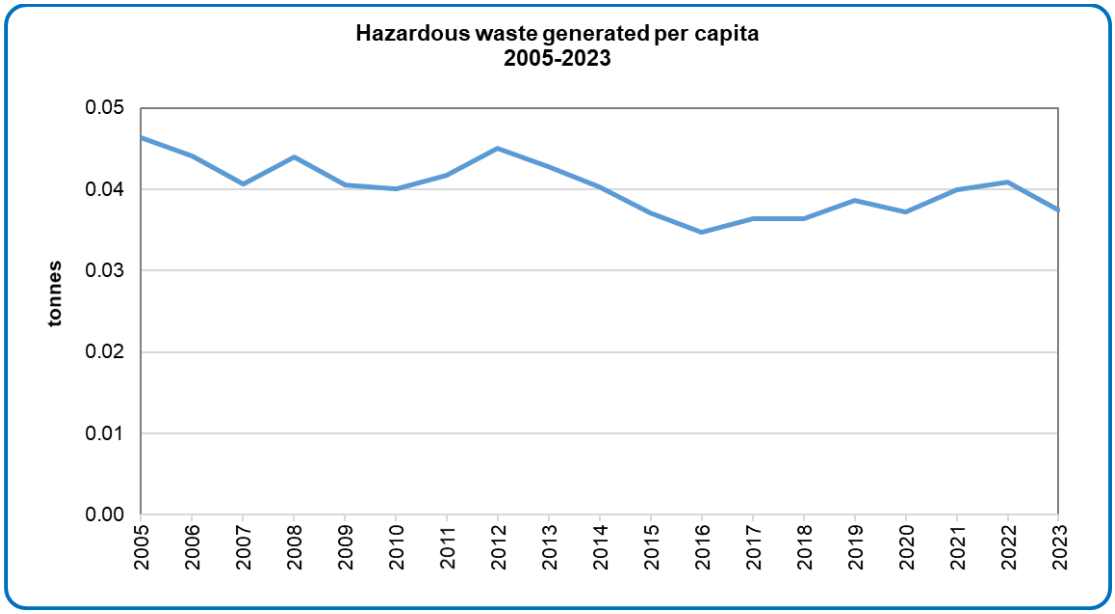
12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP main streamed as a priority or a target into national policies

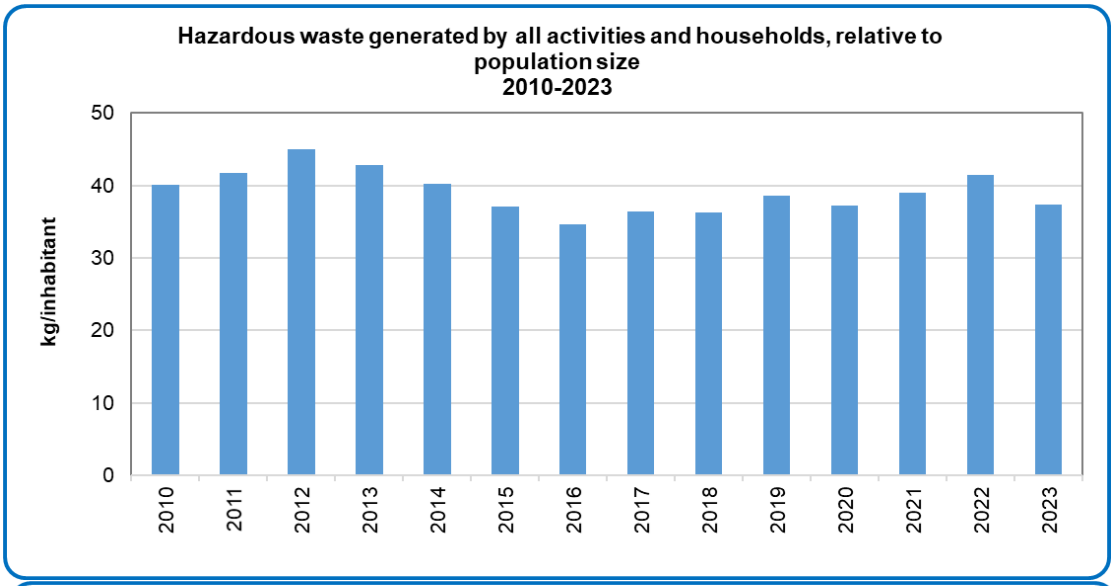
Israel has an SCP National Action Plan since 2015. SCP is mainstreamed into national policies relating to green public procurement; implementation of sustainable development strategies within government companies; support in the assimilation of best practices at small and medium enterprises; launch of the resource efficiency knowledge center; and promotion of environmental standards and labeling.

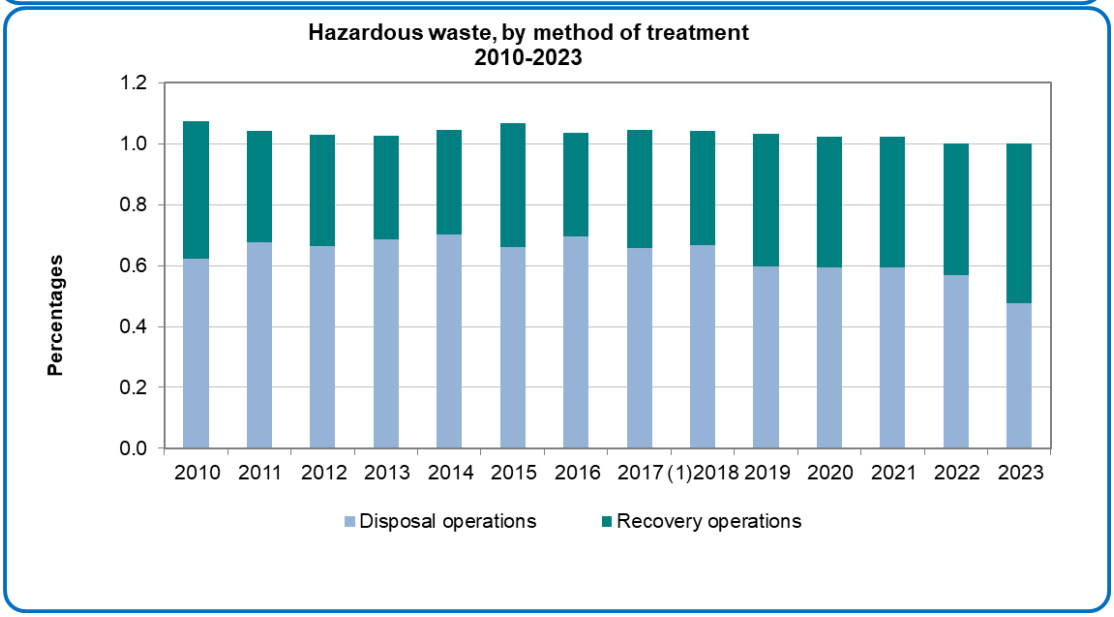
12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement

Israel is party to the United Nations Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (the Basel Convention) and complies with its provisions. Israel has yet to ratify the Ban Amendment and fully align the E-waste Amendments with national legislation but already complies with their provisions, further limiting the export of hazardous waste. Israel is a party to the Rotterdam Convention on Prior Informed Consent (PIC) and meets its obligations. It is in the process of working towards ratifying the Stockholm Convention on Persistent Organic Pollutants (POPs) and in advanced stages of ratifying the Minamata Convention on Mercury which has already been incorporated into domestic law.

12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment

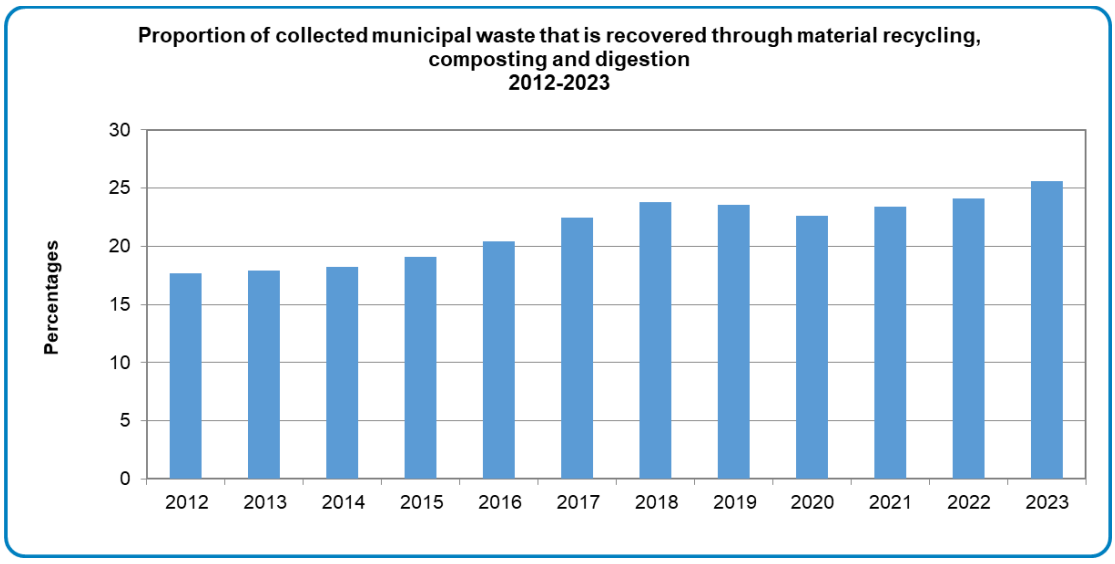


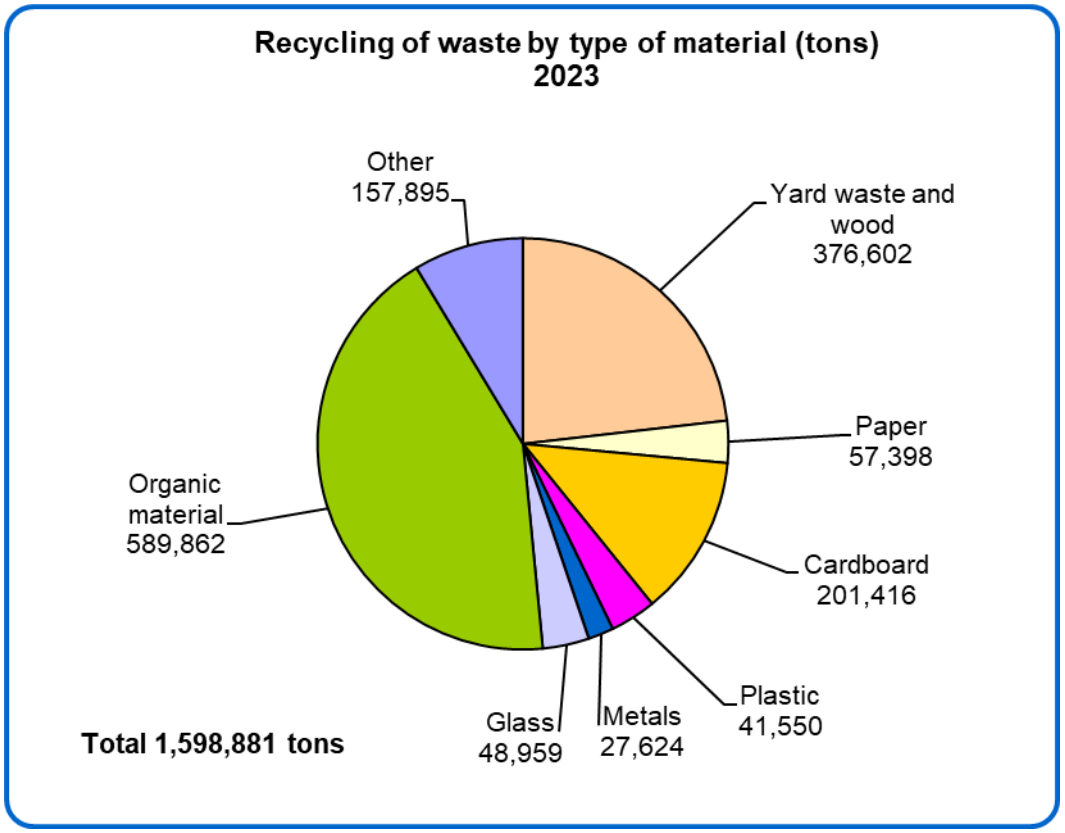


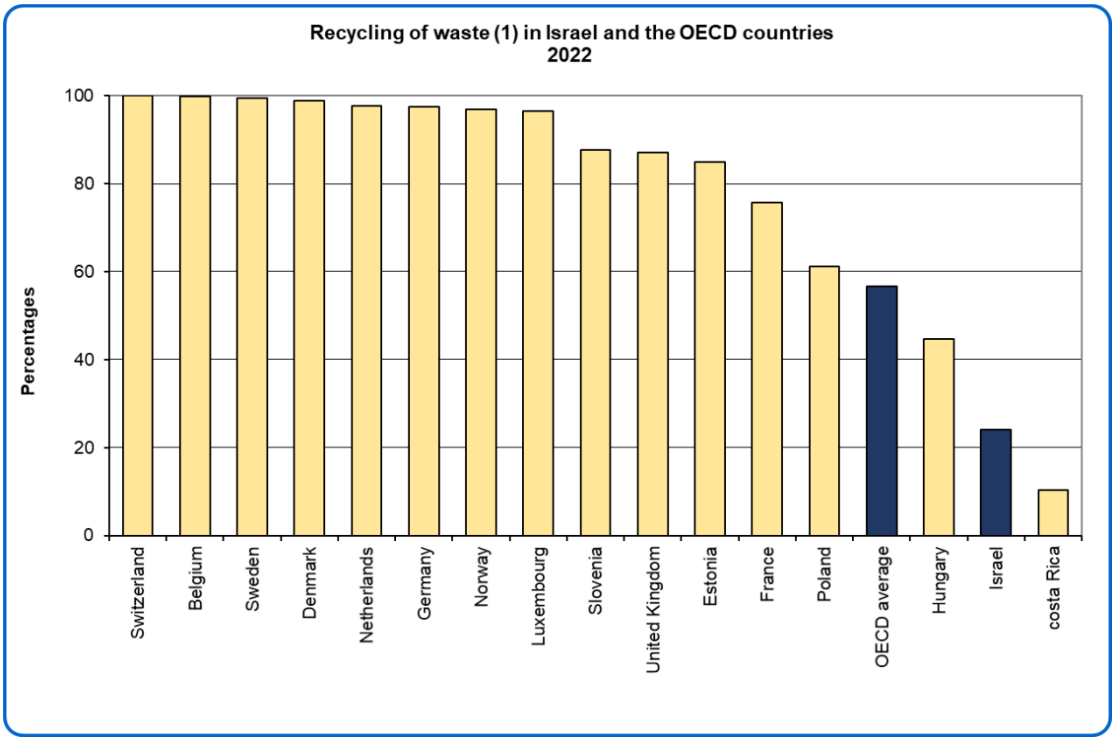


(1) The calculation method was updated in 2018.

