

Disaster Management

This booklet consist of the following Chapters:

- ❖ Introduction
- ❖ Natural Disasters
- ❖ Man Made Disasters in India
- ❖ Disaster Management Cycle
- ❖ Disaster Management Institutions in India
- ❖ Emergency Response Mechanism
- ❖ Community Based Disaster Management
- ❖ Leveraging Science & Technology in Disaster Management

Indian Economy (Part-1)

This booklet consist of the following Chapters:

ECONOMY BASICS

- ❖ Introduction
- ❖ Law of Demand
- ❖ Law of Supply
- ❖ Market Equilibrium
- ❖ Basic Market Structures
- ❖ Concept of Elasticity
- ❖ Mobilization of Resources

OVERVIEW OF INDIAN ECONOMY

- ❖ Indian Economy in Pre-independence Period
- ❖ Theory of Drain
- ❖ Impact of British Rule on Indian Economy
 - Agricultural Stagnation
 - Poverty and Famines
 - Deindustrialization
 - Demography
- ❖ Economy of Eve of Independence
 - Challenges
 - Features
- ❖ Post-Independence India
 - Issues
 - Agriculture and its development so far
 - Agricultural Terms
 - Industry

- Services

❖ **Phases of Economic Development in India**

- Nehruvian Socialist Economy
- Economic Reforms

❖ **National Income trends since Independence**

❖ **Inflation Trends since independence**

❖ **Taxation Trends since independence**

❖ **Agricultural Growth Trends since independence**

❖ **Industrial Development Trends since Independence**

❖ **Features of Indian Economy**

❖ **Planning**

- Objectives
- Technical details
- Planning History
- Analysis of each plan

Indian Economy (Part-2)

This booklet consist of the following Chapters:

FISCAL POLICY

- ❖ **Fiscal Policy: An Overview**
 - Objectives of Fiscal Policy
 - Types of Fiscal Policy
 - Tools of Fiscal Policy
 - Role of Fiscal Policy in Developing Countries
- ❖ **Fiscal Policy in India**
 - Evolution of Indian fiscal policy till 1991
 - Liberalization, growth, inclusion and fiscal consolidation (1991-2008)
 - Achievements of fiscal policy in India
 - Limitations of Fiscal Policy
 - Major Challenges for Fiscal Policy in India
 - Conclusion
- ❖ **Annexure: Important Budgetary Terms and Fiscal Concepts**
 - Government Revenues & Spending
 - Deficits
 - Taxation
 - Balance Sheet

TAXATION

- ❖ **Taxation: An Overview**
 - Direct tax
 - Indirect tax
- ❖ **Principles of Taxation**
- ❖ **Objectives of Taxation**
- ❖ **Taxation for Mobilization of Resources**

❖ Tax System in India

- Types of Taxes in India
- Present Tax regime in India

❖ Subsidies

- Agricultural subsidies
- Fertilizer Subsidy
- PDS
- Export Subsidies
- Petroleum Subsidies
- Food Security Bill

❖ Direct Benefit/Cash Transfer

MONETARY POLICY IN INDIA

❖ Monetary Policy in India

- Objectives
- Instruments
- Monetary policy in pre-reform Era (1948 - 1991)
- Monetary Policy in Post-Reform Era (Since - 1991)
- Urjit Patel Committee Report
- Monetary Policy Committee and Inflation Targeting

FINANCIAL SYSTEM

- Money Market
- Capital Market in India
- Indian Capital Market Regulatory Framework
- Primary Market Reforms in India
- Secondary Market Reforms in India

BANKING

- Central Banking
- Indian Banking System
- Functions of Commercial Banks
- Challenges Faced by Commercial Banks in India
- Nationalization of Banks in India
- Banking Reforms in India
- New Bank Licence Criteria
- Small Finance Banks and Payment Banks Criteria

- Non-Banking Financial Company (NBFC)
- Terminologies/Concepts Related to Banking in India
- Financial Inclusion

Indian Economy (Part-3)

This booklet consist of the following Chapters:

