

PATHS TO SUSTAINABILITY II

Interim Assessment of the Israeli Government's Implementation of a National Strategy for Sustainable Development

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An Interim Assessment of the Israeli Government's Implementation of a National Strategy for Sustainable Development

Report Editors

Libby Baikin, *The Heschel Center for Environmental Learning and Leadership*

Gidon Bromberg, *Friends of the Earth Middle East, Tel-Aviv Office*

Authors of Report Chapters

Cover Photo and Quote: **Shai Zakai**, *The Israeli Forum for Ecological Art*

-Introduction and Recommendations – **Orli Ronen**, *The Heschel Center for Environmental Learning and Leadership*

- Environmental Information Law – **Liora Aharon**, *Citizens for the Environment in the Galilee*

- Water Policy – **Shimon Tsuk**, Hydrologist, *Israel Union for Environmental Defense*, **Ehud Leshem**, Water, Sewage and Environment Engineer

Editorial Committee

Dr. Lia Ettinger, *The Heschel Center for Environmental Learning and Leadership*

Tamar Keinan, *Friends of the Earth Middle East, Tel-Aviv Office*

Einat Meged, *The Heschel Center for Environmental Learning and Leadership*

Translation

Sagit Porat

PATHS TO SUSTAINABILITY

A Coalition of Environmental and Social Organizations in Israel

The Arab Center for Alternative Planning is a professional independent organization, operating as a non-profit institute since the end of the year 2000. The Center works to represent the genuine interests of the Arab Palestinian minority in Israel, on issues of planning, land, growth and development. The Center advises, within its professional realm, to the Committee of Arab Local Authorities, the Higher Arab Monitoring Committee and to Arab political and community leadership.

The Association for the Preservation of Historical Sites and Landscape in Modi'in was established in 1991 by residents of Macaabim and the region, concerned by the conduct and procedures of constructing the new city of Modi'in. As a result of activities undertaken by the association, sites of landscape and heritage value, previously intended for construction, were turned into recreational and archeological parks. Recognition and public support were created for preservation and development of these sites for the benefit of the public. The association has recently expanded its activities to include additional concerns, including the promotion of the region as a national and international heritage site and the preservation of the entirety of the region.

Bimkom – Planners for Planning Rights have set their target in strengthening the relationship between human rights and the Israeli planning system. Bimkom's activity stems from the understanding that spatial planning affects the community and society, as well as basic human rights. The correlation between planning and human and civil rights is not always an obvious one: planning is conceived to be an act of government, dictated from above to define spatial realities upon the individual and the community. Precisely for this reason, it is important to emphasize that the citizens and residents of the State have rights concerning planning procedures, and that they might be harmed by spatial planning that makes no consideration of their needs.

Citizens For the Environment in the Galilee (CFE) was founded in 1990 by a group of Jewish and Arab citizens, determined to act together and increase public awareness to environmental issues and their overall affect on our lives. CFE works within the different communities of the Galilee, in cooperation, and remain constantly aware of on-site problems that are usually unobserved by the public eye. The organization's activities aim to improve the environmental condition through all circles of influence: local, regional and national. CFE has no office, in attempt to save costs and allow for activity on-site wherever necessary.

The Coalition for Public Participation in Planning was initiated in 1999 by SHATIL (see below). The goal of the coalition is to involve citizens in the planning process. It is set up of 23 social and environmental organizations and aims to raise public awareness and advocate legislative change with regard to public participation in the planning and decision-making processes.

The Forum for Public Transportation has been advocating a reform of priorities on issues of transportation for over seven years. By means of extensive public activity, the Forum calls to divert resources from private-vehicle based schemes to public transportation integrated systems, as well as redefining land use in ways that would reduce dependency on private vehicles. The Forum asserts that even in the free economy era, there is still an obligation on the State to provide suitable accessibility and mobility conditions, while reducing negative impacts. The Forum operates through a variety of public, professional and legal means.

Friends of the Earth Middle East (FoEME) is a regional, Israeli-Jordanian-Palestinian environmental organization, focusing on the protection of common ecological systems and the promotion of regional environmental concerns. Founded in 1994, FoEME advocates sustainable development issues around shared ecosystems, such as the Dead Sea and the Gulf of Aqaba. It lobbies decision makers on regional policy issues dealing with water, trade and trans-boundary investment projects.

Green Action is a non-profit NGO established in 1994. Its main objective is the promotion of social ecological change through direct non-violent action, community work and the empowerment of youth and young adults. Green Action acts to raise public awareness to various contemporary issues associated with social environmental problems, by two main avenues – education on the one hand, and protesting various hazards and dangers on the other. The organization coordinates seminars and lectures to the public and works extensively with teenagers.

Green Course is an independent, voluntary, non-partisan student organization, campaigning environmental issues in Israel. The organization has been active for the past eight years and operates on 18 campuses countrywide. Green Course has over 3000 volunteers. The organization operates in three levels: on campus, locally and nationally. Green Course acts by practices typical to a public campaign, including information activities, education, political lobbying, legal means, demonstrations and various other activities.

The Green Network in Israel supports processes of change in schools that prioritize environmental educational agendas throughout the country. The Network, founded by the Karev Foundation, operates within the framework of the Karev Involvement Program and in collaboration with the Heschel Center. The Green Network is a platform for diverse conferences, training workshops and it accompanies schools in enhancing civil involvement by children and communities, and developing teacher leadership for environmental pursuits in education.

The Healthy Cities Network, operating in Israel since 1990, presently counts 37 local authorities, NGOs and academic institutions. The Network advocates the implementation of “health to all” and Agenda 21 principles and the strategies to promote health in the local level. The Network is a dependent unit to the Union of Local Authorities in Israel, and is a member of the European Network of national networks, directed by the World Health Organization.

The Heschel Center for Environmental Learning and Leadership was founded in 1998, its goals include creating a place in which environmental vision could be developed and expanded, training future leadership, designing practical tools and instigating new opportunities. The Heschel Center generates an encounter between the academy and fieldwork, which leads to the expansion of the conceptual and political horizons of the regenerating environmental movement.

The Israel Union for Environmental Defense (IUED) (*Adam Teva v'Din*) – the Union has a special legal status enabling it to represent the public in legal, planning, scientific and communication procedures that contribute to the improvement of air quality, prevention of water, river and sea pollution, preservation of coastal and open public space, waste management and recycling. IUED additionally provides free-of-charge legal consultation to the public in need of assistance due to additional environmental hazards.