12.5.1 National recycling rate, tons of material recycled







Source: OECD.

(1) Includes cycle for energy-burning

12.6.1 Number of companies publishing sustainability reports

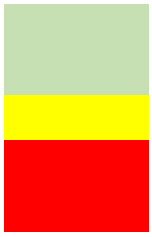
The number of sustainability reports submitted by companies in Israel is still low but increasing gradually. Banks are a leading sector in this field with a mandatory requirement to publish a sustainability report. As reporting is still mostly voluntary in Israel, a number of different sustainability (CSR) reporting schemes are in use. "Reporting" is here defined as internal disclosure to a rating organization, to the government via voluntary schemes, and to the general public via a published non-financial report. The most common corporate responsibility reporting mechanism is produced by and known as "Maala." This corporate membership organization is comprised of some 120 of Israel's large and mid-size companies. The network includes local Israeli companies as well as international companies operating in Israel. In 2024, 155 companies reported to Maala, compared to 150 companies in 2018. It should be noted that Maala only publishes the final ratings of the reporting companies and not the detailed reports of the companies.

12.7.1 Number of countries implementing sustainable public procurement policies and action plans

According to the UNEP report, Israel performs well in Mandatory SPP Provisions, Practical Support, and Social/Economic/Government-related considerations, matching the global median level. Israel is categorized as Meidum-low leve.

	Global Median	Israel
Overall SPP Implementation Level	2.00	2.00
A SPP policy/action plan	2.00	1.00
B(a) SPP Provisions	14.00	8.00
B(b) mandatory SPP	6.00	6.00
B Legal Framework	18.00	14.00
C Practical support	16.00	16.00
D(a) Environmental criteria	6.00	3.00
D(b) Social / economic / gov-related concerns	5.00	5.00
D SPP criteria	9.50	8.00
E Monitoring	14.00	2.00
F % of SPP	0.00%	0.00%

UNEP score for Israel based on national data.

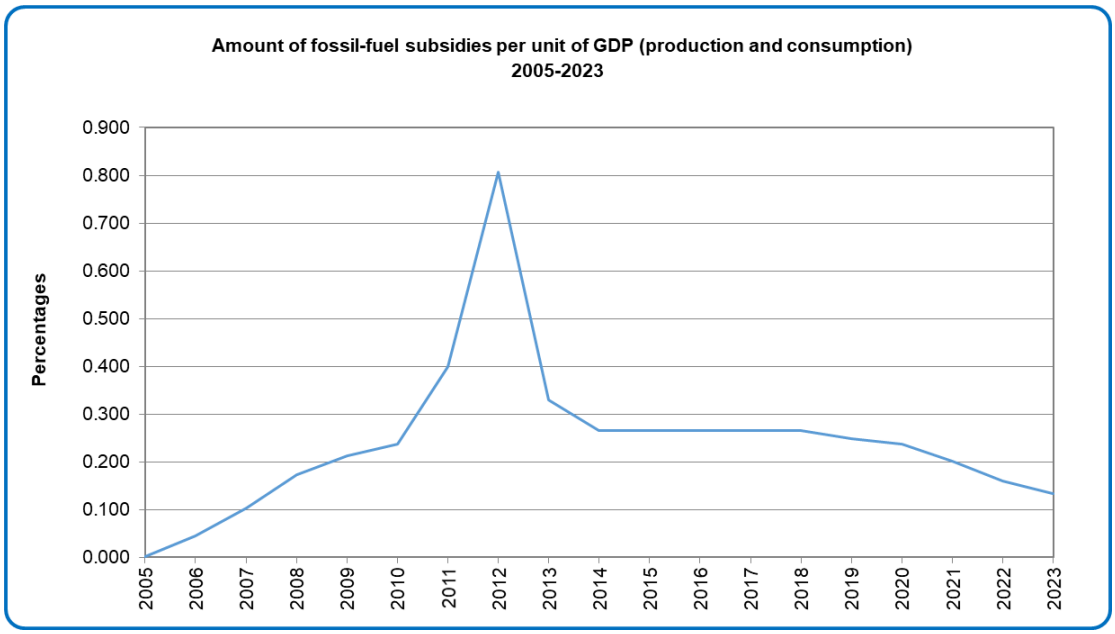


Good performance
Room for Improvement
Missing data or information

12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

See indicator 4.7.1

12.c.1 Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels



Goal 13 - Take urgent action to combat climate change and its impacts

13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

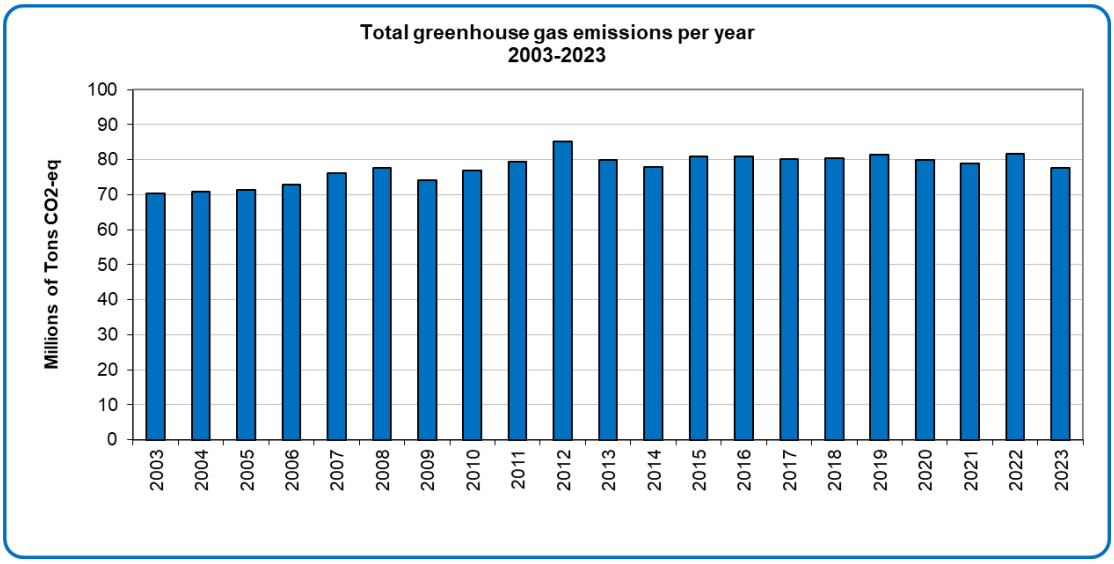
Environmental guidelines have been issued and adopted regarding local environmental disaster risk reduction strategies as part of the national disaster risk policy. In addition, individual instruction kits and checklists are prepared for each local authority. Over 85 have been provided so far and 20 more are in preparation. Regular local government audits carried out on behalf of national government will include audits of the implementation of the environmental guidelines.

13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)

Israel has strengthened its national approach to climate adaptation in recent years. Government Decision No. 4079, adopted in 2018, laid the foundation by establishing a national management framework for coordinating adaptation efforts across sectors. Building on this framework, Israel launched the National Action Plan for Climate Change (2022–2026), published its first National Climate Risk Map (2024), and developed an updated adaptation work plan for ministries and public bodies (2024–2028).

In July 2024, the Ministry of Environmental Protection published the first phase of the NAP - National Climate Adaptation Plan (Mapping Stage). In 2025, Israel submitted its first Biennial Transparency Report (BTR) for 2024 to the UNFCCC, providing comprehensive updates on its adaptation actions and progress toward low-emission, climate-resilient development.

13.2.2 Total greenhouse gas emissions per year



13.3.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

See indicator 4.7.1

Goal 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development

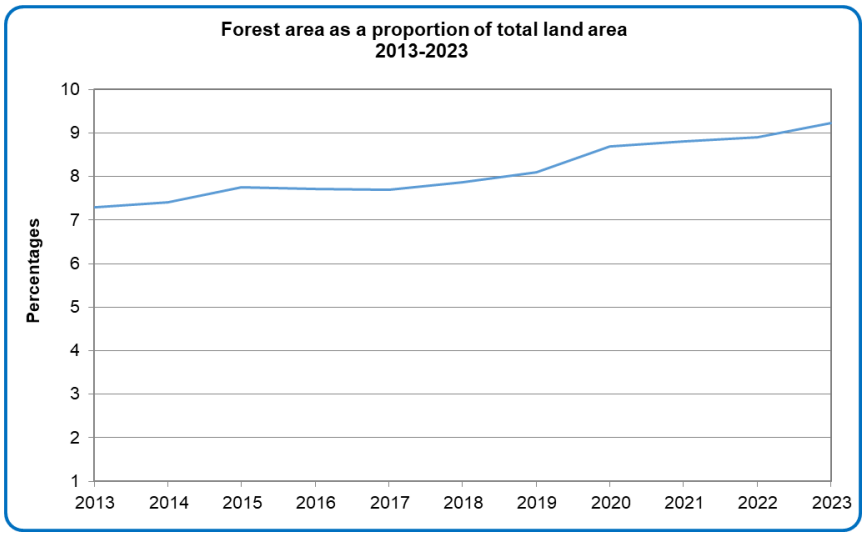
14.5.1 Coverage of protected areas in relation to marine areas

	Protected marine area (km2)	The percentage of the protected area within Israel's territorial waters
2014	11.7	0.28
2015	11.7	0.28
2016	11.7	0.28
2017	11.7	0.28
2018	11.7	0.28
2019*	112.0	2.68
2020	112.0	2.68
2021	158.3	3.79
2022	158.3	3.79
2023	158.3	3.79

*Explanation of the increase in 2019: Awareness of the importance of marine nature reserves has risen and it has been decided by the state to declare marine nature reserves on a larger scale.

Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15.1.1 Forest area as a proportion of total land area



15.2.1 Progress towards sustainable forest management

Keren Kayemeth LeIsrael-Jewish National Fund (KKL-JNF) is the official afforestation administration in Israel and the acting Forest Service, pursuant to a covenant signed with the Government of Israel in 1961. Throughout the years, KKL-JNF invested heavily in research and implemented innovative approaches that contributed to the development of a new Forest Management Policy (FMP) for Israel in 2014. The new FMP defines the primary role of forests in Israel as the provision of ecosystem services for the well-being of all citizens and the environment.

In recent years, further progress has been made. A comprehensive national strategic forest plan has been completed and is pending publication. Developed through a collaborative process, it sets a long-term vision and policy framework for the country's forest resources. Scientific capacity has also been enhanced through support for long-term monitoring and research within the LTER Israel network. As part of the FMP implementation, detailed policy documents have been published on forest thinning, management of low vegetation, invasive species control, and forest adaptation to climate change. These efforts support science-based, adaptive, and sustainable forest management nationwide.

15.5.1 Red List Index

Endangered plants: 18.09%

Endangered vertebrates: 38.74%

Number of species Last year available	Mammals	Birds	Reptiles	Amphibians	Fish	of which freshwater species	of which marine species	Vascular plants
Species known								
of which indigenous	105	213	105	7	32	32		2288
Endangered species								
of which indigenous	27	13	7	3	0	0		117
Critically endangered species								
of which indigenous	15	21	13	2	6	6		62
Vulnerable								
of which indigenous	19	31	15	1	0	0		198
Threatened species, total								
of which indigenous	61	65	35	6	6	6		377

Fish data are updated to 2018, other vertebrates to 2002.

