


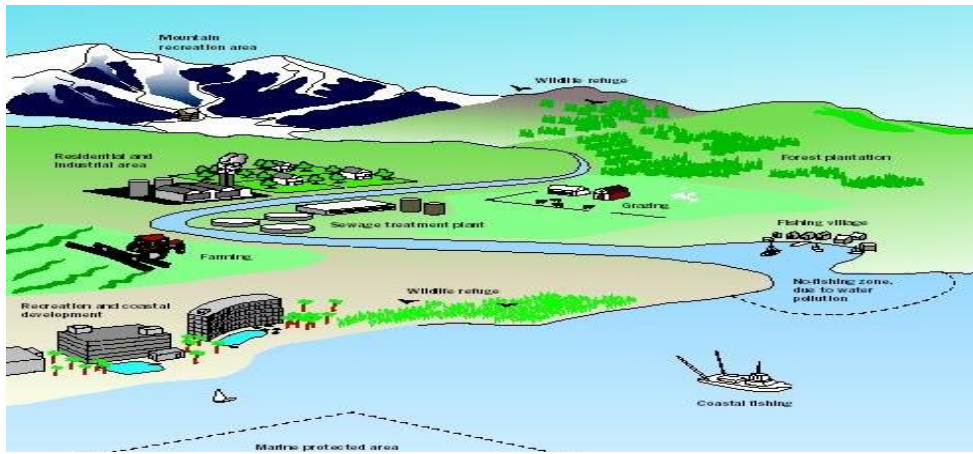


Class	VIII	Subject	Geography
Prd	1	Chapter	2.Land, Soil and Water Resources
Sub-Concepts	Land a resource (concept) Classification of land resource Concept of plains, Plateaus & Mountains and their importance Fertile lands and Barren lands		
Teaching Aid To be used	PPT with relevant video and images		
Learning Outcome	<ul style="list-style-type: none"> To be able to know the meaning of resources, their variety, location and distribution. To be able to understand the significance of resources & types of land resources, their distribution and utility. 		
INTRODUCTION	<p>For Achievers: - Teacher will start the class by asking following questions: -</p> <ol style="list-style-type: none"> Name important natural resources. Think of a resource without which life on Earth will become impossible. Discuss. Why do we need to utilize resources with minimal waste? <p>*LAND SOIL AND WATER * Answer will vary student to student * Ensure maximum benefits as they are limited in supply.</p>	<p>For Average: - Teacher will start the class by showing few pictures like: -</p>    <p>And ask students which one of these resource, they considered to be most important and why?</p>	
Sl. No	Step Wise (What to be done)		
1.	<p>Land, soil, water are the resources which belong to abiotic resources and are the most important resources.</p> <p>Land:</p> <ul style="list-style-type: none"> Land is among the most important natural resources. Land covers about 30% of the total area of the earth's surface. Ninety percent of the world population occupies only 30% of the land area. The 		

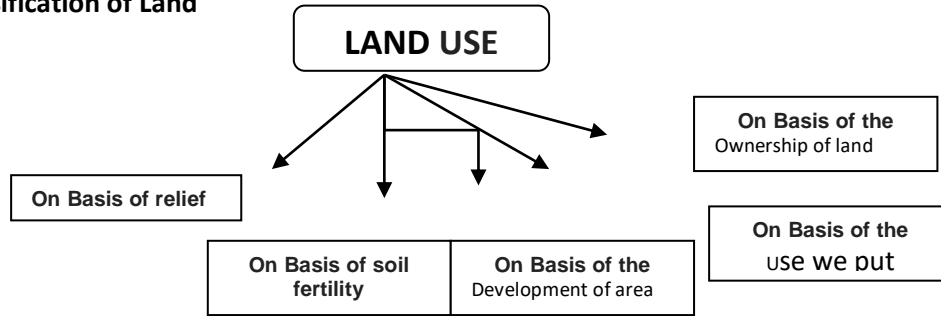
i
o
n

remaining 70% of land is either sparsely populated or uninhabited.



2. C
L
A
S
S
I
F
I
C
A

Classification of Land



3 LAND
USES



4 L A N D U S E P A T T E R N	<p style="text-align: center;">Landuse Map of India</p>	
5 . H W	<ol style="list-style-type: none"> 1. What do you mean by land as resource? 2. Mention different land use. 3. Differentiate between land classification on the basis of ownership. 	

NOTE: As land resource, land use and land use pattern is a continuous topic so this TN should be referred for multiple session as required.




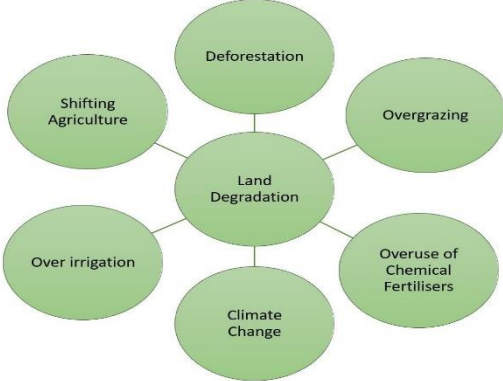
ODM Teachers' Note

Class	VIII	Subject	Geography
--------------	------	----------------	-----------

Prd	2	Chapter	2.Land, Soil and Water Resources
------------	---	----------------	----------------------------------

Sub-Concepts	Land degradation Factors affecting land degradation Conservation of land resources
Teaching Aid To be used	PPT and relevant videos as well as images
LEARNING OUTCOME	<ul style="list-style-type: none"> • To be able to know the meaning of land degradation and methods to conserve land degradation. • To be able to understand the significance of land conservation.


Sl. No	Step Wise (What to be done)
---------------	------------------------------------

<p>1 RECAPITULATION</p>	<p>Teacher will ask following questions to recall the previous learning of the students: -</p> <ol style="list-style-type: none"> 1.What do we include in land resource? 2. How land resource is classified on the basis of development and ownership? 3. Which land use has maximum distribution in our country? 4. Explain net sown area.
<p>2</p>	<p>Land degradation</p> 
<p>3</p>	<p>Causes of Land Degradation: -</p> 
<p>4</p>	<p>Land degradation can be checked in the following ways:</p> <ul style="list-style-type: none"> ✓ Afforestation, i.e. by planting trees. ✓ Control and proper management over grazing. ✓ Control on mining activities. ✓ To plan for proper discharge of industrial effluents. ✓ Proper management of waste lands. ✓ Stabilization of dunes by growing thorny bushes.
<p>5 HOME ASSIGNMENT</p>	<ol style="list-style-type: none"> 1. What do you mean by land degradation? 2. What are the causes of land degradation?

