



ECONOMICS



Unit - 3

Food Security and Nutrition



Learning Objectives

- To study about the meaning, definition of food security
- To know about the availability and access to food grains
- To understand about the purchasing power and agricultural policy
- To gain knowledge about the multi-dimensional nature of poverty
- To study about nutrition and health status and policies in Tamil Nadu



Introduction

Food is defined as any substance that people eat and drink to maintain life and growth. Food security would denote a person's ability to eat enough, stay active and lead a healthy life.

3.1 Food Security

The United Nation's Food and Agriculture Organisation defines food security as follows:

“Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.” (FAO, 2009)

While this comprehensive definition highlights the need for food to be nutritious, in addition to that there are certain other aspects that are required to achieve nutrition security. According to eminent agricultural scientist M.S.Swaminathan, nutrition security is:

“physical, economic and social access to a balanced diet, safe drinking water,

environmental hygiene, primary health care and primary education”.

The concept of food security has continuously evolved over the last five decades or so. Initially it referred to the overall food supply for a global, regional or national context. From this idea of food security, which means food supply/food production that addressed the overall adequacy, it became clear that the term had to be relevant at the community, household and individual level.

3.1.1. Basic components of food and nutrition security

The term was broadened to include the three basic components of food and nutrition security. They are availability, access and absorption:

1. **Availability of food** is physical availability of food stocks in desired quantities, which is a function of domestic production, changes in stocks and imports;

2. **Access to food** is primarily a matter of purchasing power and is therefore closely linked with the capabilities and employment opportunities to earn. Capabilities and opportunities in turn are related to one's access to assets and education.
3. **Absorption** of food is the ability to biologically utilise the food consumed. Several factors such as nutrition, knowledge and practices, safe and hygienic environmental conditions allow for effective biological absorption of food and health status.

3.2 Availability and Access to Food Grains

Thus food security for people in a country is not only dependent on the quantum of food available but also on the ability of people to purchase/access food and to stay in appropriate healthy environment. Just as other developmental issues, food security of people is also related to a country's overall development process. After Independence, India chose to adopt a planned developmental model.



Food Grains

After an initial focus on agriculture, industrialisation was given priority. The recurrent droughts experienced by India pushed her to be dependent on imports of food grains. However, the available foreign exchange reserve could not permit open market purchases and import of grains. India had to plead for food grains from richer countries at concessional rates. United States

of America extended assistance through its Public Law 480 (PL 480) scheme to India during early 1960s. This situation was popularly known as 'Ship to Mouth' existence.

A country with a massive population growing hungry was perceived to be a potential candidate for revolution. The American administration and philanthropic organisations like Ford Foundation formulated a plan to increase food production in the country by introducing High Yielding Varieties (HYV) of wheat and rice. This programme was implemented in select districts where irrigation was assured. The results were promising and the programme was extended to cover a larger number of districts.

Thus, Green Revolution was born in the country paving way for self-sufficiency in food grain production. Increased food grain production was made possible by an increase area cultivated with HYV of rice and wheat as also an increase in the yield of these major cereal crops. Area under food grains was a little more than 98 million hectares during early 1950s. The country was producing just 54 million tonnes of food grains then with an average yield of food grains of 547 kg per hectare. The food situation has steadily improved over a period of 65 years. Area under foodgrain cultivation has grown to 122 million hectares, with an increase of five-fold increase in food grain production. Yield of food grains has increased four-fold between the time of independence and at present. (see Table 1)

This growth in food grain production was made possible by the HYV programme, which was implemented as a package. Apart from introducing fertiliser-responsive high-yielding varieties of rice and wheat, it ensured the availability of subsidised chemical fertilisers for the farmers. Cheaper farm credit was disbursed to farmers through co-operative banks and societies. Minimum support price (MSP) for the crops were announced at the



Table 1: Area, Production and Yield of Foodgrain in India from 1951-52 to 2017-18

Triennium average centered around	Area (Million ha)	Production (Million tonnes)	Yield (Kg/ha)
1951-52	98.79	54.00	546.65
1971-72	122.07	103.54	848.18
1991-92	124.29	174.75	1406.02
2013-14	122.63	258.27	2106.00
2017-18	126.98	279.51	2201.00

Source: Agricultural Statistics at a Glance, 2018; Economic Survey, 2017-18.

beginning of the season and the state procured the harvested grains through the Food Corporation of India (FCI). The FCI had built huge storage godowns and built buffer stocks of food grain during the harvest season to be distributed all through the year.

Minimum Support Price

Minimum Support Price is a price fixed by an expert group for a particular crop by considering various costs involved in the cultivation of that crop. After announcing the MSP, the State will open procurement centres in places where these crops are widely grown. However, the farmers are free to sell in the open market if they get a better price for their crop produce. On the other hand, if the open market price is lower than the MSP, the farmers would get an assured price (the MSP) by selling their produce to the FCI. Thus, with the implementation of MSP farmers are certain about the price they would get at the end of the crop season. Further, farmers also get insulated against any price crash during the harvest season.

The rapid increase in food grain production was accompanied by appropriate technological interventions in the dairy, poultry and fisheries sectors. As a result, the milk production in the country witnessed an eight-fold increase, egg production grew 40-fold and fish production by 13-fold between the time of Independence and mid-2000s.

However, India could not succeed in attaining self-sufficiency in the production of pulses and oil seeds. Therefore, India depends on imports to meet the requirements of people.

3.2.1. Public Distribution System

The increase in food grain production need not result in increase in access to food for all. Given the unequal distribution of income and the level of poverty that persists in Indian economy, the government took steps to distribute food grains at subsidised rates through the Public Distribution System (PDS). The nature, scope and functioning of PDS varies from state to state.



Public Distribution System

While Tamil Nadu has adopted an 'Universal' PDS, the rest of the states in India had a 'Targeted' PDS. Under universal PDS all the family ration card holders are entitled to the supplies from PDS. In the targeted PDS, the beneficiaries are identified based on certain criteria and given their entitlements, leaving

out the rest. Both the Union and the State governments subsidised the supplies distributed through PDS. The level and quantum of subsidy also varied across states.

Subsequently, the National Food Security Act (NFSA) was passed by the Indian parliament in 2013. The NFSA covers 50% of urban households and 75% of the rural households. These households are known as priority households identified based on a set of criteria. Priority households of this country now have the right to food supplied through PDS. The Union government supplies rice at the rate of ₹ 3 per kg, wheat at the rate of ₹ 2 per kg, and millets at the rate of ₹ 1 per kg under NFSA. Tamil Nadu continues to have the universal system of PDS and supplies rice at free of cost to all card holders.

Bio Metric Smart Family Cards

The Government of Tamil Nadu has declared that SMART family cards will be issued in lieu of existing family cards. It has also been mentioned that the Director of Census Operations under the National Population Registry is conducting bio-metric capturing of 10 fingerprints, two iris and face scan of citizens to issue Unique Identification Number. After completion of this process of bio-metric capturing, it has been proposed to adopt this data to issue bio-metric SMART family cards. The advantage is that since it is based on unique identity, the data duplication of members and bogus cards can be eliminated.



National Food Security Act in Tamil Nadu

On 1 November 2016, Tamil Nadu became the last state in the country to implement the National Food Security Act after holding out for three years. In a government order issued on 27 October, the state specified that while it was enforcing the law, it would be modifying its provisions.

3.2.2. Role of Consumer Cooperatives in Food Security

Consumer cooperatives play an important role in the supply of quality goods at responsible rates to common people.



Co-operative Society

There is a three-tier structure of consumer cooperative societies in India. They are primary consumer cooperative societies. Central consumer cooperative stores and state level consumer federations. More than 50,000 village level societies are engaged in the distribution of consumer goods in rural areas. There are many benefits to consumer cooperatives such as health care, insurance, housing etc.. This scheme is playing an important role in food security in India. For example out of all fair

Buffer Stock

Buffer stock is the stock of food grains, namely wheat and rice, procured by the government through the Food



Buffer Stock

Corporation of India (FCI). The FCI purchases wheat and rice from the farmers in states where there is surplus production. The farmers are paid a pre-announced price for their crops. This price is called Minimum Support Price (MSP). The MSP is declared by the government every year before the sowing season to provide incentives to farmers for raising the production of these crops. The purchased foodgrains are stored in granaries.

Buffer stock is done to distribute foodgrains in the deficit areas and among the poorer strata of the society at a price lower than the market price also known as the Issue Price. This also helps resolve the problem of shortage of food during adverse weather conditions or during the periods of calamity.

price shops running in Tamil Nadu, around 94% are being run by cooperatives.

Fair Price Shops

At present, 33,222 Fair Price Shops are serving 1.98 crore families. Out of 33,222 Fair Price shops, 31,232 are run by the cooperative societies, 1,394 are run by the Tamil Nadu Civil Supplies Corporation and 596 are run by women self-help groups. To improve accessibility to PDS, it is necessary that they are located in close proximity to habitations. Accordingly, it has been proposed to open new fair price shops so that, no card holder walks more than 1.5 km.

3.3 Purchasing Power

Purchasing power is the value of a currency expressed in terms of the amount of goods or services that one unit of money can buy. Price increases purchasing power declines and vice versa.

3.3.1. Factors affecting Purchasing Power

1. Over population

The population growth rate in India is high as 1.7 per 1000. Large population leads to increasing demand, but supply was not equal to the demand. So, the normal price level will be going an higher. So it affect purchasing power, especially in rural population.



Population

2. Increasing prices of essential goods

Even though there has been a constant growth in the GDP and growth opportunities in the Indian economy, there have been steady increase in the prices of essential goods. The continuous rise in the prices erodes the purchasing power and adversely affect the poor people. During 2015–16 an average rate of 2% flood inflation, the prices of pulses rose by about 40%.

3. Demand for goods

When demand for goods increases, the price of goods increases then the purchasing power is affected.

4. Price of goods affect the value of currency

When the price increases the purchasing power decreases and finally the value of currency decreases and vice versa.

5. Production and supply of goods

The production and supply of goods decline, the price of goods increases, then the purchasing power is affected.

6. Poverty and inequality

There exists a huge economic disparity in the Indian economy. The proportion of income and assets owned by top 10% of Indian



Inequality

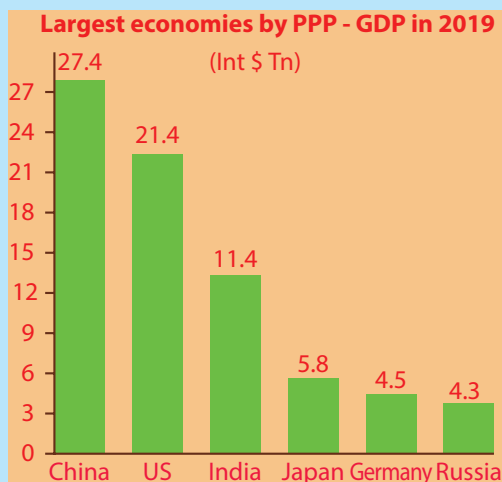
goes on increasing. This has led to an increase in the poverty level in the society. Generally purchasing power is affected by poverty and unequal distribution of wealth also.

Purchasing power affects every aspect of economics, from consumers buying goods to investors and stock prices to a country's economic prosperity. As such, a country's government institutes policies and regulations to protect a currency's purchasing power and keep an economy healthy. One method to monitor purchasing power is through the Consumer Price Index.

Purchasing Power Parity (PPP)

A concept related to purchasing power is purchasing price parity (PPP). PPP is an economic theory that estimates the amount that needs to be adjusted to the price of an item, given exchange rates of the two countries, in order for the exchange to match each currency's purchasing power.

