CHAPTER

3

Production and Employment

GDP growth slumps to 9 year low

India's GDP grew only by 5 per cent in 2012-13. The agriculture growth also moderated, while a slowdown was also

witnessed in construction and services Disappointed with the dismal GDP figures, Finanace Minister,

however, expressed cautious optimism and pointed to some signs of recovery in some select sectors. (The Hindu)

You may have come across such news. What is GDP that is being talked about? What relation does it have to the sectors of the Indian economy? Let us try to understand...

Sectors of Economy

You may recall some of the chapters from class VIII and IX, where we discussed how people are engaged in different activities to earn their livelihoods. These activities are broadly categorised into three – 1) agriculture and related activities such as fishing, forestry, mining where nature has a dominant role in the production process; 2) manufacturing processes & other industries, where goods are produced by people using tools or machines; and 3) those activities that don't directly produce a good but provide services that are required in production and other services for people.

To recall these differences:

• Classify the following list of occupations under agriculture, industry and service sectors. Give reasons for your classification:

Occupation	Classification
Tailor	
Basket weaver	
Flower cultivator	
Milk vendor	
Fishermen	
Priest	
Courier	

Workers in match factory	
Money lender	
Gardener	
Potter	
Bee-keeper	
Astronaut	
Call centre employee	

• The following table shows the percentage of workers employed in different sectors in India in 1972-73 and in 2009-10, i.e. after 37 years.

Year Agriculture		Industry	Services
1972-73	74%	11%	15%
2009-10	53%	22%	25%

- (i) What are the major changes that you observe from the above table?
- (ii) From what you have read before, discuss what could be some of the reasons for these changes.

Observe the Pictures and menstion the sector which they belong to:



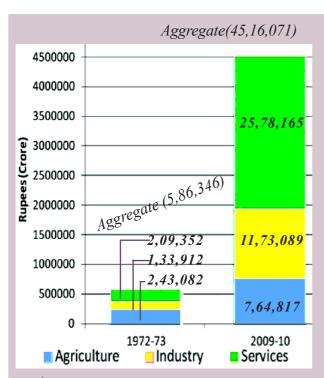
Gross Domestic Product

Suppose there are two families – one is a rich family whereas the other is a poor family. We can make such judgements as "rich" or "poor" based on: the dress people in the family wear, vehicles they use to travel, food that they eat, house they live in, furniture and other equipment they have, hospitals they go for treatment etc. Alternately, income that these families earn is an important overall indicator. For the country as a whole, we use the total value of goods and services produced in the country as the indicator of income for the country. The technical term to denote this value is Gross Domestic Product (GDP).

The following Graph 1 shows the value of GDP for India for two different years: 1972-73 and 2009-2010. One can compare what kind of increase has taken place in production in the three sectors of the economy.

Free distribution by A.P. Government 29





Graph 1: GDP by Agriculture, Industry and Service Sectors

Answer the following questions by looking at the chart:

- Which was the largest producing sector in 1972-73?
- Which was the largest producing sector in 2009-2010?
- Fill in the blank:

The total value of production of goods and services in India increased approximately _____ times between 1972-3 and 2009-10.

(The data for 2009-10 has been adjusted for prices, which means that both for 1972-3 and 2009-10 the GDP values can be compared. Both have been expressed in terms of prices existing in the same reference/ base year).

How do we estimate GDP?

People engaged in various economic activities in the above sectors produce a very large number of goods and services. What we desire to find out is: how much goods and services are produced.

With so many thousands of goods and services produced, you might think this is an impossible task. Not only would the task be enormous, you might also wonder how we can add up cars, computers, mobile phone service, baskets and pots. It won't make sense!

To get around this problem, economists suggest that the value of goods and services should be used rather than adding up the actual numbers. For example, if 10,000 kilograms of paddy are sold at Rs. 25 per kg, the total value of paddy will be Rs. 2,50,000. The value of 5000 coconuts at Rs. 10 per coconut will be Rs. 50,000. Is it necessary to count every good (or service) that is produced and sold? How do we estimate the total value of goods and services?