Class	VIII	Subject	Geography
--------------	-------------	----------------	------------------

Prd	3	Chapter	2.Land, Soil and Water Resources
------------	----------	----------------	---

Sub-Concepts	Soil as a resource, Soil profile Fertile and Infertile soils
Teaching Aid To be used	PPT and relevant videos as well as images
Learning outcome	<ul style="list-style-type: none"> To be able to know the meaning of soil resources, their variety, location and distribution. To be able to understand the significance of soil as resources. To be a sensible citizen respecting natural resources and utilizing them properly.

Sl. No	Step Wise (What to be done)
1 RECAPITULATION	<p>Teacher will ask following questions to recall the previous learning of the students: -</p> <ol style="list-style-type: none"> 1.What is land degradation? 2. Mention some of the causes of land degradation. 3. How land degradation can be controlled?
2	<p>Soil:</p> <ul style="list-style-type: none"> • Soil is the thin layer of grainy substance covering the surface of the earth. • Different types of soils are suitable for particular type of crops. <div style="text-align: center;">  </div> <p>https://www.youtube.com/watch?v=8kZXullobA8 SOIL</p>
3	Factors of Soil Formation:

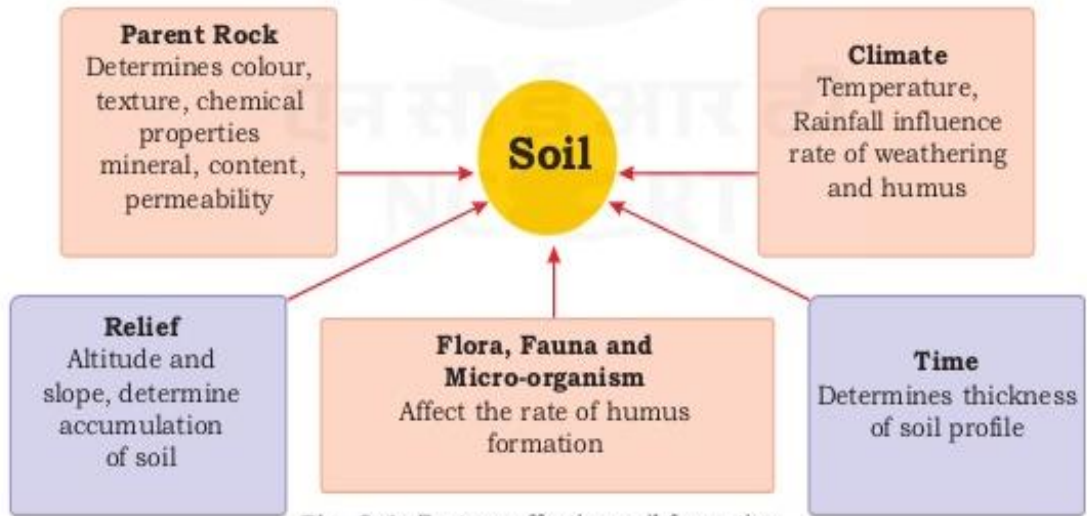
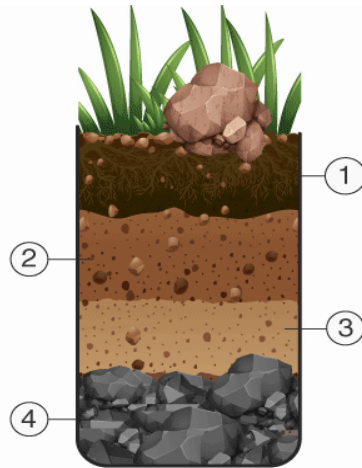


Fig. 2.4: Factors affecting soil formation

4 Soil Profile



- | | |
|----------------------------|----------------------------|
| 1 The O-Horizon (Organic) | 2 The A-Horizon or Topsoil |
| 3 The B-Horizon or Subsoil | 4 The C-Horizon or Bedroc |

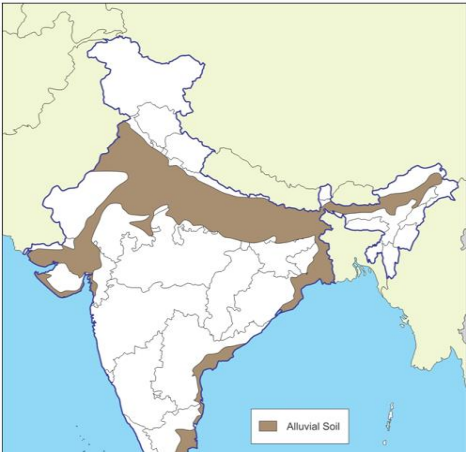
5
H
W

- Define Soil.
- What are different factors that are responsible for the formation of the soil?
- Which layer of the soil supports vegetation and why ?

Class	VIII	Subject	Geography
-------	------	---------	-----------

Prd	4	Chapter	2.Land, Soil and Water Resources
-----	---	---------	----------------------------------

Sub-Concepts	Soil in India (ICAR Classification) Alluvial soils (features, distribution, crops grown, importance)
Teaching Aid To be used	PPT and relevant videos as well as images

Sl. No	Step Wise (What to be done)
1. RECAPITULATION	Teacher will ask following questions to recall the previous learning of the students: - 1.What is soil profile? 2. What is soil horizon? 3. Which layer of the soil is most important according to you and why?
2	Soil in India (ICAR Classification): - The Indian Council of Agriculture Research (ICAR) has classified the soil found in India into Eight groups on the basis of Origin, Color, Composition, texture and location.
3	8 categories they are alluvial soils , Black cotton soils , Red soils , Laterite soils , Mountainous or forest soils , Arid or desert soils , Saline and alkaline soils Peaty and marshy soils .
4	Alluvial soils : - 

