

## Syllabus -Course-Work

### FUNDAMENTAL OF ECONOMICS

Total Credit: 04

Subject Code: ECPHD01

The objective of this course is to make the students aware of the fundamentals of economics and also the contemporary issues. This course will help the student in deciding their area of research interest. This course is of 4 credits.

#### 1. The Price System (10)

- Allocation mechanisms
- Signals, speculation and prediction
- Price ceilings and price floors, Price gouging
- General Equilibrium Theory, Two Fundamental Theorems of Welfare Economics, Theory of Second Best

#### 2. Market Mechanism (12)

- Competition and entry, creating barriers to entry, the benefits of competition (consumer's surplus, creating destruction)
- Alternatives to the market (disagreement, cartels, collusion, monopolization)
- eBay and Online markets
- Asymmetric information, Market failure
- Market problems and Government (externalities, common ownership, public goods)

#### 3. National and Global Issues (14)

- GDP and the measurement of progress, nominal and real measures, flow of income and expenditure
- Business cycles, historical records and indicators, inflationary records, Transmission and amplification measures, Monetary policy and fiscal policy
- The Economy in the Long Run- economic growth, productivity and living standards, savings and capital formation, catching up vs cutting edge, money, prices and federal finance, financial markets and international capital flows
- The foreign exchange market, balance of payment, current and capital account, exchange rate and open economy
- International Trade Theory – Classical, Heckscher Ohlin, New Trade Theory

#### 4. Social Issues (12)

- Discrimination, the market, statistical discrimination, minimum wage, gender discrimination, exclusion
- Income inequality and poverty, causes of income inequality and poverty (inflation) income distribution over time, the official poverty rate
- Unemployment, measurement, types and cost of unemployment, interpreting the unemployment rate, social security

- Governance and Corruption
- Global warming – the market for natural resources, environmental problems, mitigation of global warming

### 5. Game Theory (12)

- Strategic form games and Nash equilibrium
- Rationalizability and inter related elimination of dominated actions
- Bayesian games and correlated equilibrium
- Extensive form games with perfect information
- Bargaining
- Repeated games
- Extensive form games and imperfect and incomplete information

### Suggested Readings

1. Mas-Colell, Whinston & Green, *Microeconomic Theory*, OUP and D Fudenberg & J Tirole, *Game Theory*, MIT Press.
2. Kreps, D M, *A Course in Microeconomic Theory*, Harvester Wheatsheaf; H R Varian, *Microeconomic Analysis* (3rd edn), Norton
3. Osborne, M J & A Rubinstein, *A Course in Game Theory*, MIT Press
4. Jehle, G A & P J Reny, *Advanced Microeconomic Theory*, Longman.
5. Romer, D., *Advanced Macroeconomics*, McGraw-Hill *Advanced Series in Economics*, New York, 1996.
6. Acemoglu, D., *Introduction to Modern Economic Growth*, Princeton University Press, 2009
7. Barro, R J & X Sala-i-Martin, *Economic Growth*, McGraw-Hill, 1997.
8. Ljungqvist, L & T Sargent, *Recursive Macroeconomic Theory*, MIT Press, 2000
9. Stokey, N & R E Lucas, *Recursive Methods in Economic Dynamics*, Harvard University Press, 1989.
10. Obstfeld, M & K Rogoff, *Foundations of International Macroeconomics*, MIT Press, 2000
11. Aghion, P & P Howitt, *Endogenous Growth Theory*, MIT Press 1998
12. Pissarides, C A, *Equilibrium Unemployment Theory*, MIT Press 2000.
13. Samuelson, P.A. and W.O. Nordhaus (1998), *Economics*, 16<sup>th</sup> Edition, Tata McGraw Hill, New Delhi
14. Verian H. (2000), *Micro Economic Analysis*, W.W. Norton, New York
15. Dornbush, R and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc. New York
16. Hall, R.E. and J.B. Taylor (1986), *Macro economics*, W.W. Norton, New Delhi
17. Mankiw, N.G. and D. Romer (Eds.) (1991), *New Keynesian Economics* (2<sup>nd</sup> ed.) MIT Press, Cambridge

18. Solow, R.M. (2000), *Growth Theory: An Exposition*, Oxford University Press, Oxford
19. Sankar, U. (Ed.) (2001), *Environmental Economics*, Oxford University Press, Oxford
20. Barrows, David and John Smithin, *Fundamentals of Economics for Business* (2<sup>nd</sup> edition).
21. Boyles, William J. And Michael Melvin, *Fundamentals of Economics*, Houghton Mifflin Company, USA
22. Menger, Carl (1976), *Principles of Economics*, New York University Edition
23. Marshall, Alfred (1890), *Principles of Economics: An Introductory Volume*
24. Mankiw, N Gregory (2009), *Principles of Economics*, 6<sup>th</sup> edition, South Western Cengage Learning, USA.

## RESEARCH METHODOLOGY

Total Credit: 04

Subject Code: ECPHD02

The aim of this course is to give the thorough knowledge about the research methods and techniques which could be applied for conducting the research. The course would also enable the students to handle the time series and cross section data sets and the use of softwares and statistical packages to analyse the data. The students will also be equipped with use of econometric techniques for model building. This course will contain 4 credits.

### I BASIC RESEARCH (20)

Foundations- language, research philosophy, conceptualization and evaluation of research; Sampling-probability and non-probability sampling; Measurement- construct validity and reliability; Survey research- types of surveys and interviews; Scaling- Thurston, Likert and Guttman scaling; Quantitative and Qualitative Measures- data, approaches and validity, Design- Experimental and quasi-experimental, Analysis- data preparation, descriptive statistics, hypothesis testing, multivariate analysis (inferential statistics), Writing a Research Proposal, Report Writing, References and Bibliography.

