

AKF supports mushroom production in drought-prone Salamieh District as a means of improving rural income. Not only do mushrooms require little land, as they are grown indoors, but also significantly less water when compared to other agricultural crops, while still generating an adequate income.



Development Partners

would provide an essential service to more than 350 farmers by increasing their ability to market higher quality milk to traders.

Mushrooms and Compost

To spur economic growth without straining existing water resources, AKF supports a range of different interventions. One of the most successful has been the introduction of fresh mushroom production in Salamieh. Cultivating mushroom involves two stages: the first is the preparation of a special type of compost in which seeds (spores) germinate and the second is the actual production of mushrooms. The first stage requires temperature-controlled storage facilities, and is carried out in a single location in partnership with local social entrepreneurs. In the second stage, AKF provides the seeded compost to households in several rural villages. In 2007, the social entrepreneurs established a new compost production centre. The mushroom growers are expected to increase production as a result of their increasing technical experience – collectively exceeding 20 tons – while selling a significant proportion of the product outside Salamieh to nearby cities such as Hama and even Damascus.

The conditions in Salamieh make mushroom production an efficient economic activity. Not only do mushrooms require little land, as they are grown indoors, but also

significantly less water when compared to other agricultural crops, while still generating an adequate income. A villager can use existing space in his housing compound, and, with limited labour and supervision, grow enough mushrooms for local sale. These fresh mushrooms are competing with bottled mushrooms (from China) that sell at SYP175 (US\$ 3.50) per kilogram, and the yearly domestic demand in Syria is known to exceed 1,000 tons. In contrast, when fresh mushrooms from Salamieh reach the market, they are sold at lower prices and are better tasting.

Future Directions

For an agricultural community fraught with persistent problems of water scarcity, the collective management of resources is key to reducing rural poverty. AKF is strongly committed to improving livelihoods and water management in this region and has a long-term vision for the Rural Support Programme. Continuing to expand outreach in Salamieh District, AKF-RSP bases village selection on community-identified needs and the possibility of working with local government. In these new villages, the programme will continue to build on its success with water management and modernised irrigation combined with the introduction of new crops and techniques.

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The Aga Khan Development Network (AKDN) is a group of private development agencies working to empower communities and individuals, often in disadvantaged circumstances, to improve living conditions and opportunities, especially in Africa and Asia. Its agencies work in over 30 countries for the common good of all citizens, regardless of their gender, origin or religion. Its underlying impulse is the ethic of compassion for the vulnerable in society.

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SYRIA



The Aga Khan Foundation Rural Support Programme

The Aga Khan Foundation (AKF) is committed to reducing rural poverty, particularly in resource-poor, degraded or remote environments. It concentrates on a small number of programmes of significant scale. Programmes typically link elements such as natural resource management, productive infrastructure development, increased agricultural productivity and human skills development with a central concern for community-level participation and decision-making. The ultimate goal is to enable community members to make informed choices from a range of appropriate options for sustainable and equitable development.

An Area Development Approach

The Foundation's activities in Syria are part of an integrated approach to development undertaken by the Aga Khan Development Network (AKDN). Activities of the various Network agencies are complementary and designed to

improve the lives of people by increasing opportunities and encouraging self-reliance. Other AKDN activities in Syria consist of interventions in health, culture, early childhood development, education, economic development and microfinance. The Network is active in the Governorates of Damascus, Aleppo, Hama, Tartous and Lattakia.

A primary economic challenge in Syria is unemployment, which has been increasing at a faster rate than GDP growth. There is tension between economic policies which place the responsibility of employment on the state, demands for a free market economy and attempts to deregulate. The result is that developments on the ground remain difficult despite the government's commitment to expand foreign investment and increase the pace of economic liberalisation. Transforming the state-run, command economy into a vibrant economic structure characterised by private enterprise depends on successfully catalysing entrepreneurship, drawing on the creative potential of an educated labour

force and enabling access to finance and business development services. This will consequently help raise the incomes of rural villagers in the Salamieh District located in the central Governorate of Hama, where employment opportunities are limited, and a declining water table threatens a population whose livelihood is largely dependent on agriculture.

Regional Challenge: Water Scarcity

Syria faces a growing problem of water scarcity, a consequence of limited water resources shared by a burgeoning population, overuse and inefficient water management. Within the next few years, Syria will become a "water scarce" country, dropping under the allotment of 1,000 cubic metres, per person, per year. One of the regions most acutely afflicted by a water shortage is the Salamieh District, home to nearly 200,000 residents in the Governorate of Hama, where the water table has been dropping in some areas at a rate of one metre per year over the past



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quarter century. With increasing pressures on the water supply, the agricultural sector has suffered seriously in Salamieh, as the vast majority (74 percent) of residents relies on farming as a significant source of income. Over the past 25 years, the area of irrigated land – home to a variety of crops ranging from wheat and barley to watermelons and tomatoes – has more than halved. In addition, 60 percent of wells have dried up. In some villages, underground water is no longer available locally and must be transported from other areas, which is costly and merely relocates the problem rather than addressing the issues of efficiency and usage. Although many farmers have switched back to rain-fed crops, the economic return has been minimal due to inadequate rainfall.

