



INSTITUTE OF DISTANCE EDUCATION **IDE**
Rajiv Gandhi University



MASOC-504

Sociology of Development-I

MA SOCIOLOGY

3rd Semester

Rajiv Gandhi University

www.ide.rgu.ac.in

MA (Sociology)
THIRD SEMESTER
MASOC 504



INSTITUTE
OF DISTANCE
EDUCATION **IDE**
Rajiv Gandhi University

SOCIOLOGY OF DEVELOPMENT

www.ide.rgu.ac.in

BOARD OF STUDIES		
1.	Shri. Bikash Bage Head of the Daprtment Department of Sociology, RGU	Chairman (Ex-Officio)
2.	Prof. Kedilezo Kikhi Dept. of Sociology, Tezpur University Assam	Member
3.	Dr. S R Padhi Dept. of Sociology and Social Anthro. Indira Gandhi National Tribal Univ. Lalpur (M.P)	Member
4.	Dr. S. Yadav Assistant Professor Department of Sociology, RGU	Member
5.	Ms. Moyir Riba Assistant Professor Institute of Distance Education, RGU	Member
6.	Ms. Nani Umie Assistant Professor Dept. of Sociology, RGU	Member
7.	Dr. Padi Hana Assistant Professor Dept. of Sociology, RGU	Member
8.	Shri. Bikash Bage Assistant Professor & Head Department of Sociology, RGU	Member Secretary

Authors:

Mr. Bikash Bage

Head of the Department, Department of Sociology, Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh

& Mr. Kiri Taso

Assistant Professor, Department of Sociology, Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh

SYLLABI-BOOK MAPPING TABLE

Sociology of Development

Syllabi

Mapping in Book

Unit I: Introduction to Sociology of Development
Meaning, Nature of Sociology of Development, Scope of Sociology development.

Unit I. Introduction to of Sociology Development

Unit II: Approaches to Study Development
Marxist, Functional,

Unit II: Approaches to Study Development

Unit III: Theories of Development
Modernization, Dependency,

Unit III: Theories of Development

Unit IV: Critiques of Development
Gandhi and Schumacher

Unit IV: Critiques of Development

CONTENTS

UNIT 1: INTRODUCTION TO SOCIOLOGY OF DEVELOPMENT PART I

- 1.0. Introduction
- 1.1. Unit Objectives
- 1.2. Meaning of Sociology of Development
 - 1.2.1. Nature of Sociology of Development
 - 1.2.2. Scope of Sociology of Development
- 1.3. Summary
- 1.4. Key Terms
- 1.5. Answer to 'Check your Progress'
- 1.6. Questions and Exercises
 - 1.6.1. Short-Answer Questions
 - 1.6.2. Long-Answer Questions
- 1.7. Further Reading

UNIT 2: APPROACHES TO STUDY DEVELOPMENT PART I

- 2.0. Introduction
- 2.1. Unit Objectives
- 2.2. Marxist
- 2.3. Functional
- 2.4. Summary
- 2.5. Key Terms
- 2.7. Answer to 'Check your Progress'
- 2.7. Questions and Exercises
- 2.8. Further reading

UNIT 3: THEORIES OF DEVELOPMENT PART I

- 3.0. Introduction
- 3.1. Unit Objectives
- 3.2. Modernisation
- 3.3. Dependency
- 3.4. Summary
- 3.5. Key Terms
- 3.6. Answer to 'Check your Progress'
- 3.7. Questions and Exercises
- 3.8. Further reading

UNIT 4: CRITIQUE OF DEVELOPMENT

- 4.0. Introduction
- 4.1. Unit Objectives
- 4.2. Gandhi
- 4.3. Schumacher
- 4.4. Summary
- 4.5. Key Terms
- 4.6. Answer to 'Check your Progress'
- 4.7. Questions and Exercises
- 4.8. Further reading

INTRODUCTION

The MASOC-504 is introduced in MA Sociology Programme in Institute of Distance Education (IDE). The main Purpose of the introduction of MASOC-504, 'Sociology of Development' is to introduce the learner to make understand the concept of development from Sociological Perspectives and to appreciate development as an integrated process.

Course Introduction

The Concept of Development has always been a matter of significant concern. Henceforth, the subject so called the 'Sociology of Development' is introduced at Post Graduate Level (IDE) to enable the students to understand the *concept of development* and *its process* in a more better way from the sociological perspective. The present book is an attempt to enable the students to have a comprehensive overview of the Sociology of Development.

The basic purpose of the subject is to enable the students to grasp the concept of development along with its various approaches to development. Development as a subject matter is quite complex one. Since, Development as a process has been understood differently like as growth, change, transformation and modernisation, etc.

Traditionally, the concept of development and its process was usually explained in economic term. However, later there has been paradigm shift in the ideology and people realised that, the economic factor too need socio-cultural prerequisite which play a decisive role in making economic factor more effective. Therefore, presently there is global tendency to view development with social and human orientation besides economic and political orientation. And it has been observed that, due to liberalisation, privatisation and globalisation there is frequent, rapid, and radical changes in the field of development. Therefore, the course has been formulated and developed with the objective of understanding development which will enable students to acquire a sociological understanding of the concept of development and its process. This will assist in developing and acquiring socio-historical critique of the development process.

Therefore, keeping all these factors in mind, the present course is an attempt to critically examine and understand the historical, empirical and social context, the intellectual perception and relevance of the developmental concept and perspective pertaining to development. Thus, the course called Sociology of Development is incorporated in the MA Sociology (IDE) to focus on the concept, approaches or perspective of development from critical orientation. The course also highlights the development process and its impact in Indian context as well in Northeast Indian context.

Course organisation

There are five units in this course. Each unit is incorporated with a view to enable the students to have comprehensive knowledge in relevant topics. Further, for the convenient, each unit is divided into sub-headings. The themes focus on the following:

- The concept of development
- Approaches to study development
- Theories of development
- Critique of development
- Development and Northeast India

UNIT 1: INTRODUCTION TO SOCIOLOGY OF DEVELOPMENT

PART I

1.0. Introduction

1.1. Unit Objectives

1.2. Meaning of Sociology of Development

1.2.1. Nature of Sociology of Development

1.2.2. Scope of Sociology of Development

1.3. Summary

1.4. Key Terms

1.5. Answers to ‘check your progress’

1.6. Questions and Exercises

1.6.1. Short-Answer Questions

1.6.2. Long-Answer Questions

1.7. Further Reading

1.0. INTRODUCTION

Understanding the concept of “**Development**” has become more significant in the modern contemporary era. There is complexity in dealing *development* as its subject matter. Development is composite concept with multiple meaning like- economic development, social development, human and sustainable development. Therefore, it has multi-dimension. Thus, it required profound knowledge in the same field. And various Philosopher, Scholars and Intellectuals have propounded different insight regarding the same. However, Development can be understood as a process of positive sense. It refers to the planned change in desire way. To sum up, we can say “development” is a planned change in the material conditions and related socio-cultural milieu.

Development is an integral aspect of the society. It is an important indicator for change in society. Since, society is ever changing process with interaction and adaptation of other cultures it become necessary for us to study the concept and indicator that are related to development. *Development* thus, is a planned change in the material conditions and related socio-cultural milieu.

1.1. UNIT OBJECTIVES

After going through this unit, you will be able to:

- Meaning of Sociology of development
- Nature of Sociology of development
- Scope of Sociology of development
- Understand Development and Social & Human Development.
- Differentiate between Economic Growth and Development
- Distinguish economic growth with development
- Understand the term “Progress” and “Evolution”
- Describe human development

- Explain globalisation and sustainable development

1.2. MEANING OF SOCIOLOGY OF DEVELOPMENT

Sociology of Development is a new branch of study to understand the term development in more relevant manner. The “Sociology of Development” was originated with the Post-Second World War and the Post-Colonial experiences of Development in the newly emerged Nations. As during that era there was *stern need for the sociological analysis of development*, which could aid in understanding and explaining the interface of economy and society. The *subject matter of sociology of development is indeed no doubt complex due to interface between the economy and society. Both condition each other.* Thereby, changes in one corresponds the changes in other. The modern industrial economy could not have emerged if the culture would not have undergone radical change. Similarly, due to radical change in the economy and technology we witnessed there are structural changes in the family, community, social stratification and gender, etc. in society.

The *Sociology of development* can be understood as a subject which study the *concept of development and its process* from the *sociological perspective*. As we know that, there several aspect of human life like social, political, Economical, religious, educational and family life. All these aspect are interdependent and inter-related each other. In short, all these aspects influence each other. Further, each of these aspects is studied by a separate discipline of social science. *For example*, Political science and Economics study the- political and economical aspect of life, respectively. Likewise, Sociology too has several branches to study different aspects of social life as being science of society. Thus, we have sociology of law, sociology of religion, sociology of education, sociology of medicine, sociology of crime, sociology of environment, etc. are such branch of Sociology. Perhaps, the economic aspect of human life is the most vital aspect. Therefore, we have economic sociology with its different branches like sociology of work, sociology of leisure, sociology of profession and sociology

of development, which holds a significant position. Infact, some economist like Sombart, Pareto, Schumpeter and Oppenheimer have explained economic change as an aspect of social change. And renowned German Sociologist Max Weber has profounded a classical example to show how social factors, particularly its religious beliefs and practical ethics have influence the economic activities of people.

In simple words, we can say that, addressing the issue of development from the point of view of sociology is called as Sociology of Development. There is close linkage between the Socio-cultural environment and economic activities. Both condition each other (Smelser- sociology of economic life). The “Sociology of Development” helps us to comprehend that, there is relevant issues involved in the linkages between the Society and Economy. The ideology, philosophy, values, norms and polity, etc. are determined by the economic structure (Marx). Thus, to some extent we can say that, people’s attitudes towards economic activities and their way of economic life are determined by the norms and values of the society they are brought up in.

The “Protestant Ethics and the Spirit of Capitalism” by Weber is perhaps the most convincing interpretation on the positive role of cultural norms in determination of the nature of economic milieu. As his study reveals that, Protestantism helped in bringing about modern Capitalism in Western Europe.

To conclude, we can say that “addressing the problems of development from the point of view of Sociology may be called as sociology of development”. The term “Development” is a composite concept and multiple meaning depending on its nature and context. Economic development, social development, human development, political development and sustainable development, etc. are various dimension of devolvment and all have sociological bearing and implication. Further, all these dimension of development are in one way or the other, can be interpretable in terms of their linkages with socio-cultural condition. Thus, all

these aspects are interrelated to one another. For example, Economic development is not possible only when there is sufficient availability of economic resources or factor like labour, capital, technological, Infrastructure, markets, transportation and communication, etc. Thus, these economic factors too need socio-cultural prerequisites which play a significant role in making these factors more effective.

1.2.1. Nature of Sociology of Development

The nature of Sociology of development is significant one to understand the developmental process in better manner. Thereby, study of development has been one of the fundamental aspects of sociology since the beginning of the discipline itself. Sociology as an independent social science has concern over the issue of development. Therefore, Sociology as being science of society studies the causes and consequences of economic changes in the society. Sociology of development is one of importance branch of Sociology which studies the interface of socio-cultural circumstances and the process of development in sociological perspective. This discipline presumes that every aspects of the development are largely dependson sociological condition of society for its realisation.

The eminent contribution of Weber's Protestant Ethic and the Spirit of Capitalism (1904-05) and Marx's Das Kapital (1867) have made significant debates concerning the rise and evolution of Capitalism central to the core theoretical debates in sociology. It is this analysis of causes and consequences of development leads to the spur that produced the further sociological intellectual enrichment like; development of Parsonian functionalism as well as Neo-Marxist and the world-system theory based challenges to system models.

Considering the inter-relation between economic development and social life has stimulated many of our models of demography, notably those of changes in fertility and mortality. Models of migration have been consistently rooted in development dynamics. Analyses of historical transformations of gender roles and gender ideology consistently

invoke the dialectical interplay between the forces of economic development, female labor force participation, power within the family and gendered culture. Political sociology has consistently engaged with the role of the state in producing economic development – and the role of economic change in redistributing power among social actors. Economic sociology consistently turns to economic development as the natural setting for tests of its theories.

Development Sociology investigates the practices and processes of social change. In this sense the sociology of development addresses pressing intellectual challenges: internal and international migration, transformation of political regimes, changes in household and family formations, technological change, sustainable (and unsustainable) population and economic growth, and the production and reproduction of social and economic inequality.

Weberians have responded to the challenge of developing transnational models by introducing the concepts of globalization and global culture, forces capable of constraining nations and states (Meyer et al. 1997). Throughout the debate on globalization, which now pervades sociology as a discipline, an emphasis on development remains a central concern.

The sociology of development has been essential component of the sociological study of stratification and inequality. Development sociologists address both national differences in income per se (O'Hearn 2001) and a wide variety of other indicators of human well being (see Jorgenson *et al.*'s 2007 examination of environmental inequality on a global scale). Development sociologists also address spatial inequality internal to nation-states (Hechter 1999; Logan and Molotch 1985; Massey and Denton 1993). Using both quantitative and qualitative methods, this body of work highlights spatial variation in patterns of inequality and power differences (Lobao, Hooks and Tickamyer [eds.] 2007; McCall 2001; Pellow 2002).

Development has been central to microsociological debates as well. The relevance of development to demographic dynamics is well known and is epitomized in the journal

the *Population and Development Review*. Feminist theorists have turned their attention to the question of gender and development, addressing questions of low wage female labor, the rise of gendered labor regimes and migration within female sex-typed occupation. Gender and development scholars also consider the inter-relations between economic change, the family, patriarchal cultural institutions, and women's mobilization. (Beneria and Feldman 1992, Tiano 1994, Moghadam 2005) The empirical material of development has been so rich that it has been a staple for sociologists working at virtually every level of analysis.

To conclude, we can say that several sociological conditions define the term "development". Social issues, gender equity, women's education and their participation in economically gainful activities, increases the- lifespan, literacy, advancement of democracy, reduction of infant and maternal mortality, reduction of birth and death rate are the sociological phenomena which in combination or in turn determine the extent of development.

Check your progress

1. What do you mean by Sociology of Development?

1.2.2. Scope of Sociology of Development

The Scope of Sociology of Development can be more appropriately understood by making a distinction between the *Classical Economics* and *Development Economics* which emerged around the initial years of second half of the last century.

The *Classical or Traditional Economics* was more oriented toward the study of political economy which dealt the relationship between the politics and economics thereby analyzed the economic laws of monopoly and dominance. Management of resources, markets and their best appropriation and sustaining growth have been the prime focus of the study.

On the other hand, the Development economics has wider scope of study. To M.P. Todaro, the *Development Economics* along with concerned with the efficient allocation of existing

scarce productive resources and with their sustained growth over time, must also deal with economic, social and institutional mechanisms, both public and private, necessary for bringing about rapid (at least by historical standards) and large scale improvement in level of living for poverty-stricken, malnourished, illiterate people of Africa, Asia and Latin America. Thus, the Development Economics have much concern towards the structural and institutional transformation and human development.

The *Sociology of Development* is to some extent quite close to *Development Economics*. The only differences are that, the *Sociology of Development* locates sociological laws and spheres which contribute to development and what social and cultural consequences are entailed from development. Whereas, *Development Economics* is concerned towards the task of tracing the cultural and institutional conditions which determine development in society.

Thus, the *Sociology of Development* is a social science discipline which studies economic development from the point of view of *social development*. It attempts to explore the linkages between the social, political, cultural and institutional spheres, along with the levels of economic development in a society. The *ultimate aim* of the subject is to trace the non-economic factors of economic development. That is, The *Sociology of Development* tries to understand how far the social, political, cultural and institutional factors are facilitative to development. Thus, following are the areas which sociology of development can suggest to explore:

1. Structure and Development

The Various scholars have extensively studied the “Social Structure” in order to establish its positive or negative role. For example, it has been observed that, the traditional social structure, which has been authoritarian in nature and in which the status rights and duties of an individual were ascribed and not achieved, did not facilitate the process of

development. The micro-structures such as joint family and caste system, etc. and the Macro-structures such as modern elites and Bureaucracy, etc. are need to be studied with an objective to find out their positive or negative role in the development. Berna, K.Sujata, S.SinghChoudhary and Timberg, etc. may be consulted to discover the linkages between the social structure and business in India.

2. Culture and Development

Along with *social structure*, *Culture* also determines the nature and magnitude of development in a society, which can be considered as part of the scope of sociology of development. Religious compatibility and imperativeness of cultural reforms have proved to be culturally favourable factors for development and, therefore, need to introduce into the curriculum of sociology of development. Likewise, we have humanistic and Liberal philosophical orientations of people towards different issues like-religious, social and economic life, etc. which we need to address in this discipline. Max Weber, E. Durkheims, Kapp, Papanek and Momin have put forward their views on these lines.

3. Polity and Development

Political factor no doubt plays a very significant role in development. Any factor of development, howsoever strong it is, will remain ineffective to yield better result unless it is supported by governmental policies and programmes. Thus, the protection, support and incentive etc. are the important role that, the government has to perform in order to ensure economic development in the region or in the country. The reason behind the unequal industrial development among the different states in the country is due to inter alia variation in the industrial policies. Which of course needed to be shorted-out? Thus, the political factor is needed to be taken into consideration by Sociologist while analysing the development of a region or a country.

4. Gender and Development

The society or country cannot properly develop or tends towards developing phase if there is *gender discrimination*. All human is equal, the reason why we have incorporated Article 21 in Indian constitutions. Further, there is notion of Human Rights which is supported by UNO (UDHR) since 1948. The traditional family structure of almost all over the modern world is *patriarchal*. Due to patriarchal system male supremacy is prevailed over the female. Result leads to gender discrimination, due to which still large number of female population is being denied from general social, economical and political participation. This gender discrimination hampers the societal development. Women's work cannot be underrated, but unfortunately, about three-fourths of unmonetized labour in the world is done by the women (UN Report). Thus, women are deprived from the various economical, social and political opportunities and privileges. They too are suffering from health and hygiene issue. It is therefore, utmost necessary for the sociology of development to focus on this field.

5. Entrepreneurship and Development

Development refers to social and cultural development along with successive economic growth. Industrialization and economic growth are not only result of precondition of sufficient labour, technology, capital and infrastructure, but most importantly from adequate supply of able entrepreneurs. An entrepreneur is neither capitalist nor a simple trader. An entrepreneur is a business leader who takes initiative to establish a business enterprise. Entrepreneur is a notable person with a typical personality, who emerges from a specific social and cultural setting. Therefore, it is an important field of the study of sociology of development.

6. Displacement and Rehabilitation

Displacement so called forceful migration has been historically associated with the development projects such as construction and installation of dam, mining, industrial plants, military installation and airport, etc. The Development-induced displacement and

Resettlement (DIDR) occur when people are forced to leave their native place as a result of development. This displacement matter is really a big social problem. This displaced family's needs to rehabilitate and resettled through a proper framework policies, which may ensure appropriate compensation and minimum decent living. The development project mostly affects the marginalized and weaker section of society. Many social, ethical and legal issues are involved in the after-effect of development projects. We have been witnessing such development and displacement issue for last six decades with reference to land reforms and community development programmes, etc. Thus, the displacement and rehabilitation issue and policies of the Government of India is needed to be sociologically analyzed to grasp better understanding of the same.

7. Human Development Index (HDI)

The human development concept was developed by the Pakistani economist MahbubulHaq. There was thinking on this human development concept at the World Bank in the 1970s. But it took the concrete shape as an approach when Dr. Haq argued that existing measures of human progress failed to improve people's lives. Therefore, he propounded three essential indicators that can indicate human developments are:

- a) Life expectancy-To lead a long and healthy life,
- b) Education- To acquire knowledge and
- c) Per capita income-To have access to resources needed for a decent standard of living.

The level of development of different countries is rated on the scale of HDI. Thus, the Human Development Index (HDI) is one of the important area of the scope of sociology of development.

8. Sustainability of Development

From around 1980s onwards of last century, people became more conscious over the negative consequences of the nature of development. The developmental process has breeds

two major problems such as environmental pollution and exhaustion of natural resources. These two problems were more deteriorate by more use of technology and cruel exploitation of natural resources. Which no doubt posed serious threat to living creatures on earth. Therefore, major focus was made in the development process along with aims to sustain the natural resources. Now, it becomes serious challenge for the *scholars of development* to explore viable alternatives to the existing developmental planning. Thus, it becomes one of the important fields of the study of sociology of development.

9. Modernisation of Traditions

To some extent modernity and development have many related symptoms (Huntington). Societies may not develop unless and until the tradition of that society undergo a process of modernisation. And as per the study of change in Indian society is concern it is problematic one. As because Indian society has its deep rooted traditional history which may not completely replaced with modernity. This leads to some extent create constraint development in the country. In this regard the Yogendra Singh and Milton Singer have portray the trajectory of modernity in the world of Indian traditions. Thus, the study of modernization of development could be the important scope of the sociology of development.

Check your progress

2. Which are the areas which Sociology of Development can explore?

1.3. SUMMARY

- Development is a composite concept with multiple dimensions- economic development, social development, human and sustainable development.
- Addressing the issue of development from the point of view of sociology is called as Sociology of Development.

- The Scope of Sociology of Development can be understood by making a distinction between the Classical Economics and Development Economics to some extent.
- Economic growth is the long-term expansion of a country's productive potential by which a nation's wealth increases over time.

1.4. KEY TERMS

- **Development:** it can be understood as a process of positive sense. It refers to the planned change in desire way. To sum up, we can say “development” is a planned change in the material conditions and related socio-cultural milieu.
- **Sociology of Development:** The *Sociology of development* can be understood as a subject which study the *concept of development* and *its process* from the *sociological perspective*.
- **Human Development:** it is designed and directed to create an enabling environment for people to enjoy long, healthy and creative lives. Human development is defined as the process of enlarging people's freedoms and opportunities and improving their well-being.
- **Human Development Index (HDI):** It has propounded three essential indicators that can indicate human developments are:
 - (a) Life expectancy-To lead a long and healthy life,
 - (b) Education- To acquire knowledge and
 - (c) Per capita income-To have access to resources needed for a decent standard of living.
- **Progress:** stand for a march in a forward direction according to some accepted principle that is formulated by a particular principle of judgment. However, that forward direction may or may not strive towards positive changes or strive towards desired way of change.

- **Evolution:** The term “Evolution” has been derived from the Latin word “evoluerē” which means “to develop” or “to unfold”. Evolution literally means *gradually unfolding* or *unrolling*.
- **Globalisation:** Globalization or globalisation is the process of interaction and integration among people, companies, and governments worldwide.
- **Sustainable:** It is the ability to maintain at a certain level.
- **Sustainable Development:** maintaining a balance between the human need to improve lifestyles and feeling of well-being on one hand, and preserving natural resources and ecosystems, on which we and future generations depend on other hand.
- **Social Inclusion:** It is the process of improving the terms on which individuals and groups take part in society—improving the ability, opportunity, and dignity of those disadvantaged on the basis of their identity.

1.5. ANSWER TO ‘CHECK YOUR PROGRESS’

1. Addressing the problem of development from the point of view of sociology is called ‘Sociology of Development’.
2. Sociology of Development suggests exploring social structure, culture, polity, gender, displacement and rehabilitations, HDI, Sustainable Development, and Modernization.
3. When growth is meant for all, it leads to development, i.e. inclusive growth is called development.

1.6. QUESTIONS AND EXERCISES

1.6.1. Short-Answer Questions

1. Define Human Development.
2. What are the indices under Human Development Index (HDI)?
3. What is Globalization?
4. Define Evolution.

5. What do you mean by Progress?

1.6.2. Long-Answer Questions

1. Describe the nature and scope of Sociology of Development.
2. Discuss, how Sustainable Development is intertwined with globalization?
3. Briefly analyze 17 United Nation Sustainable Development Goals (UNSDGS).

1.7. FURTHER READING

- Apter, David E. Rethinking Development, Sage, New Delhi 1987.
- Desai, A. R State and society in India paths of development, popular.Bombay, 1984.
- Desai, A. R, Essay on Modernisation VolII , Thacker , Bombay,1971
- D'Souza, V. Development Planning and Structural Inequalities, Sage,1990.
- Joshin,P.G. Land reforms in India, Essay house, Bombay, 1975
- Frank, A.G. Latin America-Underdevelopment or revolution, Monthly Review Press 1964
- Myrdal .G. Asian Drama, Penguin 1968
- Lehman, David, Development Theory-Four Critical Studies, frank Lass, London.1974
- RakhiBhattacharjee, Development Perspective-in North East India, Foundation Publication,2011.
- Borthakur, B.N, 2004, Sociological aspect of economic development, Dibrugarh ,Assam, Upasana Pub Academy.
- Singh ,2010, sociology of development, Rawat Publication, Jaipur.
- Mehta, S.R, 1999, Dynamic of Development: A Sociological Perspective, GyanBooks , New Delhi.
- Immanuel Wallerstein (1974) The Modern World-System, New York, Academic Press, pp. 347-57.

- Jan Nederveen Pieterse, A Critique of World System Theory, in *International Sociology*, Volume 3, Issue no. 3, 1988.
- Robinson, William I. (2011-11-01). "Globalization and the sociology of Immanuel Wallerstein: A critical appraisal". *International Sociology*. 26 (6): 723–745. doi:10.1177/0268580910393372. ISSN 0268-5809.
- Wallerstein, Immanuel Maurice. "The Modern World System as a Capitalist World-Economy." *World-Systems Analysis: An Introduction*. Durham: Duke UP, 2004. 23-30. Print.
- Walter C. Ladwig III, "Delhi's Pacific Ambition: Naval Power, 'Look East,' and India's Emerging Role in the Asia-Pacific," *Asian Security*, Vol. 5, No. 2 (June 2009), pp. 98–101.
- Kondratieff, Waves in the World System Perspective. *Kondratieff Waves. Dimensions and Perspectives at the Dawn of the 21st Century / Ed. by Leonid E. Grinin, Tessaleno C. Devezas, and Andrey V. Korotayev*. Volgograd: Uchitel, 2012. P. 23–64.
- Korotayev A. A Compact Macromodel of World System Evolution *Journal of World-Systems Research* 11 (2005): 79–93 Archived 2009-07-06 at the Wayback Machine;
- Korotayev A., Malkov A., Khaltourina D. (2006). *Introduction to Social Macrodynamics: Compact Macromodels of the World System Growth*. Moscow: KomKniga. ISBN 5-484-00414-4;
- Korotayev A. The World System urbanization dynamics. *History & Mathematics: Historical Dynamics and Development of Complex Societies..*

UNIT 2: APPROACHES TO STUDY DEVELOPMENT

2.0. Introduction

2.1. Unit Objectives

2.2. Marxist

2.3. Functional

2.4. Summary

2.5. Key Terms

2.6. Answer to ‘Check your Progress’

2.7. Questions and Exercises

2.8. Further reading

2.0. INTRODUCTION

This unit begins with a discussion on various approaches to study development. It begins with the Marxist approach which describes human societal progress and development through several stages like, primitive communism, slavery, feudalism and capitalism.

The functional approach, on the other hand, describes how the systems of different parts are interlinked to maintain a state of balance and social equilibrium as a whole; the liberal approaches explain different perspectives of development through various theories like, liberal economy theory, liberal feminist theory and social liberal theory.

The unit also discussed about ecological system theory which identifies five environmental systems that are, Microsystem, Mesosystem, Exosystem, Macrosystem, Chronosystem.

2.1. UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss Marx's theory of economic growth
- Explain Historical materialism
- Describe functionalist approach of development
- Discuss Durkheim's views on development and progress
- Analyse liberal perspective of development
- Explain ecological approach to development

2.2. MARXIST APPROACH

There is an increasing sense that the 'new' Marxist-influenced development sociology which emerged in the early 1970s has reached some kind of impasse. This paper suggests that there are good reasons for this sense of unease; that the weaknesses and lacunae in current sociological development research cannot be attributed entirely to the influence of any particular radical perspective (e.g. dependency theory); and that understanding the impasse

requires standing back from the theoretical controversies of the past decade and a half to examine some underlying commonalities of approach. A key problem, it is argued, is Marxism's metatheoretical commitment to demonstrating the 'necessity' of economic and social patterns, as distinct from explaining them and exploring how they may be changed.

Karl Marx's theory of economic growth

Among the few famous persons who have influenced not only the masses but also the intelligentsia in the world by their writings and teachings, Karl Marx has a most honoured place. He is regarded as the founder of modern communism which had taken deep roots in many countries of the world. This great man's works are significant from the point of view of economics also. The four volumes of his magnum opus "Das Capital" containing also 4000 pages provide useful source material for study by sociologists, Politicians, historians, social reformers and economists. Some of his views relating to economic growth are:

1. Historical stages of growth

Karl Marx introduced the theory of stages of economic development, which complemented his theory of class struggle. He categorized economic evolution into five categories viz.-slavery, feudalism, capitalism, socialism and communism.

Marx has analyzed the main stages which have taken place in human history. According to him, all historical events are the result of a continuous economic struggle between different classes in society. According to Marx, the mode of production which determines the general character of social, political, and spiritual processes of life is the main cause of social change.

As methods and techniques of production change the social relations which follow them also change. Against this background Marx describes four stages in history. They are:

- a. Primitive Communism
- b. Slavery

c. Feudalism

d. Capitalism

(i) Primitive communism is the first stage. It was characterized by a classes society, where in all factors of production was owned in common and people lived in groups.

(ii) Slavery

In this stage, all the work is done by human labour like hunting, preparing shelter, finding skin of animals or bark of a tree to be used as cloths. This made the human labour the most important resource which can earn income. Those who had maximum slaves were the most powerful in the society.

(iii) Feudalism

As the population increased, it was not possible to feed huge population with only hunting. This increased the demand for land to grow food grains to feed growing population. Mankind also started learning the art of sowing and harvesting and invented tools to increase productivity.

Shift of the economy from slavery to feudalism led to shift of strategic resources from human labour to land. Those who land became most important and powerful in the society. Fiefs held land with the permission of the king.

Fiefs were the warlords who fought among themselves to capture land from each other. Sometimes the dispute was settled by Kings. Fiefs employed serfs to work on their fields to grow foodgrains.

Main source of revenue for the government was land revenue and king was usually satisfied till the fiefs paid their land revenue obligations. In feudal economy, agriculture rather than hunting became the most important human activity.

(iv) Capitalism

Industrial Revolution led to generation and spread of scientific ideas and values among people. French Revolution led to realization of the need for freedom of expression and speech. These developments led to many innovations and introduction of new technology in many sectors. Technological improvements initially benefited agriculture resulting in increasing the productivity. This led to displacement of labour from agriculture. At the same time, textile and mineral sectors developed, which were able to employ labour displaced from agriculture.

Agricultural activity was located in rural areas whereas textile and mineral companies were located in urban areas. This led to shift of population from rural areas to urban areas. As the productivity increased in agricultural sector, lesser amount of land was needed for feeding population. This decreased the importance of land. Starting of industrial forms needed capital, which made the owners of capital the most important and powerful section of the population.

(v) Socialism and Communism

Maturity of capitalism will create intense class conflict between proletariat (labour class) and bourgeois (capitalist class). Ultimately, labour will unite together and overthrow the state controlled by capitalist class through a revolution. In a socialistic economy, labour will control the state and will own the companies. Market mechanism will be substituted by planning by the state. Income of the individuals will be decided by their needs and not by market mechanism. Ultimately socialism will lead to communism whereby state itself will wither away and there will be no shortage of products.

According to the Marxian theory of economic development, any social system based on class conflict cannot be a permanent system. So capitalism is to be considered as a transition state in the evolution of society. The capitalist controls the means of production

and the workers depend on the capitalist for work. The main aim of the capitalist for work, the main aim of the capitalist is to maximize their profits. This they do by exploitation of labour pay low wages, long hours of work and employment of women and children are some of the ways by which a capitalist exploit workers. As exploitation increases conditions become ripe to overthrow of capitalism by the united proletariat. Thus increasing antagonism between capitalist and workers creates conditions for the destruction of capitalism, the emergence of socialism. Here lies the importance of class conflict in the Marxian development model.

Appraisal

The Marxian theory of economic development can be examined from two angles.

1. Relates to the examination of Marx's assumptions and predictions in the light of the subsequent actual happenings in the world.
2. Refers to the examination of the place of dynamic factors and their interrelationships contained in the theoretical frame work of his theory of capitalist development.

Marx's prophecy that the capitalist system will collapse after reaching the advanced stage of development and that socialism will emerge in its place only afterwards has been proved false by history. The country such as Russia and China had been in the very early stages of evaluation of capitalization when they adopted communism through revolution. Moreover socialism has not displaced capitalism in USA and UK and other capitalist countries. Further more communisms has not come into existence on the lines laid down by Karl Marx.

Marx has pointed out that the technological progress is helpful to capitalist and increases the misery of workers. But this has not happened in the capitalist countries on the contrary workers have been receiving high wages and other facilities in these countries. The introduction of social security measures in the capitalist societies has promoted the welfare of

workers. According to Marx, the development of capitalism will bring the capitalist and workers in the opposite camps. However such a thing is now a matter of the past. There is no sign of withering away of the state in capitalist societies.

Many capitalist societies have taken many steps to achieve the objective of full employment; therefore, the industrial reserve army is not increasing.

Marx's argument that as capitalism progresses wealth, economic power gets concentrated in fewer and fewer hands is also not a sound argument, as capitalist will have to work within the frame-work of rules and regulations framed by the governments of these countries.

The doctrine of surplus value is regarded as the weakest point in his theory of economic growth. Critics argue that all factors of production are needed to produce a commodity and workers alone cannot claim the entire volume of the commodity.

Marxian theory of economic growth is applicable indirectly to developing countries. Although Marx did not think of the problem of the developing countries, yet some of the variables of his analysis do exist in such countries. In Marxian theory, production means the generation of value. Thus economic development is the process of more value generating, labour generates value. But high level of production is possible through more and more capital accumulation and technological improvement.

At the start, growth under capitalism, generation of value and accumulation of capital underwent at a high rate. After reaching its peak, there is a concentration of capital associated with falling rate of profit. In turn, it reduces the rate of investment and as such rate of economic growth. Unemployment increases. Class conflicts increase. Labour conflicts start and there is a class revolt. Ultimately, there is a downfall of capitalism and rise of socialism.

