

KWC-29
30 April 1985

INSTITUTE OF CURRENT WORLD AFFAIRS
5178 Edgemoor Dr.
Norcross, GA 30071

**TURKISH SILK: AN ANCIENT
INDUSTRY STRUGGLES ON**

by

Kenneth W. Cline

In the green, forested mountains of western Turkey, near the city of Bursa, villagers are carrying on a 1,400-year-old tradition — the rearing of silkworms.

Every spring, toward the end of April, the process begins anew. Some 14,460 farmers from the Bursa region, which accounts for 34 percent of Turkey's total silk production, visit government cooperatives to purchase boxes of silkworm eggs. At their homes, they feed the newly-hatched worms on mulberry leaves until the creatures finally spin white cocoons around themselves. By the middle of June, the villagers are ready to sell the cocoons, with the precious raw silk contained in their shells, to merchants in Bursa's reconstructed 15th century Koza Han, or "Cocoon Market."

You might say it all started around 550 A.D., when the Byzantine emperor Justinian figured out a way to bypass the Chinese monopoly on silk manufacture, jealously guarded by them for 2,000 years. By Justinian's time, people had caught on to the fact that worms produced the silk; earlier theories in the West held that silk came from the lining of a certain type of bark. But getting hold of the worm was the problem. Justinian managed to convince two Persian monks living in China to visit his capital of Constantinople (modern Istanbul) with the silkworms concealed in their hollow bamboo canes. From those few hardy smuggled worms came all the varieties of silkworm that kept European sericulture going until the 19th century, when additional Asian strains were imported.

The nomadic Turks wrested the Anatolian plateau (modern Turkey) from the Byzantines, but continued the Byzantine sericulture tradition. In 1451, 125 years after taking Bursa from the Byzantines, the Turks erected there a great stone silk market, the Koza Han, a two-story arcade built around an open courtyard. The Turkish government restored this structure in 1973 and today it is again the commercial center of Turkey's silk industry. The Turkish-made silk scarves and handkerchiefs

Kenneth Cline is a Village Reporting Fellow of the Institute studying rural life in Turkey



The entrance to Bursa's Koza Han, or "Cocoon Market." Since the building was erected in 1451, it has been the heart of Turkey's silk industry.

on sale there constitute one of Bursa's major tourist attractions.

With its mild climate favorable to the cultivation of mulberry trees — silkworms will eat nothing but mulberry leaves — Bursa was renowned in early Ottoman times for its sericulture. But European and Japanese technical advances wiped out silk production in much of the Middle East by the 19th century and, today, Turkey's silk industry is only a shadow of its former self. The country's 46,300 part-time sericulturists produce only 325 tons of raw silk a year, or .4 percent of the world total. By comparison, the Chinese



Silk merchant Hassan Tunçman in his Koza Han shop. Mr. Tunçman purchases his processed silk cloth from some of the six silk factories located in Bursa.

produce 23,000 tons a year, or 52 percent of the total. The Japanese and South Koreans dominate the rest of the market.

Turkey does not even export raw silk anymore. In order to supply their textile and silk carpet industries, the Turks have to import about 40 tons of Chinese raw silk each year — at less than it costs them to produce the silk in Turkey.

Officials at Turkey's Sericulture Institute, located in Bursa, admit the industry has more social than economic value. "The government is primarily interested in increasing



Mehmet Bayram is a farmer and part-time sericulturist from the village of Büyükbalıklı Köyü, about 14 km from Bursa.

village incomes," says agricultural technician Vedat Aksoy, 28, adding that Turkish farmers gross about \$75 million a year from their part-time sericulture.

26-year-old Mehmet Bayram, from a village near Bursa, is one of these farmers. The slender, red-haired young man says sericulture is an old tradition in his family. "The grandfather of my grandfather did it," he says. "I learned from my father and he learned from his father."

Each year, Mr. Bayram purchases from the cooperative one box containing 20,000 silkworm eggs. He raises the worms on the newspaper-covered floor of a room in his house, feeding



View of Koza Han arcade with mosque minarets in background. The Turkish government spent 10 years restoring the Koza Han, finally completing the work in 1973.

them with leaves taken from his own orchard of 30 mulberry trees. This is a tricky business. Because the worms have been reared under human care for several thousand years, they have lost all ability to take care of themselves. Unless food is placed directly in front of them, they will starve to death. A worm's debilitated sense of smell cannot scent mulberry leaves placed three feet away. No matter how hungry it may be, a worm lacks the strength to crawl more than a few inches to its food. In fact, a silkworm is so weak that the slightest breeze will knock it off a bush.

After Mr. Bayram has fed them for 35 days, the worms

climb onto mulberry branches and begin spinning their cocoons. By the middle of June, Mr. Bayram will collect about 35 kilograms worth of cocoons, selling them to a merchant in the Koza Han for a \$50 net profit. He agrees the money "doesn't help my family that much," but says that raising silkworms has become "a kind of habit" for him. Also, since the rearing season lasts only 45 days, sericulture does not take up that much of his time. Generally in rural Turkey, the task of feeding the silkworms is left to women, children, and older people not needed in the fields.

In the interests of quality control, the Sericulture Institute in Bursa (established in 1888) keeps a close watch on villagers like Mr. Bayram, who are allowed to raise silkworms only with Institute permission. Government agricultural technicians oversee the handling of the eggs by the cooperatives and control the number allotted to the villagers each year.

Throughout the late 1970s, the Turkish government provided a guaranteed support price for the cocoons. That was done away with in 1980, but market prices are still high enough to interest the villagers in raising silkworms.

The villagers may be willing, but the government cannot provide enough eggs. Most silk-producing countries raise the worms three seasons a year. Turkey does produce the cocoons in two seasons, April to mid-June, and again in August and September, but the autumn season is relatively insignificant, producing only 66,000 kilograms of cocoons, compared with two million during the spring. Turkey needs more egg storage facilities and additional irrigation to produce more mulberry trees if it's going to expand its autumn rearing season.

Turkish silk producers are still trying, but the industry could use some updating.