Endangered plants in Israel, 2009

Criterion	Severity	IUCN				Total
		Extinct	Critically endangered	Endangered	Vulnerable	
Rarity	**Total**	**36**	**59**	**120**	**199**	**414**
	Found at more than 100 sites	-	-	1	-	1
	Found at 31-100 sites	1	1	16	22	40
	Found at 11-30 sites	2	5	17	55	79
	Found at 5-10 sites	2	6	30	63	101
	Found at 3-4 sites	5	7	22	16	50
	Found at 2 sites	10	12	16	21	59
	Found at 1 site	16	28	18	22	84
Vulnerability	No vulnerability	7	2	19	61	89
	Low vulnerability	1	1	11	22	35
	Medium vulnerability	-	3	27	43	73
	High vulnerability	3	20	32	46	101
	Very high vulnerability	25	33	31	27	116
Attractivity	No attractivity	32	38	72	153	295
	Low attractivity	1	7	19	30	57
	Medium attractivity	2	9	11	10	32
	High attractivity	-	4	15	4	23
	Exploitation	1	1	3	2	7
Endemism	Not endemic	35	34	82	164	315
	Endemic to the Levant	-	2	3	6	11
	Sub-endemic	1	11	19	14	45
	Sub-endemism	-	-	1	2	3

	Endemic	-	12	15	13	40
Peripherality	Not peripheral	23	38	85	141	287
	Peripheral	13	21	35	58	127
	Thereof: East	1	-	6	6	13
	North	12	26	62	96	196
	South	9	8	12	30	59
	West	1	4	5	9	19
Disjunctive	One geographical segment	1	4	7	14	26
	More than one geographical segment	35	55	113	185	388
Law protection	Protected by law	5	9	32	20	66
	Not protected by law	31	50	88	179	348

The Israeli Biodiversity Index - The Israeli Biodiversity Index is composed of changes relative to the baseline period (2013):

- The amount of natural land, measured by the percentage of natural land loss;
- The continuity of natural areas, measured by the connectivity between natural areas and their density;
- The status of species – including animals (mammals, birds, and reptiles) and plants. The species status is characterized by changes in the proportion of endangered species and endemic species (unique to Israel), as well as the proportion of invasive and outbreak species, and species associated with human activity.

The indicators are calculated based on the monitoring system of the National Program for the Assessment of Nature Status in Israel for the year 2021, compared to 2013. The analysis was divided into nine monitoring units at the national level, covering Israel's terrestrial ecosystems.

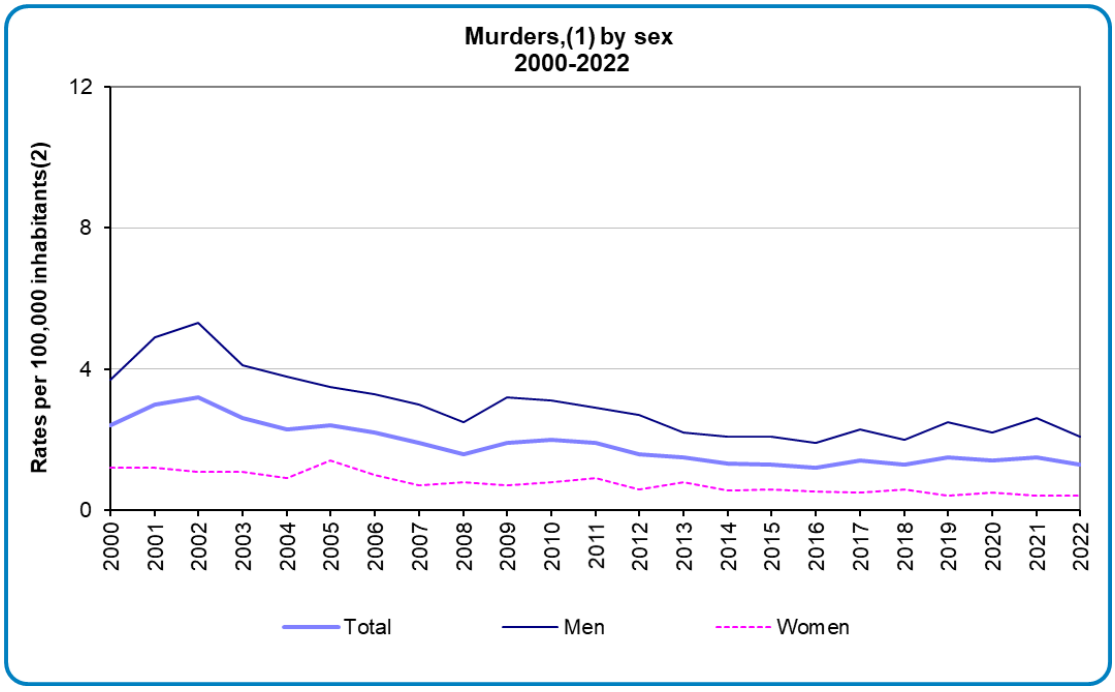
The index is calculated as a weighted combination of 50% species indicators and 50% continuity and fragmentation indicators. This weighting is then multiplied by the proportion of remaining natural land in each unit. Additionally, the results are computed using general indicators for a nationwide calculation.

The desired trend for the index is an increase—indicating an improvement in biodiversity, which is reflected in an increase in the remaining natural land, the continuity of these areas, and the number of local species observed during the measured period, particularly unique species. (A score above 1 indicates improvement, while a score below 1 indicates deterioration).

Monitoring units	Biodiversity Indicator - Weighted Index	Quality component: remaining natural area	Quality component: Biotic factors (species)	Quality component: abiotic factors (patchiness and continuity)	Direction of Change (2021 vs. 2013)
National Indicator	**0.952**	**0.988**	**1.013**	**0.913**	- ↓
Mediterranean forest	0.941	0.977	0.961	0.954	- ↓
Planted coniferous forest	0.954	0.991	1.006	0.902	- ↓
Shore sand dunes	0.940	0.977	1.009	0.937	- ↓
Scrubland	0.951	0.988	0.957	0.952	- ↓
Desert fringe	0.950	0.987	0.985	0.959	- ↓
Loess Plains	0.957	0.994	0.978	0.957	- ↓
Negev inner sand dunes	0.953	0.989	1.088	0.813	- ↓
Negev mountains	0.960	0.997	1.001	0.927	- ↓
Arid south	0.959	0.995	1.133	0.814	- ↓

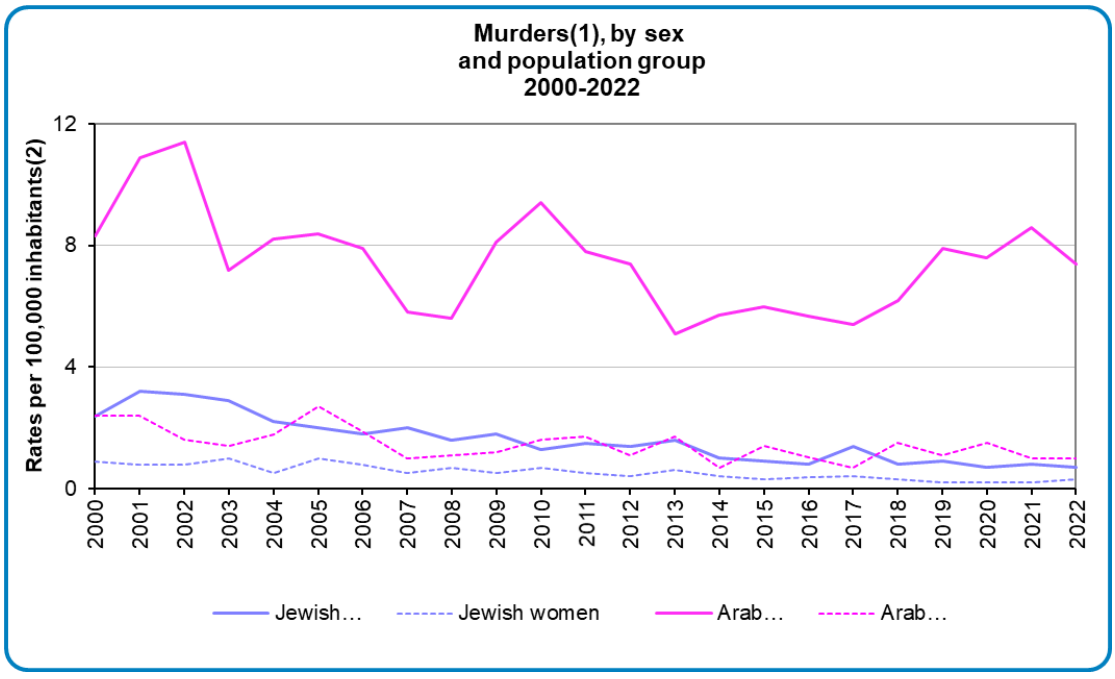
Goal 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age



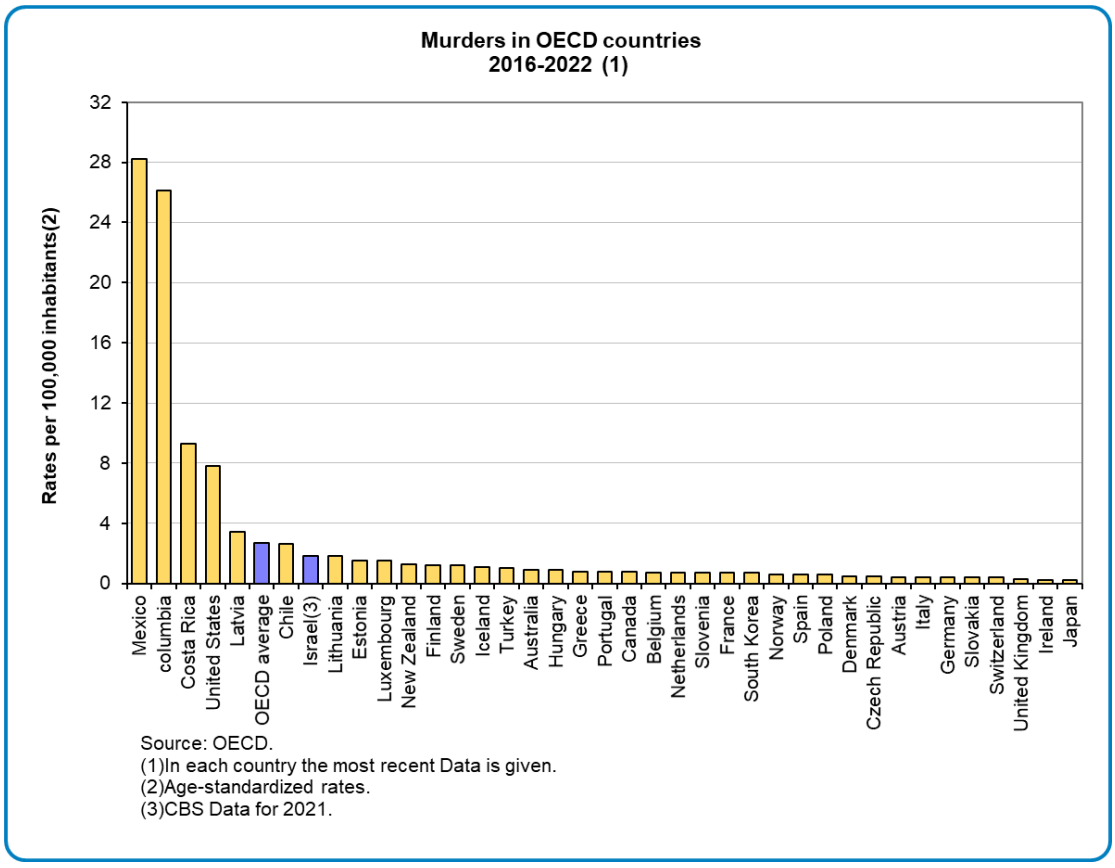
(1) The homicide rate does not include deaths from terror attacks.

(2) Some rates are based on a small number of cases.