The Sustainable Water Management Project

In response to problems relating to water scarcity, the Aga Khan Foundation Rural Support Programme (AKF-RSP) recently launched the Sustainable Water Management Project. The objective of this project is to promote better communal and individual management of water resources, as well as to develop more efficient methods of agricultural production. The project plans to reach all 165 villages in the Salamieh District and serve as an example for other regions in Syria. Its current activities include education and raising awareness about water scarcity; research on water resources in the region; improvement of irrigation systems; and the introduction of new crops and agricultural techniques.

Modernised Irrigation and Diversified Crops

The Sustainable Water Management Project seeks and implements new

ideas to improve the productivity and water-use efficiency of regional farming practices. It works with farmers to increase production, while decreasing water use. New irrigation systems, designed by the project, decrease cost and distribute water more evenly through drip irrigation and sprinkler schemes, which distribute water to each plant and cut down on waste. To enable farmers to finance these new irrigation systems, the project works in concert with the Aga Khan Agency for Microfinance (AKAM) in Salamieh to provide loans. Other techniques have included the use of soluble fertiliser injected into the irrigation water to increase yields. AKF is also studying the promotion of new or sparingly-used crops, such as mushrooms, medicinal plants and grape vines to diversify production. Many of these crops use less water than those already grown, but yield equivalent quantities at higher market value.

To reduce water usage, the Water Management Project is encouraging the planting of pistachios, almonds and grapes as cash crops as they require less water. The introduction of new agricultural methods and crops is conducted in three phases:

1. New crops or techniques are tested on experimental plots of land owned by volunteer farmers. Costs to farmers are covered by the project;
2. After identifying improved practices, the project demonstrates the improved yields and efficiencies of the new crops or techniques to other farmers in a number of demonstration plots. These costs are partially covered by the project;
3. Other farmers are encouraged to test or adopt new crops or techniques and the project assists them by providing short-term credit for the purchase of inputs.

Collective Action – the Fraytan Experience

Forming groups to manage water resources collectively is critical to sustainable management of this resource, but without incentives it is unlikely to occur. Fraytan, a village of 40 households and nearly 300 residents located in the heart of Salamieh District, has an average yearly rainfall of 250 mm. AKDN offered a group loan to enable all willing farmers – with irrigated land – in the village to convert to a drip irrigation system for their summer crops. Seventeen farmers were persuaded both by the technical assistance offered by AKF-RSP and a discount of 20 percent for the irrigation equipment due to the size of the purchase. Through effective management and good yields, the group was successfully able to pay back the loan and administrative fee on time. Moreover, incomes increased and water use reduced. The drip irrigation systems last for at least five years and as many as ten, resulting in long-term profits for the farmers. The Rural Support Programme is now working to expand the same structure throughout Salamieh.

The Salamieh Enterprise Support Initiative

In addition to increasing agricultural productivity while reducing water use, AKF-RSP focuses on generating greater financial returns for farmers by identifying new, external markets and providing training that enhances the value of the end product. This initiative to support local enterprises is also involved in the purchase, caretaking and shared breeding (through farmer to farmer activities) of improved livestock, and the application of techniques to fatten sheep and calves. The AKF-RSP staff arranges procurement of new breeds of livestock through bulk purchases. Technical assistance provided to pilot

initiatives, as described below, seeks to help communities to diversify their incomes and enable social entrepreneurship.

Olive Oil

The goal of this initiative is to minimise losses during harvest and collection seasons, lower transportation costs, improve the quality of the end product and facilitate access to higher value markets. As a spin-off, local entrepreneurs should provide value-added ancillary services, resulting in work opportunities. The objectives are to improve the quality of olive oil by providing technical assistance related to olive farming, harvesting, milling and storage; support an existing Olive Oil association and assist in its transformation to a commercial entity; and to assist in the development of market linkages.

AKF has introduced better irrigation and pest control methods and harvesting techniques during seminars and demonstration days. It encourages farmers to work collectively in various parts of the olive processing chain, such as sharing transportation, joint pressing, bulk containment of olives and combined sales through recruitment campaigns; helping to form a small group of farmers who collectively work together on all parts of the processing chain; collecting sales information from olive oil exporters in Syria to determine best sales prices for the groups; and determining approximate olive and olive oil production yields per tree.

Dairy

AKF-RSP is working with a small group of dairy farmers. Milk collection in Salamieh has been identified as the weakest link in the dairy processing chain, resulting in losses of up to 40 percent during the summer months. Investment in a modernised milk collection centre in the Salamieh District



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