PPP can be used to compare countries income levels and other relevant economic data concerning the cost of living, or possible rates of inflation and deflation. Recently, India became the third largest economy in terms of PPP. China became the largest economy, pushing the US to the second position.



3.4 Agricultural Policy in India

The new agricultural policy based on export of agricultural goods was announced by the Central government in 2018. This policy states that the government has decided to remove export restrictions on most organic and processed agricultural products.

The main reason is to give an assurance that organic or processed agricultural products will not be under any export restrictions such as export duty, export bans and quota restriction.

Agricultural policy of a country is mostly designed by the Government for raising agricultural production and productivity and also for raising the level of income and standard

of living of farmers within a definite time frame. This policy is formulated for allround and comprehensive development of the agricultural sector.

The following are some of the important objectives of india's agricultural policy

1. Raising the productivity of inputs

One of the important objectives of India's agricultural policy is to improve the productivity of inputs so purchased like, HYV seeds, fertilisers, pesticides, irrigation projects etc.

2. Raising value-added per hectare

Agricultural policy is to increase per hectare value-added rather than raising physical output by raising the productivity of agriculture in general and productivity of small and marginal holding in particular.

3. Protecting the interests of poor farmers

Agricultural policy is proposed to protect the interests of poor and marginal farmers by abolishing intermediaries through land reforms, expanding institutional credit support to poor farmers etc.

4. Modernising agricultural sector

Here the policy support includes the introduction of modern technology in agricultural operations and application of improved agricultural inputs like HYV seeds, fertilizers etc.



5. Environmental degradation

Agricultural policy of India has set another objective to check environmental degradation of natural base of Indian agriculture.

6. Removing bureaucratic obstacles

The policy has set another objective to remove bureaucratic obstacles on the farmers' co-operative societies and self-help institutions so that they can work independently.

3.5 Multi-dimensional Nature of Poverty

Multi-dimensional poverty measures can be used to create a more comprehensive picture. They reveal who is poor, how they are poor and the range of disadvantages they experience. As well as providing a headline measure of poverty, multi-dimensional measures can be broken down to reveal the poverty level in different areas of a country, and among different sub-groups of people.

The Multi-dimensional Poverty Index (MPI) was launched by the United Nations Development Programme (UNDP) and the Oxford Poverty Human Development Initiative (OPHI) in 2010. The basic philosophy and significance of MPI is that it is based on the idea that poverty is not unidimensional, and that it is rather multi-dimensional.

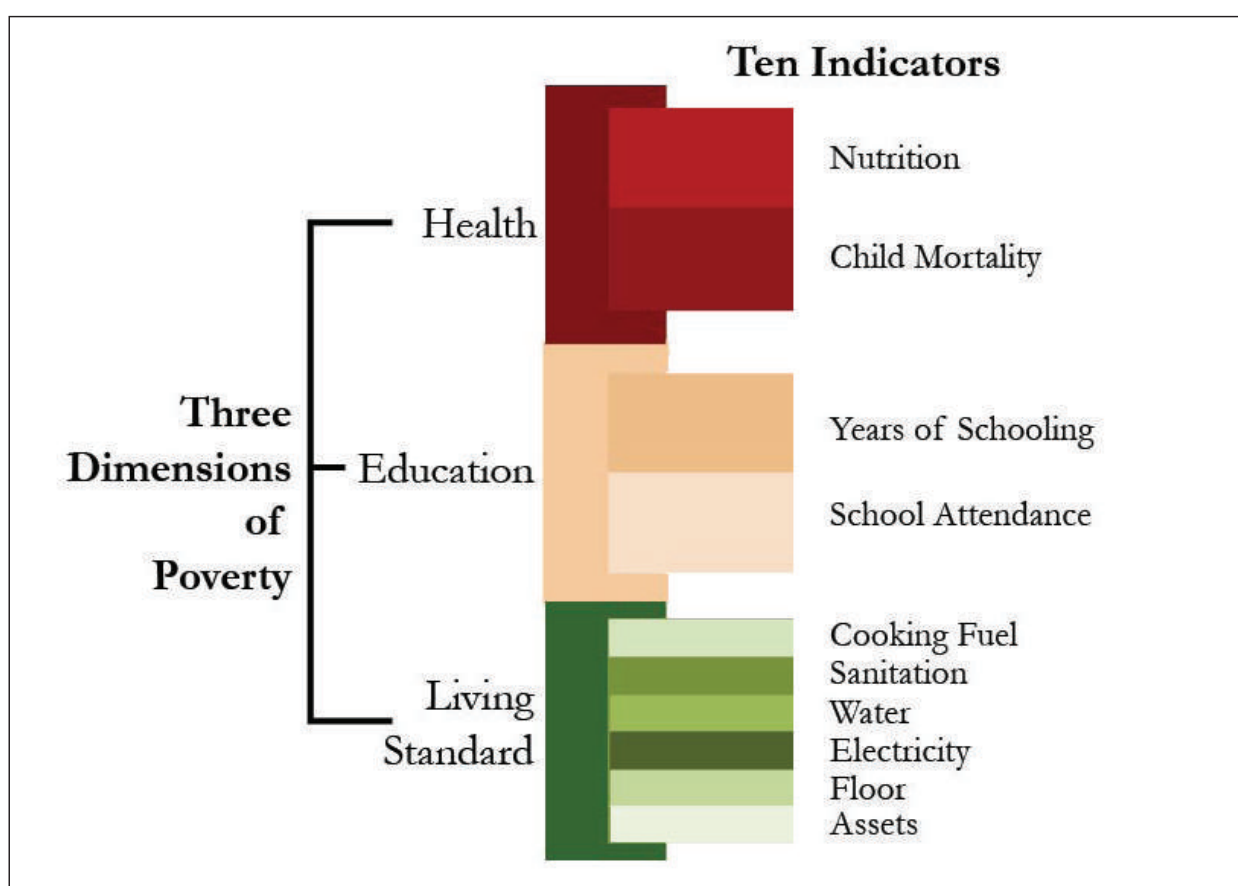
Multi-dimensional poverty is made up of several factors that constitute poor people's experience of deprivation such as health, education,

living standards, income, disempowerment, quality of work and threat from violence.

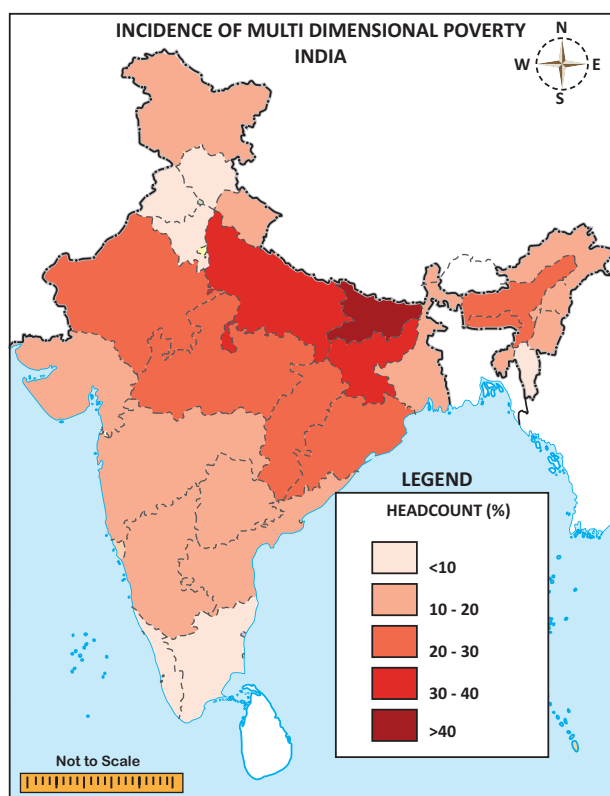
3.5.1. Multi-dimensional Poverty Index 2018 in India

Multi-dimensional Poverty Index 2018 report prepared by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative makes the following observations about India.

1. India has reduced its poverty rate drastically from 55% to 28% in 10 years, with 271 million people moving out of poverty between 2005-06 and 2015-16.
2. India still had 364 million poor people in 2015-16, the largest for any country, although it is down from 635 million in 2005-06.
3. Of the 364 million people who were MPI poor in 2015-16, 156 million were children whereas in 2005-06 there were 292 million



Multi-Dimensional Poverty Index - Ten Indicators



poor children in India. This represents a 47% decrease or 136 million fewer children growing up in multi-dimensional poverty.

4. 80% of people belonging to ST were poor in 2005-06 and 50% of them were still poor in 2015-16.
5. Bihar with more than half its population in poverty was the poorest state in 2015-16.
6. The four poorest states Bihar, Jharkhand, Uttar Pradesh and Madhya Pradesh were still home to 196 million MPI poor people, which was over half of all the MPI poor people in India.
7. Kerala, one of the least poor regions in 2006, reduced its MPI by around 92%.

3.5.2. Multi-dimensional Poverty Index 2018 Report in Tamil Nadu

Over the last decades, Tamil Nadu has made a significant progress in poverty reduction. The districts in Tamil Nadu are classified into three categories, namely high-poverty districts (more than 40% of the population living below poverty line), moderately poor districts (30% to 40%) and low level poverty districts (below 30%).

After 1994, poverty has declined steadily in both rural and urban areas of Tamil Nadu and the state has a smaller share of India's poor relative to its population. After 2005, the poverty reduction in this state has been faster than in many other states in India. Tamil Nadu leads in the poverty alleviation programmes during 2014–2017. Government of India is implementing many policies and programmes to eradicate poverty.

These policies and programmes, if continued, will completely eradicate the poverty in the state. In future, Tamil Nadu can become a model of development in India.

Top and Bottom MPI districts in Tamil Nadu

S. No	Top 5 Districts	Rank	Bottom 5 Districts	Rank
1	Kancheepuram	1	Dharmapuri	32
2	Chennai	2	Perambalur	31
3	Cuddalore	3	Ramanathapuram	30
4	Coimbatore	4	Virudhunagar	29
5	Nagapattinam	5	Ariyalur	28

3.6 Nutrition and Health Status

3.6.1. Status of Nutrition

We noted earlier that food security includes nutrition security too. Though our country has reached self-sufficiency in food production, the nutrition status of the population has not seen corresponding levels of improvement. In 2015–16, 27% of the rural women and 16% of the urban women (in the age group of 15–49 years) were counted as undernourished or chronically energy deficient by the National Family Health Survey.

More than half of the women in the reproductive age group (15–49 years) in both rural and urban India were anaemic in 2015–16. As regards children, about 60% of the rural



TN commitment on Nutrition

Amartya Sen, Noble Prize winning Economist, has observed that in India, hunger is not enough of a political priority. The public expenditure on health is very low and funds allocated to programmes like child nutrition remain unspent. It is only in States like Tamil Nadu that he sees a political will and commitment to tackle these issues by setting goals like achieving the status of a “Malnutrition Free State”.

and 56% of the urban children (in the age group of 6–59 months) are counted to be anaemic, in 2015–16. About 41% of the rural and 31%



Underweight Child

of urban children are stunted, that is, they are not of the required height in correspondence to their age. Another indicator of nutrition deficiency among children is “underweight”, which is weight in relation to age. In India, in 2015–16, about 20% of children (in the age group of 6–59 months) in rural and urban India are estimated to be underweight.

Thus, though our country has reached self-sufficiency in food production, we are yet to attain food security for all.

