

'SHAHAM' AGRICULTURAL EXTENSION SERVICES OF ISRAEL

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Israel is a small country, located in the middle East. The total geographical area is about 21,000 sq km with a population of 6 million. The total area cultivated in the country is 4000,000 ha. Out of this 50%, area is irrigated (i.e. 200,00 ha). The rainfall varies from 25 mm – 700 mm per annum. In the country's total economy, agriculture contributes about 2.5% of GNP and 3% of population are employed in agriculture. There are 25 lakh full time farmers and 20 lakh part time farmers. The country exports about 1 bill, worth of fresh products, 1 bill worth of processed products and 1.5 bill worth of equipments inputs to other countries. It has an advantage as it can reach any US / European markets within 6 to 8 hrs because of good transport and communication facilities.

The country has all the four climatic regions namely, humid, semi-humid, semi arid and arid zones

The agricultural extension system in Israel is an integral part of the Ministry of Agriculture and Rural Development, employing 250 professional assisted by 65 support and clerical staff, and providing advisory services to a clientele of around 25,000 growers : private family farmers (20%), Cooperative farmers (80%) – kibbutzim (collective farms) and Moshavism (family - cooperatives).

The extension service covers all crop and animal husbandry production branches, as well as four service disciplines, namely plant protection, irrigation / fertilization, farmer machinery and farm management, which support the crop production units. The technical departments, headed by the state extension specialists, are all located in the Agriculture Ministry offices in Tel AVIV, where as the frontline activity is carried out by the regional extension offices located throughout the country.

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* **The following are the state level technical units**

Flower crops	Sheep
Vegetables crops	Beekeeping
Deciduous and subtropical fruit crops	Crop Protection
Citrus	Irrigation & Fertilization
Field crops	Farm machinery
Poultry	Farm management
Dairy and beef production	Landscape & gardening

* * **The following are the six newly organized extension regions**

1. Kiriyat Shmonah Region (Northern Galilee and the Golan Heights)
2. Amakim Region (beit-she'an and Jordan Valley and Afula, Yezreel Valley)
3. Acre Region (western Galilee)
4. Central Region (central coast, from dadera to Ramana)
5. Rehovot Region (southern Plain)
6. Hanegev Region (kiriyat Gat, Beer-Sheva and the Negev).

Shaham -The extension and production services shahams mission is to serve

National Policy

- ☞ Land settlement
- ☞ Population spread
- ☞ Self supply
- ☞ Promote exports
- ☞ Protect Environment

Farmer welfare

- ☞ Standard of living
- ☞ Efficient production
- ☞ Profitability

Consumer welfare

- ☞ Safe nutrition's food
- ☞ All year round supply
- ☞ At reasonable prices

Shaham role :

- ☞ Gathering and analyzing info – know how
- ☞ Developing new technologies
- ☞ Transfer of know how and technologies
- ☞ Application of know how



Promoting agricultural production

Shaham – The extension and production service, Ministry of Agriculture Some guiding principles

- ☞ Initiate extension and advice to all farmers
- ☞ Guide and follow-up application on farm
- ☞ Generate and develop relevant technologies
- ☞ Guided by professional considerations
- ☞ Provides professional and technical advice only
- ☞ Intensity of advising according to needs
- ☞ Shaham continuously upgrading to needs
- ☞ Shaham continuously upgrades staffs competency
 - ☞ Technology and know how
 - ☞ Extension methods
- ☞ Maintain strong on-going ties with research
- ☞ Cooperate fully with agricultural organization

The main objectives of the Israel Agriculture extension service

- ★ Promoting agriculture and rural environment by varying farmers production and management capability.
- ★ Providing information, knowledge and agricultural technological services to the Ministry of Agriculture and rural development and to the sectors on a public and private basis.

- ★ Providing technological development, including technology generation, different and adoption.
- ★ Providing quality and excellence in both agricultural production and marketing
- ★ Providing a national policy of sustainable agriculture for all the answers of agricultural goods with particular attention to environmental and natural resource productivity.