‘Check your progress’

1. Who wrote the book called ‘Das Capital’?
2. According to Marx, which are the four stages in History?

2.3. Functional Approach

Sociology provides us with different perspectives with which to view our social world. A perspective is simply a way of looking at the world. A theory is a set of interrelated propositions or principles designed to answer a question or explain a particular phenomenon; it provides us with a perspective. Sociological theories help us to explain and predict the social world in which we live.

Sociology includes three major theoretical perspectives: the functionalist perspective, the conflict perspective, and the symbolic interactionist perspective (sometimes called the interactionist perspective or simply the micro view). Each perspective offers a variety of explanations about the social world and human behavior.

Functionalist Perspective The functionalist perspective is based largely on the works of *Herbert Spencer*, *Emile Durkheim*, *Talcott Parsons*, and *Robert Merton*. According to functionalism, society is a system of interconnected parts that work together in harmony to maintain a state of balance and social equilibrium for the whole. For example, each of the social institutions contributes important functions for society: Family provides a context for reproducing, nurturing, and socializing children; education offers a way to transmit a society’s skills, knowledge, and culture to its youth; politics provides a means of governing members of society; economics provides for the production, distribution, and consumption of goods and services; and religion provides moral guidance and an outlet for worship of a higher power. The functionalist perspective emphasizes the interconnectedness of society by focusing on how each part influences and is influenced by other parts. For example, the increase in singleparent and dual-earner families has contributed to the number of children

who are failing in school because parents have become less available to supervise their children's homework. As a result of changes in technology, colleges are offering more technical programs, and many adults are returning to school to learn new skills that are required in the workplace. The increasing number of women in the workforce has contributed to the formulation of policies against sexual harassment and job discrimination. Functionalists use the terms functional and dysfunctional to describe the effects of social elements on society. Elements of society are functional if they contribute to social stability and dysfunctional if they disrupt social stability. Some aspects of society can be both functional and dysfunctional. For example, crime is dysfunctional in that it is associated with physical violence, loss of property, and fear. But according to Durkheim and other functionalists, crime is also functional for society because it leads to heightened awareness of shared moral bonds and increased social cohesion.

Durkheim's views on development and progress

Durkheim also conceived society in terms of an evolutionary scheme. He talked about social solidarity by which he meant the moral beliefs and ideas, which defined the "common sense" underlying social life. Like a social evolutionist, he was of the view that mechanical solidarity (characteristics of pre-industrial societies) was based on agreement and identity between people, while organic solidarity in industrial societies was derived from agreement to tolerate a range of differences, conflicts being moderated through a variety of institutional arrangements such as courts, trade unions and political parties.

In the pre-industrial societies there is little or no division of labour, every one works in similar ways and consumes in similar ways; there is little division of opinion, little individuality. In organic solidarity, on the other hand, there are specialisation of activities and advanced division of labour whose production, distribution and consumption are carried out in specialised ways.

Durkheim tried to explain social change as the result of changes in the bonds of morality, which he called social solidarity. Societies based on mechanical solidarity are transferred to organic solidarity by the growth of Industrialisation, heterogeneity, differentiation, specialisation of activity and individualism.

The problem of the growth of population, shrinking of natural resources and growing individualism (growth of material and moral density), according to him, is resolved by division of labour in the industrial society, i.e., in the organic solidarity.

As each individual is specialised and also individualism is respected they are socially integrated with bondage of division of labour. Indeed division of labour in the organic solidarity ensures the integration of individual specialisation in the system. However, abnormal division of labour, according to the Durkheim, may lead to formlessness.

To Durkheim, material density means sheer increase in the number of population in a give space. Which moral density indicates the increased interaction among individuals caused by their increase in numbers? Durkheim considers the development of the division of labour in the society to be associated with the increasing contact among people since the greater density of contact leads to the specialisation of people. But, he argues, the moral relationship can only produce its effect only if the real distance between individuals diminish, which means increase in material density. What Durkheim refers here is that moral density cannot grow unless material density grows at the same time. He suggests three ways in which this happens. People begin to concentrate together. Agriculture may begin this, and this continues with the growth of cities as well. Cities always result from the need of individuals to put themselves in very intimate contact with others. They can multiply and extend only if the moral density is raised. Increased number and rapidity of means of transportation and communication results in suppressing or diminishing the gaps separating social segments which in turn increases the density of society.

Functionalism interprets each part of society in terms of how it contributes to the stability of the whole society. Society is more than the sum of its parts; rather, each part of society is functional for the stability of the whole. Durkheim actually envisioned society as an organism, and just like within an organism, each component plays a necessary part, but none can function alone, and one experiences a crisis or fails, other parts must adapt to fill the void in some way.

Within functionalist theory, *the different parts of society are primarily composed of social institutions, each of which is designed to fill different needs, and each of which has particular consequences for the form and shape of society. The parts all depend on each other.* The core institutions defined by sociology and which are important to understanding for this theory include family, government, economy, media, education, and religion. According to functionalism, an institution only exists because it serves a vital role in the functioning of society. If it no longer serves a role, an institution will die away. When new needs evolve or emerge, new institutions will be created to meet them.

‘Check your progress’

3. Which Sociologists studied Division of Labour?
4. According to Durkheim, types of solidarity in industrial society is _____

2.4. SUMMARY

- Karl Marx theory of economic development can be categorised as conflict perspective of development.
- Functionalist approach of development tries to study the functional aspects of development on the society.
- The functionalist perspective is based largely on the works of Herbert Spencer, Emile Durkheim, Talcott Parsons, and Robert Merton.

- Emile Durkheim carried out the study of social division of labour. In his study he highlighted, how solidarity undergoes change from mechanical to organic as society progresses from pre-industrial to industrial society.
- Liberalism is a political and moral philosophy based on liberty, consent of the governed, and equality before the law.
- Ecological systems theory was developed by Urie Bronfenbrenner which offers a framework through which community psychologists examine individuals' relationships within communities and the wider society.

2.5. KEY TERMS

- **Communism:** A theory or system of social organization in which all property is owned by the community and each person contributes and receives according to their ability and needs.
- **Capitalism:** An economic and political system in which a country's trade and industry are controlled by private owners for profit, rather than by the state.
- **Development:** The act or process of growing or causing something to grow or become larger or more advanced. Functionalist approach of development tries to study the functional aspects of development on the society.
- **Marxist Approach:** This theory of economic development emphasizes on the conflict perspective of development.
- **Functionalist Approach:** this approach tries to study the functional aspects of development on the society in its functional pre-requisite manner.
- **Liberal Approach:** Liberalism is a political and moral philosophy based on liberty, consent of the governed, and equality before the law.

- **Ecological Approach:** Ecological systems theory offers a framework through which community psychologists examine individuals' relationships within communities and the wider society.

2.6. ANSWER TO 'CHECK YOUR PROGRESS'

1. Karl Marx
2. Primitive Communism, Slavery, Feudalism and Capitalism
3. Emile Durkheim
4. Organic Solidarity
5. American Revolution (1776), French Revolution (1789)
6. Urie Bronfenbrenner

Now you will be able to give answer to the following topics

1. Marxist Approach to Development.
2. Functionalist perspective of development.
3. Emile Durkheim views on development.
4. Mechanical and Organic Solidarity by Emile Durkheim
5. Liberal Approach to Development.
6. Ecological Approach to Development.
7. Urie Bronfenbrenner approach.

2.7. Questions and Exercises

Short-Answer Questions

1. Describe historical materialism.
2. Explain Durkheim's view on Development and Progress
3. What do you mean by functional approach to study development?
4. Explain Karl Marx's Theory of Economic Growth.

5. Define Liberal feminist's perspective on development.
6. Define Ecological Approach to development

Long-Answer Questions

1. How is Marx idea on development different from that of Durkheim's view on development?
2. Give a critical analysis on the functional perspective of development.
3. Define Liberal Perspective of development.
4. Differentiate between Classical and Modern Liberal Perspective of Development.
5. Briefly analyze Ecological Systems Theory developed by Urie Bronfenbrenner.

2.8. FURTHER READING

- Booth, D. (1985). Marxism and development sociology: interpreting the impasse. *World Development*, 13(7), 761-787.
- Foster-Carter, A. (1973). Neo-Marxist approaches to development and underdevelopment. *Journal of Contemporary Asia*, 3(1), 7-33.
- Becker, S. L. (1984). Marxist approaches to media studies: The British experience. *Critical Studies in Media Communication*, 1(1), 66-80.
- Chenery, H. B. (1975). The structuralist approach to development policy. *The American Economic Review*, 65(2), 310-316.
- Rose, D. (1984). Rethinking gentrification: beyond the uneven development of Marxist urban theory. *Environment and planning D: Society and Space*, 2(1), 47-74.
- Seddon, D. (Ed.). (1978). *Relations of production: Marxist approaches to economic anthropology*. Psychology Press.
- Meillassoux, C. (1972). From reproduction to production: A Marxist approach to economic anthropology.

- Mouzelis, N. P. (1988). Sociology of development: reflections on the present crisis. *Sociology*, 22(1), 23-44.
- Castro, C. J. (2004). Sustainable development: mainstream and critical perspectives. *Organization & Environment*, 17(2), 195-225.
- Caporaso, J. A. (1980). Dependency theory: continuities and discontinuities in development studies. *International Organization*, 34(4), 605-628.
- Bernstein, H. (1971). Modernization theory and the sociological study of development. *The Journal of Development Studies*, 7(2), 141-160.
- Eisenstadt, S. N. (1974). Studies of modernization and sociological theory. *History and Theory*, 13(3), 225-252.
- Sandbrook, R. (1976). The 'Crisis' in political development theory. *The Journal of Development Studies*, 12(2), 165-185.
- Muñoz, H. (Ed.). (2019). *From dependency to development: strategies to overcome underdevelopment and inequality*. Routledge.
- Weaver, C. (1978). Regional theory and regionalism: towards rethinking the regional question. *Geoforum*, 9(6), 397-413.versity Press, 1977),
- Parsons, Talcott, *The Social System* (New York: Free Press, 1951) and Parsons, Talcott, "Evolutionary Universals in Society," in *Sociological Theory and Modern Society*,
- Parsons, Talcott, eds. (New York: Free Press, 1967), pp. 490–520. Marion J. Levy, *The Structure of Society* and Levy, , *Modernization and the Structure of Society* (Princeton, N.J.: Princeton University Press, 1966
- La Palombara, Joseph and Weiner, Myron, eds., *Political Parties and Political Development* (Princeton, N. J. : Princeton University Press, 1966).

- La Palombara, Joseph, ed., *Bureaucracy and Political Development* (Princeton, N. J.: Princeton University Press, 1963).
- Pye, Lucien W., ed., *Communications and Political Development* (Princeton, N. J.: Princeton University Press, 1967).
- Abrahamsen, R. and Williams, M. C. (2007) Securing the city: private security companies and non-state authority in global governance, *International Relations*, 21, pp. 237-253. Downloaded from usj.sagepub.com at University of Leeds on May 17, 2015 212.
- Angelis, M. de (2003) Neoliberal governance, reproduction and accumulation, *The Commoner*, 7(Spring/Summer) (<http://www.commoner.org.uk/07deangelis.pdf>).
- Bayley, D. (1995) A foreign policy for democratic policing, *Policing and Society*, 5, pp. 79–93. Beckett,
- K. and Herbert, S. (2006) Dealing with disorder: social control in the post-industrial city. Paper presented at the conference Place Matters: Seeking Equity in Diversity, Diversity Research Institute, University of Washington, October.
- Bond, P. (2000) *Elite Transition: From Apartheid to Neoliberalism in South Africa*. London: Pluto Press. Bond, P. (2003)
- Bronfenbrenner, U. (1994). Ecological models of human development. *Readings on the development of children*, 2(1), 37-43.
- Apple, M. (1982) in F.Ahmad, J.Schultz, E.Smith and W.Whelan (eds.) *From Gene to Protein: Translation into Biotechnology*, London, Academic Press.
- Bahro, R. (1982) *Socialism and Survival*, London, Heretic Books. Baker, L. (1981) 'The environmental nexus', *Resource Management*, 13(2): 12–25.

- Barbira-Scazzochio, F. (1980) (ed.) Land, People and Planning in Contemporary Amazonia, University of Cambridge.
- Barratt-Brown, M. (1985) Models in Political Economy, London, Penguin.
- Bartelmus, P. (1986) Environment and Development, London,
- Allen and Unwin. Batisse, M. (1985) 'Action plan for biosphere reserves', Environmental Conservation, 12(1):17–27.
- Bernstein, H. (1979) 'African peasantries: a theoretical framework', The Journal of Peasant Studies, 6(4).
- Bishop, J. and Cook, L. (1981) 'Genes, phenotype and environment' in J.Bishop and L.Cook (eds.) Genetic Consequences of Man-Made Change, London, Academic Press.
- Blaikie, P. (1985) The Political Economy of Soil Erosion in Developing Countries, London, Longman. Block,
- H.R. (1981) The Planetary Product in 1980, Washington, US Department of State.
- Blowers, A. (1985) 'Environmental politics and policy surrounding minerals, agriculture, air pollution and nuclear waste', paper presented to RESSG Conference 'Environmental Problems and Politics in Rural Societies', Loughborough.
- Booth, D. (1984) Marxism and development sociology: interpreting the impasse, mimeo.
- Bowler, I. (1985) Agriculture Under the Common Agricultural Policy, Manchester University Press. 206 Bibliography Brandt Commission (1983) Common Crisis, London, Pan Books. Branford, S. and Glock, O. (1985) The Last Frontier, London, Zed. Brown, L. (1984) The State of the World, New York, Worldwatch Institute,

- W.W.Norton. Brundtland (1985a) Mandate for Change: Key Issues, Strategy and Workplan, World Commission on Environment and Development, Geneva.
- Brundtland (1985b) Brundtland Commission Public Hearings, Jakarta, transcript.
- BTAM (1985) British Tropical Agricultural Mission, Bolivia, Review, London, Overseas Development Administration.
- Bull, D. (1982) A Growing Problem: Pesticides and the Third World Poor, Oxford, Oxfam.
- Burbach, R. and Flynn, P. (1980) Agribusiness in the Americas, New York, Monthly Review
- Press. Burcham, T. (1957) California Range Land, Sacramento, California, Department of Natural Resources, Division of Forestry.
- Burgess, R. (1978) 'The concept of nature in geography and Marxism', *Antipode* 10(2):1–11.
- Burton, D. J. (1981) 'The political economy of environmentalism', *Kapitalistate*, Working Papers 9, 147–57.
- Buttel, F. (1983) *Sociology and the Environment: The Winding Road toward Human Ecology*, Cornell University, Department of Rural Sociology.
- Buttel, F., Kenney, M. and Kloppenburg, J. (1983) *Biotechnology and the Third World: towards a global political-economic perspective*, Cornell University, unpublished MS.
- Caufield, C. (1984) *Tropical Moist Forests*, London, Earthscan,
- IIED CEPAL (1985 a) *The Environmental Dimension in Development Planning: main issues in Latin America*, Santiago, Chile, CEPAL (United Nations).
- CEPAL (1985b) 'El Medio Ambiente como factor del Desarrollo', *Notas sobre la Economía y el Desarrollo*, CEPAL, 417, May.

- Chambers, R. (1986) 'Sustainable livelihoods', Institute of Development Studies, University of Sussex, mimeo.
- Churfas, J. (1982) *Man-Made Life*, Oxford, Blackwell. Clements, F. (1916) *Plant Succession*, Washington, Carnegie Institute.
- Colchester, M. (1986) 'Unity and diversity: Indonesian policy towards tribal peoples', *The Ecologist*, 16(2/3), 89–98.
- Commoner, B. (1971) *The Closing Circle*, New York, Knopf. Conlin, S. (1985) 'Anthropological advice in a government context', in R.Grillo and A.Rew (eds.) *Social Anthropology and Development Policy*, London, Tavistock.
- Conway, G. (1984) *Rural Resource Conflicts in the UK and Third World - Issues for Research Policy*, London, Imperial College/SPRU, *Papers in Science, Technology and Public Policy*.
- Conway, G. (1985b) 'Agricultural ecology and farming systems research', paper prepared for the Farming Systems Research (FSR) Workshop, Hawkesbury, Australia.
- Conway, G. (1985c) 'Rapid rural appraisal and agro-ecosystem analysis: a case study from Northern Pakistan', paper presented at International Conference on RRA, Khon Kaen, Thailand.
- Cook, K. (1983) 'Surplus madness', *Journal of Soil and Water Conservation*, 31(1), 25–8.
- Cotgrove, S. (1982) *Catastrophe or Cornucopia: The Environment, Politics and the Future*, Chichester, Wiley.
- Crow, B. and Thomas, A. (1982) *Third World Atlas*, Milton Keynes, Open University Press.

- Dandler, J. and Sage, C. (1985) 'What is happening to Andean potatoes? A view from the grassroots', *Development Dialogue*, 1, Uppsala, Sweden.
- Dasmann, R.F. (1975) *The Conservation Alternative*, London, Wiley. Dasmann, R.F. (1985) 'Achieving the sustainable use of species and ecosystems', *Landscape Planning* 12:211–19.
- Denevan, W., Treacy, J., Alcorn, J., Padoch, C., Denslow, J., Flores, S. (1982) 'Indigenous agroforestry in the Peruvian Amazon: Bora Indian management of swidden fallows', in
- J.Hemmings (ed.) *Change in the Amazon Basin*, Manchester University Press, vols. 1 and 2.
- Devall, B.B. (1979) 'The Deep Ecology Movement', *Natural Resources Journal*, 20, 299–322.
- Devall, B.B. and Sessions, G. (1984) *Deep Ecology*, Layton, Utah, Peregrine Smith Books.

UNIT 3: THEORIES OF DEVELOPMENT

3.0. Introduction

3.1. Unit Objectives

3.2. Modernisation

3.3. Dependency

3.4. Summary

3.5. Key Terms

3.6. Answer to ‘Check your Progress’

3.7. Questions and Exercises

3.8. Further reading

3.0. INTRODUCTION

The present unit explains the process of modernization, model of a progressive transition from traditional to a modern society. Dependency theories describe about how wealthy or developed countries depended on peripheral poorer nations for maintaining their status as rich nations. While the World System Theories discuss about relationships between core-, peripheral- and semi-peripheral nations, and describe how core nations exploit them in the name of development. On the otherhand, Trotsky and Rudolf Hilferdings discusses uneven development or unequal distributions of resources and wealth .

3.1. UNIT OBJECTIVES

After going through this unit, you will be able to:

1. Explain modernization.
2. Modernization Theory and its Criticism.
3. Describe Dependency theory.
4. Discuss World System Theory of Immanuel Wallerstein and its Criticism.

5. Analyse Uneven Development Theory and its Origin, Concept and Rudolf Hilferding's Theory.

3.2. MODERNIZATION

Modernization is the current term for an old process—the process of social change whereby less developed societies acquire characteristics common to more developed societies. The process is activated by international, or intersocietal, communication. Modernization is the current term for an old process—the process of social change whereby less developed societies acquire characteristics common to more developed societies. The process is activated by international, or intersocietal, communication. It can be seen on a global scale, as modernization extends outward from its original Western base to take in the whole world. The existence of unevenly and unequally developed nations introduces a fundamental element of instability into the world system of states. Thus, “ ‘*Modernization*’ can be understood as the process of becoming modern”. It broadly covers two aspects that are, advancement in ‘science’ and ‘technology’, however. It also attached to various other socio-cultural aspects.

What is Modernization Theory?

Modernization theory is a theory used to explain the process of modernization that a nation goes through as it transitions from a traditional society to a modern one. The theory has not been attributed to any one person; instead, its development has been linked to American social scientists in the 1950s.

Modernization theory is used to explain the process of modernization within societies. Modernization refers to a model of a progressive transition from a 'pre-modern' or 'traditional' to a 'modern' society. Modernization theory originated from the ideas of German sociologist Max Weber (1864–1920), which provided the basis for the modernization paradigm developed by Harvard sociologist Talcott Parsons (1902–1979). The theory looks at

the internal factors of a country while assuming that with assistance, "traditional" countries can be brought to development in the same manner more developed countries have been. Modernization theory was a dominant paradigm in the social sciences in the 1950s and 1960s, and then went into a deep eclipse. It made a comeback after 1991 but remains a controversial model.

Overview

Modernization theory both attempts to identify the social variables that contribute to social progress and development of societies and seeks to explain the process of social evolution. Modernization theory is subject to criticism originating among socialist and free-market ideologies, world-systems theorists, globalization theorists and dependency theorists among others. Modernization theory stresses not only the process of change but also the responses to that change. It also looks at internal dynamics while referring to social and cultural structures and the adaptation of new technologies. Modernization theory maintains that traditional societies will develop as they adopt more modern practices. Proponents of modernization theory claim that modern states are wealthier and more powerful and that their citizens are freer to enjoy a higher standard of living. Developments such as new data technology and the need to update traditional methods in transport, communication and production, it is argued, make modernization necessary or at least preferable to the status quo. That view makes critique difficult since it implies that such developments control the limits of human interaction, not vice versa. And yet, seemingly paradoxically, it also implies that human agency controls the speed and severity of modernization. Supposedly, instead of being dominated by tradition, societies undergoing the process of modernization typically arrive at forms of governance dictated by abstract principles. Traditional religious beliefs and cultural traits, according to the theory, usually become less important as modernization takes hold.^[2]

Historians link modernization to the processes of urbanization and industrialization and the spread of education. As Kendall (2007) notes, "Urbanization accompanied modernization and the rapid process of industrialization." In sociological critical theory, modernization is linked to an overarching process of rationalisation. When modernization increases within a society, the individual becomes increasingly important, eventually replacing the family or community as the fundamental unit of society

Origin

Sociological theories of the late 19th century such as Social Darwinism provided a basis for asking what the laws of evolution of human society were. The current modernization theory originated with the ideas of German sociologist Max Weber (1864–1920) regarding the role of rationality and irrationality in the transition from traditional to modern society. Weber's approach provided the basis for the modernization paradigm as popularized by Harvard sociologist Talcott Parsons (1902–1979), who translated Weber's works into English in the 1930s and provided his own interpretation.

After 1945 the Parsonian version became widely used in sociology and other social sciences. By the late 1960s opposition developed because the theory was too general and did not fit all societies in quite the same way.

There are many different versions of modernization theory. This lesson will discuss the opposing views of the Marxist and capitalist versions, a Western version, and a present-day version of modernization theory.

Marxist vs. Capitalist

Early theories were greatly affected by the political climate between the United States and the Soviet Union. During the Cold War era (1947-1991), two versions of modernization theory were prominent.

Marxist

The Marxist theory of modernization theorized that as nations developed, adopting a communist approach to governing, such as eradicating private property, would end conflict, exploitation, and inequality. Economic development and social change would lead developing nations to develop into a society much like that of the Soviet Union.

Capitalist

The capitalist version of modernization theorized that as nations developed, economic development and social change would lead to democracy. Many modernization theorists of the time, such as W. W. Rostow, argued that when societies transitioned from traditional societies to modern societies, they would follow a similar path. They further theorized that each developing country could be placed into a category or stage of development. Rostow's stages of development are:

- **Traditional** - an agricultural-based society
- **Pre-conditions for take-off** - characterized by an abundance of entrepreneurial activity
- **Take-off** - a period of rapid economic growth
- **Maturation** - economic development slows to a more consistent rate
- **Mass production or mass consumption** - a period in which real income increases

Other modernization theorists, such as Samuel Huntington, argued that social mobilization and economic development were driving forces behind modernization. Increased **social mobilization** meant that individuals and societal groups changed their aspirations. Increased **economic development** meant the capabilities of the newly modern society would change. Huntington argued that these societal changes would inevitably lead to democratization.

Although the Marxist and capitalist versions of modernization held opposing views, both views held that in order for developing countries to modernize the countries needed assistance in economic development and social change.

Communism was deteriorating by the 1970s and democratization had failed to occur in many nations struggling to develop. Many critics declared that the Marxist and capitalist versions of modernization were void.

Modernisation Theory (Development and Underdevelopment)

Historical Context (1940s and 50s)

By the end of WW2 it had become clear that despite exposure to Capitalism many of the countries of the South had failed to develop. In this context, in the late 1940s, Modernisation Theory was developed. Modernisation theory had two major aims

- It attempted to explain why poorer countries have failed to develop, focussing on what cultural and economic conditions might act as **‘barriers’ to development**
- It aimed to provide a **non-communist** solution to poverty in the developing world by suggesting that economic change (in the form of Capitalism) and the introduction of western values and culture could play a key role in bringing about modernisation.

Why countries are underdeveloped? Cultural and economic barriers to development

Modernisation theorists argue that there are a number of cultural and economic barriers that prevent traditional societies from developing.

Cultural barriers are seen as internal to the country – it is essentially their fault for being backward. Western culture, on the other hand, is seen as having a superior culture that has allowed for it to develop.

Traditional Values – prevent economic growth and change.	Modern Values – inspire change and economic growth.
---	--

Simple division of labour, less specialised job roles, individuals rely on a few dozen people in their local communities for basic needs to be met.	Complex division of labour, individuals tend to have very specialised jobs and rely on thousands of others for basic needs to be met
Religious beliefs and tradition influence day to day life (resistance to change)	Rational decision making (cost benefit analysis and efficiency) are more important.
Stronger community and family bonds and collectivism	Weaker community and family bonds means more individual freedom.
Affective relationships	Meritocracy –people are more motivated to innovate and change society for the better.
Patriarchy	Gender equality

Economic barriers to development

These are barriers which may make developing countries unattractive to investors.

- Lack of infrastructure
- Lack of technology
- Lack of skills in the work force
- Political instability
- Lack of capital in the country

Modernisation Theory 2: How countries should develop

Rostow believed that an initial injection of aid from the west in the form of training, education, economic investment etc. would be enough to jolt a society into economic growth overcoming these cultural barriers.

Rostow suggested that development should be seen as an evolutionary process in which countries progress up 5 stages of a development ladder

Rostow's five stage model of development

Stage 1 – Traditional societies whose economies are dominated by subsistence farming. Such societies have little wealth to invest and have limited access to modern industry and technology. Rostow argued that at this stage there are cultural barriers to development (see sheet 6)

Stage 2 – The preconditions for take off.

The stage in which western aid packages brings western values, practises and expertise into the society. This can take the form of:

- Science and technology – to improve agriculture
- Infrastructure – improving roads and cities communications
- Industry – western companies establishing factories

These provide the conditions for investment, attracting more companies into the country.

Stage 3 - Take off stage.

The society experiences economic growth as new modern practices become the norm. Profits are reinvested in infrastructure etc. and a new entrepreneurial class emerges and urbanised that is willing to invest further and take risks. The country now moves beyond subsistence economy and starts exporting goods to other countries

This generates more wealth which then trickles down to the population as a whole who are then able to become consumers of new products produced by new industries there and from abroad.

Stage 4 - The drive to maturity.

More economic growth and investment in education, media and birth control. The population start to realise new opportunities opening up and strive to make the most of their lives.

Stage 5 - The age of high mass consumption.

This is where economic growth and production are at Western levels.

Variations on Rostow's 5 stage model

Different theorists stress the importance of different types of assistance or interventions that could jolt countries out their traditional ways and bring about change.

- **Hoselitz** – education is most important as it should speed up the introduction of Western values such as universalism, individualism, competition and achievement measured by examinations. This was seen as a way of breaking the link between family and children.
- **Inkeles** – media – Important to diffuse ideas non traditional such as family planning and democracy
- **Hoselitz** – urbanisation. The theory here is that if populations are packed more closely together new ideas are more likely to spread than amongst diffuse rural populations.

Criticisms of Modernisation Theory

The below shows the Criticisms of Modernisation Theory in one by one:

1. The Asian Tiger economies combined elements of traditional culture with Western Capitalism to experience some of the most rapid economic growth of the past 2 decades.
2. Ignores the 'crisis of modernism' in both the developed and developing worlds. Many developed countries have huge inequalities and the greater the level of inequality the greater the degree of other problems: High crime rates, suicide rates, health problems, drug abuse.

3. Ethnocentric interpretations tend to exclude contributions from thinkers in the developing world. This is a one size fits all model, and is not culture specific.
4. The model assumes that countries need the help of outside forces. The central role is on experts and money coming in from the outside, parachuted in, and this downgrades the role of local knowledge and initiatives. This approach can be seen as demeaning and dehumanising for local populations. Galeano (1992) argues that minds become colonised with the idea that they are dependent on outside forces. They train you to be paralysed and then sell you crutches. There are alternative models of development: See sheet no...
5. Corruption (Kleptocracy) prevents aid of any kind doing good, Much aid is siphoned off by corrupt elites and government officials rather than getting to the projects it was earmarked for. This means that aid creates more inequality and enables elites to maintain power
6. There are ecological limits to growth. Many modernisation projects such mining and forestry have lead to the destruction of environment.
8. Social damage – Some development projects such as dams have lead to local populations being removed forcibly from their home lands with little or no compensation being paid.

Some Marxist theorists argue that aid and development is not really about helping the developing world at all. It is really about changing societies just enough so they are easier to exploit, making western companies and countries richer, opening them up to exploit cheap natural resources and cheap labour. Joseph Stiglitz notes that those countries that followed alternative models of development ignoring western advice are now competing with the west, China and India are two examples

‘Check your progress’

1. According to Rostow, how many types of developmental stages exist?
2. What are the Two Major Aims of Modernization?

3.3. Dependency

Dependency theory is the notion that resources flow from a "periphery" of poor and underdeveloped states to a "core" of wealthy states, enriching the latter at the expense of the former. It is a central contention of dependency theory that poor states are impoverished and rich ones enriched by the way poor states are integrated into the "world system".

The theory arose as a reaction to modernization theory, an earlier theory of development which held that all societies progress through similar stages of development, that today's underdeveloped areas are thus in a similar situation to that of today's developed areas at some time in the past, and that, therefore, the task of helping the underdeveloped areas out of poverty is to accelerate them along this supposed common path of development, by various means such as investment, technology transfers, and closer integration into the world market. Dependency theory rejected this view, arguing that under-developed countries are not merely primitive versions of developed countries, but has unique features and structures of their own; and importantly, are in the situation of being the weaker members in a world market economy. Dependency theory no longer has many proponents as an overall theory though some writers have argued for its continuing relevance as a conceptual orientation to the global division of wealth.

One alternative model on the left is Dependency theory. It emerged in the 1950s and argues that the underdevelopment of poor nations in the Third World derived from systematic imperial and neo-colonial exploitation of raw materials. Its proponents argue that resources typically flow from a "periphery" of poor and underdeveloped states to a "core" of wealthy states, enriching the latter at the expense of the former. It is a central contention of

dependency theorists such as Andre Gunder Frank that poor states are impoverished and rich ones enriched by the way poor states are integrated into the "world system". Dependency models arose from a growing association of southern hemisphere nationalists (from Latin America and Africa) and Marxists. It was their reaction against modernization theory, which held that all societies progress through similar stages of development, that today's underdeveloped areas are thus in a similar situation to that of today's developed areas at some time in the past, and that, therefore, the task of helping the underdeveloped areas out of poverty is to accelerate them along this supposed common path of development, by various means such as investment, technology transfers, and closer integration into the world market.

History

Dependency theory originates with two papers published in 1949 – one by Hans Singer, one by Raúl Prebisch – in which the authors observe that the terms of trade for underdeveloped countries relative to the developed countries had deteriorated over time: the underdeveloped countries were able to purchase fewer and fewer manufactured goods from the developed countries in exchange for a given quantity of their raw materials exports. This idea is known as the Prebisch–Singer thesis. Prebisch, an Argentine economist at the United Nations Commission for Latin America (UNCLA), went on to conclude that the underdeveloped nations must employ some degree of protectionism in trade if they were to enter a self-sustaining development path. He argued that import-substitution industrialisation (ISI), not a trade-and-export orientation, was the best strategy for underdeveloped countries. The theory was developed from a Marxian perspective by Paul A. Baran in 1957 with the publication of his *The Political Economy of Growth*. Dependency theory shares many points with earlier, Marxist, theories of imperialism by Rosa Luxemburg and Vladimir Lenin, and has attracted continued interest from Marxists. Some authors identify two main streams in dependency theory: the Latin American Structuralist, typified by the work of Prebisch, Celso

Furtado, and Aníbal Pinto at the United Nations Economic Commission for Latin America (ECLAC, or, in Spanish, CEPAL); and the American Marxist, developed by Paul A. Baran, Paul Sweezy, and Andre Gunder Frank.

Using the Latin American dependency model, the Guyanese Marxist historian Walter Rodney, in his book *How Europe Underdeveloped Africa*, described in 1972 an Africa that had been consciously exploited by European imperialists, leading directly to the modern underdevelopment of most of the continent.^[5]

The theory was popular in the 1960s and 1970s as a criticism of modernization theory, which was falling increasingly out of favor because of continued widespread poverty in much of the world. It was used to explain the causes of overurbanization, a theory that urbanization rates outpaced industrial growth in several developing countries.

The Latin American Structuralist and the American Marxist schools had significant differences but agreed on some basic points:

Both groups would agree that at the core of the dependency relation between center and periphery lays [lies] the inability of the periphery to develop an autonomous and dynamic process of technological innovation. Technology – the Promethean force unleashed by the Industrial Revolution – is at the center of stage. The Center countries controlled the technology and the systems for generating technology. Foreign capital could not solve the problem, since it only led to limited transmission of technology, but not the process of innovation itself. Baran and others frequently spoke of the international division of labour – skilled workers in the center; unskilled in the periphery – when discussing key features of dependency.