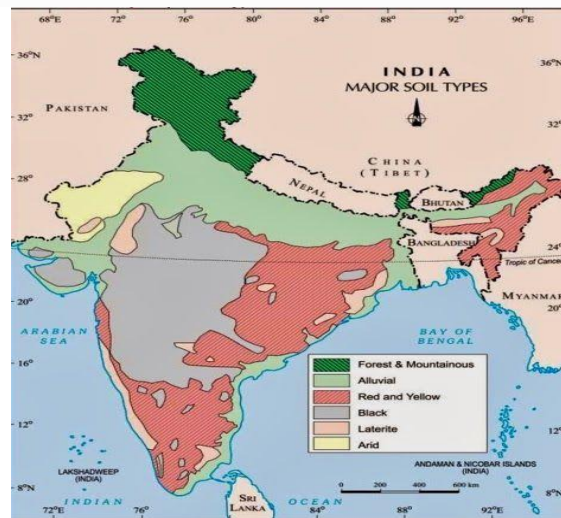
5

Black Soil



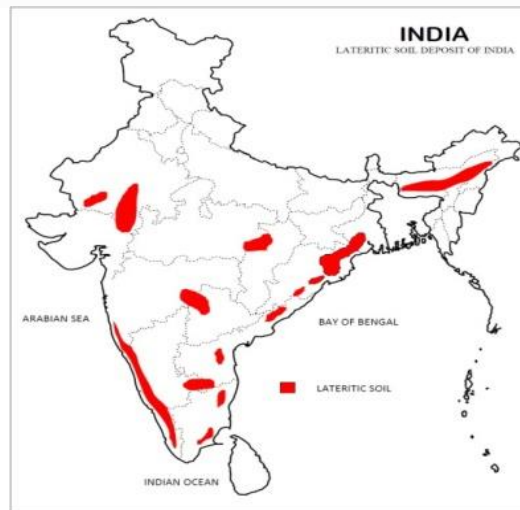
6

RED SOIL, MOUNTAIN SOIL, ARID SOIL



7

LATERITE SOIL



8 TYPES OF INDIAN SOILS	SOIL	FORMATION	FEATURE	AREAS
	ALUVIAL SOIL	DEPOSITIONAL ACTION OF RIVERS	MOST FERTILE SUPPORT CULTIVATION	INDO-GANGETIC PLAINS, DELTAIC PLAINS
	BLACK SOIL (REGUR/COTTON)	SOLIDIFICATION OF LAVA	SWELLS WHEN WET. DEVELOPES CRACKS WHEN DRY GOOD FOR CEREALS, PULSES, OIL SEEDS, CITRUS FRUITS, VEGETABLES	DECCAN PLATEAU
	RED SOIL	DIFFUSION OF METAMORPHIC ROCKS	SANDY, RED IN COLOUR (PRESENCE OF IRON-OXIDES) LESS FERTILE IN UPLANDS	ODISHA, MP, TN, TELANGANA, AP, KERALA
	LATERITE SOIL	INTENSE LEACHING (WATER WASHES OUT SOIL NUTRIENTS)	NEED FERTILISERS FOR CULTIVATION USED FOR BRICK MAKING, JUTE, MILLETS, FODDER CROP	MAHARASTRA, KARNATAKA, KERALA, ODISHA, TN, WB
	ARID/ SANDY SOIL	DRY REGION, LACK MOISTURE	LOW MOISTURE, LACK VEGETATION COVER, IRRIGATION HELPS IN CULTIVATION	WESTERN RAJASTHAN
	PEATY/FOREST SOIL	NATURAL OCCURING FOREST AND REGIONS OF DENSE VEGETATION	RICH IN HUMUS, ORGANIC MATTER,	UTTARANCHAL, J&K, JHARKHAND, BIHAR, N-E States
9 HOME ASSIGNMENT	<ol style="list-style-type: none"> 1. Mention various soil found in India? 2. Give three features of alluvial soil. 3. Write the distribution of laterite soil in India? 4. Which soil is also known as Regur Soil? Mention features of the same. 			

NOTE: As Types of soil is a continuous topic so this TN should be referred for multiple session as per classification of soils.



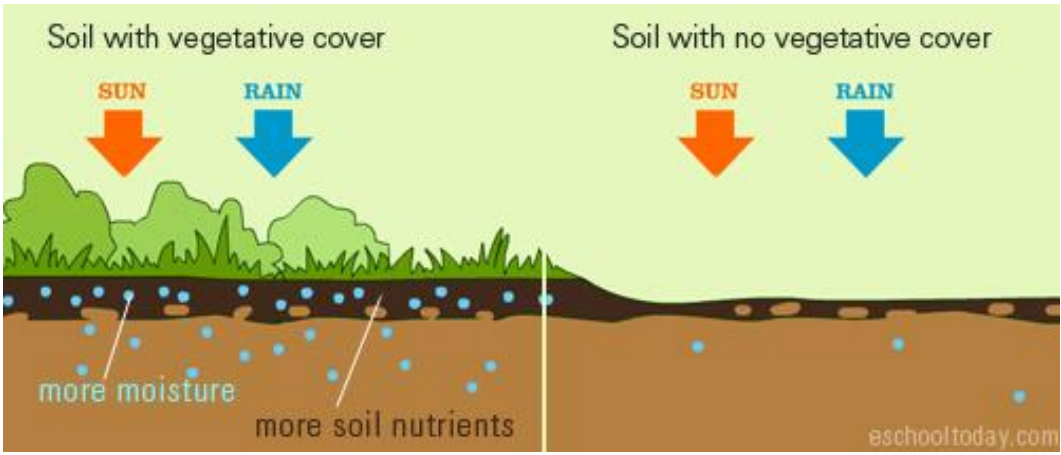
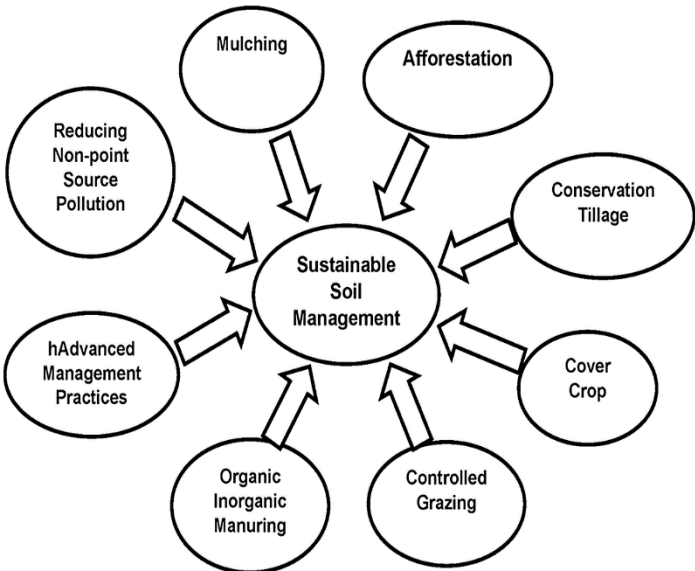
ODM Teachers' Note

Class	VIII	Subject	Geography
--------------	-------------	----------------	------------------

Prd	5	Chapter	2.Land, Soil and Water Resources
------------	----------	----------------	---

