



#### **Themes**

- 1. Rainfall-An important factor governing Indian economy
- 2. Drought in Maharashtra: Issues and Implications

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Class



Shiksha Kendra, 2, Community Centre, Preet Vihar, Delhi-110092, India

## Social Science (087) Class - IX

# Theme 1: Rainfall-An important factor governing Indian economy

(Based on Geography Unit 4 - Climate)

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Lea	ining objectives
	To deepen the knowledge and understanding of students regarding India's climate and its effects on Indian economy.
	To make learners realize that the process of change is continuous and any event or phenomenon or issue cannot be viewed in isolation but in a wider context of time and space.
	To create awareness on the importance of rainfall.
	To come up with latest and innovative suggestions to solve the problem of heavy and low rainfall.
Not	e to readers
	To assign the text material to the students in groups so that they can read and understand it through reciprocal teaching, view it from different perspectives and brainstorm the main ideas in the class.
	To provide a platform to each and every student to participate in active learning process, through discussion, analysis and higher order thinking skill.

To encourage open response in solving problems, application of concept, comparison and

☐ To facilitate the learners to understand and appreciate the diversity in the land and people of the country with its underlying unity.

Social Science (087) Class - IX

### Theme 1: Rainfall-An important factor governing Indian economy

(Based on Geography Unit 4 - Climate)

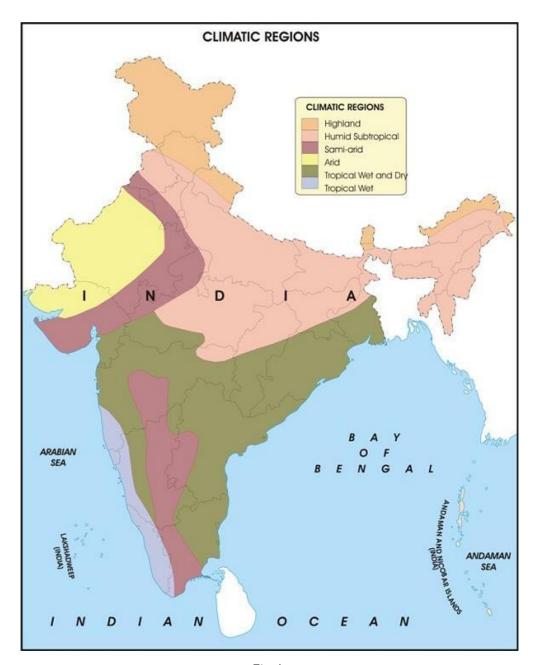
#### **Abstract**

India, a primarily agrarian country, is dependent on rain for 62 % of its net sown agricultural area. The southwest monsoon (June-September) provides about 80 % of the India's precipitation. As can be expected, a good monsoon season with sufficient rainfall results in good agricultural production, whereas a bad monsoon season with low precipitation negatively impacts the economy through lower production. Thus Indian agriculture is governed by monsoon. Bumper production provides growth and development to the rural areas, generating self employment facilities, raw material to agro-based industries, better living standard and food security. Text enables to enrich knowledge about Indian climate and agriculture. The students can understand the role of monsoon in governing Indian agriculture, its economy, direct and indirect impact on each and every occupation and suggested ways to reduce dependence of agriculture on monsoon.

The climate of India comprises a wide range of weather conditions across a vast geographic scale and varied topography, making generalizations difficult. India has monsoon type of climate. Notwithstanding its broad climatic unity, the climate of India has many regional variations, expressed in the pattern of winds, temperature and rainfall, rhythm of cycle of seasons and the degree of wetness or dryness. These climatic differences are due to location, altitude, distance from the sea, faces of the land and upper air circulation.

#### Think and discuss

How the monsoon regime gives unity to India?



 $\label{eq:Fig.1} Fig.~1 \\ Source: http://www.indiamapssite.com/india/climatic-regions-map.html$ 

#### **Characteristics of Monsoonal Rainfall includes**

- □ Seasonal in character-June to September
- ☐ Mainly orographic in its mode of occurrence
- □ Rainfall decreases with increasing distance from the sea
- ☐ Burst of monsoon and dry and wet spells
- Pulsating in nature

#### Did you know?

The Bombay HC order has ordered to shift IPL matches out of Maharashtra owing to water crisis, then **IPL chairman** said they are ready to do whatever is in their hand to resolve the water crisis but shifting of matches is surely not a solution.