Baran placed surplus extraction and capital accumulation at the center of his analysis. Development depends on a population's producing more than it needs for bare subsistence (a surplus). Further, some of that surplus must be used for capital accumulation – the purchase

of new means of production – if development is to occur; spending the surplus on things like luxury consumption does not produce development. Baran noted two predominant kinds of economic activity in poor countries. In the older of the two, plantation agriculture, which originated in colonial times, most of the surplus goes to the landowners, who use it to emulate the consumption patterns of wealthy people in the developed world; much of it thus goes to purchase foreign-produced luxury items –automobiles, clothes, etc. – and little is accumulated for investing in development. The more recent kind of economic activity in the periphery is industry—but of a particular kind. It is usually carried out by foreigners, although often in conjunction with local interests. It is often under special tariff protection or other government concessions. The surplus from this production mostly goes to two places: part of it is sent back to the foreign shareholders as profit; the other part is spent on conspicuous consumption in a similar fashion to that of the plantation aristocracy. Again, little is used for development. Baran thought that political revolution was necessary to break this pattern.

In the 1960s, members of the Latin American Structuralist School argued that there is more latitude in the system than the Marxists believed. They argued that it allows for partial development or "dependent development"—development, but still under the control of outside decision makers. They cited the partly successful attempts at industrialisation in Latin America around that time (Argentina, Brazil, Mexico) as evidence for this hypothesis. They were led to the position that dependency is not a relation between commodity exporters and industrialised countries, but between countries with different degrees of industrialisation. In their approach, there is a distinction made between the economic and political spheres: economically, one may be developed or underdeveloped; but even if (somewhat) economically developed, one may be politically autonomous or dependent. More recently, Guillermo O'Donnell has argued that constraints placed on development

by neoliberalism were lifted by the military coups in Latin America that came to promote development in authoritarian guise (O'Donnell, 1982).

The importance of multinational corporations and state promotion of technology were emphasised by the Latin American Structuralists.

Fajnzylber has made a distinction between systemic or authentic competitiveness, which is the ability to compete based on higher productivity, and spurious competitiveness, which is based on low wages.

The third-world debt crisis of the 1980s and continued stagnation in Africa and Latin America in the 1990s caused some doubt as to the feasibility or desirability of "dependent development".

The *sine qua non* of the dependency relationship is not the difference in technological sophistication, as traditional dependency theorists believe, but rather the difference in financial strength between core and peripheral countries—particularly the inability of peripheral countries to borrow in their own currency. He believes that the hegemonic position of the United States is very strong because of the importance of its financial markets and because it controls the international reserve currency – the US dollar. He believes that the end of the Bretton Woods international financial agreements in the early 1970s considerably strengthened the United States' position because it removed some constraints on their financial actions.

"Standard" dependency theory differs from Marxism, in arguing against internationalism and any hope of progress in less developed nations towards industrialization and a liberating revolution. Theotonio dos Santos described a "new dependency", which focused on both the internal and external relations of less-developed countries of the periphery, derived from a Marxian analysis. Former Brazilian President Fernando Henrique Cardoso (in office 1995–2002) wrote extensively on

dependency theory while in political exile during the 1960s, arguing that it was an approach to studying the economic disparities between the centre and periphery. **Cardoso summarized his version of dependency theory as follows:**

- there is a financial and technological penetration by the developed capitalist centers of the countries of the periphery and semi-periphery;
- this produces an unbalanced economic structure both within the peripheral societies and between them and the centers;
- this leads to limitations on self-sustained growth in the periphery;
- this favors the appearance of specific patterns of class relations;
- these require modifications in the role of the state to guarantee both the functioning of the economy and the political articulation of a society, which contains, within itself, foci of inarticulateness and structural imbalance.

The analysis of development patterns in the 1990s and beyond is complicated by the fact that capitalism develops not smoothly, but with very strong and self-repeating ups and downs, called cycles. Relevant results are given in studies by Joshua Goldstein, Volker Bornschier, and Luigi Scandella.

With the economic growth of India and some East Asian economies, dependency theory has lost some of its former influence. It still influences some NGO campaigns, such as Make Poverty History and the fair trade movement.

3.4. SUMMARY

- From this unit we have become familiar about the Marxist Theory of Modernization
- Modernization Theory, its aims, cultural and economic barriers in development and its criticisms were also discussed
- The unit also discussed about the Rostow Model of five different stages in detail

- Dependency Theory of A.G. Frank and World-System Theory of Emanuel Wallerstein (how countries are interlinked and dependent on each other)
- Uneven Development Theory given by Trotsky and Rudolf Hilferding's (Unequal distribution of resources and wealth)

3.5 KEY TERMS

Modernization “‘Modernization’ can be understood as the process of becoming modern”. It broadly covers two aspects that are, advancement in ‘science’ and ‘technology’, however. It also attached to various other socio-cultural aspects.

Modernization Theory: Modernization theory is a theory used to explain the process of modernization that a nation goes through as it transitions from a traditional society to a modern one.

Marxist theory of modernization : The **Marxist theory of modernization** theorized that as nations developed, adopting a communist approach to governing, such as eradicating private property, would end conflict, exploitation, and inequality.

Dependency theory is the notion that resources flow from a "periphery" of poor and underdeveloped states to a "core" of wealthy states, enriching the latter at the expense of the former. It is a central contention of dependency theory that poor states are impoverished and rich ones enriched by the way poor states are integrated into the "world system.

World-System Theory : "World-system" refers to the inter-regional and transnational division of labor, which divides the world into core countries, semi-periphery countries, and the periphery countries.^[2]Core countries focus on higher skill, capital-intensive production, and the rest of the world focuses on low-skill, labor-

intensive production and extraction of raw materials. This constantly reinforces the dominance of the core countries.

Uneven Development : the process is marked by persistent differences in levels and rates of economic development between different sectors of the economy. This differentiation appears at many levels and in terms of a multiplicity of quantitative and qualitative indices.

Core nations-Developed countries

Peripheral nations – Developing and under- developed countries

3.6 ANSWER TO ‘CHECK YOUR PROGRESS’

- Five
- It attempts to explain why poorer countries have failed to develop and it aims to provide a non-communist solution to poverty in the developing world
- Immanuel Wallerstein
- Developed countries

Now you will be able to give answer to the following problems

- Explain Modernization and Modernization Theory.
- It attempts to explain why poorer countries have failed to develop and it aims to provide a non-communist solution to poverty in the developing world.
- Note down Rostow’s five stage model of development.
- Critical analysis of Modernisation Theory.
- Able to describe Dependency Theory.
- Explain World System Theory in relevance manner.
- Understand the concepts of Peripheral, Semi-peripheral and Core Nation.

3.7 Questions And Exercises

Short-Answer Questions

1. What is Modernization?
2. Define Dependency Theory
3. Describe Marxist Theory of Modernization.
4. Define Economic barriers to development
5. Criticisms of modernization theory.
6. What do you mean by Peripheral Nation?
7. Define Semi-Peripheral Nation.

Long-Answer Questions

1. Discuss uneven Development according to Trotsky and Rudolf Hilferding's Theory.
2. Describe the World System Theory of Immanuel Wallerstein.
3. Explain Rostow's Five Stages Model of Development.

3.8 . Further Reading

- Cardoso, F. H. (1979). Development under Fire. Mexico D.F.: Instituto Latinoamericano de Estudios Transnacionales, DEE/D/24 i, Mayo (Mexico 20 D.F., Apartado 85 - 025). Cited after Arno Tausch, Almas Heshmati, Re-Orient? MNC Penetration and Contemporary Shifts in the Global Political Economy, September 2009, IZA Discussion Paper No. 4393
- Carlos A. Martínez-Vela, World Systems Theory, paper prepared for the Research Seminar in Engineering Systems, November 2003
- F. Peter Wagner, Rudolf Hilferding: theory and politics of democratic socialism. Atlantic Highlands, N. J. : Humanities Press, 1996.
- Hongmei, Li (27 October 2010). "India's "Look East Policy" means "Look to encircle China?". People's Daily. Retrieved 1 November 2010.

- Hopkins, Terence K., and Immanuel Wallerstein, coordinators (1996). *The Age of Transition*. London: Zed Books.
- <http://countrystudies.us/india/126.htm> India-Nepal Treaty
- Laskar, Rejaul (December 2013). "Promoting National Interest Through Diplomacy". *Extraordinary and Plenipotentiary Diplomatist*. 1 (9): 59–60.
- Leon Trotsky, "Peculiarities of Russia's development", chapter 1 in *History of the Russian Revolution*, Vol. 1
- Leon Trotsky, *The struggle against fascism in Germany*, introduced by Ernest Mandel. Harmondsworth: Penguin, 1975.
- Leon Trotsky, *The Spanish Revolution 1931-1939*. New York: Pathfinder Press, 1975.
Leon Trotsky, *On France*. New York: Pathfinder, 1979. Leon Trotsky, *Fascism: What It Is and How to Fight It*. New York: Pathfinder 1969.
- Marcel van der Linden, "The 'Law' of Uneven and Combined Development: Some Underdeveloped Thoughts". *Historical Materialism*, Volume 15, Number 1, 2007, pp. 145-165.
- Michael Lowy, *The politics of Uneven and Combined Development*. London: Verso, 1981. (republished by Haymarket Books in 2010).
- Moore, Jason W. 2011. 2011. "Ecology, Capital, and the Nature of Our Times: Accumulation & Crisis in the Capitalist World-Ecology," *Journal of World-Systems Analysis* 17(1), 108-147, "Archived copy". Archived from the original on 2011-05-10. Retrieved 2011-02-11..
- Morales Ruvalcaba, Daniel Efrén (11 September 2013). "INSIDE THE BRIC: ANALYSIS OF THE SEMIPERIPHERAL NATURE OF BRAZIL, RUSSIA, INDIA

AND CHINA". Austral: Brazilian Journal of Strategy & International Relations (in Spanish). 2 (4). ISSN 2238-6912.

- Rudolf Hilferding, *Finance Capital. A Study of the Latest Phase of Capitalist Development*. London: Routledge & Kegan Paul, 1981, pp. 322-23.
- Shambaugh, David (2006). *Power Shift: China and Asia's New Dynamics*. University of California Press. p. 218. ISBN 978-0-520-24570-9.
- So, Alvin Y. (1990). *Social Change and Development: Modernization, Dependency, and World-Systems Theory*. Newbury Park, London and New Delhi: Sage Publications. pp. 169–199.
- Sushant Singh, "China border roads hobbling, 12 years later, 21 of 73 ready", *Indian Express*, 11 July 2017.
- Wallerstein, Immanuel (1974). *The Modern World-System I: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*. New York: Academic Press.
- Wallerstein, Immanuel (1983). *Historical Capitalism*. London: Verso.
- Wallerstein, Immanuel (1989). *The Modern World-System III*. San Diego: Academic Press
- Wallerstein, Immanuel (1992). "The West, Capitalism, and the Modern World-System",
- Review 15 (4), 561-619; also Wallerstein, *The Modern World-System I*, chapter one; Moore,
- Jason W. (2003) "The Modern World-System as Environmental History? Ecology and the rise of Capitalism," *Theory & Society* 32(3), 307–377.

- Wallerstein, Immanuel (Sep 1974). "Wallerstein. 1974. "The Rise and Future Demise of the World-Capitalist System: Concepts for Comparative Analysis" (PDF). *Comparative Studies in Society and History*. 16 (4): 390. Cited after
- Wallerstein, Immanuel Maurice (2004). *World-systems analysis: An introduction*. Duke University Press. pp. 23–24.
- Wallerstein, Immanuel. 1974. *The Modern World System: Capitalist Agriculture and the Origins of the European World-Economy in the 16th Century*. New York: Academic Press.
- Wallerstein, Immanuel. 2004. 2004a. "World-Systems Analysis." In *World System History: Encyclopedia of Life Support Systems*, edited by George Modelski. Oxford: UNESCO/EOLSS Publishers, <http://www.eolss.net>.
- Berlie, Jean A., ed. (2004). *Islam in China, Hui and Uyghurs: between modernization and sinicization*. Bangkok: White Lotus Press. ISBN 974-480-062-3.
- Bernstein, Henry (1971). "Modernization theory and the sociological study of development". *Journal of Development Studies*. 7 (2): 141–60. doi:10.1080/00220387108421356.
- Bhikhu Parekh, *Gandhi's Political Philosophy: A Critical Examination*, Ajanta Publications, Delhi, 1st Indian edition, 1995.
- Blokland, Hans; Van Weesep, Nancy Smyth, eds. (2006). *Modernization and Its Political Consequences: Weber, Mannheim, and Schumpeter*.
- Brown, Richard D. (1972). "Modernization and the Modern Personality in Early America, 1600–1865: A Sketch of a Synthesis". *Journal of Interdisciplinary History*. 2: 201–28. JSTOR 202285.
- Brown, Richard D. (1976). *Modernization: The Transformation of American Life, 1600–1865*.

- Brugger, Bill; Hannan, Kate (1983). *Modernization and revolution*. Routledge. ISBN 978-0-7099-0695-7.
- Chin, Carol C. (2011). *Modernity and National Identity in the United States and East Asia, 1895–1919*. Kent State University Press; An intellectual history of American, Chinese, and Japanese views of modernity.
- Dixon, Simon M. (1999). *The modernisation of Russia, 1676–1825*. Cambridge University Press. ISBN 978-0-521-37961-8.
- Eisenstadt, S. N., ed. (1968). *The Protestant Ethic and Modernization: A Comparative View*.
- Gavrov, Sergey (2004). *Modernization of the Empire. Social and cultural aspects of modernization processes in Russia*. ISBN 978-5-354-00915-2.
- Gavrov, Sergey (2005). *The phenomenon of modernization*. *Filozofia Bliższa życiu: Wyższa Szkoła Finansów I Zarządzania* in Warsaw. ISBN 978-83-88953-76-7.
- Gavrov, Sergey; Klyukanov, Igor (2015). "Modernization, Sociological Theories of". In Wright, James D. (ed.). *International Encyclopedia of the Social & Behavioral Sciences*. Vol 15 (2nd ed.). Oxford: Elsevier. pp. 707–13. ISBN 9780080970868.
- Gilman, Nils (2004). *Mandarins of the Future: Modernization Theory in Cold War America*. Johns Hopkins University Press.
- Goorha, Prateek (2010). "Modernization Theory". *Oxford Research Encyclopedia of International Studies*. Oxford University Press. doi: 10.1093/acrefore/9780190846626.013.266.
- Hua, Shiping; Zhong, Yang, eds. (2006). *Political Civilization And Modernization in China: The Political Context of China's Transformation*.

- Immanuel Wallerstein, (2004), "World-systems Analysis." In World System History, ed. George Modelski, in Encyclopedia of Life Support Systems (EOLSS), Developed under the Auspices of the UNESCO, Eolss Publishers, Oxford, UK
- Inglehart, Ronald & Welzel, Christian (2005). *Modernization, Cultural Change and Democracy: The Human Development Sequence*. New York: Cambridge University Press. ISBN 9780521846950..
- Jaquette, Jane S. (1982). *Women and Modernization Theory*. *World Politics*. 34. pp. 267–73.
- Jensen, Richard (1980). "On Modernizing Frederick Jackson Turner: The Historiography of Regionalism". *Western History Quarterly*. 11: 307–22. JSTOR 967565.
- Jensen, Richard (2001). *Illinois: A History, modernizers, traditionalists and post-moderns make state history*
- Khan, Joel S. (2001). *Modernity and exclusion*. SAGE. ISBN 978-0-7619-6657-9.
- Knobl, Wolfgang (2003). "Theories That Won't Pass Away: The Never-ending Story". In
- Delanty, Gerard; Isin, Engin F. (eds.). *Handbook of Historical Sociology*. pp. 96–107.
- Leroy, Peter; van Tatenhove, Jan (2000). "Political modernization theory and environmental politics". *Environment and Global Modernity*. pp. 187–208. doi: 10.4135/9781446220139 .n9. ISBN 9780761967675.
- Linden, Ian (2003). *A New Map of the World*. London: Darton, Longman and Todd. ISBN 0-232-52442-4.
- Lipset, Seymour Martin, ed. (1996). *The Encyclopedia of Democracy*. (4 vol.)
- Gandhi, M. K. - *From Yerrvda Mandir: Ashram Observances*, translated by Valji G. Desai, Navajivan Publishing House, Ahmedabad, reprint, 1980.

- Macionis, John J.; Plummer, Ken (2008). *Sociology* (4th ed.). Pearson Education. ISBN 978-0-13-205158-3.
- Marshall, T. H.; Lipset, Seymour Martin, eds. (1965). *Class, Citizenship, and Social Development*.
- Mazlish, Bruce (1993). *Conceptualizing Global History*. Westview Press.
- Mergel, Thomas (2011). "Modernization". Mainz: Institute of European History. Retrieved July 11, 2012.
- Rodgers, Daniel T. (1977). "Tradition, Modernity, and the American Industrial Worker: Reflections and Critique". *Journal of Interdisciplinary History*. 7: 655–81. JSTOR 202886.
- Sam Ashman, "Combined and uneven development", pp. 60-65 in Ben Fine Alfredo & Saad
- Filho (eds.), *The Elgar Companion to Marxist Economics*. Cheltenham, UK: Edward Elgar, 2012.
- So, Alvin Y. (1990). *Social Change and Development: Modernization, Dependency and World-System Theories*.
- Thongkhohal Haokip, "India's Look East Policy: Its Evolution and Approach," *South Asian Survey*, Vol. 18, No. 2 (September 2011), pp. 239-257.
- Tipps, Dean C. (1973). "Modernization Theory and the Comparative Study of Societies: A Critical Perspective". *Comparative Studies in Society and History*. 15: 199–226. JSTOR 178351.

UNIT 4: CRITIQUE OF DEVELOPMENT

4.0. Introduction

4.1. Unit Objectives

4.2. Gandhi

4.3. Schumacher

4.4. Summary

4.5. Key Terms

4.6. Answer to ‘Check your Progress’

4.7. Questions and Exercises

4.8. Further reading

4.0. INTRODUCTION

This unit explains Gandhi’s view on the ideas of sustainable development for overall progress of the future generations. Gandhi also stressed to promote Small Scale Industries.

Schumacher stressed on broader view of development and discussed about problems of industrial production and materialism. He further discussed about Western and Intermediate Technologies, alternative paths for Industrial Nations and Less Developed Countries.

4.1. UNIT OBJECTIVES

After going through this unit, you will be able to understand:

- Gandhiji’s view on Large scale industries and cottage industries
- The idea of ‘Sustainable Development’ as perceived by Gandhi ji
- Schumacher broader views on development perspective

- The ill aspects of Industrial production, materialism and technology as were propagated by Schumacher.

4.2. GANDHI

The Gandhian Critique That the problem of environmental degradation remains inspite of the various attempts for solving it is perhaps an indication that we have to look for a better alternative. The idea of sustainable development is a conceptual one and therefore it has not become clear how it can be realized in practice. The idea underlying sustainable development was conceived by Gandhi and he showed how it can be realized in practice, already at the beginning of this century, when he wrote 'Hind Swarajl. But considering the problems of industrialization today, people do not seem to have taken it seriously. But the point of the present thesis is that Gandhi's concept of development and his alternative in terms of small scale industries are still relevant. The study of industrialization and its impact on environment is not some thing totally new, in fact several studies have been made, and as the references we have made show. The special contribution of the thesis is not necessarily its analysis of the problems of industrialization but its Gandhian critique of industrialization and its confirmation with the data collected by the researcher especially in the context of the survey of the five large scale industries in Kerala. As a background to Gandhi's concept of civilization it might be recalled that his entire philosophy is rooted in the traditions of Indian culture. In particular, some of the great personalities and sacred scriptures seem to have exerted their influence on him significantly during his formative years. This influence has given a spiritual dimension to his idea of development. At the same time he was exposed to the western culture where he found that people were enslaved by temptation of money and of the luxuries that money could buy.

Gandhi's speciality is his moral approach to civilization and development. For him, a development that discounts duty oriented moral values is no development. In fact in 1908 he

predicted the down fall of western civilization mainly because it was exalting the status of machine and lowering the status of human beings. According to him, no civrilization is worth while unless it provides the criteria and opportunities for the fullest development of humans. Gandhi therefore ardently advocated simplicity in our style of life and a change in the standard of values. He did this because industrialization tended to emphasise the values of money and material wealth to the exclusion of moral and human values. In fact he did not draw a sharp distinction between economics and ethics. This is clearly reflected in his ideal economy of decentralized cottage industries and self-sufficient village communities. Gandhi rejects the highly sophisticated technology and mode of its production because they lead to conflict among nations and ultimately to war. The present style of industrialization is totally unacceptable to him because it is based on greed. It is this greed that has lead to the depletion of non-renewable natural resources and has created environmental pollution. What is good for the west may not be good for India. Gandhi has taken this position because conditions in India are different. There is a false belief on which the modern civilization is based. Namely, the universal infinite prosperity is possible in this finite world and its attainment is possible on the basis of 'enrich yourself'. Gandhi did not entertain this belief because it implies no limiting principles. Gandhi's concept of development: is a combination of economic and real progress. He therefore denounced the uncontrolled use of machines, centralization of economic power and mass prodcuction. Gandhi is being recognized today as an environmentalist though history describes him under different titles. Gandhi was indeed prophetic in his understanding of industrialization and of its impact on environment. His ultimate objective was that all people might live in harmony with nature and with one another. His idea of civilization, simple living, non-possession, equal distribution, decentralization, etc. is all geared to this single goal. This single goal can be achieved, according to Gandhi, if and only if we go in for small scale industries. Therefore the real

alternative to industrialization is the kind of small scale industries that Gandhi advocated. This Gandhian solution becomes all the more relevant today when we consider the problem of large scale pollution and natural resource depletion which are characteristic of large scale industries. Though Gandhi's solution might sound unrealistic and utopian no other meaningful alternative has been formulated so far. In the light of the above survey and the analytical study and evaluation it seems that Gandhi had an intuition into the realities of nature and of the spirit. That is why Gandhi related economics with ecology and morality. This does not mean that Gandhi did not praise science and technology. Gandhi had prized every invention of science much more than we do. But he wanted to make sure that science and technology must serve man and they should not make man a slave to them. He often made the distinction between 'invention' and 'invention' and condemned the invention which made man a slave to them and which are detrimental for the future generation. The invention should be for constructive purposes and not for destruction. He further insisted that the scientific inventions and discoveries should not be the instruments of greed to amass wealth but, they must help to alleviate the miseries of the downtrodden and the marginalized. In brief, the scientific inventions must ease the burden of labourer and help him in his individual production. They should not make him lazy and should not substitute him with machine. This might give us the wrong impression that Gandhi was against machinery. As a matter of fact, Gandhi was not against the use of machinery. According to him the very human body is a piece of machinery. He was not against its use. Instead he wanted to develop its talents to the maximum. The spinning wheel, which he ad-scated is also a machine. If the machinery has to serve well, it has to help and ease the efforts of man. If a choice is to be made between the 'living machine' and the 'dead machine' the former is always preferred to the latter. The dead machinery should not be pitted against the millions of living machines scattered through out the numerous villages of India.

Gandhi's View on Large Scale Industries Gandhi is often charged as an enemy to large scale industries and industrial progress. This is a baseless charge against him. He had no objection to the use of large scale machinery for works of public utility if such public works could not be undertaken by human labour. Under such conditions it is necessary that the key industries have to be in the public sector. If at all big industries function in the private-sector, those private industrialists must act as trustees of their industries for the welfare of the workers and the people. As for the use of large scale technology, Gandhi wanted the people to go thus far and no further. The indiscriminate use of large scale technology has many defects such as:

- i. The large scale technology provides an opportunity to the minority to control the majority. Ordinary people can not have access to this high-tech. Those who control these sophisticated means of production can control the masses that are left with no means of production.
- ii. Indiscriminate introduction of large scale technology in the economic system means extinction of cottage and small scale industries and consequent unemployment of millions.
- iii. Defenders of ' large scale technology says that the wearisome physical labour can be avoided and ample leisure time could be provided for intellectual pursuit. Certainly leisure is good and necessary to an extent. However some amount of physical labour is necessary for every one. Cottage industries and agriculture can provide this.
- iv. It is argued that if means of production based on large scale technology are socialised, the evil effects of modern industrialism can be eliminated. But Gandhi would say that these evils are inherent to industrialism so much so that no amount of socialization can eradicate such evils.

- v. Large scale technology accelerates the process of centralization which can not be promoted for a decentralized development as put forward by Gandhi.
- vi. The big industries cause inexplicable pollution of air, water, and sound, which in turn causes many diseases.
- vii. The roads of the industrialized cities are crowded with rushing vehicles and restless people who are compelled to travel uncomfortably and miserably. These people find themselves lonely and isolated among the millions. Isolation and crowded life does not lead to a happy social life.
- viii. Large scale industrialization leads to exploitation of one type or other, which would lead to conflicts between groups and nations. These are the foundations and bases which compelled Gandhi to speak against the reckless large scale industrialization. As a counter to these exploitative orders Gandhi put forward his alternative system of small and cottage industries.

Gandhi on Cottage Industries

Gandhi had *his clear vision and reasons to promote cottage industries in the Indian context* which could be succinctly put as follows:

- i. Cottage industries based on small scale technology will pave way for decentralized production, equitable distribution and easy consumption of goods. It solves the problems of transportation and consequent price-rise. This will facilitate economic decentralization which would in turn lead to political decentralization.
- ii. When the means of production are operated and controlled by the rural masses, we will not require a centralized defence -285- system or distribution system for cottage industries. A country, whose economic system is organized on the basis of small scale technology has less risk of foreign colonisation and invasion than a country with large scale industries supported by military power.

- iii. The means of production based on small scale technology minimise the craze for amassing wealth through dead tools.
- iv. The people can not enjoy liberty if they do not own means of production for necessities of life. The small scale technology alone can provide the ownership of means of production to the people.
- v. Home industries which are the result of small scale technology provide self-supporting and self-reliant economy. The internal economy of such a country will be the strong bulwark against the foreign aggression.
- vi. A vast country like India with millions of unemployed can not go in for large scale technology which will add unemployment further.
- vii. A charge is levelled against small scale industries saying that these can not bring about a rapid and unlimited progress as the West and the developed countries aim at. May be true, but Oandhi always believed that a finite and limited world/people should not aspire for an unlimited and infinite progress or development. This difference between the West and Gandhi is because of the basic difference between the two visions or philosophies.

The option is left to us whether we have to offer ourself as a scape-goat of the Western model of development or give a chance to a model of development wholly based on our culture, as preached by Mahatma Gandhi is the question. Today is late and tomorrow will be too late. If we are still hessitating to make a start it will prove catastrophic. It is therefore high time that we give the Gandhian solution a try. To conclude the thesis in Mahatma Gandhi's own words,

"It is perfectly possible for an individual to adopt this way of life without having to wait for others to do so. And if an individual can observe a certain rule of conduct, it follows that a group of individuals can do likewise. It is necessary for me to emphasize the fact that no one

need wait for anyone else in order to adopt a right course. Men generally hesitate to make a beginning if they feel that the objective can not be had in its entirety. Such an attitude of mind is in reality a bar to progress.~ (Collected Works of Mahatma Gandhi, Vo1.72, p.399)

Gandhi aims at what we may call sustainable development, balanced development of body, mind and soul. Gandhi had realized that human development is not just material or economic; it has to be moral, it should be able to instill the values of equality, liberty and dignity in the people; it must provide the persons with courage to protest against injustice. His emphasis on decentralization, community based economics; self-sufficiency, handicrafts, rural development, and use of low capital intensive appropriate technology indicate his vision for a self-sufficient economy. According to Gandhi nature provides just enough, and not more, for our daily needs. He opposes exploitation, ruthless drive for economic abundance and personal aggrandizement, massive technological progress, severe competitions, unbridled consumerism and concentration of wealth and power. In his opinion, greed is detrimental to social good and political emancipation without economic equality is hollow. *For him economics stands for social justice. (Harijan, October 9, 1937) He emphasizes decentralized self- dependent units bound together by the bonds of mutual cooperation and interdependence.*

For him the development of the individual and the development of the society are intertwined. His ultimate goal was *sarvodaya* (the development of all in all facets of life). The concept of *Sarvodaya* presupposes the principle of justice. *Sarvodaya* generates movements for changes, outward as well as inward and strives for egalitarian social order based on truth, nonviolence and purity of means. Gandhi never compromised at the cost of individual freedom, equality and social justice; his principle of nonviolence was not a mere philosophical principle but it was the rule of life. He had visualized an India where "all interests not in conflict with the interests of the dumb millions will be scrupulously respected,

whether indigenous or foreign" (*Young India*, September 10, 1931). Gandhi's basic aim was to have an all-round development of the society that included human development along with socio-economic and political development. Gandhian programme is holistic and multidimensional. The objective of his constructive work is the creation of non-violent society. Gandhi envisages a healthy society based on harmony and dialogue, where the ideas of equality and justice are translated in the lives of teeming millions. Commenting on man's social nature, Gandhi writes "If it is his privilege to be independent it is equally his duty to be independent. It will be possible to reconstruct our villages so that villages collectively, not villagers individually, will become self-contained" (*Young India*, April 25, 1929).

Trusteeship for Gandhi is a dynamic concept that can bring change in the established institutions. It is a means of transforming the present capitalist order of society into an egalitarian one. An individual is not free to hold or use his wealth for selfish satisfaction (*Harijan*, October 25, 1952). The common property is to be used for the good of one and all, all including the rich have to work for the society acc to his/her capacity and they will receive as per needs. Property owners are caretakers of the property for the common good. Trusteeship aims at some realizable outcomes like capital-labour cooperation, formation of social capital, reduction in concentration of economic power in a few hands, and voluntary cutting down the wants. *Gandhi did not approve the use of machines that replaces men or makes them subservient to machines. He advocates judicious use of machines; and simple, indigenous technology of non-exploitative nature in tune with nonviolence. He emphasizes the importance of whatever can be produced locally,* (From Yeravada Mandir, 1980:.44) and thinks about a decentralized economy. He propagated the use of the spinning wheel and **Khadi** for self reliance as well as moral and economic regeneration. Gandhi visualized exploitation free society, based on cooperation and ethics. His vision included productive employment for India's millions, schemes for rebuilding villages and

creating communities of care and concern, promotion of *khadi* and local handicrafts, production of need-based basic goods, empowering people by imparting basic education and required skills to enable them to create decentralized structures of power, and ensuring equality of opportunity for all. He believed that human wants have to be limited, and no one should suffer from deprivation and want of basic necessities. And for that the required means of production should be socially controlled. His emphasis is on collectivity and not on individual needs and greed. Wealth has to be created collectively and enjoyed collectively. For Gandhi rebuilding villages, in accordance with the principles of self-sufficiency and decentralization, was very important. To quote him, "I would say that if the village perishes, India will perish *too*" (*Harijan*, August 29, 1936). The nearest approach to civilization based on nonviolence was the erstwhile village republic of India (*Harijan*, January 13, 1940). According to him, cities have so far exploited the villages, and that has resulted in the gap between villages and cities in education, culture, facilities, employment. Now a new partnership between cities and villages is needed. Gandhi insists on regulation of wants and use of the goods and material not imported, but made in one's own country. His concept of *Swadeshi*, a dynamic concept of self-reliance, is closely connected with *Swaraj*, political freedom. Another of his important concept is that of 'bread labour', that propagates that some amount of physical labour has to be done by every person every day. Physical labour is a great equalizing force, and the need for socially useful manual labour is obvious. Influenced by John Ruskin, Gandhi maintained that all works are of equal dignity. He also said that in the conflict situation between the capital and the labour, cooperation and amicable settlements are the way out and not violence.

‘Check your progress’

1. What was Gandhi Ji’s Concept of Swaraj?

4.3. SCHUMACHER

Ernst Friedrich Schumacher (19 August 1911 – 4 September 1977) was a German statistician and economist who is best known for his proposals for human-scale, decentralised and appropriate technologies. He served as Chief Economic Advisor to the British National Coal Board for two decades, and founded the Intermediate Technology Development Group in 1966.

In 1995, his 1973 book *Small Is Beautiful: A Study of Economics As If People Mattered* was ranked by *The Times Literary Supplement* as one of the 100 most influential books published since World War II. In 1977 he published *A Guide for the Perplexed* as a *critique of materialistic scientism and as an exploration of the nature and organisation of knowledge*.

The 1973 publication of *Small is Beautiful: a study of economics as if people mattered*, a collection of essays, finished in the house of his friend Leopold Kohr, brought his ideas to a wider audience. One of his main arguments in *Small is Beautiful* is that we cannot consider the problem of technological production solved if it requires that we recklessly erode our finite natural capital and deprive future generations of its benefits. Schumacher's work coincided with the growth of ecological concerns and with the birth of environmentalism, and he became a hero to many in the environmental movement and community movement.

EF Schumacher's *Small is Beautiful* is widely viewed as a humanistic and radical tract. Nothing could be further from the truth. Viewed in its proper context it is both profoundly anti-human and deeply conservative. The central idea in Schumacher's text is that there is a natural limit to economic growth. As he put it: "Economic growth, which viewed from the point of view of economics, physics, chemistry and technology, has no discernible limit, must necessarily run into decisive bottlenecks when viewed from the point of view of the environmental sciences." Schumacher objected to organising the economy on a large

scale precisely because he believed that more prosperity would damage the environment. He correctly understood that small-scale communities cannot produce nearly as much as those operating on a regional or global scale. A modern car, for example, typically relies on components, raw materials and know-how from around the globe. From the perspective of Schumacher's "Buddhist economics", it is better for people to be poorer in economic terms if they can be spiritually richer.

This argument flies against a huge weight of evidence showing that material advance is closely bound up with progress more generally. The past two centuries of modern economic growth have seen huge advances in human welfare along with technological innovation and social advance. Perhaps the most striking single indicator of this improvement is the increase in human life expectancy from about 30 in 1800 to nearly 70 today. Note that this is a global average, so it includes the billions of people who live in poor countries as well as the minority who live in rich ones.