### II BASIC STATISTICS (15)

Measures of Inequality: Gini, Entropy and Theil's measures, Lorenz Curve. Curves: Concept and Types. Different Methods of Curve Fitting with applications; Regression and

Correlation Analysis; Variance Analysis of One, Two and Three Factor Classification. Covariance Analysis; Methods of Data Reduction-Principal Components and Factor Analysis. Applications of SPSS, STATA, E-Views etc.

### III BASIC ECONOMETRICS (15)

Linear Regression Model-Violation of Assumptions; Multicollinearity, Auto-Correlation, Heteroscedasticity; Multiple regression analyses Model Specification; Dummy Variables, Panel Data Models. Data Base and Problems of estimation-Cross Section and Time Series Data Base, Two Stage and Indirect Least Squares methods of estimation. Simultaneous equation models, identification problem, Granger Causality test, Error Correction Model. Applications of SPSS, STATA, E-Views etc.,

### IV REVIEW STUDIES (10)

Study of the methodologies used by the Classical, Neo-Classical, Keynesians, New Classical Economists

### Reference Books

1. Anderson, TW (1984) An Introduction to Multivariate Statistical Analysis, John Wiley, Wiley, New York.
2. Baltagi, B.H (2001) Econometric Analysis of Panel Data, John Wiley, London.
3. Damodar N. Gujarati, Basic Econometrics; 4th Edition, McGraw Hill, 2008.
4. Enders, Walter (2004) Applied Econometric Time Series, John Wiley, London.
5. Georgescu-Roegen, N (1971) The Entropy Law and the Economic Process, Harvard University Press.
6. Good and Hattt, (1979) Methods in Social Research, Tata-Mc Graw Hill, New Delhi.
7. Green, WH (2003) Econometric Analysis, Pearson Education Inc, Delhi.
8. Hamilton, J.D (1994) Time Series Analysis, Princeton University Press, Princeton.
9. Hayek, Friedrich (1948) Individualism and Economic Order, University of Chicago Press, Chicago.
10. Humphreys, P (2004) Extending Ourselves: Computational Science, Empiricism and Scientific Method, OUP, Oxford.
11. Judd, L and Tesfation, L (2006) Handbook of Computational Economics: Agent-Based Computational Economics, Elsevier/North-Holland, Amsterdam.
12. Kagel, JH and Roth, AE (1995) The Handbook of Experimental Economics, Princeton University Press, Princeton.
13. Kendall, MG and Stuart, A (1968) The Advanced Theory of Statistics, Charles Griffin & Co., London.
14. Kothari, CR (1995) Research Methodology: Methods and Techniques, Wishwa Prakashan (Wiley Eastern Ltd), New Delhi.
15. Krishnamurthy, EV and Sen, SK (1976) Computer-based Numerical Algorithms, Affiliated East-West Press, New Delhi.

16. Mitchell, WC (1967) Types of Economic Theory, John Hopkins Univ. Press, Baltimore.
17. Mosteller, F. and Turkey, J (1977) Data Analysis and Regression: A Second Course in Statistics, Addison-Wesley, London. Ph.D/M.Phil Coursework
18. Moore, D.S. and Mc Cabe, G.P (1989) Introduction to the Practice of Statistics, W.H. Freeman and Co., New York.
19. Mukherjee, C., White, H. and Wuyts, M (1997) Econometrics and Data Analysis for Developing Countries, Brooks/Cole, Californi

## OPTIONAL PAPER

The students are required to select any one of the paper as per their interest area. In order to study this paper, the students are required to interact with their research supervisor. They have to finalize their topic of research from the paper they will choose. The students also have to review at least five research studies and give the presentation on the selected course. This paper will contain 4 credits.

### Agriculture and Rural Economics

**Total Credit: 04**

**Subject Code: ECPhD03**

#### Preamble

The place of agriculture and rural economics in the overall economic literature is unique in the context of the Indian economy. The development programmes in India are cantered around the rural area. The paper is intended to highlight the working and significance of the rural economy along with the institutional involvement in implementing the government programmes. Agriculture, allied sectors, the non-farm sector and Co-operative movement is the thrust area of the paper.

#### I Agriculture and Economic Development (10)

Nature and scope of agricultural and rural economics; Traditional agriculture and its modernization; Role of agriculture in economic development; Interdependence between agriculture and industry — some empirical evidence; Agricultural development, poverty and environment. Land Reforms and Land Policy

## II Agricultural Growth in India (20)

Recent trends in agricultural growth in India; Inter-regional variations in growth of output and productivity; Cropping pattern shifts; Supply of inputs — Irrigation, power, seed and fertilizers; Pricing of inputs and role of subsidies; Role of Public investment and capital formation in Indian agriculture; Agricultural and non agricultural pricing policies in India. Food security issue and Public distribution system, Recent initiative for second green revaluation, Globalization of Indian economy and problems and prospects of Indian agriculture; Impact of World Trade Organization on Indian agriculture.

## III Agricultural Transformation and Rural Economy (15)

Role of agriculture in rural economic development, rural credit markets, Micro Finance in India: Microfinance and rural development, SHGs-Bank Linkage Programmes and emerging scenario of Microfinance regulation in India, Causes and effects of rural urbanization Migration, Harris-Todaro model of rural-urban migration, Agricultural wages in India; Non-agricultural rural employment- Trends and determinants;

## IV Diversification of Rural Economy (15)

Diversification of Agriculture-Dairy Farming, Horticulture, Floriculture, Fishery, and Farm Forestry; Rural Industrialisation- Importance, Programmes, Progress and Problems of Small- Scale and Cottage Industries and Remedial Measures. Rural social infrastructure: issues and problems in Educational and Health infrastructure; Housing and Sanitation; Drinking Water Supply; Rural Transport and Communication; Rural Electrification.