Take, for instance, a farmer who sells paddy to a rice mill for Rs. 25 per kg. She sells 100 kilograms of paddy. Let us assume that she did not have to buy any seeds. The total value of paddy produced by her is Rs. 2500. The rice mill takes out rice and sells (i) 80 kilograms of rice to the hotelier for Rs. 40 per kg and (ii) 20 kilograms of husk at Rs. 20 per kg. The total value of goods produced by the rice miller is: $(80 \times 40) + (20 \times 20) = \text{Rs.} 3600$. This is what the hotelier pays the rice







miller. The hotelier makes *idli*, *dosa* and husk is used as fuel by him. The hotel owner by using rice and husk makes out Rs. 5000 from the sale of *idli*, *dosa*.

Total value of goods sold at each stage:

Stage 1 (sale of paddy by farmer to rice mill owner) Rs. 2500 Stage 2 (sale of rice and husk by rice mill owner to hotelier) Rs. 3600 Stage 3 (sale of *idli*, *dosa*) Rs. 5000

• Discuss: To find out the total value of goods produced should we add them up?

Goods such as paddy and rice and husk in this example are at the intermediary stages. They are not being used by the final consumer. They are used as inputs to make the final good, in this example *idli* and *dosa*. If one were to add the value of all the physical inputs in between plus the value of the final goods, we would be double counting. The value of final goods already includes the value of all the in between or intermediate goods that are used in making the final good. At each stage the producer paid for these inputs produced by someone before. Hence, the value of Rs. 5000 worth of hotel items sold by hotelier (final good) already includes Rs. 3600, the value of rice and husk used as physical inputs. This was not made by the hotelier but he only purchased them from the rice miller. Similarly the rice and husk produced by the miller at Rs. 3600 already includes the value of physical input paddy (Rs. 2500) purchased by him. He did not produce paddy. The farmer produced this in stage 1. To count the value of the rice and paddy separately means counting the value of the same things a number of times - first as paddy, then as rice and husk and finally as *idli* and *dosa*.

The good becomes final if it is not used further in producing goods to be sold. In the above example if the rice had been bought by a family for their consumption, this would be the final point. *Idli* and *dosa* would be made by the family for themselves and not as goods to be sold.

....But I should be paid the full value of the wheat that I produce!



• In the above example, paddy or rice is the intermediate goods and *idli* is the final good. The following are a few goods we consume in our daily lives. List some of the intermediate goods against each one.

Final good	Intermediate goods
Notebook	
Car	
Computer	









Another way of looking at these stages is to focus only on value added at every step by the producer of the good. To find out the value added by the producer to the physical inputs purchased by him we relook at the above example:

It makes sense only to include the value added at each stage or to take the value of final goods and services. The value of final goods and services produced in each

Stage 1 (sale of paddy by farmer to rice mill owner) = Rs. 2500 Stage 2 (sale of rice and husk by rice mill owner to hotelier) = Rs. 3600 Stage 3 (sale of idli, dosa) = Rs. 5000

• Discuss: Why do both methods give the same result?

sector during a particular year provides the total production of the sector for that year. And the sum of production in the three sectors gives what is called the Gross Domestic Product (GDP) of a country. It is the value of all final goods and services produced within a country during a particular year.

You might have noticed that the GDP figures are given for the year 2009-10. This means the figures are pertaining to April 2009 to March 2010. This period is also called financial year.

GDP records the market value of all final goods and services produced. But there are many items that are not sold/ purchased in the market. One important example is the work that is done at home like cooking, cleaning, organizing, bringing up children, tending to plants and cattle, etc. In most instances, these do not involve any monetary transaction and therefore remain outside the GDP measure, though they are extremely important for the economy. Also, the unpaid work is done mostly by women even today, in India and across the globe.

• The value of GDP is given in the following table. Compute the growth rate of GDP as shown for 2010-11.

Year	GDP (in rupees crores)	Percentage change in GDP over	= Growth Rate
		the previous year	of GDP
2009-10	45,16,000	-	-
2010-11	49,37,000	[(49,37,000 – 45,16,000)/	= 9.32 %
		45,16,000] *100	
2011-12	52,44,000		
2012-13	55,05,000		







Changes in the importance of sectors - value of goods and services produced and employment of people

So far we know how the size of GDP has increased over the years, as more and more goods and services are produced. It is essential to know how this increase took place and what kind of activities contributed more to this growth of GDP. It has been noted that many of the now developed countries had agriculture and other allied activities as the most important contributor of GDP during the initial stages of development.

As the methods of farming changed and agriculture sector began to prosper, it produced much more food than before. Many people could now take up other activities, as essential food requirements were met by other producers. There were increasing number of craft-persons and traders. Buying and selling activities increased many times, further increasing demand for goods and services, besides, rulers employed large number of people as administrators, army etc. However, at this stage, in an overall context most of the goods produced were from agriculture and related sector and most people were also employed in this sector.