Almost every other measure of wellbeing has increased hugely over the long term, including infant mortality, food consumption and level of education. Most of humanity, even in the developing world, has access to services our ancestors could only have dreamt of, including electricity, clean water, sanitation and mobile phones. None of the arguments used by Schumacher's followers to counter this narrative of progress are convincing. Greens often side-step the broader case for the growth by deriding the accumulation of consumer goods and services. Environmentalist arguments have more than a tinge of elitism, with comfortably middle-class greens scoffing at the masses for wanting flat-screen televisions and foreign holidays. It should also be remembered that some consumer goods, such as washing machines, have directly led to huge improvements in human welfare. Anti-consumerism reveals more about the narrowness of the green vision than it does about economic growth. Viewing rising prosperity simply in terms of consumer goods is incredibly blinkered. Growth

provides the resources for much else including airports, art galleries, hospitals, museums, power stations, railways, roads, schools and universities. Popular prosperity provides the bedrock for much that we value in contemporary society. Another common green rebuttal to the benefits of growth is to point to the existence of inequality. Of course it is true that there are huge disparities both within countries as well as between the developed and developing world. The key question, however, is how best to tackle the problem. From Schumacher's perspective it is desirable to reduce the living standards of everyone except the poorest of the poor. His is a narrative of shared sacrifice and lower living standards for almost all. The alternative vision, the traditional position of the left, was to argue for plenty for everyone. Finally, there is the argument about the environment itself. The most popular variant of the idea of a natural limit nowadays is that growth inevitably means runaway climate change. However, there is plenty of evidence to the contrary. There are many forms of energy, including nuclear, that do not emit greenhouse gases. There are also ways to adapt to global warming such as building higher sea walls. Since such measures are expensive it will take more resources to pay for them; which means more economic growth rather than less. If anything the green drive to curb prosperity is likely to undermine our capacity to tackle climate change. Schumacher's fundamentally conservative argument chimes well with those who want to reconcile us to austerity. It suits those in power for the mass of the population to accept the need to make do with less. Under such circumstances it is no surprise that David Cameron, like his international peers, is keen for us to focus on individual contentment rather than material prosperity.

Schumacher broader views on development perspective:

In the mid-1970s, the phrase “small is beautiful” became a counterculture slogan against the industrial threat to the environment and the scarcity of resources. Arguing against excessive materialism and meaningless growth, the late Dr. Ernest Friedrich Schumacher—the author

of *Small Is Beautiful: Economics as if People Mattered* promoted the use of small-scale technology to benefit both humankind and the environment. As an economist trained in a market-oriented discipline, his thinking evolved from believing that large-scale technology could be salvation for industrial civilization to believing that large-scale technology is the root of degrading human beings and the environment.

The case against the use of large-scale technology was made by Schumacher between the early 1950s and the late 1970s. It is still legitimate today. Walt Rostow's (1960) high-mass consumption age has led to many serious problems in industrial countries. Al Gore (1992) expressed that global warming, stratospheric ozone depletion, loss of living species, and deforestation has been disrupting the earth's ecological system. Burning gasoline fills cities with fumes and creates air pollution. Chemical and nuclear energy and the high rate of depletion of fossil fuels for industries leave future generations in disarray. For mechanization of agriculture to work, 40 calories have to be spent to produce a calorie worth of food. Since 1950, the number of insects resistant to insecticides has been growing. The individual finds himself or herself further and further removed from many of the major decisions taken by the society in which he or she lives. Less developed countries face additional problems of drain on foreign reserves, technological dependence, high unemployment rate, and severe poverty. With a diagnosis of the crisis threatening Western and less developed countries, Schumacher (1973) challenged the modern belief that "bigger is better" and replaced it with "small is beautiful" (p. 150). He forcefully argued that bigness is impersonal, is insensitive, and has lust to power; smallness, on the other hand, is free, efficient, creative, enjoyable, and enduring. The most important area in which he sought to implement smallness was technology, mostly because the modern world has been shaped by it. Schumacher suggested that the less developed countries should not imitate Western technological development based on the trickle-down approach; instead, the less developed countries should embrace an

alternative path of development that is less expensive and thus within reach of ordinary people but more productive than indigenous technology.

What make Schumacher's work remarkable is the philosophical themes woven around the low-cost, small-scale technology as an alternative to high-cost, large-scale technology. This article is divided into three sections. The first section outlines the essential ideas of Schumacher on orthodox economics, industrial production, and materialism, social aspects of technology, Buddhist economics, Western technology in the less developed countries, and intermediate technology. This is followed by a critical examination of Schumacher's main thesis, whether small is indeed beautiful. The final section concludes with a brief life history of Schumacher.

Schumacher's Philosophical Outlook

The Myth of Objectivity in Orthodox Economics: Since the publication of Adam Smith's *Wealth of Nations* in 1776, mainstream economists have pushed for economics to be a value-free objective science similar to the physical sciences. According to them, economics makes positive statements about facts, which are verifiable in principle. Based on definitions and assumptions, hypotheses are formulated as statements about the world in which we live. These statements are then subject to rigorous analysis on the basis of logic, mathematical principles, and statistical techniques. If proven, they predict how people, things, and systems behave under given conditions. These scientific procedures are seen as neutral and thus eliminate the normative aspects of economics. Accordingly, in 1969, the Nobel Prize for "economic science" was established. As Professor Erik Lundberg observed, "Economic science has developed increasingly in the direction of a mathematical specification and statistical quantification of economic contexts" and has left behind "the vague, more literary type of economics" (as cited in Roszak, 1973, p. 1). Schumacher argued against the myth of objectivity in orthodox economics. According to him, unlike the physical sciences,

economics is concerned with human choices and actions, which by their very nature introduce value elements. Numbers that are relied on by economists to be objective are often misleading in reference to human beings. Numbers by themselves have no meaning unless significance is established. For example, “the substance of man cannot be measured by Gross National Product. Perhaps it cannot be measured at all, except for certain symptoms of loss statistics never prove anything” (Schumacher, 1973, p. 19). His “theory has always been that figures don’t mean anything if you can’t make them sing” (Schumacher, 1979, p. 125). Once meaning is attached to numbers, they are no longer neutral. Another example of facts being tainted with values in orthodox economics is in the area of money. Schumacher (1967/1982) found this field relies heavily on the single coefficient of money because it is concerned mostly with the ability to earn an adequate short-term profit. As a result, economic activities that are likely to lower short-term monetary profits tend to be placed outside of orthodox economics. For example, the practice of environmental conservation has no acknowledged place in a society under the dictatorship of economics. When it is occasionally introduced into the discussion, it tends to be treated not merely as a strange but as an undesirable alien, probably dishonest and almost certainly immoral.

The Problem of Industrial Production:

The economy of Western countries is industrialized, based on a complex infrastructure and high productivity. Industrial enterprises manufacture a large volume of products at a low cost. Furthermore, they provide decent employment so people can buy products; real personal income has risen to a point that transcends basic necessities such as food, clothing, and shelter. The output per worker is high because the production depends on the potentialities created by modern science and technology. Agriculture is mechanized and approximately 20% of the population depends on it. To maintain production, necessary infrastructures such as roads, transportation, and electricity have been developed. Such industrial economies have

been hailed as panacea to all sorts of economic and social problems. It is believed that Western societies' wellbeing is contingent on the continuous industrial expansion. Unless there is an increase in industrial production, they will suffer stagnant or lower living standards.

Western countries have based their industrial production on various sources of energy such as oil, natural gas, nuclear, and coal. Schumacher (1973), therefore, examined facts and figures about the growth of energy production, consumption, demand, and supply. He found industrial production to be predominantly based on nonrenewable sources of energy, which are finite and thus cannot be replaced after they were consumed. In other words, the world will eventually run out of energy resources with the current consumption rate. In the era of industrial expansion, Schumacher argued against industrial production that assumed limitless fossil fuels. He stated that one of the most fateful errors of our age is the belief that the problem of production has been solved. This illusion is mainly due to our inability to recognize that the modern industrial system, with all its intellectual sophistication, consumes the very basis on which it has been erected. It lives on irreplaceable capital which it treats as income. *He warned that industrial countries contain the seeds of their own destruction.*

According to Schumacher, profligate use of natural resources has also brought on the crisis of the environment. For instance, replacing fossil fuels with the use of nuclear energy means solving "the fuel problem by creating an environmental and ecological problem of such a monstrous magnitude" (Schumacher, 1973, p. 18). Similarly, the "qualitative jump" in the production of synthetic compounds unknown to nature has pushed nature's "tolerance margins." Such dangerous ecological impact threatens to destroy the earth. He opposed those practices of the modern world that seek to mobilize more resources to fight pollution or discover new sources of fossil fuels—because they do not change the methods of industrial production.

Danger in Materialism:

Materialism holds that the world is by its very nature material; the world consists of particles of matter; each of them has its own existence. These particles interact with each other and in their totality form the world. Matter is objective reality existing outside and independent of the mind; anything mental or spiritual is a product of material processes. Materialism is based on the scientific investigations of natural phenomena and thus seeks explanations in terms of factors that can be verified. It views each human being as a social atom with certain inherent properties and attributes. In the industrial system of production, materialism has been reduced to the ideology of market. The market is seen both as the natural condition of mankind and irresistible; it gives the people what they want. The production and consumption of material goods and the acquisition of money are the main goals of the market. It is believed that the generation of wealth will result in satisfaction with nonmaterial goods such as justice, harmony, happiness, beauty, and health.

Against materialism, Schumacher believed in idealism, which views spiritual as prior to the material. For him, there was a higher, more real, and nonmaterial world beyond the material world. He believed that the problem of industrial production resulting in the environmental crisis stemmed from misplaced values. Unlike religious teachings, materialism shows no selfcontrol or respect with the natural world. Schumacher (1977) made a distinction between “convergent” and “divergent” problems (p. 121). Convergent problems relate to the nonliving aspect of the world; in contrast, divergent problems relate to the human issues. With convergent problems, scientific investigations tend to find solutions; the answers tend to converge. However, with divergent problems, scientific investigations lead to opposite solutions; the answers tend to diverge. Schumacher believed that materialism treats all problems as convergent and thus dehumanizes individuals. He therefore suggested a return to religious truth. In his words, “the modern experiment to live without religion has failed”

Schumacher thought of the materialist philosophy of overproduction and overconsumption as a root of many problems facing the modern world. For instance, the practice of mechanized agriculture and factory farming adds to the pollution of land and water. Similarly, increasing wealth of people depends on making continuous demands on limited world resources. Schumacher (1973) questioned measuring a man's "standard of living" by assuming that a "man who consumes more is 'better off' than a man who consumes less" (p. 54). He believed that material prosperity could not lead to world peace because "it is attainable only by cultivating such drives of human nature as greed and envy" (p. 30). According to him, "man must never lose his sense of the marvellousness of the world around and inside him" (Schumacher, 1974, p. 31). He therefore promoted "reduction of needs" to promote "peace and permanence" (Schumacher, 1973, p. 31).

Social Aspect of Technology:

Technology is generally considered socially neutral, possessing an internal objective logic of its own (e.g., Bell, 1980). It is believed that technology develops as a result of an internal dynamic and then molds society to fit its pattern. One of the implications of technology being socially neutral is that technological development is a practical necessity regardless of its consequences. Even when there are some adverse impacts of technology, it remains the necessary price to be paid for the well-being of a society. There is no need to question the nature and structure of technology and the ways in which it has developed historically. Consequently, technology has been hailed as a motor of all progress, the key to solving our social problems, and a source of permanent prosperity. Many believe that scientific and technical progress will cure diseases, improve the quality of life, explore space, and develop faster modes of communication. They imagine a technological future that is filled with neatness and order, endless gadgets to do all the work, superhighways, and virtual reality.

Schumacher also believed that the modern world has been shaped by technology. However, instead of admiring technological determinism,¹ he showed the destructive impacts of modern technology such as degradation of environment, threat to the existence of human race, depletion of natural resources, and dislocation of labor. He believed that the role of technology in society needs to be debated. Given that technological development is a social process and that the prevailing technology in an industrial society coincides with authoritarian and hierarchical relationships,² it is possible to conceive a technology that is based on nonauthoritarian and nonhierarchical relationships. In other words, there are technological alternatives, and there is no reason to make inappropriate choices in selecting technologies. In Schumacher's (1973) words,

if that which has been shaped by technology, and continues to be so shaped, looks sick, it might be wise to have a look at technology itself. If technology is felt to be becoming more and more inhuman, we might do well to consider whether it is possible to have something better—a technology with a human face. (p. 138)

He therefore believed in a technological fix, using technology to solve economic and social problems.

Inappropriateness of Western Technology

The core of the development policies of the less developed countries is that by introducing Western technology, they would be revitalized and thus would start growing on their own. A general assumption is that the technological transformation of the less developed countries is synonymous with the whole process of socioeconomic development. Less developed countries have taken this path of development mainly because the characteristic feature of the unprecedented epoch of modern economic growth in the West is the use of modern scientific and technological knowledge, which has increased productivity output per unit of all inputs. In contrast, the less developed countries have emerged underdeveloped in relation to the

West. Furthermore, the less developed countries have been characterized by the West as “backward,” “traditional,” and “lacking scientific and technical traditions” and thus are looked down upon. A theory of “modernization,” the heart of which is the “transfer of technology” from the West, has extensively been parceled to the less developed countries. Since independence from the colonial powers, the less developed countries have adopted the developmental model of the West.

Concerned about the increasing discrepancy between the rich and poor nations, Schumacher (1973) sought to understand the problems of the less developed countries. He questioned Western technology as a possible solution to the less developed countries’ development problems. According to him, in the process of modernization the less developed countries have acquired different production functions in the advanced and traditional sectors. Over all, gains from the growth of the modern sector have been increasing rather than reducing problems of development by deepening dualism between the limited industrial sector and the vast rural hinterland. In his words,

the dual economy, unless consciously counteracted, produces ...a “process of mutual poisoning,” whereby successful industrial development in the cities destroys the economic structure of the hinterland, and the hinterland takes its revenge by mass migration into the cities, poisoning them and making them utterly unmanageable. (p. 158)

According to Schumacher, the West has established large industries with advanced technology in the cities and staffed them with managers. These industries are a product of Western societies, which are rich in capital but short in labor; the less developed countries, on the other hand, are rich in labor but short in capital. These industries make a limited contribution to employment in the less developed countries. Furthermore, Western technology functions differently in the less developed countries because of its different social context. For instance, “the system of mass production, based on sophisticated, highly capital-

intensive, high energyinput dependent, and human labour-saving technology, presupposes that you are already rich” (Schumacher, 1973, p. 145). As a result, the less developed countries have failed to incorporate Western technology or imitate Western economies.

Intermediate Technology:

Schumacher’s greatest contribution has been on the role of intermediate technology for the development of the less developed countries. Schumacher argued that the Western “trickle-down” theory was not leading to the full employment of poor people in the less developed countries, most of who lived in rural areas. The primary consideration of growth-based development was to maximize output per man in the urban area and not work opportunities for the unemployed and underemployed in the rural area. Furthermore, industrial mode of production was unsustainable because it was based on the depletion of natural resources and the deterioration of the environment. He did not view socialist economics as a possible solution to the less developed countries because the problem was the means of production, not ownership by the capitalist class. He believed that socialist economies were founded on the same unsustainable basis as Western economies.

Schumacher was deeply impressed with the philosophy of Mahatma Gandhi who led the opposition against the British rule of India. Like Gandhi, he felt that Western technology would displace massive labor forces from rural to urban areas without providing full employment. Schumacher also felt that India lacked the infrastructure necessary for such technology. Unlike Gandhi, however, he believed that indigenous technology would be insufficient to improve the economic conditions of rural India. Schumacher (1979, p. 95) set his tasks to create cheap workplaces, locate them in the rural area, employ simple production methods, and use local materials. Instead of “capitalintensive” technology, he sought to employ “laborintensive” technology and lend to “small-scale” establishments. He believed

such production methods would be biologically sound, build up soil fertility, and produce beauty and permanence.

This small-scale, inexpensive, labor-intensive, compatible with human needs, and nonviolent to nature technology was named by Schumacher intermediate technology.³ He founded the Intermediate Technology Development Group (ITDG) in 1966 to engage in the systematic study on how to help people help themselves. To this day, ITDG makes the less developed countries aware of the alternatives to the high technologies promoted by the West by providing technical assistance.

Schumacher (1973) defined intermediate technology as a “£100-technology” (p. 169). Using equipment cost per workplace as a base, Schumacher called the indigenous technology of the less developed countries a “£1-technology” and the modern technology of the Western countries a “£1000-technology.” He saw the less developed countries stagnating with £1-technology. However, he believed the £1,000-technology from the West killed off the £1-technology and left the poor people of the less developed countries worse off than before. This was mostly because the £1,000-technology was expensive, complex, and dependent on highenergy input and destroyed indigenous social and economic structures. Schumacher proposed an alternative that was more productive than the traditional technology and still less expensive than Western technology. Schumacher considered the intermediate technology “vastly superior to the primitive technology of bygone ages but at the same time much simpler, cheaper, and freer than the super-technology of the rich” (p. 145). He believed that intermediate technology would promote gradual development of the less developed countries while meeting the needs of ordinary people.

Is Small Beautiful?

Schumacher’s most important claim, that smallscale technology could be the foundation of new society, needs a critical examination. He understood smallscale technology

in dichotomous fashion. He saw social, economic, and political problems in a society as being associated with modern large-scale technology; the implementation of alternative small-scale technology was seen as a panacea for all such problems. Some of the characteristics that distinguished alternative from modern technology were small scale versus large scale, inexpensive versus expensive, ecologically sound versus ecologically unsound, small energy input versus large energy input, low pollution rate versus high pollution rate, nonviolent to nature versus violent to nature, decentralist versus centralist, simple versus complex, labor intensive versus capital intensive, compatible with human needs versus incompatible with human needs, reversible use of materials versus nonreversible use of materials, and so forth (Dickson, 1975, pp. 103-104). In the 1970s and 1980s, such a mystifying role of alternative small-scale technology had turned into a theology. People had become devotees of small-scale technology, believing that somehow “the evil” and social ills in their society would be destroyed with its implementation.

Broadly, there are two dominant meanings for alternative small-scale technology, one for industrial countries and the other for the less developed countries. In industrial countries, alternative small-scale technology is understood as one that does not degrade the environment, whereas in the less developed countries, it is understood as one that provides employment to ordinary people.

Alternative Path for Industrial Nations:

The industrial system of the United States alone consumes approximately 30% of the world’s primary resources to support its less than 6% of the world’s population. With this rate of consumption, it is possible that the world could run out of nonrenewable resources in the 21st century, continuing to increase the level of pollution. The Club of Rome (1972) has argued that if the current growth of population and industrial consumption of natural resources continues, the limits to growth on this planet will occur within the next 100 years

because of limited stocks of physical resources. Similarly, the world's consumption of energy for industrial purposes has been doubling approximately once every decade since World War II. It is undeniable, as Schumacher suggested, that the problems of industrial countries would be less severe if, for instance, energy production were based on using renewable fuels (sun, wind, and vegetation), which would not degrade the environment. However, the question of importance is why alternative energy technologies, despite numerous advantages, do not get developed on a wider scale in industrial countries. Perhaps the answer lies in the lack of a clear vision of how alternative energy technologies could be realized. Schumacher has correctly pointed out that such technologies could develop within the framework of a new value system. But he was silent on major social and political factors that are obstacles to or could promote the development of alternative energy technologies. It is not enough to believe that through alternative energy technologies, one can build society based on democratic and egalitarian principles; that is, alternative technologies can shape vested interests. In fact, vested interests can shape alternative technologies to suit their own goals.

A national government, which could develop alternative energy technologies, is not directly involved in the production process in the free enterprise economies of industrial countries. It gives concessions to private enterprises that run, develop, and supply technology on the basis of cost and profit. The government more or less establishes some regulations on energy, but private enterprises determine the nature of it. Alternative energy technologies, therefore, can only develop within the existing framework if it can achieve the goals of profit maximization. Private enterprises, however, have been making profits from technologies that have been the source of many problems. Even with the oil crisis of 1973, "Big Seven" oil companies made higher profits than the pre-1973 era. For instance, Gulf's profits in the first quarter of 1979 jumped 61%, Texaco's 81%, and Standard Oil of Ohio's 303% (Barnet,

1980, p. 26). These companies, therefore, have little incentive to switch from oil to solar or wind technology.

Most important, big oil companies have come to control alternative energy technologies such as coal, solar, and wind to avoid competition. Before the oil crisis of 1973, oil companies had acquired control over vast quantities of nonoil energy sources. They held six out of seven outstanding patents of photovoltaic cell areas, which convert sunlight directly into electricity. Shell owned Solar Energy Systems, Exxon controlled Solar Power, and Arco had Solar Tech (Barnet, 1980, p. 103). By controlling other sources of energy supplies, oil companies are able to maximize their profits because nothing else competes with them.

Alternative energy technologies become worth developing by oil companies if they are less expensive than oil technology. Whether the price is right for alternative energy technologies depends on the price of oil. Also, to maximize profit, oil companies explore the development of various energy resources if they are potentially profitable. Initially, the few alternative energy technologies that were developed due to concern shown by ecologists, environmentalists, and the public, as well as increasing costs due to environmental legislation of the 1970s, remained more expensive than oil technology. This limited the market for solar and wind technologies (Barnet, 1980; Tanzer, 1974).

Schumacher was critical of large-scale energy technologies but shied away from discussing how they were related to the distribution of power and the exercise of social control. The nature of technology development in any society can best be understood by relating technology to the patterns of general economic and social activities that maintain the interest of the dominant social groups in that society.

In the past decade, however, solar and wind cells have emerged as cornerstones of the new energy economy, even though oil and gas remain the main sources of energy consumption. Between 1990 and 1998, world wind-generating capacity expanded 26% as the cost dropped

\$2,600 per kilowatt in 1981 to \$800 in 1998 (Brown, Renner, & Flavin, 2000, pp. 48-49, 52-55). Wind power has become one of the world's cheapest sources of electricity. In 1998, sales of solar cells that can convert sunlight into electricity jumped 21% (Brown et al., 2000, p. 17). Although the annual rate of growth has been increasing for wind and solar, it has been decreasing for nonrenewable sources of energy. For instance, the growth in oil use in 1998 slowed to less than 1%. For the same period, the burning of natural gas increased by only 1.6%, and the nuclear power generation experienced the near zero growth rate (Brown et al., 2000, p. 17). Private companies such as British Petroleum and Royal Dutch Shell have been investing heavily in alternative energy sources. In 1999, Mike Bowlin, chairman and CEO of ARCO, a leading U.S. oil company, acknowledged that the new challenge was to convert the carbon-based world energy economy into one that was based on hydrogen and other forms of energy (as cited in Brown et al., 2000, p. 18).

The emergence of a new energy economy supports Schumacher's thesis that alternative technologies can be developed within the Western system of industrial production. However, alternative energy technologies have become worth developing by the fossil fuel industry mostly because of the high price of oil and the global economic slowdown. Because private enterprises control both nonrenewable and alternative sources of energy, they can have both technological developments as seasonal, depending on their longterm economic interest. In either case, alternative energy technologies are no longer small scale and decentralized; instead, such technologies are large scale and centralized, controlled by big private enterprises. What Schumacher proposed to be small establishments have now become large establishments.

Alternative Path for Less Developed Countries:

The problems of the less developed countries would be less severe, as Schumacher suggested, if laborintensive technologies were employed that could absorb the unemployed

and underemployed members of the labor force. The strategy of heavy industrialization has been rather ineffective in employing the massive labor force of the less developed countries. This is not to deny that there are some countries such as South Korea and Taiwan that have succeeded in increasing industrial employment and are no longer considered less developed. But less developed countries where heavy industrialization has brought a significant change in the employment structure are few compared to those where it has not.

Schumacher employed the notion of intermediate technology and advocated small-scale methods of production for the less developed countries. He believed that the West had mistakenly believed that what is good for them is also good for the less developed countries. So, he suggested that the West should transfer small-scale instead of large-scale technology. The transfer of technology from the West is carried out via the multinational (or global) corporations. The transfer of technology from the multinational corporations to the less developed countries resembles leasing land under feudalism. A large part of the scientific and technological knowledge that is essential for less developed countries to resemble the industrialization of the West is not freely available to them. There are proprietary rights in technology in the form of patents, trademarks, and brand names; the basic designs, blue prints, and know-how remain in the private possession of multinational corporations. Furthermore, the supply of technology is linked with other services and equipment. Less developed countries have to buy a complete industrial process with preinvestment studies, design of plant, commissioning and construction, start-up, and training by engineering consultants and machinery manufacturers. The multinational corporations maintain a degree of control over the continuing use of the technology even after the plant is built up through partial or complete ownership. Many such contracts also involve restrictive practices such as exclusive grants, challenges to validity of patents, exclusive dealing, and restrictions on research. A consequence is that the less developed countries have been unable to acquire the

technology they desire at the right price under the right terms and conditions (see Barnett & Muller, 1974; Goulet, 1977). This is why they have demanded a complete transfer of modern science and technology from multinational corporations on better terms (United Nations, 1975). But the less developed countries attempting to unpack the technology have been resisted by multinational corporations, mostly because it threatens their control over technology, markets, and economic gains.

It is unclear why multinational corporations would behave differently in transferring small-scale technologies to the less developed countries than what they have done for large-scale technologies. In other words, transfer of alternative small-scale technology from the West to the less developed countries would continue to lead to technological dependence of the latter. Schumacher was critical of modern technology in the less developed countries but not of the role multinational corporations play in the so-called transfer of technology.

For Schumacher, intermediate technology was the one close to midway between capital-intensive technologies exported by the West and traditional technologies of the less developed countries on the logarithmic scale of cost. Irrespective of his intentions, it can be viewed that he not only promoted technological dependence of the less developed countries on the West but also gave a theoretical rationale for the secondhand and outmoded technologies dumped by multinational corporations in the less developed countries. It is not true, as Schumacher assumed, that the less developed countries are rejecting the Western model of modernization and development. Schumacher had overemphasized the opening of a cell for alternative technology in 1971 by the Ministry of Industry of the government of India. It is true that it was closely followed by the opening of a number of centers for research into alternative technology in some of the leading Indian technical institutes. But needless to say, the so-called alternative technology program did not get very far in India. Gandhian peasants in India are trying their best to acquire modern industrial agricultural equipment. Far from

rejecting Western technology, they are well integrated into a pattern of production based on chemical fertilizer, diesel- or electricpowered machinery, and high-yielding varieties of seeds. Most important, there are many changes that have taken place with the introduction of large-scale technology, such as communication, electricity, electronics, hospitals, media, and transport, with which ordinary people in less developed countries are quite happy. Furthermore, many social practices such as untouchability, widow burning, endogamy, witchcraft, quack medicine, and so forth are put to change in the era of large-scale technology. So, it is hard to say that all aspects of large-scale technology are bad and all aspects of small-scale technology are good in the less developed countries.

Concluding Remarks:

Schumacher has shown limitations of large-scale industrialization for both industrial and less developed countries. Both countries have accepted some principles of alternative technological development and devoted some resources to achieve such goals. Nonetheless, Schumacher's antidote of small is beautiful represented wishful thinking. First, modern technology is many things simultaneously—including a body of empirical knowledge, a corpus of techniques, a method of cognition, and an epistemology. It has grown and developed within the Western society and thus carries a Western worldview. It plays both roles—constructive and destructive—and thus cannot be painted as oppressive per se. Second, the sources of oppression need not lie in modern technology but perhaps in the social structure of a society. If holders of economic and political power use modern technology to suit their vested interests, then the fault lies within the social structure. This is not to deny that the struggle for emancipation from apparently oppressive modern technology coincides with and reinforces the struggle for emancipation from oppressive social structure. Third, alternative paths for development are not well defined. For instance, there are too many qualities of alternative small-scale technology. Different combinations of these qualities

would result in an extremely large number, suggesting vast possibilities for alternative technological development and thus making the task unmanageable. Fourth, small-scale technology does not always play a constructive role from the point of view of ordinary people in the less developed countries. To prescribe an antidote that ordinary people should not desire to have sophisticated technical goods or the less developed countries should not hope to resemble the industrialized countries is nothing more than an ethnocentric view.

‘Check your progress’

2. Who wrote the Book ‘Small is Beautiful’?

4.4. SUMMARY

- Gandhi Ji criticised the idea of development at the cost of environmental degradation.
- M. Gandhi’s idea of civilization was simple living, non-possession, equal distribution, decentralization, etc. which are geared towards single goal. This single goal can be achieved, only if we go in for small scale industries. Therefore the real alternative to industrialization is the kind of small scale industries that Gandhiji advocated.
- Gandhiji’s view on Large Scale Industries is often charged as an enemy to large scale industries and industrial progress. He has clear vision about small scale industries and cottage industries and gave reasons to promote them.
- Ernst Friedrich Schumacher is best known for his proposals for human-scale, decentralisation and appropriate technologies. He proposed for a balance between growth and materialism/industrial progress.

4.5. KEY TERMS

- **Decentralization:** It is the transfer of authority from the Central to Local government.
- **Industrialization:** It is the development of industries in a country or region on a wide scale.

- **Materialism:** It is a tendency to consider ‘material possessions’ and ‘physical comfort’ as more important than spiritual values.
- **Technology:** It is the ‘application of scientific knowledge for practical purposes’, especially in industry.
- **Cottage Industries:** an industry whose labor force consists of family units or individuals working at home with their own equipment. Also refers to a small and often informally organized industry which has a limited but enthusiastically pursued activity or subject

4.6. ANSWER TO ‘CHECK YOUR PROGRESS’

1. According to Gandhi Ji, Swaraj is an integral revolution that encompasses all spheres of life. At individual level, it is connected with capacity for dispassionate self-assessment, ceaseless self-purification and growing Swadesh or self-reliance.
2. Ernst Freidrich Schumacher

Now you will able to give answers the following

1. **Gandhi on Cottage Industries:** Cottage industries based on small scale technology will pave way for decentralized production, equitable distribution and easy consumption of goods. It solves the problems of transportation and consequent price-rise. This will facilitate economic decentralization which would in turn lead to political decentralization.
2. **Gandhi aims at what we may call sustainable development,** balanced development of body, mind and soul. Gandhi had realized that human development is not just material or economic; it has to be moral, it should be able to instill the values of equality, liberty and dignity in the people; it must provide the persons with courage to protest against injustice. His emphasis on

decentralization, community based economics; self-sufficiency, handicrafts, rural development, and use of low capital intensive appropriate technology indicate his vision for a self-sufficient economy.

3. The Gandhian Critique that the problem of environmental degradation remains inspite of the various attempts for solving it is perhaps an indication that we have to look for a better alternative. The idea of sustainable development is a conceptual one and therefore it has not become clear how it can be realized in practice
4. Ernst Freidrich Schumacher *a Guide for the Perplexed as a critique of materialistic scientism and as an exploration of the nature and organisation of knowledge.*
5. you will able to unswrstand the concepts of Alternative Path for Less Developed Countries and Industrial Nations, Inappropriateness of Western Technology, Social Aspect of Technology, Danger in Materialism, The Problem of Industrial Production, etc.

4.7. QUESTIONS AND EXERCISES

Short-Answer Questions

1. Define Mahatma Gandhi's idea of development.
2. Write short notes on Schumacher concept of development.
3. Explain Gandhin perspectives on Cottage Industries.

Long-Answer Questions

1. Explain Gandhi's view of 'Sustainable development'.
2. Explain 'Schumacher Theory' as a Critique of development.

4.8. FURTHER READING

- Usha Thakkar and Jayshree Mehta, ed.s- *Understanding Gandhi: Gandhians in Conversation with Fred J Blum*, Sage Publications India Pvt. Ltd., New Delhi, 2011.
- Wagner, Peter (2001). *Theorizing Modernity. Inescapability and Attainability in Social Theory*. London: SAGE. ISBN 978-0761951476.
- Wagner, Peter (2008). *Modernity as Experience and Interpretation: A New Sociology of Modernity*. London: Polity Press. ISBN 978-0-7456-4218-5.
- Wagner, Peter (1993). *A Sociology of Modernity: Liberty and Discipline*. London: Routledge. ISBN 9780415081863.
- Yi, Han (2007). "On the World Historical Process of Industrial Modernization". *Journal of Graduate School of Chinese Academy of Social Sciences*. 1: 017
- Wood, B (1984) *E F Schumacher: his life and thought* (New York: Harper & Row).
- M. K. Gandhi - *From Yerrvda Mandir: Ashram Observances*, translated by Valji G. Desai, Navajivan Publishing House, Ahmedabad, reprint, 1980.
- B. N. Ghosh, *Gandhian Political Economy: Principles, Practice and Policy*, Ashgate Publishing Ltd., Aldershot, Hampshire, UK, 2007.
- Bhikhu Parekh, *Gandhi's Political Philosophy: A Critical Examination*, Ajanta Publications, Delhi, 1st Indian edition, 1995.
- Usha Thakkar and Jayshree Mehta, ed.s- *Understanding Gandhi: Gandhians in Conversation with Fred J Blum*, Sage Publications India Pvt. Ltd., New Delhi, 20
- E. F. Schumacher, *Multilateral Clearing Economica*, New Series, Vol. 10, No. 38 (May 1943), pp. 150–165

- Leopold Kohr. *"Tribute to E. F. Schumacher"*. Archived from the original on 11 October 2007. Retrieved 14 May 2008., in Satish Kumar (ed.), *The Schumacher Lectures*, Harper & Row, 1980.
- Daniel Yergin. *The Prize*, Simon & Schuster, 1991, p. 559.
- "Small is Beautiful" Section 2, Chapters 3-4. Schumaker, EF. Harper and Row Publishers. 1989.
- "Scott Bader". Scott Bader. Archived from the original on 26 September 2012. Retrieved 20 September 2019.
- Surur Hoda (1928–2003)". Gandhi Foundation. 7 September 2008.
- "Chapter 12: Influences - E. F. Schumacher: Ideas That Matter". www.schumacher-haney.info. Retrieved 20 September 2019.
- Charles Fager. "Small Is Beautiful, and So Is Rome: The Surprising Faith of E. F. Schumacher" Archived 20 June 2010 at the Wayback Machine, Christian Century, 6 April 1977.
- Pearce, Joseph (2008). "The Education of E.F. Schumacher". God Spy "An Economics Embodying Our Highest Ideals". Schumacher Center for a New Economics. Retrieved 16 April 2013. ed. Schumacher on Energy (London: Sphere Books, 1983)
- Wood, Barbara, E.F. Schumacher: His Life and Thought (New York: Harper & Row, 1984)
- Etherden, Peter, "The Schumacher Enigma", Fourth World Review, 1999
- Pearce, Joseph, Small is Still Beautiful, (Wilmington: ISI Books, 2006)

MA (Sociology)
THIRD SEMESTER
MASOC 504



INSTITUTE
OF DISTANCE
EDUCATION **IDE**
Rajiv Gandhi University

SOCIOLOGY OF DEVELOPMENT

www.ide.rgu.ac.in

BOARD OF STUDIES		
1.	Shri. Bikash Bage Head of the Daprtment Department of Sociology, RGU	Chairman (Ex-Officio)
2.	Prof. Kedilezo Kikhi Dept. of Sociology, Tezpur University Assam	Member
3.	Dr. S R Padhi Dept. of Sociology and Social Anthro. Indira Gandhi National Tribal Univ. Lalpur (M.P)	Member
4.	Dr. S. Yadav Assistant Professor Department of Sociology, RGU	Member
5.	Ms. Moyir Riba Assistant Professor Institute of Distance Education, RGU	Member
6.	Ms. Nani Umie Assistant Professor Dept. of Sociology, RGU	Member
7.	Dr. Padi Hana Assistant Professor Dept. of Sociology, RGU	Member
8.	Shri. Bikash Bage Assistant Professor & Head Department of Sociology, RGU	Member Secretary

Authors:

Mr. Bikash Bage

Head of the Department, Department of Sociology, Rajiv Gandhi
University, Rono Hills, Doimukh, Arunachal Pradesh

& Mr. Kiri Taso

Assistant Professor, Department of Sociology, Rajiv Gandhi University,
Rono Hills, Doimukh, Arunachal Pradesh

SYLLABI-BOOK MAPPING TABLE

Sociology of Development

Syllabi

Mapping in Book

Unit I: Introduction to Sociology of Development
Meaning, Nature of Sociology of Development, Scope of Sociology development.