3.6.2. Nutrition and Health Status in Tamil Nadu

Nutrition plays a crucial role in human health and well-being. At the national level, despite higher economic growth, improvements in human development indicators like nutrition levels of the population have been unacceptably slow. A large number of Indian children are stunted. A substantial number of Indian children and women are underweight, anaemic and suffer from micronutrient deficiencies. To address these concerns, the Central and state governments have been channelling

substantial resources into various health and nutrition schemes and programmes like Integrated Child Development Services (ICDS), mid-day meals, Reproductive and Child Health Programmes (RCH) and National Rural Health Mission (NRHM). However, an effective scaling up of these efforts is required to mitigate the incidence of under-nutrition in the country.

Tamil Nadu has played a pioneering role in bringing about significant changes in the health and nutrition status of children under six years of age, pregnant women, lactating mothers and adolescent girls. The Government of Tamil Nadu’s successive budget outlays for nutrition and health are the highest in the country. The performance of the ICDS scheme and the Puratchi Thalaivar MGR Nutritious Meal Programme (PTMGRNMP) in Tamil Nadu are considered one of the best in the country.

The Government of Tamil Nadu’s policy for “A Malnutrition Free Tamil Nadu” guides the state’s long-term multi-sectoral strategy for eliminating malnutrition. The goal is “reducing human malnutrition of all types to the levels of best performing countries”. In Tamil Nadu, ICDS is being implemented through 54,439 Child Centres (comprising 49,499 Anganwadi Centres and 4,940 Mini Anganwadi Centres) in 434 Child Development Blocks (385 rural, 47 urban and 2 tribal).

With steady expansion into unreached areas, increasing coverage of marginalised groups, enhanced allocations and enlarged scope of services, ICDS is now considered to be one of the world’s largest programmes of its kind and a model for the holistic development of the child. To ensure that services reach the intended beneficiaries, the programme has been universalised and convergence promoted with allied departments dealing with health, education, drinking water, sanitation etc.

The PTMGRNMP is considered to be the largest noon meal programme in the country for combating malnutrition among children,

increasing primary school enrolment and reducing dropout rates. Other states in the country have modelled their noon meal programmes along the lines of Tamil Nadu's pioneering efforts.



ICDS Scheme

Boosting peer group engagement

- Efforts will be made to strengthen the 'Padhumaiyar Kuzhu' for empowering girls and making them persuasive catalysts of change.



Padhumaiyar Kuzhu

- Innovative approaches will be considered for drawing adolescent girls into the programme, connecting them with various services and encouraging their participation in activities. A mobile centre was rolled for widening the reach of services in nine districts.
- Distribution and monitoring of the 'Padhumaiyar card' will be further strengthened.

Important ongoing Schemes in Tamil Nadu

1. Under Dr. Muthulakshmi Reddy Maternity Benefit Scheme, financial assistance to the tune of ₹ 12,000 is being disbursed to poor pregnant women with the aim of meeting expenses on nutritious diet, to compensate for loss of income during the delivery period and to avoid low birth weight of new born babies in three installments to those availing antenatal care, delivering and immunising the babies born in government institutions.
2. The Chief Minister's Comprehensive Health Insurance Scheme was launched in the state in 2011-12 with the aim to provide Universal Healthcare to All by providing free medical and surgical treatment in Government and private hospitals to any family whose annual income is less than ₹ 72,000 by meeting all expenses relating to the hospitalisation of the beneficiary.
3. Tamil Nadu Health Systems Projects (TNHSP) has launched ambulance services free of cost (The 108 Emergency Ambulance Service).
4. The School Health Programme mainly emphasises on providing comprehensive healthcare services to all students studying in Government and Government-aided schools.
5. The National Leprosy Eradication programme is being implemented in the state with the aim to detect and to provide sustained regular treatment to all leprosy patients.



School Health Programme



Some Nutrition Programmes in Tamil Nadu

1. **Purachi Thalaivar M.G.R. Nutrition Meal Programme:**

It is being implemented in the rural areas from 1 July 1982 and in urban areas for the school students from 1984, old age pensioners from 1983 and for pregnant women from 1995.

2. **National Programme of Nutritional Support to Primary Education**

3. **General ICDS Projects and World Bank Assisted**

Integrated Child Development Services: The services started in 1991 in 318 blocks covering 24 districts. In 1999 this extended to 318 rural blocks and 19,500 centres.

4. **Pradhan Manthri Gramodaya Yojana Scheme (PMGYS):** In this scheme, nutrition supplementation in the form of weaning food is given to children in the age group of 6 months to 36 months in the unreached hamlets.

5. **Tamil Nadu Integrated Nutrition Programme:** This project was started in 1980 targeting at 6 to 36 months old children and pregnant and lactating women.

6. **Mid-Day Meal Programme:** This programme has been introduced for children between ages 2 and 14 attending balwadis or schools at the expense of ₹ 0.90 per beneficiary. This programme covered 5.57 crore children in 4,426 blocks.



Mid-Day Meal Programme

SUMMARY

- Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food, which meets their dietary needs and food preferences for an active and healthy life.
- The term was broadened to include the three basic components of food and nutrition security. They are availability, access and absorption.
- The Green Revolution was born in the country paving way for self-sufficiency in food grain production.
- The National Food Security Act (NFSA) was passed by the Indian Parliament in 2013.
- Purchasing power is the value of a currency expressed in terms of the amount of goods or services that one unit of money can buy. Price increases purchasing power declines and vice versa.
- The new agricultural policy based on export agricultural goods was announced by the Central government in 2018.
- Multi-dimensional poverty measures can be used to create a more comprehensive picture.
- Health has an important role in human resources development. Better medical care leads to a healthy population.

A-Z GLOSSARY

Availability	That which can be used, attainable	அடையத்தகுந்த
Accessibility	Right to enter	அணுகுமுறை
Affordability	Ability to be afforded	செலவிடத்தகுந்த
Sufficient	Enough	போதுமான
Purchasing power	The financial ability to buy produce	பொருட்கள் வாங்கும் திறன்
Productivity	Power of producing	உற்பத்தி செய்யும் ஆற்றல்
Degradation	To reduce to a lower rank	மதிப்புக்கு குறைவு
Unidimensional	Having one direction	ஒரு பரிமாணம்
Malnourished	Lack of proper nutrition	உட்கட்டிச்சத்தின்மை



EXERCISE



I. Choose the correct answer

- _____ of food is physical availability of food stocks in desired quantities, which is a function of domestic production, changes in stocks and imports.
 - Availability of food
 - Access to food
 - Absorption of food
 - none
- Buffer stock is the stock of food grains, namely wheat and rice, procured by the government through the _____.
 - FCI
 - Consumer Cooperatives
 - ICICI
 - IFCI
- Which is correct?
 - HYV-High Yielding Varieties
 - MSP-Minimum Support Price
 - PDS-Public Distribution System
 - FCI-Food Corporation of India
 - i and ii are correct
 - iii and iv are correct
 - ii and iii are correct
 - all are correct
- _____ extended assistance through its Public Law 480.
 - United States of America
 - India
 - Singapore
 - UK
- _____ revolution was born in India paving way for self sufficiency in food grain production.
 - Blue Revolution
 - White Revolution
 - Green Revolution
 - Grey Revolution
- _____ is the only state in India to adopt universal PDS.
 - Kerala
 - Andhra Pradesh
 - Tamil Nadu
 - Karnataka
- _____ is the process of providing or obtaining the food necessary for health and growth.
 - Health
 - Nutrition
 - Sanitation
 - Security
- Tamil Nadu Integrated Nutrition Programme was started in _____.
 - 1980
 - 1975
 - 1955
 - 1985



9. _____ status is one of the indicators of the overall well-being of population and human resources development.
- Health
 - Nutritional
 - Economic
 - Wealth
10. Tamil Nadu Health System Projects has launched _____ service at free of cost.
- 106 ambulance
 - 108 ambulance
 - 107 ambulance
 - 105 ambulance

II. Fill in the blanks

- _____ foundation from USA introduced HYV in India.
- _____ is an important indicator of nutrition deficiency.
- In the year _____ National Food Security Act was passed by the Indian Parliament.
- _____ play an important role in the supply of quality goods at responsible rates to common people.
- _____ is the value of currency expressed in terms of the amount of goods and services that one unit of money can buy.

III. Match the following

- | | |
|-------------------------------|----------------------------------------|
| 1. Consumer cooperatives | – subsidized rates |
| 2. Public Distribution System | – 2013 |
| 3. UNDP | – least poor region |
| 4. National Food Security Act | – supply of quality goods |
| 5. Kerala | – United Nations Development Programme |

IV. Assertion and Reason

1. **Assertion (A):** Purchasing power increases, price decreases and vice versa.
Reason (R): The production of goods decline, the price of goods increases and then the purchasing power is affected.
- A is correct, R is false
 - Both A and R are false statements
 - A is correct but R is not a correct explanation
 - A is correct, R is the correct explanation of A

V. Answer in short

- Define food security according to FAO.
- What are the basic components of food and nutrition security?
- Explain 'ship to mouth' phenomenon.
- What is the role of FCI in Green Revolution?
- What are the effects of Green Revolution?
- Write a note on Differential Universal PDS and Targeted PDS.
- Write a short note on purchasing power.
- What are the main reasons for the New Agricultural Policy?
- Write short note on multi-dimensional nature of poverty.
- Write some name of the nutrition programmes in Tamil Nadu.

VI. Answer in detail

- Elucidate why the Green Revolution was born.
- Explain Minimum Support Price.
- Elaborate the Public Distribution System.
- What are the factors affecting the purchasing power and explain them.
- Write briefly some of the important objectives of India's agricultural policy.
- Discuss about the Multi-dimensional Poverty Index India and Tamil Nadu.
- Briefly explain the nutritional and health status of Tamil Nadu.

VII. Activity and Project

1. Visit nearby “Uzhavar Sandhai” and collect the information about the functions of market.
2. Collect information about health centre functioning nearby your location.



REFERENCE BOOKS

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2. Ministry of Agriculture & Farmers Welfare. Annual report 2016–17.
3. Nutrition & Food Security. UN India.

4. *Pratiyogita Darpan*–Indian Economy.
5. Economic Survey 2017–18.
6. *The Gazette of India*–“The National Food Security Act 2013”.



INTERNET RESOURCES



ICT CORNER

Steps

- Open the browser and type the URL given below.
- Click on the left side menu to view the policies on food security, procurement data for current marketing season, minimum support price of food grains.
- For example, click on the minimum support price of paddy. You can see the yearwise minimum support price of paddy, wheat and coarsegrain.
- Likewise, you can view regionwise procurement also.



B376_10_SOCIAL_EM

Unit - 4

Government and Taxes



Learning Objectives

- To understand the role of the government and development policies
- To gain knowledge about tax and its types
- To study how is tax levied
- To gain insight into black money and tax evasion
- To know the difference between the tax and other payments
- To understand the taxes and its development



Introduction

Tax is levied by government for the development of the state's economy. The revenue of the government depends upon direct and indirect taxes. Direct taxes are levied on income of the persons and the indirect taxes are levied on goods and services by which the government mobilises its "financial resources".

4.1 Role of Government in Development Policies

4.1.1. The role of government and development policies

In India, the three levels of governments, namely, union, state and local, have been carrying out various functions for the benefit of people and society at large. These roles are into divided into seven categories for easy understanding.

1. **Defence:** This is an essential security function to protect our nation from our enemies. We know that we have three services, namely, army, navy and air force. The Union government is responsible for creating and maintaining defence forces.
2. **Foreign policy:** In today's world, we need to maintain friendly relationships with all the other countries in the world. India is committed to world peace. We should also maintain cordial economic relationships through exports and imports, sending and receiving investments and labour. This service is also provided by the Union government.
3. **Conduct of periodic elections:** India is a democratic country. We elect our representatives to Parliament and state assemblies. The Union government creates laws and administrative system and conducts elections to these two legislature institutions. Similarly the state governments conduct elections to local bodies within the state.