Recall what you have read about the industrial revolution in the earlier classes. As new methods of manufacturing were introduced, factories came up and started expanding. Those people who had earlier worked on farms now began to work in factories in large numbers. People began to use many more goods. There was mass production by factories at much lower rates and these goods reached markets all over the world. For these countries industrial production gradually became the most important sector, both in the total production of goods and services and also in the employment of people. Hence, over time, a shift took place. This means that the importance of the sectors had changed. The industrial sector became the dominant sector and the importance of the agriculture sector both for employment and production declined.

In the past 50 years, there has been a further shift from industry to service sector for developed countries. The service sector has become the most important in terms of total production. Most of the working people have also shifted and are now employed in the service sector and most of the production activities are those of services and not manufactured goods. This is the general pattern observed for developed countries. Is a similar pattern observed for India?

Look at the following (2) pie charts . The contribution of various activities to GDP is presented for two financial years - 1972-73 and 2009-2010. The circle or the pie represents the GDP in the given year. GDP is made up of production from the three sectors - agriculture, industry and services. Services in turn are seen to comprise of three types.

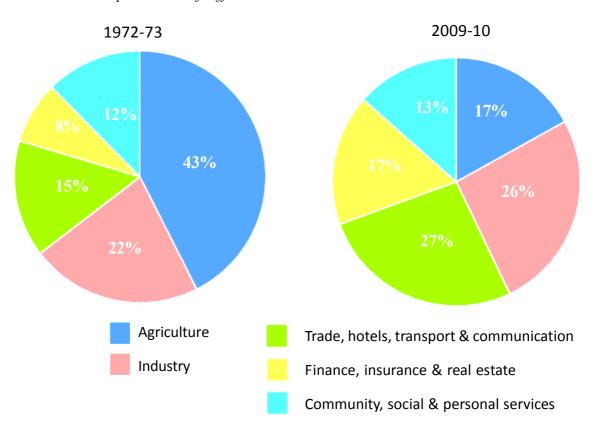






Public Administration, Defence, Education, Health, Veterinary
activities, Media, Library, archives, museums and other cultural activities, etc.
services of banks, post-office savings accounts, non-bank financial companies, Life insurance and General Insurance corporation, services of brokers and real estate companies etc.
s a c

Graph 2 Share of different sectors in Gross Domestic Product



During the 37-year period, the output share of agriculture sector has fallen drastically. There was a small increase in the share of industrial output in GDP. In contrast to this, there is a tremendous increase in the share of service activities - two out of three sub-sectors of service activities have expanded.

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Employment – the working life in India

The Gross Domestic Product of a country has close relation with the total number of working people in that country. In every country, as population increases, it is essential that the country provides opportunities for those who are looking for work. Unless people get jobs to earn, how do they get food and other requirements?

According to the Census of India, 2011, out of 1.2 billion persons in India, 460 million people are workers, i.e. people engaged in some productive activities. The following table shows some basic facts about workers in India:

Table: 1 Distribution of Workers in India, 2009-2010 (%)

Sector	Place of Residence		S	All workers	
	Rural	Urban	Male	Female	
Agriculture Sector	68	8	47	69	53
Industry Sector	17	34	34	16	22
Services Sector	15	58	19	15	25
Total	100	100	100	100	100

Unfortunately in India while there has been a change in the share of the three

Read the above table and fill in the blanks:

- Majority of workers in agriculture are living in
 - Most workers are employed in agriculture sector. Only a small section of is in industrial sector.
- More than 90% of urban workers are getting employment in sectors.
- Compared to males, female workers are getting employment in sectors only to a small extent.

sectors in GDP, a similar shift has not taken place in employment. Graph 3.3 shows the share of employment in the three sectors in 1972-73 and 2009-10. The agriculture sector continues to be the largest employer even now. Why didn't employment shift out of agriculture sector? It is because not enough jobs were created in the industry and service sectors. Even though production of industrial goods went up by more than nine times during the period, employment went up only by around three times. The same applies to service sector: while

production rose by more than 14 times, employment rose around five times.

As a result, more than half of the workers in the country are working in the agriculture sector, producing only one-sixth of the GDP. In contrast to this, the industry and service sectors produce three-fourth of the GDP whereas they employ only about half the proportion of workers. Does this mean that the workers in agriculture are not producing as much as they could?