Israel-Palestine Center for Research and Information (IPCRI) is dedicated to the promotion of Israeli-Palestinian cooperation. It is managed jointly by Israelis and Palestinians and is based in Jerusalem. In the last ten years the Center has been involved in environmental issues such as water supply and distribution and the affect of environmental pollution on public health. Palestinian-Israeli cooperation promotes the use of mediation as a means of resolving environmental conflicts in Israel and the Palestinian Authority areas.

The Israeli Forum for Ecological Art works to increase public awareness of environmental issues through art. Its activities include projects of art reclamation and preservation of landscape sites and hazards, promotion of artwork that investigate environmental problems and shed light on the relationship between humans and their environment, as well as artwork embodying interdisciplinary approaches to ecological and environmental issues.

Life and Environment, the umbrella organization of Environmental NGOs was established in 1975 to serve as a coordinating framework to the environmental movement in Israel. Presently Life and Environment membership comprise over 75 organizations engaged in ecological, environmental and social issues. L&E provides professional support and services to its member organizations, assists in campaigning joint initiatives and represents, through its members, the environmental concern in the national and international arena.

LINK to the Environment motivates Arab and Jewish residents of the Galilee to take action for environmental causes. Since its founding in 1995, the organization encourages cooperation between different groups in society to find environmental solutions. LINK's target populations include businesses, authorities and residents.

SHATIL provides support and consultation services to organizations for social change. It was established by the New Israel Fund in 1982. SHATIL offers its professional services to non-profit organization that promote democracy, tolerance, equality and social justice in Israel. SHATIL's Environmental Justice Project aims to nurture, assist and consult grassroots groups and newly active organizations operate. Its agenda includes action against local environmental hazards, increasing public awareness to environmental rights, expanding civil power to have impact on the environment, assisting to develop effective tools for public environmental campaigns and promoting cooperation between local groups to achieve common goals.

The Society for the Protection of Nature in Israel (SPNI) has the highest membership if Israel's environmental organizations. Established over 50 years ago the SPNI endeavors to ensure the protection of the environment, nature, landscapes and the historical-cultural heritage of Israel. To achieve these goals, the SPNI holds varied activities: information and appreciation of the land and its environment, public and professional advocacy by means of endorsing legislation, planning and campaigning sustainable development issues before the authorities, and education and information activities in order to create environmental awareness, influence public opinion and that of decision-makers on various environmental issues.

The Sustainable Jerusalem Coalition was established in 1998, and presently numbers 52 member organizations, sharing the common goal of realizing the Sustainable Jerusalem Charter. The coalition is assisted by the Future of Jerusalem Forum – a team of planners, architects and environmentalists. It aspires to create a future planning vision for the Jerusalem metropolis, based on principles of sustainable development.

Transport Today and Tomorrow (TTT) – the Israeli organization for sustainable transport was established in 1998. Its members include planning and transportation academics and professionals. TTT advocates sustainable development both in the national and local levels through a number of projects, including a sustainable transportation competition for local authorities, coordinating a forum of directors of the public transport companies and ETP project – reducing the use of private vehicles for commuting.

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Recommendations of the Coalition

In May 2003 the Israeli Government adopted the conclusions of the Johannesburg Summit and Agenda 21, and decided to develop a national strategy for sustainable development (NSSD) in Israel. The *Paths to Sustainability* coalition of environmental and social organizations, who had lobbied the Israeli government for some 18 months prior to, and during the Johannesburg Summit, decided to continue to accompany the government NSSD process to ensure that it includes meaningful participation of the public and that the strategy to be produced impact decision-making on the ground.

On the occasion of the UN Commission on Sustainable Development (CSD) meeting in New York, the coalition is presenting its interim assessment of the Israeli governmental NSSD process, including recommendations we believe are required to promote sustainable development specific to the water economy in Israel.

Recommendation to Promote Sustainable Development in the Water Economy

1. Implementing the 'Inbar Standard' for wastewater treatment as a minimum standard
2. Authorizing the use of graywater

Recommendations to Promote a Sustainable Development Process in General:

1. Creating a Ministerial Level Committee for sustainable development
2. Setting up ministerial teams for sustainable development headed by the Director General of each ministry
3. The Prime Minister's Office will join the Ministry of the Environment in coordinating the inter-ministerial committee of directors.
4. Constructing a training and seminar program, by way of the Civil Service Commission, to civil servants who hold positions with bearings on sustainability
5. Creating budgetary items in the State Budget for 2006 to finance the ministerial strategies for sustainable development
6. Governmental endorsement of the Environmental Information Bill
7. Establishing a steering committee for sustainable development in each ministry, with the participation of representatives of the public and other stakeholders.
8. Presenting the sustainable development strategies to the public and enabling expression of opinions prior to the final submission of strategies to the government

INTRODUCTION

The Johannesburg Summit and the National Strategy for Sustainable Development in Israel

Orli Ronen, Deputy Director,
The Heschel Center for Environmental Learning and Leadership

In September 2002 the second Earth Summit took place in Johannesburg, South Africa, with the aim to examine the progress the world had made in implementing the principles of sustainable development and Agenda 21. Israel as one of 178 countries to have adopted the Rio Declaration committed itself to adopt Agenda 21 principles. This commitment included an obligation for Israel to present, ten years on, a progress report on its implementation of a sustainable development agenda in Israel. The Israeli Government report was presented at Johannesburg by the Israeli delegation, lead by three ministers: the Minister of Foreign Affairs, the Minister of the Environment and the Minister for Regional Cooperation.

Prior to the summit, the environmental and social organizations in Israel coordinated the preparation of a 'Shadow Report' to that published by the Israeli Government, in order to examine and analyze from an independent position the progress Israel had made in the past decade towards promoting sustainable development. The NGO coalition also sent a large delegation to Johannesburg and presented the Shadow Report with the demand that Israel develop a national strategy in line with the principles of Agenda 21 and assimilate them into governmental policies. Following the summit, a government resolution was passed in May 2003 to prepare a national sustainable development strategy for Israel. The government resolution recognized the important role played by civil society and mandated public participation in the NSSD process.

This interim report presents the evaluation of the NGOs of progress made in the governmental process to date. This report has a special focus on the two main issues chosen by the CSD to be reported on in 2005 – water and sanitation issues. Additionally, the report presents a chapter referring to the general status of public participation in the governmental process.

