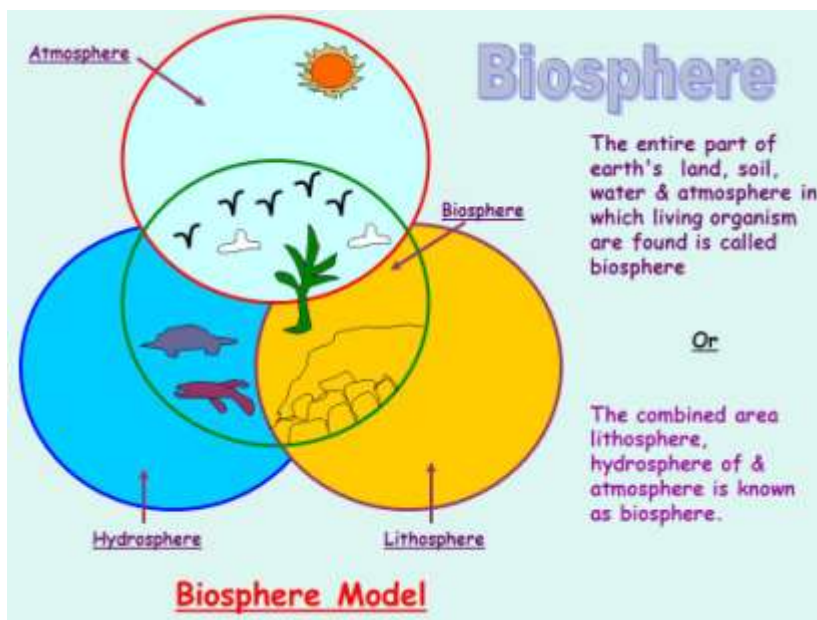


CHAPTER -7: CONSERVATION OF PLANTS AND ANIMALS

HAND OUT - MODULE 1

BIOSPHERE

- THE PART OF THE EARTH WHICH SUPPORTS LIFE.
- IT COMPRISES THE LAND AREA, WATER AND AIR.
- THE LAND AREA IS CALLED LITHOSPHERE, WATER IS CALLED HYDROSPHERE AND AIR IS CALLED ATMOSPHERE.



WHAT IS BIODIVERSITY?

- BIODIVERSITY REFERS TO THE DIFFERENT VARIETY OF ORGANISMS EXISTING ON EARTH AND THEIR RELATIONSHIP WITH THE ENVIRONMENT.
- THE VARIETY OF ORGANISMS INCLUDE BOTH FLORA , FAUNA AND MICRO ORGANISMS FOUND IN THAT AREA.

WHAT DO WE MEAN BY FLORA AND FAUNA?

- FLORA – PLANTS FOUND IN A PARTICULAR REGION.
- FAUNA – ANIMALS FOUND IN A PARTICULAR REGION.

WHAT IS THE MAJOR ACTIVITY DESTROYING BIODIVERSITY?

DEFORESTATION - THE PROCESS OF CUTTING TREES AND CLEARING OF FOREST LAND IS CALLED DEFORESTATION.

WHY IS DEFORESTATION DONE?

- PROCURING LAND FOR CULTIVATION
- BUILDING HOUSES AND FACTORIES
- MAKING FURNITURE
- USING WOOD AS FUEL

WHAT ARE THE CONSEQUENCES OF DEFORESTATION?

- INCREASES TEMPERATURE OF EARTH
- INCREASES POLLUTION LEVELS
- INCREASE IN CARBONDIOXIDE LEVELS
- DECREASE IN RAINFALL
- LOWERING OF GROUND WATER
- DECREASED SOIL FERTILITY
- INCREASED CHANCES OF FLOODS AND DROUGHTS

HOW ARE DROUGHTS CAUSED?

- PLANTS NEED CARBONDIOXIDE FOR PHOTOSYNTHESIS
- DEFORESTATION RESULTS IN MORE CARBONDIOXIDE
- IT TRAPS HEAT LEADING TO GLOBAL WARMING
- DISTURBS WATER CYCLE
- REDUCES RAINFALL LEADING TO DROUGHT

WHAT IS DESERTIFICATION?