It means that there are more people in agriculture but everyone may not be fully occupied. So, even if few people move out, production will not be affected. In other words, workers in agricultural sector are underemployed.

Take the case of a small farmer, Gayathri, owning about two hectares of unirrigated land dependent only on rain and growing crops like jowar and redgram. All five members of her family work in the plot throughout the year. Why? They have nowhere else to go for work. You will see that everyone is working, none remains idle, but in actual fact their labour effort gets divided. Each one is doing some work but no one is fully employed. This is the situation of underemployment, where people are apparently working but all of them are made to work less than their potential. This kind of underemployment is hidden in contrast to someone who does not have a job and is clearly visible as unemployed. Hence, it is also called disguised unemployment.

Supposing, a landlord hires one or two members of the family to work on his land. Gayathri's family is now able to earn some extra income through wages. Since you do not need five people to look after that small plot, two people moving out does not affect production on their farm. In the above example, two people may move to work in a factory, or trade. Once again the earnings of the family would increase and they would also continue to produce as much from their land.

There are lakhs of farmers like Gayathri in India. This means that even if several people from agricultural sector are provided with proper work elsewhere, agricultural production will not suffer. The incomes of the people who take up other work would increase the total family income.

This underemployment can also happen in other sectors. For example there are thousands of casual workers in the service sector in urban areas who search for daily employment. They are employed as painters, plumbers, repair persons and others doing odd jobs. Many of them don't find work every day. Similarly, we see

1972-73

Services
15%

Agriculture
74%

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Graph 3: Sectoral shares of employment

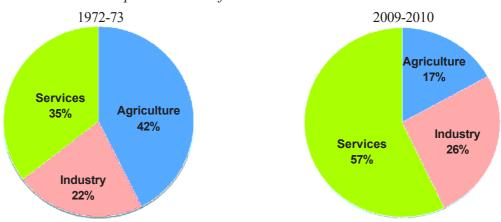






other people of the service sector on the streets pushing a cart or selling something where they may spend the whole day but earn very little. They are doing this work because they do not have better opportunities.

Graph 4: Shares of three sectors in GDP



Look a	at the a	bove pie c	harts and	l fill in	the foll	lowing table.

S ector	Employment (%)		Gross Domestic Product (%)	
	1972-73	2009-10	1972-73	2009-10
Agriculture				
Industry				
Services				

While service sector has grown, all service sector activities are not growing equally well. Service sector in India employs many different kinds of people. At one end there are a limited number of services that employ highly skilled and educated workers. At the other end, there are a very large number of workers engaged in services such as small shopkeepers, repair persons, transport persons, etc. These people barely manage to earn a living and yet they perform these services because no alternative opportunities for work are available to them. Hence, only a part of this sector is growing in importance.

Organised and unorganised sector employment in India

So far we have seen how different sectors contribute to Gross Domestic Product of India and also realised the comparative importance of the three sectors. This helps us to analyse the shifts that take place or don't take place for both production and employment.

For our country we don't see substantial shift in employment and to explore this we use another classification method focusing on the nature of employment. The classification discussed below emphasizes the problems of employment and the associated conditions of work even more starkly.





Narasimha

Narasimha works in a government office. He attends his office from 9.30 am to 5.30 pm. He uses his motorbike to travel from house to office which is about 5 kilometres. He gets his salary regularly at the end of every month, deposited in his bank account. In additional to the salary, he also gets provident fund as per the rules laid down by the government. He also gets medical and other allowances. Narasimha does not go to office on Sundays. This is a paid holiday. When he joined work,



he was given an appointment letter stating all the terms and conditions of work.



Rajeshwari

Rajeshwari is working as a construction worker. She goes for work at 7 am and returns home at 7 pm. She travels about 8 to 10 kilometres daily for work by bus. Construction workers get one hour lunch break between 1pm and 2 pm. She gets work only for 10 to 12 days a month. In the remaining days she has no work, and she does not get any wage. She gets Rs 150 per day as wages. Mostly she is paid the wages on the spot in the evening. When she works for three or

four days at the same spot she is paid after the work. She gets more work from February to June. July to January is unseasonal. Rajeshwari is a member of a Self Help Group in her locality. The government pays some compensation, if any death or major injury while she is on work. There is no help from the government for treatment in accidents while working. She is also part of a group that works under a mason. There are 6 to 10 workers under each mason.