Each chapter was written by representatives of different organizations, and reflects the position of their organization alone.

The Structure of the Governmental NSSD Process

The Government resolution on sustainable development was adopted in May 2003. In August 2003 the Ministry of the Environment convened the first meeting of the General Directors' inter-ministerial committee for sustainable development. From the outset two representatives of the NGO coalition were invited to participate in the meetings of the committee, together with representatives of industry and academia.

The Ministry of the Environment developed a scheme based on 15-principles as the basis for the ministerial strategies for sustainable development. Each ministry appointed a focal point responsible to attend the inter-ministerial committee and to develop a strategy for sustainable development for their specific ministry. The Ministry of the Environment is funding external consultants for some of the ministries: Transport, Interior, Finance and the Israel Land Administration, to assist them with the formation of their own ministerial strategy.

In August 2004 the Minister of the Environment, the late Prof. Yehudit Naot, submitted an interim report to the government, summarizing progress made by the ministries in 2003/4. Notably the report included a chapter presenting the views of the NGO coalition.^[1] Prior to the CSD in New York, the Ministry of the Environment has prepared an interim report in English of the progress made in the NSSD process in general and by the Ministry of the Environment in particular.

The Framework of Action of the *Paths to Sustainability* Coalition

Over the last decade there has been great momentum in Israel in the organization of NGOs to shape a dynamic and vibrant civil society and this is an encouraging indication of the path Israeli society is making towards sustainability. The *Paths to Sustainability* coalition is a product of this momentum, and as such, it presents a unique cooperation between environmental and social organizations in Israel.

The coalition has identified three main goals:

1. Developing an ongoing dialogue with the government;
2. Promoting public debate on the strategies being formulated;
3. Challenge government agency agendas by proposing creative ideas;

In order to promote these goals ten NGO working groups were established, referring to lateral issues and their institutional contexts. The working groups are in the field of: water; planning; transportation; energy; education, culture and arts; international treaties; public health; minorities; agriculture; and military and the environment. An NGO coordinator on behalf of one of the member organizations heads each group. The working groups formulate analyses and make recommendations to their relevant ministerial strategies and seek to generate public debate with the participation of government ministries and agencies, academia and stakeholders from different sectors.

The coalition operates on three tiers:

1. Dialogue with government ministries and agencies – participating in the inter-ministerial director generals' committee, meeting with professionals in the ministries, building partnerships in the holding of seminars and discussions, consulting and exchanging ideas and opinions.

2. Promotion of public debate and inclusion of stakeholders in the process – organizing public debates, roundtable sessions, workshops and study days together with academic institutions, publishing updated information on the internet, publishing a special supplement in the national press on sustainable development and the government's NSSD process.
3. Evaluation and supervision – cooperating with the Knesset Committee of Interior and Environmental Affairs (Israeli Parliament) to promote the implementation of the government NSSD resolution, publishing 'Alert Papers' on vulnerable aspects of the process, presenting shadow reports in Israel and abroad.

Towards the end of 2005 the coalition will publish a report on the budgetary implications, expected by the NGO Coalition, if the ministerial strategies are to be implemented.

Assessing the Governmental Process

The process of constructing the strategy for sustainable development in Israel was inspired by the Canadian Governmental Model, in which each government ministry develops its strategy independently, with no actual necessity for monitoring or directing the contents and essence of the strategies being developed. In practice however the Ministry of the Environment is setting the conceptual outline for each ministry and is developing apparatus to assist the ministries advance their strategies. An evident problem arising from the existing process stems from the fact that the central body promoting it, the Ministry of the Environment, is one of the smallest, poorly budgeted ministries and one considered of lesser importance in the governmental hierarchy. In practice most of the ministries do not consider the strategy to be a practical policy, and except for developing general principles, do not develop policies for implementation. No less important, ministry focal points do not actively prevent the implementation of policies contradictory to sustainable development.^[2] The continued advancement of these plans suggests that sustainable development is conceived as another concern that should be balanced with other interests, rather than a comprehensive supra-concept that should be guiding their every policy.

In this context, three main issues are identified to be addressed and amended, in order to ensure that the NSDD process will become a significant factor in the promotion of sustainable development:

1. **Internalizing the Principles of Sustainable Development** – The term 'sustainability' is relatively new and unfamiliar in government ministries. The Ministry of the Environment tries to assist other ministries to understand the concept and implement decisions accordingly. For this purpose, the ministry assigned advisors and held seminars with some of the ministries. And yet, due to severe budgetary limitation, the Ministry of the Environment has not the possibility to offer assistance to all of the other ministries. As a result, disparities are created in the quality of the formulated strategies.

2. **Recommendation:**

Constructing an array of training and instruction sessions to civil servants on issues pertinent to sustainable development, through the Civil Service Commission.

3. **Status of the Strategy** – In most ministries the strategy for sustainable development does not receive supra-strategy status with principles that will translate into actual practice and become the basis for all future policy. In order for the strategic plan to become a basis for a plan of action, it must incorporate the entire scope of activities, responsibilities, and duties. In spite of the above, at this stage the situation does not appear to be that the ministries are developing a strategy referring to the totality

of their activities. For instance, the strategy of the Ministry of Finance does not include the biggest and most influential division of the ministry, the Budget department, claiming that the budgets of the ministries are the responsibilities of each ministry's general accountants. Focal Points – each ministry appointed a focal point to coordinate the NSSD process. However the focal points are usually mid-level employees who lack the standing, backing and authority to lead a strategic process. Committee of Director General's – despite the fact that the committee tracking the process is a Director General's committee, the only director general to participate in its meetings regularly, is the Director General of the Ministry of the Environment.

Recommendations:

- a. Establishing a ministerial level committee to promote sustainable development – the Minister of the Environment will convene a committee of ministers for sustainable development, alongside the Director General's committee.
- b. In each ministry a sustainable development team, headed by the Director General, will be set up to promote the process.
- c. The Prime Minister's Office will join the Ministry of the Environment in coordinating the Ministerial and Director General's committee and promoting the process.

