

# When the Earth Speaks, Can Livestock and Fish Afford to Stay Silent?

## SHRIDHAR speaks



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On June the 5<sup>th</sup>, the World Environment Day, the world pauses, even if only briefly, to take stock of what we are doing to the planet we live on. This year, the theme of the day was: “Inspired by Nature. For Climate. For Our Future.” Anchored in UNEP’s broader “NowForClimate” campaign, the day is a global call to acknowledge the Earth’s distress signals and, crucially, to act on them.

But here is a question that does not get asked loudly enough: what does all of this mean for the farmers raising chickens in Andhra Pradesh, the fisherfolk casting nets in the Bay of Bengal, or the cattle herder in Rajasthan watching his animals grow leaner as pastures dry up? The climate conversation tends to stay afloat high in the air. Let us bring it all the way down to the shed, the pond, and the shore.

The inconvenient truth that hangs over livestock and fisheries is that these sectors are simultaneously contributors to and victims of climate change. That is a double bind that few industries face with quite the same intensity. On the contribution side, the numbers are sobering. Livestock supply chains account for approximately 7.1 gigatonnes of CO<sub>2</sub> equivalent per year, making up around 14.5% of all human-caused greenhouse gas (GHG) emissions globally. Cattle, raised for both beef and milk, are responsible for roughly

two-thirds of that share, largely because of methane released during digestion in a process called enteric fermentation. And enteric methane alone accounts for about 30% of global methane emissions, a particularly potent warming agent in the short run.

Poultry, often cited as the greener protein, is not entirely off the hook either. The global poultry sector contributes around 8 percent of total livestock GHG emissions, or roughly 606 billion kg of CO<sub>2</sub> equivalent per year, with feed production alone accounting for more than half of that footprint. The average emission intensity of broiler chicken is estimated at 5.4 kg of CO<sub>2</sub> equivalent per kg of carcass weight. In India specifically, total GHG emissions from livestock were estimated at 281.23 million tonnes of CO<sub>2</sub> equivalent in 2019, a figure that is only going to climb as the sector grows. And yet, and this is the part that often gets lost in the debate, these same sectors are paying a steep price for a warming planet they did not cause alone.

Ask any poultry farmer in Telangana what summer feels like now, and the answer will involve words like “maro” (death), weight loss, and stress: it is not a metaphor, but biology. Poultry birds are sensitive to temperature, thriving best within a thermal comfort zone of 16°C to 25°C. Once temperatures cross 30°C, the problems multiply: panting, reduced feed intake, dehydration, weakened immunity, and sharply lower egg production. Cross 36°C, and birds can simply start dying.

In coastal Karnataka, veterinary officials warned as recently as March 2026 that rising summer temperatures and humidity were putting severe stress on both cattle and chickens. “Meat chickens may significantly reduce their food intake, resulting in insufficient weight gain, and may start dying when temperatures exceed 36°C,” said an official of the department of Animal Husbandry and

Veterinary Services. It is not a distant scenario, but happening now.

India is the second largest producer of eggs and among the top five producers of broiler chicken globally. So heat stress is not just an animal welfare issue, it is business, food security, and a rural livelihood risk, all rolled into one. And it is not just poultry: across India, the majority of livestock rearers now report a climate change impact on their animals; and among buffalo keepers, the number is estimated as 54%. Milk production is affected in ways that correlate directly with heat stress, reduced fodder availability, and erratic rainfall. Studies confirm a 2.7% decline in the bovine population in coastal India between 2012 and 2019, as farmers involuntarily shift toward smaller, more heat-tolerant ruminants like goats and sheep.

If the poultry farmer’s enemy is heat, the fisherman’s enemies are many, rising sea temperatures, intensifying cyclones, shifting fish populations, and an ocean that is becoming less predictable by the season. The Bay of Bengal is a particularly alarming case study. Despite covering less than 1% of the global ocean, this body of water supplies nearly 8% of the world’s fishery production, a fact that makes its vulnerability deeply consequential. Recent research published in Nature Geoscience warned that extreme variability in the Indian Summer Monsoon could cause a 50% drop in food available for marine life at the ocean’s surface, fundamentally destabilising the food web. Climate-induced storms and extreme weather are now reducing fishing days by an average of 10 to 15 days each year in the Bay of Bengal region: the days of income, days of food, days that cannot simply be recovered.

Chronic ocean warming is driving a nearly 20% annual decline in fish biomass in several major ocean regions. A study from Monash University, published in

early 2026, found that every degree of warming reduces fisheries production, as fish evolve to survive higher temperatures by maturing faster but growing smaller. “This evolution is good for fish but bad for fisheries,” said Professor Craig White, who led the research. India’s northeast coast tells a similar story. Research on the Bengal and Mahanadi delta systems, which support about 1.25 million people, found that a projected 4°C increase in sea surface temperature would decrease fisheries productivity by around 5 percent, with species-level shifts in what can be caught and where.

None of this means livestock and fisheries are helpless bystanders. World Environment Day 2026 challenges them to recognise that they are part of the solution if the political will and practical support are there. For livestock, the mitigation pathway runs through optimising animal nutrition, reducing enteric fermentation through feed additives, and implementing better manure management through biogas digesters and composting. Silvopastoral systems, integrating trees, fodder crops, and livestock on the same land, promote biodiversity and enhance carbon sequestration simultaneously. FAO notes that more than 90 developing countries have now included livestock in their Nationally Determined Contributions under the Paris Agreement.

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Vitamins C and E, along with electrolyte supplements, have demonstrated real promise in buffering heat stress. Indigenous poultry breeds, better adapted to tropical conditions, also deserve far more attention from breeders and policymakers than they currently receive.

There is something particularly apt about this year’s theme. “Inspired by Nature” is not just a slogan for livestock and fisheries, it is literally the operating principle. These sectors exist only because nature provides: grasslands for cattle, plankton for fish, rain for fodder, cool water for prawns. When nature frays, the sector frays with it. India’s animal agriculture sector, dairy, poultry, meat, and fisheries, feeds hundreds of millions of people and supports the livelihoods of innumerable livestock keepers and fisherfolk. Climate change is not a distant threat to this world, it is already restructuring it; which animals to keep, who can still fish and where, who can afford to adapt and who cannot. World Environment Day 2026 should be a constant reminder that the climate does not negotiate; it just sends signals: rising temperatures, shrinking fish stocks, more intense cyclones, drying fodder fields. The question is whether we are paying attention and responding before these signals become catastrophes.