- PROPERTIES OF SOIL ARE AFFECTED BY NEW PLANTATION .
- DEFORESTATION LEADS TO SOIL EROSION.
- THIS TAKES AWAY THE FERTILE TOP SOIL
- EXPOSES THE LOWER HARD ROCKY LAYERS WHICH IS LESS FERTILE.
- GRADUAL CONVERSION OF FERTILE LAND TO DESERT .

HOW DOES DEFORESTATION PLAY A ROLE IN CAUSING FLOODS?

- SOIL EROSION AND DESERTIFICATION CHANGES NUTRIENT CONTENT, TEXTURE ETC.
- WATER HOLDING CAPACITY DECREASES.
- INFILTRATION,MOVEMENT OF WATER FROM SURFACE TO GROUND IS REDUCED LEADING TO FLOODS.

HOW DO WE CONSERVE FOREST AND WILDLIFE?

OUR GOVERNMENT HAS TAKEN CARE OF FOREST AND ANIMALS AND CREATED PROTECTED AREAS. THEY ARE

- BIOSPHERE RESERVES
- WILD LIFE SACTUARIES
- NATIONAL PARKS

THINGS PROHIBITED IN PROTECTED AREAS

- PLANTATION
- CULTIVATION OF CROPS
- GRAZING BY CATTLE
- FELLING TREES
- HUNTING AND POACHING OF WILD ANIMALS

BIOSPHERE RESERVES

- LARGE AREAS OF PROTECTED LAND FOR PRESERVING WILD LIFE, PLANTS AS WELL AS THE TRADITIONAL LIFE OF TRIBALS IN THAT AREA
- MEANT FOR CONSERVATION OF BIODIVERSITY AND CULTURE OF THAT AREA

BIOSPHERE RESERVES IN INDIA

BIOSPHERE RESERVE	STATE
GREAT RANN OF KUTCH	GUJARAT
GULF OF MANNAR	TAMIL NADU
SUNDERBANS	WEST BENGAL
NANDADEVI	UTTARKHAND
NILGIRI	TAMIL NADU, KERALA, KARNATAKA
PACHMARI	MADHYA PRADESH
GREAT NICOBAR	ANDAMAN AND NICOBAR ISLAND

WHAT DO WE MEAN BY SPECIES?

- HAVE COMMON CHARACTERISTICS.
- GROUP OF POPULATION CAPABLE OF INTERBREEDING AMONG THEMSELVES.
- PRODUCE FERTILE OFFSPRING ONLY WITH MEMBERS OF THEIR OWN SPECIES.

PACHMARI BIOSPHERE RESERVE

- LOCATED IN THE SATPURA RANGE OF MADHYA PRADESH IN CENTRAL INDIA
- IT WAS CREATED IN 1999.
- CONSISTS OF ONE NATIONAL PARK CALLED SATPURA NATIONAL PARK.
- CONSISTS TWO WILD LIFE SANCTUARIES NAMELY BORI AND PACHMARI

WHAT ARE THE ANIMALS AND PLANTS OF PACHMARI BIOSPHERE RESERVE?

- FLORA – SAL. TEAK, MANGO, JAMUN, SILVER ,FERN, ETC.

- FAUNA – CHINKARA, BLUE BULL, BARKING DEER,CHEETA, LEOPARD, WILD DOG, WOLF ETC.

ENDEMIC SPECIES

- SPECIES FOUND EXCLUSIVELY IN A PARTICULAR AREA AND NOT ANYWHERE ELSE.
- ENDEMIC FLORA – SAL AND WILD MANGO
- ENDEMIC FAUNA – BISON , INDIAN GIANT SQUIRREL, FLYING SQUIRREL.

HOW ARE ENDEMIC SPECIES IN DANGER?

- DESTRUCTION OF HABITAT
- INCREASING POPULATION
- INTRODUCTION OF NEW SPECIES IN A HABITAT

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