The service generates applied knowledge with the help of field trials and observations and diffuses it relying on a series of information dissemination techniques

- ★ One to one advice visits of advisors on farmers fields
- ★ Group activities – with selected groups of farmers
- ★ Training sessions for farmers
- ★ Pre-season, seasonal and season end meetings
- ★ Publication of leaflets and data sheets
- ★ Publication of crop production and protection recommendation guides
- ★ Filming and editing videotapes for the use of the individual farmers, in most agricultural branches.
- ★ Preparation of radio programs for farmers.

The extension services operates technical support laboratories all over the country, being responsible for the accuracy of the results, their incorporation into technical recommendations and their interpretation to farmers in the following areas

- ★ Soil analysis
- ★ Leaf tests for the formulation of fertilization recommendations
- ★ Analysis of dry matter content
- ★ Tests for water quality in irrigation, brackish water , etc..with particular attention to environmental and natural resource protection.

High professional and a rapid pace of development are the main characteristics of agriculture. Producers show a steady demand for know-how and reveal high rates of extension adoption and application. This kind of agriculture requests agricultural extension and research services to capture both information and knowledge from local and foreign sources, to generate knowledge of its own and follow-up its application at farmer level. An R & D system of this nature has to develop skills and capabilities in both production and farm management.

The strength of the service consists in its ability to tackle the complex and the non conventional by forming inter disciplinary and inter institutional teams of extension specialists and researchers. These teams can resolve crop production and farm management problems encountered by producers, in addition to the provision of routine advice in the various agricultural branches.

The structure and mechanism of extension

A At headquarters

Location of state - level technical units responsible for the branch – wise formulation of the technical policy

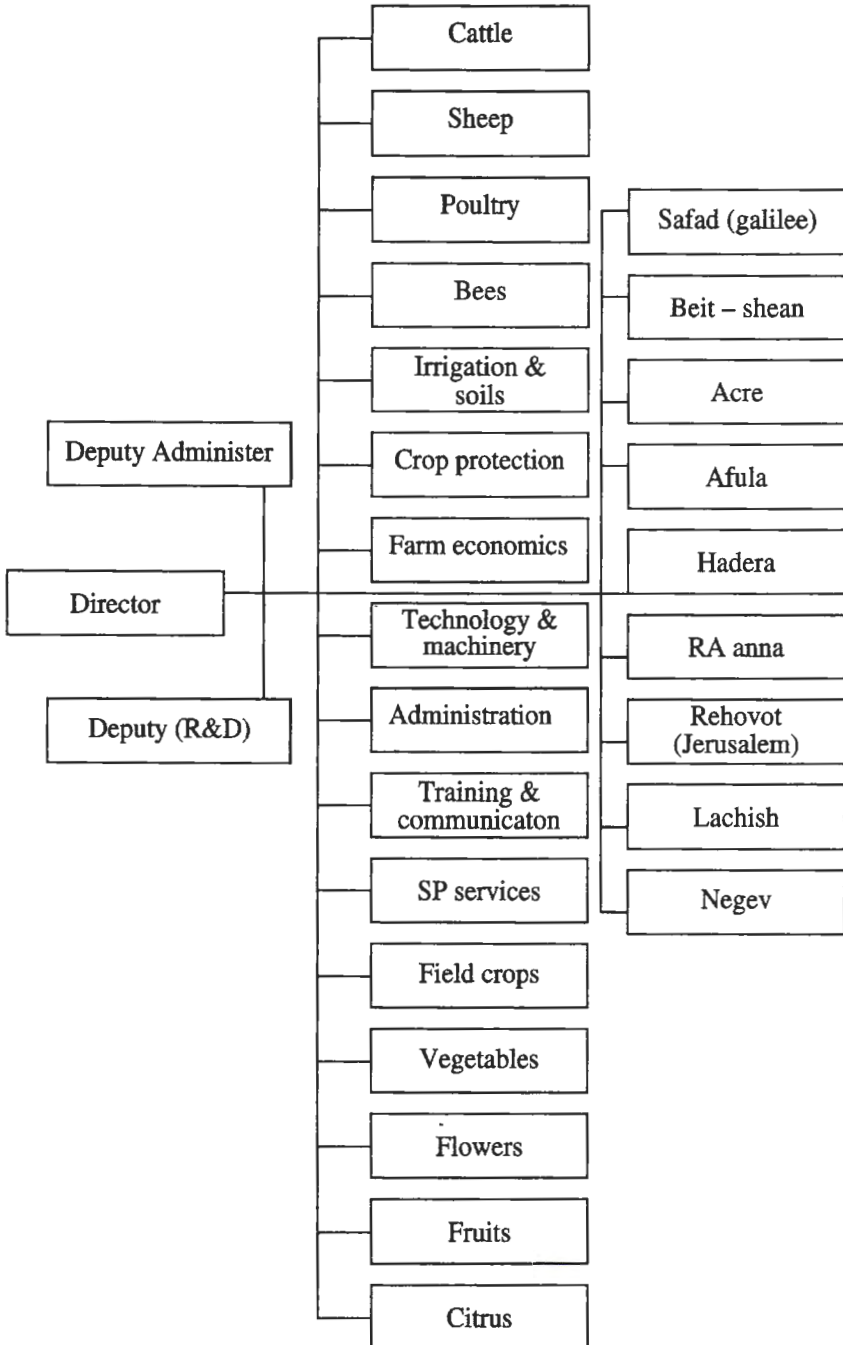
Technical support to all 4 regional extension specialists, advice to the various units of the Ministry of Agriculture and Rural Development.