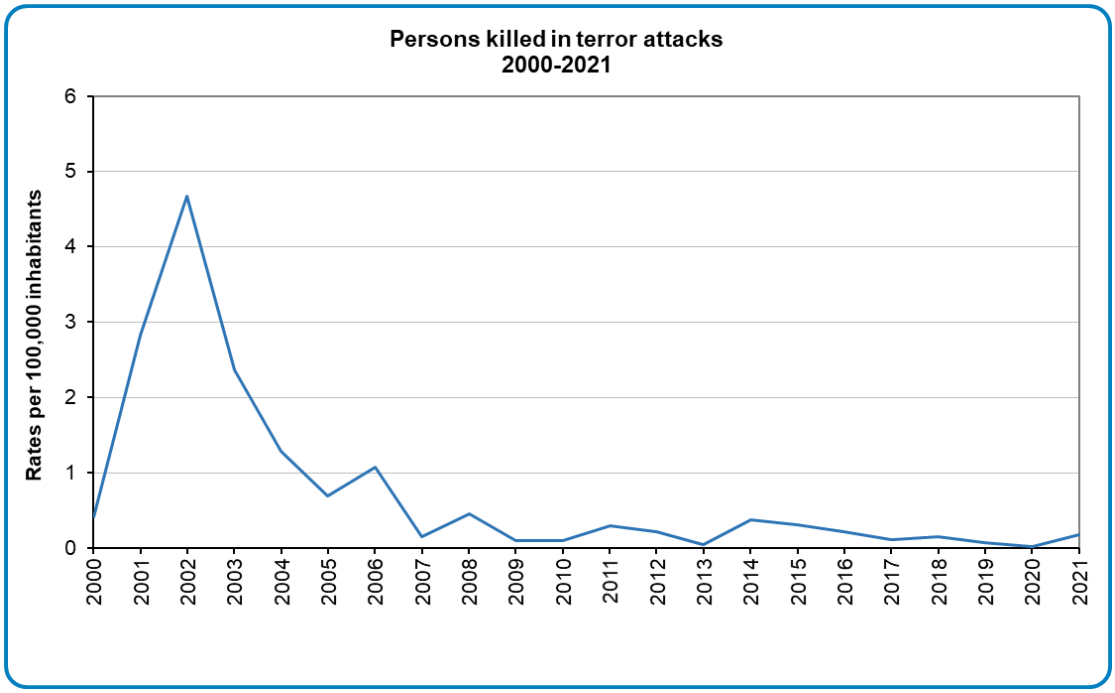


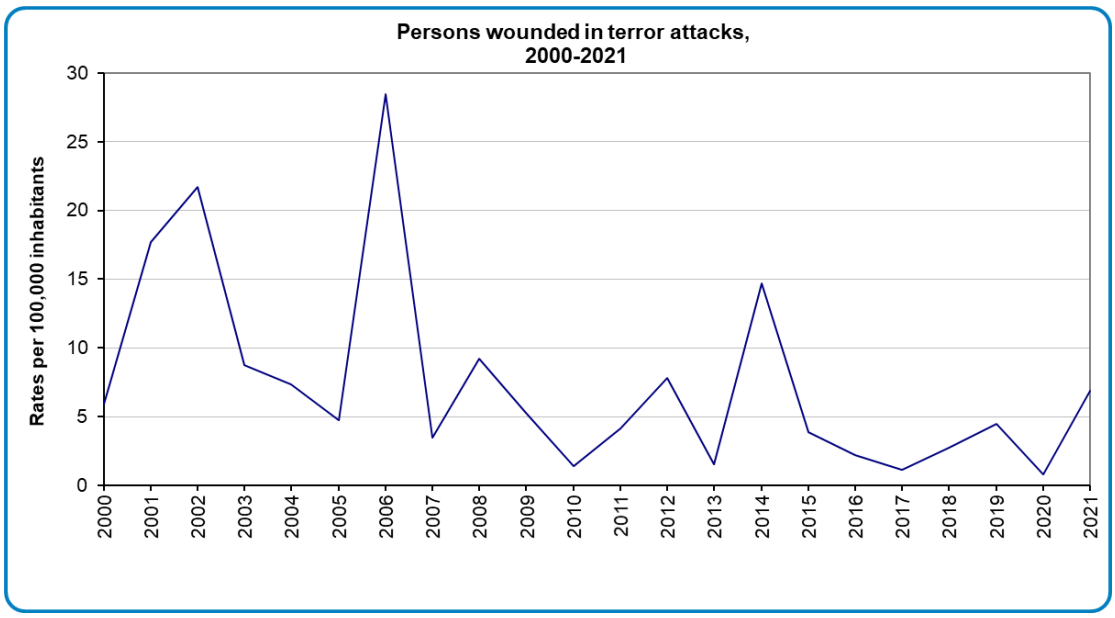
(1) The homicide rate does not include deaths from terror attacks.

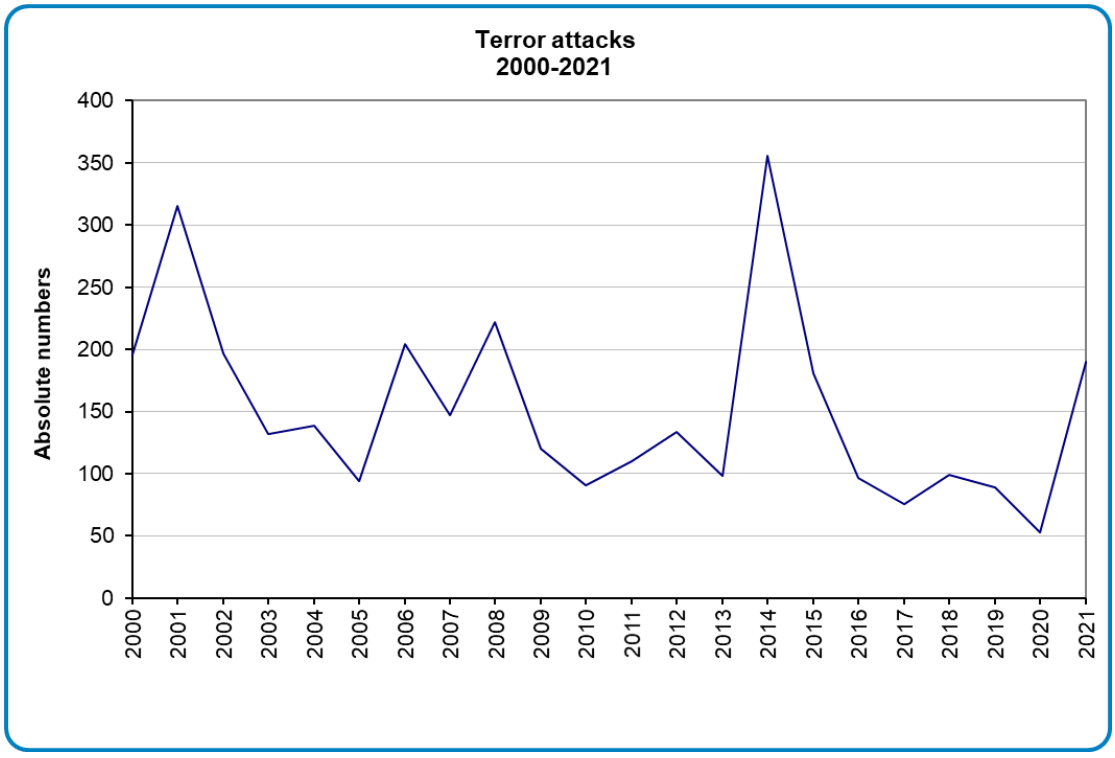
(2) Some rates are based on a small number of cases.



16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause

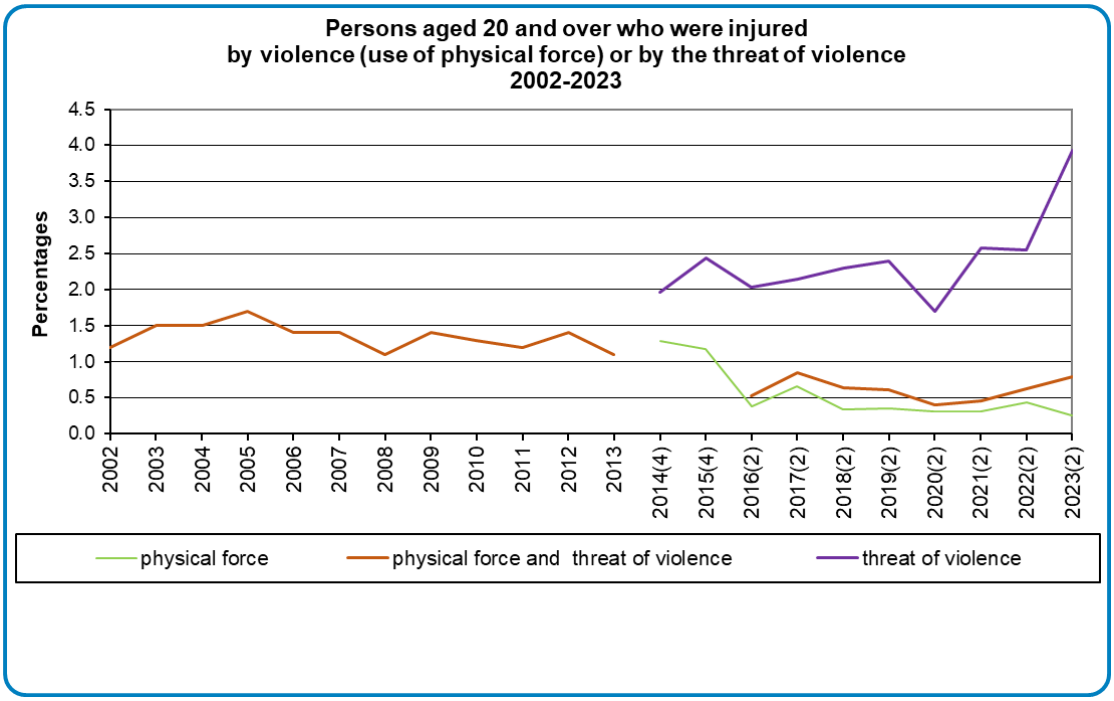



Persons wounded in terror attacks,
2000-2021
Rates per 100,000 inhabitants
30
25
20
15
10
5
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021


Terror attacks
2000-2021
Absolute numbers
400
350
300
250
200
150
100
50
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021

16.1.3 Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months

Data are for victims of physical violence.



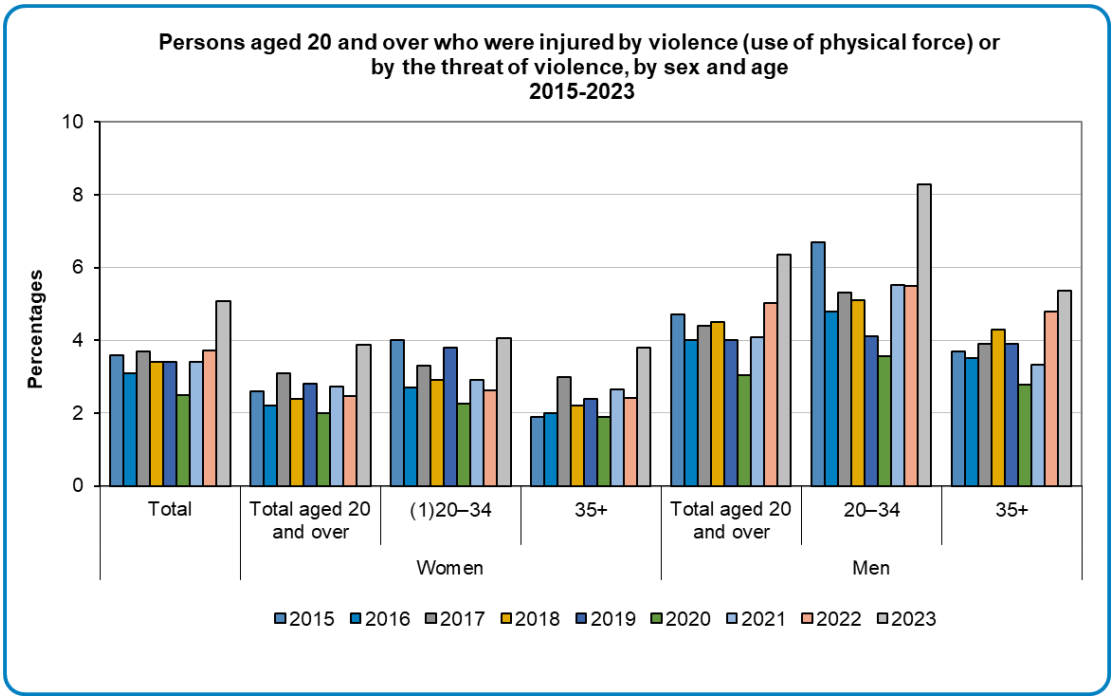
(1) Until 2013 the data is based on the social survey, from 2014 the data is based on a personal security survey

(2) Data is presented with a relative sampling error of 15%-30%.

(3) Until 2013, the data includes the use of physical force and the threat of violence

(4) In the 2014 and 2015 surveys, there were only two types of violence (use of physical force - yes/no)

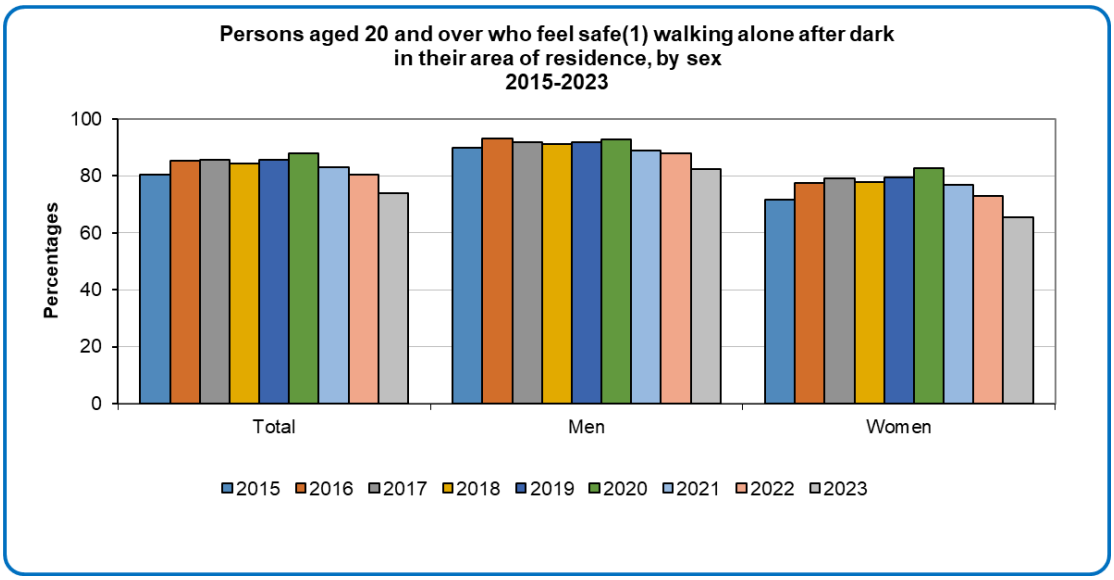
Data on sexual violence cannot be displayed due to sampling errors.