4. **Law and order:** Both the Union and state governments enact numerous laws to protect our rights, properties and to regulate our economy and society. To settle disputes, the Union government has a vibrant judicial system consisting of courts at the national, state and lower levels and state governments take the responsibility for administering the police force in respective states.
5. **Public administration and provision of public goods:** The government generally administers the economy and society through various departments, for example, revenue department, schools, hospitals, rural development and urban development. The list of departments with the Union and state governments are available in the public domain. The local governments provide public goods like local roads, drainage, drinking water and waste collection and disposal.
6. **Redistribution of income and poverty alleviation:** Governments collect various taxes to finance the various activities mentioned earlier. The taxes are collected in a way that the high-income people can bring in more tax revenue to the government than the poor. The governments also spend money such that the poor are given some basic necessities of life like food, shelter, clothing education, health care and monthly income to the very poor persons. Thus collecting taxes and spending for the poor is how the government redistributes income and introduces measures to reduce poverty.
7. **Regulate the economy:** The Union government, through the Reserve Bank of India, controls money supply and controls the interest rate, inflation and foreign exchange rate. The main objective is to remove too much of fluctuation in these rates. The Union also controls the economy through various other agencies such as Securities Exchange Board of India and Competition Commission of India.

All the governments in India run public sector enterprises to provide important goods and services at affordable rates to the people.

4.2 Tax

The origin of the word "tax" is from "taxation," which means an estimate.

Taxation is a means by which governments finance their expenditure by imposing charges on citizens and corporate entities. The main purpose of taxation is to accumulate funds for the functioning of the government machinery. Tax has come into forefront on account of the new concept of "welfare state". Modern governments do not confine themselves to law and order only. The importance of public finance (tax) has vastly increased in recent years.

Taxes are compulsory payments to government without expectation of direct return (or) benefit to the tax payer. Prof. Seligman also defined a tax as "a compulsory contribution from a person to the government to defray the expenses incurred in the common interest of all, without reference to special benefits conferred."

4.2.1. Why Taxes?

The levying of taxes aims to raise revenue to fund governance or to alter prices in order to affect demand. States and their functional equivalents throughout history have used money provided by taxation to carry out many functions. Some of these include expenditures on economic infrastructure (transportation, sanitation, public safety, education, healthcare



Taxation in India has its roots from the period of *Manu Smriti* and *Arthashastra*. The present Indian tax system is based on this ancient tax system.



Tax system

Every type of tax has some advantages and some disadvantages. So we have a tax system, that is, a collection of variety of taxes. All countries use a variety of taxes. There are some characteristics of tax system that economists think should be followed while designing a tax system. These characteristics are called as canons of taxation. From Adam Smith, many economists have given lists of canons of taxation. It is important to recall those common among them for discussion here.

Canon of equity – Since tax is a compulsory payment, all economists agree that equity is the cardinal principle in designing the tax system. The equity principal says that the rich should pay more tax revenue to government than the poor, because rich has more ability than the poor to pay the tax. Moreover, after payment of tax, you will find the economic difference is reduced between the rich and the poor. You can do an exercise to find out which of the taxes adhere to the canon of equity.

Canon of Certainty – Government should announce in advance the tax system so that every tax payer will be able to calculate how much tax amount one may have to pay during a year to the government. In other words, government should not change the tax system frequently and should not announce sudden changes in the tax system.

Canons of Economy and Convenience – These two canons are related. As tax payers we incur a cost to process our accounts and pay the tax, for example, salary paid to accountants and auditors. Similarly government also pays salary to its taxmen and run huge institutions. If the tax is simple, then the cost of collecting taxes (tax payer cost + tax collector cost) will be very low. Further, tax should be collected from a person at the time he gets enough money to pay the tax. This is called canon of convenience. A convenient tax reduces the cost of collecting tax.

Canons of Productivity and Elasticity – Government should choose the taxes that can get enough tax revenue to it. In other words, it should choose a few taxes that can fetch more tax revenue, instead of lots of taxes and each one of them getting a little tax revenue. This is canon of productivity. Tax is paid by the people out their incomes. Therefore the tax system should be designed in such a way that the people automatically pay more tax revenue if their incomes grow. This is called canon of elasticity. In a broader sense, as the economy is growing the people will get more income and consequently they will also pay more tax revenue to government if the tax system is elastic.

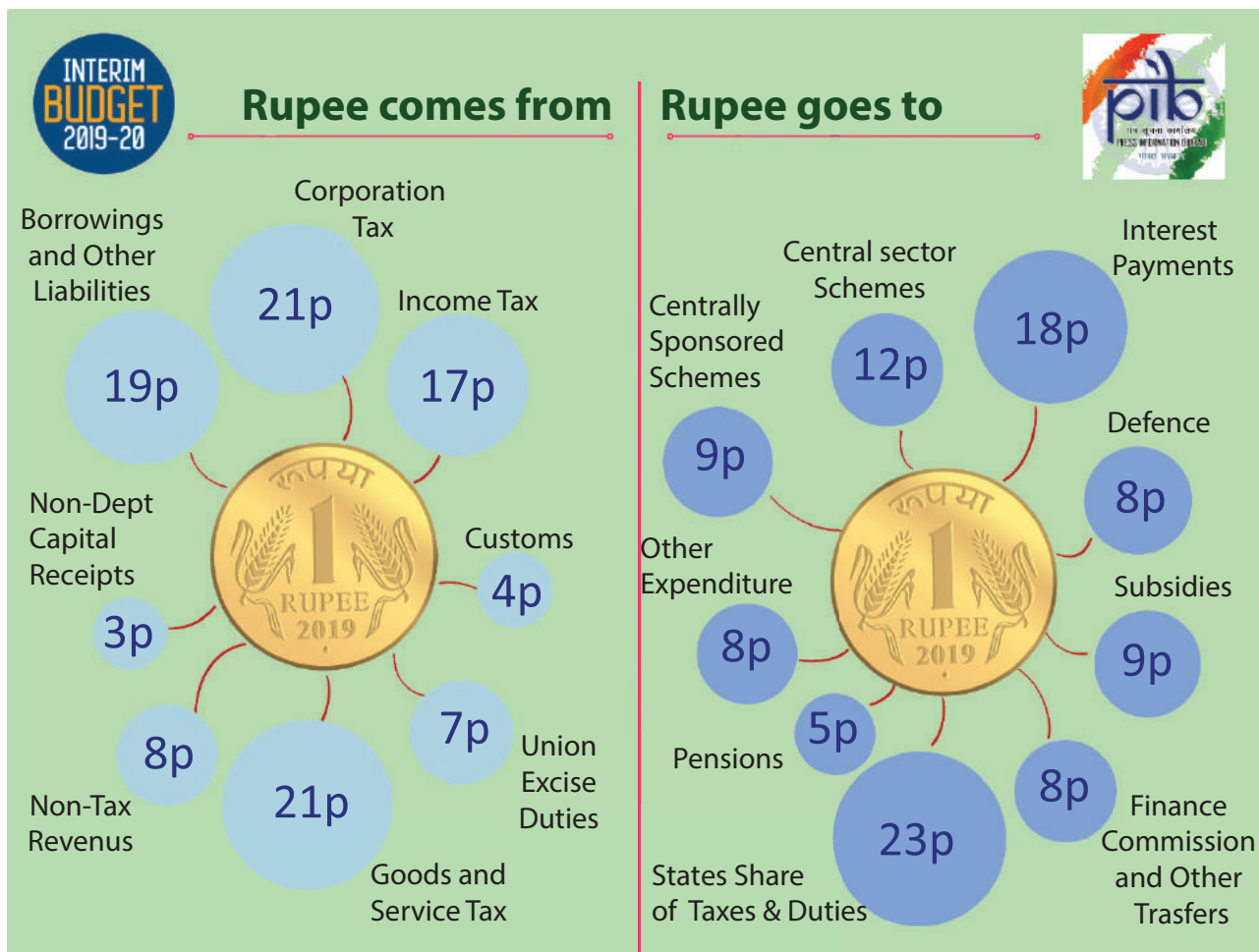
systems, to name a few), military, scientific research, culture and the arts, public works and public insurance and the operation of government itself. A government's ability to raise taxes is called its fiscal capacity.



In India, Income Tax was introduced for the first time in 1860 by Sir James Wilson in order to meet the losses sustained by the Government on account of the Mutiny of 1857.

When expenditures exceed tax revenue, a government accumulates debt. A portion of taxes may be used to service past debts. Governments also use taxes to fund welfare and public services. These services can include education systems, pensions for the elderly, unemployment benefits and public transportation. Energy, water and waste management systems are also common public utilities.

According to the proponents of the theory of money creation, taxes are not needed for government revenue, as long as the government in question is able to issue fiat money. The purpose of taxation is to maintain the stability of the currency,



express public policy regarding the distribution of wealth, subsidising certain industries or population groups or isolating the costs of certain benefits such as highways or social security.

4.3 Types of Taxes

4.3.1 Direct Taxes

A tax imposed on an individual or organisation, which is paid directly, is a direct tax. The burden of a direct tax cannot be shifted to others. J.S. Mill defines a direct tax as “one which is demanded from the very persons who it is intended or desired should pay it.” Some direct taxes are income tax, wealth tax and corporation tax.

Income tax

Income tax is the most common and most important tax levied on an individual in India. It is charged directly based on the income of a person. The rate at which it is charged varies, depending on the level of income.

Activity

Students are asked to search a Income Tax website and know the Income Tax slab for current year.

Corporate tax

This tax is levied on companies that exist as separate entities from their shareholders. It is charged on royalties, interest gains from sale of capital assets located in India and fees for a technical services and dividends.

Foreign companies are taxed on income that arises or is deemed to arise in India.

Income	For Indian Companies	For Foreign Companies
Less than ₹ 50 crore	25%	40%
More than ₹ 50 crore	30%	40%

Wealth tax

Wealth tax is charged on the benefits derived from property ownership. The same property will be taxed every year on its current market value. The tax is levied on the individuals and companies alike.

In India taxes are collected by all the three tiers of government. There are taxes that can be easily collected by the Union government. In India almost all the direct taxes are collected by the Union governments. Taxes on goods and services are collected by both Union and state governments. The taxes on properties are collected by local governments.

In India we collect more tax revenue through indirect taxes than through direct taxes. The major indirect taxes in India are customs duty and GST. Both these taxes have different tax rates for different goods and services. The governments try to design in such a way that the rich consumers pay more tax than the poor. However, poor still pay more through these taxes. Therefore, many argue we should reduce the indirect taxes and increase the collection through direct taxes.

Indian tax system adheres to all the canons of taxation. But there are arguments that often the equity principle is compromised and productivity is lost when we tinker with tax system to the advantage of a few. We announce the tax system once in a year in the annual budget. It is very rarely breached by announcing mid-year tax changes. Therefore, Indian tax system adheres to canon of certainty more than anything else.

4.3.2 Indirect Taxes

If the burden of the tax can be shifted to others, it is an indirect tax. The impact is on one person while the incidence is on the another person. Therefore, in the case of indirect taxes, the tax payer is not the tax bearer.

Some indirect taxes are stamp duty, entertainment tax, excise duty and goods and service tax (GST).

Stamp duty

Stamp duty is a tax that is paid on official documents like marriage registration or documents related to a property and in some contractual agreements.