4. Implementation Mechanisms – the path from strategy, to action plan must define an implementation mechanism and monitoring procedure. Most of the strategies being formulated do not refer to implementation mechanisms. Four aspects in which the development of implementation mechanisms could provide significant leverage to the process are identified as follows:

- i. Training and Professional Development – Sustainable development is a complex concept that demands the acquisition of knowledge and familiarity with global processes as well as a fundamental transformation in the management of existing resources. It is difficult to expect that professionals in the ministries could lead strategic moves without understanding and internalizing fundamental concepts. And yet, within the framework of the government resolution and the formulating strategies, no specific resources have been allocated for training, except for a limited budget within the Ministry of the Environment. Thus far, the Ministry of Environment held a number of seminars, a few hours long each, to its senior staff as well as senior staffers of the Ministries of Transport, Commerce, Foreign Affairs, and Construction and Housing. The seminars were significant, but only included a limited number of employees. Recently, an attempt has been made to develop a training program on sustainable development in the Ministry of Education, but so far it is yet to be executed.
- ii. Budgeting – Sustainable development calls first and foremost for a change in priorities, but such a transformation, mainly changes relating to planning and infrastructure, will require budgetary expenditures. In 2005, the development of the strategy was at too early a stage to start its materialization in the state budget. However, despite the fact that the Ministry of Finance is presently starting to plan the 2006 budget, it seems there is no budgetary reference to the NSSD process in the budgets of the different ministries. The Ministry of Finance, which holds independent policies for sustainable development (on issues of taxation and pension insurance), refrains from including the Budget Division, responsible for shaping the budgets of the various ministries and agencies, in the development of the NSSD strategy, claiming that shaping the budgetary priorities of the ministries is within the role of each ministry. In fact, in the absence of participation of the staff of the Budget Division of the Ministry of Finance in the development of the strategy, and in the absence of methodical training on sustainable development issues for these staffers, it could be expected that any formulated strategies promoting sustainable

development will not be accepted by the Budget Division at the Ministry of Finance.

- iii. Public Participation – Agenda 21 considers joint deliberation and planning with the participation of the public to be an essential basis for sustainable development. The government resolution also states explicitly the obligation to present the plan to the public during its preparation. Despite the progress made by some of the ministries in forming the strategies, most ministries do not have a public participation plan, and are lacking the knowledge and the tools, and sometimes the willingness too, to develop such a plan. As a result, government strategies that might have far reaching implications on the public are being developed without enabling different stakeholders to participate and influence the process.
- iv. Legislation Supporting the Developing Strategies – The government resolution on sustainable development might be an act of the executive branch, but in order to generate comprehensive change in the proceedings of the government, legislation promoting sustainability is required. Over the last two years the Knesset's Parliamentary Environmental Lobby has grown strong, and activities promoting such legislation are now being advanced. For example - the Commission for Future Generations, a unique Israeli institution active within the Knesset, is promoting a National Pension to all citizens of the State; a bill proposed by MK Rabbi Malchior and MK Dr. Ness creates an obligation to operate in accordance to sustainable development principles and not in contradiction to them; a law initiated by civil society groups and promoted by MK Bronfman states that a committee for environmental affairs must be established at each local authority and its members are to include civil society representatives, and a new bill called the Environmental Information Bill requires the public disclosure of all environmental information generated by public authorities (further details below).

Recommendations:

- a. Developing a system for training and educating civil servants on issues related to sustainable development through the Civil Service Commission
- b. Creating budgetary items in the 2006 State Budget to finance the implementation of internal ministerial strategies
- c. Endorsing the Environmental Information Bill by the government (detailed below)
- d. Setting up steering committees for sustainable development in the ministries, with the participation of representatives of the public and other stakeholders
- e. Presenting strategies to the public and opening up possibilities to express opinions and have those opinions considered before final presentation to the government.

In summation, it could be stated that the way the ministries intend to develop their strategies and their commitment to the NSSD process as a whole varies greatly from one ministry to another. However, the one thing in common to all is the reservations they have to address sustainable development as a comprehensive strategic framework, such that the issue develops into becoming the pivotal pillar of the ministry's policies and a central instrument in planning and budgetary allocations. As a result, the government ministries are lacking the political will and capability to developing implementation mechanisms for sustainable strategies and substantial public participation.

An Environmental Information Law

Liora Aharon, Director,
Citizens for the Environment in the Galilee

Background

The Environmental Information Bill is an example of a legislative initiative designed to advance public participation in sustainable development. The Environmental Information Bill is an initiative of *Citizens for the Environment in the Galilee*, a non-profit local organization. The bill was drafted by students at the Environmental Justice Clinic at the Faculty of Law at Tel Aviv University. MK Dr. Lea Ness presented the bill before the Israeli Knesset in 2003. The objective of the bill is to require all government agencies to make available to the public through the internet site of the Ministry of the Environment all environmental data and information that government agencies and bodies themselves produce. The need for this bill was due to the inability to receive information collectively regarding a specific concern or geographic area, without relying on significant resources, ample time and most importantly – in depth understanding of the issue at hand. All these are obstructions before an average citizen when requesting information from government authorities. To a large extent the bill was drafted in response to the difficulties in obtaining information under the Israeli Freedom of Information Law.

Environmental information is often the basis for decision making and planning procedures by local and regional authorities. Making that information readily available to the public is extremely important if meaningful public participation is to take place. Informed citizens are active citizens, who could assist authorities to carry out their role of environmental scrutiny and supervision, pollution prevention and the elimination of hazards. It is therefore important that essential information be readily available and accessible to the public. These include: emission levels of pollutants into the environment, water quality, data related to sewerage, radiation levels and more.

Prior to 1998, when the Israeli Freedom of Information Law was passed, most authorities considered that the information they generated as their own possession, rather than public property to which they serve as trustees. The average citizen could usually get the information requested, only after presenting a personal or private interest that they might have had in requiring the information. Court rulings actually supported the delivery of information by the authorities, however, in the absence of specific

guidance by the legislator, the rulings remained inconsistent. Considering freedom of information is an important public value, a wide coalition of organizations was set up to promote the legislation of the Freedom of Information Law in Israel.