### Reading List:

1. Biradar, R.R.(2008): Rural Non-Agricultural Employment in India: An Analysis of Its Determinants and Impact on Poverty and Inequality, Concept Publishing Company, New Delhi
2. Chadha, G. K. and A. N. Sharma (Eds) (1997): Growth, Employment and Poverty: Change and Continuity in Rural India, D K Publishers, New Delhi.
3. Chambers, R. (1983): Rural Development: Putting the Last First, Longman, Harlow.
4. Dandekar, V.M. and N. Rath (1971): Poverty in India, GIPE, Pune.

5. Dantwala, M. L. (1973): Poverty in India: Then and Now, 1870-1970, Macmillan, Bombay.
6. Dantwala, M. L. and Others (Ed) (1986): Indian Agricultural Development since Independence: A Collection of Essays, Oxford and IBH Publishing Co.Pvt. LTD. New Delhi.
7. Gupta. K.R. (Ed) (2003): Rural Development in India, Atlantic Publishers and Distributors, New Delhi.
8. Jain, Gopal Lal (1997): Rural Development, Mangal Deep Publications, Jaipur,.
9. Singh, Katar (1986): Rural Development: Principles, Policies and Management, Sage Publications, New Delhi, (Second Edition).
10. Karalay, G. N. (2005): Integrated Approach to Rural Development: Policies, Programmes and Strategies, Concept Publishing Company, New Delhi
11. Maheshwari, S. R. (1985): Rural Development in India, Sage, Publications New Delhi.
12. Satya Sundaram, I. (1997): Rural Development, Himalaya Publishing House, Delhi.
13. Mehta, Shiv R. (1984): Rural Development Policies and Programmes, Sage Publications, New Delhi.
14. Srinivasan, T. N. and P. K. Bardhan (Eds) (1974): Poverty and Income Distribution in India, Statistical Publishing Society, Calcutta.
15. Tyagi, B. P. (1998): Agricultural Economics and Rural Development, Jai Prakash Math and Co., Meerut.
16. Visaria, P. and R. Basant Ed) (1994): Non-Agricultural Employment in India: Trends and Prospects, Sage Publications, New Delhi.

## Economics of Infrastructure and Development

Total Credit: 04

Subject Code: ECPHD04

### Preamble

The important role infrastructure plays in a country's development need not be reiterated. In case of developing countries, lack of adequate infrastructure has been held as a major obstacle to growth. Of the various categories of infrastructure, the category of social overhead capital has gained particular prominence. The contents of the paper 'Economics of Infrastructure' exposes the student wholly to issues involved in development of infrastructure in developing countries like India.

### I Infrastructure and Economic Development – Concepts (10)

Definition, Meaning, Classification of infrastructure (Social and Economic Infrastructure); Infrastructure and economic development — Infrastructure as a public good; Special characteristics of public utilities. The peak-load, Off-Load Problem, Dual Principle Controversy; Economies of scale of Joint supply; Marginal Cost Pricing vs. other methods of pricing in public utilities; Cross-subsidization — free prices, equity and efficiency. Urban and Rural Infrastructure schemes in India – PURA; Spatial aspects of development and linkages with infrastructure.

### II Physical Infrastructure – I (Energy, Electricity, Gas and water Supply) (15)

Primacy of Energy in the Process of Economic Development. Factors Determining Demand for Energy; Effects of Energy Shortages. Energy Conservation. Renewable and Non-conventional Sources of Energy. Energy Modelling. The Search for an Optimal Energy Policy in the Indian Context.

Electricity, Gas and Water Supply: Bulk Supply and Pricing of Electricity. The Relative Economics of Thermal, Hydel and Nuclear Power Plants. The Case for a National Power Grid. Financing Water Utilities. Urban and Rural Water Supply. The Exploitation of Natural Gas. Pricing Problem.

### III Physical Infrastructure – II (Transport & Communication) (15)

Significance of Transport Infrastructure; Factors affecting Transport Network – Growth and Present status of Transport System in India; Impact of Transport Development on location of economic activities; Transport Sector Reforms in India

Postal and Telegraph. Telecommunication and Information Technology; Major issues in IT – Growth and present status of IT industry in India; Implications for Regional Development

### IV Social and Tourism Infrastructure (10)

Growth and present status of Social Infrastructure – Education, Health, Housing and Banking & Insurance; Impact of Social Infrastructure on Human and Economic Development, and development of social services in Indian plans-tourism and economic development - role of state in promoting tourism - tourism planning - infrastructural requirements for marketing tourism

### V Infrastructure Demand & Financing (10)

Demand Simulation for Infrastructure; Financing Needs; Infrastructure Financing in Plan Period; Infrastructure Financing in Recent Times; Privatisation of Infrastructure and PPP Models; Implications for Infrastructural Development

#### References:

Baru, R.V. (1998), Private Health Care in India : Social Characteristics and Trends, Sage Publications, New Delhi.

Becker, G.S. (1974), Human Capital (2nd Edition), National Bureau of Economic Research, New York.

Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.

Centre for Monitoring Indian Economy (1996), India : Energy Sector, CMIE, Mumbai.

Crew, M.A. and P.R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.

Indian Council of Social Sciences Research (ICSSR) (1976), Economics of Infrastructure Vol. VI, New Delhi.

McMohan, W.W. (1999), Education and Development : Measuring the Social Benefits, Oxford University Press, Oxford.

National Council of Applied Economic Research (NCAER) (1996), India Infrastructure Report : Policy Implications for Growth and Welfare, NCAER, New Delhi.