AGRICULTURE AN OVERVIEW

- ❖ Introduction
- ❖ Role of Agriculture in Indian Economy
- ❖ Land Reforms
 - Objectives of Land Reforms in India
 - Progress of Land Reforms in India
 - Progress of Ceiling Legislation
- ❖ New Agricultural Strategy
 - Achievements of the New Agricultural Strategy
 - Weaknesses of New Strategy

AGRICULTURE FINANCE

- ❖ Introduction
- ❖ Features of Agricultural Finance
- ❖ Criteria for Agricultural Credit
- ❖ Problems of Agricultural Finance
- ❖ Suggestions For Improvement

AGRICULTURAL CREDIT INSTITUTIONS

- ❖ Introduction
- ❖ Commercial Bank
- ❖ Lead Bank Scheme
- ❖ Multi Agency Approach
- ❖ Regional Rural Banks
- ❖ National Bank for Agriculture and Rural Development (NABARD)

- ❖ Reserve Bank of India
- ❖ Kisan Credit Card Scheme
- ❖ Self Help Group (SHG) Bank Linkage Programme
- ❖ Rural Infrastructure Development Fund (RIDF)
- ❖ Government Policy For Agricultural Credit
- ❖ Farmers Service Societies (FSS)
- ❖ Conclusion

CROP INSURANCE IN INDIA

- ❖ Introduction
- ❖ Historical Background
- ❖ Issues Related to Crop Insurance
- ❖ Pradhan Mantri Fasal Bima Yojana
- ❖ Comparison with Earlier Crop Insurance Schemes
- ❖ Challenges
- ❖ Conclusion

AGRICULTURE MARKETING

- ❖ Introduction
- ❖ Process of Agricultural Marketing in India
- ❖ Structure of Agricultural Marketing in India
- ❖ Importance of Proper Agriculture Marketing
- ❖ Government Measures to Improve Agricultural Marketing in India
- ❖ Suggested Measures
- ❖ Conclusion

ANALYSIS OF APMC

- ❖ Introduction
- ❖ Importance of Proper Agriculture Marketing
- ❖ Present Agriculture Marketing System in India
- ❖ Issues Related to APMC
- ❖ Role of APMC act in Raising Food Inflation
- ❖ Model Act of APMC
- ❖ Importance of APMCs and Reforms Needed

- ❖ Emerging Alternative Marketing Models

FOOD CORPORATION OF INDIA (FCI)

- ❖ Introduction
- ❖ Functions
- ❖ Performance Evaluation of FCI
- ❖ Providing Effective Price Support to Farmers
- ❖ Food Storage
- ❖ Shanta Kumar Committee

SUSTAINABLE AGRICULTURE

- ❖ Introduction
- ❖ Sustainable Agriculture
- ❖ Sustainable Agriculture Development
- ❖ Small Farms are more Efficient than Large Farms

RESOURCE MANAGEMENT IN AGRICULTURE

- ❖ Introduction
- ❖ Land
- ❖ Land-leasing
- ❖ Soil
- ❖ Labour
- ❖ Capital
- ❖ Agricultural Productivity

AGRICULTURAL REVOLUTIONS IN INDIA

- ❖ Introduction
- ❖ Green Revolution
- ❖ White Revolution - Operation Flood
- ❖ Yellow Revolution
- ❖ Blue Revolution
- ❖ Golden Fiber Revolution: Jute
- ❖ Golden Revolution

FOOD PROCESSING SECTOR

- ❖ Overview
- ❖ Processed Foods Scenario with respect to Specific Sectors

- ❖ **Policy Initiatives**
- ❖ **Foreign Direct Investment**
- ❖ **Infrastructure Development in Food Processing Sector**
- ❖ **Sector-specific government policies**
- ❖ **Government Initiatives**
- ❖ **Issues in Food Processing Sector**
- ❖ **Way Ahead**
- ❖ **FDI Policy in Food Processing**
- ❖ **Notable Trends in the Indian Food Processing Sector**
- ❖ **Growth Factors in food and processing industry**

