## **Greening the Deserts in Inner Mongolia (2017)**

Amidst news of disasters in Western newspapers, a recent headline in China Daily USA caught my attention. It reads: 'A Miracle Sprouts in the Ordos Desert.' It tells the story of Yin Yuzhen, a woman from North China, who married a farmer in Ordos, Inner Mongolia. She found her new home in Uxin Banner bleak and desolate. With the nearest neighbor living twenty kilometers away, she might not see visitors for weeks. She was depressed by the loneliness, the sight of endless desert and the sandstorms, which could last a month. In order to survive the misery, Yin decided to plant trees with the cooperation of her husband. They used the extra money they earned from doing odd jobs to buy 600 saplings, and planted these around their house. Even though she tended the young trees daily, only ten survived the wind and drought. Undaunted by the defeat, she bought thousands of small poplars from a distant nursery and carried them home on the backs her three cows. These too were uprooted by bouts of sandstorm. Success finally came after Yin learned to plant brush before planting the saplings to shield the latter from the wind. Spurred on by the welcoming sight of trees, she and her husband continued to turn the desert nearby into forests, which soon became home for wildlife. After turning thousands of acres of desert green since the 1980s, she has now become a celebrity in China and abroad. Neighbors have started to emulate her by creating tree plantations. The remoteness of her home has not discouraged streams of visitors from coming to see her handiwork. Loneliness is now a thing of the past. She has traveled to many foreign countries to give lectures and to receive awards on environmental protection.

Since the drive against desertification is usually a top-down government-led undertaking in China, it is heartening to read about a case initiated by a private individual. This article aroused my interest to find out more about what China has been doing about its deserts from both Chinese and Western publications.

Although China is a large country, about 27% of its land is desert, against the world's 24.1%. China's deserts, like that of other parts of the world, are advancing at an alarming rate. Its largest desert, the Gobi, devours over 1,400 square miles of grassland per year. Deforestation, overgrazing, overuse of water by people, together with rising temperature and more severe

draughts from climate change are some of the leading causes of desertification.

When China started its "reform and opening-up" to the world in 1978, it also made a big move to address the problem of the march of its deserts. Its government decided to mobilize Chinese farmers to plant a Great Green Wall of trees along a 2,800-mile border of the Gobi Desert. So far 66 million trees have been planted. When the projects ends in 2050, it will have increased the world's forest by 10%.

Besides implementing massive projects like the Great Green Wall in the Gobi Desert, the Chinese authorities provided active leadership and adopted a flexible approach to harness the energy of enthusiastic individuals and innovative entrepreneurs and bring them into the fight against desertification. Yin Yuzhen and other individuals like her were held up as praiseworthy models by the Chinese government to encourage others. Much publicity and support were given to innovative entrepreneurs who managed to create sustainable enterprises out of transforming desert into productive land. A prominent example was Wang Wenbiao, a poor man from the Kubuqi Desert, who founded the Elion Resource Group, which grew into a multi-billion dollar business, marketing products harvested from trees, grasses, and other plants it cultivated in the harsh desert environment. Among Elion's successful ventures was the growing of licorice, a desert-friendly plant the roots of which harbor nitrogen-fixing bacteria that enrich the dry soil. Elion leased a large amount of desiccated land from a multitude of local farmers and herders and involved them in tending to the herb grown on their land. Both Elion and the local community made a lot of money from selling licorice products to the pharmaceutical industry at high prices. Because Elion developed sustainable businesses from both an economic and an ecological perspective, it has lasted twenty-five years and is still expanding briskly into new areas. During the last three decades, the combined efforts of the Chinese government, private companies, dedicated individuals, and local communities, have covered 6,000 square kilometers (approximately one third) of the Ordos Kubuqi Desert in Inner Mongolia with greenery.

On September 6, 2017, the United Nations Convention to Combat Desertification held a conference in Ordos, Inner Mongolia. The delegates of

this conference recommended the Chinese approach to greening the desert as a model for other countries challenged by desertification. Erik Solheim, the deputy head of the United Nations Environmental Program, considered the Chinese experience in developing an ecological economy in desert conditions invaluable for other regions of the world facing this challenge. He encouraged countries ravaged by deserts in African and the Middle East to adopt the "Ordos' Kubuqi Model".