Parikh, J. (Ed.) (1997), Energy Models for 2000 and Beyond, Tata McGraw-Hill, New Delhi.

Parikh, K.S. (Ed.) (1997), India Development Report 1997, Oxford, New Delhi.

Parikh, K.S. (Ed.) (1999), India Development Report — 1999-2000, Oxford, New Delhi.

### **Environmental and Resource Economics**

**Total Credit: 04**

**Subject Code: ECPHD05**

#### **Preamble**

Due to the speedy growth of industries and population there is an increasing demand for the environmental resources. The free goods in the nature have now become the priced goods in the economy. The various types of pollutions have created the problems to the human beings as well as the biosphere. The quality of environmental resources is being fastly deteriorated. This paper would enable the students to know about the relationship between environment and economy, global Issues relating to environmental problems, policies and protection.

#### **1. Introduction to Environmental Economics (10)**

Basic concepts of Environmental Economics, Economy-Environment interaction, Market failure, Property rights, Open access resources, Collective action, Environment and development trade-off, Environmental Kuznet's curve.

#### **2. Economics of Exhaustible and Renewable Resources (15)**

Basic concepts - Hotelling's rule, Solow-Harwick's rule, Market structure and optimal extraction policy, Uncertainty and the rate of resource extraction, Resource scarcity; Economic models of forestry and fisheries, Economics of biodiversity.

### **3. Environmental Valuation (10)**

Market and non-market valuation; Physical linkage methods; Revealed and stated preference methods, Hicksian equivalence, Exposure to the type of models.

### **4. Environmental Policy (10)**

Command and control versus market mechanisms; Uncertainty and instrument choice, Regulatory compliance and enforcement, Eco-taxes and other fiscal measures.

### **5. Global Environmental Issues (15)**

Trans-boundary pollution, economics of global warming, Climate change negotiations, Kyoto protocol, Impact of trade on environment and environment on trade, Porter's hypothesis, Pollution havens hypothesis.

#### **Suggested Readings –**

1. Kolstad, C., Environmental Economics, Oxford University Press, 2000.
2. Baumol, W.J, and W.E. Oates, The Theory of Environmental Policy, Cambridge University Press, 1988.
3. Freeman, A. M., The Measurement of Environmental and Resource Values, 2<sup>nd</sup> Edition, Resources for the Future, 2003.
4. Hanley, N., J.F. Shogren, and B. White, Environmental Economics: In Theory and Practice, Macmillan India Ltd., 1997.

## Financial Economics

Total Credit: 04

Subject Code: ECPHD06

### Preamble

The positive and significant role of finance in the process of growth and development has been very well recognized in the literature and indeed has become more important during the last two decades as the financial systems of different countries have become integrated in the process of globalization. India is no exception and has taken far reaching measures since 1991 in this direction. This paper focuses on the financial system and its relationship with the financial markets both at the national and international levels.

#### 1. Introduction (10)

Nature and Scope of Financial Economics; Basic financial concepts, Economics of capital Budgeting; Investment Criteria, Estimation of project Cash Flows, Risk Analysis

#### 2. Financial System (30)

Financial System-Meaning, constituents, functions and importance of financial system; Indian Banking System: Banking structure in India, Structure and functions of commercial banks; Functions of Central bank, Monetary policy and Central bank; Money market: Introduction, Treasury bills, Commercial paper, Certificates of deposit; Call money market, Money market mutual funds; Capital market: Primary market-shares and debentures-Types and their issuance; Secondary market- Stock exchange - Stock market indices, Methods of trading; Reforms in the Indian stock market; Role of SEBI, Debt market: Introduction; Private corporate debt market, Government securities market; Capital asset pricing model; Arbitrage pricing theory; Stock market efficiency.

#### 3. Security Analysis (15)

Price-value interaction model- Buy-sell decision rules, information traders and liquidity traders, Samuelson's continuous equilibrium, Passive and Aggressive trading. Risk and Return: Expected return and variances-portfolios systematic and unsystematic risk-diversification and portfolio risk Mean- Variance Criterion -systematic risk and

beta-efficient frontier characteristic lines- optimum portfolio -capital asset pricing model, arbitrage pricing theory, Valuation: Bond valuation-equity valuation.

#### 4. Analysis of Financial markets: Fundamental analysis, Technical analysis.(05)

#### Suggested Readings:

1. Bhole, L M, [Financial Institutions and Markets: Structure, Growth and Innovations](#), Fourth Edition, Tata McGraw-Hill Publishing Co., New Delhi, 2004.
2. Brealey, R. and S. Myers, *Principles of Corporate Finance*, Fifth edition, New York, McGraw Hill, 1997.
3. Copeland, T. E. and J. F. Weston, *Financial Theory and Corporate Policy*, Addison Wesley, 1992.
4. Elton, E.J and M.J. Gruber, *Modern Portfolio Theory & Investment Analysis*, Fourth edition, John Wiley & Sons 1991.
5. Houthakker, H.S. and P.J. Williamson, *Economics of Financial Markets*, Oxford University Press, 1996.
6. Khan, M Y, *Indian Financial System*, Seventh edition, Tata McGraw-Hill Publishing Co., New Delhi, 2009.

#### Gender Economics

Total Credit: 04

Subject Code: ECPHD07

#### Preamble

Gender biases in societal practices and development policies have resulted in persistent gender inequalities. It is increasingly being realized that mitigating such inequalities and enhancing women's capabilities and entitlements are crucial to the overall development of the country. This course "Economics of Gender and Development" would provide students an understanding of the nature of the economic role of women and their contribution to the national economy on the basis of a scientific and non-sexist analysis. The modules incorporated

in this course provide an analysis of issues at the theoretical level and also with regard to specificity of issues prevailing in the Indian context.