#### Impact of Monsoon Climate of India on Agriculture -An overview

India is a Monsoon land. Besides it is basically an agricultural country. Monsoon climate influences agricultural crops in a big way as under:

- ☐ India is primarily an agricultural country. About 74% of the total population directly or indirectly earns livelihood from agriculture. Growth and development of Indian agriculture is mainly dependent on Monsoon climate.
- Climatic diversities have led to differential cropping patterns. Both tropical and temperate climates allow agricultural crops to be raised here without any difficulty. Agricultural crops include rice, wheat, jawar-bajra, cotton, tea and oilseeds.
- ☐ High temperatures have resulted in ever growing seasons: Agricultural crops are raised throughout the year.
- Sudden rise in temperatures in summer culminates in less and partially grown grains. Hence our production of food grains is inferior in quality.
- Western depressions cause rains in the North-western parts of the country in winter. It is ideal for wheat cultivation.
- Dry summer causes dearth of fodder for animals.
- Uncertainty and unevenness of rainfall causes damages to agricultural crops. It also creates twin problems of floods and famines in the country.
- Mosquitoes breed in large numbers in rainy season, causing Malaria. Other diseases which cause anxiety in this season are Cholera and Diphtheria.



Fig. 2

Indian agriculture's tryst with monsoon, or the South-West monsoon to be precise, is an age-old one. It is also unique. There is hardly any other climatic event across the globe that can match the Asian monsoon in its grandiose sweep and bearing on the economy. The monsoon that hits India is the largest in the world because of the extent of area covered, which is practically the whole subcontinent. "Industry in India depends greatly on the monsoon," says Laxman Singh Rathore, Director General, India Meteorological Department (IMD). "It is believed that only the agriculture sector is affected by monsoon. Despite its contribution to the GDP declining to 15 per cent, it remains a vital sector for rural India where 65 per cent of our population resides. But all other sectors, particularly power, are equally dependent on the season," adds Rathore.

A century ago, Viceroy Lord George Curzon had said that the Indian economy is a 'gamble on the monsoon.' Rathore agrees that it continues to be so. Weather patterns impact farm and industrial output, labour productivity, energy demands and health. India, which is the world's second-biggest grower of rice and wheat, depends on the June-September rains to water its farms because about 60 per cent of arable land isn't irrigated. Farmers rely on the timing of the monsoon to decide which crops to grow. The season typically starts on the first day of June. Every few years, parts of the country are impacted due to insufficient rains. This drives up food prices and hits electricity output. This causes inflation, the bugbear of policymakers, to flare up.

#### Riding the luck

The Indian monsoons, among the most prominent and oldest weather patterns in the world, are perhaps unique in terms of their profound economic significance, affecting the lives of 25 per cent of the world's population that live in the Indian sub-continent. In India alone, monsoon rains are vital to the farm sector which accounts for 14 per cent of the national economy and around 50 per cent of employment. Moreover, half of India's farmland lacks irrigation. Yet, it has proven notoriously difficult to predict, and understanding of the phenomenon is still evolving. In addition, the good monsoon is likely to stimulate rural employment and give a fillip to industrial production as well.

# Searching for perfection- Innovative Methods Required to Deal with 'Deficient Monsoon'

- Need of the hour is to develop latest technologies that enhance farmers' confidence and give a higher cost-benefit ratio are organic practices such as growing green manure, and plant protection measures, such as applying a herbal decoction.
- The present scenario exemplifies the importance of making agriculture in India more drought resistant and increasing agricultural water use efficiency to produce "more crop per drop." The Centers for International Projects Trust, affiliated with the Columbia Water Center at the Earth Institute, has undertaken various low cost technological innovations to reduce the amount of water used for the production of rice and wheat.