Sub-Concepts	Soil erosion and why soil needs to be conserved Some soil conservation methods (afforestation, plugging, contour bunding)
Teaching Aid To be used	PPT and relevant videos as well as images

Learning Outcome	<ul style="list-style-type: none"> To be able to know consequence of soil erosion. To be able to understand the significance of methods of soil conservation.
-------------------------	---

Sl. No	Step Wise (What to be done)
1 Recapitulation	<p>Teacher will ask following questions to recall the previous learning of the students: -</p> <ol style="list-style-type: none"> 1. What are the factors that affect formation of soil? 2. Why soil is important for us? 3. Name types of soil found in India. 4. Name the most fertile soil. 5. Which soil is found in your state 'Odisha'?
2	<ul style="list-style-type: none"> Soil erosion is the removal of top soil. https://www.youtube.com/watch?v=qNTOq1uEObc SOIL EROSION
3	<ul style="list-style-type: none"> Soil erosion and why soil needs to be conserved 
4	<p>Some soil conservation:</p> <p>https://www.youtube.com/watch?v=uo_ntewAemw</p> 

5.



Mulching



Strip farming



Crop rotation



Dry farming

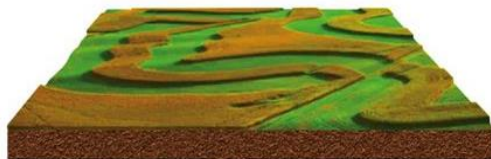
6



(a) Terracing



(c) Alley cropping



(b) Contour planting and strip cropping



(d) Windbreaks

7 Home Assignment

1. What is soil erosion?
2. Mention methods to conserve soil in the hilly regions.
3. What can be done to conserve soil in the coastal regions?

Class	VIII	Subject	Geography
--------------	-------------	----------------	------------------

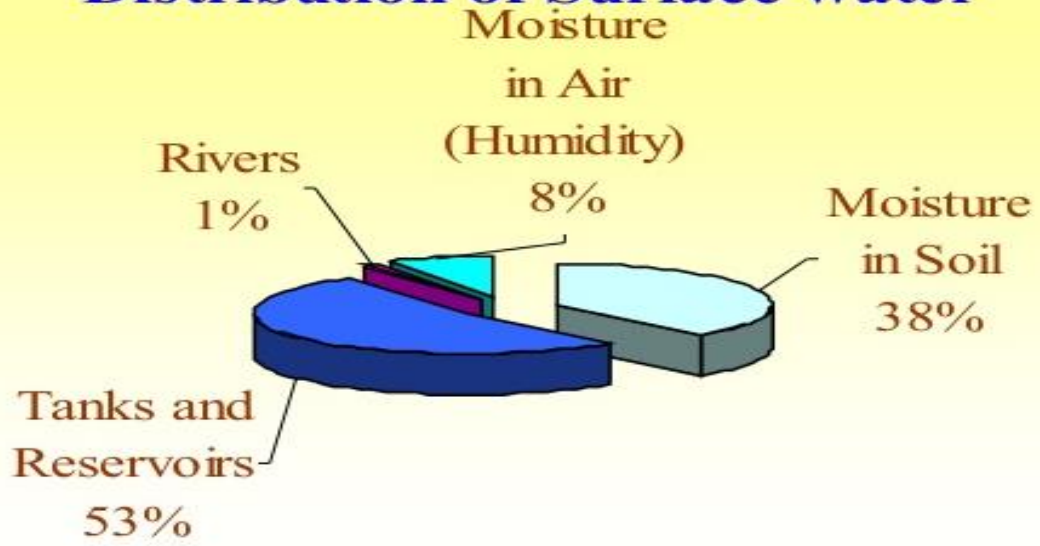
Prd	6.	Chapter	2.Land, Soil and Water Resources
------------	-----------	----------------	---

Sub-Concepts	Water as a resource Distribution of water on earth Water cycle Uses of water
Teaching Aid To be used	PPT and relevant videos as well as images
Learning Outcome	<ul style="list-style-type: none"> To be able to understand distribution of water. To be able to understand the significance of water resources & types of water resources in India. To know different ways of water conservation.
Sl. No	Step Wise (What to be done)
1 RECAPITULATION	<p>Teacher will ask following questions to recall the previous learning of the students: -</p> <ol style="list-style-type: none"> 1.What is soil erosion? 2. How soil erosion can be prevented in plain regions? 3. What is contour bunding?