### **I. Introduction and Review (10)**

Families and households, Importance and concepts of women studies — Women in patriarchal and matriarchal societies and structures, patrilineal and matrilineal systems and relevance to present day society in India, Gender bias in the theories of value, distribution, and population, Women in the economic history , Race, class, and the economics of gender , The economics of gay identity D'Emilio

### **II. Demography (10)**

Demography of female population: Age structure, mortality rates, and sex ratio — Causes of declining sex ratios and fertility rates in LDCs and particularly India — Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources, and their impact on female mortality and fertility, economic status, and in work participation rate.

### **III. Women in Decision Making (5)**

Factors affecting decision making by women; property rights, access to and control over economic resources, assets; Power of decision making at household, class, community level; Economic status of women and its effect on work-participation rate, income level, health, and education in developing countries and India; Role of kinship in allocating domestic and social resources.

### **IV. Gender and the Economics of the Labor Market (15)**

Labour force participation patterns, Labour force participation and family structure Factors affecting female entry in labour market; Supply and demand for female labour in developed and developing countries, particularly India; Studies of female work participation in agriculture, non-agricultural rural activities, informal sector, cottage and small-scale industries, organized

industry, and services sector; Discrimination : Labour market biases and gender discrimination  
Compensating Differentials : Wage differentials in female activities; Determinants of wage differentials; gender, education, skill, productivity, efficiency, opportunity; Structures of wages across regions and economic sectors. Feminisation of the economic sector, Human Capital,

#### **V. Social Security and Social Protection for Women (10)**

Social security of women: entitlements, ensuring economic independence and risk coverage, access to credit and insurance markets; Role of voluntary organizations, self-help groups in providing social security; effectiveness of collective bargaining; Review of legislation for women's entitlements, protection of property rights, social security — Schemes for safety net for women; Need for female labour unions; affirmative action for women and improvement in their economic and social status.

#### **VI. Gender Planning, Development Policies and Governance ( 10)**

Gender and development indices; Mainstreaming gender into development policies; Gender planning techniques; Gender sensitive governance; Paradigm shifts from women's wellbeing to women's empowerment; Democratic decentralization (panchayats) and women's empowerment in India, Gender Budgeting

### **Suggested Books and Readings**

#### **Books:**

Blau, Francine, Marianne Ferber and Anne Winkler 1998. *The Economics of Men, Women and Work* (Englewood Cliffs, NJ: Prentice Hall, Third Edition). (BFW)

Boserup E. (1970), *Women's Role in Economic Development*, George Allen and Unwin, London.

Desai, N. and M.K. Raj. (Eds.) (1979), *Women and Society in India*, Research Centre for Women Studies, SNDT University, Bombay.

Government of India (1974), *Towards Equality — Report of the Committee on the Status of Women in India*, Department of Social Welfare, Ministry of Education and Social Welfare, New Delhi.

Hoffman, Saul D. and Susan L. Averett 2004. *Women and the Economy: Family, Work and Pay* (Addison-Wesley-Longman). (HA)

Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999), *Gender, Population and Development*, Oxford University Press, New Delhi.

Jacobsen, Joyce P.. 1998. *The Economics of Gender*, 2<sup>nd</sup> edition, New York: Blackwell.

Jacobsen, Joyce. 1998. *The Economics of Gender* (Cambridge: Blackwell, 2nd Edition).(On reserve at Odegaard).

Stack, Carol B. 1974. *All Our Kin: Strategies For Survival in a Black Community*. New York, NY: Harper & Row.

Seth, M. (2000), *Women and Development : The Indian Experience*, Sage Publications, New Delhi. Economics 179

Srinivasan K. and A. Shroff (1998), *India : Towards Population and Development Goals*, Oxford University Press, New Delhi.

Venkateswaran, S. (1995), *Environment, Development and the Gender Gap*, Sage Publications, New Delhi.

Wazir, R. (2000), *The Gender Gap in Basic Education : NGOs as Change Agents*, Sage Publications, New Delhi.

### Readings:

D'Emilio, John. 1993. "Capitalism and Gay Identity," reprinted in *The Lesbian and Gay Studies Reader*, Henry Abelove, et. al., eds., New York: Routledge.

Ehrenreich, Barbara and Deirdre English. 1973. "Women and the Rise of the American Medical Profession," reprinted in Wendy McElroy, ed., *Freedom, Feminism, and the State*, 2<sup>nd</sup> edition, New York: Holmes and Meier, 1991.

Hochschild, Arlie Russel. 1989. *The Second Shift*, New York: Avon, chapter 4.

McKenzie, Richard and Gordon Tullock. 1975. *The New World of Economics*, Homewood, IL: Richard Irwin, chapter 9.

Rhoads, Steven E.. 1993. *Incomparable Worth: Pay Equity Meets the Market*, Cambridge: Cambridge University Press, chapter 2.

Robinson, John P. and Melissa A. Milkie. 1998. "Back to Basics: Trends in and Role Determinants of Women's Attitudes Toward Housework," *Journal of Marriage and the Family* 60, February: 205-18.

Segalen, Martine. 1996. "The Industrial Revolution: From Proletariat to Bourgeoisie," in Andre Barguiere, et. al., eds, Sarah Hamburg Tenison, trans., *A History of the Family* vol. 2, Cambridge, MA: MIT Press.

Walker, Deborah. 1995. "Feminism and Economics: Legislation or Markets?" in Rita J. Simon, ed., *Neither Victim nor Enemy*, Lanham, MD: Women's Freedom Network and University Press of America.