Unit I. Introduction to of Sociology Development

Unit II: Approaches to Study Development
Marxist, Functional,

Unit II: Approaches to Study Development

Unit III: Theories of Development
Modernization, Dependency,

Unit III: Theories of Development

Unit IV: Critiques of Development
Gandhi and Schumacher

Unit IV: Critiques of Development

CONTENTS

UNIT 1: INTRODUCTION TO SOCIOLOGY OF DEVELOPMENT PART I

- 1.0. Introduction
- 1.1. Unit Objectives
- 1.2. Meaning of Sociology of Development
 - 1.2.1. Nature of Sociology of Development
 - 1.2.2. Scope of Sociology of Development
- 1.3. Summary
- 1.4. Key Terms
- 1.5. Answer to 'Check your Progress'
- 1.6. Questions and Exercises
 - 1.6.1. Short-Answer Questions
 - 1.6.2. Long-Answer Questions
- 1.7. Further Reading

UNIT 2: APPROACHES TO STUDY DEVELOPMENT PART I

- 2.0. Introduction
- 2.1. Unit Objectives
- 2.2. Marxist
- 2.3. Functional
- 2.4. Summary
- 2.5. Key Terms
- 2.7. Answer to 'Check your Progress'
- 2.7. Questions and Exercises
- 2.8. Further reading

UNIT 3: THEORIES OF DEVELOPMENT PART I

- 3.0. Introduction
- 3.1. Unit Objectives
- 3.2. Modernisation
- 3.3. Dependency
- 3.4. Summary
- 3.5. Key Terms
- 3.6. Answer to 'Check your Progress'
- 3.7. Questions and Exercises
- 3.8. Further reading

UNIT 4: CRITIQUE OF DEVELOPMENT

- 4.0. Introduction
- 4.1. Unit Objectives
- 4.2. Gandhi
- 4.3. Schumacher
- 4.4. Summary
- 4.5. Key Terms
- 4.6. Answer to 'Check your Progress'
- 4.7. Questions and Exercises
- 4.8. Further reading

INTRODUCTION

The MASOC-504 is introduced in MA Sociology Programme in Institute of Distance Education (IDE). The main Purpose of the introduction of MASOC-504, 'Sociology of Development' is to introduce the learner to make understand the concept of development from Sociological Perspectives and to appreciate development as an integrated process.

Course Introduction

The Concept of Development has always been a matter of significant concern. Henceforth, the subject so called the 'Sociology of Development' is introduced at Post Graduate Level (IDE) to enable the students to understand the *concept of development and its process* in a more better way from the sociological perspective. The present book is an attempt to enable the students to have a comprehensive overview of the Sociology of Development.

The basic purpose of the subject is to enable the students to grasp the concept of development along with its various approaches to development. Development as a subject matter is quite complex one. Since, Development as a process has been understood differently like as growth, change, transformation and modernisation, etc.

Traditionally, the concept of development and its process was usually explained in economic term. However, later there has been paradigm shift in the ideology and people realised that, the economic factor too need socio-cultural prerequisite which play a decisive role in making economic factor more effective. Therefore, presently there is global tendency to view development with social and human orientation besides economic and political orientation. And it has been observed that, due to liberalisation, privatisation and globalisation there is frequent, rapid, and radical changes in the field of development. Therefore, the course has been formulated and developed with the objective of understanding development which will enable students to acquire a sociological understanding of the concept of development and its process. This will assist in developing and acquiring socio-historical critique of the development process.

Therefore, keeping all these factors in mind, the present course is an attempt to critically examine and understand the historical, empirical and social context, the intellectual perception and relevance of the developmental concept and perspective pertaining to development. Thus, the course called Sociology of Development is incorporated in the MA Sociology (IDE) to focus on the concept, approaches or perspective of development from critical orientation. The course also highlights the development process and its impact in Indian context as well in Northeast Indian context.

Course organisation

There are five units in this course. Each unit is incorporated with a view to enable the students to have comprehensive knowledge in relevant topics. Further, for the convenient, each unit is divided into sub-headings. The themes focus on the following:

- The concept of development
- Approaches to study development
- Theories of development
- Critique of development
- Development and Northeast India

UNIT 1: INTRODUCTION TO SOCIOLOGY OF DEVELOPMENT

PART I

1.0. Introduction

1.1. Unit Objectives

1.2. Meaning of Sociology of Development

1.2.1. Nature of Sociology of Development

1.2.2. Scope of Sociology of Development

1.3. Summary

1.4. Key Terms

1.5. Answers to ‘check your progress’

1.6. Questions and Exercises

1.6.1. Short-Answer Questions

1.6.2. Long-Answer Questions

1.7. Further Reading

1.0. INTRODUCTION

Understanding the concept of “**Development**” has become more significant in the modern contemporary era. There is complexity in dealing *development* as its subject matter. Development is composite concept with multiple meaning like- economic development, social development, human and sustainable development. Therefore, it has multi-dimension. Thus, it required profound knowledge in the same field. And various Philosopher, Scholars and Intellectuals have propounded different insight regarding the same. However, Development can be understood as a process of positive sense. It refers to the planned change in desire way. To sum up, we can say “development” is a planned change in the material conditions and related socio-cultural milieu.

Development is an integral aspect of the society. It is an important indicator for change in society. Since, society is ever changing process with interaction and adaptation of other cultures it become necessary for us to study the concept and indicator that are related to development. *Development* thus, is a planned change in the material conditions and related socio-cultural milieu.

1.1. UNIT OBJECTIVES

After going through this unit, you will be able to:

- Meaning of Sociology of development
- Nature of Sociology of development
- Scope of Sociology of development
- Understand Development and Social & Human Development.
- Differentiate between Economic Growth and Development
- Distinguish economic growth with development
- Understand the term “Progress” and “Evolution”
- Describe human development

- Explain globalisation and sustainable development

1.2. MEANING OF SOCIOLOGY OF DEVELOPMENT

Sociology of Development is a new branch of study to understand the term development in more relevant manner. The “Sociology of Development” was originated with the Post-Second World War and the Post-Colonial experiences of Development in the newly emerged Nations. As during that era there was *stern need for the sociological analysis of development*, which could aid in understanding and explaining the interface of economy and society. The *subject matter of sociology of development is indeed no doubt complex due to interface between the economy and society. Both condition each other.* Thereby, changes in one corresponds the changes in other. The modern industrial economy could not have emerged if the culture would not have undergone radical change. Similarly, due to radical change in the economy and technology we witnessed there are structural changes in the family, community, social stratification and gender, etc. in society.

The *Sociology of development* can be understood as a subject which study the *concept of development and its process* from the *sociological perspective*. As we know that, there several aspect of human life like social, political, Economical, religious, educational and family life. All these aspect are interdependent and inter-related each other. In short, all these aspects influence each other. Further, each of these aspects is studied by a separate discipline of social science. *For example*, Political science and Economics study the- political and economical aspect of life, respectively. Likewise, Sociology too has several branches to study different aspects of social life as being science of society. Thus, we have sociology of law, sociology of religion, sociology of education, sociology of medicine, sociology of crime, sociology of environment, etc. are such branch of Sociology. Perhaps, the economic aspect of human life is the most vital aspect. Therefore, we have economic sociology with its different branches like sociology of work, sociology of leisure, sociology of profession and sociology

of development, which holds a significant position. Infact, some economist like Sombart, Pareto, Schumpeter and Oppenheimer have explained economic change as an aspect of social change. And renowned German Sociologist Max Weber has profounded a classical example to show how social factors, particularly its religious beliefs and practical ethics have influence the economic activities of people.

In simple words, we can say that, addressing the issue of development from the point of view of sociology is called as Sociology of Development. There is close linkage between the Socio-cultural environment and economic activities. Both condition each other (Smelser- sociology of economic life). The “Sociology of Development” helps us to comprehend that, there is relevant issues involved in the linkages between the Society and Economy. The ideology, philosophy, values, norms and polity, etc. are determined by the economic structure (Marx). Thus, to some extent we can say that, people’s attitudes towards economic activities and their way of economic life are determined by the norms and values of the society they are brought up in.

The “Protestant Ethics and the Spirit of Capitalism” by Weber is perhaps the most convincing interpretation on the positive role of cultural norms in determination of the nature of economic milieu. As his study reveals that, Protestantism helped in bringing about modern Capitalism in Western Europe.

To conclude, we can say that “addressing the problems of development from the point of view of Sociology may be called as sociology of development”. The term “Development” is a composite concept and multiple meaning depending on its nature and context. Economic development, social development, human development, political development and sustainable development, etc. are various dimension of devolvment and all have sociological bearing and implication. Further, all these dimension of development are in one way or the other, can be interpretable in terms of their linkages with socio-cultural condition. Thus, all

these aspects are interrelated to one another. For example, Economic development is not possible only when there is sufficient availability of economic resources or factor like labour, capital, technological, Infrastructure, markets, transportation and communication, etc. Thus, these economic factors too need socio-cultural prerequisites which play a significant role in making these factors more effective.

1.2.1. Nature of Sociology of Development

The nature of Sociology of development is significant one to understand the developmental process in better manner. Thereby, study of development has been one of the fundamental aspects of sociology since the beginning of the discipline itself. Sociology as an independent social science has concern over the issue of development. Therefore, Sociology as being science of society studies the causes and consequences of economic changes in the society. Sociology of development is one of importance branch of Sociology which studies the interface of socio-cultural circumstances and the process of development in sociological perspective. This discipline presumes that every aspects of the development are largely dependson sociological condition of society for its realisation.

The eminent contribution of Weber's Protestant Ethic and the Spirit of Capitalism (1904-05) and Marx's Das Kapital (1867) have made significant debates concerning the rise and evolution of Capitalism central to the core theoretical debates in sociology. It is this analysis of causes and consequences of development leads to the spur that produced the further sociological intellectual enrichment like; development of Parsonian functionalism as well as Neo-Marxist and the world-system theory based challenges to system models.

Considering the inter-relation between economic development and social life has stimulated many of our models of demography, notably those of changes in fertility and mortality. Models of migration have been consistently rooted in development dynamics. Analyses of historical transformations of gender roles and gender ideology consistently

invoke the dialectical interplay between the forces of economic development, female labor force participation, power within the family and gendered culture. Political sociology has consistently engaged with the role of the state in producing economic development – and the role of economic change in redistributing power among social actors. Economic sociology consistently turns to economic development as the natural setting for tests of its theories.

Development Sociology investigates the practices and processes of social change. In this sense the sociology of development addresses pressing intellectual challenges: internal and international migration, transformation of political regimes, changes in household and family formations, technological change, sustainable (and unsustainable) population and economic growth, and the production and reproduction of social and economic inequality.

Weberians have responded to the challenge of developing transnational models by introducing the concepts of globalization and global culture, forces capable of constraining nations and states (Meyer et al. 1997). Throughout the debate on globalization, which now pervades sociology as a discipline, an emphasis on development remains a central concern.

The sociology of development has been essential component of the sociological study of stratification and inequality. Development sociologists address both national differences in income per se (O'Hearn 2001) and a wide variety of other indicators of human well being (see Jorgenson *et al.*'s 2007 examination of environmental inequality on a global scale). Development sociologists also address spatial inequality internal to nation-states (Hechter 1999; Logan and Molotch 1985; Massey and Denton 1993). Using both quantitative and qualitative methods, this body of work highlights spatial variation in patterns of inequality and power differences (Lobao, Hooks and Tickamyer [eds.] 2007; McCall 2001; Pellow 2002).

Development has been central to microsociological debates as well. The relevance of development to demographic dynamics is well known and is epitomized in the journal

the *Population and Development Review*. Feminist theorists have turned their attention to the question of gender and development, addressing questions of low wage female labor, the rise of gendered labor regimes and migration within female sex-typed occupation. Gender and development scholars also consider the inter-relations between economic change, the family, patriarchal cultural institutions, and women's mobilization. (Beneria and Feldman 1992, Tiano 1994, Moghadam 2005) The empirical material of development has been so rich that it has been a staple for sociologists working at virtually every level of analysis.

To conclude, we can say that several sociological conditions define the term "development". Social issues, gender equity, women's education and their participation in economically gainful activities, increases the- lifespan, literacy, advancement of democracy, reduction of infant and maternal mortality, reduction of birth and death rate are the sociological phenomena which in combination or in turn determine the extent of development.

Check your progress

1. What do you mean by Sociology of Development?

1.2.2. Scope of Sociology of Development

The Scope of Sociology of Development can be more appropriately understood by making a distinction between the *Classical Economics* and *Development Economics* which emerged around the initial years of second half of the last century.

The *Classical or Traditional Economics* was more oriented toward the study of political economy which dealt the relationship between the politics and economics thereby analyzed the economic laws of monopoly and dominance. Management of resources, markets and their best appropriation and sustaining growth have been the prime focus of the study.

On the other hand, the Development economics has wider scope of study. To M.P. Todaro, the *Development Economics* along with concerned with the efficient allocation of existing

scarce productive resources and with their sustained growth over time, must also deal with economic, social and institutional mechanisms, both public and private, necessary for bringing about rapid (at least by historical standards) and large scale improvement in level of living for poverty-stricken, malnourished, illiterate people of Africa, Asia and Latin America. Thus, the Development Economics have much concern towards the structural and institutional transformation and human development.

The *Sociology of Development* is to some extent quite close to *Development Economics*. The only differences are that, the *Sociology of Development* locates sociological laws and spheres which contribute to development and what social and cultural consequences are entailed from development. Whereas, *Development Economics* is concerned towards the task of tracing the cultural and institutional conditions which determine development in society.

Thus, the *Sociology of Development* is a social science discipline which studies economic development from the point of view of *social development*. It attempts to explore the linkages between the social, political, cultural and institutional spheres, along with the levels of economic development in a society. The *ultimate aim* of the subject is to trace the non-economic factors of economic development. That is, The *Sociology of Development* tries to understand how far the social, political, cultural and institutional factors are facilitative to development. Thus, following are the areas which sociology of development can suggest to explore:

1. Structure and Development

The Various scholars have extensively studied the “Social Structure” in order to establish its positive or negative role. For example, it has been observed that, the traditional social structure, which has been authoritarian in nature and in which the status rights and duties of an individual were ascribed and not achieved, did not facilitate the process of

development. The micro-structures such as joint family and caste system, etc. and the Macro-structures such as modern elites and Bureaucracy, etc. are need to be studied with an objective to find out their positive or negative role in the development. Berna, K.Sujata, S.SinghChoudhary and Timberg, etc. may be consulted to discover the linkages between the social structure and business in India.

2. Culture and Development

Along with *social structure*, *Culture* also determines the nature and magnitude of development in a society, which can be considered as part of the scope of sociology of development. Religious compatibility and imperativeness of cultural reforms have proved to be culturally favourable factors for development and, therefore, need to introduce into the curriculum of sociology of development. Likewise, we have humanistic and Liberal philosophical orientations of people towards different issues like-religious, social and economic life, etc. which we need to address in this discipline. Max Weber, E. Durkheims, Kapp, Papanek and Momin have put forward their views on these lines.

3. Polity and Development

Political factor no doubt plays a very significant role in development. Any factor of development, howsoever strong it is, will remain ineffective to yield better result unless it is supported by governmental policies and programmes. Thus, the protection, support and incentive etc. are the important role that, the government has to perform in order to ensure economic development in the region or in the country. The reason behind the unequal industrial development among the different states in the country is due to inter alia variation in the industrial policies. Which of course needed to be shorted-out? Thus, the political factor is needed to be taken into consideration by Sociologist while analysing the development of a region or a country.

4. Gender and Development

The society or country cannot properly develop or tends towards developing phase if there is *gender discrimination*. All human is equal, the reason why we have incorporated Article 21 in Indian constitutions. Further, there is notion of Human Rights which is supported by UNO (UDHR) since 1948. The traditional family structure of almost all over the modern world is *patriarchal*. Due to patriarchal system male supremacy is prevailed over the female. Result leads to gender discrimination, due to which still large number of female population is being denied from general social, economical and political participation. This gender discrimination hampers the societal development. Women's work cannot be underrated, but unfortunately, about three-fourths of unmonetized labour in the world is done by the women (UN Report). Thus, women are deprived from the various economical, social and political opportunities and privileges. They too are suffering from health and hygiene issue. It is therefore, utmost necessary for the sociology of development to focus on this field.

5. Entrepreneurship and Development

Development refers to social and cultural development along with successive economic growth. Industrialization and economic growth are not only result of precondition of sufficient labour, technology, capital and infrastructure, but most importantly from adequate supply of able entrepreneurs. An entrepreneur is neither capitalist nor a simple trader. An entrepreneur is a business leader who takes initiative to establish a business enterprise. Entrepreneur is a notable person with a typical personality, who emerges from a specific social and cultural setting. Therefore, it is an important field of the study of sociology of development.

6. Displacement and Rehabilitation

Displacement so called forceful migration has been historically associated with the development projects such as construction and installation of dam, mining, industrial plants, military installation and airport, etc. The Development-induced displacement and

Resettlement (DIDR) occur when people are forced to leave their native place as a result of development. This displacement matter is really a big social problem. This displaced family's needs to rehabilitate and resettled through a proper framework policies, which may ensure appropriate compensation and minimum decent living. The development project mostly affects the marginalized and weaker section of society. Many social, ethical and legal issues are involved in the after-effect of development projects. We have been witnessing such development and displacement issue for last six decades with reference to land reforms and community development programmes, etc. Thus, the displacement and rehabilitation issue and policies of the Government of India is needed to be sociologically analyzed to grasp better understanding of the same.

7. Human Development Index (HDI)

The human development concept was developed by the Pakistani economist MahbubulHaq. There was thinking on this human development concept at the World Bank in the 1970s. But it took the concrete shape as an approach when Dr. Haq argued that existing measures of human progress failed to improve people's lives. Therefore, he propounded three essential indicators that can indicate human developments are:

- a) Life expectancy-To lead a long and healthy life,
- b) Education- To acquire knowledge and
- c) Per capita income-To have access to resources needed for a decent standard of living.

The level of development of different countries is rated on the scale of HDI. Thus, the Human Development Index (HDI) is one of the important area of the scope of sociology of development.

8. Sustainability of Development

From around 1980s onwards of last century, people became more conscious over the negative consequences of the nature of development. The developmental process has breeds

two major problems such as environmental pollution and exhaustion of natural resources. These two problems were more deteriorate by more use of technology and cruel exploitation of natural resources. Which no doubt posed serious threat to living creatures on earth. Therefore, major focus was made in the development process along with aims to sustain the natural resources. Now, it becomes serious challenge for the *scholars of development* to explore viable alternatives to the existing developmental planning. Thus, it becomes one of the important fields of the study of sociology of development.

9. Modernisation of Traditions

To some extent modernity and development have many related symptoms (Huntington). Societies may not develop unless and until the tradition of that society undergo a process of modernisation. And as per the study of change in Indian society is concern it is problematic one. As because Indian society has its deep rooted traditional history which may not completely replaced with modernity. This leads to some extent create constraint development in the country. In this regard the Yogendra Singh and Milton Singer have portray the trajectory of modernity in the world of Indian traditions. Thus, the study of modernization of development could be the important scope of the sociology of development.

Check your progress

2. Which are the areas which Sociology of Development can explore?

1.3. SUMMARY

- Development is a composite concept with multiple dimensions- economic development, social development, human and sustainable development.
- Addressing the issue of development from the point of view of sociology is called as Sociology of Development.

- The Scope of Sociology of Development can be understood by making a distinction between the Classical Economics and Development Economics to some extent.
- Economic growth is the long-term expansion of a country's productive potential by which a nation's wealth increases over time.

1.4. KEY TERMS

- **Development:** it can be understood as a process of positive sense. It refers to the planned change in desire way. To sum up, we can say “development” is a planned change in the material conditions and related socio-cultural milieu.
- **Sociology of Development:** The *Sociology of development* can be understood as a subject which study the *concept of development* and *its process* from the *sociological perspective*.
- **Human Development:** it is designed and directed to create an enabling environment for people to enjoy long, healthy and creative lives. Human development is defined as the process of enlarging people's freedoms and opportunities and improving their well-being.
- **Human Development Index (HDI):** It has propounded three essential indicators that can indicate human developments are:
 - (a) Life expectancy-To lead a long and healthy life,
 - (b) Education- To acquire knowledge and
 - (c) Per capita income-To have access to resources needed for a decent standard of living.
- **Progress:** stand for a march in a forward direction according to some accepted principle that is formulated by a particular principle of judgment. However, that forward direction may or may not strive towards positive changes or strive towards desired way of change.

- **Evolution:** The term “Evolution” has been derived from the Latin word “evoluerē” which means “to develop” or “to unfold”. Evolution literally means *gradually unfolding* or *unrolling*.
- **Globalisation:** Globalization or globalisation is the process of interaction and integration among people, companies, and governments worldwide.
- **Sustainable:** It is the ability to maintain at a certain level.
- **Sustainable Development:** maintaining a balance between the human need to improve lifestyles and feeling of well-being on one hand, and preserving natural resources and ecosystems, on which we and future generations depend on other hand.
- **Social Inclusion:** It is the process of improving the terms on which individuals and groups take part in society—improving the ability, opportunity, and dignity of those disadvantaged on the basis of their identity.

1.5. ANSWER TO ‘CHECK YOUR PROGRESS’

1. Addressing the problem of development from the point of view of sociology is called ‘Sociology of Development’.
2. Sociology of Development suggests exploring social structure, culture, polity, gender, displacement and rehabilitations, HDI, Sustainable Development, and Modernization.
3. When growth is meant for all, it leads to development, i.e. inclusive growth is called development.

1.6. QUESTIONS AND EXERCISES

1.6.1. Short-Answer Questions

1. Define Human Development.
2. What are the indices under Human Development Index (HDI)?
3. What is Globalization?
4. Define Evolution.

5. What do you mean by Progress?

1.6.2. Long-Answer Questions

1. Describe the nature and scope of Sociology of Development.
2. Discuss, how Sustainable Development is intertwined with globalization?
3. Briefly analyze 17 United Nation Sustainable Development Goals (UNSDGS).

1.7. FURTHER READING

- Apter, David E. Rethinking Development, Sage, New Delhi 1987.
- Desai, A. R State and society in India paths of development, popular.Bombay, 1984.
- Desai, A. R, Essay on Modernisation VolII , Thacker , Bombay,1971
- D'Souza, V. Development Planning and Structural Inequalities, Sage,1990.
- Joshin,P.G. Land reforms in India, Essay house, Bombay, 1975
- Frank, A.G. Latin America-Underdevelopment or revolution, Monthly Review Press 1964
- Myrdal .G. Asian Drama, Penguin 1968
- Lehman, David, Development Theory-Four Critical Studies, frank Lass, London.1974
- RakhiBhattacharjee, Development Perspective-in North East India, Foundation Publication,2011.
- Borthakur, B.N, 2004, Sociological aspect of economic development, Dibrugarh ,Assam, Upasana Pub Academy.
- Singh ,2010, sociology of development, Rawat Publication, Jaipur.
- Mehta, S.R, 1999, Dynamic of Development: A Sociological Perspective, GyanBooks , New Delhi.
- Immanuel Wallerstein (1974) The Modern World-System, New York, Academic Press, pp. 347-57.

- Jan Nederveen Pieterse, A Critique of World System Theory, in *International Sociology*, Volume 3, Issue no. 3, 1988.
- Robinson, William I. (2011-11-01). "Globalization and the sociology of Immanuel Wallerstein: A critical appraisal". *International Sociology*. 26 (6): 723–745. doi:10.1177/0268580910393372. ISSN 0268-5809.
- Wallerstein, Immanuel Maurice. "The Modern World System as a Capitalist World-Economy." *World-Systems Analysis: An Introduction*. Durham: Duke UP, 2004. 23-30. Print.
- Walter C. Ladwig III, "Delhi's Pacific Ambition: Naval Power, 'Look East,' and India's Emerging Role in the Asia-Pacific," *Asian Security*, Vol. 5, No. 2 (June 2009), pp. 98–101.
- Kondratieff, Waves in the World System Perspective. *Kondratieff Waves. Dimensions and Perspectives at the Dawn of the 21st Century / Ed. by Leonid E. Grinin, Tessaleno C. Devezas, and Andrey V. Korotayev*. Volgograd: Uchitel, 2012. P. 23–64.
- Korotayev A. A Compact Macromodel of World System Evolution *Journal of World-Systems Research* 11 (2005): 79–93 Archived 2009-07-06 at the Wayback Machine;
- Korotayev A., Malkov A., Khaltourina D. (2006). *Introduction to Social Macrodynamics: Compact Macromodels of the World System Growth*. Moscow: KomKniga. ISBN 5-484-00414-4;
- Korotayev A. The World System urbanization dynamics. *History & Mathematics: Historical Dynamics and Development of Complex Societies*..

UNIT 2: APPROACHES TO STUDY DEVELOPMENT

2.0. Introduction

2.1. Unit Objectives

2.2. Marxist

2.3. Functional

2.4. Summary

2.5. Key Terms

2.6. Answer to ‘Check your Progress’

2.7. Questions and Exercises

2.8. Further reading

2.0. INTRODUCTION

This unit begins with a discussion on various approaches to study development. It begins with the Marxist approach which describes human societal progress and development through several stages like, primitive communism, slavery, feudalism and capitalism.

The functional approach, on the other hand, describes how the systems of different parts are interlinked to maintain a state of balance and social equilibrium as a whole; the liberal approaches explain different perspectives of development through various theories like, liberal economy theory, liberal feminist theory and social liberal theory.

The unit also discussed about ecological system theory which identifies five environmental systems that are, Microsystem, Mesosystem, Exosystem, Macrosystem, Chronosystem.

2.1. UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss Marx's theory of economic growth
- Explain Historical materialism
- Describe functionalist approach of development
- Discuss Durkheim's views on development and progress
- Analyse liberal perspective of development
- Explain ecological approach to development

2.2. MARXIST APPROACH

There is an increasing sense that the 'new' Marxist-influenced development sociology which emerged in the early 1970s has reached some kind of impasse. This paper suggests that there are good reasons for this sense of unease; that the weaknesses and lacunae in current sociological development research cannot be attributed entirely to the influence of any particular radical perspective (e.g. dependency theory); and that understanding the impasse

requires standing back from the theoretical controversies of the past decade and a half to examine some underlying commonalities of approach. A key problem, it is argued, is Marxism's metatheoretical commitment to demonstrating the 'necessity' of economic and social patterns, as distinct from explaining them and exploring how they may be changed.

Karl Marx's theory of economic growth

Among the few famous persons who have influenced not only the masses but also the intelligentsia in the world by their writings and teachings, Karl Marx has a most honoured place. He is regarded as the founder of modern communism which had taken deep roots in many countries of the world. This great man's works are significant from the point of view of economics also. The four volumes of his magnum opus "Das Capital" containing also 4000 pages provide useful source material for study by sociologists, Politicians, historians, social reformers and economists. Some of his views relating to economic growth are:

1. Historical stages of growth

Karl Marx introduced the theory of stages of economic development, which complemented his theory of class struggle. He categorized economic evolution into five categories viz.-slavery, feudalism, capitalism, socialism and communism.

Marx has analyzed the main stages which have taken place in human history. According to him, all historical events are the result of a continuous economic struggle between different classes in society. According to Marx, the mode of production which determines the general character of social, political, and spiritual processes of life is the main cause of social change.

As methods and techniques of production change the social relations which follow them also change. Against this background Marx describes four stages in history. They are:

- a. Primitive Communism
- b. Slavery

c. Feudalism

d. Capitalism

(i) Primitive communism is the first stage. It was characterized by a classes society, where in all factors of production was owned in common and people lived in groups.

(ii) Slavery

In this stage, all the work is done by human labour like hunting, preparing shelter, finding skin of animals or bark of a tree to be used as cloths. This made the human labour the most important resource which can earn income. Those who had maximum slaves were the most powerful in the society.

(iii) Feudalism

As the population increased, it was not possible to feed huge population with only hunting. This increased the demand for land to grow food grains to feed growing population. Mankind also started learning the art of sowing and harvesting and invented tools to increase productivity.

Shift of the economy from slavery to feudalism led to shift of strategic resources from human labour to land. Those who land became most important and powerful in the society. Fiefs held land with the permission of the king.

Fiefs were the warlords who fought among themselves to capture land from each other. Sometimes the dispute was settled by Kings. Fiefs employed serfs to work on their fields to grow foodgrains.

Main source of revenue for the government was land revenue and king was usually satisfied till the fiefs paid their land revenue obligations. In feudal economy, agriculture rather than hunting became the most important human activity.

(iv) Capitalism

Industrial Revolution led to generation and spread of scientific ideas and values among people. French Revolution led to realization of the need for freedom of expression and speech. These developments led to many innovations and introduction of new technology in many sectors. Technological improvements initially benefited agriculture resulting in increasing the productivity. This led to displacement of labour from agriculture. At the same time, textile and mineral sectors developed, which were able to employ labour displaced from agriculture.

Agricultural activity was located in rural areas whereas textile and mineral companies were located in urban areas. This led to shift of population from rural areas to urban areas. As the productivity increased in agricultural sector, lesser amount of land was needed for feeding population. This decreased the importance of land. Starting of industrial forms needed capital, which made the owners of capital the most important and powerful section of the population.

(v) Socialism and Communism

Maturity of capitalism will create intense class conflict between proletariat (labour class) and bourgeois (capitalist class). Ultimately, labour will unite together and overthrow the state controlled by capitalist class through a revolution. In a socialistic economy, labour will control the state and will own the companies. Market mechanism will be substituted by planning by the state. Income of the individuals will be decided by their needs and not by market mechanism. Ultimately socialism will lead to communism whereby state itself will wither away and there will be no shortage of products.

According to the Marxian theory of economic development, any social system based on class conflict cannot be a permanent system. So capitalism is to be considered as a transition state in the evolution of society. The capitalist controls the means of production

and the workers depend on the capitalist for work. The main aim of the capitalist for work, the main aim of the capitalist is to maximize their profits. This they do by exploitation of labour pay low wages, long hours of work and employment of women and children are some of the ways by which a capitalist exploit workers. As exploitation increases conditions become ripe to overthrow of capitalism by the united proletariat. Thus increasing antagonism between capitalist and workers creates conditions for the destruction of capitalism, the emergence of socialism. Here lies the importance of class conflict in the Marxian development model.

Appraisal

The Marxian theory of economic development can be examined from two angles.

1. Relates to the examination of Marx's assumptions and predictions in the light of the subsequent actual happenings in the world.
2. Refers to the examination of the place of dynamic factors and their interrelationships contained in the theoretical frame work of his theory of capitalist development.

Marx's prophecy that the capitalist system will collapse after reaching the advanced stage of development and that socialism will emerge in its place only afterwards has been proved false by history. The country such as Russia and China had been in the very early stages of evaluation of capitalization when they adopted communism through revolution. Moreover socialism has not displaced capitalism in USA and UK and other capitalist countries. Further more communisms has not come into existence on the lines laid down by Karl Marx.

Marx has pointed out that the technological progress is helpful to capitalist and increases the misery of workers. But this has not happened in the capitalist countries on the contrary workers have been receiving high wages and other facilities in these countries. The introduction of social security measures in the capitalist societies has promoted the welfare of

workers. According to Marx, the development of capitalism will bring the capitalist and workers in the opposite camps. However such a thing is now a matter of the past. There is no sign of withering away of the state in capitalist societies.

Many capitalist societies have taken many steps to achieve the objective of full employment; therefore, the industrial reserve army is not increasing.

Marx's argument that as capitalism progresses wealth, economic power gets concentrated in fewer and fewer hands is also not a sound argument, as capitalist will have to work within the frame-work of rules and regulations framed by the governments of these countries.

The doctrine of surplus value is regarded as the weakest point in his theory of economic growth. Critics argue that all factors of production are needed to produce a commodity and workers alone cannot claim the entire volume of the commodity.

Marxian theory of economic growth is applicable indirectly to developing countries. All though Marx did not think of the problem of the developing countries, yet some of the variables of his analysis do exist in such countries. In Marxian theory, production means the generation of value. Thus economic development is the process of more value generating, labour generates value. But high level of production is possible through more and more capital accumulation and technological improvement.

At the start, growth under capitalism, generation of value and accumulation of capital underwent at a high rate. After reaching its peak, there is a concentration of capital associated with falling rate of profit. In turn, it reduces the rate of investment and as such rate of economic growth. Unemployment increases. Class conflicts increase. Labour conflicts start and there is a class revolt. Ultimately, there is a downfall of capitalism and rise of socialism.