Indian Economy (Part-4)

This booklet consist of the following Chapters:

INDUSTRY

- ❖ **Industrial Policy in India**
 - Industrial development since independence
 - Public sector since independence
 - Sectoral Development
 - Private sector since independence
 - Conclusion
- ❖ **Small Scale Industry**
 - Introduction
 - Small Scale: Rumors and Reality
 - Government Policy
 - Major Hurdles faced by SSI
- ❖ **Make In India**
 - Problems faced by manufacturing sector
 - Proposed benefits of Make in India
 - Hurdles for 'Make in India'
 - Challenges
 - Analysis

LABOUR

- ❖ **Impact of liberalization**
- ❖ **Contemporary Employment Trends**
- ❖ **Policy and Strategy for Employment Generation**
- ❖ **Employment generation and Growth Programs**
- ❖ **Manufacturing for Employment**
- ❖ **Unemployment in India**

- ❖ **Labour Reforms**
- ❖ **Skill Development**

INVESTMENT

- ❖ **Measures of Investment**
- ❖ **Capital and investment**
- ❖ **Factors affecting investment**
- ❖ **Classification of Investment**
 - FDI
 - Angel Investors and Start-ups
 - M&A
- ❖ **Strategies and models of Investment**
- ❖ **Role of State**
- ❖ **Savings and Investment Trends**
- ❖ **Investment Models**

INFRASTRUCTURE

- ❖ **Overview of Transport Infrastructure**
- ❖ **Road Transport**
- ❖ **Railways**
- ❖ **Aviation**
- ❖ **Shipping and Ports**
- ❖ **Inland Water Ways**
- ❖ **Power**
- ❖ **Telecommunications**
- ❖ **Public-Private-Partnership**

Indian Economy (Part-5)

This booklet consist of the following Chapters:

❖ International Trade

- What is Foreign Trade?
- Features of International Trade
- Analysis of Foreign Trade of a Country
- Foreign Trade of India
 - Inter-Linkages Between Trade and Domestic Production
 - Trade In Services

❖ Trade Policy

- Aspects of Trade Policy
- Trade Policy Instruments and their Effects
- Highlights of The Foreign Trade Policy 2015-2020
- Critical Appraisal of the New Trade Policy

❖ Balance of Payments

- Current and Capital Account
 - The Capital Account Balance
 - The Basic Balance
 - Why BoP Account is Always Balanced?
- Distinction between Concept of Balance of Trade and Balance of Payments
- Recent Trend in India's Balance of payments

❖ Foreign Capital

- Differences Between Portfolio And Direct Investment
- Why Do Companies Invest Overseas?
- Concerns About Shifting Production Due to Foreign Investment
- Why Has Foreign Investment Increased So Dramatically in Recent Decades
- Efforts to Increase International Investment

❖ **Impact of Globalization on Indian Economy**

- Introduction
 - Historical Development
 - Financial Flows
 - Concerns and Fears
 - India's Stance
 - Demands on the Trading System
 - Actions by India

❖ **International Monetary Fund**

- Introduction
 - Historical Development
 - Functions of IMF
 - How is the IMF Financed?
- International Liquidity
 - SDR
 - Reasons for SDR Creation
- IMF QUOTA
- Major Facts: Proposed 2010 Reforms
- Recent Reforms
- Decision-making in the IMF

❖ **WTO**

- Main provisions of WTO
- General Principles
- Trade-Related Investment Measures (TRIMS)
- Legal Framework
- Impact on Indian Agriculture
- Implications of the Agreement
- Doha Round in Detail
- WTO
- Success
- Critique / Failures

❖ **World Bank Group**

- World Bank Structure
- The Future of the World Bank and IMF
- AIIB and NDB

Internal Security (Part-1)

This booklet consist of the following Chapters:

Chapter 1: Internal Security Challenges

- ❖ Social Diversity as Issues of Security Threat
- ❖ Challenges from within
- ❖ Neighbours as Issue of Security Threat
 - Pakistan
 - China
 - Myanmar
 - Bangladesh
 - Bhutan
 - Nepal
 - Sri Lanka
- ❖ Non-State Actors as Issue of Security Threat
- ❖ Global Indices and Measurement of Vulnerability of a State Towards such Non-State Actors
- ❖ Law and Order vs. Internal Security

Chapter 2: Terrorism Threat to India

- ❖ Changing face of Terrorism
- ❖ Terror Threats Faced by India
- ❖ Broader Framework to Deal with Terrorism
- ❖ Drawbacks in Intelligence Infrastructure

Chapter 3: Organized Crime

- ❖ Types of Organized Crime
- ❖ Problems in controlling organized crimes

- ❖ **Combating organized crimes**
- ❖ **Linkage of Terrorism and Organized Crime in India**

Chapter 4: Linkage between Development and Spread of Extremism

- ❖ **Stated Purpose of the Naxal Movement**
- ❖ **Why naxalism got huge support from common man?**
- ❖ **Why naxalism is biggest threat to internal security?**

Chapter 5: Insurgency in North-East

- ❖ **Introduction**
- ❖ **Issues & Conflicts**
- ❖ **Assam Insurgency**

Chapter 6: Security Challenges in Border Areas

- ❖ **Challenges to Border Management**
- ❖ **Issues Faced in Border Management**
- ❖ **Options for India**
- ❖ **Community Participation for Border Management**

Chapter 7: Basics of Cyber Security

- ❖ **Basic Definition**
- ❖ **Types of Cyber Crimes**
- ❖ **Impact and Steps needed**
- ❖ **Recent Incident: Ransomware**
- ❖ **The National Cyber Security Policy of India 2013**

Chapter 8: Cyber Warfare

- ❖ **Factors Contributing/Aggravating Rise of Cyber Attack**
- ❖ **Recent Initiatives for Tackling Cyber Warfare**
- ❖ **Way Ahead**

Chapter 9: Social Media and Internal Security Threat

- ❖ **Regulation of Social Media in India for Internal Security**
- ❖ **Challenges in Monitoring Social Media**

- ❖ **Examples**
- ❖ **Steps Needed**

Chapter 10: Money Laundering

- ❖ **Meaning of Money Laundering**
- ❖ **Harmful Effects of Money Laundering**
- ❖ **Steps taken by the Government**

Chapter 11: Black Money in India

- ❖ **Parallel Economy in India**
- ❖ **What are the various measures taken by Government to curb Black Money?**
- ❖ **Demonetization for curbing black money**
- ❖ **Impact of demonetisation on black money**
- ❖ **Criticisms**

Internal Security (Part-2)

This booklet consist of the following Chapters:

Chapter 1: Police Reforms in India

- ❖ The Organisational Structure
- ❖ Duties and Responsibilities of the Police
- ❖ Centre's Role in Policing
- ❖ Traditional Security Challenges
- ❖ Non-Traditional Security Challenges (NTS)
- ❖ Recommendations for Police Reforms
- ❖ Police we Want in 21st Century

Chapter 2: Various Security Forces and their Mandate

- ❖ Assam Rifles
- ❖ Border Security Force (BSF)
- ❖ Indo-Tibetan Border Police
- ❖ Central Industrial Security Force (CISF)
- ❖ Central Reserve Police Force
- ❖ National Security Guard
- ❖ Issues with Paramilitary Forces

Chapter 3: Role of Army in Internal Security

- ❖ Strategic Perspective: Why role of Military become important?
- ❖ National Context
- ❖ The Indian Army's Response
 - Structural Adaptation
 - Doctrinal Development
 - Leadership Adaptation
 - Long-term Perspective

Internal Security (Part-3)

This booklet consist of the following Chapters:

Chapter 1: Threats, Challenges and Vulnerabilities in 21st Century

- ❖ Introduction
- ❖ China: The Long-term Challenge
- ❖ Managing the China-Pakistan Collusion
- ❖ Afghanistan
- ❖ The Immediate Neighbourhood
- ❖ Nuclear, Biological and Chemical Threat
- ❖ Aerospace Threats
- ❖ Maritime Security
- ❖ Information and Cyber Security
- ❖ Natural Resources
- ❖ Conflict over Water
- ❖ Energy Security
- ❖ Global Warming
- ❖ Indian Diaspora
- ❖ Economic Warfare

Chapter 2: Impact of Governance and Justice Delivery System on Internal Security

- ❖ Importance of Good Governance in Internal Security
- ❖ Examples
- ❖ Reforms Needed

Chapter 3: National Security Mechanism

- ❖ **Improving Policing and Intelligence**
- ❖ **Resolving Centre-State Issues in Managing Internal Security**

Chapter 4: Issues in Intelligence Services

- ❖ **Response Mechanism in India**
- ❖ **What are the Major INTELLIGENCE Challenges?**
- ❖ **What can be done to tackle the flaws?**
- ❖ **What are the probable measures to improve Intelligence Services in India?**
- ❖ **How to Create These Capabilities?**

Chapter 5: Strategy for Coastal and Offshore Security

- ❖ **Different Facets of Maritime Security**
- ❖ **Different Reporting Mechanism for Handling Security**
- ❖ **Importance of Coastal Community Participation**

Chapter 6: Make in India in Defence

- ❖ **Present Scenario**
- ❖ **Make in India in Defence**
- ❖ **Government Policy**
- ❖ **Strategy for Indigenization**
 - **Skill Development**
 - **Technology acquisition**

Science & Technology

This booklet consist of the following Chapters:

Chapter 1: Introduction

- ❖ **India's policy in the field of the science and technology**
 - The S&T policy resolution in 1958
 - S&T policy of the 1983
 - S&T policy of the 2003
 - S&T policy 2013
 - S&T policy 2013
- ❖ **Institutional structure**
 - Department of Science & Technology
 - CSIR
 - Survey of India
 - Science and Engineering Research Council
 - Technology Development Board
 - National Accreditation Board For Testing And Calibration Laboratories
- ❖ **Science and technology as a source of Human Resource Development**
- ❖ **Awards related to Science**
- ❖ **New Initiatives Aligned with the National Agenda**
- ❖ **India and World collaboration in science projects**
- ❖ **Conclusion**

Chapter 2: Space

- ❖ **Types of orbits**
- ❖ **Launch Vehicle**
- ❖ **Satellite communication in India**
- ❖ **INSAT Satellite application**
- ❖ **Remote sensing applications**
- ❖ **Cryogenic rockets**

- ❖ **Global Positioning System**
 - Galileo
 - GLONASS
 - IRNSS
 - GAGAN
- ❖ **Chandrayaan - I**
- ❖ **Mars Orbiter Mission**
- ❖ **Role of space in development**
- ❖ **ISRO as soft power**
- ❖ **Why ISRO is successful?**
- ❖ **Issue of Space race**
- ❖ **Recent updates**
 - South Asia Satellite: Significance
 - Neutrino Observatory
 - Solar Mission- ADITYA
 - Gravitational Waves

Chapter 3: IT, Telecom and Electronics

- ❖ **Introduction**
- ❖ **IT Industry in India**
- ❖ **Computers**
 - Generation of computers
 - Computer terminologies
 - Supercomputer and its applications
- ❖ **Information technology**
 - Components of IT
 - IT enabled services
 - Application of IT
- ❖ **Display technologies**
 - Cathode ray
 - LCD
 - LED
 - Plasma Monitors
 - OLED
- ❖ **Telecommunications**
 - Mobile generations

- Smartfone
- Important conceps
- ❖ **Government initiatives**
 - Digital India Initiative
 - MeghRaj
 - Code Free for India
 - E-Kranti
 - Bharat Net project
 - Bharat QR
- ❖ **Contemporary debates**
 - Net Nuetrality
 - Internet of Things
 - Big Data Initiative and Privacy
 - Cyber crime and security