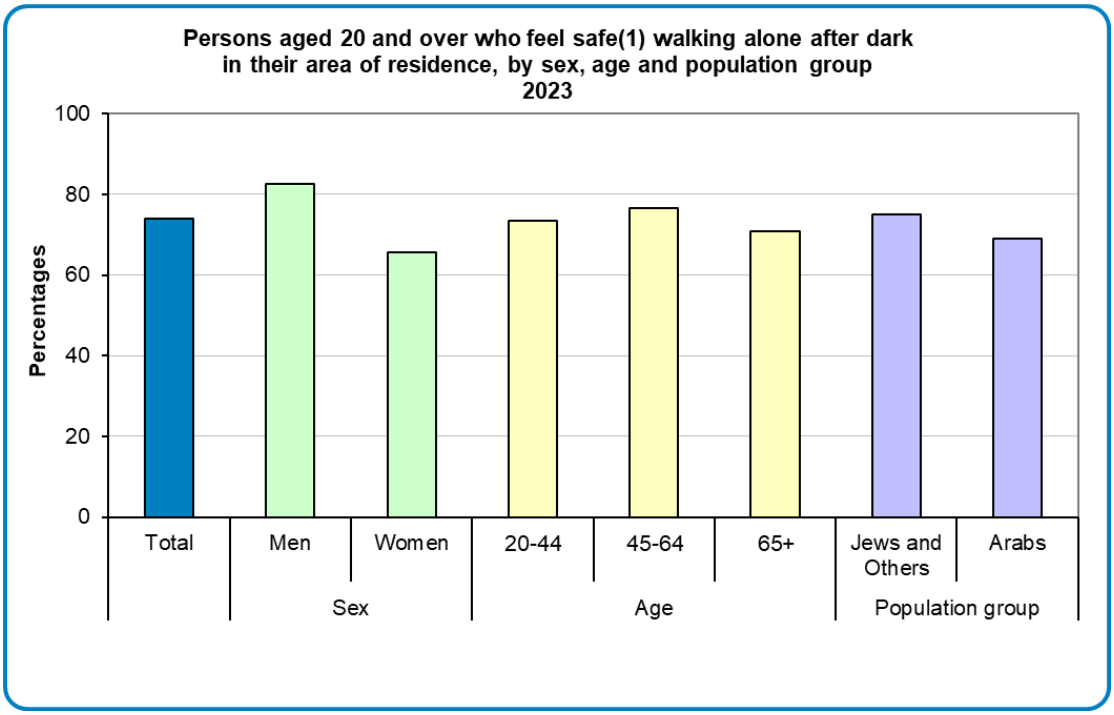
(1) Data is presented with a relative sampling error of 15%-30%.
Data on sexual violence cannot be displayed due to sampling errors.

16.1.4 Proportion of population that feel safe walking alone around the area they live

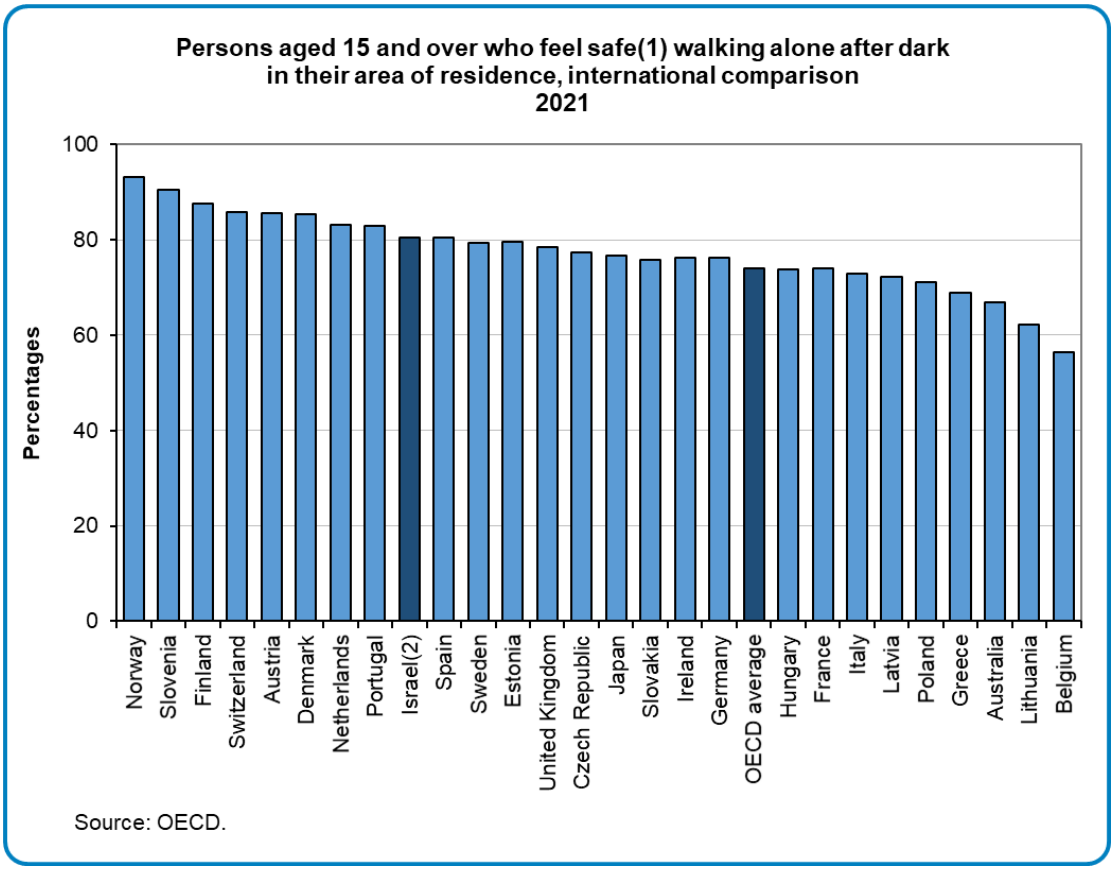
Data from the Israeli victimization survey refer to people who feel safe walking alone at dark around the area they live.



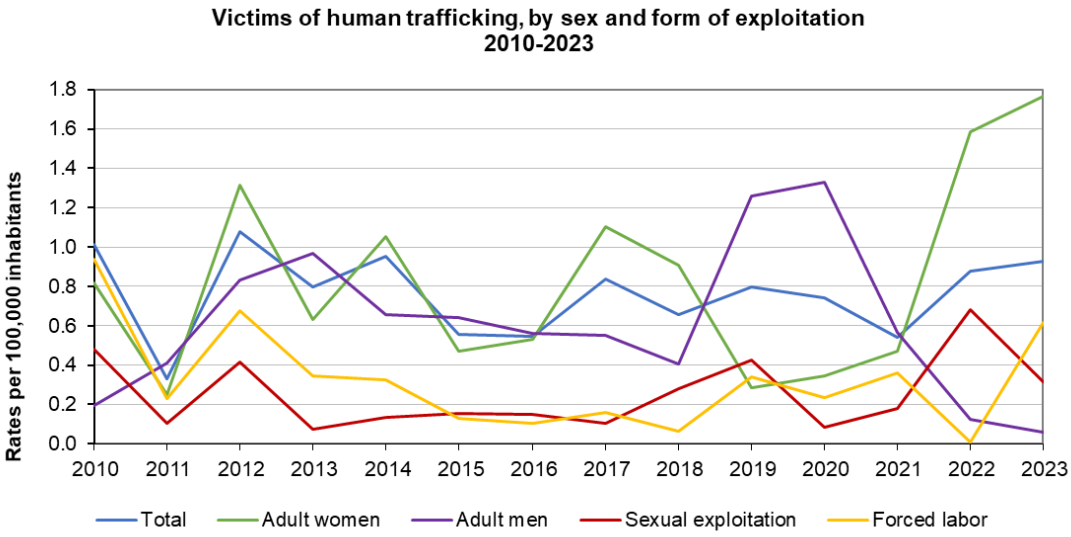
(1) 'To a very large extent' or 'to a large extent'. Not including 'not relevant'.



(1) 'To a very large extent' or 'to a large extent'. Not including 'not relevant'.

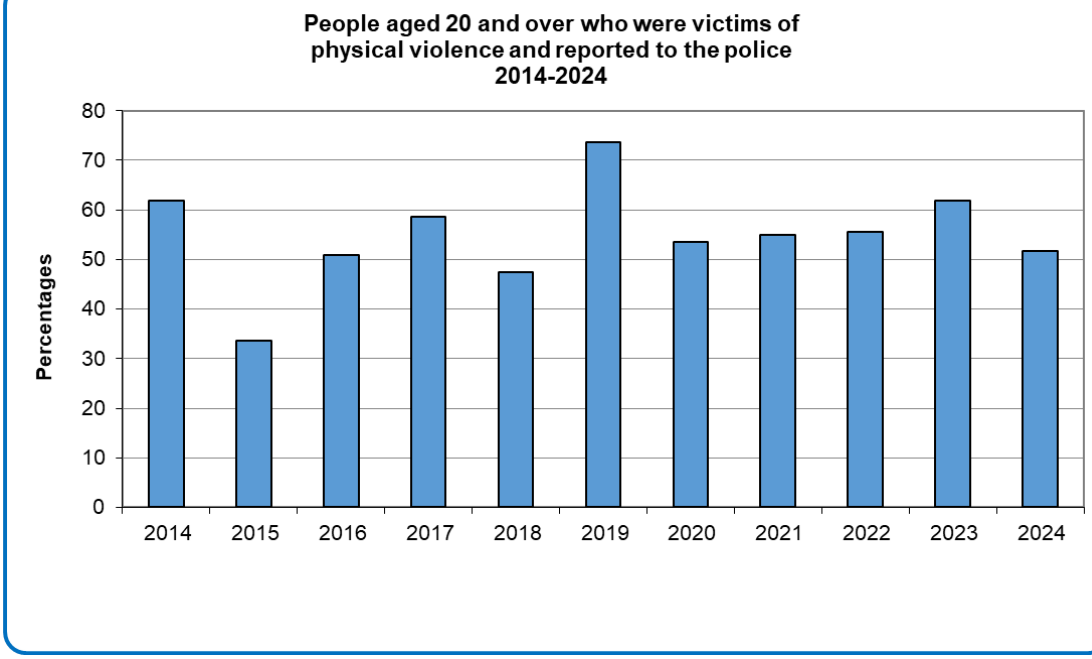


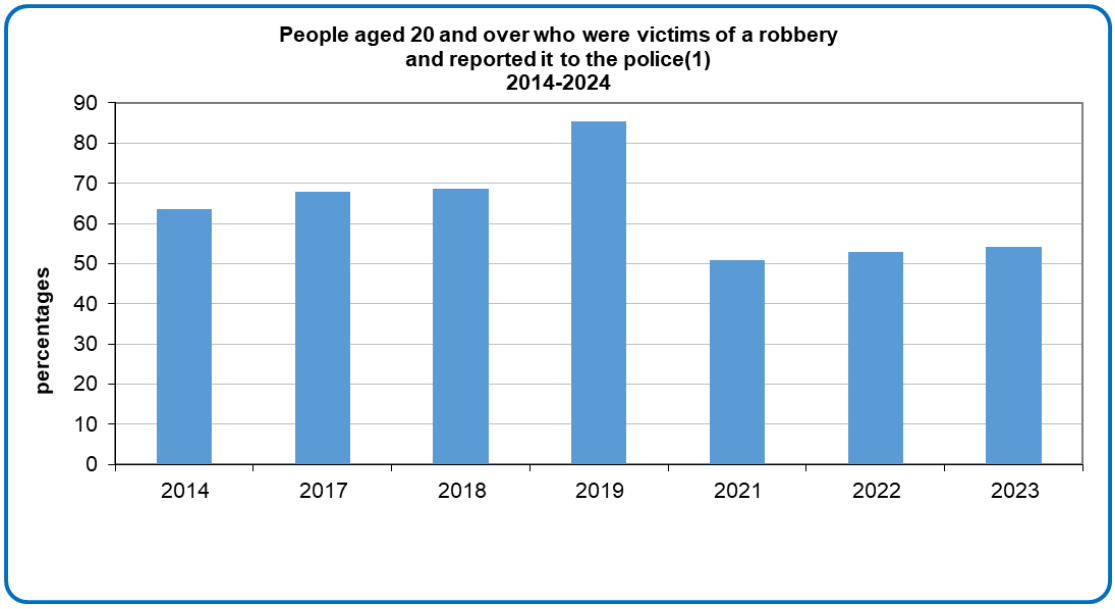
16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation



Source: Ministry of Justice.