‘Check your progress’

1. Who wrote the book called ‘Das Capital’?
2. According to Marx, which are the four stages in History?

2.3. Functional Approach

Sociology provides us with different perspectives with which to view our social world. A perspective is simply a way of looking at the world. A theory is a set of interrelated propositions or principles designed to answer a question or explain a particular phenomenon; it provides us with a perspective. Sociological theories help us to explain and predict the social world in which we live.

Sociology includes three major theoretical perspectives: the functionalist perspective, the conflict perspective, and the symbolic interactionist perspective (sometimes called the interactionist perspective or simply the micro view). Each perspective offers a variety of explanations about the social world and human behavior.

Functionalist Perspective The functionalist perspective is based largely on the works of *Herbert Spencer*, *Emile Durkheim*, *Talcott Parsons*, and *Robert Merton*. According to functionalism, society is a system of interconnected parts that work together in harmony to maintain a state of balance and social equilibrium for the whole. For example, each of the social institutions contributes important functions for society: Family provides a context for reproducing, nurturing, and socializing children; education offers a way to transmit a society’s skills, knowledge, and culture to its youth; politics provides a means of governing members of society; economics provides for the production, distribution, and consumption of goods and services; and religion provides moral guidance and an outlet for worship of a higher power. The functionalist perspective emphasizes the interconnectedness of society by focusing on how each part influences and is influenced by other parts. For example, the increase in singleparent and dual-earner families has contributed to the number of children

who are failing in school because parents have become less available to supervise their children's homework. As a result of changes in technology, colleges are offering more technical programs, and many adults are returning to school to learn new skills that are required in the workplace. The increasing number of women in the workforce has contributed to the formulation of policies against sexual harassment and job discrimination. Functionalists use the terms functional and dysfunctional to describe the effects of social elements on society. Elements of society are functional if they contribute to social stability and dysfunctional if they disrupt social stability. Some aspects of society can be both functional and dysfunctional. For example, crime is dysfunctional in that it is associated with physical violence, loss of property, and fear. But according to Durkheim and other functionalists, crime is also functional for society because it leads to heightened awareness of shared moral bonds and increased social cohesion.

Durkheim's views on development and progress

Durkheim also conceived society in terms of an evolutionary scheme. He talked about social solidarity by which he meant the moral beliefs and ideas, which defined the "common sense" underlying social life. Like a social evolutionist, he was of the view that mechanical solidarity (characteristics of pre-industrial societies) was based on agreement and identity between people, while organic solidarity in industrial societies was derived from agreement to tolerate a range of differences, conflicts being moderated through a variety of institutional arrangements such as courts, trade unions and political parties.

In the pre-industrial societies there is little or no division of labour, every one works in similar ways and consumes in similar ways; there is little division of opinion, little individuality. In organic solidarity, on the other hand, there are specialisation of activities and advanced division of labour whose production, distribution and consumption are carried out in specialised ways.

Durkheim tried to explain social change as the result of changes in the bonds of morality, which he called social solidarity. Societies based on mechanical solidarity are transferred to organic solidarity by the growth of Industrialisation, heterogeneity, differentiation, specialisation of activity and individualism.

The problem of the growth of population, shrinking of natural resources and growing individualism (growth of material and moral density), according to him, is resolved by division of labour in the industrial society, i.e., in the organic solidarity.

As each individual is specialised and also individualism is respected they are socially integrated with bondage of division of labour. Indeed division of labour in the organic solidarity ensures the integration of individual specialisation in the system. However, abnormal division of labour, according to the Durkheim, may lead to formlessness.

To Durkheim, material density means sheer increase in the number of population in a give space. Which moral density indicates the increased interaction among individuals caused by their increase in numbers? Durkheim considers the development of the division of labour in the society to be associated with the increasing contact among people since the greater density of contact leads to the specialisation of people. But, he argues, the moral relationship can only produce its effect only if the real distance between individuals diminish, which means increase in material density. What Durkheim refers here is that moral density cannot grow unless material density grows at the same time. He suggests three ways in which this happens. People begin to concentrate together. Agriculture may begin this, and this continues with the growth of cities as well. Cities always result from the need of individuals to put themselves in very intimate contact with others. They can multiply and extend only if the moral density is raised. Increased number and rapidity of means of transportation and communication results in suppressing or diminishing the gaps separating social segments which in turn increases the density of society.

Functionalism interprets each part of society in terms of how it contributes to the stability of the whole society. Society is more than the sum of its parts; rather, each part of society is functional for the stability of the whole. Durkheim actually envisioned society as an organism, and just like within an organism, each component plays a necessary part, but none can function alone, and one experiences a crisis or fails, other parts must adapt to fill the void in some way.

Within functionalist theory, *the different parts of society are primarily composed of social institutions, each of which is designed to fill different needs, and each of which has particular consequences for the form and shape of society. The parts all depend on each other.* The core institutions defined by sociology and which are important to understanding for this theory include family, government, economy, media, education, and religion. According to functionalism, an institution only exists because it serves a vital role in the functioning of society. If it no longer serves a role, an institution will die away. When new needs evolve or emerge, new institutions will be created to meet them.

‘Check your progress’

3. Which Sociologists studied Division of Labour?
4. According to Durkheim, types of solidarity in industrial society is _____

2.4. SUMMARY

- Karl Marx theory of economic development can be categorised as conflict perspective of development.
- Functionalist approach of development tries to study the functional aspects of development on the society.
- The functionalist perspective is based largely on the works of Herbert Spencer, Emile Durkheim, Talcott Parsons, and Robert Merton.

- Emile Durkheim carried out the study of social division of labour. In his study he highlighted, how solidarity undergoes change from mechanical to organic as society progresses from pre-industrial to industrial society.
- Liberalism is a political and moral philosophy based on liberty, consent of the governed, and equality before the law.
- Ecological systems theory was developed by Urie Bronfenbrenner which offers a framework through which community psychologists examine individuals' relationships within communities and the wider society.

2.5. KEY TERMS

- **Communism:** A theory or system of social organization in which all property is owned by the community and each person contributes and receives according to their ability and needs.
- **Capitalism:** An economic and political system in which a country's trade and industry are controlled by private owners for profit, rather than by the state.
- **Development:** The act or process of growing or causing something to grow or become larger or more advanced. Functionalist approach of development tries to study the functional aspects of development on the society.
- **Marxist Approach:** This theory of economic development emphasizes on the conflict perspective of development.
- **Functionalist Approach:** this approach tries to study the functional aspects of development on the society in its functional pre-requisite manner.
- **Liberal Approach:** Liberalism is a political and moral philosophy based on liberty, consent of the governed, and equality before the law.

- **Ecological Approach:** Ecological systems theory offers a framework through which community psychologists examine individuals' relationships within communities and the wider society.

2.6. ANSWER TO 'CHECK YOUR PROGRESS'

1. Karl Marx
2. Primitive Communism, Slavery, Feudalism and Capitalism
3. Emile Durkheim
4. Organic Solidarity
5. American Revolution (1776), French Revolution (1789)
6. Urie Bronfenbrenner

Now you will be able to give answer to the following topics

1. Marxist Approach to Development.
2. Functionalist perspective of development.
3. Emile Durkheim views on development.
4. Mechanical and Organic Solidarity by Emile Durkheim
5. Liberal Approach to Development.
6. Ecological Approach to Development.
7. Urie Bronfenbrenner approach.

2.7. Questions and Exercises

Short-Answer Questions

1. Describe historical materialism.
2. Explain Durkheim's view on Development and Progress
3. What do you mean by functional approach to study development?
4. Explain Karl Marx's Theory of Economic Growth.

5. Define Liberal feminist's perspective on development.
6. Define Ecological Approach to development

Long-Answer Questions

1. How is Marx idea on development different from that of Durkheim's view on development?
2. Give a critical analysis on the functional perspective of development.
3. Define Liberal Perspective of development.
4. Differentiate between Classical and Modern Liberal Perspective of Development.
5. Briefly analyze Ecological Systems Theory developed by Urie Bronfenbrenner.

2.8. FURTHER READING

- Booth, D. (1985). Marxism and development sociology: interpreting the impasse. *World Development*, 13(7), 761-787.
- Foster-Carter, A. (1973). Neo-Marxist approaches to development and underdevelopment. *Journal of Contemporary Asia*, 3(1), 7-33.
- Becker, S. L. (1984). Marxist approaches to media studies: The British experience. *Critical Studies in Media Communication*, 1(1), 66-80.
- Chenery, H. B. (1975). The structuralist approach to development policy. *The American Economic Review*, 65(2), 310-316.
- Rose, D. (1984). Rethinking gentrification: beyond the uneven development of Marxist urban theory. *Environment and planning D: Society and Space*, 2(1), 47-74.
- Seddon, D. (Ed.). (1978). *Relations of production: Marxist approaches to economic anthropology*. Psychology Press.
- Meillassoux, C. (1972). From reproduction to production: A Marxist approach to economic anthropology.

- Mouzelis, N. P. (1988). Sociology of development: reflections on the present crisis. *Sociology*, 22(1), 23-44.
- Castro, C. J. (2004). Sustainable development: mainstream and critical perspectives. *Organization & Environment*, 17(2), 195-225.
- Caporaso, J. A. (1980). Dependency theory: continuities and discontinuities in development studies. *International Organization*, 34(4), 605-628.
- Bernstein, H. (1971). Modernization theory and the sociological study of development. *The Journal of Development Studies*, 7(2), 141-160.
- Eisenstadt, S. N. (1974). Studies of modernization and sociological theory. *History and Theory*, 13(3), 225-252.
- Sandbrook, R. (1976). The 'Crisis' in political development theory. *The Journal of Development Studies*, 12(2), 165-185.
- Muñoz, H. (Ed.). (2019). *From dependency to development: strategies to overcome underdevelopment and inequality*. Routledge.
- Weaver, C. (1978). Regional theory and regionalism: towards rethinking the regional question. *Geoforum*, 9(6), 397-413.versity Press, 1977),
- Parsons, Talcott, *The Social System* (New York: Free Press, 1951) and Parsons, Talcott, "Evolutionary Universals in Society," in *Sociological Theory and Modern Society*,
- Parsons, Talcott, eds. (New York: Free Press, 1967), pp. 490–520. Marion J. Levy, *The Structure of Society* and Levy, , *Modernization and the Structure of Society* (Princeton, N.J.: Princeton University Press, 1966
- La Palombara, Joseph and Weiner, Myron, eds., *Political Parties and Political Development* (Princeton, N. J. : Princeton University Press, 1966).

- La Palombara, Joseph, ed., *Bureaucracy and Political Development* (Princeton, N. J.: Princeton University Press, 1963).
- Pye, Lucien W., ed., *Communications and Political Development* (Princeton, N. J.: Princeton University Press, 1967).
- Abrahamsen, R. and Williams, M. C. (2007) Securing the city: private security companies and non-state authority in global governance, *International Relations*, 21, pp. 237-253. Downloaded from usj.sagepub.com at University of Leeds on May 17, 2015 212.
- Angelis, M. de (2003) Neoliberal governance, reproduction and accumulation, *The Commoner*, 7(Spring/Summer) (<http://www.commoner.org.uk/07deangelis.pdf>).
- Bayley, D. (1995) A foreign policy for democratic policing, *Policing and Society*, 5, pp. 79–93. Beckett,
- K. and Herbert, S. (2006) Dealing with disorder: social control in the post-industrial city. Paper presented at the conference Place Matters: Seeking Equity in Diversity, Diversity Research Institute, University of Washington, October.
- Bond, P. (2000) *Elite Transition: From Apartheid to Neoliberalism in South Africa*. London: Pluto Press. Bond, P. (2003)
- Bronfenbrenner, U. (1994). Ecological models of human development. *Readings on the development of children*, 2(1), 37-43.
- Apple, M. (1982) in F.Ahmad, J.Schultz, E.Smith and W.Whelan (eds.) *From Gene to Protein: Translation into Biotechnology*, London, Academic Press.
- Bahro, R. (1982) *Socialism and Survival*, London, Heretic Books. Baker, L. (1981) 'The environmental nexus', *Resource Management*, 13(2): 12–25.

- Barbira-Scazzochio, F. (1980) (ed.) Land, People and Planning in Contemporary Amazonia, University of Cambridge.
- Barratt-Brown, M. (1985) Models in Political Economy, London, Penguin.
- Bartelmus, P. (1986) Environment and Development, London,
- Allen and Unwin. Batisse, M. (1985) 'Action plan for biosphere reserves', Environmental Conservation, 12(1):17–27.
- Bernstein, H. (1979) 'African peasantries: a theoretical framework', The Journal of Peasant Studies, 6(4).
- Bishop, J. and Cook, L. (1981) 'Genes, phenotype and environment' in J.Bishop and L.Cook (eds.) Genetic Consequences of Man-Made Change, London, Academic Press.
- Blaikie, P. (1985) The Political Economy of Soil Erosion in Developing Countries, London, Longman. Block,
- H.R. (1981) The Planetary Product in 1980, Washington, US Department of State.
- Blowers, A. (1985) 'Environmental politics and policy surrounding minerals, agriculture, air pollution and nuclear waste', paper presented to RESSG Conference 'Environmental Problems and Politics in Rural Societies', Loughborough.
- Booth, D. (1984) Marxism and development sociology: interpreting the impasse, mimeo.
- Bowler, I. (1985) Agriculture Under the Common Agricultural Policy, Manchester University Press. 206 Bibliography Brandt Commission (1983) Common Crisis, London, Pan Books. Branford, S. and Glock, O. (1985) The Last Frontier, London, Zed. Brown, L. (1984) The State of the World, New York, Worldwatch Institute,

- W.W.Norton. Brundtland (1985a) Mandate for Change: Key Issues, Strategy and Workplan, World Commission on Environment and Development, Geneva.
- Brundtland (1985b) Brundtland Commission Public Hearings, Jakarta, transcript.
- BTAM (1985) British Tropical Agricultural Mission, Bolivia, Review, London, Overseas Development Administration.
- Bull, D. (1982) A Growing Problem: Pesticides and the Third World Poor, Oxford, Oxfam.
- Burbach, R. and Flynn, P. (1980) Agribusiness in the Americas, New York, Monthly Review
- Press. Burcham, T. (1957) California Range Land, Sacramento, California, Department of Natural Resources, Division of Forestry.
- Burgess, R. (1978) 'The concept of nature in geography and Marxism', Antipode 10(2):1–11.
- Burton, D. J. (1981) 'The political economy of environmentalism', Kapitalistate, Working Papers 9, 147–57.
- Buttel, F. (1983) Sociology and the Environment: The Winding Road toward Human Ecology, Cornell University, Department of Rural Sociology.
- Buttel, F., Kenney, M. and Kloppenburg, J. (1983) Biotechnology and the Third World: towards a global political-economic perspective, Cornell University, unpublished MS.
- Caufield, C. (1984) Tropical Moist Forests, London, Earthscan,
- IIED CEPAL (1985 a) The Environmental Dimension in Development Planning: main issues in Latin America, Santiago, Chile, CEPAL (United Nations).
- CEPAL (1985b) 'El Medio Ambiente como factor del Desarrollo', Notas sobre la Economía y el Desarrollo, CEPAL, 417, May.

- Chambers, R. (1986) 'Sustainable livelihoods', Institute of Development Studies, University of Sussex, mimeo.
- Churfas, J. (1982) *Man-Made Life*, Oxford, Blackwell. Clements, F. (1916) *Plant Succession*, Washington, Carnegie Institute.
- Colchester, M. (1986) 'Unity and diversity: Indonesian policy towards tribal peoples', *The Ecologist*, 16(2/3), 89–98.
- Commoner, B. (1971) *The Closing Circle*, New York, Knopf. Conlin, S. (1985) 'Anthropological advice in a government context', in R.Grillo and A.Rew (eds.) *Social Anthropology and Development Policy*, London, Tavistock.
- Conway, G. (1984) *Rural Resource Conflicts in the UK and Third World - Issues for Research Policy*, London, Imperial College/SPRU, *Papers in Science, Technology and Public Policy*.
- Conway, G. (1985b) 'Agricultural ecology and farming systems research', paper prepared for the Farming Systems Research (FSR) Workshop, Hawkesbury, Australia.
- Conway, G. (1985c) 'Rapid rural appraisal and agro-ecosystem analysis: a case study from Northern Pakistan', paper presented at International Conference on RRA, Khon Kaen, Thailand.
- Cook, K. (1983) 'Surplus madness', *Journal of Soil and Water Conservation*, 31(1), 25–8.
- Cotgrove, S. (1982) *Catastrophe or Cornucopia: The Environment, Politics and the Future*, Chichester, Wiley.
- Crow, B. and Thomas, A. (1982) *Third World Atlas*, Milton Keynes, Open University Press.

- Dandler, J. and Sage, C. (1985) 'What is happening to Andean potatoes? A view from the grassroots', *Development Dialogue*, 1, Uppsala, Sweden.
- Dasmann, R.F. (1975) *The Conservation Alternative*, London, Wiley. Dasmann, R.F. (1985) 'Achieving the sustainable use of species and ecosystems', *Landscape Planning* 12:211–19.
- Denevan, W., Treacy, J., Alcorn, J., Padoch, C., Denslow, J., Flores, S. (1982) 'Indigenous agroforestry in the Peruvian Amazon: Bora Indian management of swidden fallows', in
- J.Hemmings (ed.) *Change in the Amazon Basin*, Manchester University Press, vols. 1 and 2.
- Devall, B.B. (1979) 'The Deep Ecology Movement', *Natural Resources Journal*, 20, 299–322.
- Devall, B.B. and Sessions, G. (1984) *Deep Ecology*, Layton, Utah, Peregrine Smith Books.

UNIT 3: THEORIES OF DEVELOPMENT

3.0. Introduction

3.1. Unit Objectives

3.2. Modernisation

3.3. Dependency

3.4. Summary

3.5. Key Terms

3.6. Answer to ‘Check your Progress’

3.7. Questions and Exercises

3.8. Further reading

3.0. INTRODUCTION

The present unit explains the process of modernization, model of a progressive transition from traditional to a modern society. Dependency theories describe about how wealthy or developed countries depended on peripheral poorer nations for maintaining their status as rich nations. While the World System Theories discuss about relationships between core-, peripheral- and semi-peripheral nations, and describe how core nations exploit them in the name of development. On the otherhand, Trotsky and Rudolf Hilferdings discusses uneven development or unequal distributions of resources and wealth .

3.1. UNIT OBJECTIVES

After going through this unit, you will be able to:

1. Explain modernization.
2. Modernization Theory and its Criticism.
3. Describe Dependency theory.
4. Discuss World System Theory of Immanuel Wallerstein and its Criticism.

5. Analyse Uneven Development Theory and its Origin, Concept and Rudolf Hilferding's Theory.

3.2. MODERNIZATION

Modernization is the current term for an old process—the process of social change whereby less developed societies acquire characteristics common to more developed societies. The process is activated by international, or intersocietal, communication. Modernization is the current term for an old process—the process of social change whereby less developed societies acquire characteristics common to more developed societies. The process is activated by international, or intersocietal, communication. It can be seen on a global scale, as modernization extends outward from its original Western base to take in the whole world. The existence of unevenly and unequally developed nations introduces a fundamental element of instability into the world system of states. Thus, “ ‘*Modernization*’ can be understood as the process of becoming modern”. It broadly covers two aspects that are, advancement in ‘science’ and ‘technology’, however. It also attached to various other socio-cultural aspects.

What is Modernization Theory?

Modernization theory is a theory used to explain the process of modernization that a nation goes through as it transitions from a traditional society to a modern one. The theory has not been attributed to any one person; instead, its development has been linked to American social scientists in the 1950s.

Modernization theory is used to explain the process of modernization within societies. Modernization refers to a model of a progressive transition from a 'pre-modern' or 'traditional' to a 'modern' society. Modernization theory originated from the ideas of German sociologist Max Weber (1864–1920), which provided the basis for the modernization paradigm developed by Harvard sociologist Talcott Parsons (1902–1979). The theory looks at

the internal factors of a country while assuming that with assistance, "traditional" countries can be brought to development in the same manner more developed countries have been. Modernization theory was a dominant paradigm in the social sciences in the 1950s and 1960s, and then went into a deep eclipse. It made a comeback after 1991 but remains a controversial model.

Overview

Modernization theory both attempts to identify the social variables that contribute to social progress and development of societies and seeks to explain the process of social evolution. Modernization theory is subject to criticism originating among socialist and free-market ideologies, world-systems theorists, globalization theorists and dependency theorists among others. Modernization theory stresses not only the process of change but also the responses to that change. It also looks at internal dynamics while referring to social and cultural structures and the adaptation of new technologies. Modernization theory maintains that traditional societies will develop as they adopt more modern practices. Proponents of modernization theory claim that modern states are wealthier and more powerful and that their citizens are freer to enjoy a higher standard of living. Developments such as new data technology and the need to update traditional methods in transport, communication and production, it is argued, make modernization necessary or at least preferable to the status quo. That view makes critique difficult since it implies that such developments control the limits of human interaction, not vice versa. And yet, seemingly paradoxically, it also implies that human agency controls the speed and severity of modernization. Supposedly, instead of being dominated by tradition, societies undergoing the process of modernization typically arrive at forms of governance dictated by abstract principles. Traditional religious beliefs and cultural traits, according to the theory, usually become less important as modernization takes hold.^[2]

Historians link modernization to the processes of urbanization and industrialization and the spread of education. As Kendall (2007) notes, "Urbanization accompanied modernization and the rapid process of industrialization." In sociological critical theory, modernization is linked to an overarching process of rationalisation. When modernization increases within a society, the individual becomes increasingly important, eventually replacing the family or community as the fundamental unit of society

Origin

Sociological theories of the late 19th century such as Social Darwinism provided a basis for asking what the laws of evolution of human society were. The current modernization theory originated with the ideas of German sociologist Max Weber (1864–1920) regarding the role of rationality and irrationality in the transition from traditional to modern society. Weber's approach provided the basis for the modernization paradigm as popularized by Harvard sociologist Talcott Parsons (1902–1979), who translated Weber's works into English in the 1930s and provided his own interpretation.

After 1945 the Parsonian version became widely used in sociology and other social sciences. By the late 1960s opposition developed because the theory was too general and did not fit all societies in quite the same way.

There are many different versions of modernization theory. This lesson will discuss the opposing views of the Marxist and capitalist versions, a Western version, and a present-day version of modernization theory.

Marxist vs. Capitalist

Early theories were greatly affected by the political climate between the United States and the Soviet Union. During the Cold War era (1947-1991), two versions of modernization theory were prominent.

Marxist

The Marxist theory of modernization theorized that as nations developed, adopting a communist approach to governing, such as eradicating private property, would end conflict, exploitation, and inequality. Economic development and social change would lead developing nations to develop into a society much like that of the Soviet Union.

Capitalist

The capitalist version of modernization theorized that as nations developed, economic development and social change would lead to democracy. Many modernization theorists of the time, such as W. W. Rostow, argued that when societies transitioned from traditional societies to modern societies, they would follow a similar path. They further theorized that each developing country could be placed into a category or stage of development. Rostow's stages of development are:

- **Traditional** - an agricultural-based society
- **Pre-conditions for take-off** - characterized by an abundance of entrepreneurial activity
- **Take-off** - a period of rapid economic growth
- **Maturation** - economic development slows to a more consistent rate
- **Mass production or mass consumption** - a period in which real income increases

Other modernization theorists, such as Samuel Huntington, argued that social mobilization and economic development were driving forces behind modernization. Increased **social mobilization** meant that individuals and societal groups changed their aspirations. Increased **economic development** meant the capabilities of the newly modern society would change. Huntington argued that these societal changes would inevitably lead to democratization.

Although the Marxist and capitalist versions of modernization held opposing views, both views held that in order for developing countries to modernize the countries needed assistance in economic development and social change.

Communism was deteriorating by the 1970s and democratization had failed to occur in many nations struggling to develop. Many critics declared that the Marxist and capitalist versions of modernization were void.

Modernisation Theory (Development and Underdevelopment)

Historical Context (1940s and 50s)

By the end of WW2 it had become clear that despite exposure to Capitalism many of the countries of the South had failed to develop. In this context, in the late 1940s, Modernisation Theory was developed. Modernisation theory had two major aims

- It attempted to explain why poorer countries have failed to develop, focussing on what cultural and economic conditions might act as **‘barriers’ to development**
- It aimed to provide a **non-communist** solution to poverty in the developing world by suggesting that economic change (in the form of Capitalism) and the introduction of western values and culture could play a key role in bringing about modernisation.

Why countries are underdeveloped? Cultural and economic barriers to development

Modernisation theorists argue that there are a number of cultural and economic barriers that prevent traditional societies from developing.

Cultural barriers are seen as internal to the country – it is essentially their fault for being backward. Western culture, on the other hand, is seen as having a superior culture that has allowed for it to develop.

Traditional Values – prevent economic growth and change.	Modern Values – inspire change and economic growth.
---	--

Simple division of labour, less specialised job roles, individuals rely on a few dozen people in their local communities for basic needs to be met.	Complex division of labour, individuals tend to have very specialised jobs and rely on thousands of others for basic needs to be met
Religious beliefs and tradition influence day to day life (resistance to change)	Rational decision making (cost benefit analysis and efficiency) are more important.
Stronger community and family bonds and collectivism	Weaker community and family bonds means more individual freedom.
Affective relationships	Meritocracy –people are more motivated to innovate and change society for the better.
Patriarchy	Gender equality

Economic barriers to development

These are barriers which may make developing countries unattractive to investors.

- Lack of infrastructure
- Lack of technology
- Lack of skills in the work force
- Political instability
- Lack of capital in the country

Modernisation Theory 2: How countries should develop

Rostow believed that an initial injection of aid from the west in the form of training, education, economic investment etc. would be enough to jolt a society into economic growth overcoming these cultural barriers.

Rostow suggested that development should be seen as an evolutionary process in which countries progress up 5 stages of a development ladder

Rostow's five stage model of development

Stage 1 – Traditional societies whose economies are dominated by subsistence farming. Such societies have little wealth to invest and have limited access to modern industry and technology. Rostow argued that at this stage there are cultural barriers to development (see sheet 6)

Stage 2 – The preconditions for take off.

The stage in which western aid packages brings western values, practises and expertise into the society. This can take the form of:

- Science and technology – to improve agriculture
- Infrastructure – improving roads and cities communications
- Industry – western companies establishing factories

These provide the conditions for investment, attracting more companies into the country.

Stage 3 - Take off stage.

The society experiences economic growth as new modern practices become the norm. Profits are reinvested in infrastructure etc. and a new entrepreneurial class emerges and urbanised that is willing to invest further and take risks. The country now moves beyond subsistence economy and starts exporting goods to other countries

This generates more wealth which then trickles down to the population as a whole who are then able to become consumers of new products produced by new industries there and from abroad.

Stage 4 - The drive to maturity.

More economic growth and investment in education, media and birth control. The population start to realise new opportunities opening up and strive to make the most of their lives.

Stage 5 - The age of high mass consumption.

This is where economic growth and production are at Western levels.

Variations on Rostow's 5 stage model

Different theorists stress the importance of different types of assistance or interventions that could jolt countries out their traditional ways and bring about change.

- **Hoselitz** – education is most important as it should speed up the introduction of Western values such as universalism, individualism, competition and achievement measured by examinations. This was seen as a way of breaking the link between family and children.
- **Inkeles** – media – Important to diffuse ideas non traditional such as family planning and democracy
- **Hoselitz** – urbanisation. The theory here is that if populations are packed more closely together new ideas are more likely to spread than amongst diffuse rural populations.

Criticisms of Modernisation Theory

The below shows the Criticisms of Modernisation Theory in one by one:

1. The Asian Tiger economies combined elements of traditional culture with Western Capitalism to experience some of the most rapid economic growth of the past 2 decades.
2. Ignores the 'crisis of modernism' in both the developed and developing worlds. Many developed countries have huge inequalities and the greater the level of inequality the greater the degree of other problems: High crime rates, suicide rates, health problems, drug abuse.

3. Ethnocentric interpretations tend to exclude contributions from thinkers in the developing world. This is a one size fits all model, and is not culture specific.
4. The model assumes that countries need the help of outside forces. The central role is on experts and money coming in from the outside, parachuted in, and this downgrades the role of local knowledge and initiatives. This approach can be seen as demeaning and dehumanising for local populations. Galeano (1992) argues that minds become colonised with the idea that they are dependent on outside forces. They train you to be paralysed and then sell you crutches. There are alternative models of development: See sheet no...
5. Corruption (Kleptocracy) prevents aid of any kind doing good, Much aid is siphoned off by corrupt elites and government officials rather than getting to the projects it was earmarked for. This means that aid creates more inequality and enables elites to maintain power
6. There are ecological limits to growth. Many modernisation projects such mining and forestry have lead to the destruction of environment.
8. Social damage – Some development projects such as dams have lead to local populations being removed forcibly from their home lands with little or no compensation being paid.

Some Marxist theorists argue that aid and development is not really about helping the developing world at all. It is really about changing societies just enough so they are easier to exploit, making western companies and countries richer, opening them up to exploit cheap natural resources and cheap labour. Joseph Stiglitz notes that those countries that followed alternative models of development ignoring western advice are now competing with the west, China and India are two examples

‘Check your progress’

1. According to Rostow, how many types of developmental stages exist?
2. What are the Two Major Aims of Modernization?

3.3. Dependency

Dependency theory is the notion that resources flow from a "periphery" of poor and underdeveloped states to a "core" of wealthy states, enriching the latter at the expense of the former. It is a central contention of dependency theory that poor states are impoverished and rich ones enriched by the way poor states are integrated into the "world system".

The theory arose as a reaction to modernization theory, an earlier theory of development which held that all societies progress through similar stages of development, that today's underdeveloped areas are thus in a similar situation to that of today's developed areas at some time in the past, and that, therefore, the task of helping the underdeveloped areas out of poverty is to accelerate them along this supposed common path of development, by various means such as investment, technology transfers, and closer integration into the world market. Dependency theory rejected this view, arguing that under-developed countries are not merely primitive versions of developed countries, but has unique features and structures of their own; and importantly, are in the situation of being the weaker members in a world market economy. Dependency theory no longer has many proponents as an overall theory though some writers have argued for its continuing relevance as a conceptual orientation to the global division of wealth.

One alternative model on the left is Dependency theory. It emerged in the 1950s and argues that the underdevelopment of poor nations in the Third World derived from systematic imperial and neo-colonial exploitation of raw materials. Its proponents argue that resources typically flow from a "periphery" of poor and underdeveloped states to a "core" of wealthy states, enriching the latter at the expense of the former. It is a central contention of

dependency theorists such as Andre Gunder Frank that poor states are impoverished and rich ones enriched by the way poor states are integrated into the "world system". Dependency models arose from a growing association of southern hemisphere nationalists (from Latin America and Africa) and Marxists. It was their reaction against modernization theory, which held that all societies progress through similar stages of development, that today's underdeveloped areas are thus in a similar situation to that of today's developed areas at some time in the past, and that, therefore, the task of helping the underdeveloped areas out of poverty is to accelerate them along this supposed common path of development, by various means such as investment, technology transfers, and closer integration into the world market.

History

Dependency theory originates with two papers published in 1949 – one by Hans Singer, one by Raúl Prebisch – in which the authors observe that the terms of trade for underdeveloped countries relative to the developed countries had deteriorated over time: the underdeveloped countries were able to purchase fewer and fewer manufactured goods from the developed countries in exchange for a given quantity of their raw materials exports. This idea is known as the Prebisch–Singer thesis. Prebisch, an Argentine economist at the United Nations Commission for Latin America (UNCLA), went on to conclude that the underdeveloped nations must employ some degree of protectionism in trade if they were to enter a self-sustaining development path. He argued that import-substitution industrialisation (ISI), not a trade-and-export orientation, was the best strategy for underdeveloped countries. The theory was developed from a Marxian perspective by Paul A. Baran in 1957 with the publication of his *The Political Economy of Growth*. Dependency theory shares many points with earlier, Marxist, theories of imperialism by Rosa Luxemburg and Vladimir Lenin, and has attracted continued interest from Marxists. Some authors identify two main streams in dependency theory: the Latin American Structuralist, typified by the work of Prebisch, Celso

Furtado, and Aníbal Pinto at the United Nations Economic Commission for Latin America (ECLAC, or, in Spanish, CEPAL); and the American Marxist, developed by Paul A. Baran, Paul Sweezy, and Andre Gunder Frank.

Using the Latin American dependency model, the Guyanese Marxist historian Walter Rodney, in his book *How Europe Underdeveloped Africa*, described in 1972 an Africa that had been consciously exploited by European imperialists, leading directly to the modern underdevelopment of most of the continent.^[5]

The theory was popular in the 1960s and 1970s as a criticism of modernization theory, which was falling increasingly out of favor because of continued widespread poverty in much of the world. It was used to explain the causes of overurbanization, a theory that urbanization rates outpaced industrial growth in several developing countries.

The Latin American Structuralist and the American Marxist schools had significant differences but agreed on some basic points:

Both groups would agree that at the core of the dependency relation between center and periphery lays [lies] the inability of the periphery to develop an autonomous and dynamic process of technological innovation. Technology – the Promethean force unleashed by the Industrial Revolution – is at the center of stage. The Center countries controlled the technology and the systems for generating technology. Foreign capital could not solve the problem, since it only led to limited transmission of technology, but not the process of innovation itself. Baran and others frequently spoke of the international division of labour – skilled workers in the center; unskilled in the periphery – when discussing key features of dependency.

Baran placed surplus extraction and capital accumulation at the center of his analysis. Development depends on a population's producing more than it needs for bare subsistence (a surplus). Further, some of that surplus must be used for capital accumulation – the purchase

of new means of production – if development is to occur; spending the surplus on things like luxury consumption does not produce development. Baran noted two predominant kinds of economic activity in poor countries. In the older of the two, plantation agriculture, which originated in colonial times, most of the surplus goes to the landowners, who use it to emulate the consumption patterns of wealthy people in the developed world; much of it thus goes to purchase foreign-produced luxury items –automobiles, clothes, etc. – and little is accumulated for investing in development. The more recent kind of economic activity in the periphery is industry—but of a particular kind. It is usually carried out by foreigners, although often in conjunction with local interests. It is often under special tariff protection or other government concessions. The surplus from this production mostly goes to two places: part of it is sent back to the foreign shareholders as profit; the other part is spent on conspicuous consumption in a similar fashion to that of the plantation aristocracy. Again, little is used for development. Baran thought that political revolution was necessary to break this pattern.