- In Central Punjab, India, the center and Punjab Agricultural University worked with 8,000 farmers to achieve a 12-15 percent reduction in water use through the use of low cost tensiometers, a tool used to measure the moisture content of the soil. These savings also correspond to a reduction in energy usage for groundwater extraction. The center plans to introduce a new, easy-to-use and low-cost soil moisture sensor that will inform farmers when to irrigate their fields.
- In Gujarat, India, the center has been pilot testing the use of GW-11 variety of wheat with farmers in the Mehsana district of North Gujarat. GW-11 is drought resistant and produces yields that are comparable to the traditional variety of wheat. The center is in the process of collecting this harvest season's GW-11 crop yield measurement data with the intent to analyze the production versus the number of irrigations. Initial findings indicate that the GW-11 variety requires less irrigation than traditional wheat.
- Low cost innovations not only reduce water usage in agriculture but also make farmers less vulnerable to climate variability, especially as it relates to the monsoon season. Simple solutions like the ones being developed by the center have the potential to be widely adopted and lead to significant water savings and growth in agricultural production.

The table below shows the impact of a normal versus below normal southwest monsoon season on the production of two major food grains – rice and wheat – across the past decade.

Year	Status of Monsoon	Production of Rice (Metric Tonnes)	Production of Wheat (Metric Tonnes)
2002-03	Below Normal Monsoon - Drought Year	71.82	65.76
2003-04	Normal Monsoon	88.28	72.11
2004-05	Below Normal Monsoon - Drought Year	83.13	68.64
2005-06	Normal Monsoon	91.79	69.35
2006-07	Normal Monsoon	92.76	74.89
2007-08	Normal Monsoon	96.69	78.57
2008-09	Normal Monsoon	99.18	80.68

2009-10	Below Normal Monsoon - Drought Year	89.09	80.80	
2010-11	Normal Monsoon	95.98	86.87	
2011-12	Normal Monsoon	105.30	94.88	

Source: DAC data book and IMD Reports

The data shows a decrease in the production of rice and wheat during drought years (2002, 2004 and 2009).

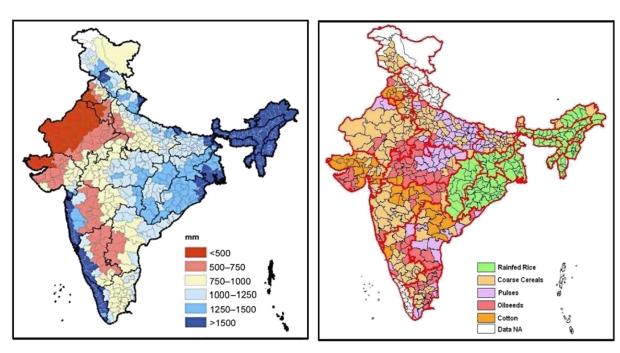


Fig. 3: District wise average annual rainfall

Source: Current Science

Fig. 4: Rain fed districts and their main crops

Source: NRAA, 2012

Precipitation in India is unevenly distributed over time and space. As shown in Figure 3, average annual rainfall varies across districts, with less than 500mm in districts of western Rajasthan to more than 1,500mm in the northeast. Figure 4 shows that rain-fed rice is mostly prevalent in the eastern and northeastern parts of India, whereas coarse cereals are mainly confined to western and central regions.



Fig. 5: Agricultural Practice - Dependence on Monsoon

Thus we can say that we have to find alternatives to reduce dependence on monsoon, improve agricultural productivity and create rural job opportunities. Dams used for irrigation projects help produce electricity and transport facilities, as well as provide drinking water supplies to a growing population, control floods and prevent droughts. Indian economy is vitally linked with the monsoon because of its water resources. The distinct advantage of hydro-electric power over all other types of power is that its source, i.e. monsoon water, is perennial, although it shows some fluctuations from year to year. The population of India is increasing at a much faster rate than the total food grains production and soon the country may be facing a serious economic crisis. A large part of the monsoon water which is currently unutilized should be held at suitable locations for irrigation and possible power generation.

