

RURAL DEVELOPMENT

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1. Overview

Changes in Israeli society and the economy necessitate a review of the management and development of the rural landscape. Open space and agricultural land management, and the development of farming settlements, agriculture, entrepreneurships, tourism, services, and traffic – all depend on development policy and the definition of the means to implement it.

The Ministry of Agriculture and Rural Development is in the process of defining a strategic plan and comprehensive framework for agricultural and rural sustainable development, while preserving the rural landscape and adhering to environmental values. The aims of this plan are:

- Strengthening the rural community.
- Diversifying the rural economic basis while stabilizing and developing agriculture as a unique economic sector.
- Protecting open spaces and landscapes, both natural and man-made, and integrating them with the rural landscape.
- Planning and developing farm and countryside in Israel, in its various contexts, as a unique form of rural life with a distinct character.
- Updating the statutory and physical structure of these settlements to keep pace with current organizational and structural trends.

Efforts continue to support sustainable development and help to solve environmental hazards stemming from agriculture, while on the other hand, position agriculture as an environmental friendly solution for such problems as sewage and open space preservation. These actions include both rural development and farm agronomy.

An unplanned benefit accrues to the public as a result of the rural agronomic activity. A byproduct of Israel's farming community is a rural landscape and open space with a very high economic value for public enjoyment. Yet it receives no return on the product, because it is essentially a public good. In this context, government subsidies make sense economically. Moreover, as many European nations have stressed, agricultural lands serve as real estate reserves, preserving options for future generations.

Two different projects are cited in this section as examples of development in rural areas within the context of sustainable development.

The first is the Negev 2015 plan, an ambitious national commitment to “upgrade” the periphery status of the Negev region, which can be defined as both rural and desert. The project is designed to develop the economic infrastructure and improve employment and educational opportunities for the weaker socio-economic groups in this region. This is a complex challenge to sustainable development that involves enormous investments and upgrades in infrastructure, housing and transportation, while preserving the unique values of the rural arid landscape and its desert fragile ecosystem.

The second example is the Hula Valley Restoration, which restored drained wetland that supports massive bird migration across the continents. It is a prime example of sustainable rural development incorporating sustainable agriculture, nature-based ecotourism and a restored wetland/migratory bird-based habitat into a unique mutual interdependent system. A wide variety of public, local and NGO stakeholders collaborated in the vision, undertaking and ongoing maintenance project of the project and its economic and social benefits are dependant upon the ecological systems' integrity and long term ability to flourish.

2. Concrete Actions and Progress

2.1 Policies/Programs for Rural Development

The Ministry of Agriculture and Rural Development is charting directions for development in line with the spirit of change that has occurred in the rural landscape in recent years. The aim of the plan is to remove statutory obstacles for regional rural development while at the same time allow for sustainable development, so that the characteristics, heritage and qualities of the rural settlement may be preserved. This effort will emphasize agriculture's importance and its integration into the open spaces that characterize the rural landscape.

The Ministry of Agriculture and Rural Development gives direct funding to support planning. Plans that receive assistance are master plans and outlines, both regional and topic related, as well as settlement specific plan and detailed designs for carrying out environmental and landscape development. Typical plans include that have already received assistance include plans for open spaces, stream improvement, bike and hike trails, tourism, and a biosphere region.

Maintaining the Character of the Rural Settlement and Its Legacy

- Retaining cooperative agricultural frameworks and councils.
- Sustainable solutions for foreign farm workers.
- Non-agriculture related construction that preserves and develops the rural settlements while maintaining their unique character.
- Development of rural and agro-tourism that is compatible with agricultural activity and rural character.
- Organic demographic growth that is manifested in expansion of already existing settlements while strengthening both veteran and new communities.
- Quality of life in the rural landscape.
- Renewal of the rural settlement – emphasizing the creation of a community that preserves its heritage, reflects its past and the history of its development as the basis for its growth.