In the 1960s, members of the Latin American Structuralist School argued that there is more latitude in the system than the Marxists believed. They argued that it allows for partial development or "dependent development"—development, but still under the control of outside decision makers. They cited the partly successful attempts at industrialisation in Latin America around that time (Argentina, Brazil, Mexico) as evidence for this hypothesis. They were led to the position that dependency is not a relation between commodity exporters and industrialised countries, but between countries with different degrees of industrialisation. In their approach, there is a distinction made between the economic and political spheres: economically, one may be developed or underdeveloped; but even if (somewhat) economically developed, one may be politically autonomous or dependent. More recently, Guillermo O'Donnell has argued that constraints placed on development

by neoliberalism were lifted by the military coups in Latin America that came to promote development in authoritarian guise (O'Donnell, 1982).

The importance of multinational corporations and state promotion of technology were emphasised by the Latin American Structuralists.

Fajnzylber has made a distinction between systemic or authentic competitiveness, which is the ability to compete based on higher productivity, and spurious competitiveness, which is based on low wages.

The third-world debt crisis of the 1980s and continued stagnation in Africa and Latin America in the 1990s caused some doubt as to the feasibility or desirability of "dependent development".

The *sine qua non* of the dependency relationship is not the difference in technological sophistication, as traditional dependency theorists believe, but rather the difference in financial strength between core and peripheral countries—particularly the inability of peripheral countries to borrow in their own currency. He believes that the hegemonic position of the United States is very strong because of the importance of its financial markets and because it controls the international reserve currency – the US dollar. He believes that the end of the Bretton Woods international financial agreements in the early 1970s considerably strengthened the United States' position because it removed some constraints on their financial actions.

"Standard" dependency theory differs from Marxism, in arguing against internationalism and any hope of progress in less developed nations towards industrialization and a liberating revolution. Theotonio dos Santos described a "new dependency", which focused on both the internal and external relations of less-developed countries of the periphery, derived from a Marxian analysis. Former Brazilian President Fernando Henrique Cardoso (in office 1995–2002) wrote extensively on

dependency theory while in political exile during the 1960s, arguing that it was an approach to studying the economic disparities between the centre and periphery. **Cardoso summarized his version of dependency theory as follows:**

- there is a financial and technological penetration by the developed capitalist centers of the countries of the periphery and semi-periphery;
- this produces an unbalanced economic structure both within the peripheral societies and between them and the centers;
- this leads to limitations on self-sustained growth in the periphery;
- this favors the appearance of specific patterns of class relations;
- these require modifications in the role of the state to guarantee both the functioning of the economy and the political articulation of a society, which contains, within itself, foci of inarticulateness and structural imbalance.

The analysis of development patterns in the 1990s and beyond is complicated by the fact that capitalism develops not smoothly, but with very strong and self-repeating ups and downs, called cycles. Relevant results are given in studies by Joshua Goldstein, Volker Bornschier, and Luigi Scandella.

With the economic growth of India and some East Asian economies, dependency theory has lost some of its former influence. It still influences some NGO campaigns, such as Make Poverty History and the fair trade movement.

3.4. SUMMARY

- From this unit we have become familiar about the Marxist Theory of Modernization
- Modernization Theory, its aims, cultural and economic barriers in development and its criticisms were also discussed
- The unit also discussed about the Rostow Model of five different stages in detail

- Dependency Theory of A.G. Frank and World-System Theory of Emanuel Wallerstein (how countries are interlinked and dependent on each other)
- Uneven Development Theory given by Trotsky and Rudolf Hilferding's (Unequal distribution of resources and wealth)

3.5 KEY TERMS

Modernization “‘Modernization’ can be understood as the process of becoming modern”. It broadly covers two aspects that are, advancement in ‘science’ and ‘technology’, however. It also attached to various other socio-cultural aspects.

Modernization Theory: Modernization theory is a theory used to explain the process of modernization that a nation goes through as it transitions from a traditional society to a modern one.

Marxist theory of modernization : The **Marxist theory of modernization** theorized that as nations developed, adopting a communist approach to governing, such as eradicating private property, would end conflict, exploitation, and inequality.

Dependency theory is the notion that resources flow from a "periphery" of poor and underdeveloped states to a "core" of wealthy states, enriching the latter at the expense of the former. It is a central contention of dependency theory that poor states are impoverished and rich ones enriched by the way poor states are integrated into the "world system.

World-System Theory : "World-system" refers to the inter-regional and transnational division of labor, which divides the world into core countries, semi-periphery countries, and the periphery countries.^[2]Core countries focus on higher skill, capital-intensive production, and the rest of the world focuses on low-skill, labor-

intensive production and extraction of raw materials. This constantly reinforces the dominance of the core countries.

Uneven Development : the process is marked by persistent differences in levels and rates of economic development between different sectors of the economy. This differentiation appears at many levels and in terms of a multiplicity of quantitative and qualitative indices.

Core nations-Developed countries

Peripheral nations – Developing and under- developed countries

3.6 ANSWER TO ‘CHECK YOUR PROGRESS’

- Five
- It attempts to explain why poorer countries have failed to develop and it aims to provide a non-communist solution to poverty in the developing world
- Immanuel Wallerstein
- Developed countries

Now you will be able to give answer to the following problems

- Explain Modernization and Modernization Theory.
- It attempts to explain why poorer countries have failed to develop and it aims to provide a non-communist solution to poverty in the developing world.
- Note down Rostow’s five stage model of development.
- Critical analysis of Modernisation Theory.
- Able to describe Dependency Theory.
- Explain World System Theory in relevance manner.
- Understand the concepts of Peripheral, Semi-peripheral and Core Nation.

3.7 Questions And Exercises

Short-Answer Questions

1. What is Modernization?
2. Define Dependency Theory
3. Describe Marxist Theory of Modernization.
4. Define Economic barriers to development
5. Criticisms of modernization theory.
6. What do you mean by Peripheral Nation?
7. Define Semi-Peripheral Nation.

Long-Answer Questions

1. Discuss uneven Development according to Trotsky and Rudolf Hilferding's Theory.
2. Describe the World System Theory of Immanuel Wallerstein.
3. Explain Rostow's Five Stages Model of Development.

3.8 . Further Reading

- Cardoso, F. H. (1979). *Development under Fire*. Mexico D.F.: Instituto Latinoamericano de Estudios Transnacionales, DEE/D/24 i, Mayo (Mexico 20 D.F., Apartado 85 - 025). Cited after Arno Tausch, Almas Heshmati, *Re-Orient? MNC Penetration and Contemporary Shifts in the Global Political Economy*, September 2009, IZA Discussion Paper No. 4393
- Carlos A. Martínez-Vela, *World Systems Theory*, paper prepared for the Research Seminar in Engineering Systems, November 2003
- F. Peter Wagner, *Rudolf Hilferding: theory and politics of democratic socialism*. Atlantic Highlands, N. J. : Humanities Press, 1996.
- Hongmei, Li (27 October 2010). "India's "Look East Policy" means "Look to encircle China?". *People's Daily*. Retrieved 1 November 2010.

- Hopkins, Terence K., and Immanuel Wallerstein, coordinators (1996). *The Age of Transition*. London: Zed Books.
- <http://countrystudies.us/india/126.htm> India-Nepal Treaty
- Laskar, Rejaul (December 2013). "Promoting National Interest Through Diplomacy". *Extraordinary and Plenipotentiary Diplomatist*. 1 (9): 59–60.
- Leon Trotsky, "Peculiarities of Russia's development", chapter 1 in *History of the Russian Revolution*, Vol. 1
- Leon Trotsky, *The struggle against fascism in Germany*, introduced by Ernest Mandel. Harmondsworth: Penguin, 1975.
- Leon Trotsky, *The Spanish Revolution 1931-1939*. New York: Pathfinder Press, 1975.
Leon Trotsky, *On France*. New York: Pathfinder, 1979. Leon Trotsky, *Fascism: What It Is and How to Fight It*. New York: Pathfinder 1969.
- Marcel van der Linden, "The 'Law' of Uneven and Combined Development: Some Underdeveloped Thoughts". *Historical Materialism*, Volume 15, Number 1, 2007, pp. 145-165.
- Michael Lowy, *The politics of Uneven and Combined Development*. London: Verso, 1981. (republished by Haymarket Books in 2010).
- Moore, Jason W. 2011. 2011. "Ecology, Capital, and the Nature of Our Times: Accumulation & Crisis in the Capitalist World-Ecology," *Journal of World-Systems Analysis* 17(1), 108-147, "Archived copy". Archived from the original on 2011-05-10. Retrieved 2011-02-11..
- Morales Ruvalcaba, Daniel Efrén (11 September 2013). "INSIDE THE BRIC: ANALYSIS OF THE SEMIPERIPHERAL NATURE OF BRAZIL, RUSSIA, INDIA

AND CHINA". Austral: Brazilian Journal of Strategy & International Relations (in Spanish). 2 (4). ISSN 2238-6912.

- Rudolf Hilferding, *Finance Capital. A Study of the Latest Phase of Capitalist Development*. London: Routledge & Kegan Paul, 1981, pp. 322-23.
- Shambaugh, David (2006). *Power Shift: China and Asia's New Dynamics*. University of California Press. p. 218. ISBN 978-0-520-24570-9.
- So, Alvin Y. (1990). *Social Change and Development: Modernization, Dependency, and World-Systems Theory*. Newbury Park, London and New Delhi: Sage Publications. pp. 169–199.
- Sushant Singh, "China border roads hobbling, 12 years later, 21 of 73 ready", *Indian Express*, 11 July 2017.
- Wallerstein, Immanuel (1974). *The Modern World-System I: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*. New York: Academic Press.
- Wallerstein, Immanuel (1983). *Historical Capitalism*. London: Verso.
- Wallerstein, Immanuel (1989). *The Modern World-System III*. San Diego: Academic Press
- Wallerstein, Immanuel (1992). "The West, Capitalism, and the Modern World-System",
- Review 15 (4), 561-619; also Wallerstein, *The Modern World-System I*, chapter one; Moore,
- Jason W. (2003) "The Modern World-System as Environmental History? Ecology and the rise of Capitalism," *Theory & Society* 32(3), 307–377.

- Wallerstein, Immanuel (Sep 1974). "Wallerstein. 1974. "The Rise and Future Demise of the World-Capitalist System: Concepts for Comparative Analysis" (PDF). *Comparative Studies in Society and History*. 16 (4): 390. Cited after
- Wallerstein, Immanuel Maurice (2004). *World-systems analysis: An introduction*. Duke University Press. pp. 23–24.
- Wallerstein, Immanuel. 1974. *The Modern World System: Capitalist Agriculture and the Origins of the European World-Economy in the 16th Century*. New York: Academic Press.
- Wallerstein, Immanuel. 2004. 2004a. "World-Systems Analysis." In *World System History: Encyclopedia of Life Support Systems*, edited by George Modelski. Oxford: UNESCO/EOLSS Publishers, <http://www.eolss.net>.
- Berlie, Jean A., ed. (2004). *Islam in China, Hui and Uyghurs: between modernization and sinicization*. Bangkok: White Lotus Press. ISBN 974-480-062-3.
- Bernstein, Henry (1971). "Modernization theory and the sociological study of development". *Journal of Development Studies*. 7 (2): 141–60. doi:10.1080/00220387108421356.
- Bhikhu Parekh, *Gandhi's Political Philosophy: A Critical Examination*, Ajanta Publications, Delhi, 1st Indian edition, 1995.
- Blokland, Hans; Van Weesep, Nancy Smyth, eds. (2006). *Modernization and Its Political Consequences: Weber, Mannheim, and Schumpeter*.
- Brown, Richard D. (1972). "Modernization and the Modern Personality in Early America, 1600–1865: A Sketch of a Synthesis". *Journal of Interdisciplinary History*. 2: 201–28. JSTOR 202285.
- Brown, Richard D. (1976). *Modernization: The Transformation of American Life, 1600–1865*.

- Brugger, Bill; Hannan, Kate (1983). *Modernization and revolution*. Routledge. ISBN 978-0-7099-0695-7.
- Chin, Carol C. (2011). *Modernity and National Identity in the United States and East Asia, 1895–1919*. Kent State University Press; An intellectual history of American, Chinese, and Japanese views of modernity.
- Dixon, Simon M. (1999). *The modernisation of Russia, 1676–1825*. Cambridge University Press. ISBN 978-0-521-37961-8.
- Eisenstadt, S. N., ed. (1968). *The Protestant Ethic and Modernization: A Comparative View*.
- Gavrov, Sergey (2004). *Modernization of the Empire. Social and cultural aspects of modernization processes in Russia*. ISBN 978-5-354-00915-2.
- Gavrov, Sergey (2005). *The phenomenon of modernization*. *Filozofia Bliższa życiu: Wyższa Szkoła Finansów I Zarządzania* in Warsaw. ISBN 978-83-88953-76-7.
- Gavrov, Sergey; Klyukanov, Igor (2015). "Modernization, Sociological Theories of". In Wright, James D. (ed.). *International Encyclopedia of the Social & Behavioral Sciences*. Vol 15 (2nd ed.). Oxford: Elsevier. pp. 707–13. ISBN 9780080970868.
- Gilman, Nils (2004). *Mandarins of the Future: Modernization Theory in Cold War America*. Johns Hopkins University Press.
- Goorha, Prateek (2010). "Modernization Theory". *Oxford Research Encyclopedia of International Studies*. Oxford University Press. doi: 10.1093/acrefore/9780190846626.013.266.
- Hua, Shiping; Zhong, Yang, eds. (2006). *Political Civilization And Modernization in China: The Political Context of China's Transformation*.

- Immanuel Wallerstein, (2004), "World-systems Analysis." In World System History, ed. George Modelski, in Encyclopedia of Life Support Systems (EOLSS), Developed under the Auspices of the UNESCO, Eolss Publishers, Oxford, UK
- Inglehart, Ronald & Welzel, Christian (2005). *Modernization, Cultural Change and Democracy: The Human Development Sequence*. New York: Cambridge University Press. ISBN 9780521846950..
- Jaquette, Jane S. (1982). *Women and Modernization Theory*. *World Politics*. 34. pp. 267–73.
- Jensen, Richard (1980). "On Modernizing Frederick Jackson Turner: The Historiography of Regionalism". *Western History Quarterly*. 11: 307–22. JSTOR 967565.
- Jensen, Richard (2001). *Illinois: A History, modernizers, traditionalists and post-moderns make state history*
- Khan, Joel S. (2001). *Modernity and exclusion*. SAGE. ISBN 978-0-7619-6657-9.
- Knobl, Wolfgang (2003). "Theories That Won't Pass Away: The Never-ending Story". In
- Delanty, Gerard; Isin, Engin F. (eds.). *Handbook of Historical Sociology*. pp. 96–107.
- Leroy, Peter; van Tatenhove, Jan (2000). "Political modernization theory and environmental politics". *Environment and Global Modernity*. pp. 187–208. doi: 10.4135/9781446220139 .n9. ISBN 9780761967675.
- Linden, Ian (2003). *A New Map of the World*. London: Darton, Longman and Todd. ISBN 0-232-52442-4.
- Lipset, Seymour Martin, ed. (1996). *The Encyclopedia of Democracy*. (4 vol.)
- Gandhi, M. K. - *From Yerrvda Mandir: Ashram Observances*, translated by Valji G. Desai, Navajivan Publishing House, Ahmedabad, reprint, 1980.

- Macionis, John J.; Plummer, Ken (2008). *Sociology* (4th ed.). Pearson Education. ISBN 978-0-13-205158-3.
- Marshall, T. H.; Lipset, Seymour Martin, eds. (1965). *Class, Citizenship, and Social Development*.
- Mazlish, Bruce (1993). *Conceptualizing Global History*. Westview Press.
- Mergel, Thomas (2011). "Modernization". Mainz: Institute of European History. Retrieved July 11, 2012.
- Rodgers, Daniel T. (1977). "Tradition, Modernity, and the American Industrial Worker: Reflections and Critique". *Journal of Interdisciplinary History*. 7: 655–81. JSTOR 202886.
- Sam Ashman, "Combined and uneven development", pp. 60-65 in Ben Fine Alfredo & Saad
- Filho (eds.), *The Elgar Companion to Marxist Economics*. Cheltenham, UK: Edward Elgar, 2012.
- So, Alvin Y. (1990). *Social Change and Development: Modernization, Dependency and World-System Theories*.
- Thongkholal Haokip, "India's Look East Policy: Its Evolution and Approach," *South Asian Survey*, Vol. 18, No. 2 (September 2011), pp. 239-257.
- Tipps, Dean C. (1973). "Modernization Theory and the Comparative Study of Societies: A Critical Perspective". *Comparative Studies in Society and History*. 15: 199–226. JSTOR 178351.

UNIT 4: CRITIQUE OF DEVELOPMENT

4.0. Introduction

4.1. Unit Objectives

4.2. Gandhi

4.3. Schumacher

4.4. Summary

4.5. Key Terms

4.6. Answer to ‘Check your Progress’

4.7. Questions and Exercises

4.8. Further reading

4.0. INTRODUCTION

This unit explains Gandhi’s view on the ideas of sustainable development for overall progress of the future generations. Gandhi also stressed to promote Small Scale Industries.

Schumacher stressed on broader view of development and discussed about problems of industrial production and materialism. He further discussed about Western and Intermediate Technologies, alternative paths for Industrial Nations and Less Developed Countries.

4.1. UNIT OBJECTIVES

After going through this unit, you will be able to understand:

- Gandhiji’s view on Large scale industries and cottage industries
- The idea of ‘Sustainable Development’ as perceived by Gandhi ji
- Schumacher broader views on development perspective

- The ill aspects of Industrial production, materialism and technology as were propagated by Schumacher.

4.2. GANDHI

The Gandhian Critique That the problem of environmental degradation remains inspite of the various attempts for solving it is perhaps an indication that we have to look for a better alternative. The idea of sustainable development is a conceptual one and therefore it has not become clear how it can be realized in practice. The idea underlying sustainable development was conceived by Gandhi and he showed how it can be realized in practice, already at the beginning of this century, when he wrote 'Hind Swarajl. But considering the problems of industrialization today, people do not seem to have taken it seriously. But the point of the present thesis is that Gandhi's concept of development and his alternative in terms of small scale industries are still relevant. The study of industrialization and its impact on environment is not some thing totally new, in fact several studies have been made, and as the references we have made show. The special contribution of the thesis is not necessarily its analysis of the problems of industrialization but its Gandhian critique of industrialization and its confirmation with the data collected by the researcher especially in the context of the survey of the five large scale industries in Kerala. As a background to Gandhi's concept of civilization it might be recalled that his entire philosophy is rooted in the traditions of Indian culture. In particular, some of the great personalities and sacred scriptures seem to have exerted their influence on him significantly during his formative years. This influence has given a spiritual dimension to his idea of development. At the same time he was exposed to the western culture where he found that people were enslaved by temptation of money and of the luxuries that money could buy.

Gandhi's speciality is his moral approach to civilization and development. For him, a development that discounts duty oriented moral values is no development. In fact in 1908 he

predicted the down fall of western civilization mainly because it was exalting the status of machine and lowering the status of human beings. According to him, no civrilization is worth while unless it provides the criteria and opportunities for the fullest development of humans. Gandhi therefore ardently advocated simplicity in our style of life and a change in the standard of values. He did this because industrialization tended to emphasise the values of money and material wealth to the exclusion of moral and human values. In fact he did not draw a sharp distinction between economics and ethics. This is clearly reflected in his ideal economy of decentralized cottage industries and self-sufficient village communities. Gandhi rejects the highly sophisticated technology and mode of its production because they lead to conflict among nations and ultimately to war. The present style of industrialization is totally unacceptable to him because it is based on greed. It is this greed that has lead to the depletion of non-renewable natural resources and has created environmental pollution. What is good for the west may not be good for India. Gandhi has taken this position because conditions in India are different. There is a false belief on which the modern civilization is based. Namely, the universal infinite prosperity is possible in this finite world and its attainment is possible on the basis of 'enrich yourself'. Gandhi did not entertain this belief because it implies no limiting principles. Gandhi's concept of development: is a combination of economic and real progress. He therefore denounced the uncontrolled use of machines, centralization of economic power and mass prodcuction. Gandhi is being recognized today as an environmentalist though history describes him under different titles. Gandhi was indeed prophetic in his understanding of industrialization and of its impact on environment. His ultimate objective was that all people might live in harmony with nature and with one another. His idea of civilization, simple living, non-possession, equal distribution, decentralization, etc. is all geared to this single goal. This single goal can be achieved, according to Gandhi, if and only if we go in for small scale industries. Therefore the real

alternative to industrialization is the kind of small scale industries that Gandhi advocated. This Gandhian solution becomes all the more relevant today when we consider the problem of large scale pollution and natural resource depletion which are characteristic of large scale industries. Though Gandhi's solution might sound unrealistic and utopian no other meaningful alternative has been formulated so far. In the light of the above survey and the analytical study and evaluation it seems that Gandhi had an intuition into the realities of nature and of the spirit. That is why Gandhi related economics with ecology and morality. This does not mean that Gandhi did not praise science and technology. Gandhi had prized every invention of science much more than we do. But he wanted to make sure that science and technology must serve man and they should not make man a slave to them. He often made the distinction between 'invention' and 'invention' and condemned the invention which made man a slave to them and which are detrimental for the future generation. The invention should be for constructive purposes and not for destruction. He further insisted that the scientific inventions and discoveries should not be the instruments of greed to amass wealth but, they must help to alleviate the miseries of the downtrodden and the marginalized. In brief, the scientific inventions must ease the burden of labourer and help him in his individual production. They should not make him lazy and should not substitute him with machine. This might give us the wrong impression that Gandhi was against machinery. As a matter of fact, Gandhi was not against the use of machinery. According to him the very human body is a piece of machinery. He was not against its use. Instead he wanted to develop its talents to the maximum. The spinning wheel, which he ad-scated is also a machine. If the machinery has to serve well, it has to help and ease the efforts of man. If a choice is to be made between the 'living machine' and the 'dead machine' the former is always preferred to the latter. The dead machinery should not be pitted against the millions of living machines scattered through out the numerous villages of India.

Gandhi's View on Large Scale Industries Gandhi is often charged as an enemy to large scale industries and industrial progress. This is a baseless charge against him. He had no objection to the use of large scale machinery for works of public utility if such public works could not be undertaken by human labour. Under such conditions it is necessary that the key industries have to be in the public sector. If at all big industries function in the private-sector, those private industrialists must act as trustees of their industries for the welfare of the workers and the people. As for the use of large scale technology, Gandhi wanted the people to go thus far and no further. The indiscriminate use of large scale technology has many defects such as:

- i. The large scale technology provides an opportunity to the minority to control the majority. Ordinary people can not have access to this high-tech. Those who control these sophisticated means of production can control the masses that are left with no means of production.
- ii. Indiscriminate introduction of large scale technology in the economic system means extinction of cottage and small scale industries and consequent unemployment of millions.
- iii. Defenders of ' large scale technology says that the wearisome physical labour can be avoided and ample leisure time could be provided for intellectual pursuit. Certainly leisure is good and necessary to an extent. However some amount of physical labour is necessary for every one. Cottage industries and agriculture can provide this.
- iv. It is argued that if means of production based on large scale technology are socialised, the evil effects of modern industrialism can be eliminated. But Gandhi would say that these evils are inherent to industrialism so much so that no amount of socialization can eradicate such evils.

- v. Large scale technology accelerates the process of centralization which can not be promoted for a decentralized development as put forward by Gandhi.
- vi. The big industries cause inexplicable pollution of air, water, and sound, which in turn causes many diseases.
- vii. The roads of the industrialized cities are crowded with rushing vehicles and restless people who are compelled to travel uncomfortably and miserably. These people find themselves lonely and isolated among the millions. Isolation and crowded life does not lead to a happy social life.
- viii. Large scale industrialization leads to exploitation of one type or other, which would lead to conflicts between groups and nations. These are the foundations and bases which compelled Gandhi to speak against the wreckless large scale industrialization. As a counter to these exploitative orders Gandhi put forward his alternative system of small and cottage industries.

Gandhi on Cottage Industries

Gandhi had *his clear vision and reasons to promote cottage industries in the Indian context* which could be succinctly put as follows:

- i. Cottage industries based on small scale technology will pave way for decentralized production, equitable distribution and easy consumption of goods. It solves the problems of transportation and consequent price-rise. This will facilitate economic decentralization which would in turn lead to political decentralization.
- ii. When the means of production are operated and controlled by the rural masses, we will not require a centralized defence -285- system or distribution system for cottage industries. A country, whose economic system is organized on the basis of small scale technology has less risk of foreign colonisation and invasion than a country with large scale industries supported by military power.

- iii. The means of production based on small scale technology minimise the craze for amassing wealth through dead tools.
- iv. The people can not enjoy liberty if they do not own means of production for necessities of life. The small scale technology alone can provide the ownership of means of production to the people.
- v. Home industries which are the result of small scale technology provide self-supporting and self-reliant economy. The internal economy of such a country will be the strong bulwark against the foreign aggression.
- vi. A vast country like India with millions of unemployed can not go in for large scale technology which will add unemployment further.
- vii. A charge is levelled against small scale industries saying that these can not bring about a rapid and unlimited progress as the West and the developed countries aim at. May be true, but Oandhi always believed that a finite and limited world/people should not aspire for an unlimited and infinite progress or development. This difference between the West and Gandhi is because of the basic difference between the two visions or philosophies.

The option is left to us whether we have to offer ourself as a scape-goat of the Western model of development or give a chance to a model of development wholly based on our culture, as preached by Mahatma Gandhi is the question. Today is late and tomorrow will be too late. If we are still hessitating to make a start it will prove catastrophic. It is therefore high time that we give the Gandhian solution a try. To conclude the thesis in Mahatma Gandhi's own words,

"It is perfectly possible for an individual to adopt this way of life without having to wait for others to do so. And if an individual can observe a certain rule of conduct, it follows that a group of individuals can do likewise. It is necessary for me to emphasize the fact that no one

need wait for anyone else in order to adopt a right course. Men generally hesitate to make a beginning if they feel that the objective can not be had in its entirety. Such an attitude of mind is in reality a bar to progress.~ (Collected Works of Mahatma Gandhi, Vo1.72, p.399)

Gandhi aims at what we may call sustainable development, balanced development of body, mind and soul. Gandhi had realized that human development is not just material or economic; it has to be moral, it should be able to instill the values of equality, liberty and dignity in the people; it must provide the persons with courage to protest against injustice. His emphasis on decentralization, community based economics; self-sufficiency, handicrafts, rural development, and use of low capital intensive appropriate technology indicate his vision for a self-sufficient economy. According to Gandhi nature provides just enough, and not more, for our daily needs. He opposes exploitation, ruthless drive for economic abundance and personal aggrandizement, massive technological progress, severe competitions, unbridled consumerism and concentration of wealth and power. In his opinion, greed is detrimental to social good and political emancipation without economic equality is hollow. *For him economics stands for social justice. (Harijan, October 9, 1937) He emphasizes decentralized self- dependent units bound together by the bonds of mutual cooperation and interdependence.*

For him the development of the individual and the development of the society are intertwined. His ultimate goal was *sarvodaya* (the development of all in all facets of life). The concept of *Sarvodaya* presupposes the principle of justice. *Sarvodaya* generates movements for changes, outward as well as inward and strives for egalitarian social order based on truth, nonviolence and purity of means. Gandhi never compromised at the cost of individual freedom, equality and social justice; his principle of nonviolence was not a mere philosophical principle but it was the rule of life. He had visualized an India where "all interests not in conflict with the interests of the dumb millions will be scrupulously respected,

whether indigenous or foreign" (*Young India*, September 10, 1931). Gandhi's basic aim was to have an all-round development of the society that included human development along with socio-economic and political development. Gandhian programme is holistic and multidimensional. The objective of his constructive work is the creation of non-violent society. Gandhi envisages a healthy society based on harmony and dialogue, where the ideas of equality and justice are translated in the lives of teeming millions. Commenting on man's social nature, Gandhi writes "If it is his privilege to be independent it is equally his duty to be independent. It will be possible to reconstruct our villages so that villages collectively, not villagers individually, will become self-contained" (*Young India*, April 25, 1929).

Trusteeship for Gandhi is a dynamic concept that can bring change in the established institutions. It is a means of transforming the present capitalist order of society into an egalitarian one. An individual is not free to hold or use his wealth for selfish satisfaction (*Harijan*, October 25, 1952). The common property is to be used for the good of one and all, all including the rich have to work for the society acc to his/her capacity and they will receive as per needs. Property owners are caretakers of the property for the common good. Trusteeship aims at some realizable outcomes like capital-labour cooperation, formation of social capital, reduction in concentration of economic power in a few hands, and voluntary cutting down the wants. *Gandhi did not approve the use of machines that replaces men or makes them subservient to machines. He advocates judicious use of machines; and simple, indigenous technology of non-exploitative nature in tune with nonviolence. He emphasizes the importance of whatever can be produced locally,* (From Yeravada Mandir, 1980:.44) and thinks about a decentralized economy. He propagated the use of the spinning wheel and **Khadi** for self reliance as well as moral and economic regeneration. Gandhi visualized exploitation free society, based on cooperation and ethics. His vision included productive employment for India's millions, schemes for rebuilding villages and

creating communities of care and concern, promotion of *khadi* and local handicrafts, production of need-based basic goods, empowering people by imparting basic education and required skills to enable them to create decentralized structures of power, and ensuring equality of opportunity for all. He believed that human wants have to be limited, and no one should suffer from deprivation and want of basic necessities. And for that the required means of production should be socially controlled. His emphasis is on collectivity and not on individual needs and greed. Wealth has to be created collectively and enjoyed collectively. For Gandhi rebuilding villages, in accordance with the principles of self-sufficiency and decentralization, was very important. To quote him, "I would say that if the village perishes, India will perish *too*" (*Harijan*, August 29, 1936). The nearest approach to civilization based on nonviolence was the erstwhile village republic of India (*Harijan*, January 13, 1940). According to him, cities have so far exploited the villages, and that has resulted in the gap between villages and cities in education, culture, facilities, employment. Now a new partnership between cities and villages is needed. Gandhi insists on regulation of wants and use of the goods and material not imported, but made in one's own country. His concept of *Swadeshi*, a dynamic concept of self-reliance, is closely connected with *Swaraj*, political freedom. Another of his important concept is that of 'bread labour', that propagates that some amount of physical labour has to be done by every person every day. Physical labour is a great equalizing force, and the need for socially useful manual labour is obvious. Influenced by John Ruskin, Gandhi maintained that all works are of equal dignity. He also said that in the conflict situation between the capital and the labour, cooperation and amicable settlements are the way out and not violence.

‘Check your progress’

1. What was Gandhi Ji’s Concept of Swaraj?

4.3. SCHUMACHER

Ernst Friedrich Schumacher (19 August 1911 – 4 September 1977) was a German statistician and economist who is best known for his proposals for human-scale, decentralised and appropriate technologies. He served as Chief Economic Advisor to the British National Coal Board for two decades, and founded the Intermediate Technology Development Group in 1966.

In 1995, his 1973 book *Small Is Beautiful: A Study of Economics As If People Mattered* was ranked by *The Times Literary Supplement* as one of the 100 most influential books published since World War II. In 1977 he published *A Guide for the Perplexed* as a *critique of materialistic scientism and as an exploration of the nature and organisation of knowledge*.

The 1973 publication of *Small is Beautiful: a study of economics as if people mattered*, a collection of essays, finished in the house of his friend Leopold Kohr, brought his ideas to a wider audience. One of his main arguments in *Small is Beautiful* is that we cannot consider the problem of technological production solved if it requires that we recklessly erode our finite natural capital and deprive future generations of its benefits. Schumacher's work coincided with the growth of ecological concerns and with the birth of environmentalism, and he became a hero to many in the environmental movement and community movement.

EF Schumacher's *Small is Beautiful* is widely viewed as a humanistic and radical tract. Nothing could be further from the truth. Viewed in its proper context it is both profoundly anti-human and deeply conservative. The central idea in Schumacher's text is that there is a natural limit to economic growth. As he put it: "Economic growth, which viewed from the point of view of economics, physics, chemistry and technology, has no discernible limit, must necessarily run into decisive bottlenecks when viewed from the point of view of the environmental sciences." Schumacher objected to organising the economy on a large

scale precisely because he believed that more prosperity would damage the environment. He correctly understood that small-scale communities cannot produce nearly as much as those operating on a regional or global scale. A modern car, for example, typically relies on components, raw materials and know-how from around the globe. From the perspective of Schumacher's "Buddhist economics", it is better for people to be poorer in economic terms if they can be spiritually richer.

This argument flies against a huge weight of evidence showing that material advance is closely bound up with progress more generally. The past two centuries of modern economic growth have seen huge advances in human welfare along with technological innovation and social advance. Perhaps the most striking single indicator of this improvement is the increase in human life expectancy from about 30 in 1800 to nearly 70 today. Note that this is a global average, so it includes the billions of people who live in poor countries as well as the minority who live in rich ones.

