

The Environmental Policy Center at JIIS

The Environmental Policy Center at the Jerusalem Institute for Israel Studies (EPC) was established in 2000. It focuses on policy issues in environmental public administration, through strengthening the tools for decision making, improving the information base on environmental issues and identifying issues which should be on the agenda of policy makers. Its target groups are government ministries and bodies, Parliament and civil society.

Themes included in its work program 2010-2011

Sustainability Indicators

Building on previous research on identifying sustainability indicators and a pilot study on their application, EPC in cooperation with the Ministry of Environmental Protection will develop an 'Environmental Outlook to 2030' for Israel, comparing environmental performance in Israel with other countries in the OECD, identifying where Israel is distant from targets, assessing the implications of alternative scenarios for the long term future and showing which instruments for intervention could be most effective and efficient.

Environmental Diplomacy

Negotiations in the global and regional context require a combination of environmental knowledge with diplomatic expertise, to turn environment from a platform for conflict to a common interest for cooperation. Review of experience during past negotiations within the context of the regional conflict, together with a review of environmental peacebuilding around the world, will be a focus of EPC research. The results should enable future negotiators to better represent the environmental interests of Israel in situations of conflict and negotiation and to better represent Israel in the international community.

Environmental Governance

Environmental policy is formulated and implemented by many actors, in and out of government. It is increasingly determined by international institutions, through conventions and through internationally accepted duties, responsibilities and standards. It is also managed by the activities of civil society, through environmental movements and organizations. Decision making structures are capable of reforming themselves from within to take environmental considerations on board, however much effort is often devoted to conflicts between relevant actors. Through an analysis of 5 recent cases of conflicts between development interests and environmental interests, models and elements on the most effective and efficient ways of reforming institutional structures will be developed, using the land use planning authorities as a case example. Such models and elements may

be of assistance to all the actors involved in the planning institutions and may be relevant to other institutional structures.

Environmental Economics

Environment is increasingly becoming an integral part of financial and economic decisionmaking . Environmentalists are increasingly realizing that the most effective way of achieving their goals is through influencing the economic actors influencing trade and markets. It is therefore essential to develop a common language between environmentalists and economists and promote an understanding of how environmental criteria can be integrated into market instruments. One of the possible tools concerns environmental liability, whereby a legal obligation would impose liability for damage or pollution of the environment in a way which exposes an offender to court proceedings and to claims for compensation. If effective, environmental insurance would become an additional tool for promoting environmental performance. Previous studies by EPC have shown that environmental enforcement is not sufficiently effective in Israel and that further measures are needed to promote compliance. Environmental liability may require new legislation.

Environmental Risk Management

All countries face some risks and hazards, though they vary in type and intensity. Israel has a strong capability in security risk management and managed better than many countries concerning financial risk management. However, environmental risk management has not received sufficient attention, except in relation to seismic risks.

A previous study by EPC focused on the management of environmental risks in the Dead Sea area as a result of the lowering of its sea level, the sudden emergence of sink holes and the ongoing retreat of its shoreline. Another study, nearing completion, focused on the management of risk along the unstable cliffs of the Mediterranean shoreline. Both studies involved multiple issues and multiple actors, often in conflict with one another. A further study in the Dead Sea area will review alternatives for a possible raising of sea level, including the implications for Israel of the current proposal for a Peace Conduit from the Red to the Dead Sea as well as alternatives which could offer similar benefits but at a lower level of risk.

Raising Issues on the Agenda of Public Administration

EPC plays a role in promoting public discussion of issues which have not yet received sufficient attention on the public administration agenda. It recently held discussions on government proposals for the reform of the Lands Administration and of the Land Use Planning System.

Recent publications

Policy Paper - The Israeli Eroding Cliff Shores- Definition of the problem, Economics, Social, Legal & Environmental implications and Measures of Coping (2010) [Editors: Amos Bein, Amir Eidelman, Galit Cohen]



The Israeli coast stretches over some 190 km in length embraces about 45 km of a high coastal cliff and is experiencing significant coastal erosion and cliff retreat. The Prime Minister's Office and the Ministry of Environmental Protection assigned The Jerusalem Institute for Israel Studies (JIIS) to prepare of a policy paper that would present alternatives for dealing with the erosion and collapse of Israel's coastal cliff shores. The objective of this project is to formulate national policy guidelines on eroding cliff shores which will be scientifically and technically based, and address policy & mitigation alternatives within their socio-economic, legal, & environmental context.