Entertainment tax

Entertainment tax is a duty that is charged by the government on any source of entertainment provided. This tax can be charged on movie tickets, tickets to amusement parks, exhibitions and even sports events.

Excise duty

An excise tax is any duty on manufactured goods levied at the movement of manufacture, rather than at sale. Excise is typically imposed in addition to an indirect tax such as a sales tax.

4.3.3. Goods and service tax (GST)

The goods and service tax (GST) is one of the indirect taxes. The GST was passed in Parliament on 29 March 2017. The act came into effect on 1 July 2017. The motto is one nation, one market, one tax.

Goods and service tax is defined as the tax levied when a consumer buys a good or service. That aims to replace all indirect taxes levied on goods and services by the Central and state governments. GST would eliminate the cascading effect of taxes on the production and distribution of goods and services. It is also a “one-point tax” unlike value-added tax (VAT), which was a multipoint tax.



France was the first country to implement GST in 1954 and many other European countries introduced GST in 1970-80.

4.4 How Taxes Are Levied?

Tax is levied by the government progressively, proportionately as well as regressively.

Structure of Goods and Service Tax (GST)

State Goods and Service Tax (SGST): Intra state (within the state)

VAT/sales tax, purchase tax, entertainment tax, luxury tax, lottery tax and state surcharge and cesses

Central Goods and Service Tax (CGST): Intra state (within the state)

Central Excise Duty, service tax, countervailing duty, additional duty of customs, surcharge, education and secondary/higher secondary cess

Integrated Goods and Service Tax (IGST): Inter state (integrated GST)

There are four major GST rates: 5%, 12%, 18% and 28%. Almost all the necessities of life like vegetables and food grains are exempted from this tax.

Progressive tax

Progressive tax rate is one in which the rate of taxation increases (multiplier) as the tax base increases (multiplicand). The amount of tax payable is calculated by multiplying the tax base with the tax rate. In the case of a progressive tax, the multiplicand (income) increases. When income increases, the tax rate also increases. This is known as a progressive tax.

Example:

Tax Base	Tax Rate	Amount of Tax
₹10,000	10%	₹1000
₹20,000	15%	₹3000
₹30,000	25%	₹7500
₹40,000	40%	₹16000

Proportionate taxes

Tax levied on goods and service in a fixed portion is known as proportionate taxes. All tax payers contribute the same proportion of their incomes. In this method, the rate of taxation is the same regardless of the size of income. The tax amount realised varies in the same proportions that of income.

Example:

Tax Base	Tax Rate	Amount of Tax
₹10,000	10%	₹1000
₹20,000	10%	₹2000
₹30,000	10%	₹3000
₹40,000	10%	₹4000

Regressive Taxes

It implies that higher the rate of tax lower the income groups than in the case of higher income groups. It is a very opposite of progressive taxation.

Progressive Tax	Income increase	Tax also Increase	E.g. Income Tax
Proportional Tax	Income Increase	Tax Decrease	E.g. Corporate Tax
Regressive Tax	Income change	Same tax always	E.g. Sales Tax

4.5 Black Money



Black Money

Black money is funds earned on the black market on which income and other taxes have not been paid. The unaccounted money that is concealed from the tax administrator is called black money.

Recent Legislative Initiatives to curb Black Money in India

- 1 Constitution of the Special Investigation Team (SIT) on Black Money under Chairmanship and Vice-Chairmanship of two former Judges of Hon'ble Supreme Court.
- 2 Enactment of a comprehensive law – The Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015 .
- 3 Constitution of Multi-Agency Group (MAG) consisting of officers of Central Board of Direct Taxes (CBDT), Reserve Bank of India (RBI), Enforcement Directorate (ED) and Financial Intelligence Unit (FIU) for the investigation of recent revelations in Panama paper leaks.
- 4 Double Taxation Avoidance Agreements (DTAAs)/Tax Information Exchange Agreements (TIEAs)/Multilateral Conventions.
- 5 Foreign Account Tax Compliance Act (FATCA).
- 6 Money-laundering Act, 2002 through the Finance Act, 2015.
- 7 Enactment of the Benami Transactions (Prohibition) Amendment Act, 2016 .
- 8 Launching of 'Operation Clean Money' on 31 January 2017.
- 9 Lokpal and Lokayukta act.
- 10 The Real Estate (Regulation and Development) Act, 2016.

4.5.1. Causes of Black Money

Several sources of black money are identified as causes.

1. **Shortage of goods:** Shortage of goods, whether natural or artificial, is the root cause of black money. Controls are often introduced to check black money.
2. **Licensing proceeding:** It is firmly believed that the system of controls permits, quotes and licences are associated with maldistribution of commodities in short supply, which results in the generation of black money.
3. **Contribution of the industrial sector:** Industrial sector has been the major contributor to black money. For example, the Controller of Public Limited Companies tries to buy commodities at low prices and get them billed at high amounts and pockets the difference personally.
4. **Smuggling:** Smuggling is one of the major sources of black money. When India had rigid system of exchange



controls, precious metals like gold and silver, textiles and electronics goods were levied a heavy excise duty. Bringing these goods by evading the authorities is smuggling.

5. **Tax structure:** When the tax rate is high, more black money is generated.

4.6 Tax Evasion



Tax evasion is the illegal evasion of taxes by individuals, corporations and trusts. Tax evasion often entails taxpayers deliberately misrepresenting the true state of their affairs to the tax authorities to reduce their tax liability and includes dishonest tax reporting, such as declaring less income, profits or gains than the amounts actually earned, or overstating deductions.

Tax evasion is an activity commonly associated with the informal economy. One measure of the extent of tax evasion is the amount of unreported income, which is the difference between the amount of income that should be reported to the tax authorities and the actual amount reported.

Tax evasion activities included

- Underreporting income
- Inflating deductions or expenses
- Hiding money
- Hiding interest in offshore accounts

4.6.1 Causes of tax evasion

- 1 Tax evasion resulting in black money prevents the resource mobilisation efforts of the Union government. Shortage of funds distorts implementation of developmental plans and forces the government to resort to deficit financing in case public expenditure is inelastic.
- 2 Tax evasion interferes with the declared economic policies of the government by distorting saving and investment patterns and availability of resources for various sectors of the economy.
- 3 Tax evasion undermines the equity attribute of the tax system. Honest taxpayers willingly bear disproportionate tax burden, feel demoralised and lured to join the tax evaders' camp.

- 4 Tax evasion and black money encourage the concentration of economic power in the hands of undeserving groups in the country, which, in turn, is a threatening to the economy in its way.
- 5 Evasion of tax consumes time and energy of tax administration to disentangle the intricate manipulations of tax dodgers.

4.6.2 Tax evasion penalties

- 1 If a person wilfully commits the act of tax evasion, he may face felony charges. Tax evasion penalties include imprisonment of up to five years and high amount as fines.
- 2 The defendant may also be ordered to pay for the costs of prosecution.
- 3 Other tax evasion penalties include community service, probation and restitution depending on the circumstances of the case.
- 4 Tax evasion penalties can be harsh, depending on the severity of the crime.

4.7 Tax and other Payments

Taxes are compulsory payments to government without expectation of direct return (or) benefit to the tax payer.

Payment includes income received from production and supply of goods and services

4.7.1 Difference between Tax and other Payments

S. No.	Tax	Payments
1	Tax is compulsory to the government without getting any direct benefits	Fee is the payment for getting any service
2	If the element of revenue for general purpose of the state predominates, the levy becomes a tax	While a fee is a payment for a specific benefit privilege although the special to the primary purpose of regulation in public interest.
3	Tax is a compulsory payment	Fee is a voluntary payment.
4	If tax is imposed on a person, he has to pay it; otherwise he has to be penalised	On the other hand fee is not paid if the person do not want to get the service
5	In this case, tax payer does not expect any direct benefit. Example: Income tax, gift tax, wealth tax, VAT etc.	Fee payer can get direct benefit for paying fee. Examples: stamp fee, driving license fee, government registration fee

of public enterprises and revenue from administrative activities. Payments from non-tax sources other than tax income is known as payments.

Some payments are fees, fines and penalties, and forfeitures.

4.8 Taxes and Development

The role of taxation in developing economics is as follows.

- 1. Resource mobilisation:** Taxation enables the government to mobilise a substantial amount of revenue. The tax revenue is generated by imposing direct taxes such as personal income tax and corporate tax and indirect taxes such as customs duty, excise duty, etc.
- 2. Reduction in inequalities of income:** Taxation follows the principle of equity. The direct taxes are progressive in nature. Also certain

indirect taxes, such as taxes on luxury goods, is also progressive in nature.

- 3. Social welfare:** Taxation generates social welfare. Social welfare is generated due to higher taxes on certain undesirable products like alcoholic products.
- 4. Foreign exchange:** Taxation encourages exports and restricts imports, Generally developing countries and even the developed countries do not impose taxes on export items.
- 5. Regional development:** Taxation plays an important role in regional development, Tax incentives such as tax holidays for setting up industries in backward regions, which induces business firms to set up industries in such regions.
- 6. Control of inflation:** Taxation can be used as an instrument for controlling inflation. Through taxation the government can control inflation by reducing the tax on the commodities.

SUMMARY

- Direct Tax is a tax paid directly to the Union government or to state or local governments, such as income tax and property tax.
- Income Tax is a tax paid by individuals and businesses based on earned and unearned income.
- Local Tax is a tax charged by a local government, such as a city or country.
- Tax Rate is the percentage of income that is owed as tax.
- Black Money is earned illegally or on which be necessary tax is not paid.

A-Z GLOSSARY

Levied	To impose taxes	வரி (விதிக்கப்பட்ட)
Fluctuation	To change	ஏற்ற இறக்கம்
Affordable	Inexpensive, reasonably priced	கட்டுப்படியாகக்கூடிய
Defray	Meet the expenses	செலவை ஈடுகட்ட
Proponents	Person who advocates theory	கொள்கை மொழிவோர்
Progressive Tax	Happening or developing gradually or in stages	முற்போக்கான வரி
Regressive Tax	Taking a proportionally greater amount from those on lower incomes.	பிற்போக்கு வரி
Proportionate Tax	(of a variable quantity) having a constant ratio to another quantity.	விகிதாசார வரி
Evasion	The action of evading something	ஏய்ப்பு



EXERCISE

I. Choose the correct answer



- The three levels of governments in India are
 - Union, state and local
 - Central, state and village
 - Union, municipality and panchayat
 - None of the above
- In India, taxes are including
 - Direct taxes
 - Indirect taxes.
 - Both (a) and (b)
 - None of these
- Which is the role of government and development policies?.
 - Defence
 - Foreign policy
 - Regulate the economy
 - all of above
- The most common and important tax levied on an individual in India is
 - Service tax
 - Excise duty.
 - Income tax
 - Central sales tax
- Under which tax one nation, one uniform tax is ensured
 - Value added tax (VAT)
 - Income tax
 - Goods and service tax
 - Sales tax
- Income tax was introduced in india for the first time in the year _____.
 - 1860
 - 1870
 - 1880
 - 1850
- _____ tax is charged on the benefits derived from property ownership.
 - Income tax
 - Wealth tax
 - Corporate tax
 - Excise duty
- What are identified as causes of black money?
 - Shortage of goods
 - High tax rate
 - Smuggling
 - All of above

- Tax evasion is the illegal evasion of taxes by
 - Individuals
 - Corporations
 - Trusts
 - All of the above
- Payments are
 - Fees and fines
 - Penalties and forfeitures
 - None of the above
 - a and b

II. Fill in the blanks

- _____ is levied by government for the development of the state's economy.
- The origin of the word 'tax' is from the word _____.
- The burden of the _____ tax cannot be shifted to others.
- _____ tax is levied on companies that exist as separate entities from their shareholders.
- The Goods and Service Tax act came into effect on _____.
- The unaccounted money that is concealed from the tax administrator is called _____.