16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms

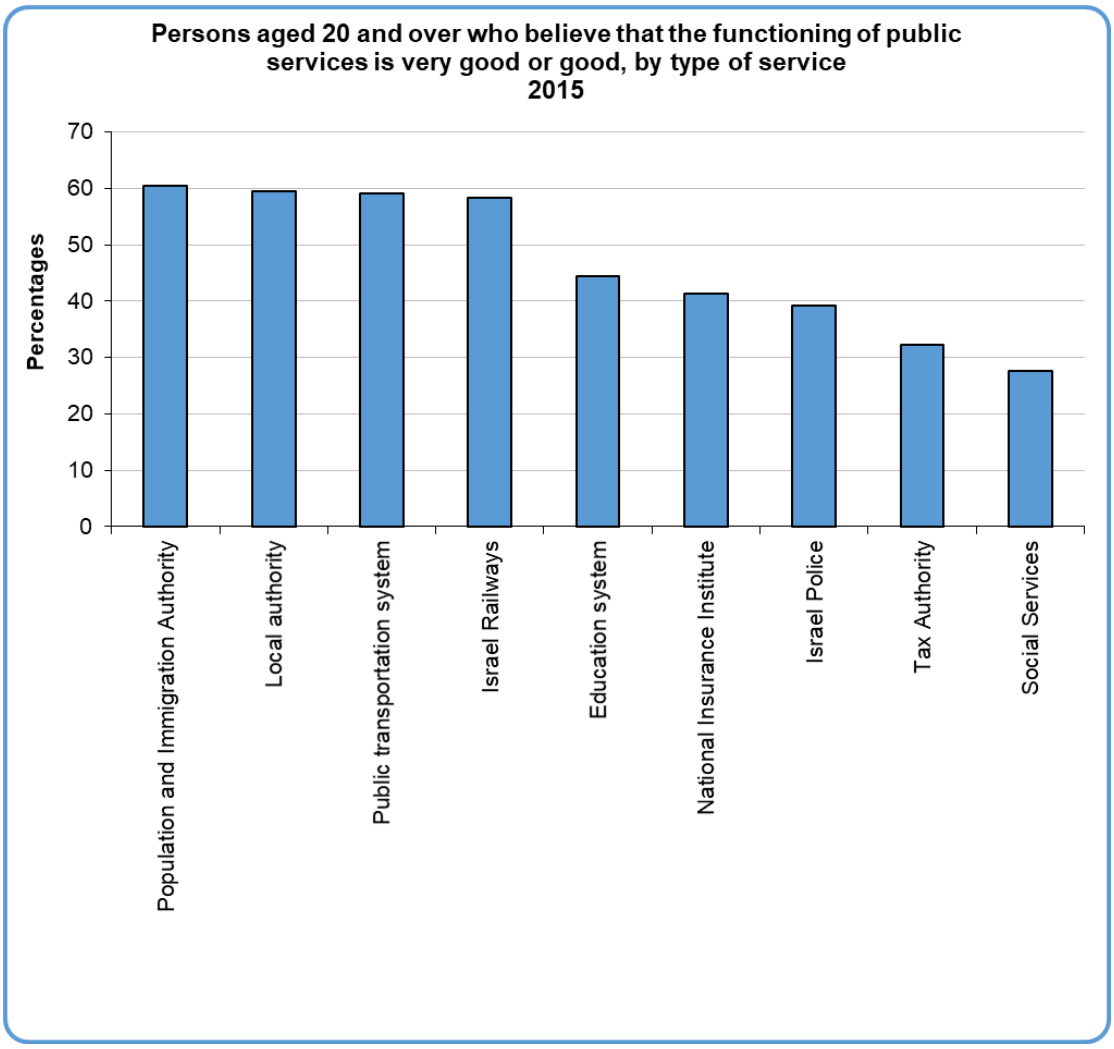




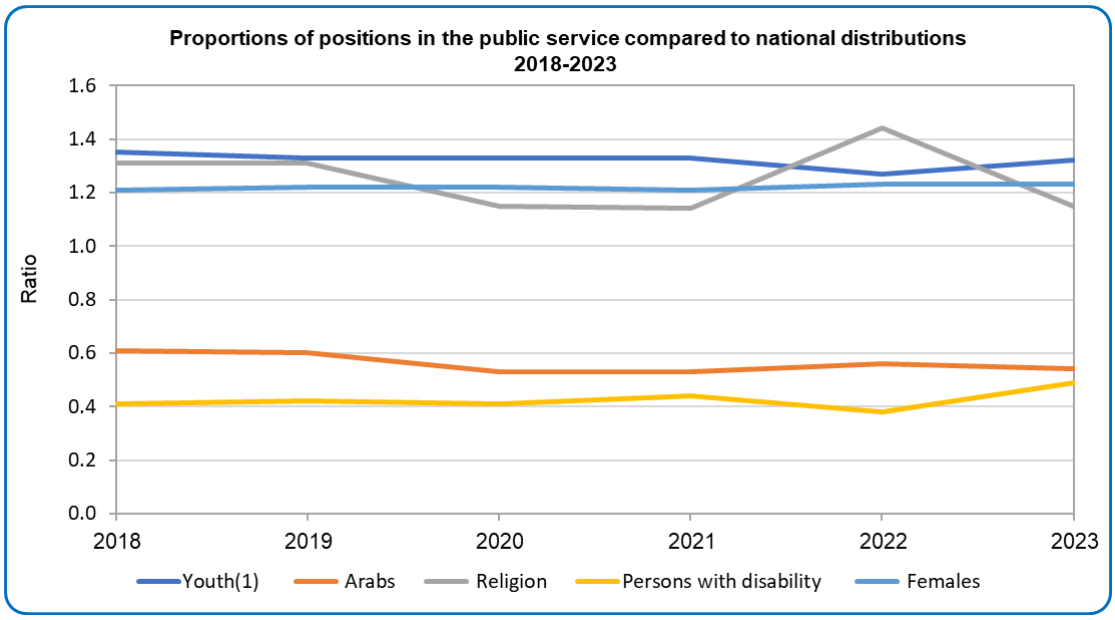
(1) Data on police reporting rates for 2015, 2016, 2019, 2020 and 2024 can't be published due to a relative sampling error higher than 30%.

16.6.2 Proportion of the population satisfied with their last experience of public services

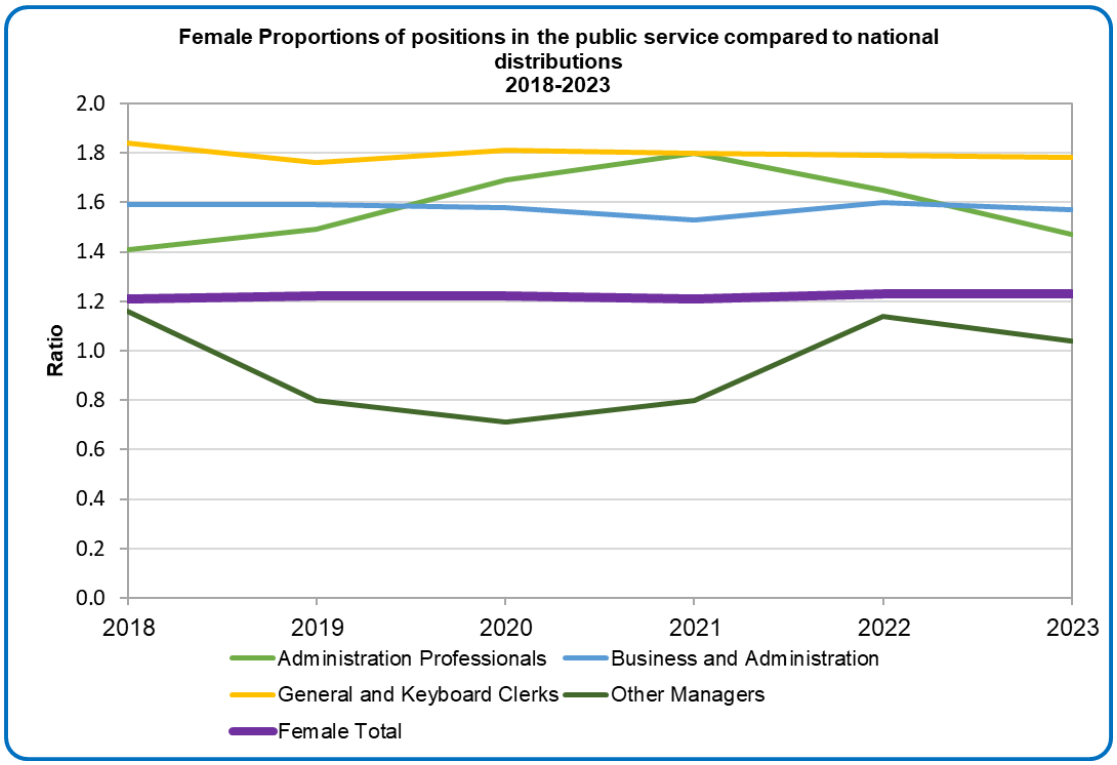
Based on questions from the 2015 social survey, data are available for evaluation of several public services.

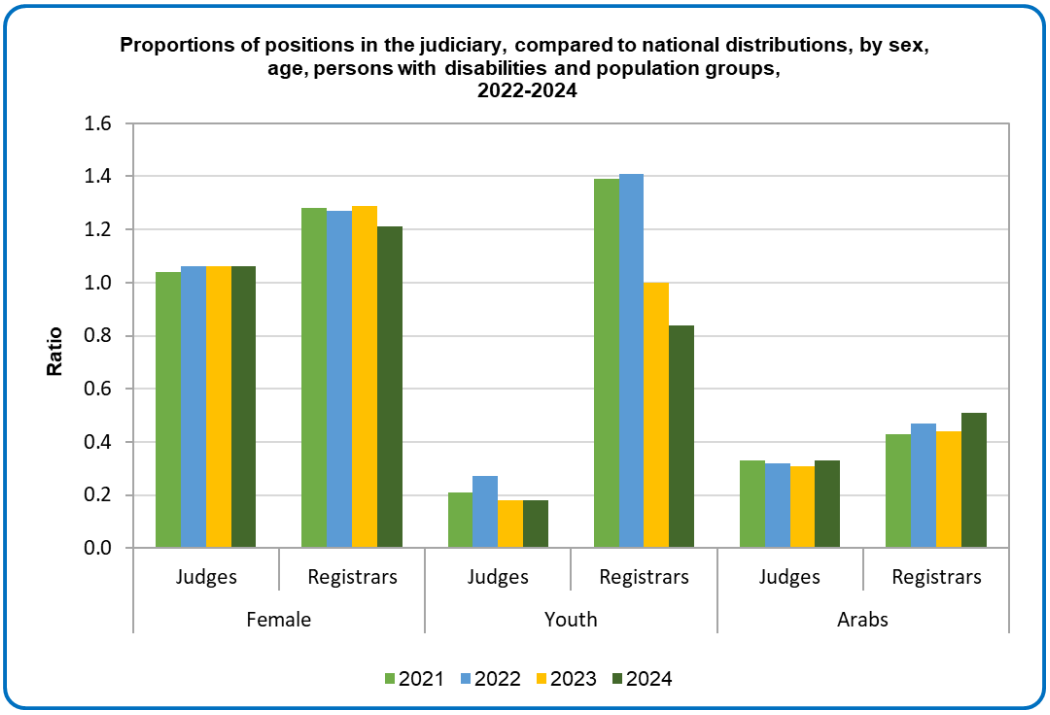


16.7.1 Proportions of positions in national and local institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population groups