The Freedom of Information Law creates a focal point in each ministry, to coordinate requests received in accordance with the law. After some seven years of experience with the legislation, a number of problems have surfaced:

1. The attitude of many government agencies is not one that information is public property and that the authorities hold it in trust. As a result, information requests are too readily denied or even ignored by the authorities. [3]
2. The fee charges can be prohibitive and the process is time consuming, with no system in place for urgent requests.
3. There is often the difficulty in identifying the responsible authority. This necessitates separate requests to each possible authority, paying multiple fees and awaiting different lengths of time for each to respond. For example responsibility for water issues in Israel is under the jurisdiction of nine separate authorities: the Water Commission, the Ministry of Infrastructure, the Ministry of the Environment, the Ministry of Health, the Ministry of the Interior, the Ministry of Finance, Mekorot the national water company and local authorities.
4. The Freedom of Information Law stipulates that the authority is not obligated to process the information according to the needs of the petitioner, but merely to present it as it has been produced. For environmental information, often the unprocessed data as available by the authority is not understood by a citizen with no specific professional training on the issue.
5. Due to all difficulties mentioned above and a lack of publicity as to the existence of the Freedom of Information Law, the number of requests submitted to each governmental authority numbers at less than one hundred requests every year.

A Recommended Solution: The Environmental Information Law

The bill was drafted to address many of the above-mentioned problems as related to environmental information, by placing a duty of publishing environmental information on the authorities. The proposal is different from the Freedom of Information Law, on several parameters. First, it **requires the publication of information to the public**, rather than delivering it in response to an individual request; the information to be published is **information pertaining environmental issues**, rather than all of the information available to the authorities; the information provided by the numerous authorities will be collected by the Ministry of the Environment, to enhance the availability of the information, rather than needing to approach each and every one of the Freedom of Information focal points in each of the authorities. The information is to be published on the Internet. The bill determines that any information pertinent to the environment is to be published, and stipulates:

- Information pertinent to the environment with relevance to public health
- Information on environmental standards
- Data of the release and emissions of pollutants to the environment

- Findings of inspections, sampling, monitoring of polluting substances
- Inventory lists of hazardous substances
- Readings of all types of radiation
- Noise levels and odor pollution
- Environmental surveys and studies
- Environmental impact assessments
- Relevant environmental information resulting from other legislation, such as business permits, water and sewage, hazardous substances, plant protection law, and planning and construction regulations.

Authorities obligated to provide information for publication include government ministries, the Knesset, local authorities, corporations controlled by local authorities, corporations established by law, state owned companies, any other public entity reviewed by the State Comptroller's Office. Information must be submitted for publication within a short time after its production, to give the public the most current information.

MK Dr. Lea Ness advanced the law proposed in 2003, however, due to objections of various ministries and authorities, its preliminary reading by the Knesset was delayed until July 2004. In the process of negotiation before the Knesset vote, it was agreed that the bill would be an additional clause to the existing Freedom of Information Law. The Ministry of the Environment originally opposed the bill on grounds of workload and expense.^[4] However, with the recent appointment of a new Minister of the Environment, MK Shalom Simhon, the ministry has decided to support the spirit of the bill, yet it asserts certain reservations as to the type of information to be published.^[5]

The NGOs are concerned that the reservations will narrow the type of information provided, and not respond satisfactorily to the demands of the environmental movement. The Ministry is taking the position that only the emission values will be published, exclusive of their reference values (not to mention the comprehensive detailed list of the original draft). The implication is that a layperson might not be able to interpret the data presented, making the information provided less relevant.

Recommendation for Action

The Environmental Information Bill came from within the environmental movement in Israel and since it was devised we have been involved in a profound debate regarding the manner of implementing it.^[6] We congratulate the Minister's resolution to support and promote this legislation but will not support the watering down of the legislation. We recommend the establishment of a joint team to cooperate in formulating the regulations to enable the legislation to be passed by the end of 2005. The Ministry of the Environment must promote the law in a way that will make available to the public full, detailed, reliable and coherent information of the state of the environment in Israel, so that transparency and accessibility of environmental information will foster greater public participation in environmental issues in general.

An Assessment of Sustainable Development Policies in Israel's Water Economy

Reversing the Pyramid – Internalizing Sustainable Development Principles in the Management of the Water Economy in Israel

Shimon Tsuk, Hydrologist,
Israel Union for Environmental Defense

Background

The Water Commission prepared its long-term master plan for the development of the Israeli water economy in October 2003. However, this plan is based, on premises that are contrary to sustainable development principles, for they **assume that the constantly growing demand for water cannot be managed**. The conclusion of the master plan is that water availability and the ability to supply it must be increased by investing energy, natural resources, and infrastructure all by artificial means.

The quantity of fresh water available is approximately 1.6 billion cubic meters per annum, whereas water consumption in Israel reaches approximately 2 billion cubic meters every year. The difference is made up due to the reuse of treated wastewater, excessive-pumping of aquifers and existing levels of seawater and saline water desalination. The 2003 master plan of the Water Commission estimates that the average personal annual consumption in Israel will increase to 120 cubic meters by the year 2010 (compared to 106 cubic meters in 2002), as a result of rising standards of living. Coupled with the expected population growth, the result is a 25% increase in freshwater consumption. Water allocation for agriculture is planned for 1150 million cubic meters (MCM) per annum, of which a fixed amount of 530 MCM per annum is identified as freshwater.

The present policy of the Water Commission is based on the premise of providing for demand, by predicting future water demand and increasing water supply to provide for the higher rates of demand. This is called the 'Predict and Provide approach'. An alternative approach would be the 'Predict and Prevent approach', which seeks to reduce demand through conservation and protect existing water resources from pollution through a set of pollution prevention measure. The current water pyramid is therefore demand driven. Preventing the increase in predicted demand dictates reversing the current priority pyramid by the Water Commission. By avoiding managing demand (Predict and Prevent approach), the Water Commission plan allows for unlimited water supply. The increased supply is proposed to be met by investment in seawater desalination and water import from Turkey.

The 2003 master plan presented by the Water Commission estimates a NIS 19 billion (2.3 billion US \$) expenditure, 30 percent dedicated by the building of desalination plants (400 MCM desalinated sea water per annum) and the import of an additional 100 MCM per annum from Turkey, which together will increase water supply by another 30 percent. This figure does not take into account the ongoing operational expenses necessary for the desalination facilities, including the enormous expense spent on energy and the environmental costs of the desalination process, such as air and sea pollution. Smaller amounts were allocated to upgrading wastewater treatment (however, not up to the Inbar Standard – see details below), renewing and improving the supply system, desalinating saline non-sea water, restoration of polluted wells and investing in the reduction of urban water consumption.