III. Choose the correct statement

- Which of the following statement is correct about GST?
 - GST is the 'one point tax'.
 - This aims to replace all direct taxes levied on goods and services by the Central and State governments.
 - It will be implemented from 1 July 2017 throughout the country.
 - It will unified the tax structure in India.
 - (i) and (ii) are correct
 - (ii), (iii) and (iv) are correct
 - (i), (iii) and (iv) are correct
 - All are correct
- Choose the incorrect statements.
 - Shortage of goods, whether natural or artificial, is the root cause of black money.

- (ii) Industrial sector has been the major contributor to black money.
- (iii) Smuggling is one of the major sources of black money.
- (iv) When the tax rate is low, more black money is generated.
- a) (i) and (ii) b) (iv)
c) (i) d) (ii) and (iii)

IV. Match the following

- | | | |
|----------------|---|-----------------|
| 1. Income Tax | - | Value added tax |
| 2. Excise duty | - | 1 July 2017 |
| 3. VAT | - | Smuggling |
| 4. GST | - | Direct tax |
| 5. Black money | - | Indirect tax |

V. Give Short Answers

1. Define tax.
2. Why we pay tax to the government?
3. Write the canons of tax system?
4. What are the types of tax? Give examples.
5. Write short note on Goods and Service Tax.
6. What is progressive tax?
7. What is meant by black money?
8. What is tax evasion?
9. Write some causes of tax evasion.
10. What is the difference between tax and payments?

VI. Brief Answer

1. Briefly explain the role of government in development policies.
2. Explain some direct and indirect taxes.
3. Write the structure of GST.
4. What is black money? Write the causes of black money.
5. Explain the role of taxation in economic development.

VII. Activity and Projects

1. Collect information about the local taxes (water, electricity and house tax etc).
2. Students purchase some goods on the shop. The teacher and students discuss those goods, maximum retail price, purchasing price or GST.



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INTERNET RESOURCES

Unit - 5

Industrial Clusters in Tamil Nadu



Learning Objectives

- To know the historical development of Industrial Clusters in Tamil Nadu
- To know the Tamil Nadu government policies and Industrial development Agencies
- To understand the impact of Government policies
- To know the role of the Entrepreneur



Introduction - Industrialisation

Generally, “any human activity which is engaged in the conversion of raw materials into readily usable materials is called an industry”. Industrialisation refers to the process of using modern techniques of production to produce goods that are required by both consumers and other producers on a large scale. While some consumer goods such as phones and television sets meet the requirements of consumers, industries also produce goods like components, machine parts and machines that are required by other producers. The historical process of a steady increase in the number and scale of manufacturing in a country exists for a long time. It is important for several reasons. In this chapter we will learn the nature of industrialisation of Tamil Nadu, importance of industrial clusters, how industrial clusters have developed in Tamil Nadu and the role of government initiatives in promoting industries.

5.1 Importance of Industrialisation

To understand importance of industries, we need to understand why the share of agriculture in an economy's income and employment decreases with development. First, demand for food remains constant with regard to income. Therefore, as an economy grows and incomes increase, consumers tend to spend a lesser share of their income on products from the agricultural sector.

Second, even the food that is consumed is subject to more transformation as an economy expands and there is greater division of labour between people and between regions. Food products are taken over longer distances, processed and branded. This also requires that food products have to be preserved. As a result, the prices that farmers get tend to be much less compared to the prices at which consumers buy.

Third, there are limits to the ability of agriculture to absorb labour due to the declining marginal productivity of land. As a result, labour productivity in the agricultural



sector cannot increase much. Wages too cannot therefore increase and as a result poverty levels may remain high, especially when more and more people continue to rely on agriculture for their livelihood.

Due to all these factors, there is a need for an economy's production and employment base to diversify away from agriculture. Development economics therefore recognises the need for structural transformation of the economy where the share of non-agricultural sectors tend to get increase steadily. Such transformation and diversification through industrialisation is therefore seen as important for an economy's development.

5.1.1 What benefits does industrialisation bring to an economy?

As stated earlier, it is essential to produce inputs to other producers in an economy. Even agriculture requires inputs from industry such as fertilisers and tractors to increase productivity.

Second, a market exists for both producers and consumer goods. Even services like banking, transport and trade are dependent on production of industrial goods.

Third, by using modern methods of production, industries contribute to better productivity and hence lower cost of production of all goods produced. It therefore helps people to buy goods at a cheaper rate and help create demand for more products.

Fourth, through such expansion of production, industrialisation helps to absorb the labour force coming out of agriculture. Employment generation is therefore an important objective of industrialisation.

Fifth, a related advantage of industrialisation is therefore technological change. Through use of modern techniques, industrialisation contributes to learning of such methods and their improvement. As a result labour productivity, ie, output per unit of labour input increases, which can help workers earn higher wages.

Sixth, expanding incomes lead to more demand for goods and services. If an economy is not able to produce enough to meet such demand, it has to rely on imports and therefore spend a lot of foreign exchange. If the economy does not earn enough from exporting, it will be difficult to meet the growing demand. Industrialisation therefore helps an economy to save and also generate foreign exchange through exports.

5.2 Types of Industries

Industries can be classified on the basis of

(a) **Users:** If the output is consumed by the final consumer, it is called a consumer goods sector. If the output is consumed by another producer, it is called a capital goods sector. There are industries that produce raw materials for other industries such as cement and steel. Such industries are called basic goods industries.

(b) **Type of Inputs Used:** Industries are also classified based on the kind of raw material used such as agro-processing, textiles sector, rubber products, leather goods, etc.

(c) **Ownership:** Firms may be privately owned, publicly owned (by the government, central or state), jointly owned by the private and public sector, or cooperatively owned (cooperatives).

(d) **Size:** Firms may be large, small or medium based on their volume of output, sales or employment or on the basis of the amount of investments made. The Indian government normally uses the investment criterion to decide whether a firm is small, medium or large. There are also micro or tiny enterprises that are smaller than even small firms. This classification is important because the government often provides financial, infrastructural or subsidy support to the smaller firms to promote them.

The small sector is seen as important for two reasons. One, it is believed to generate more employment than the large-scale sector, which is likely to use more advanced and



automated technologies and therefore may not generate enough employment. Second, the small scale sector allows for a larger number of entrepreneurs to emerge from less privileged backgrounds.

Till the 1980s, it was widely believed that large firms are more efficient and can out-compete the smaller firms. But at present, based on experiences of industrialisation in different parts of the world, it is believed that when small firms specialising in one sector are geographically concentrated in specific locations, and linked to one another through production and learning, they tend to be equally if not more efficient than large scale enterprises. Such agglomerations of small firms are called industrial clusters.

5.3 Industrial Clusters

Industrial clusters are groups of firms in a defined geographic area that share common markets, technologies and skill requirements. An important aspect of clusters is the nature of inter-firm networks and interactions. Clusters where firms specialise in one stage of the production process and supply inputs or absorb the output of another firm in the cluster is critical to the efficiency and competitiveness of the cluster. The advantages of industrial clusters or districts was first observed by the famous economist Alfred Marshall in the 1920s when he tried to understand the working of clusters of small firms in the metal-working and textile regions in England. While the notion of an 'industrial district' was developed by Marshall, it was only after the success of small firms in Italy in the 1980s that it became popular. Policy-makers in developing countries like India began to promote them actively as they realized that there several such small firm clusters in the country.

The following are the chief characteristics of a successful cluster.

- close inter-firm collaboration
- inter-firm competition based on innovation
- a socio-cultural identity, which facilitates trust
- multi-skilled workforce
- active self-help organisations, and
- supportive regional and municipal governments.

Firms are therefore expected to collaborate and compete with one another at the same time. By collaborating, they can expand their capacity and also learn from one another. Through competition, they are forced to become more efficient. Apart from the Chennai region, industrial growth has been concentrated in several small town clusters, throughout the state, with the western region being more dominant. These clusters specialise in a range of activities like clothing, home furnishings, textiles, leather, poultry, coir products, transport equipment servicing, engineering services and auto component making.

5.3.1 How Do Clusters Originate?

Clusters may arise due to many factors. Certain clusters evolve over a long time in history when artisans settle in one locality and evolve over centuries. Handloom weaving clusters are one examples of this development. Or else, in some sectors, when a large firm is established, a cluster of firms may emerge to take care of its input and service requirements. At times, governments may decide to encourage manufacturing using raw materials from a region, which may also lead to emergence of clusters.

5.4 Historical Development of Industrialisation in Tamil Nadu

There is lot of evidence for presence of industrial activities such as textiles, ship-building, iron and steel making and pottery in precolonial Tamil Nadu. Given the vast coastline, the region has been involved in trade with both South-East and West Asia for several



centuries. Colonial policies also contributed to the decline of the handloom weaving industry due to competition from machine-made imports from England. But some industries also developed during the colonial period and provided the basis for subsequent industrialisation in the state.

5.4.1 Industrialisation in the Colonial Period

There are two sets of factors that have contributed to the process. The introduction of cotton cultivation in western and southern Tamil Nadu by the colonial government led to the emergence of a large-scale textile sector in these parts, which involved ginning, pressing, spinning and weaving operations. The introduction of railways also expanded the market for cotton yarn and helped develop the sector.

Second, increase in trade during this period led to industrial development around two of the most active ports in the region, Chennai and Tuticorin. The Chennai region also saw the beginning of the automobile sector during this period along with leather. The growth of jaggery industry in south Tamil Nadu is another example of this. Match factories too emerged during the colonial period in the Sivakasi region, which later on became a major centre for fireworks production and printing. Port-related activity too contributed to the growth of the region. Leather production was also taking place in Dindigul, Vellore and Ambur areas.

In Western Tamil Nadu, the emergence of textiles industries also led to demand and starting of textile machinery industry in the region. This textile machinery industry in turn led to the rise of a number of small workshops for repair and producers of machinery components. Another major development in the western region is the introduction of electricity from hydro-electric power in the 1930s. Availability of electricity allowed for use of oil engines for drawing ground water. This led to both expansion of agriculture as

well as increase in demand for oil engines. In turn, it led to emergence of workshops for servicing engines and also for addressing the demand for spare parts. Foundries began to be set up and agricultural machinery began to be produced.

5.4.2 Post-Independence to early 1990s

Soon after independence, several large enterprises were set up by both the central and state governments in different segments such as the Integral Coach Factory in Chennai to make railway coaches and the Bharat Heavy Electricals Limited (BHEL) in Tiruchirappalli manufacture to boilers and turbines. BHEL in turn led to the emergence of an industrial cluster of several small firms catering to its input requirements. Heavy Vehicles Factory was set up to manufacture tanks in Avadi on the outskirts of Chennai. Standard Motors too started manufacturing cars in Chennai. Ashok Motors (later Ashok Leyland) and Standard Motors together helped form an automobile cluster in the Chennai region. The Avadi industrial estate was established in the 1950s to support the small and medium companies supplying to the large firms in the region. More hydro-electric power projects in the state were also initiated to increase the spread of electrification. The government played a major role in all these processes. The Salem Steel Plant was set up in 1973 to produce stainless steel.

The Coimbatore region also witnessed diversification from textiles to textile machinery as well as agricultural machinery like electric motors and pumpsets for drawing ground water.