2

Water as a resource and Distribution of water on earth: -

Distribution of Surface water



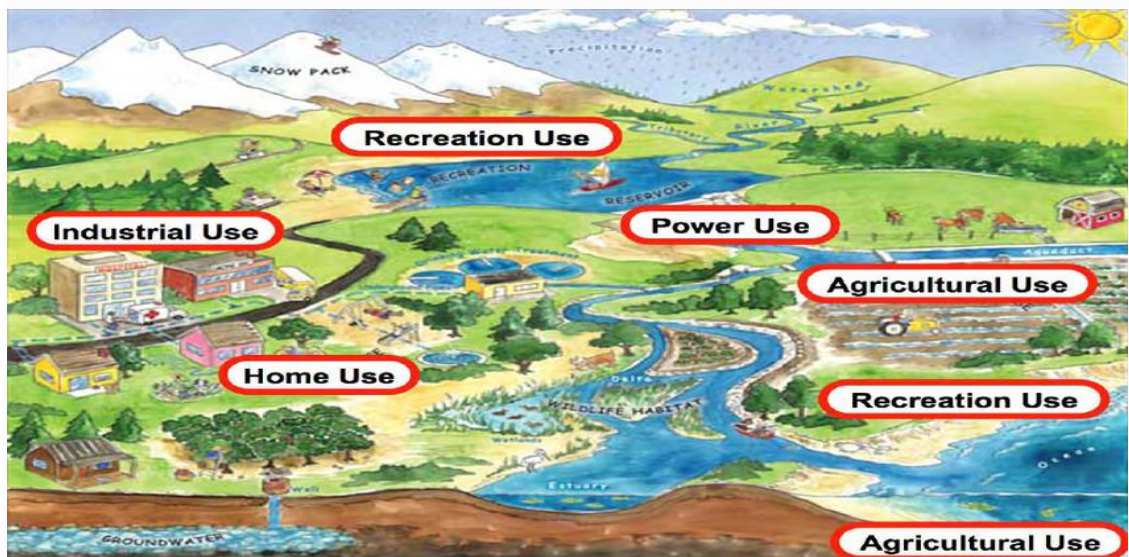
3

Water cycle: -



4

Uses of water: -



5 HOME ASSIGNMENT

1. Differentiate between perennial and season rivers of India.
2. Mention uses of water.



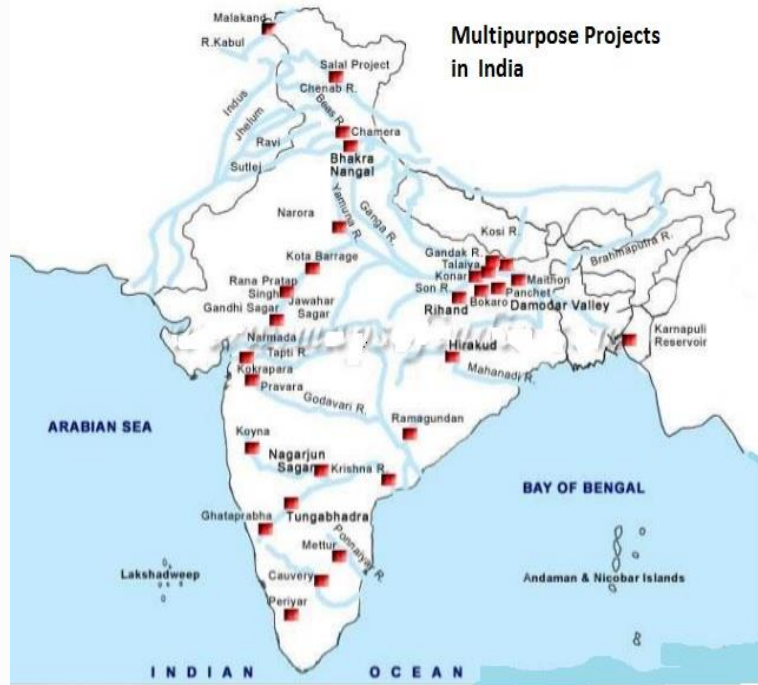
EDUCATIONAL GROUP
Changing your Tomorrow

ODM Teachers' Note

Class	VIII	Subject	Geography
Prd	7.	Chapter	2.Land, Soil and Water Resources
Sub-Concepts	Water resource of India Rivers of India (Perennial & Seasonal) Multi-purpose dam projects and their uses		
Teaching Aid To be used	PPT and relevant videos as well as images		
LEARNING OUTCOME	<ul style="list-style-type: none"> • To be able to understand distribution of water. • To be able to understand the significance of water resources & types of water resources in India. • To know different ways of water conservation. 		
Sl. No	Step Wise (What to be done)		
1 RECAPITULATION	<p>Teacher will ask following questions to recall the previous learning of the students: -</p> <ol style="list-style-type: none"> 1. Mention distribution of water on the earth. 2. Briefly explain how water is being balanced on the surface of the earth. 		