As lopsided this plan already was from the outset, it was not ratified in full by the Israeli Government. The only portion that was accepted was the plans for desalination and water import. This has led to even further distortion of the water economy priority pyramid in favor of supply side management, since investments required for water conservation, upgrading sewage treatment facilities, restoration of wells, upgrading water quality and water saving schemes, and improving the efficiency of water usage, have not materialized. Since the building of the desalination plants have been approved and following high rainfall years, voices calling for wise water use are little being heard. Measures for preventing and treating polluted water sources and budgets required for water conservation are now left unclear.

Desalination plants and water import are large budget item projects, which will not be executed by the State, but rather by private entrepreneurs who are awarded tenders issued by the State. The advancement of desalination and import projects while deferring the water conservation elements in the master plan raise concern, that the policy is being advanced to strengthen interests of the business sector and large planning firms, at the expense of the long-term interests of the public. Including the public in the decision-making process is absent throughout.

According to the Israeli Water Law, water belongs to all of the citizens of the State. Water use in Israel is presently not egalitarian. A water economy based heavily on desalination will have further far-reaching social implications. Desalination provides a solution for present over-consumption of the natural water resources in Israel by the higher income groups in the country and by the agricultural sector for export purposes. Hence, water desalination is not meant to supply water as a basic good, but rather maintain over consumption practices by the wealthy. The Predict and Provide policy of the Water Commission therefore compromises environmental justice principles.

The Suggested Solution and its Cost

An analysis of potential water conservation concludes that efficient urban water usage, through the installation of water saving devices, can bring about savings of approximately 15% of the total urban consumption (about 105 MCM per annum). Gray water recycling results in an additional 150 MCM per annum saved (see separate chapter below) and the development of water saving gardens can save 100 MCM per annum, and would generate an additional saving of about 250 MCM every year. The significance of these figures is that had the necessary steps been taken to accomplish the above-mentioned three tasks, even without abdicating the predict and provide concept, it might have been possible to avoid massive expenditure on desalination, enabling financial resources to have been directed elsewhere such as towards education for water conservation.

Reversal of the pyramid and preferring efficient, wise use of water rather than increasing water supply by artificial means is economically worthwhile to the Israeli economy, general public and the environment. Efficient water use and prevention of water pollution at source are far cheaper than seawater desalination. The increase of water availability and supply through desalination has external costs not taken into account, including increased dependence on imported fossil fuels, air pollution, greenhouse gases emission and the resulting environmental damages due to increased use of natural resources and chemicals and the damage to water reservoirs and the coastal environment.

Policy Recommendations

The NGO Coalition recommends that the Israeli government and the Water Commission adopt a genuinely sustainable policy, which reverses the current priority pyramid. The policy must prioritize urban, agricultural and industrial water saving and efficient usage; increase of the natural water inventory by regulating water efficient construction practices; action to prevent pollution at source by investing in research and development; information, education, legislation and enforcement; upgrading wastewater treatment to drinking water quality (see below) and rehabilitation of polluted water sources. **Desalination and water import as a policy should be developed only to resolve a water crisis for drought years.**

We believe that sustainable development necessitates centralizing the management of water policies on the one hand, and a policy that encourages decentralization in the implementation of those policies and developing creative and efficient means, appropriate for the environment and society.^[7] Decentralization in implementation will encourage the public to be more accountable in their behavior with regard to the water they consume and the wastewater they discharge.

Upgrading Regulations on Sewage Water Quality –

The Israeli ‘Inbar Standard’

Background

The anticipated crisis of the Israeli water economy was predicted many years ago. One of the solutions to the crisis was supposed to have been an increase in the reuse of wastewater for the needs of agriculture, nature, gardening, industry and recreation. However, despite the fact that the leaders of the water economy in Israel prioritized the issue of reusing wastewater over 30 years ago, and although Israel reuses the highest percentage of wastewater relative to its population in the world, (approximately 290 MCM per annum), presently some 60% of the treated wastewater is of poor quality. The poor quality of the wastewater heavily restricts its utilization, but where it is used it additionally pollutes land, groundwater, rivers and the sea. In recent years, due to the water crisis and a reduction of 50% of freshwater usage in agriculture, the pressure on the authorities on behalf of the farmers has increased, and has allowed usage of poor quality treated wastewater even in areas

vulnerable to hydrological pollution. It is estimated that by the year 2010, 600 MCM per annum municipal sewage will be produced.

Treated wastewater, as opposed to sewage, has undergone some treatment to improve its quality. Two sets of regulations exist to regulate the issues, and those are being enforced by three different government agencies (the Ministries of Health and the Environment and the Water Commission). The regulations define three levels of sewage treatment determining the quality of treated wastewater. Permitted uses of the water are derived from its defined quality. Treated wastewater of 'primary' standard is forbidden for any type of use due to its poor quality. Treated wastewater of a 'secondary' standard is permitted to be used for crops not consumed by humans, plantations, fish breeding and recreational usage with no body contact. 'Tertiary' treated wastewater is permitted for unlimited agricultural use, active recreation as well as allowing for seepage back into groundwater. However, the treated wastewater is not of high enough quality, as they abide by regulations based on dated standards, established throughout the USA and Western Europe in the 1940s. The reason for this being the inability to monitor many of the contaminating factors in urban and industrial wastewater, such as bacteria, viruses, parasites, phosphorus, salts, detergents, heavy metals, insecticides, volatile organic compounds and other toxic and carcinogenic substances. Most of these substances are not defined by any standard, and the ability to enforce and treat wastewater containing these materials is very limited.

The poor quality of the treated wastewater is derived from economic considerations of the local authorities treating the sewage. The authorities collect a sewage fee from their residents, and have an interest to maximize their profit from it (that is, invest as few resources as possible to treat the actual wastewater, while upholding minimal standards). The agricultural sector also supports minimal wastewater treatment, in order to retain the low cost of treated wastewater. Profits earned by the local authorities come at the expense of significant damage to the environment and humans. Water quality restoration costs are extremely high, and will be cast upon the entire public and future generations.

The treated wastewater quality problem reduces the efficiency of using them. Since it is necessary to keep low quality wastewater from population centers and to refrain from directing them to peripheral fields, a significant fiscal investment is required for piping, pumping equipment and pumping energy as well as large investments in collection means for the wintertime, considering wastewater is produced year round, but agriculture requires it mostly during June to September.