Preservation of Open Spaces, Agrarian Culture and Landscape Values

- Construction for agricultural purposes within settlements and in open space.
- Incorporating the principles of sustainable development into decision making processes in ministerial committees such as the program and land committees.
- Agricultural land cultivation – development while maintaining the agricultural foundation and open space.
- Land preservation and drainage to maintain the value of soil for agriculture.
- Support of the agricultural landscape.
- Developing agricultural landscape complexes.

Preservation of the Nature-Agriculture Relationship

- Preventing or minimizing damage caused to farmers by native wildlife (various birds and mammals) via environment friendly means.
- Refraining from importing foreign and exotic organisms (both animal and vegetable) with the potential of becoming an aggressively intruding species.
- Strict prevention of agricultural contamination spillage into protected and valued areas (nature reserves and landscape sites).
- Setting population limits for restriction on species that are intrusive both to natural wildlife and to agriculture (jackals, foxes, wolves, cattle egret, etc.).
- Active involvement in the preservation of biodiversity in Israel.
- Contributing to the preservation of the Israeli nature's genetic resources, especially concerning plants with agronomic potential.

2.2 Development of the Rural Landscape

The Ministry of Agriculture and Rural Development has initiated rural development plans with the following goals:

Goals

- Developing an inclusive and worthy statutory infrastructure for the rural landscape that will ensure its development and renewal alongside continuing agricultural activity.
- Creating conditions for the sustenance of a population and all types of sustainable rural settlement, on a local and regional scale that will secure a reasonable level of public services, a multi-generation society and a diverse and stable economy.
- Stabilizing and developing peripheral regions while giving special aid to settlements in distress that have not yet managed a minimal threshold of socio-economic independence.
- Developing projects, initiatives and ideas to reinforce the rural landscape and raising awareness for the importance of retaining them.
- Government support in promoting a diverse economic rural activity in addition to agriculture, such as tourism and vacationing, agronomic processing, industry and various services.
- Conserving agricultural areas as a main element in open space planning, legislation and funding new and developing technologies, while encouraging the use of appropriate materials and environmentally friendly methods.
- Utilization of alternative assistance tools to develop infrastructure, alternative occupations, research, professional training, environmental protection and open space conservation.
- Increasing the rural landscape's accessibility to population and information centers through improvement of transportation and communication.
- Strengthening settlements in the center of the country and ensuring their continued existence as rural and agricultural entities within the context of the broader urbanized region.

2.3 Relocating Livestock Breeding to Improve the Rural Environment

- **Poultry farm reform** – the objective is to relocate chicken coops that are in proximity to residences in rural agricultural cooperatives, thereby removing this environmental nuisance from residential areas. Based on economic incentives to this sector from government allocated grants, the chicken coops are to be moved to designated areas. These will adhere to environmental protection codes and improve sanitation and veterinary conditions. The removal of chicken coops from communities in the North of the country is expected to have a positive influence on the rural settlements. Apart from the hygienic necessity (due to new epidemiologic risks), it will fundamentally improve the rural quality of life, by enabling new development opportunities for rural tourism and employment. The relocated chicken coops will take into account the landscape and environmental ramifications, while the old sites will require the removal of structures and debris (and asbestos).
- **Relocation of traditional animal breeding from villages.** The Ministry is planning economic incentives to encourage relocation of animal breeding facilities away from residential areas in Arab villages. The intention is to align traditional agricultural with the demands of environmental protection and sustainable development, while the goals are to improve the quality of life in the village, and the quality of the livestock breeding to internationally acceptable levels.
- **Dairy-farming reform:** Now entering its final stages, the program has resulted in a reduction in the number of inefficient dairy cowsheds and improved compliance with environmental standards.

2.4 Sustainable Development of Rural Tourism

Tourism and Land Resource Conservation

Two main forms of coping with the conservation of rural land resources in terms of development and conservation of tourist and recreation areas may be proposed. The first calls for conservation and protection in a direction more kindred in spirit to that of nature and landscape reserves. According to this approach, critical open space areas will be identified in terms of their importance to the surrounding population and their availability for conservation. These areas will be designated for recreation, welfare and leisure and will be granted the necessary status within the framework of development policy and planning regulations.