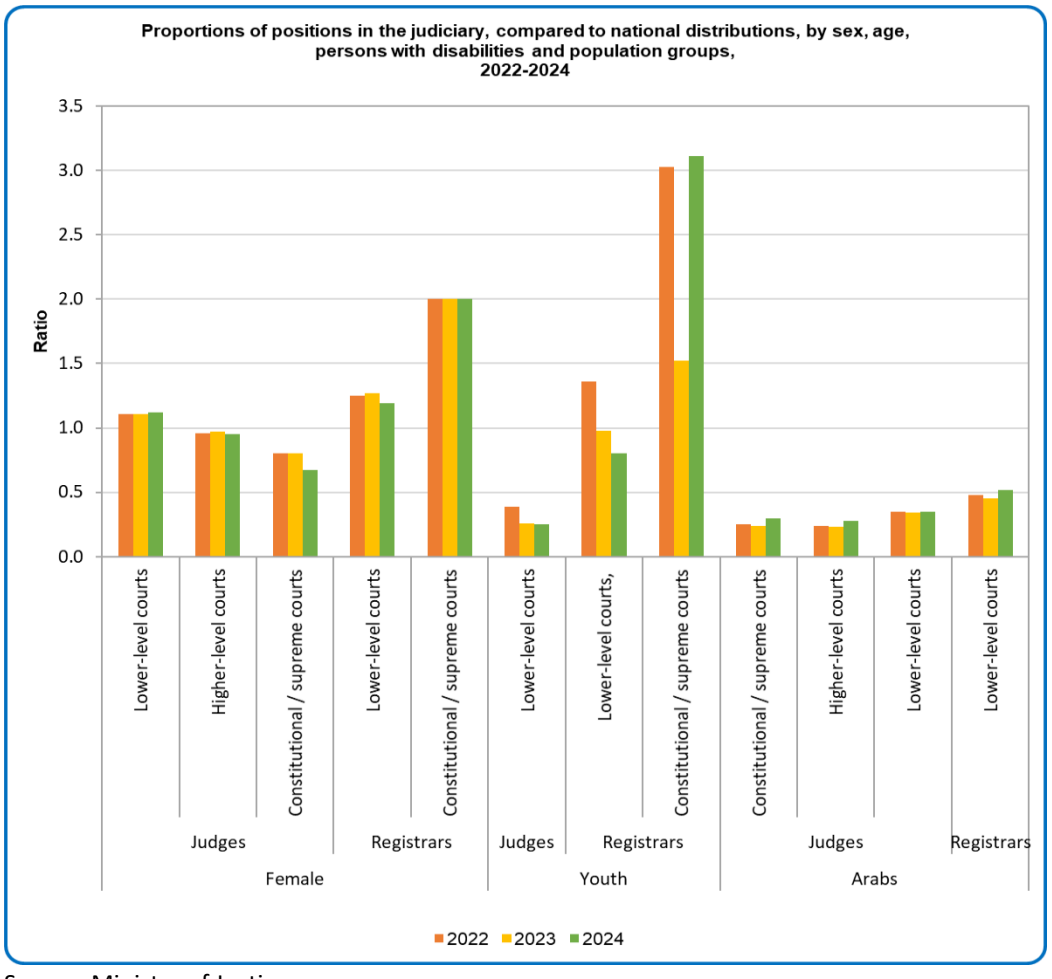


(1)'Youth' - aged 34 and below



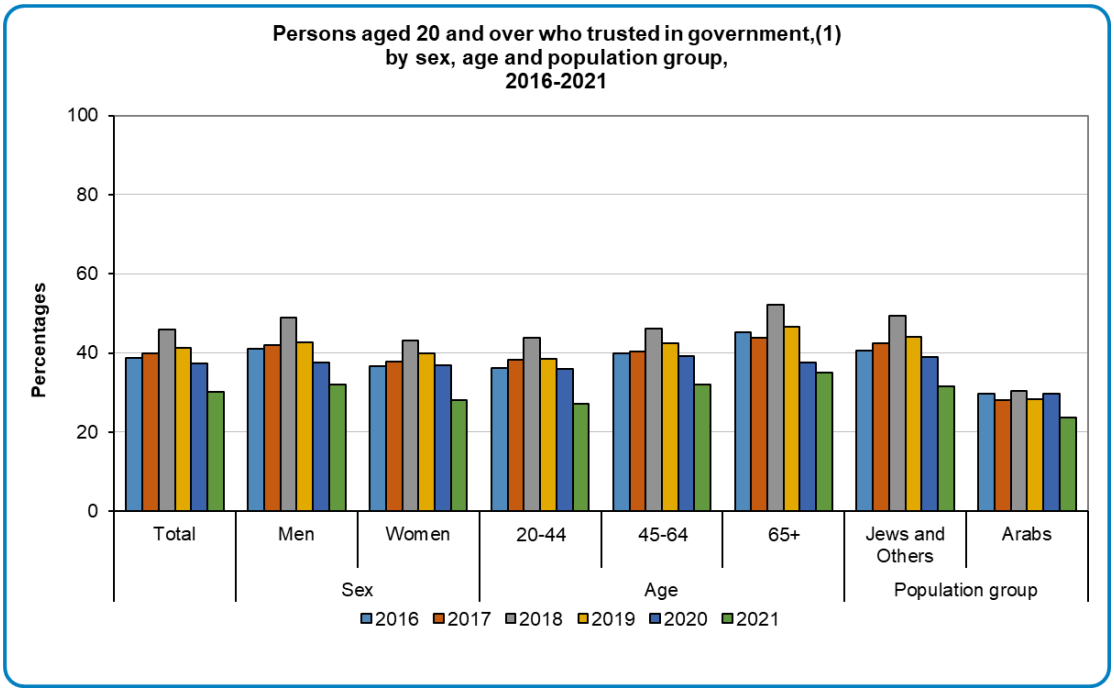


Source: Ministry of Justice



Source: Ministry of Justice

16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group



16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age

100% of births of children that are under 5 years of age have been registered with a civil authority.

16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information

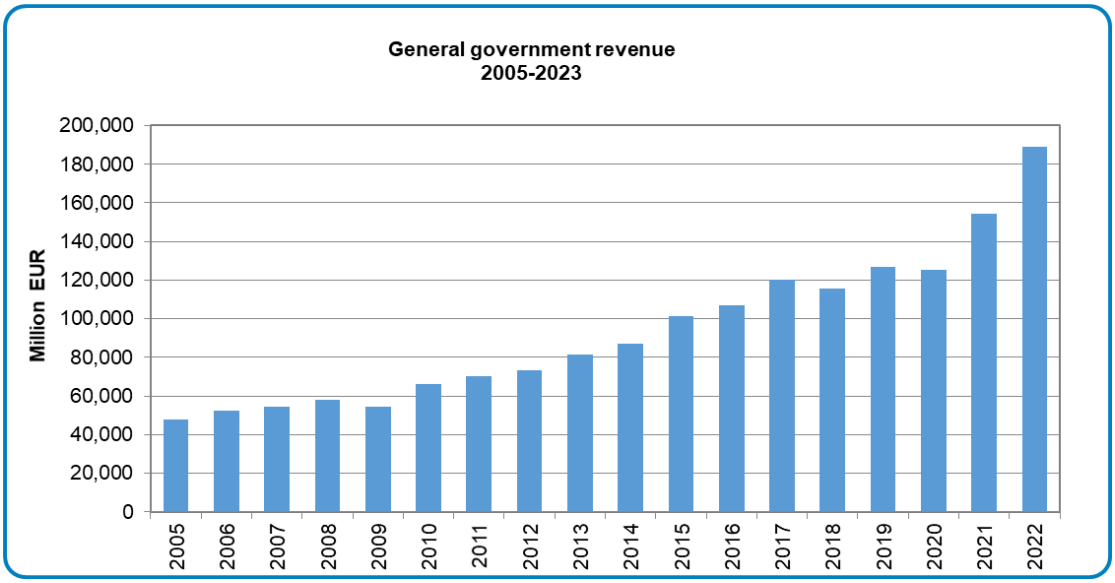
Israel guarantees public access to information through the Freedom of Information Law (1998). The Freedom of Information Unit in the Ministry of Justice, established by Government Resolution No. 2950 (2011), serves as the professional and regulatory authority on the law's implementation and constitutes a center of professional knowledge in the field of freedom of information in Israel and gathers relevant information. The Unit provides legal and procedural guidance to FOI officers, investigates complaints, and publishes annual reports on compliance in both government ministries and local authorities. It also maintains the national list of public authorities, manages an online request form to simplify public access, and issues binding procedures on proactive publication and request handling.

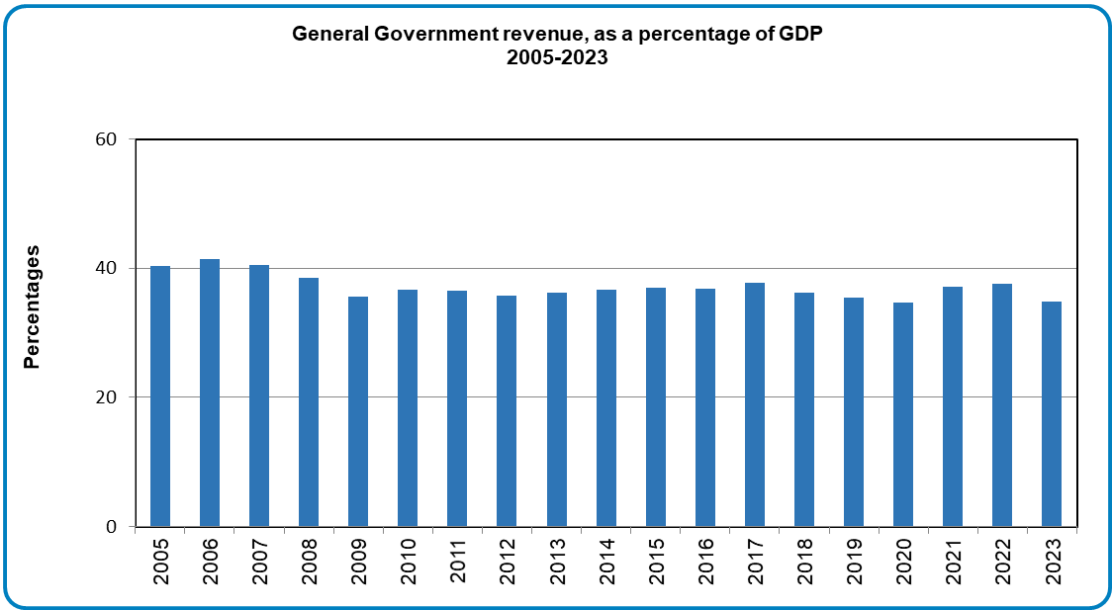
16.b.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law

See indicator 10.3.1

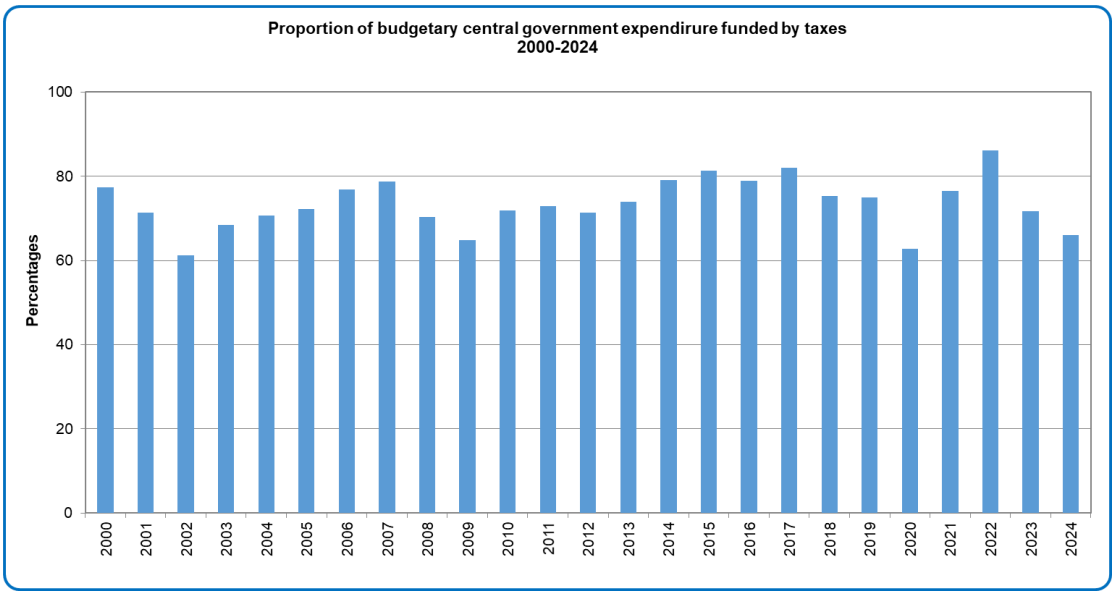
Goal 17 - Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

17.1.1 Total government revenue as a proportion of GDP, by source



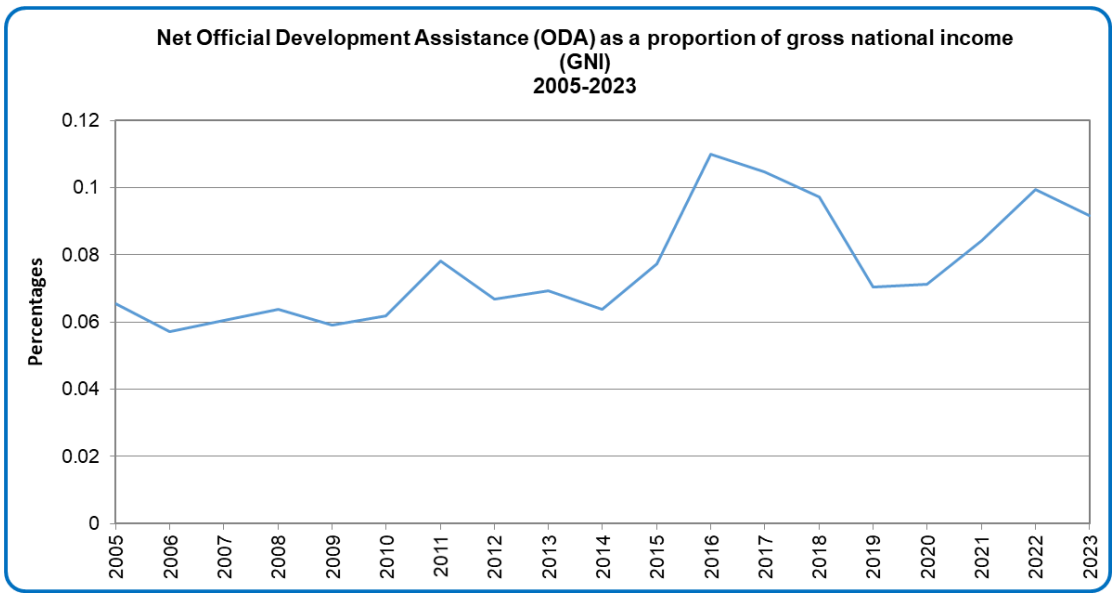


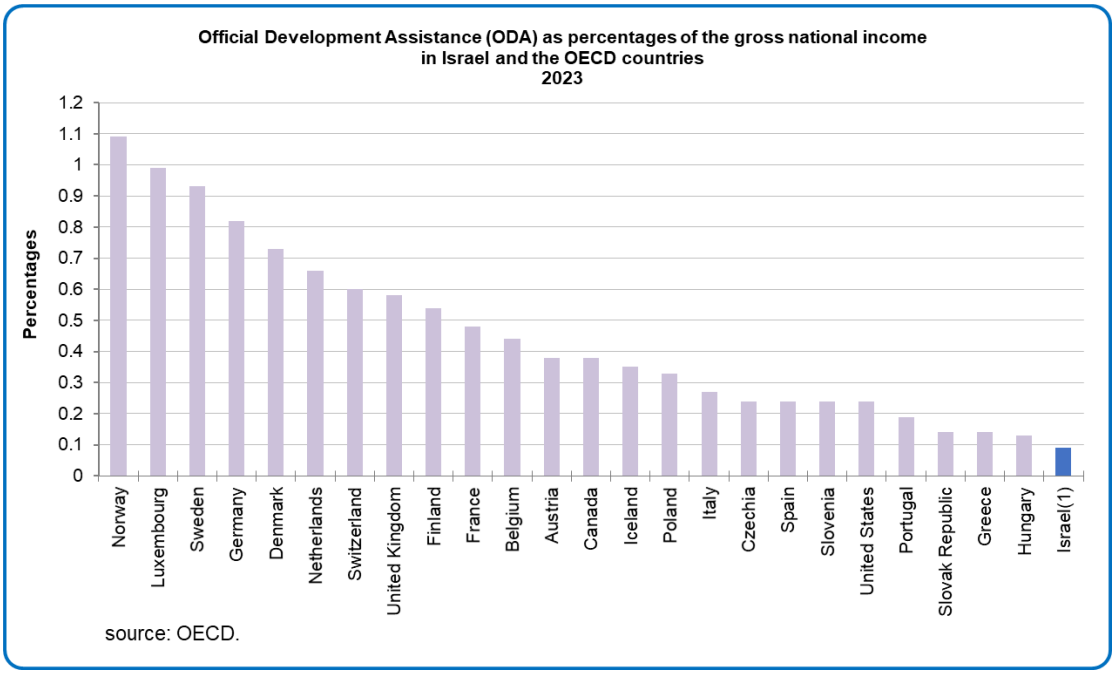
17.1.2 Proportion of domestic budget funded by domestic taxes



The indicator is derived from the GFS series reported to the IMF Statistics department.