#### **Videos:**

*1900 House* (selected episodes). Shown on the campus network

## HEALTH ECONOMICS

Total Credit: 04

Subject Code: ECPHD08

### Preamble

Health status of the population forms a major variable in measuring the Human Development Index. Health infrastructure provisions both public and private sector assumes significance in the overall health policy of a country. The present paper analyses the national health scene, correlation of health output and input indicators with level of economic development. Resource allocation in the health sector both public and private sector, evaluation of benefits and costs of health services, financing of health services and role of government and institutions also is examined.

### 1. Introduction to Health Economics (10)

Defining Health Economics. Importance of Health Economics – Essential Features.

Basic concepts of health economics: Health, Health Care, Birth rate, Fertility rate, Death rate, IMR, CMR, MMR, Morbidity rate (Acute and Chronic), Disability Adjusted Life Year (DALY), Quality Adjusted Life Year (QUALY), Sex Ratio.

### 2. Demand for Health and Health Care (10)

Welfare economics of medical care, production of health, demand for health and health care, equity, efficiency and the need, link between development and health, investing in health for economic development

### 3. Health Production Function (10)

Nature of production function, different types of production function and their applications, national and international perspective, distributional inequities in opportunity and commercialization of medical and para-medical education, cost escalation in the health care system, easy access and availability to appropriate technology, need for regulation and control

### 4. Health Care Incentives, Costing and Financing(10)

Goals of health care provision and financing, competitive health insurance and risk adjustment, Demand and supply of health insurance, asymmetric information and agency, costing of health

care market insurance, self-insurance and protection, employment based insurance, health insurance in India, , public-private partnership and the role of state

5. **Measuring and Valuing Health Outcomes (10)**

Measurement of health state utilities, QALYs and its alternatives- different approaches of valuing health, multi-attribute utility instruments and their development

6. **Health Care in India(10)**

Various health indicators and its recent trend, health care expenditures, target of health care and achievements, different options for financing healthcare, taxation, user fees, health insurance, role of urban and rural local bodies, role of WHO, economic impact of HIV/AIDS in India and gender issues

**Suggested Readings -**

1. CII-Mckinsey Report, *Healthcare in India: The Road Ahead*, 2004.
2. Culyer, A. J. and J.P. Newhouse (eds.), *Handbook of Health Economics, Volume 1 A & 1 B*, North-Holland, 2000.
3. Folland, S., A.C. Goodman and M. Stano, *Economics of Health and Health Care*, Fifth edition, Pearson Prentice Hall, 2006.
4. Pradhan, B.K. and R Sundar, *Gender Impact of HIV and AIDS in India*, United Nations Development Programme, 2006.
5. Pradhan, B.K. and R Sundar, *Socio-economic impact of HIV AIDS in India*, United Nations Development Programme, 2006.
6. Reports of WHO.
7. Zweifel, P., *Health Economics*, Oxford University Press, 1997.

## International Economics and Policy

Total Credit: 04

Subject Code: ECPHD09

### Preamble

International Economics and Economic Policy focuses on contributions that are relevant to economic policy, emphasizing both theoretical and empirical papers. In particular, the course focuses on comparative economic policy; international political economy, including international organizations and policy cooperation; monetary and real/technological dynamics in open economies; globalization and regional integration; trade; migration; international investment; internet commerce; and regulation.

### I Theory of International Trade (15)

Mercantilist theory, Classical and Neo-classical (Adam Smith, Ricardo, J.S.Mill, H-O Model, Haberler), Theory of Opportunity Cost, New construction of Ricardian Theory, New Trade Theories (Vernon, Posner, Cannon) Technological dynamics, Factor intensity Reversal, Leontief Paradox, Stolper Samuelson theorem, Theory of Change in Factor Endowment, Factor Equalization Theorem, Specific Factor Model, Immiserizing Growth, Theory of Custom Union, Gains From Trade, Inter and Intra Industry Trade Model, Free trade better than no trade, Restricted trade better than no trade and free trade

### II External Trade Policy. (10)

Exim policy, ECGC, Export Promotion Councils, DGFT, Incoterm, Tariff and Non-Tariff Barriers, Terms of trade, Protection, New Economic Policy

### III The Theory of International Finance (15)

Prices in the open economy: purchasing power parity, Financial markets in the open economy, Open economy macroeconomics, exchange rate determination: Flexible prices: the monetary Model, Fixed prices: the Mundell-Fleming model, Coordination of Fiscal and Monetary policy under fixed and flexible exchange rate, Asset Market Model, Exchange rate dynamics,

Expectations, Balance of Payment and adjustment Mechanisms, Foreign Trade Multiplier and repercussion effect

#### **IV Open Economy Policy Analysis. (15)**

International Monetary system, Euro currency, Euro dollar, Dollarization, SDR, China and reserve currency issues. Optimum currency areas and monetary union, Recent Financial crisis

Regional Trade Agreement, Economic Integration in North America, The European Union: Many Markets into One, ASEAN, Trade and Policy Reform in Latin America, Emerging Economies, BRICS and the world economy,

#### **V International Financial Architecture (5)**

IMF, World Bank, WTO, GATT, UNCTAD, Reforming the international institutional architecture

#### **Suggested Reading**

Pugel, T.A. (2008), *International Economics*, 13th Edition, Tata Mcgraw hill publishing Co, New Delhi.

Bhagwati, J. N., A. Panagariya and T.N.Srinivasan(1998), *Lectures on International Trade*, OUP,NewDelhi, Second Edition.

Krugman, P.A. and M Obstfeld (2003), *International Economics: Theory and Policy*,Sixth Ed.