Narasimha and Rajeshwari are illustrative examples of workers employed in organised and unorganised sectors respectively. Do you see the differences in conditions of work between them? The distinction between organised and unorganised sectors helps us to understand the working situation and wages faced by the majority of workers in the country. 92 per cent of workers in India are found in unorganised sector and only 8 percent find work in the organised sector.



Organised sector covers those enterprises or places of work where the terms of employment are regular and therefore, people have assured work. They are registered by the government and have to follow its rules and regulations which are given in various laws such as the Factories Act, Minimum Wages Act, Shops and Establishments Act etc. It is called organised because it has some formal processes and procedures. Workers in the organised sector enjoy security of employment. They are expected to work only for a fixed number of hours. If they work more, they have to be paid overtime by the employer. They also get several other benefits from the employers. They get paid leave, payment during holidays, provident fund, etc. They are supposed to get medical benefits and, under the laws, the employer has to ensure facilities like drinking water and a safe working environment. When they retire, many of these workers get pensions as well. People who work in the government or with companies or large establishments are all in the organised sector.

The unorganised sector is characterised by small and scattered units which have remained largely outside the control of the government. There are rules and regulations but these are not followed or enforced. Jobs here are low-paid and not regular. There is no provision for overtime, paid leave, holidays, leave due to sickness etc. Employment is not secure. People can be asked to leave without any reason. When there is less work during some seasons, some people may be asked to leave. A lot also depends on the whims of the employer or changes in the market situation.

Besides the above conditions, this sector includes a large number of people who are employed on their own – self employed. Almost half the workers are self employed. You would find them everywhere, doing small jobs such as selling on the street or doing repair work or as hawkers. Similarly, farmers are largely self employed and also hire labourers as and when they require.

The organised sector offers jobs that are the most sought-after. But the employment opportunities in the organised sector have been expanding very slowly. As a result, a large number of workers are forced to enter the unorganised sector jobs, which pay a very low salary. They are often exploited and not paid a fair wage. Their earnings are low and not regular. When workers lose their jobs in the organised sector they are forced to take up jobs in the unorganised sector with low earnings. Besides the need for more work, there is also a need for protection and support of the workers in the unorganised sector.

Who are these vulnerable people who need protection? In the rural areas, the unorganised sector mostly comprises of landless agricultural labourers, small and marginal farmers, sharecroppers and artisans (such as weavers, blacksmiths, carpenters and goldsmiths). Nearly 80 per cent of rural households in India are in small and marginal farmer category. These farmers need to be supported through adequate facilities for timely delivery of seeds, agricultural inputs, credit, storage





facilities and marketing outlets. As farm labourers they require adequate work and payment of minimum wages.

In the urban areas, unorganised sector comprises mainly of workers in small-scale industry, casual workers in construction, trade and transport etc., and those who work as street vendors, head load workers, garment makers, rag pickers etc. Small-scale industry also needs government's support for procuring raw material and marketing of output. The casual workers in both rural and urban areas need to be protected.

We also find that majority of workers from scheduled castes, tribes and backward communities find themselves in the unorganised sector. It is worse if one is a woman from these communities. Besides getting the irregular and low paid work, these workers also face social discrimination. Protection and support to the unorganised sector workers is thus necessary for both economic and social development.

Let's examine both the production of goods and services and employment from these sectors. The unorganised sector also contributes to GDP. During 2004-05, the unorganised sector workers accounted for 92 per cent of all workers that contributed half of all production. On the other hand, only 8% of people had a decent employment and contributed 50% of the production of goods and services. The products and services of these companies find a market but they support a very small section of the population with privileged jobs. This is an extremely unequal situation. The rest find only insecure low paying jobs or are self employed with low earnings or remain underemployed.

Table 2 Contribution of organised and unorganised sectors

Sector	Contribution (% of total)		
Sec. 01	Employment	Gross Domestic Product	
Organised	8	50	
Unorganised	92	50	
Total	100	100	

How to create more and better conditions of employment?

A large number of people should have found a decent employment in industry and services but this has not taken place. Production (in industry and services) has increased without a similar increase in employment. When we look at how people are employed we find that most people are in the unorganised sector, barely able to find work. The increase in production is benefitting only about 8% of workers. Hence in what ways can one increase employment for all people? Let us look at some of them.