The 1970s and 1980s saw the setting up of emergence of powerloom weaving clusters in the Coimbatore region as well as expansion of cotton knitwear cluster in Tiruppur and home furnishings cluster in Karur. This period also saw more encouragement of the small and medium sector with setting up of industrial estates by the state government in different parts. The Hosur industrial cluster

is a successful case of how such policy efforts to promote industrial estates helped develop industries in a backward region.

5.4.3 Industrialisation in Tamil Nadu – Liberalization Phase

The final phase of industrialisation is the post-reforms period since the early 1990s. The reforms made the state governments more responsible for resource mobilisation and they were forced to compete with each other to attract private investments for industrialisation. Incentives such as cheap land, tax concessions and subsidised but quality power were all offered to woo investors. Trade liberalisation and currency devaluation also helped open up export markets. This led to two major developments.

First, because of trade liberalisation measures, exports of textiles, home furnishings and leather products began to grow rapidly. Second, efforts to attract investments led to entry of leading multinational firms (MNCs) into the state, especially in the automobile sector. Since automobile sector relies heavily on component makers, entry of MNCs not only brought along other MNC component suppliers but also opened up new market opportunities for domestic component producers. Chennai region also emerged as a hub for electronics industry with MNCs such as Nokia, Foxconn, Samsung and Flextronics opening plants on the city's outskirts. A significant share of these investments has come up in special economic zones in the districts bordering Chennai. Tamil Nadu has often been hailed as a model for successfully using the SEZ route to attract productive investments.

Other important industries in the state that evolved over a much longer period include sugar, fertilizers, cement, agricultural implements, iron and steel, chemicals, transformers and paper.

Because of all these factors, Tamil Nadu at present has the largest number of factories among all states in India and also has the largest share of workforce employed in manufacturing. Importantly, it is more labour

intensive compared to other industrially advanced states like Maharashtra and Gujarat. The major industries are automobiles, auto-components, light and heavy engineering, machinery, cotton, textiles, rubber, food products, transport equipment, chemicals, and leather and leather goods. Unlike other states, the industries are spread across all regions of the state (there are 27 clusters in 13 districts) with many of them being export oriented as well. The state has a well-developed network of roads, rail, air and major ports.

The diffusion of industrialisation also implies a widening of the social base of entrepreneurship. Unlike in North India where entrepreneurs and business groups are drawn mostly from merchant communities, in Tamil Nadu, the entrepreneurs come from a dispersed social background, with a relatively small size of capital. Further, the spatial spread of industries is higher. The state also has a better mix of large, small and household industries. This diffused process of industrialisation and corresponding urbanisation has paved the way for better rural-urban linkages in Tamil Nadu than in most other states.

5.5 Major Industrial Clusters and Their Specialisation in Tamil Nadu

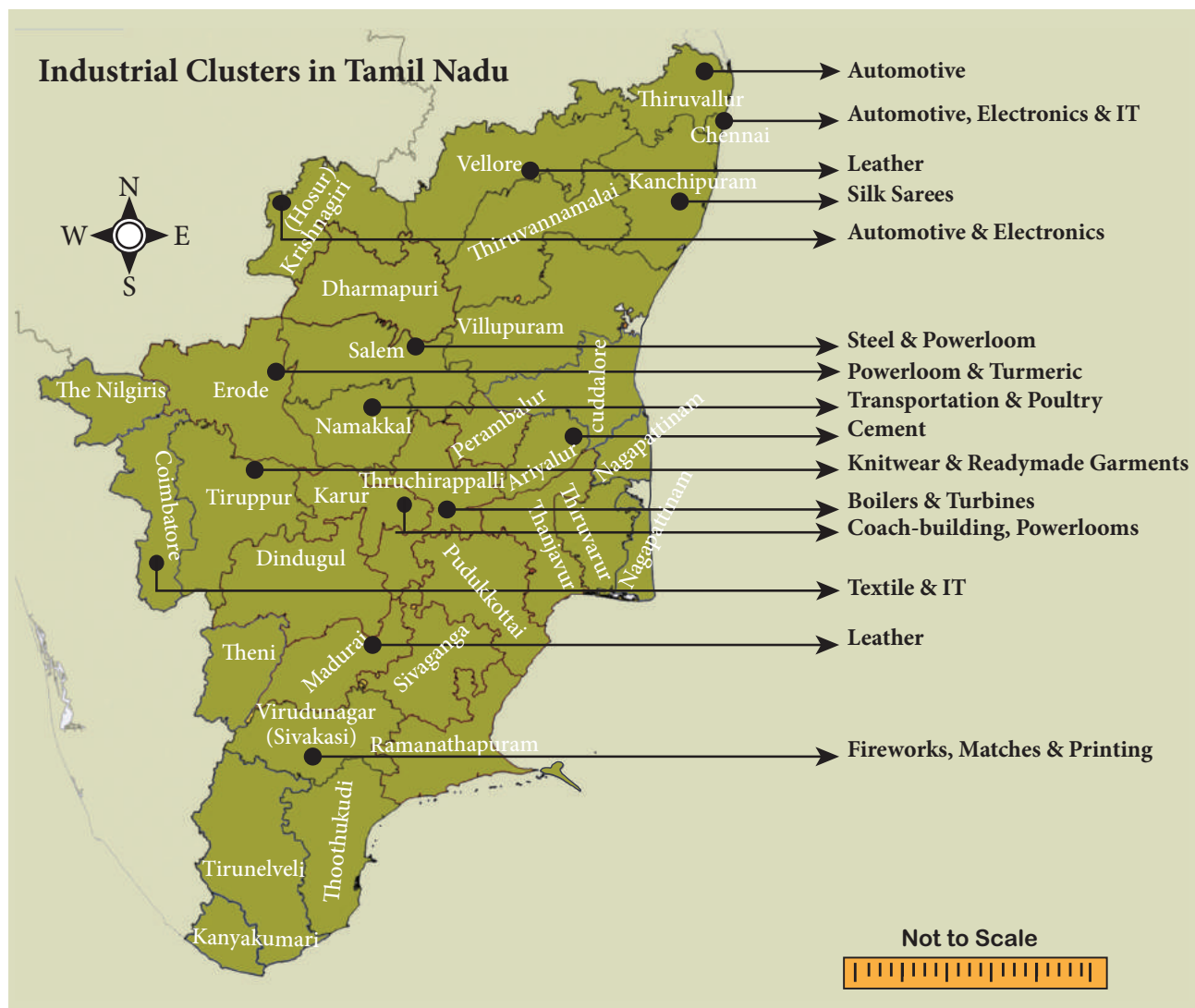
Automotive Clusters

Chennai is nicknamed as "The Detroit of Asia" because of its large auto industry base. Chennai is home to large number of auto assembly and component making firms.

While there were a few domestic firms like TVS, TI Cycles, Ashok Leyland and Standard Motors earlier, in the post-reform period, several MNC firms like Hyundai, Ford, Daimler-Benz and Renault-Nissan have opened factories in the region. This in turn has attracted a number of component suppliers from foreign countries. Many local firms too cater to component production for all these firms.



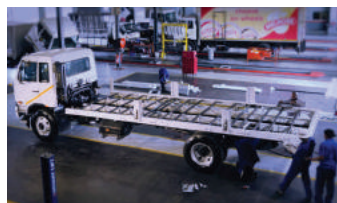
Automotive Industry



Hosur is another auto cluster with firms like TVS and Ashok Leyland having their factories there. Coimbatore region is also developing into an auto component cluster.

Truck and Bus Body Building Industry Clusters

The Namakkal-Tiruchengode belt in western Tamil Nadu is known for its truck body building industry. About 150 of the 250 units in this sector are located in this cluster including 12 large-sized body building houses. Karur is another major hub with more than 50 units. Many entrepreneurs were previous employees in a big firm involved in body building who came out to set up their own units.



Truck Body Building Industry

Textile Clusters



Textile Industry

Tamil Nadu is home to the largest textiles sector in the country. Because of the development of cotton textile industry since the colonial period, Coimbatore often referred as the "Manchester of South India". At present, most of the spinning mills have moved to the smaller towns and villages at a radius over 100 to 150 km around the Coimbatore city. Tamil Nadu is the biggest producer of cotton yarn in the country.



Palladam and Somanur, small towns near Coimbatore and the villages near these towns, are home to a dynamic powerloom weaving cluster as well. Powerloom is however more widespread with Erode and Salem region too having a large number of power loom units.



Tiruppur is famous for clustering of a large number of firms producing cotton knitwear. It accounts for nearly 80% of the country's cotton knitwear exports and generates employment in the range of over three lakh people since the late 1980s. It is also a major producer for the domestic market. Because of its success in the global market, it is seen as one of the most dynamic clusters in the Global South. While initially most firms were run by local entrepreneurs, at present, some of the leading garment exporters in India have set up factories here.

Global South

Countries in the southern hemisphere are called Global South countries

Apart from body building, Karur is a major centre of exports of home furnishings like table cloth, curtains, bed covers and towels. Bhavani and Kumrapalayam are again major centres of production of carpets, both for the domestic and the global markets.

Apart from such modern clusters, there are also traditional artisanal clusters such as Madurai and Kanchipuram that are famous for silk and cotton handloom sarees. Even these clusters have witnessed a degree of modernisation with use of powerlooms in several units.

Leather and Leather Goods Clusters

Tamil Nadu accounts for 60 per cent of leather tanning capacity in India and 38 per cent of all leather



Leather Industry

footwear, garments and components. Hundreds of leather and tannery facilities are located around Vellore and its nearby towns, such as Ranipet, Ambur and Vaniyambadi. The Vellore district is the top exporter of finished leather goods in the country. Chennai also has a large number of leather product making units involved in exports. There is another clustering of leather processing in Dindigul and Erode. The leather products sector too is a major employment generator.

Fireworks, Matches and Printing Cluster

Sivakasi region, once famous for its match industry has now become a major centre for printing and fireworks in the country. It is believed to contribute to 90% of India's fireworks production, 80% of safety matches and 60% of offset printing solutions. The offset printing industry has a high degree of specialisation among firms with several of them undertaking just one operation required for printing. All these industries have their origin in the colonial period and at present offer employment to a large number of workers.



Fireworks Industry

Electronics and Information Technology (IT) Clusters

After the economic reforms started in the early 1990s, the state has seen the entry of hardware and electronics manufacturers like Nokia, Foxconn, Motorola, Sony-Ericsson, Samsung and Dell making cellular handset devices, circuit boards and consumer electronics. They have all been set up in the Chennai region. While Nokia has been closed down, Chennai still continues to be a minor electronics hub in the country.



Tidel Park, Chennai

Similarly, with the expansion of the software sector, Chennai and, to a limited extent Coimbatore, have emerged as centres for software services.

Information Technology Specific Special Economic Zones :

In order to make development more inclusive, Tier II cities such as Coimbatore, Madurai, Trichy, Tirunelveli, Hosur and Salem have been promoted as IT investment destinations apart from the Chennai region. To facilitate this, ELCOT has established ELCOSEZs (IT Specific Special Economic Zones) in the following eight locations:

- Chennai – Sholinganallur
- Coimbatore – Vilankurichi
- Madurai – Ilandhaikulam
- Madurai – Vadapalanji-Kinnimangalam
- Trichy – Navalpattu

Companies desiring to set up units in the state can avail themselves of the facilities provided in ELCOSEZs. The possibility of setting up ELCOSEZs in new locations will be explored based on demand and viability. (Map Information Communication Technology Policy - 2018–19)

- Tirunelveli – Gangaikondan
- Salem – Jagirammappalayam
- Hosur – Viswanathapuram

5.6 The Policy Factors that Helped the Industrialisation Process in Tamil Nadu

Policy factors can be divided into three aspects:

Education

Industries require skilled human resources. Apart from a lot of attention to primary education to promote literacy and basic arithmetic skills, the state is known for its vast supply of technical human resources. It is home to one of the largest number of engineering colleges, polytechnics and Industrial Training Centres in the country.