#### **Bibliography**

- Chatterjee, A. (1998). Simulating the impact of increase in Carbon Dioxide and temperature on growth and yield of Maize and Sorghum. M.Sc. thesis, Division of Environmental Sciences, Indian Agricultural Research Institute, New Delhi.
- □ Chattopadhayay, R. (2000). Simulating the impact of climatic variability and climate change on the productivity of sugarcane. Ph.D. Thesis, Division of Environmental Sciences, Indian Agricultural Research Institute, New Delhi.
- Rathore B.M.S. et al, "Drought Conditions and Management Strategies in India" country report prepared for the regional workshop for Asia-Pacific as part of the UN-Water Initiative on "Capacity Development to Support National Drought Management Policies, Hanoi, Vietnam May 6-9, 2014.
- Sinha S K and Swaminathan M S. (1991). Deforestation, climate change and sustainable nutrition security: a case study of India. Climatic Change 19: 201-209.

Saseendran, S.A., Singh, K.K., Rathore, L.S., Singh, S.V., Sinha, S.K. (1999). Effects of climate change on rice production in the tropical humid climate of Kerala, India. Climate Change 12:1-20.

#### **Sample Questions**

#### 1. What can we do to stop climate change?

[5]

Ans. There are lots of things you, your friends, and your family can do each day to reduce greenhouse gas emissions. A major way that greenhouse gases get into the atmosphere is when people burn coal, oil, and natural gas for energy. Here are some simple steps you can take to use less energy:

- ☐ Turn off the lights when you leave a room.
- Turn off your computer and other electronic devices when you're not using them.
- Drive less. Instead, walk, ride your bike, or use public transportation if you can.
- Use less water.
- Create less waste.
- Recycle used paper, cans, bottles, and other materials.

#### 2. How is rainfall an important factor governing Indian economy?

[5]

Ans. Indian economy revolves around monsoon. It plays significant role in the economic life in India. Agriculture is a gamble on monsoon. Bumper production gives more raw material to agro-based industries. Generation of hydroelectricity means more power for industries and agriculture. Agriculture and industry go hand in hand.

#### **Social Science Class - IX**

# Theme 2: Drought in Maharashtra: Issues and Implications

# **Learning Objectives**

	To understand the concept of Drought and famine.
	To comprehend the reasons which lead to the situation of drought in any country.
	To analyze the reasons behind the recent drought like situations in some parts of our country.
	To study the steps taken by the government to tackle the situation of Drought in those regions.
	To understand likely solutions to the problem of drought in future.
	To comprehend the role of various water preservation techniques in the direction of water conservation and preservation.
Not	e to readers
	To assign the text material to the students in groups so that they can read and understand in through reciprocal teaching, view it from different perspectives and brainstorm the main ideas in the class.
	To provide a platform to each and every student to participate in active learning process through discussion, analysis and higher order thinking skill.
	To encourage open response in solving problems, application of concept, comparison and inference.
	To facilitate the learners to understand and appreciate the diversity in the land and people of the country with its underlying unity.

#### Social Science Class - IX

### Theme 2: Drought in Maharashtra: Issues and Implications

#### Abstract

Human Beings have exploited the resources of Earth over centuries; they have used, misused and even abused the resources without thinking about the repercussions which they might have to face in future. Our beloved Mother Nature has borne upon the pushes and pressures silently over the long period but even such a compassionate and benign identity has all the rights to be angry and unhappy about the behavior towards her. She has her own ways and means to show its anguish, agony and anger, history is full of instances in this regard like massive Floods, devastating Earthquakes, furious Tsunamis and colossal Famines etc. The latest drought in Maharasthra and some other parts of India can be quoted as an addition to the list. This text will be aimed to understand the issues and implications of this situation.

Jatin and Sumit, two brothers living in Mumbai, were watching an IPL Cricket match at their home when suddenly got a news notification on their mobile phone that IPL matches scheduled to take place in Maharashtra are being shifted out of Maharashtra as per the orders of Hon'ble High Court of Mumbai. They were saddened as they were planning to watch the final at Wankhede Stadium, Mumbai. Immediately they wrote a post on a popular social – networking site and got huge support from people from all walks of life.