Responsibility for ties with research, technology generation and the operation of field experimentation programs.

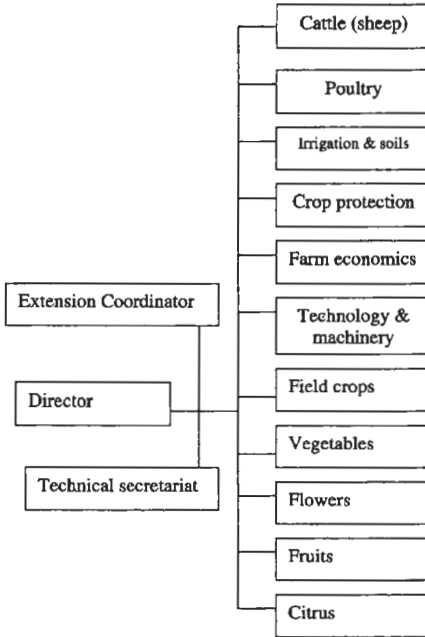
In the Regions * * *

Six regional extension offices (recently-re-organized) accommodating regional extension specialists; the specializations of the advisors being parallel to the needs of the producers in the area. Through these regional offices, the service maintains its continuous and close relationship with the farmers, seeing to it that they receive relevant advisory services. The advisors identify production and socio-economic constraints at field level, find and adapt technical solutions to local needs and conditions.