The second strategy will add active content into tourism development plans in important and sensitive areas. These planning and development frameworks will be land intensive and will cover large areas, and will integrate the need for preservation with the population's need for recreation. These may include open recreation areas, forests and woods, natural and artificial water bodies and any extensive use that functions and meets social needs and leaves the values of open space intact. Tourism may therefore constitute a principal tool and means for conserving rural and environmental resources.

Regulating the Nature and Capacity of Rural Tourism

Rural tourism has been the tourism success story of the last decade, but its growing popularity threatens its very underpinnings— quiet and serenity amidst natural surroundings. Limits must be imposed on the scope of this type of tourism to ensure that its special ambiance is maintained. This may, for example, call for determining a ratio between tourist accommodation and the size of the local population to maintain an atmosphere of “hospitality” where the guests assimilate with the hosts and do not outnumber them.

Weight should be given to the location of new tourist areas and projects – it is preferable that they should be established near existing built-up areas and not necessarily in open space areas. This is particularly pertinent in view of the demand to preserve the attraction of these areas: open beaches, forests, nature reserves, and wide open spaces.

Ministry Support for Rural Tourism

The development of public infrastructure in the rural sector, also known as "tourism villages" or "tourism complexes" is a project that has been active for several years now, and its purpose is to establish a stable economy in settlements and regions that engage in tourism. The investments for each settlement total about \$ ½ million with about 40% funded by the Ministry of Agriculture and Rural Development. Additionally, enterprises involving visitor centers and agricultural tourism receive assistance, as well to tourist greenhouses that help start-up agro-tourism entrepreneurs. The Ministry also offer grants to a landscape development aid program that features integration of rural landscape tourism development and preservation of the agricultural environment and rural heritage and values.

In accordance with National Master Plan 35, plans that apply to open agricultural spaces are prepared at the Ministry of Agriculture and Rural Development's rural planning department, taking into consideration the preservation of open spaces and reducing impact on the landscape, while at the same time allowing for agricultural development.

Israel Bike Trail

The Israeli bike trail is a national bike path that will run the entire length of the country with lateral connections to local areas. It will provide a contiguous corridor through open spaces and agricultural areas, cities and rural settlements, and heritage, historical and archeological sites.

The collaborative effort includes the Nature and Parks Authority, the Jewish National Fund (JNF) and other stakeholders, including the Ministries of Environmental Protection and Agriculture and Rural Development, local authorities, local associations, biking clubs and others to promote a plan for a contiguous Israel Bike Trail that will run the length of the country from North to South. The Ministry of Agriculture and Rural Development is providing professional assistance in locating the optimal path for the trail to follow and incorporating it into the heart of agricultural area, while maintaining a co-existence between agricultural activity and the cyclists' needs.

Legislation is currently underway to promote local councils and municipalities to develop bike paths within their jurisdictions, which can be integrated with national network. Besides the recreational and health benefits, cycling is also important for the development of rural areas, acting as a doorway to the rural expanse, opening up agro-tourism options, and exposing the public to open spaces, riverbeds and the special qualities of the natural and rural landscapes.

2.5 Advancing Sustainable Development in the Local Rural Communities

The experience accumulated in Israel over the past few years has underlined the importance of incorporating sustainability approaches in the day-to-day management of local authorities. Israel's 54 regional councils, local authorities that govern multiple rural communities located in the same relative geographic vicinity, span 80% of its territory. Each community, whose population usually does not exceed 2000, is managed by a local committee which sends representatives to the administering regional council.

An important step in the right direction was the February 2005 amendment to the Municipalities Ordinance which obligates the appointment of an environmental committee in each local authority, responsible for activities in areas that relate to the environment and sustainable development.

To facilitate the move of local authorities in Israel toward sustainability, the Ministry of Environmental Protection has formulated 10 Principles for a Sustainable Local Authority. The ten principles, accompanied by concrete suggestions for action, are meant to expedite the transition from vision to action. These are the first steps in the transformation of a local authority into a sustainable local authority. Of course, such a transformation will only be successful if based on a consensus-building process in which all local stakeholders come together to formulate a joint vision and action plan.