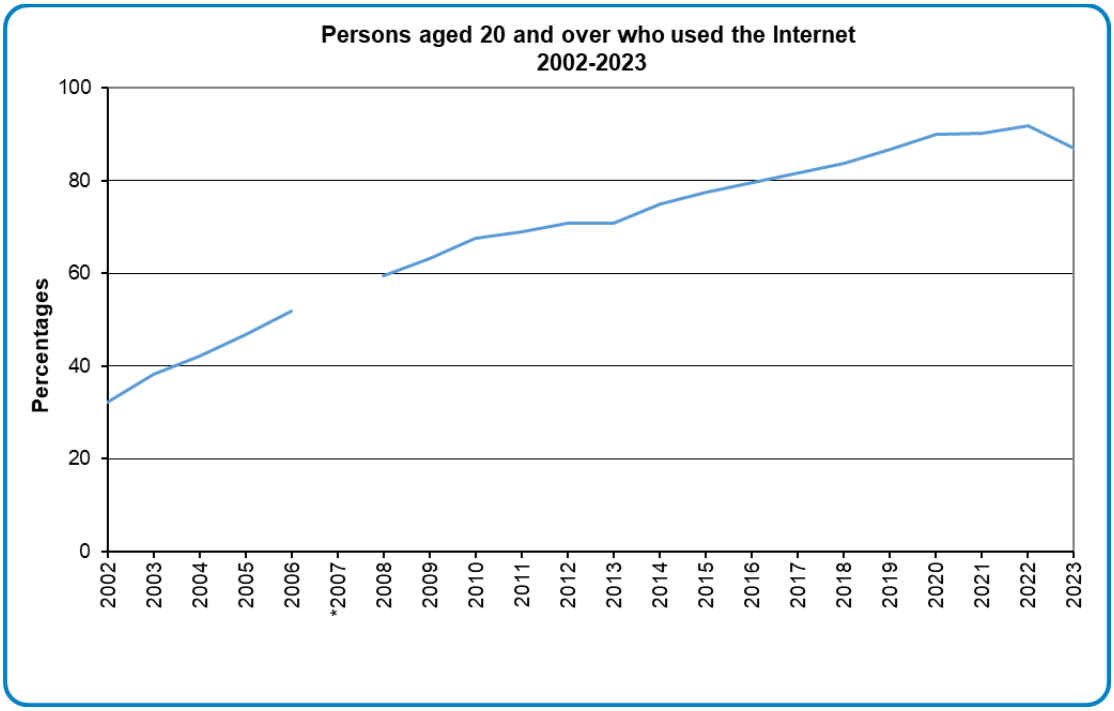
17.2.1 Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors' gross national income (GNI)


Net Official Development Assistance (ODA) as a proportion of gross national income (GNI)
2005-2023
Percentages
0.12
0.1
0.08
0.06
0.04
0.02
0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

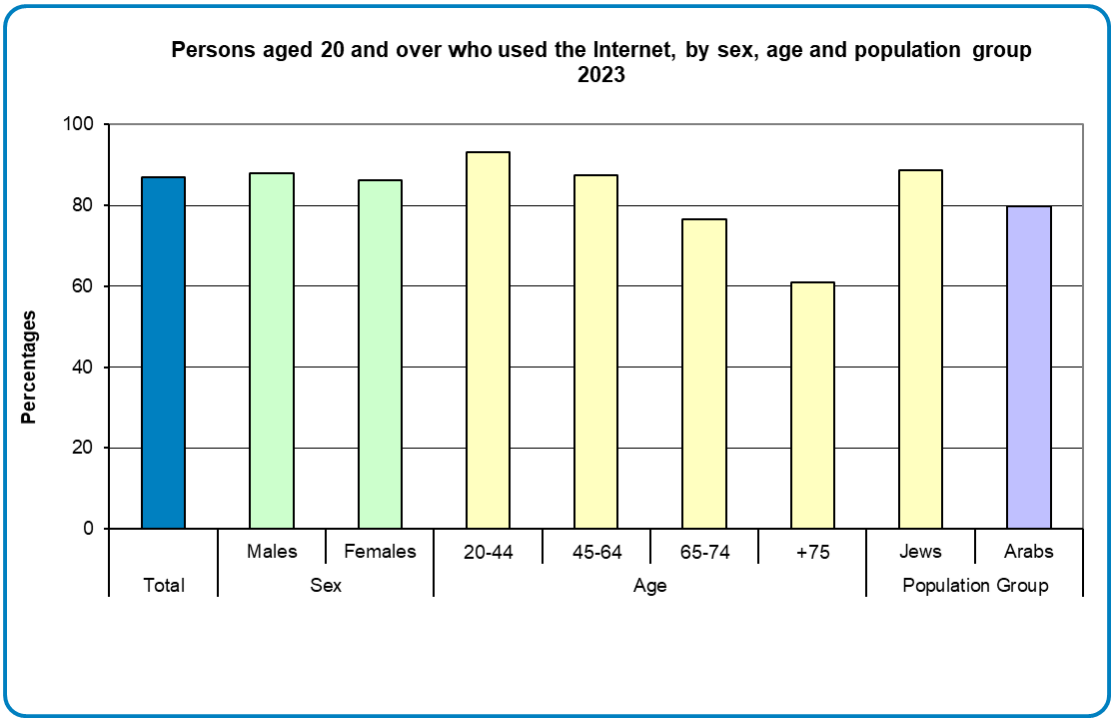

Official Development Assistance (ODA) as percentages of the gross national income in Israel and the OECD countries
2023
Percentages
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Norway
Luxembourg
Sweden
Germany
Denmark
Netherlands
Switzerland
United Kingdom
Finland
France
Belgium
Austria
Canada
Iceland
Poland
Italy
Czechia
Spain
Slovenia
United States
Portugal
Slovak Republic
Greece
Hungary
Israel(1)
source: OECD.

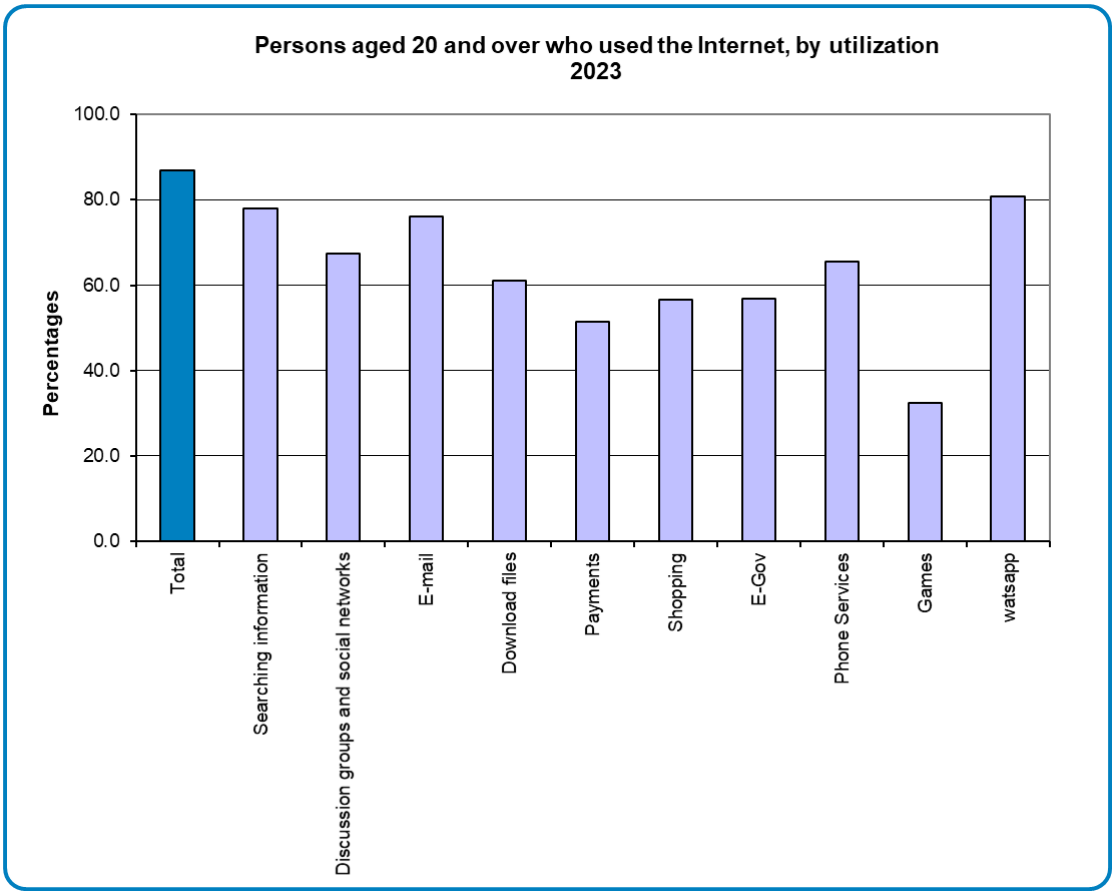
(1) ICBS data.

17.8.1 Proportion of individuals using the Internet



*There is a break in the series because in 2007 the social survey did not include a question about Internet use.





17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics

Currently there are 131 available indicators in Israel. 104 indicators are based on ICBS data and 27 indicators are based on data and information from other government ministries or other agencies. 77 indicators have been reported through the coordination role of ICBS to different international custodian agencies. Out of all the available indicators, 124 indicators are included in the statistical annex of this report. A few available indicators were not included in the statistical annex. These indicators require further development so that they can be computed and published. Some further development is also needed in other government ministries that are in charge of available indicators outside of the ICBS.

The following table summarizes the SDG indicators Included in the statistical annex:

Target	Available		Total indicators
	ICBS data	Other national data	
Goal 1. End poverty in all its forms everywhere	4		4
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture	1	3	4
Goal 3. Ensure healthy lives and promote well-being for all at all ages	20	1	21
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	9	1	10
Goal 5. Achieve gender equality and empower all women and girls	6	3	9
Goal 6. Ensure availability and sustainable management of water and sanitation for all	5	2	7
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	3		3
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	9		9
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	8		8
Goal 10. Reduce inequality within and among countries	3		3
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	6	2	8
Goal 12. Ensure sustainable consumption and production patterns	4	4	8
Goal 13. Take urgent action to combat climate change and its impacts	1	3	4
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	1		1
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	2	1	3
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	10	2	12
Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	10		10
Total	102	22	124

As stated, all indicators included in the statistical annex are based on ICBS data and calculations except for indicators reported by the following government agencies:

Relevant bodies providing data	Indicators
National Insurance Institute of Israel	2.1.2
Ministry of Health	2.2.1, 2.2.2
Ministry of Education and Ministry of Environmental Protection	4.7.1/12.8.1/13.3.1
Israeli Parliament – The Knesset	5.5.1
Ministry of Environmental Protection	3.9.1, 12.1.1, 12.4.1, 12.6.1, 13.1.3, 13.2.1
Water Authority	6.4.1, 6.4.2
Ministry of Construction and Housing	11.3.2, 11.a.1
Keren Kayemeth LeIsrael-Jewish National Fund	15.2.1
Ministry of Justice	5.1.1, 5.a.2, 16.2.2, 16.10.2

17.18.2 Number of countries that have national statistical legislation that complies with the Fundamental Principles of Official Statistics

The Statistical Ordinance in Israel is compliant with the UN Fundamental Principles of Official Statistics.

17.18.3 Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding

There is a National Statistical Plan for the ICBS under implementation which is fully funded by the government and other sources (Bank of Israel, National Insurance Institute, local authorities, universities, National Transport Infrastructure Company, etc.).

17.19.2 Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 percent birth registration and 80 percent death registration

The ICBS has conducted seven censuses since its establishment: in 1948, 1961, 1972, 1983, 1995, 2008 and 2022.
The 2022 Population Census, the seventh since the establishment of the State of Israel, took place between April 3 and December 31, 2022.
The next population census is planned as an **administrative census**. It will be based on administrative data and information, along with innovative tools and models for data analysis.