Take the case of Gayathri with her two-hectare plot of un-irrigated land. The government can spend some money or banks can provide a loan, to construct a well for her family to irrigate the land. Gayathri will then be able to irrigate her land and take a second crop, wheat, during the rabi season. Let us suppose that one hectare of wheat can provide employment to two people for 50 days (including sowing, watering, fertiliser application and harvesting). So, two more members of the family can be employed in her own field. Now suppose many small dams are constructed and canals are dug to irrigate many such farms. This could lead to a lot of employment generation within the agricultural sector itself reducing the problem of underemployment.

Now, suppose Gayathri and other farmers produce much more than before. They would also need to sell some of this. For this they may be required to transport their products to a nearby town. If the government invests some money in transportation and storage of crops, or makes better rural roads so that mini-trucks reach everywhere several farmers like Gayathri who now have access to water, can continue to grow and sell these crops. This activity can provide productive employment to not just farmers but also others such as those in services like transport or trade.

Gayathri's need is not confined to water alone. To cultivate the land, she also needs seeds, fertilisers, agricultural equipments and pumpsets to draw water. Being a poor farmer, she cannot afford many of these. So she will have to borrow money from moneylenders and pay a high rate of interest. If the local bank gives her credit at a reasonable rate of interest, she will be able to buy all these in time and cultivate her land. This means that along with water, we also need to provide cheap agricultural credit to the farmers for farming to improve.

Another way by which we can tackle this problem is to identify, promote and locate industries and services in semi-rural areas where a large number of people may be employed. For instance, many farmers decide to grow millets and other cereals. Setting up a flour mill to procure and process these and sell in the cities is one such example. Opening a cold storage could give an opportunity for farmers to store their products like chillies and onions and sell them when the price is good. In villages near forest areas, we can start honey collection centres where people can come and sell wild honey. It is also possible to set up industries that process vegetables and agricultural produce like tomato, chillies, mango, rice, red gram, fruits, which can be sold in outside markets. This will provide employment in industries located in semi-rural areas and not necessarily in large urban centres.

Today, we not only have to generate new employment opportunities but also train many workers to work efficiently and with machines. We should invest in many industries, in both rural and semi-urban areas, so that we are able to produce many more goods and services.









Final goods Sectoral goods Gross Domestic Product

(

Employment shifts Organised and unorganised sector

		prove your rearming
1.	Fill i	n the blanks using the correct option given in the bracket:
(1		Employment in the service sectorincreased to the same extent as production. (has / has not)
(ii	i) V	Vorkers in thesector do not produce goods. (service / agricultural)
(iii		Most of the workers in thesector enjoy job security. (organised / morganised)
(iv		proportion of labourers in India are working in the unorganised sector.
		large / small)
(1	`	Cotton is a product and cloth is a product. [natural /
•		nanufactured]
2		
۷.	CHOC	ose the most appropriate answer.
(a)	Prod	uction of a commodity, mostly through the natural process, is an activity in
		sector.
	(i)	primary
	(ii)	secondary
	(iii)	tertiary
	(iv)	information technology
(b)	GDP	is the total value of produced during a particular year.
	(i)	
	(ii)	all final goods and services
	(iii)	all intermediate goods and services
	(iv)	all intermediate and final goods and services
(c)	In ter	rms of GDP the share of service sector in 2009-10 was
	(i)	between 20 to 30 per cent
	(ii)	between 30 to 40 per cent
	(iii)	between 50 to 60 per cent
	(iv)	70 per cent







- 3. Find the odd one out and say why.
 - (i) Teacher, doctor, vegetable vendor, lawyer
 - Postman, cobbler, soldier, police constable (ii)
- 4. Do you think the classification of economic activities into primary, secondary and services sectors is useful? Explain how.
- 5. For each of the sectors that we came across in this chapter why should one focus on employment and GDP? Could there be other issues which should be examined? Discuss.
- 6. How is the service sector different from other sectors? Illustrate with few examples.
- 7. What do you understand by underemployment? Explain with an example each from the urban and rural areas.
- 8. The workers in the unorganised sector need protection on the following issues: wages, safety and health. Explain with examples.
- 9. A study in Ahmedabad found that out of 15,00,000 workers in the city, 11,00,000 worked are in the unorganised sector. The total income of the city in this year (1997-1998) was Rs 6000 crores. Out of this Rs 3200 crores was generated in the organised sector. Present this data as a table. What are the ways for generating more employment in the city?