Almost every other measure of wellbeing has increased hugely over the long term, including infant mortality, food consumption and level of education. Most of humanity, even in the developing world, has access to services our ancestors could only have dreamt of, including electricity, clean water, sanitation and mobile phones. None of the arguments used by Schumacher's followers to counter this narrative of progress are convincing. Greens often side-step the broader case for the growth by deriding the accumulation of consumer goods and services. Environmentalist arguments have more than a tinge of elitism, with comfortably middle-class greens scoffing at the masses for wanting flat-screen televisions and foreign holidays. It should also be remembered that some consumer goods, such as washing machines, have directly led to huge improvements in human welfare. Anti-consumerism reveals more about the narrowness of the green vision than it does about economic growth. Viewing rising prosperity simply in terms of consumer goods is incredibly blinkered. Growth

provides the resources for much else including airports, art galleries, hospitals, museums, power stations, railways, roads, schools and universities. Popular prosperity provides the bedrock for much that we value in contemporary society. Another common green rebuttal to the benefits of growth is to point to the existence of inequality. Of course it is true that there are huge disparities both within countries as well as between the developed and developing world. The key question, however, is how best to tackle the problem. From Schumacher's perspective it is desirable to reduce the living standards of everyone except the poorest of the poor. His is a narrative of shared sacrifice and lower living standards for almost all. The alternative vision, the traditional position of the left, was to argue for plenty for everyone. Finally, there is the argument about the environment itself. The most popular variant of the idea of a natural limit nowadays is that growth inevitably means runaway climate change. However, there is plenty of evidence to the contrary. There are many forms of energy, including nuclear, that do not emit greenhouse gases. There are also ways to adapt to global warming such as building higher sea walls. Since such measures are expensive it will take more resources to pay for them; which means more economic growth rather than less. If anything the green drive to curb prosperity is likely to undermine our capacity to tackle climate change. Schumacher's fundamentally conservative argument chimes well with those who want to reconcile us to austerity. It suits those in power for the mass of the population to accept the need to make do with less. Under such circumstances it is no surprise that David Cameron, like his international peers, is keen for us to focus on individual contentment rather than material prosperity.

Schumacher broader views on development perspective:

In the mid-1970s, the phrase “small is beautiful” became a counterculture slogan against the industrial threat to the environment and the scarcity of resources. Arguing against excessive materialism and meaningless growth, the late Dr. Ernest Friedrich Schumacher—the author

of *Small Is Beautiful: Economics as if People Mattered* promoted the use of small-scale technology to benefit both humankind and the environment. As an economist trained in a market-oriented discipline, his thinking evolved from believing that large-scale technology could be salvation for industrial civilization to believing that large-scale technology is the root of degrading human beings and the environment.

The case against the use of large-scale technology was made by Schumacher between the early 1950s and the late 1970s. It is still legitimate today. Walt Rostow's (1960) high-mass consumption age has led to many serious problems in industrial countries. Al Gore (1992) expressed that global warming, stratospheric ozone depletion, loss of living species, and deforestation has been disrupting the earth's ecological system. Burning gasoline fills cities with fumes and creates air pollution. Chemical and nuclear energy and the high rate of depletion of fossil fuels for industries leave future generations in disarray. For mechanization of agriculture to work, 40 calories have to be spent to produce a calorie worth of food. Since 1950, the number of insects resistant to insecticides has been growing. The individual finds himself or herself further and further removed from many of the major decisions taken by the society in which he or she lives. Less developed countries face additional problems of drain on foreign reserves, technological dependence, high unemployment rate, and severe poverty. With a diagnosis of the crisis threatening Western and less developed countries, Schumacher (1973) challenged the modern belief that "bigger is better" and replaced it with "small is beautiful" (p. 150). He forcefully argued that bigness is impersonal, is insensitive, and has lust to power; smallness, on the other hand, is free, efficient, creative, enjoyable, and enduring. The most important area in which he sought to implement smallness was technology, mostly because the modern world has been shaped by it. Schumacher suggested that the less developed countries should not imitate Western technological development based on the trickle-down approach; instead, the less developed countries should embrace an

alternative path of development that is less expensive and thus within reach of ordinary people but more productive than indigenous technology.

What make Schumacher's work remarkable is the philosophical themes woven around the low-cost, small-scale technology as an alternative to high-cost, large-scale technology. This article is divided into three sections. The first section outlines the essential ideas of Schumacher on orthodox economics, industrial production, and materialism, social aspects of technology, Buddhist economics, Western technology in the less developed countries, and intermediate technology. This is followed by a critical examination of Schumacher's main thesis, whether small is indeed beautiful. The final section concludes with a brief life history of Schumacher.

Schumacher's Philosophical Outlook

The Myth of Objectivity in Orthodox Economics: Since the publication of Adam Smith's *Wealth of Nations* in 1776, mainstream economists have pushed for economics to be a value-free objective science similar to the physical sciences. According to them, economics makes positive statements about facts, which are verifiable in principle. Based on definitions and assumptions, hypotheses are formulated as statements about the world in which we live. These statements are then subject to rigorous analysis on the basis of logic, mathematical principles, and statistical techniques. If proven, they predict how people, things, and systems behave under given conditions. These scientific procedures are seen as neutral and thus eliminate the normative aspects of economics. Accordingly, in 1969, the Nobel Prize for "economic science" was established. As Professor Erik Lundberg observed, "Economic science has developed increasingly in the direction of a mathematical specification and statistical quantification of economic contexts" and has left behind "the vague, more literary type of economics" (as cited in Roszak, 1973, p. 1). Schumacher argued against the myth of objectivity in orthodox economics. According to him, unlike the physical sciences,

economics is concerned with human choices and actions, which by their very nature introduce value elements. Numbers that are relied on by economists to be objective are often misleading in reference to human beings. Numbers by themselves have no meaning unless significance is established. For example, “the substance of man cannot be measured by Gross National Product. Perhaps it cannot be measured at all, except for certain symptoms of loss statistics never prove anything” (Schumacher, 1973, p. 19). His “theory has always been that figures don’t mean anything if you can’t make them sing” (Schumacher, 1979, p. 125). Once meaning is attached to numbers, they are no longer neutral. Another example of facts being tainted with values in orthodox economics is in the area of money. Schumacher (1967/1982) found this field relies heavily on the single coefficient of money because it is concerned mostly with the ability to earn an adequate short-term profit. As a result, economic activities that are likely to lower short-term monetary profits tend to be placed outside of orthodox economics. For example, the practice of environmental conservation has no acknowledged place in a society under the dictatorship of economics. When it is occasionally introduced into the discussion, it tends to be treated not merely as a strange but as an undesirable alien, probably dishonest and almost certainly immoral.

The Problem of Industrial Production:

The economy of Western countries is industrialized, based on a complex infrastructure and high productivity. Industrial enterprises manufacture a large volume of products at a low cost. Furthermore, they provide decent employment so people can buy products; real personal income has risen to a point that transcends basic necessities such as food, clothing, and shelter. The output per worker is high because the production depends on the potentialities created by modern science and technology. Agriculture is mechanized and approximately 20% of the population depends on it. To maintain production, necessary infrastructures such as roads, transportation, and electricity have been developed. Such industrial economies have

been hailed as panacea to all sorts of economic and social problems. It is believed that Western societies' wellbeing is contingent on the continuous industrial expansion. Unless there is an increase in industrial production, they will suffer stagnant or lower living standards.

Western countries have based their industrial production on various sources of energy such as oil, natural gas, nuclear, and coal. Schumacher (1973), therefore, examined facts and figures about the growth of energy production, consumption, demand, and supply. He found industrial production to be predominantly based on nonrenewable sources of energy, which are finite and thus cannot be replaced after they were consumed. In other words, the world will eventually run out of energy resources with the current consumption rate. In the era of industrial expansion, Schumacher argued against industrial production that assumed limitless fossil fuels. He stated that one of the most fateful errors of our age is the belief that the problem of production has been solved. This illusion is mainly due to our inability to recognize that the modern industrial system, with all its intellectual sophistication, consumes the very basis on which it has been erected. It lives on irreplaceable capital which it treats as income. *He warned that industrial countries contain the seeds of their own destruction.*

According to Schumacher, profligate use of natural resources has also brought on the crisis of the environment. For instance, replacing fossil fuels with the use of nuclear energy means solving "the fuel problem by creating an environmental and ecological problem of such a monstrous magnitude" (Schumacher, 1973, p. 18). Similarly, the "qualitative jump" in the production of synthetic compounds unknown to nature has pushed nature's "tolerance margins." Such dangerous ecological impact threatens to destroy the earth. He opposed those practices of the modern world that seek to mobilize more resources to fight pollution or discover new sources of fossil fuels—because they do not change the methods of industrial production.

Danger in Materialism:

Materialism holds that the world is by its very nature material; the world consists of particles of matter; each of them has its own existence. These particles interact with each other and in their totality form the world. Matter is objective reality existing outside and independent of the mind; anything mental or spiritual is a product of material processes. Materialism is based on the scientific investigations of natural phenomena and thus seeks explanations in terms of factors that can be verified. It views each human being as a social atom with certain inherent properties and attributes. In the industrial system of production, materialism has been reduced to the ideology of market. The market is seen both as the natural condition of mankind and irresistible; it gives the people what they want. The production and consumption of material goods and the acquisition of money are the main goals of the market. It is believed that the generation of wealth will result in satisfaction with nonmaterial goods such as justice, harmony, happiness, beauty, and health.

Against materialism, Schumacher believed in idealism, which views spiritual as prior to the material. For him, there was a higher, more real, and nonmaterial world beyond the material world. He believed that the problem of industrial production resulting in the environmental crisis stemmed from misplaced values. Unlike religious teachings, materialism shows no selfcontrol or respect with the natural world. Schumacher (1977) made a distinction between “convergent” and “divergent” problems (p. 121). Convergent problems relate to the nonliving aspect of the world; in contrast, divergent problems relate to the human issues. With convergent problems, scientific investigations tend to find solutions; the answers tend to converge. However, with divergent problems, scientific investigations lead to opposite solutions; the answers tend to diverge. Schumacher believed that materialism treats all problems as convergent and thus dehumanizes individuals. He therefore suggested a return to religious truth. In his words, “the modern experiment to live without religion has failed”

Schumacher thought of the materialist philosophy of overproduction and overconsumption as a root of many problems facing the modern world. For instance, the practice of mechanized agriculture and factory farming adds to the pollution of land and water. Similarly, increasing wealth of people depends on making continuous demands on limited world resources. Schumacher (1973) questioned measuring a man's "standard of living" by assuming that a "man who consumes more is 'better off' than a man who consumes less" (p. 54). He believed that material prosperity could not lead to world peace because "it is attainable only by cultivating such drives of human nature as greed and envy" (p. 30). According to him, "man must never lose his sense of the marvellousness of the world around and inside him" (Schumacher, 1974, p. 31). He therefore promoted "reduction of needs" to promote "peace and permanence" (Schumacher, 1973, p. 31).

Social Aspect of Technology:

Technology is generally considered socially neutral, possessing an internal objective logic of its own (e.g., Bell, 1980). It is believed that technology develops as a result of an internal dynamic and then molds society to fit its pattern. One of the implications of technology being socially neutral is that technological development is a practical necessity regardless of its consequences. Even when there are some adverse impacts of technology, it remains the necessary price to be paid for the well-being of a society. There is no need to question the nature and structure of technology and the ways in which it has developed historically. Consequently, technology has been hailed as a motor of all progress, the key to solving our social problems, and a source of permanent prosperity. Many believe that scientific and technical progress will cure diseases, improve the quality of life, explore space, and develop faster modes of communication. They imagine a technological future that is filled with neatness and order, endless gadgets to do all the work, superhighways, and virtual reality.

Schumacher also believed that the modern world has been shaped by technology. However, instead of admiring technological determinism,¹ he showed the destructive impacts of modern technology such as degradation of environment, threat to the existence of human race, depletion of natural resources, and dislocation of labor. He believed that the role of technology in society needs to be debated. Given that technological development is a social process and that the prevailing technology in an industrial society coincides with authoritarian and hierarchical relationships,² it is possible to conceive a technology that is based on nonauthoritarian and nonhierarchical relationships. In other words, there are technological alternatives, and there is no reason to make inappropriate choices in selecting technologies. In Schumacher's (1973) words,

if that which has been shaped by technology, and continues to be so shaped, looks sick, it might be wise to have a look at technology itself. If technology is felt to be becoming more and more inhuman, we might do well to consider whether it is possible to have something better—a technology with a human face. (p. 138)

He therefore believed in a technological fix, using technology to solve economic and social problems.

Inappropriateness of Western Technology

The core of the development policies of the less developed countries is that by introducing Western technology, they would be revitalized and thus would start growing on their own. A general assumption is that the technological transformation of the less developed countries is synonymous with the whole process of socioeconomic development. Less developed countries have taken this path of development mainly because the characteristic feature of the unprecedented epoch of modern economic growth in the West is the use of modern scientific and technological knowledge, which has increased productivity output per unit of all inputs. In contrast, the less developed countries have emerged underdeveloped in relation to the

West. Furthermore, the less developed countries have been characterized by the West as “backward,” “traditional,” and “lacking scientific and technical traditions” and thus are looked down upon. A theory of “modernization,” the heart of which is the “transfer of technology” from the West, has extensively been parceled to the less developed countries. Since independence from the colonial powers, the less developed countries have adopted the developmental model of the West.

Concerned about the increasing discrepancy between the rich and poor nations, Schumacher (1973) sought to understand the problems of the less developed countries. He questioned Western technology as a possible solution to the less developed countries’ development problems. According to him, in the process of modernization the less developed countries have acquired different production functions in the advanced and traditional sectors. Over all, gains from the growth of the modern sector have been increasing rather than reducing problems of development by deepening dualism between the limited industrial sector and the vast rural hinterland. In his words,

the dual economy, unless consciously counteracted, produces ...a “process of mutual poisoning,” whereby successful industrial development in the cities destroys the economic structure of the hinterland, and the hinterland takes its revenge by mass migration into the cities, poisoning them and making them utterly unmanageable. (p. 158)

According to Schumacher, the West has established large industries with advanced technology in the cities and staffed them with managers. These industries are a product of Western societies, which are rich in capital but short in labor; the less developed countries, on the other hand, are rich in labor but short in capital. These industries make a limited contribution to employment in the less developed countries. Furthermore, Western technology functions differently in the less developed countries because of its different social context. For instance, “the system of mass production, based on sophisticated, highly capital-

intensive, high energyinput dependent, and human labour-saving technology, presupposes that you are already rich” (Schumacher, 1973, p. 145). As a result, the less developed countries have failed to incorporate Western technology or imitate Western economies.

Intermediate Technology:

Schumacher’s greatest contribution has been on the role of intermediate technology for the development of the less developed countries. Schumacher argued that the Western “trickle-down” theory was not leading to the full employment of poor people in the less developed countries, most of who lived in rural areas. The primary consideration of growth-based development was to maximize output per man in the urban area and not work opportunities for the unemployed and underemployed in the rural area. Furthermore, industrial mode of production was unsustainable because it was based on the depletion of natural resources and the deterioration of the environment. He did not view socialist economics as a possible solution to the less developed countries because the problem was the means of production, not ownership by the capitalist class. He believed that socialist economies were founded on the same unsustainable basis as Western economies.

Schumacher was deeply impressed with the philosophy of Mahatma Gandhi who led the opposition against the British rule of India. Like Gandhi, he felt that Western technology would displace massive labor forces from rural to urban areas without providing full employment. Schumacher also felt that India lacked the infrastructure necessary for such technology. Unlike Gandhi, however, he believed that indigenous technology would be insufficient to improve the economic conditions of rural India. Schumacher (1979, p. 95) set his tasks to create cheap workplaces, locate them in the rural area, employ simple production methods, and use local materials. Instead of “capitalintensive” technology, he sought to employ “laborintensive” technology and lend to “small-scale” establishments. He believed

such production methods would be biologically sound, build up soil fertility, and produce beauty and permanence.

This small-scale, inexpensive, labor-intensive, compatible with human needs, and nonviolent to nature technology was named by Schumacher intermediate technology.³ He founded the Intermediate Technology Development Group (ITDG) in 1966 to engage in the systematic study on how to help people help themselves. To this day, ITDG makes the less developed countries aware of the alternatives to the high technologies promoted by the West by providing technical assistance.

Schumacher (1973) defined intermediate technology as a “£100-technology” (p. 169). Using equipment cost per workplace as a base, Schumacher called the indigenous technology of the less developed countries a “£1-technology” and the modern technology of the Western countries a “£1000-technology.” He saw the less developed countries stagnating with £1-technology. However, he believed the £1,000-technology from the West killed off the £1-technology and left the poor people of the less developed countries worse off than before. This was mostly because the £1,000-technology was expensive, complex, and dependent on highenergy input and destroyed indigenous social and economic structures. Schumacher proposed an alternative that was more productive than the traditional technology and still less expensive than Western technology. Schumacher considered the intermediate technology “vastly superior to the primitive technology of bygone ages but at the same time much simpler, cheaper, and freer than the super-technology of the rich” (p. 145). He believed that intermediate technology would promote gradual development of the less developed countries while meeting the needs of ordinary people.

Is Small Beautiful?

Schumacher’s most important claim, that smallscale technology could be the foundation of new society, needs a critical examination. He understood smallscale technology

in dichotomous fashion. He saw social, economic, and political problems in a society as being associated with modern large-scale technology; the implementation of alternative small-scale technology was seen as a panacea for all such problems. Some of the characteristics that distinguished alternative from modern technology were small scale versus large scale, inexpensive versus expensive, ecologically sound versus ecologically unsound, small energy input versus large energy input, low pollution rate versus high pollution rate, nonviolent to nature versus violent to nature, decentralist versus centralist, simple versus complex, labor intensive versus capital intensive, compatible with human needs versus incompatible with human needs, reversible use of materials versus nonreversible use of materials, and so forth (Dickson, 1975, pp. 103-104). In the 1970s and 1980s, such a mystifying role of alternative small-scale technology had turned into a theology. People had become devotees of small-scale technology, believing that somehow “the evil” and social ills in their society would be destroyed with its implementation.

Broadly, there are two dominant meanings for alternative small-scale technology, one for industrial countries and the other for the less developed countries. In industrial countries, alternative small-scale technology is understood as one that does not degrade the environment, whereas in the less developed countries, it is understood as one that provides employment to ordinary people.

Alternative Path for Industrial Nations:

The industrial system of the United States alone consumes approximately 30% of the world’s primary resources to support its less than 6% of the world’s population. With this rate of consumption, it is possible that the world could run out of nonrenewable resources in the 21st century, continuing to increase the level of pollution. The Club of Rome (1972) has argued that if the current growth of population and industrial consumption of natural resources continues, the limits to growth on this planet will occur within the next 100 years

because of limited stocks of physical resources. Similarly, the world's consumption of energy for industrial purposes has been doubling approximately once every decade since World War II. It is undeniable, as Schumacher suggested, that the problems of industrial countries would be less severe if, for instance, energy production were based on using renewable fuels (sun, wind, and vegetation), which would not degrade the environment. However, the question of importance is why alternative energy technologies, despite numerous advantages, do not get developed on a wider scale in industrial countries. Perhaps the answer lies in the lack of a clear vision of how alternative energy technologies could be realized. Schumacher has correctly pointed out that such technologies could develop within the framework of a new value system. But he was silent on major social and political factors that are obstacles to or could promote the development of alternative energy technologies. It is not enough to believe that through alternative energy technologies, one can build society based on democratic and egalitarian principles; that is, alternative technologies can shape vested interests. In fact, vested interests can shape alternative technologies to suit their own goals.

A national government, which could develop alternative energy technologies, is not directly involved in the production process in the free enterprise economies of industrial countries. It gives concessions to private enterprises that run, develop, and supply technology on the basis of cost and profit. The government more or less establishes some regulations on energy, but private enterprises determine the nature of it. Alternative energy technologies, therefore, can only develop within the existing framework if it can achieve the goals of profit maximization. Private enterprises, however, have been making profits from technologies that have been the source of many problems. Even with the oil crisis of 1973, "Big Seven" oil companies made higher profits than the pre-1973 era. For instance, Gulf's profits in the first quarter of 1979 jumped 61%, Texaco's 81%, and Standard Oil of Ohio's 303% (Barnet,

1980, p. 26). These companies, therefore, have little incentive to switch from oil to solar or wind technology.

Most important, big oil companies have come to control alternative energy technologies such as coal, solar, and wind to avoid competition. Before the oil crisis of 1973, oil companies had acquired control over vast quantities of nonoil energy sources. They held six out of seven outstanding patents of photovoltaic cell areas, which convert sunlight directly into electricity. Shell owned Solar Energy Systems, Exxon controlled Solar Power, and Arco had Solar Tech (Barnet, 1980, p. 103). By controlling other sources of energy supplies, oil companies are able to maximize their profits because nothing else competes with them.

Alternative energy technologies become worth developing by oil companies if they are less expensive than oil technology. Whether the price is right for alternative energy technologies depends on the price of oil. Also, to maximize profit, oil companies explore the development of various energy resources if they are potentially profitable. Initially, the few alternative energy technologies that were developed due to concern shown by ecologists, environmentalists, and the public, as well as increasing costs due to environmental legislation of the 1970s, remained more expensive than oil technology. This limited the market for solar and wind technologies (Barnet, 1980; Tanzer, 1974).

Schumacher was critical of large-scale energy technologies but shied away from discussing how they were related to the distribution of power and the exercise of social control. The nature of technology development in any society can best be understood by relating technology to the patterns of general economic and social activities that maintain the interest of the dominant social groups in that society.

In the past decade, however, solar and wind cells have emerged as cornerstones of the new energy economy, even though oil and gas remain the main sources of energy consumption. Between 1990 and 1998, world wind-generating capacity expanded 26% as the cost dropped

\$2,600 per kilowatt in 1981 to \$800 in 1998 (Brown, Renner, & Flavin, 2000, pp. 48-49, 52-55). Wind power has become one of the world's cheapest sources of electricity. In 1998, sales of solar cells that can convert sunlight into electricity jumped 21% (Brown et al., 2000, p. 17). Although the annual rate of growth has been increasing for wind and solar, it has been decreasing for nonrenewable sources of energy. For instance, the growth in oil use in 1998 slowed to less than 1%. For the same period, the burning of natural gas increased by only 1.6%, and the nuclear power generation experienced the near zero growth rate (Brown et al., 2000, p. 17). Private companies such as British Petroleum and Royal Dutch Shell have been investing heavily in alternative energy sources. In 1999, Mike Bowlin, chairman and CEO of ARCO, a leading U.S. oil company, acknowledged that the new challenge was to convert the carbon-based world energy economy into one that was based on hydrogen and other forms of energy (as cited in Brown et al., 2000, p. 18).

The emergence of a new energy economy supports Schumacher's thesis that alternative technologies can be developed within the Western system of industrial production. However, alternative energy technologies have become worth developing by the fossil fuel industry mostly because of the high price of oil and the global economic slowdown. Because private enterprises control both nonrenewable and alternative sources of energy, they can have both technological developments as seasonal, depending on their longterm economic interest. In either case, alternative energy technologies are no longer small scale and decentralized; instead, such technologies are large scale and centralized, controlled by big private enterprises. What Schumacher proposed to be small establishments have now become large establishments.

Alternative Path for Less Developed Countries:

The problems of the less developed countries would be less severe, as Schumacher suggested, if laborintensive technologies were employed that could absorb the unemployed

and underemployed members of the labor force. The strategy of heavy industrialization has been rather ineffective in employing the massive labor force of the less developed countries. This is not to deny that there are some countries such as South Korea and Taiwan that have succeeded in increasing industrial employment and are no longer considered less developed. But less developed countries where heavy industrialization has brought a significant change in the employment structure are few compared to those where it has not.

Schumacher employed the notion of intermediate technology and advocated small-scale methods of production for the less developed countries. He believed that the West had mistakenly believed that what is good for them is also good for the less developed countries. So, he suggested that the West should transfer small-scale instead of large-scale technology. The transfer of technology from the West is carried out via the multinational (or global) corporations. The transfer of technology from the multinational corporations to the less developed countries resembles leasing land under feudalism. A large part of the scientific and technological knowledge that is essential for less developed countries to resemble the industrialization of the West is not freely available to them. There are proprietary rights in technology in the form of patents, trademarks, and brand names; the basic designs, blue prints, and know-how remain in the private possession of multinational corporations. Furthermore, the supply of technology is linked with other services and equipment. Less developed countries have to buy a complete industrial process with preinvestment studies, design of plant, commissioning and construction, start-up, and training by engineering consultants and machinery manufacturers. The multinational corporations maintain a degree of control over the continuing use of the technology even after the plant is built up through partial or complete ownership. Many such contracts also involve restrictive practices such as exclusive grants, challenges to validity of patents, exclusive dealing, and restrictions on research. A consequence is that the less developed countries have been unable to acquire the

technology they desire at the right price under the right terms and conditions (see Barnett & Muller, 1974; Goulet, 1977). This is why they have demanded a complete transfer of modern science and technology from multinational corporations on better terms (United Nations, 1975). But the less developed countries attempting to unpack the technology have been resisted by multinational corporations, mostly because it threatens their control over technology, markets, and economic gains.

It is unclear why multinational corporations would behave differently in transferring small-scale technologies to the less developed countries than what they have done for large-scale technologies. In other words, transfer of alternative small-scale technology from the West to the less developed countries would continue to lead to technological dependence of the latter. Schumacher was critical of modern technology in the less developed countries but not of the role multinational corporations play in the so-called transfer of technology.

For Schumacher, intermediate technology was the one close to midway between capital-intensive technologies exported by the West and traditional technologies of the less developed countries on the logarithmic scale of cost. Irrespective of his intentions, it can be viewed that he not only promoted technological dependence of the less developed countries on the West but also gave a theoretical rationale for the secondhand and outmoded technologies dumped by multinational corporations in the less developed countries. It is not true, as Schumacher assumed, that the less developed countries are rejecting the Western model of modernization and development. Schumacher had overemphasized the opening of a cell for alternative technology in 1971 by the Ministry of Industry of the government of India. It is true that it was closely followed by the opening of a number of centers for research into alternative technology in some of the leading Indian technical institutes. But needless to say, the so-called alternative technology program did not get very far in India. Gandhian peasants in India are trying their best to acquire modern industrial agricultural equipment. Far from

rejecting Western technology, they are well integrated into a pattern of production based on chemical fertilizer, diesel- or electricpowered machinery, and high-yielding varieties of seeds. Most important, there are many changes that have taken place with the introduction of large-scale technology, such as communication, electricity, electronics, hospitals, media, and transport, with which ordinary people in less developed countries are quite happy. Furthermore, many social practices such as untouchability, widow burning, endogamy, witchcraft, quack medicine, and so forth are put to change in the era of large-scale technology. So, it is hard to say that all aspects of large-scale technology are bad and all aspects of small-scale technology are good in the less developed countries.

Concluding Remarks:

Schumacher has shown limitations of large-scale industrialization for both industrial and less developed countries. Both countries have accepted some principles of alternative technological development and devoted some resources to achieve such goals. Nonetheless, Schumacher's antidote of small is beautiful represented wishful thinking. First, modern technology is many things simultaneously—including a body of empirical knowledge, a corpus of techniques, a method of cognition, and an epistemology. It has grown and developed within the Western society and thus carries a Western worldview. It plays both roles—constructive and destructive—and thus cannot be painted as oppressive per se. Second, the sources of oppression need not lie in modern technology but perhaps in the social structure of a society. If holders of economic and political power use modern technology to suit their vested interests, then the fault lies within the social structure. This is not to deny that the struggle for emancipation from apparently oppressive modern technology coincides with and reinforces the struggle for emancipation from oppressive social structure. Third, alternative paths for development are not well defined. For instance, there are too many qualities of alternative small-scale technology. Different combinations of these qualities

would result in an extremely large number, suggesting vast possibilities for alternative technological development and thus making the task unmanageable. Fourth, small-scale technology does not always play a constructive role from the point of view of ordinary people in the less developed countries. To prescribe an antidote that ordinary people should not desire to have sophisticated technical goods or the less developed countries should not hope to resemble the industrialized countries is nothing more than an ethnocentric view.

‘Check your progress’

2. Who wrote the Book ‘Small is Beautiful’?

4.4. SUMMARY

- Gandhi Ji criticised the idea of development at the cost of environmental degradation.
- M. Gandhi’s idea of civilization was simple living, non-possession, equal distribution, decentralization, etc. which are geared towards single goal. This single goal can be achieved, only if we go in for small scale industries. Therefore the real alternative to industrialization is the kind of small scale industries that Gandhiji advocated.
- Gandhiji’s view on Large Scale Industries is often charged as an enemy to large scale industries and industrial progress. He has clear vision about small scale industries and cottage industries and gave reasons to promote them.
- Ernst Friedrich Schumacher is best known for his proposals for human-scale, decentralisation and appropriate technologies. He proposed for a balance between growth and materialism/industrial progress.

4.5. KEY TERMS

- **Decentralization:** It is the transfer of authority from the Central to Local government.
- **Industrialization:** It is the development of industries in a country or region on a wide scale.

- **Materialism:** It is a tendency to consider ‘material possessions’ and ‘physical comfort’ as more important than spiritual values.
- **Technology:** It is the ‘application of scientific knowledge for practical purposes’, especially in industry.
- **Cottage Industries:** an industry whose labor force consists of family units or individuals working at home with their own equipment. Also refers to a small and often informally organized industry which has a limited but enthusiastically pursued activity or subject

4.6. ANSWER TO ‘CHECK YOUR PROGRESS’

1. According to Gandhi Ji, Swaraj is an integral revolution that encompasses all spheres of life. At individual level, it is connected with capacity for dispassionate self-assessment, ceaseless self-purification and growing Swadesh or self-reliance.
2. Ernst Freidrich Schumacher

Now you will able to give answers the following

1. **Gandhi on Cottage Industries:** Cottage industries based on small scale technology will pave way for decentralized production, equitable distribution and easy consumption of goods. It solves the problems of transportation and consequent price-rise. This will facilitate economic decentralization which would in turn lead to political decentralization.
2. **Gandhi aims at what we may call sustainable development,** balanced development of body, mind and soul. Gandhi had realized that human development is not just material or economic; it has to be moral, it should be able to instill the values of equality, liberty and dignity in the people; it must provide the persons with courage to protest against injustice. His emphasis on

decentralization, community based economics; self-sufficiency, handicrafts, rural development, and use of low capital intensive appropriate technology indicate his vision for a self-sufficient economy.

3. The Gandhian Critique that the problem of environmental degradation remains inspite of the various attempts for solving it is perhaps an indication that we have to look for a better alternative. The idea of sustainable development is a conceptual one and therefore it has not become clear how it can be realized in practice
4. Ernst Freidrich Schumacher *a Guide for the Perplexed as a critique of materialistic scientism and as an exploration of the nature and organisation of knowledge.*
5. you will able to unswrstand the concepts of Alternative Path for Less Developed Countries and Industrial Nations, Inappropriateness of Western Technology, Social Aspect of Technology, Danger in Materialism, The Problem of Industrial Production, etc.

4.7. QUESTIONS AND EXERCISES

Short-Answer Questions

1. Define Mahatma Gandhi's idea of development.
2. Write short notes on Schumacher concept of development.
3. Explain Gandhin perspectives on Cottage Industries.

Long-Answer Questions

1. Explain Gandhi's view of 'Sustainable development'.
2. Explain 'Schumacher Theory' as a Critique of development.

4.8. FURTHER READING

- Usha Thakkar and Jayshree Mehta, ed.s- *Understanding Gandhi: Gandhians in Conversation with Fred J Blum*, Sage Publications India Pvt. Ltd., New Delhi, 2011.
- Wagner, Peter (2001). *Theorizing Modernity. Inescapability and Attainability in Social Theory*. London: SAGE. ISBN 978-0761951476.
- Wagner, Peter (2008). *Modernity as Experience and Interpretation: A New Sociology of Modernity*. London: Polity Press. ISBN 978-0-7456-4218-5.
- Wagner, Peter (1993). *A Sociology of Modernity: Liberty and Discipline*. London: Routledge. ISBN 9780415081863.
- Yi, Han (2007). "On the World Historical Process of Industrial Modernization". *Journal of Graduate School of Chinese Academy of Social Sciences*. 1: 017
- Wood, B (1984) *E F Schumacher: his life and thought* (New York: Harper & Row).
- M. K. Gandhi - *From Yerrvda Mandir: Ashram Observances*, translated by Valji G. Desai, Navajivan Publishing House, Ahmedabad, reprint, 1980.
- B. N. Ghosh, *Gandhian Political Economy: Principles, Practice and Policy*, Ashgate Publishing Ltd., Aldershot, Hampshire, UK, 2007.
- Bhikhu Parekh, *Gandhi's Political Philosophy: A Critical Examination*, Ajanta Publications, Delhi, 1st Indian edition, 1995.
- Usha Thakkar and Jayshree Mehta, ed.s- *Understanding Gandhi: Gandhians in Conversation with Fred J Blum*, Sage Publications India Pvt. Ltd., New Delhi, 20
- E. F. Schumacher, *Multilateral Clearing Economica*, New Series, Vol. 10, No. 38 (May 1943), pp. 150–165

- Leopold Kohr. *"Tribute to E. F. Schumacher"*. Archived from the original on 11 October 2007. Retrieved 14 May 2008., in Satish Kumar (ed.), *The Schumacher Lectures*, Harper & Row, 1980.
- Daniel Yergin. *The Prize*, Simon & Schuster, 1991, p. 559.
- "Small is Beautiful" Section 2, Chapters 3-4. Schumaker, EF. Harper and Row Publishers. 1989.
- "Scott Bader". Scott Bader. Archived from the original on 26 September 2012. Retrieved 20 September 2019.
- Surur Hoda (1928–2003)". Gandhi Foundation. 7 September 2008.
- "Chapter 12: Influences - E. F. Schumacher: Ideas That Matter". www.schumacher-haney.info. Retrieved 20 September 2019.
- Charles Fager. "Small Is Beautiful, and So Is Rome: The Surprising Faith of E. F. Schumacher" Archived 20 June 2010 at the Wayback Machine, *Christian Century*, 6 April 1977.
- Pearce, Joseph (2008). "The Education of E.F. Schumacher". *God Spy "An Economics Embodying Our Highest Ideals"*. Schumacher Center for a New Economics. Retrieved 16 April 2013. ed. Schumacher on Energy (London: Sphere Books, 1983)
- Wood, Barbara, *E.F. Schumacher: His Life and Thought* (New York: Harper & Row, 1984)
- Etherden, Peter, "The Schumacher Enigma", *Fourth World Review*, 1999
- Pearce, Joseph, *Small is Still Beautiful*, (Wilmington: ISI Books, 2006)