Considering past records and forecast for sea level rise, the coastal cliff is expected to retreat in coming years at an alarming rate of about 0.5 m/y; higher rates of up to 1 m/y at some points could not be ruled out. As such, a 50 m wide strip extending east of the cliff edge has been mapped and defined as prone to collapse and retreat within the next 50 to 100 years. Possible direct and indirect damage expected exceeds by far integrated mitigation measures which include breakwaters and multiple sand nourishment, stabilization of cliff and prevention of runoff erosion. Once aware of the magnitude of the problem and its implications, the government has the responsibility to take appropriate measures to stabilize the situation by either imposing physical mitigation measures or using its regulatory powers to control current and future development and land use activities along the endangered strip. This does not mean that the government should fund these measures. The government is urged to endorse the above conclusions and initiate the organization, legal and planning processes required to control the situation which carries risks to life and damage to public and private property. The final report of the project is due to be published shortly.

The Israeli government adopted on April 2010 the policy recommendations of the policy paper.

Policy Paper The Dead Sea Basin- Assessment of Current Situation and Prospects for the Future Under Continued Dead Sea Water-Level Decline Scenario (2006) [Editors: Amos Bein, Amir Eidelman, Galit Cohen]



The continuing decline of the Dead Sea water level is causing physical changes along its shores, which have an impact on daily life and on the development of the region. The magnitudes of the changes and their associated threats have fostered uncertainties that impede present activities and arrest previously planned development. Following a government decision the Ministry of Environmental Protection assigned The Jerusalem Institute for Israel Studies (JIIS) and the Geological Survey of Israel to prepare a policy paper that would address the problem and its implications and present alternative options for intervention. This policy paper formulates national policy guidelines for the future of the Dead Sea which is scientifically and technically based, and propose mitigation alternatives within their socio-economic, legal, & environmental context. The document deals with the implications of the default option i.e., the scenario that predicts what is likely to occur in the Dead Sea and its surroundings if no steps are taken to arrest the decline in sea level. The policy paper, which was presented to the government and decision makers, presented a multidisciplinary perspective and a well-grounded forecast of the future of the Sea and its shores, including the wide spread risks of subsidence due to the development of sinkholes. A major conclusion of the study suggests that even after implementation of a remedial program such as the "peace conduit" currently under evaluation by the World Bank, raising of the sea level to any target level will take many years from inception. As such, all the present problems, particularly substrate subsidence and land collapse below the -400 m contour, will gradually dissipate only when the lake level again approaches this level. Therefore, the "default option" and its ensuing realities are valid and relevant to any foreseeable planning horizon (30-40 years, and possibly even more).

The Israeli government adopted the policy recommendations of the policy paper. It led to the adoption of a decision by the National Board for Planning and Building to order the preparation of a national masterplan for the Dead Sea area. The initial stages of the master plan were recently presented to a large public hearing in which government, local government, Parliamentary representatives, professionals and the general public participated as part of the planning process

Enforcement of Environmental Regulations: Increasing the Effectiveness of Environmental Protection Policies (2009), Dr. Orr Karassin

This study proposes a method of judging the effectiveness environmental compliance and enforcement (ECE) efforts. It works through the goals and objectives of environmental enforcement and compliance regimes, as well as the exercise of enforcement tools, to architect a framework of indicators and an index that provides the data required to assess the performance of ECE programs. The study suggests enforcement agencies use indicators to continuously and reflexively evaluate the effectiveness of their enforcement regimes. The analysis and evaluation of properly defined and constructed data is a prerequisite to logical decision making in revising existing laws, modifying enforcement jurisdiction and reforming implementation tools. Indicator implementation and analysis has the capacity to promote reflexive reassessment of goals and encourage steady improvement in the integrity and efficacy of environmental enforcement schemes. It supports efforts to ensure good governance and accountability. The study has both generic and widely applicable components as well as components specific to the Israeli enforcement context. Enforcement efforts taken by Israel's Ministry of Environmental Protection serve as the backdrop for analysis and are used to demonstrate the application and benefits of the suggested Goal Oriented Model (GO Model) Index. The application is made in the field of building and construction waste regulation enforcement in Israel. However, some of the conclusion from the application may have wider relevance, both in Israel and elsewhere.