Not just these two boys rather most of the cricket fans were sad. Next day when they were discussing loudly about this in their Physical Education period, their Geography teacher who was passing by intervened. She listened to the points raised by the students and then asked them to visit her to the Geography lab, next day in the zero period with the permission from the class-teacher, for a detailed discussion on the matter.

She went back home and collected a few newspaper clipping regarding the drought conditions prevailing in Maharashtra particularly in the Marathwada, Vidharbha & Latur regions. The next morning when Jatin and Sumit along with two of their classmates Neha and Richa visited her she started as:

My dear students as you are aware that India is primarily an agrarian economy which is entirely dependent on Rain-God (Monsoon) for the water available for irrigation in most parts of the country. The present status of the state of Maharashtra is extremely grave so far as water availability is concerned, you must not be knowing that the Government of Maharashtra has declared 'drought like situation' in 14,708 out of

Fig. 1: An old farmer looking at parched sky

around 43,000 villages. You know how difficult it is to live without water, try to do a real time exercise by not drinking water when you are in school, soon you will have the hands on experience of what I am trying to convey to you.

A number of researches indicate that the occurrence of such extreme events is expected to rise and yet the current situation in Latur is clear evidence that monetary imperatives, rather than environmental concerns are driving the state's water usage policy. Despite 73 per cent of its land area being classified as semi-arid, Maharashtra is among the largest producers in the country of two water intensive cash crops – sugarcane and cotton. By the government's own statistics, 2,450 litres of water is required to produce 1 kg of sugar in the state agAnst 990 litres in Uttar Pradesh. Cotton has an even higher cost - 1kg consumes on average 22,500 litres of water, according to the Water Footprint Network.

Neha interrupted her, Ma'am, this is what I was telling Sumit when he was disturbed by the IPL matches being shifted due to water scarcity. Ma'am, I am here today since I feel the pinch and pain of the millions of people reeling under the situation at present and its not just this state, many other states are also under the grip of this grave situation. Richa and I have made this project/scrap file collecting the news reports and pictures in the recent days. Please see. The teacher took the file with a smile. Looking at the file she said you have made my job of explaining to Jatin and Sumit, a lot easier.



Fig. 2: Dried Land

Dear, Droughts are one of the oldest, scariest and the deadliest natural calamity that have ever persisted in this country. Drought and famines have claimed countless lives in 18th, 19th and even in the beginning of 20th century. This is one phenomenon which has been prevalent in this country for ages. History has been the witness of such situations in past (recent and distant) ranging from dried patches of land, waterless wells/ponds/canals/ rivers, parched sky and

unbearable conditions to live without anything to eat and not even a single drop of water to drink.



Fig. 3: Water Train

Source: http://www.thehindu.com/news/national/other-states/latur-water-train-when-the-whistle-became-sound-of-music/article8468071.ece

This nation has faced one of the deadliest famines of this world viz. the Bengal famine which has seen millions of people starving and collapsing for the want of even a handful of grain. India being an overly dependent on monsoon for its irrigation and agricultural purposes, any failure on the front of the rainfall and water supply may cause havoc in this country with varied cropping patterns across the nation around the year.

This year such a situation has affected more than 230 districts of our country are facing drought or similar conditions across 10-12 states. The situation is gravest in places like Latur, Vidharbh & Marathwada in Maharashtra; Bundelkhand in Uttar-Pradesh and most parts of Karnataka. The situation is so horrible that the government has to transit water through trains being named as 'The Water Express' to the drought affected areas. The 'water express' is part of a series of measures designed to provide emergency relief to the drought-hit Marathwada region of Maharashtra state. Dams that supply water to several districts in the area have run completely dry in recent weeks, prompting the complete shut down of public water supply, closure of hospitals, commandeering of borewells and even water-related deaths.

The situation is so distraught that the district administration has to impose Section 144, preventing the assembly of more than five people near water distribution points from this Water Express, so as to avoid any sort of riot or stampede.

As a regular newspaper reader, to me, the drought in Marathwada and other parts of Maharashtra has hardly been a surprise. After a very weak monsoon last year, it has been clearly forecasted by various learned people that the water supply in the three major dams that supply Latur would not last until the next spell of showers in this region.