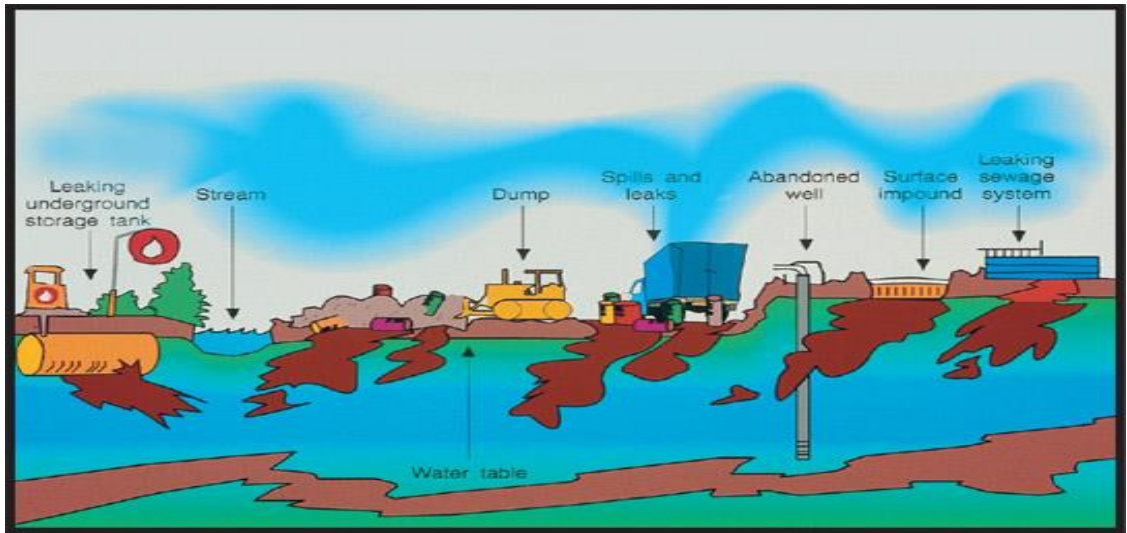
1

Multipurpose River Project



2


WATER POLLUTION



3

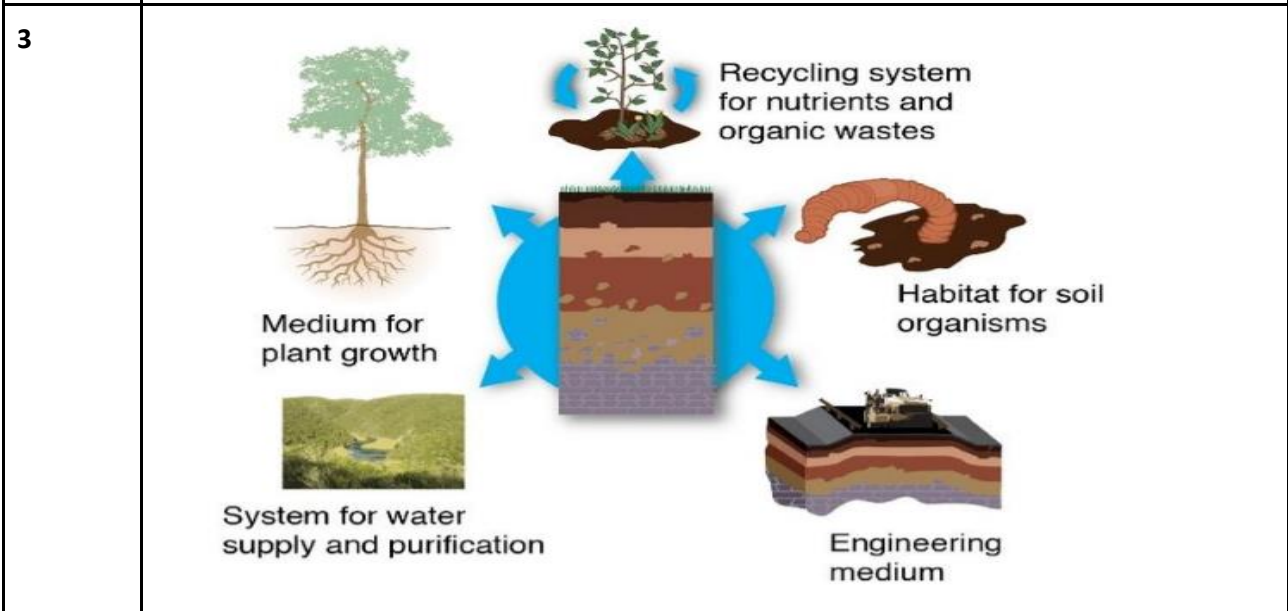
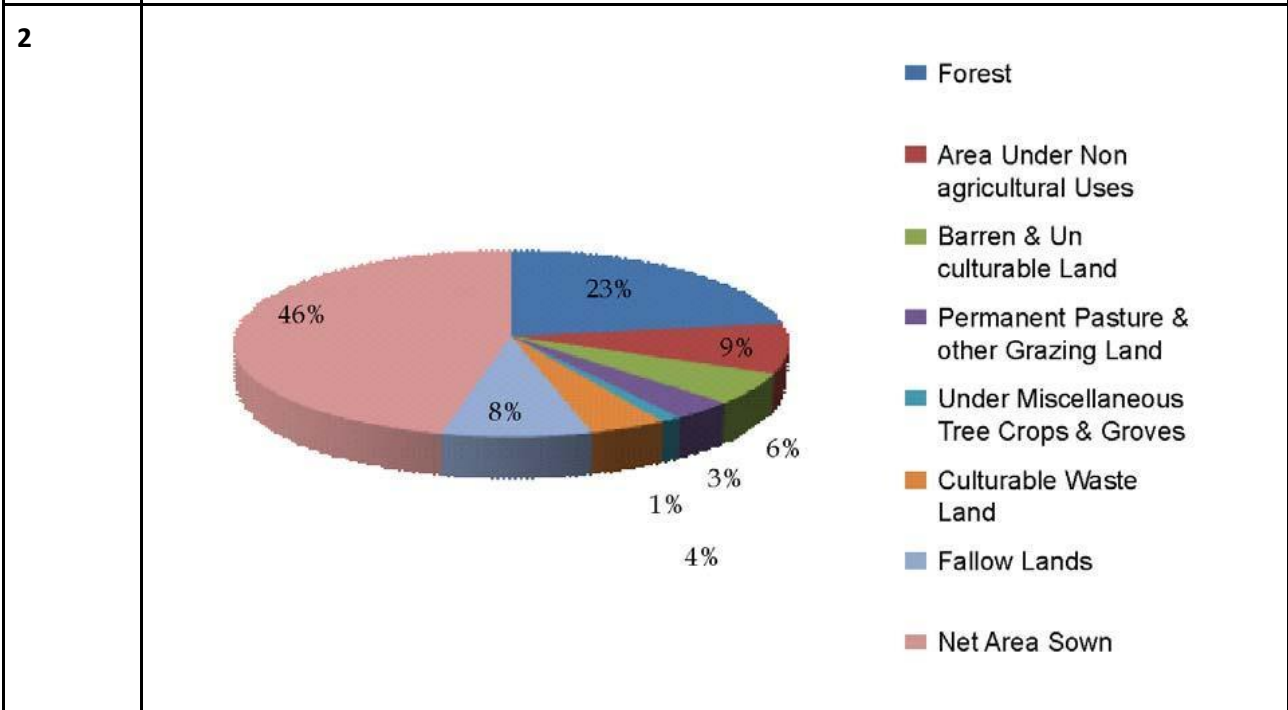
Water Conservation



	
4.HW	<ol style="list-style-type: none"> 1. What are the different sources of water in India? 2. How water gets polluted due to industries? 3. What are different ways of water conservation?

Class	VIII	Subject	Geography	
Prd	8.	Chapter	2.Land, Soil and Water Resources	
Sub-Concepts	Review of the chapter and Exercise Questions			
Teaching Aid To be used	MAP and mind map.			
LEARNING OUTCOME	<ul style="list-style-type: none"> • To be able to recall all concepts of the chapter. • To be able to understand the significance of resources and reflect their learning analytically. • To be able to attempt various questions from the topic. 			
Sl. No	Step Wise (What to be done)			

<p>1 Classifica tion of Land</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid black; background-color: #4a86e8; color: white; padding: 10px; width: 30%; text-align: center;"> <p>RELIEF (Plains, Plateau, <u>Moumtains</u>)</p> </div> <div style="border: 1px solid black; background-color: #4a86e8; color: white; padding: 10px; width: 30%; text-align: center;"> <p>SOIL FERTILITY (Fertile and Barren Land)</p> </div> <div style="border: 1px solid black; background-color: #4a86e8; color: white; padding: 10px; width: 30%; text-align: center;"> <p>Development of Area (Rural and Urban)</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="border: 1px solid black; background-color: #4a86e8; color: white; padding: 10px; width: 45%; text-align: center;"> <p>OWNERSHIP (Private, Community or Government)</p> </div> <div style="border: 1px solid black; background-color: #4a86e8; color: white; padding: 10px; width: 45%; text-align: center;"> <p>USE (Arable, Pasture, Forests, Fallow, Cultivable waste, Non-agricultural)</p> </div> </div>
---	---