Chapter 4: Defence

- ❖ **Missile system and classification**
 - On the basis of type
 - On the basis of launch vehicle
 - On the basis of Range
 - On the basis of propulsion system
- ❖ **India's Missile System**
 - Agni
 - Prithvi
 - Trishul
 - Nag
 - Dhanush
 - Astra
 - Prahaar
- ❖ **BrahMos Missile System and its significance**
- ❖ **Indian Ballistic Missile Defence Programme**
- ❖ **Indian Submarines and Naval Ships**
- ❖ **Light combat aircraft**
- ❖ **Unmanned Aerial Vehicle**
- ❖ **Stealth technology**
- ❖ **Chemical Weapon**
- ❖ **Biological Weapon**

Chapter 5: Nano-Science and Nano-Technologies

- ❖ **What is Nanoscience and Nanotechnology?**
- ❖ **Origination of Nanoscience and Technology**
- ❖ **Basics of Nanoscience**
- ❖ **Nanomaterials**
- ❖ **Applications of nanotechnology**
 - Nano medicine
 - Semiconductors and computing
 - Food
 - Textiles
 - Sustainable energy
 - Environment
 - Transport
 - Space
 - Agriculture
- ❖ **Possible Adverse Health and Environmental Impacts of Nanotechnology**
- ❖ **Social and Ethical Impacts:**
- ❖ **Nano-science and nano-technology in India**
- ❖ **Way forward**

Chapter 6: Robotics

- ❖ **What is Robotics?**
- ❖ **Machine vs Computer vs Robots**
- ❖ **Terminologies Related to Robotics**
- ❖ **Classification of Robots**
- ❖ **Robotics and Artificial Intelligence**
- ❖ **Applications of Robotics**
- ❖ **Robotics and Issues of Unemployment**
- ❖ **Conclusion**

Chapter 7: Nuclear Energy

- ❖ **Types of nuclear reactions**
- ❖ **Nuclear Power Reactor**
- ❖ **N-Power Policy of India**
- ❖ **Advantages**
- ❖ **Disadvantages**
- ❖ **Non-energy applications of Nuclear energy**

- ❖ Impact of Radiation
- ❖ Issue of Radioactive Waste
- ❖ Institutions involved in Nuclear energy Development
- ❖ Safety standards in Nuclear Power plants
- ❖ Nuclear & Radiological Disasters

Chapter 8: Biotechnology

- ❖ Different types of Biotechnology
- ❖ Biotechnology and Medicine
- ❖ Biotechnology and Plant
 - Issues related to GM food
- ❖ Biotechnology & Animal Husbandry
- ❖ Biotechnology and Industry
- ❖ Biotechnology and Environment
- ❖ Biotechnology Projects
- ❖ Issue of Bio-Piracy
- ❖ Bioinformatics
- ❖ Biotechnology and IPR Issue
- ❖ Ethical dimension in Biotechnology
- ❖ Terminologies associated with the biotechnology
- ❖ ANNEXURE: Recent updates in Biotechnology
 - Generic Drugs in India
 - Fixed Dose Combination Drugs
 - IPV Injection
 - DNA tagging of convicts

Chapter 9: Renewable Energy

- ❖ Ocean Thermal Energy Conversion (OTEC)
- ❖ Tidal Energy
- ❖ Wave Energy
- ❖ Fuel Cell
- ❖ Biofuel
- ❖ Biogas
- ❖ Geothermal Energy
- ❖ Hydroelectricity Energy
- ❖ Solar Energy

- ❖ Wind Energy
- ❖ Concept of Green Building

Chapter 10: Achievements of Indians in Science & Technology

- ❖ Scientists of Ancient India
- ❖ Science and Scientists of Medieval India
- ❖ Scientists of Modern India

Chapter 11: Policies Related to Science

- ❖ 'Technology Vision Document 2035'
- ❖ National Biotechnology Development Strategy 2015-2020
- ❖ National Intellectual Property Rights Policy
- ❖ Organ donation rules in India
- ❖ Policy on Synthetic Biology