Implementation of the following ten principles laid the foundation for the comprehensive process toward local sustainability.

1. Rational management of natural resources (water, sewage, land, energy)
2. Public participation in decision making and municipal action
3. Protection and enhancement of open spaces
4. Development of transport systems which are environmental and accessible to all
5. Minimization of the volume of municipal waste
6. Promotion of the local economy
7. Adoption of a policy of environmental and social justice
8. Advancement of environmental/social education and education for health
9. Environmental management of the municipality and its institutions
10. Advancement of partnerships to advance the environment

3. Strategic Planning for the Periphery

3.1 Negev 2015 – National Strategic Plan for the Development of the Negev

Description

In October 2005, Israel's government adopted the Negev 2015 project in response to the perceived neglect of the Negev region. As most of Israel's population lives in the coastal region of the country, the area from greater Beersheva to the south is considered the "periphery". The plan covers the central Negev region, characterized by open space, arid and desert climates, and of rural and wilderness character. Due to their unique attributes and special needs the Arava and Dead Sea areas were not included in this plan.

The Negev has many assets and for development and growth in different sectors. It is in the national interest as well as to the Negev residents to disperse the dense population and economic concentration that characterize the narrow greater Tel Aviv corridor and coastal plain. Investment in the Negev is to include transportation infrastructure, support for new communities and transfer of key industries and defense establishments to the area. The plan aims to make use of these assets and strengths with active participation from the residents and leaders of the Negev in implementing the program.

The development plans propose to better utilize Israel's land assets – the Negev covers 60% of the country's land but is home to only 8% of the population – and to narrow regional social and economic gaps. National resources are required to jump-start the physical and socio-economic infrastructure that will enable opportunities for private sector involvement and local leadership, and to improve the quality of life which will attract people and businesses to the area. The goal of the plan within a decade is for a 70% growth of the population (reaching 900,000 residents) and to reduce the region's gaps in unemployment, wages and higher education.

The plans for the development of the Negev and its high priority in national strategic planning and resource allocation are unprecedented by local standards. It will require government investment of some \$4 billion dollars with private investment expected to reach over 4 times this amount. There is little doubt that in terms of creating "alternative livelihoods" for local residents, this is the most significant initiative of its type for Israel's rural drylands in decades.

In order to achieve these objectives, the plan has mapped out activity in five main areas:

- **Economic Development** - removing region-wide barriers to economic development, attract leading industries (technology, electronics, chemicals, alternative energy, tourism) to drive new job creation.
- **Infrastructure and environment** – completion of investment in transportation infrastructure in order to improve quality of life and to facilitate the development of the business sector and the attraction of new populations; development will balance development of human activities with nature and the environment and emphasize implementing a policy of sustainability.
- **Housing** – create real-estate and housing options offering a unique high-quality residential experience, along with financial incentives to attract families; it includes investment in the infrastructure of Bedouin settlements to improve living conditions and to attract the population to permanent towns.
- **Education** - narrowing performance gaps across the Negev, investing in advanced programs for top students and launching unique initiatives that improve education and attract new families.
- **Community and Leadership** - nurturing the community and the young population, promoting regional cooperation and developing professional regional leadership.

Socio-economic Levels

Most of the Negev's population lives in the arid, northern Negev region, surrounding and to the north of Beersheva. The area is considered economically depressed with average wages falling 11% below the national average (\$1,223 versus \$1,370) and an unemployment rate that is 14-25% higher than the national average.

The region also includes some 150,000 Bedouin Arabs, many of whom are among Israel's poorest citizens, with numerous inhabitants living in unrecognized settlements. The birthrate in the Bedouin sector is amongst the highest of any ethnic group in the country and 54% of its population is under 14 years of age. Only 2.2 percent of Bedouins between the ages of 20 and 29 attend university – as opposed to a national average of 15%. The program earmarks a significant investment of resources for the Bedouin sector in the Negev, in order to narrow the gaps in three main areas: education, employment and infrastructure, and in order to integrate the Bedouin community in the fabric of civilian life in the Negev. The community will benefit from both the general initiatives and the special initiatives for closing gaps, where needed.