4

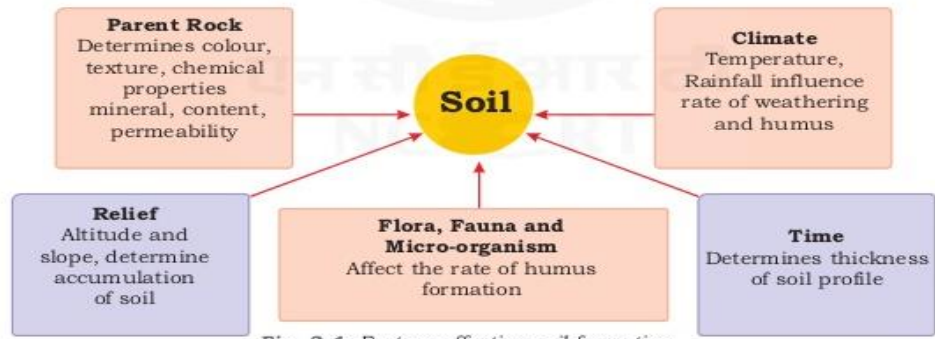
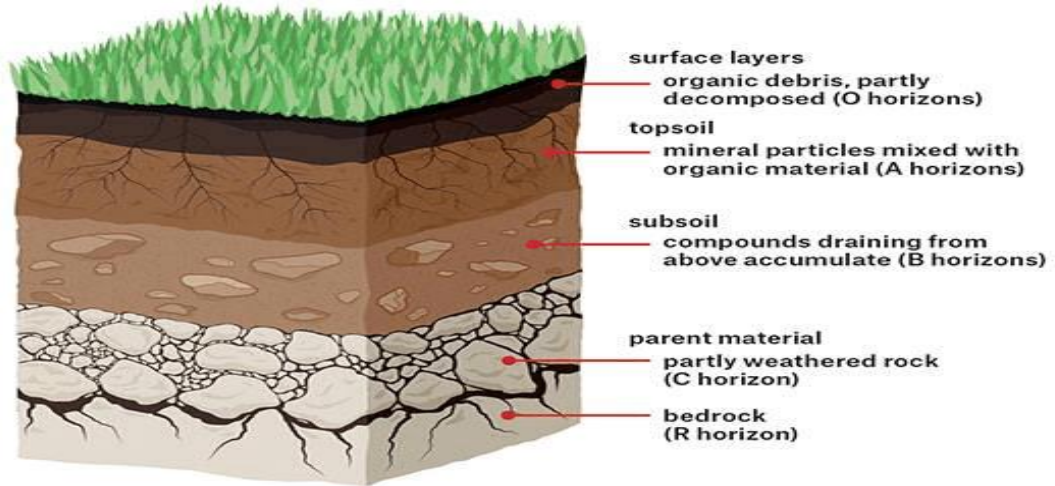
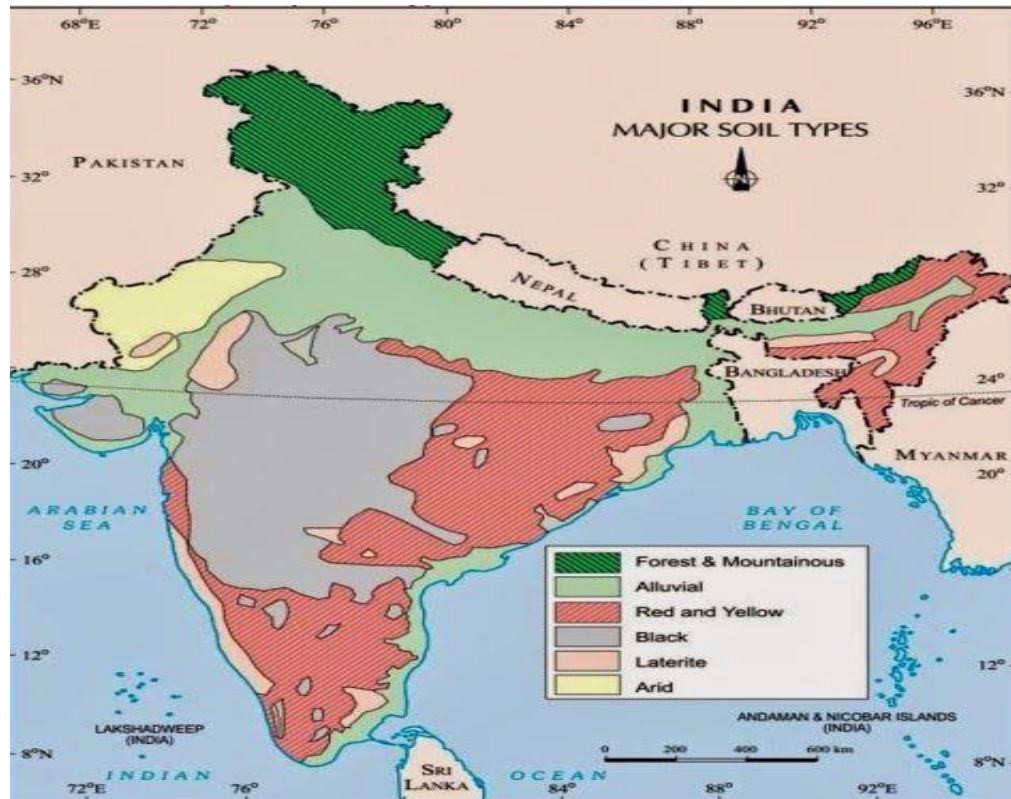


Fig. 2.4: Factors affecting soil formation

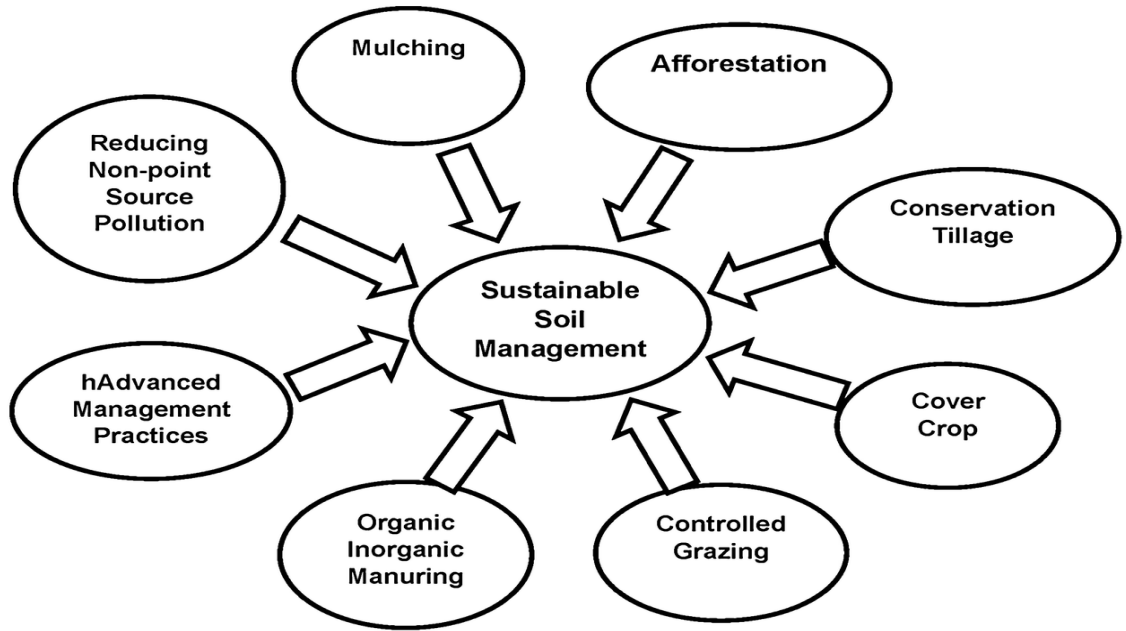
5.