Salvatore Dominick (2010), *International economics*, 8<sup>th</sup> edition, Wiley Publication, New Delhi, ISBN: 978-81-265-1413-7

Laurence Copeland (May, 2008), *Exchange Rates and International Finance* 5th Edition Paperback, ISBN13: 9780273710271

Leontief, W. W. (1953). "Domestic Production and Foreign Trade: The American Capital Position Re-examined". *Proceedings American Philosophical Society* 97: 332–349.

Leamer, E.E. (1980). "The Leontief Paradox Reconsidered". *Journal of Political Economy* 88: 495–503.

Y. Shiozawa (2007) A New Construction of Ricardian Trade Theory: A Many-country, Many-commodity with Intermediate Goods and Choice of Techniques, *Evolutionary and Institutional Economics Review*, 3(2): 141-187.

Jones, Ronald W. 1961 Comparative Advantage and the theory of Tariffs; A Multi-Country, Multi-commodity Model, *Review of Economic Studies*, 28(3): 161-175.

R. Dornbusch; S. Fischer; P. A. Samuelson 1977 Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods, *The American Economic Review*, 67(5): 823-839.

Shiozawa, Y. 2007 A New Construction of Ricardian Trade Theory—A Many-country, Many-commodity Case with Intermediate Goods and Choice of Production Techniques—, *Evolutionary and Institutional Economics Review* 3(2): 141-187.

Shiozawa, Y. 2007 A New Construction of Ricardian Trade Theory—A Many-country, Many-commodity Case with Intermediate Goods and Choice of Production Techniques—, *Evolutionary and Institutional Economics Review* 3(2): 141-187.

Chipman, J. (1965) "A Survey of the Theory of International Trade, Part I: The Classical Theory," *Econometrica* 33: 477–519.

Balassa, B. (1963) "An Empirical Demonstration of Classical Comparative Cost Theory," *Review of Economics and Statistics* 45: 231–8.

Haberler, Gottfried (1936) *The Theory of International Trade*, New York: Macmillan, ch. 12.

Heller, H. Robert (1968) *International Trade, Theory and Empirical Evidence*, Englewood Cliffs, NJ: Prentice Hall, ch. 4.

Rybczynski, T. M. (1955) "Factor Endowments and Relative Commodity Prices," *Economica* 22: 336–41; reprinted in R. Caves and H. Johnson (eds) (1968) *Readings in International Economics*, Homewood, IL: Irwin.

Samuelson, P.A. (1949) "International Factor-Price Equalization Once Again," *Economic Journal* 59: 181–97.

Stolper, W. and Samuelson, P.A. (1941) "Protection and Real Wages," *Review of Economic Studies* 9: 58–73.

Vernon, R. (1966) "International Investment and International Trade in the Product Cycle," *Quarterly Journal of Economics* 80:190–207.

Balassa, B. (1975) "Trade Creation and Diversion in the European Common Market," *European Economic Integration*. Amsterdam: North-Holland.

Brown, A., Deardorff, A., and Stern, R. (1992) "North American Integration," *Economic Journal* 102: 1507–1518.

Frankel, J. (1997) *Regional Trading Blocs in the World Economic System*, Washington, DC: Institute for International Economics.

Hufbauer, G. and Schott, J. (1993) *NAFTA: An Assessment*, Washington, DC: Institute for International Economics.

Staiger, Robert (1995) "International Rules and Institutions for Trade Policy," in G. Grossman and K. Rogoff

Jackson, John (1997) *The World Trading System, Law and Policy of International Economic Relations*, 2nd edn, Cambridge, MA: MIT Press.

Amiti, M. and Freund, C. (2007) "An Anatomy of China's Export Growth," Paper prepared for Global Implications of China's Trade, Investment and Growth Conference, IMF Research Department.

Balassa, B. (1971) *The Structure of Protection in Developing Countries*, Baltimore: Johns Hopkins University Press.

Havrylyshyn, O. (1990) "Trade Policy and Productivity Gains in Developing Countries," *World Bank Research Observer*, 1-24.

## Poverty, Inequalities and Unemployment

Total Credit: 04

Subject Code: ECPHD10

### Preamble

This course examines the economic dimensions of income inequality, poverty, unemployment and discrimination. The course begins with a review of some tools of economic analysis that are most useful in these areas of economics. The economic functions of government are discussed. Variations in economic analysis of markets and government across the political economic spectrum are examined. The main body of the course then focuses on economic facts, theories and public policies concerning income inequality, poverty and unemployment. This course explores how the discipline of economics can explain and analyse the causes and effects of poverty and discrimination on various parts of the population.

### I Introduction and Overview (5)

Overview of the Economics of Income Inequality, Poverty and Discrimination, and Unemployment

### II Concepts and Measures of Poverty (15)

Introduction to the Economics of Poverty; Poverty Facts and Data; Theoretical Causes of Poverty; Government Policies concerning Poverty, Poverty Measurement and Issues in measuring poverty, FGT index, Head count ratio, international poverty measure, Human

poverty index, Indian poverty measure Short-Run Poverty, Long-Run Poverty, and Intergenerational Poverty, Global Poverty, evolution of poverty policy, consequences of poverty and mobility

### **III Inequality: Trends and Measurement (15)**

Introduction to the Economics of Income Inequality, Income inequality: theories, empirical Studies: Tendulkar, Minhas, Sundaram, Sen, Income Distribution, Poverty & Discrimination: Facts, measurement of inequality (Lorenz curves and Gini coefficients, Inverted U Curve hypothesis), Theoretical Determinants of Personal Income; Theoretical Determinants of the Functional Distribution of (Capital and Labour) Income; Government Policies concerning Income Inequality Global Inequality

### **IV Trends in Employment and Wages (10)**

Unemployment- efficiency wage theory as an explanation for wage rigidity and involuntary unemployment, Collusive theory of unemployment. Employment and Training Programs, Labour Market Policies, Unemployment in India, Frictional, Structural, and cyclical unemployment