Treated wastewater is used mostly for agricultural irrigation. When not in demand, they are channeled to rivers or directly out to sea. Considering their present quality, their use causes salinization and pollution of the land, pollution of water sources, damage to water ecology systems and the contamination of agricultural produce.

The Suggested Solution and its Cost

Following highly critical reports produced by the State Comptroller at the beginning of 2001 a committee was established headed by Dr. Inbar from the Ministry of the Environment to investigate the treated wastewater issue. The Committee recommended to issue new regulations for treated wastewater quality, which will include many additional chemical parameters and commit the treatment facilities to create only high quality treated wastewater, suitable for unlimited irrigation or channeling to rivers.

The recommendation is called the Inbar standard.

The suggested standard by the Inbar Committee includes 38 biological, chemical and physical parameters that can be classified into three groups:

- a. Organic materials, nutrients and pathogens;
- b. The presence of salts and their characteristics;
- c. Trace elements and heavy metal.

Upgrading the treated wastewater standards will give incentive to reducing pollution of sewage at the source. Those responsible for collecting and treating wastewater (local authorities and corporations) will act more vigorously against sewage discharges to prohibit the emission of brine and other pollutants in high concentration into the sewage, in order to reduce the costs of wastewater treatment.

The estimate of the cost of upgrading the treated wastewater according to the Inbar Committee is approximately US\$ 230 million. The cost of upgrading per one cubic meter of wastewater is about US\$ 0.1 (and about US\$ 0.25 in total). The benefit to the economy will reach US\$ 0.4-0.55 per cubic meter on average. Namely, analyzing the cost-benefit of the upgrade suggests that upgrading to the Inbar Standard is economically worthwhile and practical. The committee submitted its recommendation in May 2002, however thus far the necessary regulations have not been issued due to a dispute over the source of funding for the upgrade.

It is important to point out, that the Inbar recommendations are insufficient to entirely prevent damages to health and the environment, since the standard of treated wastewater still allow for relatively high levels of pollution. The recommendations of the committee do not demand 'post tertiary' treatment, which will bring the treatment of wastewater to drinking water quality, thus entirely preventing environmental and health problems. This way a significant expense would be saved by local authorities, which will carry out the sewage treatment.

Undoubtedly the Inbar Standard offers significant progress to Israel's water policy. And yet, the cost of post tertiary treatment, removing most of the polluters from treated wastewater, reaches US\$ 0.81-1.04 per cubic meter. At the same time, according to research undertaken by the Neeman Institute at the Technion in Haifa, internalizing the external costs of pollution resulting of merely tertiary treatment, reaches over US\$ 1.12 per cubic meter. In fact, the real cost of tertiary treatment (accounting for the cost of actual treatment as well as external costs) is significantly more expensive than the cost of treating wastewater to reach drinking water quality.

Although it has been almost three years since the committee submitted its recommendations, the necessary regulations are yet to be legislated. In January 2005 the Israel Union for Environmental Defense appealed before the Supreme Court to instruct the Ministries of the Environment, Health, Interior and Finance to issue the required regulations.

Policy Recommendations

The government must at once issue regulations that necessitate wastewater treatment, which would enable the use of wastewater for any purpose and without fear of damaging public health and the environment. The government agencies are required to ensure the implementation of the regulations by means of financial assistance to the local authorities, to address the need of upgrading existing wastewater treatment facilities. Additionally, the authorities are required to intensify enforcement activities and punishment against those who do not uphold the regulations. The running costs of the expensive yet more qualitative treatment could be funded by grading the pricing of the sewage treatment tariffs, to be paid by producers of wastewater according to the required level of treatment. This pricing structure will represent the principle that 'polluters pay', which should be guiding the government in its strategy for sustainable development. The purified treated wastewater rates must be equated to freshwater rates for agriculture and industry, in order to assist in creating demand for the use of purified wastewater.

At the same time, the involvement level of the public and other stakeholders in the process should be increased, so that local gatherings, national organizations and the public at large can assist in accelerating the implementation process and ensure the application of sustainable solutions.

Gray Water Standard

Background

Water consumption for the purposes of personal and domestic use is estimated in Israel at 100-150 liters per day per person, which are 230-360 million cubic meters per annum. The estimate for the year 2020 refers to 500 MCM per annum. These water quantities make water consumption by the domestic sector to be the second largest after water consumption for agriculture.

After using water domestically, they are being run into a central sewerage system. According to the centralistic approach currently dominating sewage treatment, wastewater from all sources and of different qualities – domestic, industrial and service sector (clinics and hospitals, restaurants etc.) wastewater – all concentrate in a Wastewater Treatment Facility (WTF). The treated wastewater produced is used for agriculture and industry. Significant funds and considerable amounts of energy are invested in channeling wastewater to the central WTF, for treatment and storage of wastewater. This method has been in use for many years, but is inefficient: the system is wasteful of infrastructure in distant settlements; a significant part of the treated wastewater is useless due to the low degree of purification and because in winter there is scarce need for it in agriculture; mixing wastewater of different qualities and from varying sources causes unnecessary investment into purifying wastewater that have a relatively low degree of pollution.

Domestic wastewater are qualitatively classified into two types:

1. Gray water (murky), including domestic wastewater from showers, washbasins, washing machines, dishwashers and kitchens. This wastewater is the product of 60%-70% of the domestic water consumption.

2. Black water, including lavatory wastes. This wastewater is the product of 30%-40% of the domestic water consumption.

Suggested Solution

The sustainable stance supports the need to separate between the two types of wastewater, because gray water is treatable by local, environmental and relatively cheap means. For example, gray water might be reused after treatment to flush toilets and water private and public gardens.

Recycling and local use of gray water could reduce the quantities of domestic wastewater flowing into the central sewerage by about 50% and bring about savings of approximately 250 MCM per annum by the year 2020. Reusing this much water to wash lavatories and for gardening purposes could eliminate the need to use either freshwater from our depleting natural sources or desalinated seawater, an energy consuming process creating chemicals that damage the marine and coastal environment.