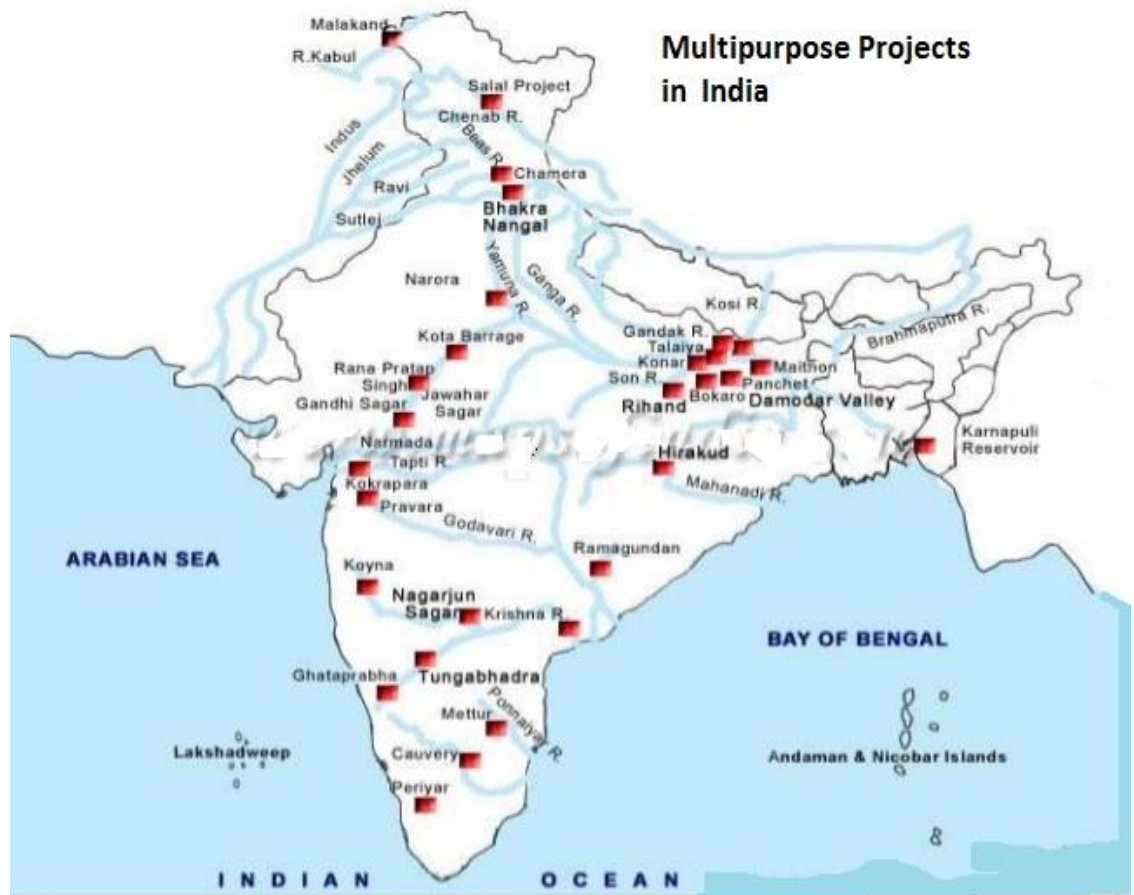
6



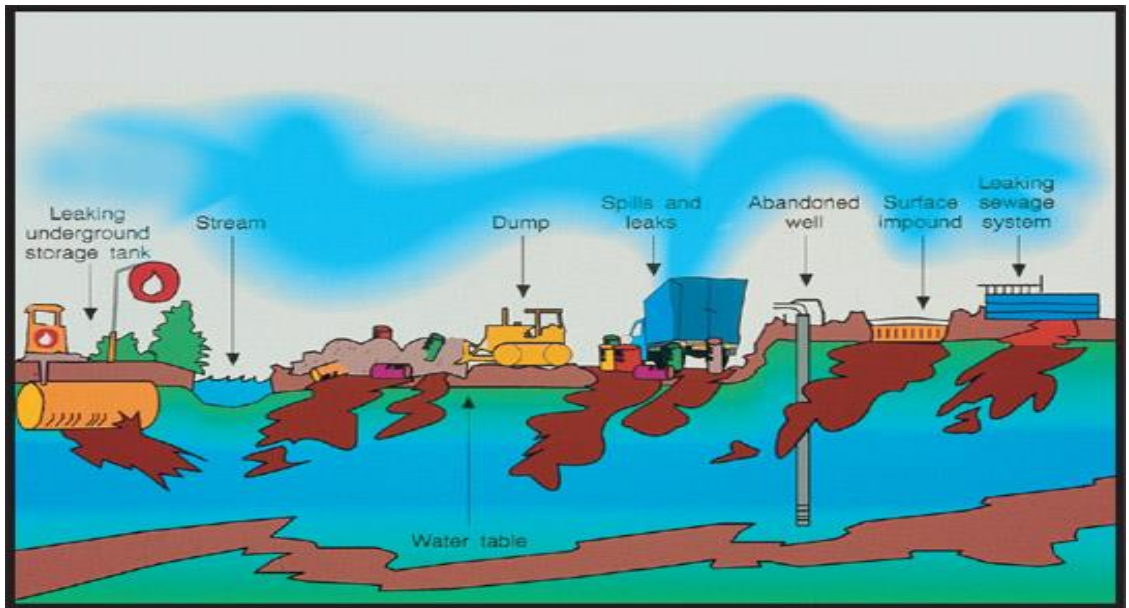
7



8



9



10

TIPS ON WATER CONSERVATION

- Use a water efficient flush toilet.
- Find and repair leaks.
- Take a quick shower.
- Convert to water and energy saving faucets.
- Avoid wasting running water as possible.
- Use an energy efficient washing machine.
- Water plants during the coolest part of day.
- Clean driveways and sidewalks with a broom instead of hose.

11.
HOME
ASSIGN
MENT

Page 20 Question HOTS and VALUE BASED QUESTION