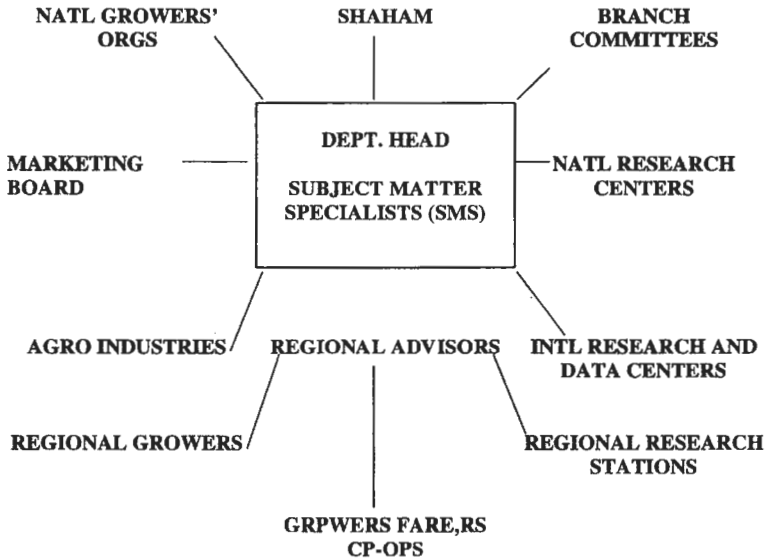
The Extension & Technology Service

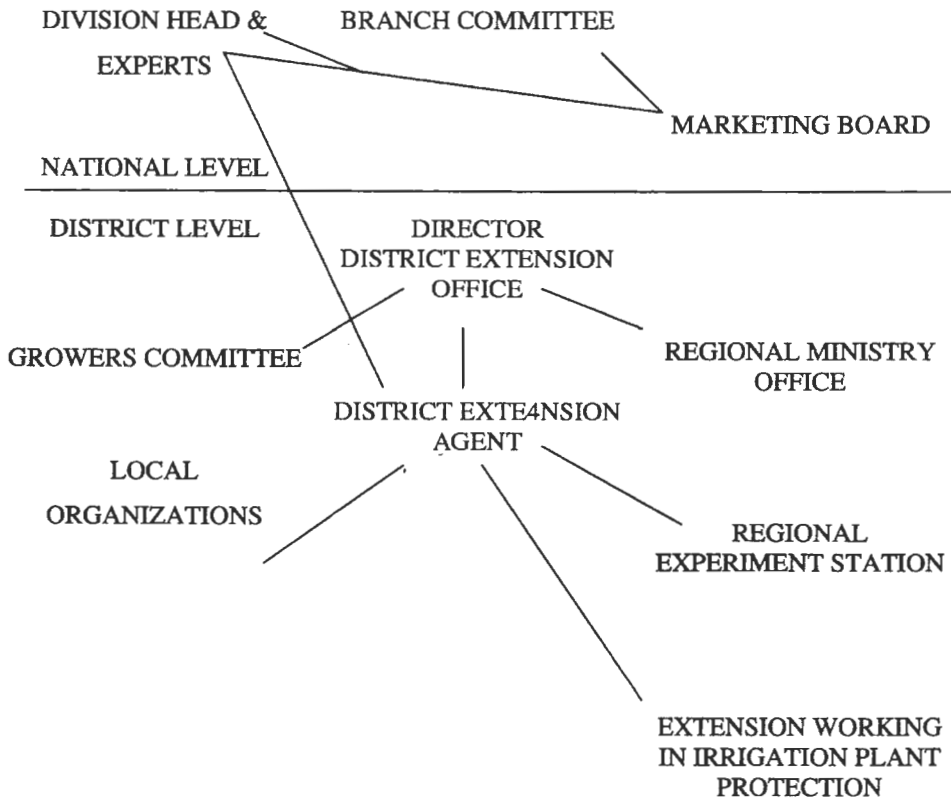


Regional Extension Office



Working ties of A Branch Department Ministry Directorate





The farmers are not charged for field visits, but their regional and state associations contribute about 10% annually to the extension services budget and support the field trial programme. The extension specialist and collaborate with researchers in joint field experimentation programmes.

The extension services are presently involved in a process of redefining the mission, organizational structure and mechanisms, in order to cope with the current anticipated changes in agricultural production environment. It is planning to adopt a more market oriented, entrepreneurial, customer oriented approach, competing for customers and signing branch wide service agreements with clientele, individual growers and with their associations. This approach tends to go far beyond the traditional extension capacity of differing knowledge and know-how from research to growers.