The plan establishes the following socio-economic objectives for 2015:

- Salary – increasing the population to 900,000 (from 535,000 in 2003).
- Salary – raising the number of the employed to 300,000 (from 164,000 in 2003).
- Salary – reducing the disparity in average per capita income relative to the national average to 4.7% (from 10.7% in 2001).
- Students – equalizing the proportion of university students among Jewish population in the Negev to the national average and raising the proportion of university students among the Bedouin population.

Sustainable Development

Development of Negev infrastructure will balance development of human activities with nature and the environment and emphasize implementing a policy of sustainability. Accordingly, the program operates according to planning principles, which support the expansion and

strengthening of existing localities as opposed to the establishment of new communities giving preference to linking infrastructure.

The uniqueness of the Negev, its open areas and its concentration of nature and scenery attract people. Additional restoration of degraded natural assets such as the Besor/Beersheva riverscape as well as the Yerucham Lake will benefit both the natural ecosystem as well as tourism and residential opportunities. A strong population will contribute to increasing the awareness of protecting the environment and improving its quality.

The plan's sustainable economic development is to be led by the private sector, focusing on government intervention in removing barriers and creating favorable conditions, including assistance in attracting investment to the Negev, reducing bureaucracy and changing regulations.

In addition to the expansion of existing roadways and railways, the main initiatives for infrastructure development are in sewage, infrastructure for industrial areas, electric, communications and air fields. Due to the fragility of the Negev environment, it is important that all infrastructure work be preceded by an impact analysis of soil and land integrity, as well as rural and desert landscape and environmental values.

4. Hula Valley Restoration Project

The Hula Valley, located in North-eastern Israel, is part of the Great Rift Valley running from Southern Turkey to Mozambique. Natural water sources – the Jordan River, its tributaries and numerous springs – flowing into the valley created a natural wetland system with associated peat soils over the course of millennia. In the 1950's this wetland was almost completely drained to facilitate agricultural and rural development for the young, developing State of Israel. Intensive agriculture on these peat soils was highly productive at first but became problematic over the years, particularly the accelerated decomposition of exposed peat soils. This phenomenon led to nutrient overloading of ground waters flowing southwards to the Sea of Galilee, which intensified water quality problems (eutrophication and algal blooms) in Israel's prime drinking water reservoir.

In the 1990's a massive integrative restoration project was undertaken by the State of Israel and the JNF which aimed to:

- Prevent pollution via the creation of an artificial wetland to reflood the exposed peat soils and prevent further decomposition.
- Construct an intensive network of drainage canals and reservoirs to control subsurface water levels of the peat soils and separate polluted from unpolluted groundwater.
- Restore a section of the original Jordan River course as a riparian corridor.
- Ecological restoration of the newly created wetland complex.
- Encourage ecologically-oriented and sustainable agricultural practices.
- Develop an ecotourism-based economy for the valley's inhabitants.
- Manage the wetlands and adjacent fields as critical support habitats for over 500 million migrating birds flying over the site twice a year between northern Europe and Africa via the Great Rift Valley.

Today, the Hula Valley is an excellent example of sustainable rural development incorporating sustainable agriculture, nature-based ecotourism and a restored wetland/migratory bird-based habitat into a unique mutual interdependent system. Management, planning and research are coordinated through public stakeholder committees representing: local farmers and residents, regional councils, drainage authorities, government ministries, Society for the Protection of Nature in Israel – Israel Ornithological Center, Israel Nature and Parks Authority, Water Authority, research bodies and JNF. Consensus building and a common vision are highly sought after and held to be the guiding principles for successful management. Economic and social benefits are understood to be directly dependant upon the ecological systems' integrity and long term ability to flourish.

In 2006, the "Great Rift Valley Migration Flyway – The Hula" was submitted for nomination as a UNESCO World Heritage site based on its unique position and function as an arid-zone wetland supporting massive bird migration along the Great Rift Valley (see Case Study on the Hula Valley Restoration Project).