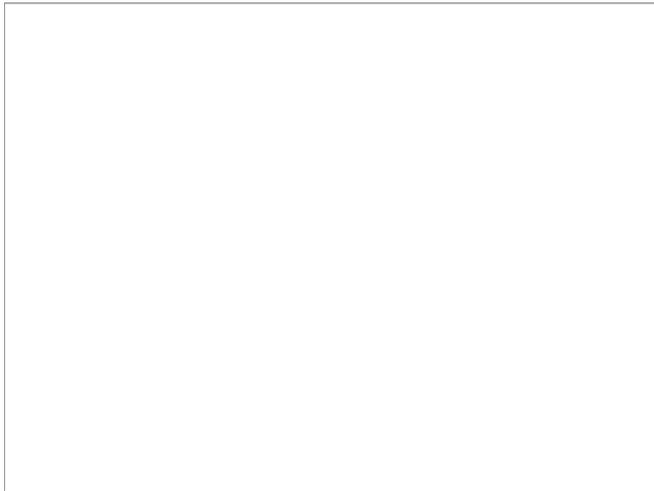
Despite the fact that gray water are conceived by the public to be an ‘uncontaminated’ water source, they might include high concentrations of organic matter, drifting solids, nutrients, detergents, salts and micro-polluters, some of which are disease generators. They could be a sanitation hazard as well as an aesthetic nuisance, therefore the recycling of gray water, even when undertaken in the house or in close proximity (rather than in a distant WTF), must be executed by established and proven technologies,

using approved and reliable treatment and channeling facilities. Installation and maintenance should be accompanied by appropriate guidance and regulation, to avoid the perils of cross-connections between the freshwater system and the reused water system.

Many studies conducted in the past 30 years on gray water recycling, have developed varied technologies to treat gray water. Some of the solutions are natural (using vegetation and bacteria) and others – mechanic. These technologies were found to be suitable to treat gray water intended for reuse to flush lavatories in residential houses and for gardening.[8] The informed users demanded green, economical and environmentally friendly solutions, of the kind entitled ***on-site gray water recycling***. Regulatory authorities around the world have recognized the significance of new, inexpensive and

environmental solutions to many problems, in particular recycling gray water and using them.^[9] These attitudes are compatible to the principles of Agenda 21 for Sustainable Development, drafted at the Earth Summit in Rio de Janeiro in 1992 and ratified by the world nations at the Johannesburg Summit in 2002.

These days, in light of the water shortage in Israel on the one hand, and the growing awareness to the existence of environmentally friendly solutions on the other, many citizens have started to look for inexpensive and economical solutions to recycle water. In recent years institutions and individuals have started using domestic murky water, mostly to water domestic gardens. In the absence of a clear policy and written guidelines on sanitation issues, these initiatives are executed with little information and no guidance concerning health, sanitation or environmental problems and with no supervision over the device used, its installer and its users.



The Water Commission and the Ministry of Environment support the development of devices to recycle gray water and their installation as part of the overall solution to the problem of the water economy and the environment in Israel. The Water Commission is financing a study by the Haifa Technion, examining the “Treatment and local reuse of gray water to wash lavatories in the urban sector”. Ben Gurion University has conducted research on this issue at its Sdeh Boker campus, and Tel Aviv University conducted an extensive feasibility study to utilize gray water produced on campus and reusing them for gardens.

Policy Recommendation

A sustainable solution to the issue is the decentralized treatment of wastewater alongside the central system of WTFs. Local solutions to purify wastewater should be supported to uphold the required standards of quality. Utilizing gray water on site and reusing them, with the participation of the community and in consideration of the ecological balance of the environment, represents a sustainable approach that can integrate into the existing system without compromising it, and without casting additional costs onto the end user. In this way, the sewage fee imposed on the consumer might be reduced, exempting the consumer from paying sewage fees on gray water. At the same time, the consumer would not be required to pay for freshwater for the irrigation of his garden or flushing his toilet.

Naturally, new technologies begin their path through research, moving on to the private entrepreneur, receiving authorization by the regulatory authority and thereafter are distributed to the consumer. However, the Ministry of Health refuses at this time to authorize gray water recycling systems (good as they might be) and is unwilling to formulate regulations and guidelines on this issue. Its refusal derives from fear of poor maintenance and results that could lead to pollution. The fact that the Ministry of Health fails to deal with the issue is the very cause to the realization of its fears, for without clear directions, the field remains unruly. We call upon the Ministry of Health to examine the matter in depth

and develop regulations, in a similar manner to the supply of electricity and gas. One of the ways to confront the issue is through pilot programs in residential neighborhoods, based on updated regulations from the United States and Australia. The conclusions of the programs will enable the formulation of recommendations and regulations to recycle gray water in an environmentally sound, efficient and safe manner.

[1] The full report may be read online on the Ministry of Environment's website (available in Hebrew only): http://www.sviva.gov.il/Environment/Static/Binaries/index_pirsumim/p0117_1.pdf. The chapter written by the NGO coalition features a detailed critique by the coalition regarding the progress in developing the strategy as regards each of the governmental ministries and agencies.

[2] Some of the project currently being upheld in contradiction to sustainability principles include the establishment of a coal operated power plant in Ashkelon and building new roads of doubtful necessity with budgeting that comes to a great extent at the expense of developing mass transportation systems.

[3] The Law allows significant latitude in denying requests. Most pretexts are based on internal or external security issues, but among them can also be found harm to economic interests of a third party. On this matter there is an exception regarding environmental matters. The law states, that with regard to substances emitted, discharged or released to the environment, as well as the measurements of noise, smell and radiation gauging outside of the private domain, there will be no protection of economic interests, although these interests might be compromised as a result of delivery of the information. This exception reflects the appropriate balance between the individual's interests and the right of the public to receive information pertinent directly to public health of the quality of life.

[4] Both in terms of the quantities of information and the tight schedules defined (and in spite of the fact that the concentration of such information at the Ministry of the Environment could prove to be of great advantage to its enforcement endeavors).

[5] The support of the bill by the Minister is part of a general tendency to attain transparency of environmental information through legislation, also including a recently imposed obligation on government owned companies to report any environment related fine or indictment imposed upon them to the stock exchange.

[6] Independent legislation, or as part of the Freedom of Information Law with complementary regulations.

[7] First signs of the centralization tendency in the water management mechanism can be seen in the plan to establish a Water Authority, whose mandate will be broader than the current Water Commission and bite into the mandate of other government ministries and agencies.

[8] In Japan legislation determined the recycling of graywater to flush toilets in high-rise buildings to be obligatory.

[9] The American and Australian authorities have issued manuals and set standards on this matter, including installation procedures and inspection on behalf of the authorities.