Eco -Innovation in Industry (2009), Dr. Nir Ben-Aharon

Innovative solutions such as these are defined as "eco-innovation" and are the subject of this research.

Over the past two decades a major change took place in Israel's industry – it significantly reduced its industrial pollution and decreased the gap between Israel and most Western countries in this field. This reduction required the firms to expend major funds on environmental technologies, most of which exacted a heavy economic cost while making no contribution to the production process. However, solutions exist which improve the environmental efficiency of firms and enable them to consume less resources and reduce their environmental pollution, while cutting down on expenses.



As part of the research study, a model which describes the primary factors which influence industrial firms to undertake eco-innovation was constructed. In this model the demand for eco-innovation solutions is based on the willingness or necessity of the firms to reduce their pollution. The supply of innovative environmental solutions

is enabled by the development of technologies In order to study eco-innovation in industry, 249 firms were investigated –those with the highest probability for implementing environmental actions.

It was found that actions taken by the Ministry of Environmental Protection –such as making business licensing conditional on the fulfillment of environmental requirements, issuing hazardous substances permits and providing grants for hazardous waste minimization projects – assisted the development of eco innovation. On the other hand, enforcement activities tended to lower eco-innovation: firms which were subject to environmental enforcement by the Ministry of Environmental Protection – through the dispatch of warnings, holding of hearings or issuance of orders – tended to conduct fewer eco-innovation projects than similar firms that were not subject to enforcement procedures. Firms under enforcement could not allow themselves to be exposed to any further risks after being legally targeted by the ministry, even if eco-innovation could have benefited them economically and strategically. Therefore, they chose to solve their environmental problems in conventional rather than innovative ways.

The research proposes the some recommendations such as: improved coordination between the government ministries involved in eco-innovation, especially the Ministry of Industry, Trade and Labor and the Ministry of Environmental Protection; change in the mix of environmental regulation – concentration of environmental authorities on the planning stages of new firms and production lines, transparency of forecasts of future environmental requirements which the authorities may impose on the firm and requirements that the firms submit their responses to these obligations. This will allow industries to prepare the infrastructure for future eco-innovation at the planning stage of a new firm.

Indicators for Sustainable Development in Israel – phase 2 (2009) [Editors: Amir Eidelman, Galit Cohen, Motti Kaplan]

In the current phase, indicators are presented as a first step in the process of formulating a comprehensive system of indicators for sustainable development in Israel.

The indicators were formulated on the basis of a proposal included in the first phase of this project, based on available data in the Central Bureau of Statistics.



The indicators were classified according to six subjects established for the UNCSD system: economic growth, level of social and environmental equity in the present generation, capacity to cope with environmental issues, protection of the interests of future generations, efficiency of natural resource utilization and quality of life of the present generation.

The indicators which were analyzed: Gross Domestic Product, Ratio of External Debt to GDP, Expenditure on Food out of the Total Income of Households (by Deciles), Motorization Rate-Number of Vehicles for 1,000 Inhabitants, Car Ownership Levels by Income Deciles, Life Expectancy at Birth, Energy Consumption per Capita, Co2 Emissions per Capita, Open Space per District, Salinity of Groundwater in the Coastal Aquifer and Mountain Aquifer.

On these days the indicators are being updated and matched with those currently used by OECD to enable international comparison of Israel with developed countries. This unique information base is being developed in partnership with government, the Ministry of Environmental Protection and the Central Bureau of Statistics. It will serve as a basis for formulating policies, evaluating results and assessing performance in meeting environmental targets.

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