

and the French team headed by Mr. Boetsch, in fields as varied as soil microbiology, ecology, medicine and anthropology.

“In Senegal we hope to experiment with different ways of doing things that will benefit the other countries as they become more active,” the colonel said.

Each year since 2008, from May to June, about 400 people are employed in eight nurseries, choosing and overseeing germination of seeds and tending the seedlings until they are ready for planting. In August, 1,000 people are mobilized to plant out rows of seedlings, about 2 million plants, allowing them a full two months of the rainy season to take root before the long, dry season sets in.

Newly planted trees are protected from hungry animals by fencing for six years — time for their roots to reach down to groundwater and their branches to grow higher than the animals can reach. Unplanted strips protect the parcels from forest fire and provide passageways for herders’ livestock.

In especially harsh years, when there is nothing left for herds to eat and too many animals starve, the protected parcels are opened up as an emergency forage bank, a flexibility that has won local acceptance of the project.

Six indigenous tree species were chosen by local people and the scientists for their hardiness and their economic uses. Among them, Acacia Senegal can be tapped for its gum arabic, a stabilizer and emulsifying agent, widely used in soft drinks, confectionery, paints and other products. The desert date, *Balanites Aegyptiacus*, is used for food, forage, cooking oil, folk medicine and in cosmetics. Many of the uses of these plants are still being explored by researchers.

After their first dry season, the saplings look dead, brown twigs sticking out of holes in the ground, but 80 percent survive. Six years on, trees planted in 2008 are up to three meters, or 10 feet, tall.

So far, 30,000 hectares, or about 75,000 acres, have been planted, including 4,000 hectares this summer.

There are already discernible impacts on the microclimate, said Jean-Luc Peiry, a physical geography professor at the Université Blaise Pascal in Clermont-Ferrand, France, who has placed 30 sensors to record temperatures in some planted parcels.