

GRASSLANDS SHRUBLANDS AND SAVANNAH ECOSYSTEM

TATA SUSTAINABILITY
MONTH, JUNE 2021



WHAT IS IT?

Grasslands, Shrublands and Savannah Ecosystems are where there is too little rain for trees to grow in great numbers.

INSTEAD, THESE LANDS ARE COVERED IN GRASSES AND GRASS-LIKE PLANTS THAT CAN SUPPORT HIGH DENSITIES OF GRAZING ANIMALS, SUCH AS ZEBRA, ANTELOPE AND BISON. THESE HERDS, IN TURN, SUPPORT ICONIC PREDATORS LIKE LIONS AND CHEETAHS.

This biome is home to a range of flora and fauna, which add to its resilience against natural disasters such as droughts or wildfires.

IN FACT, NATIVE GRASSLAND PLANTS HAVE ADAPTED TO EXTREME WEATHER CONDITIONS TO SUCH AN EXTENT THAT SAVANNAHS, A SUBSET OF GRASSLANDS FOUND IN AFRICA, AUSTRALIA, SOUTH AMERICA, AND INDIA, REQUIRE SEASONAL DROUGHTS AND WILDFIRES TO MAINTAIN BIODIVERSITY.

These ecosystems are key components of rangelands used by herders for extensive livestock production. They are where humans evolved millions of years ago.



Grasslands have many names



PRAIRIES IN NORTH AMERICA



ASIAN STEPPES

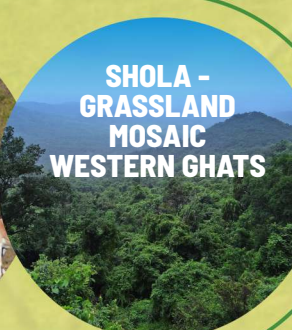


SAVANNAHS & VELDTS IN AFRICA

Two of India's celebrated grasslands



BANNI GRASSLANDS GUJARAT

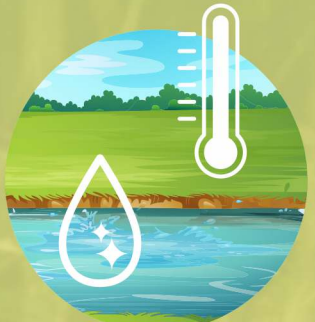


SHOLA - GRASSLAND MOSAIC WESTERN GHATS

WHY IS IT IMPORTANT?



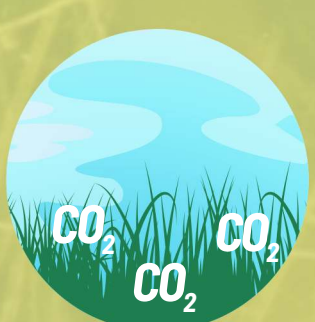
SUPPORT HIGH DENSITIES OF GRAZING ANIMALS



REGULATE WATER QUALITY AND CLIMATE



BALANCE NUTRIENT CYCLING



SEQUESTER CARBON



PROVIDE RESOURCES FOR PASTORAL COMMUNITIES AND WILDLIFE

HOW IS IT DEGRADED?



AGRICULTURE

To feed a growing human population, most of the world's grasslands are being converted to agricultural fields



CHANGES IN SPECIES COMPOSITION

The removal of key species and introduction of non-native pasture grasses and species have disrupted the balance in these ecosystems and damaged a host of other species



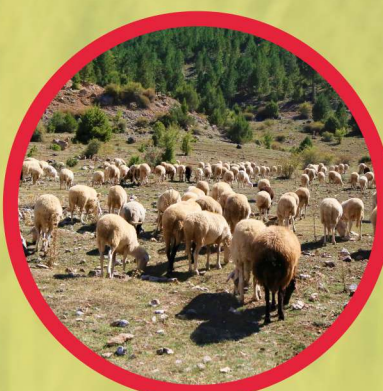
HUNTING

When hunting is not controlled or is conducted illegally, species can be wiped out



CLIMATE CHANGE

Frequent droughts, as a result of climate change, further affect the ecosystem as water is already a scarce resource



OVERGRAZING

Leaves the soil exposed to erosion and allows shrubs and alien species to invade at a high speed, displacing native vegetation

HOW BAD IS THE SITUATION?



Almost half of all Temperate Grasslands and 16 percent of Tropical Grasslands have been converted to agricultural or industrial uses and only one percent of the original Tallgrass Prairie exists today

WHAT CAN BE DONE TO RESTORE THEM?



STRENGTHEN GOVERNANCE SYSTEMS

Ensuring security of tenure and participatory rangeland management is important



COLLABORATE WITH LOCALS

Restoring Shrublands, Grasslands and Savannahs means working with pastoralists using the land



HELP DEGRADED SHRUBLANDS, GRASSLANDS & SAVANNAHS REBOUND

This includes clearing woody vegetation and re-seeding native grasses



REINTRODUCE FLORA AND FAUNA

Eradicated species can be re-introduced and protected from predation and hunting until they are established



SUSTAINABLE CONSUMPTION

The extraction of resources such as water and wood, wildlife, minerals, or non-timber forest products, needs to remain sustainable

WHAT CAN MY ORGANIZATION DO?



UNDERTAKE CSR ACTIVITIES CENTRED AROUND INDIGENOUS GRASSLANDS AND THEIR COMMUNITIES



EXPLORE OPPORTUNITIES TO PROTECT AND RESTORE WETLANDS, WHICH ARE AN IMPORTANT PART OF GRASSLAND ECOLOGY

WHAT CAN I DO TO HELP?



Learn about and boycott illegal products made from endangered species (like ivory)



Support conservation organizations that protect grasslands



Support pastoralists through fair-trade initiatives (wool, organic ghee from Banni etc.)