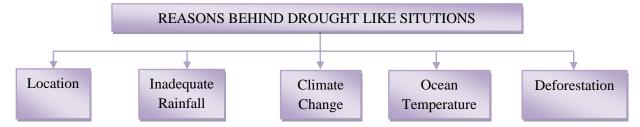


Fig. 4: People trying to get water

### Reasons behind the present conditions

Maam, if I am not wrong the reasons for the occurrence of drought are beyond the human control, is it not correct? Jatin asked the teacher.

Yes, to some extent Jatin, there are innumerable reasons for the occurrence of drought but if I were to discuss a few prime reasons for the drought there may be quoted as follows, let us discuss them one by one in detail:



Location: India is a tropical country which generally gets scattered rainfall at various places, if we have Cherrapunjee, in Meghlaya on one hand with huge rainfalls we also have places like Kalahandi in Odisha where we have had the starvation deaths due to famine in the recent past. In the central region of this country where the average annual rainfall is upto 60 cms and therefore these areas are badly affected by the scanty rainfall due to failure of monsoon. The Irrigation Commission of India has identified 67 districts in this country which are extremely drought prone over the states of Rajasthan, Odisha, Andhra Pradesh, Parts of Karnataka, Uttar-Pradesh and Maharashtra.



Fig. 5: People trying to get water from a deep well

☐ Inadequate Rainfall: In India there has been a regular pattern of failure of monsoons which results in extremely in adequate rainfall leading to crop failure and subsequent droughts and famines. As mentioned earlier too, droughts have been a major reason of innumerable deaths/suicides in the recent and distant past in our country.



Fig. 6: Dry River

- □ Climate Change/Global Warming: This may be termed as one of the major reasons of droughts not just in our country rather across various nations where such situations have arisen. Global warming has caused rise in the average temperatures of Earth leading to shift in rainfall pattern and erratic monsoon. This has increased heat during summers causing more evaporation of water from land and unless there is sufficient rain drought and famines are imminent. With climate change increasing the frequency of erratic weather patterns, particularly the state of Maharashtra has lurched blindly from one disaster to another year after year. According to a 2008 World Bank report, a drought in 2003 and a flood in 2005 together have absorbed much higher of the amount of the state's budget than what the state had planned on the irrigation, agriculture and rural development.
- Ocean Temperature: In the Indian Subcontinent, often the El-Nino effect has often been held responsible for maneuvering the monsoon pattern. Generally speaking the abnormally high temperatures at the sea-surface must result in greater evaporation of water and cause heavy rain across the country. However, a contrasting phenomenon has been observed wherein, the El-Nino creates a low pressure which pulls dry air from the Central Asia and dehydrate the Indian land mass. Apart from the El-Nino, another factor which may be enlisted is the change in Jet-Stream (Jet-Streams are the narrow bands of the air that moves around the Earth at a very high speed) have the capacity to stall high pressure system resulting in scanty rain and subsequent droughts.
- **Deforestation:** As you have read in your earlier classes how deforestation has disturbed the ecological balance and has created havoc all around, this may be quoted as one of the central reason that can be held responsible.

#### **Implications**

#### Farmers' Suicide

So much as 79.5% of India's farmland relies on rain during the monsoon season. So even a little inadequacy in rainfall can cause droughts, which can lead to crop failure. In Maharashtra, regions that have experienced droughts, crop yields have declined, and food for humans and even for cattle has become scarcer. Agricultural regions that have been affected by droughts have seen an increase in the suicide rates.

State	Total farmer suicides (Not normalized for different populations of different states)
Maharashtra	3,786
Andhra Pradesh	2,572
Karnataka	1,875

Madhya Pradesh	1,172
Kerala	1,081
Uttar Pradesh	745
Gujarat	564
Tamil Nadu	499
Assam	344
Haryana	276
Rajasthan	270
Odisha	146
Jharkhand	119
Punjab	75
Bihar	68
Himachal Pradesh	29
Sikkim	19
Tripura	18
Uttarakhand	14
Arunachal Pradesh	11
Meghalaya	10
Mizoram	10
Jammu & Kashmir	10
Chhattisgarh	4
Goa	1

Source: National Crime Reports Bureau, ADSI Report Annual 2012 Government of India (ncrb.nic.in)

#### **Migration**

The drought this year is so widespread that farmers with large holdings of up to 20 acres have also joined migrants. Several debt-ridden farmers have committed suicide.