Infrastructure

The widespread diffusion of electrification has contributed to the spread of industrialisation to smaller towns and villages in the state. Along with electrification, Tamil Nadu is known for its excellent transport infrastructure, especially minor roads that connect rural parts of the state to nearby towns and cities. A combination of public and private transport has also facilitated rural to urban connectivity and therefore connect small producers to markets better.

Industrial Promotion

Apart from investments in education and transport and energy infrastructure, active policy efforts were made to promote specific sectors and also industrialisation in specific regions. Policies to promote specific sectors like automobile, auto components, bio technology and Information and communication Technology sectors have been formulated in the post reform period. In addition, the state has put in place several industrial promotion agencies for both large enterprises and the small and medium segments, as well as to provide supporting infrastructure.

5.6.1 The following are some agencies that have played a key role in industrialization in the state

SIPCOT (State Industries Promotion Corporation of Tamil Nadu), 1971

SIPCOT was formed in the year 1971 to promote industrial growth in the state by setting up industrial estates.



SIPCOT

TANSIDCO (Tamil Nadu Small Industries Development Corporation), 1970

TANSIDCO is a state-agency of the state of Tamil Nadu established in the year 1970 to promote small-scale industries in the state. It gives subsidies and provide technical assistance for new firms in the small scale sector.

TIDCO (Tamil Nadu Industrial Development Corporation), 1965

TIDCO is another government agency to promote industries in the state and to establish industrial estates.

TIIC (Tamil Nadu Industrial Investment Corporation Ltd.), 1949

TIIC is intended to provide low-cost financial support for both setting up new units and also for expansion of existing units. Though it is meant to meet the requirements of all types of firms, 90% of support goes to micro, small and medium enterprises.

TANSI (Tamil Nadu Small Industries Corporation Ltd.), 1965

TANSI was formed in 1965 to take over the small scale-units that were set up and run by the Department of Industries and Commerce. It is supposed to be the first industrial corporation operating in the domain for small enterprises.

5.6.2 Emerging Services Sector in Tamil Nadu

With technological changes, industries too are not able to absorb labour. Automation

Special Economic Zones (SEZs)

A policy was introduced on in April 2000 for the settling up of special Economic Zones in the country with a view to a hassle-free environment for exports. Units may be set up in SEZ units are on a self-certification basis. The policy provides for setting up of SEZs in the public, private, joint sector or by state governments. It is also envisaged the some of the existing Export Processing Zones, would be converted in to Special Economic Zones.

Accordingly, the government has converted Export Processing Zones located at following places.

Nanguneri SEZ	–	A multi product SEZ, Thirunelveli
Ennore SEZ	–	Thermal power project, Vayalur
Coimbatore SEZ	–	IT Parks
Hosur SEZ	–	Auto Engineering, Electronics, Defence and Aerospace
Perambalur SEZ	–	Multi product SEZ
Autocity SEZ	–	Automobile/Auto Components, Tiruvallur
India-Singapore SEZ	–	IT & ITES, Electronic Hardware, Logistics and Warehousing – Thiruvallur District
Bio-Pharmaceuticals SEZ	–	Clinical Research Organisation, Poison Control Centre, Centre for Regenerative Medicine, Medicine Research

Madras Export Processing Zone (MEPZ)

MEPZ is a Special Economic Zone in Chennai. It is one of the seven export processing zones in the country set up the central government. It was established in 1984 to promote foreign direct investment, enhance foreign exchange earnings and create greater employment opportunities in the region. The MPEZ headquarters is located on GST Road in Tambaram, Chennai.



has been reducing the need for labour in manufacturing. The services sector has emerged as a much bigger employer over the last three decades. Tamil Nadu has become a hub for some important and dynamic service sectors such as software services, healthcare and education services. Healthcare and educational services are diffused across major cities, Chennai and Coimbatore in particular. Software services is, however, largely confined to Chennai. Only in the last ten years, a few software firms have moved to Coimbatore.

5.6.3 Issues with Industrialisation

Though Tamil Nadu has emerged as a relatively highly industrialised state in the country, the state faces a few issues in sustaining the process. To begin with, some clusters, especially chemicals, textiles and leather clusters, tend to generate a lot of polluting effluents that affect health. The effluents also pollute water bodies into which effluents are let into and also adjoining agricultural lands. This issue requires urgent attention. Second, employment generation potential has declined because of use of frontier technologies because of the need to compete globally. Quality of employment also has suffered in recent years as most workers are employed only temporarily. This issue too requires urgent attention among policy makers.

Startup India Scheme (Launched 16-Jan-2016):

Startup India Scheme is an initiative of the Indian government, the primary objective of which is the promotion of startups, generation of employment and wealth creation.

Standup India Scheme (Launched 5-April-2016):

Standup India Scheme is to facilitate bank loans between ₹10 lakh and ₹1 crore to at least one Scheduled Caste (SC) or Scheduled Tribe (ST) borrower and one woman borrower per bank branch for setting up a greenfield enterprise.

5.7 Entrepreneur

Entrepreneur is an innovator of new ideas and business processes. He possesses management skills, strong team building abilities and essential leadership qualities to manage a business.

Entrepreneurship

Entrepreneurship is a process of a action of an entrepreneur who undertakes to establish his enterprise. It is the ability to create and build something.

5.7.1 Role of an Entrepreneur

Entrepreneurs play a most important role in the economic growth and development of a country's economy.

1. They promote development of industries and help to remove regional disparities by industrialising rural and backward areas.
2. They help the country to increase the GDP and Per Capita Income.
3. They contribute towards the development of society by reducing concentration of income and wealth.
4. They promote capital formation by mobilising the idle savings of the citizens and country's export trade.
5. Entrepreneurs provide large-scale employment to artisans, technically qualified persons and professionals and work in an environment of changing technology and try to maximise profits by innovations.
6. They enable the people to avail better quality goods at lower prices, which results in the improvement of their standard of living.

SUMMARY

- Industrialisation refers to the process of using modern techniques of production to produce goods that are required by both consumers and other producers on a large scale.
- Industrial clusters are groups of firms in a defined geographic area that share common markets, technologies and skill requirements.
- Clusters may arise due to many factors. Certain clusters evolve over a long time in history when artisans settle in one locality and evolve over centuries.
- The Coimbatore region also witnessed diversification from textiles to textile machinery as well as agricultural machinery like electric motors and pumpsets for drawing ground water.
- Chennai is nicknamed as "The Detroit of Asia" because of its large auto industry base.

A-Z GLOSSARY

agglomerations	a mass or collection of things	திரட்சிகள்
Industrial Clusters	Relating to or characterised by industry.	தொழில் உற்பத்தி தொகுப்புகள்
Emergence	the process of coming into existence	தோற்றம்
Component	a part or element of a larger whole, especially a part of a machine or vehicle	உதிரிபாகங்கள்
diffusion	the spreading of something more widely	பரவல்
Artisanal	relating to or characteristic of an artisan	கைவினை சார்ந்த
Effluents	liquid waste or sewage discharged into a river or the sea	திரவக் கழிவுகள்
frontier	the extreme limit of understanding or achievement in a particular area.	எல்லை



EXERCISE

I Choose the correct answer



- 'The Detroit of Asia' is _____.
a) Tuticorin
b) Coimbatore
c) Chennai
d) Madurai
- Pumpsets and motors are produced mostly in
a) Salem
b) Coimbatore
c) Chennai
d) Dharampuri
- Tuticorin is known as
a) Gateway of India
b) Gateway of Tamil Nadu
c) Pump city
d) None of these
- _____ are an essential aspect of a nation's development.
a) agriculture
b) industry
c) railway
d) none of these
- Tiruppur is known for
a) Leather tanning
b) Lock making
c) Knitwear
d) Agro-processing



6. Along with Ambur and Vaniyambadi _____ is also a centre for leather goods exports.
a. Chennai b. Sivakasi
c. Coimbatore d. Madurai
7. IT means
a) Indian Technology
b) Information Technology
c) Institute of Technology
d) Initiative Technology
8. A successful industrial cluster entirely created by the Tamil Nadu is
a) Hosur b) Dindigul
c) Kovilpatti d) Tirunelveli
9. SIPCOT was formed in the year
a) 1972 b) 1976
c) 1971 d) 1978
10. Which is the Tamil Nadu Industrial Development Agency?
a) SIPCOT b) TANSIDCO
c) TIDCO d) All of these

II Fill in the blanks

- _____ are very important in the modern economic activities of man.
- _____ are groups of firms in a defined geographic area that share common market and technologies.
- Hundred of leather and tannery facilities are located around _____ District in Tamil Nadu.
- _____ is fondly called as 'Little Japan'.
- Special Economic Zones policy was introduced on in _____.
- _____ is an innovator of new ideas and business processes.

III Choose the correct statement

- Entrepreneurship promotes capital formation by mobilising the idle savings of the public.
- They do not provide large scale employment to artisan, technically qualified persons and professionals.
- Entrepreneurs help the country to increase the GDP and per capita income.

- IV. Entrepreneurs do not promote country's export trade.
a) I and IV is correct
b) I only correct
c) III and IV is correct
d) I and III is correct

IV Pick out odd one

- Which one of the following is not having leather factories?
a) Ranipet b) Dharmapuri
c) Ambur d) Vaniyambadi
- Which one of the following is not an industrial developing agency?
a) TIDCO b) SIDCO
c) MEPCO d) SIPCOT

V Match the following

- Entrepreneur - Export Processing Zone
- MEPZ - Coimbatore
- Indian Ordnance Factory - Organizer
- TNPL - Aravankadu
- Manchester of south India - Karur

VI Write Short Answer

- Why should a developing economy diversify out of agriculture?
- Why are wages low in the agricultural sector?
- What is meant by an industrial cluster?
- What are the routes for cluster formation?
- Mention the 3 areas of policy making that helped Tamil Nadu become one of the most industrialised states in the country.
- Mention any three industrial development agencies in Tamil Nadu and their role.
- What are the problems of industrialization currently in Tamil Nadu?
- What is Meant by Entrepreneur?
- What is Entrepreneurship?

VII Write Brief Answer

- What are the contributions of industrialization to development?
- Write a note on history of industrialisation in Tamil Nadu.

3. What are the important characteristics of successful industrial clusters?
4. Write about the Textile industry cluster in Tamil Nadu?
5. Write in detail about the types of policies adopted by the Tamil Nadu government to industrialise.
6. Explain the role of Entrepreneur?

VIII. Case studies

1. Choose a cluster in Tamil Nadu based on online research and write a note on it.

IX. Activity and Project

1. Write a note on a cluster or a firm near your school/home based on your observations.

X. Life Skills

1. Teacher and Students discuss about the entrepreneurs and their activities and Write an a essay in the topic of “If you are like a Entrepreneur”.



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4. Indian Industrial Clusters - Keshab Das



INTERNET RESOURCES



ICT CORNER

Steps

- Open the Browser and type the URL given below.
- You can see the list of SIPCOT in Tamil Nadu. When you click anyone in the list, you will get the details of SIPCOT in new tab.
- For example, click on the minimum support price of paddy. You can see the yearwise minimum support price of paddy, wheat and coarsegrain.
- Likewise, you can view regionwise procurement also.



Class X – Social Science (Volume II)

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