“If the Grass Dies, So Does Our Story”In Pakistan’s Pashtun Belt, the land’s silence tells of a changing climate — and a herding culture fighting to survive.”

Bara, Khyber Pakhtunkhwa (Pakistan) – A first light along this southern rim of Khyber Pakhtunkhwa no longer seems like a beginning but rather a warning.

Heat arrives early, weighing down canvas walls of tents, and wooden boards of stable, before sun completes crossing over horizon. Waking up with it is 48-year-old Karim Khan. He opens eyes, and sees a horizon converted to dust – where early summer, green once came in waves. His goats huddle in loose, exhausted groups: coughing, or stiffly immovable.

He was brought up in an environment where time was measured on the land. The seasons directed shepherds when to descend to the plains, how to move their animals towards high mountain meadows, when it would be rainy enough to support the grass. That rhythm has been disrupted.

“The sky no longer keeps its promises,” he says.

In the Bara plains of Khyber district, where Karim spends most of the year, grazing land has withered. Streams that once laced through the fields now vanish before midsummer. Even the high valleys of Swat and Chitral — long the final refuge for weary herders — greet arrivals with brittle meadows and water reduced to a trickle.



A 70-year-old elder walks with his grandson and goats across the River Bara bridge, heading to Peer Mila — the weekly cattle market in Bara held every Monday

Figures reflect the deteriorating landscape. In a span of only three years, Dera Ismail Khan has lost over 11 percent of its goats. Lakki Marwat's sheep have decreased 14 percent. Kurram and Orakzai, once bountiful with seasonal streams, have lost 12 percent. Khyber district, a source of livelihood for tens of thousands of pastoral families, has lost 10 percent. Less livestock equates to less meat and milk. Fertility rates are crumbling in relentless heat. The veterinary officers predict that the trend is deteriorating.

Yet in reducing the loss to percentages, the deeper wound is overlooked. In the Pashtun belt, herding is more than an income — it is a migratory culture, an ancient bond between people, terrain, and livestock.

Across the Durand Line, in eastern Afghanistan, it is no different. Summer grazing in Paktia, Nangarhar, and Khost gets drier and drier earlier and earlier. Herders there tell of selling half their flock just to provide enough fodder for the other half, of going without water for stretches. The line

may separate human beings, but not drought, heat, nor floodwaters.

The cost shock echoes way beyond the hills. In Peshawar, Mardan, and Quetta, red meat rates have jumped over 25 percent over two years. Religious festivals that were once identified with the smell of roasting mutton now experience reduced portions. Wedding receptions get smaller. Restaurateurs who were famous for creamy mutton karahi try discreetly for more affordable meats.

Scientists warn the Pashtun belt is a preview of what unchecked climate change could mean for Pakistan. The Asian Development Bank projects livestock production could fall by as much as 30 percent by 2030. The Food and Agriculture Organization lists the region as a climate-related food insecurity hotspot, with impacts likely to spill across South and Central Asia.

“It’s not a domestic problem,” according to an Islamabad-based climate researcher. “What happens here impacts on the protein supply of tens of millions.”

On the ground, veterinarians describe a darker reality: heat stress eroding immune systems, disease year-round, and pneumonia, foot-and-mouth, and hemorrhagic septicemia exacting an ever-higher toll on young livestock.

Government projects — drought-tolerant forage, acclimated breeds, mobile veterinary units for remote provinces — exist on paper, but from herders, help usually arrives after an emergency.

“For when they get here now,” he says, “the animals that we came to help have all disappeared.”

Khyber Pakhtunkhwa has already suffered record floods, fatal heatwaves, and encroaching drought. Yet, herders migrate along traditional channels, ascending towards mountains that provide fewer grasses every year. It is a gamble that must be played because no alternative exists.

Karim has seen his flock dwinddle, interred young goats before their legs

could run, and still his eyes rise to distant hills.

“If the grass over there also dies,” he says quietly, “then we’ll have nothing left of our story.”

Pakistan has committed, through the United Nations Convention to Combat Desertification (UNCCD), to reach Land Degradation Neutrality by 2030. It would restore 6 percent of degraded grasslands, 5 percent of croplands, 30 percent of forests, and 10 percent of wetlands.

Projects like the Ten Billion Tree Tsunami, part of the Green Pakistan initiative, have already planted nearly two billion trees, lifting Khyber Pakhtunkhwa’s forest cover to 26 percent. These efforts are designed not only to slow soil erosion and restore biodiversity but to rebuild ecosystems essential for pastoral and farming livelihoods.

At present, however, on Bara’s brown plains, those promises remain distant. The grass continues to wither away, and with it, an old way of living that dates back thousands of years.