In Yevalewadi, where farmers have lost two crops in the drought, more than one family member has migrated to urban area in search of jobs.

#### **Solutions**

The measures like Rainwater harvesting, watershed management, changing cropping pattern, focus on agro-forestry, tree-farming and allied sectors like poultry and dairy should be diligently followed on a larger scale and it will surely help in reversing the negative impacts of climate change.

#### **Rainwater Harvesting**

Rainwater harvesting is a technique in which rainwater is collected, stored and utilized at a later point for further use for drinking and other domestic use. With increase in draught like conditions, rainwater harvesting has become the need of the hour for such areas.

# Option 4 Recharging of open well Storing the filtered rainwater in the underground sump for re-utilization purpose. Option 2 Recharging of bore well if roof area is more than 100 Sg mits than

#### Various applications through 'Rainy' Filters

Fig. 7

#### **Cropping Pattern Change**

Traditionally farmers practice several types of cropping patterns in the drought-prone areas of Maharashtra. Main criteria for the selection of diversified cropping patterns are crops and varieties which:

- 1. Require minimal irrigation and are drought resistant,
- 2. Use remaining moisture from previous cultivation,
- 3. Are mainly food crops which provide household food security,
- 4. Are markets with high value, and
- 5. Legumes improving soil fertility, structure, infiltration rate, aggregation, and permeability.

#### **Watershed Management**

Watershed Management programs are being implemented in drought prone areas to tackle the problems faced by those areas which are regularly affected by severe drought conditions. The prime objectives of the watershed management approach are:

- A. To minimize adverse effects of drought on the production of crops
- B. Livestock and productivity of land,
- C: To improve the socioeconomic condition of the disadvantaged sections of inhabitants and promote overall economic development.



Fig. 8: Watershed Management

#### **Agro-Forestry**

There is a dire need to introduce various Agro-forestry systems (AFS) for crop diversification. Cashew crop cultivation is very suitable for drought prone areas of Central India. In Plateau regions, silvi-pastoral, agri-horticulture, agri-silviculture, agro-pastoral and agri-horti-silvi-pastoral (AFS) could be adopted for rejuvenation of the degraded / wastelands so as to amplify biomass for fodder, fuel, and small timber.

#### The Prime Minister stresses on conservation of water

Linking the drought and intense heat wave to environmental degradation, The Prime Minister made a strong pitch for creating a mass movement to conserve "every drop" of water during the upcoming Monsoon season. The Prime Minister, who has been reviewing the drought situation, said many states have taken good initiatives towards water conservation and Niti Aayog is supposed to study the best practices for their replication across the country.

"So let us make every effort count and provide upcoming generations a better environment and a safer place to live".

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- □ National Crime Reports Bureau, ADSI Report Annual 2012 Government of India (ncrb.nic.in)
- □ http://www.auctionrocks.com/
- □ www.google.com

#### **Sample Questions**

- Q.1 The drought situation in Vidarbha region of Maharashtra has not improved much, instead it has worsen over the years. Justify the statement.
- Q.2 Drought has serious implications on the socio-economic conditions of the people of Vidarbha, Maharashtra. Comment.

(Any other valid viewpoint of student must be marked)

#### **Suggestive Key**

#### Answer 1

- □ No ground work for stopping the situation.
- ☐ Farmers still commit suicide.
- □ Crop failure is prevalent.
- ☐ People are forced to migrate.
- ☐ Farmers don't have any alternative livelihood.

(Any other valid viewpoint of student must be marked)

#### Answer 2

- ☐ People are trapped in debt trap.
- Exploitation of people by rich and powerful.
- ☐ Farmers commit suicide.
- □ People are forced to migrate.
- ☐ Farmers don't have any alternative livelihood.

(Any other valid viewpoint of student must be marked)