### **V Discrimination and Welfare Reform (10)**

Introduction to the Economics of Discrimination; Discrimination Facts and Data; Theoretical Causes of Discrimination; Government Policies concerning Discrimination, Measuring labour market discriminations, Anti-Discrimination Government Legislation and Policies, Welfare policies, Social Security

### **VI Inclusive Growth (5)**

Meaning, rural-urban gap, what can be done? Challenges of equitable and inclusive growth, specific focus on weaker section of the society

### **Recommended**

- Lawrence Mishel, Jared Bernstein and Sylvia Allegretto, State of Working America, 2008/2009, Cornell University Press, 2009 (M)  
Benerjee and Rufloo, "Poor Economics"
- 6. Frank Ackerman et al, The Political Economy of Inequality, Island Press, 2000 (P)
- 7. Edward N. Wolff, Economics of Poverty, Inequality and Discrimination, South-

Western, 1997(W)

- 8. Bradley R. Schiller, *Economics of Poverty and Discrimination*, 9th ed., Prentice Hall, 2004 (S)
- 9. Randy Albelda et al, *The War on the Poor: A Defense Manual*, New Press, 1996 (A)
- 10. J. Teller-Ellsberg et al, *Field Guide to the U.S. Economy – Revised and Updated*, New Press, 2006 (T)
- Changing Poverty, Changing Policies. Ch. 14, R. Haveman. —What Does it Mean to be Poor in a Rich Society?¶
- U.S. Census Bureau. 2009. *Income, Poverty, and Health Insurance Coverage*, Current Population Reports (Washington, DC), available from: <http://www.census.gov/prod/2009pubs/p60-233.pdf>
- M. Orshansky. "Counting the Poor," *Social Security Bulletin*, 1965.
- Bradley R. Schiller, *The Economics of Poverty and Discrimination*, 10th edition, Prentice Hall, 2007. (Denoted 'EPD' below.)
- Randy Albelda, Robert Drago, and Steven Shulman, *Unlevel Playing Fields: Understanding Inequality and Discrimination*, 2nd edition, Economic Affairs Bureau, Inc., 2005. (Denoted 'UPF' below.)
- There will also be several readings found on e-reserve. More information will be handed out separately about how to access these readings.
- R. Blank, *It Takes a Nation*, 13-30.
- \*M. Corcoran, 2008. —Childhood Poverty, Race and Equal Opportunity.¶ in S.B. Newman. *Educating the Other America*, pp 35-51. (Ctools)
- S.H. Danziger. (2007). —Fighting Poverty Revisited: What Did Researchers Know 40 Years Ago? What Do We Know Today?¶, *Focus*, vol. 25(1): 3-11, <http://www.irp.wisc.edu/publications/focus/pdfs/foc251a.pdf>

- Changing Poverty, Changing Policies. Ch. 2, Meyer and Wallace, —Poverty Levels and Trends in Comparative Perspective|| Ch 3. Blank. —Economic Change and the Structure of Opportunity for Low-Skilled Workers.|| pp 35-91.
- Emmanuel Saez, 2008. —Striking it Richer: The Evolution of Top Incomes in the United States (Update Using 2006 Preliminary Estimates.|| <http://elsa.berkeley.edu/~saez/saez-UStopincomes-2006prel.pdf>
- C. Goldin and L.F. Katz. 2009. —The Future of Inequality; The Other Reason Education Matters So Much.|| Milken Institute Review, Third Quarter, 2009. pp 27-33. [http://www.economics.harvard.edu/faculty/goldin/files/GoldinKatz\\_Milken.pdf](http://www.economics.harvard.edu/faculty/goldin/files/GoldinKatz_Milken.pdf)
- Changing Poverty Changing Policies. Ch 3. R. Blank —Economic Change and the structure of opportunity for less-skilled workers.||
- Pradhan and Roy, “Well -being of Indian households” Tata McGraw Hill, New Delhi

## Public Finance and Policy

Total Credit: 04

Subject Code: ECPHDII

### Preamble

Role and functions of the Government in an economy have been changing with the passage of time. The term ‘Public Finance’ has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures. This course covers the rationale for government provision of goods in a market economy and the effects of taxes on economic efficiency. We will also contrast the traditional public finance view of the role of government with the public choice school of thought. The primary emphasis is on expenditures and taxes at the federal level. As a part of the broader fiscal restructuring plan of

the central and state governments in India, reforms have been initiated with particular emphasis on radical reforms in indirect taxes both in terms of tax policy reforms like base broadening, elimination of tax concessions and reduction in the number of tax rates and rationalization of tax structures, as well as tax administrative reforms like modernization of tax administration and extensive use of IT.

## **Introduction**

Public Finance – Definition and Scope; Public and Private finance. The Role of the Government in a changing perspective, Fiscal Functions of the Government, Co-ordination among these functions. (6)

## **Welfare Foundations of Public Economics**

Distinction between Private and Public Goods, Pareto Optimality, Theory of Second best, Market Failure, Optimal provision of Public Goods, Free Rider Problem. The Pure Theory of Public Goods by Samuelson. (10)

## **Public Expenditure**

Growth and Structural changes in public expenditure, Wagner's Law, Peacock and Wiseman's hypothesis, Public Choice in Determining the Level of Public expenditure, Public expenditure on health, education and subsidies in India, Criteria for Expenditure Evaluation - Valuation of Benefit and Cost, Choice of Discount rate.(13)

## **Principles of Taxation**

Principle of Fiscal Neutrality, Excess Burden, Principle of Equity, Benefit Principle, Bowen and Lindhal Models, Ability to pay Principle.(7)

## **Tax policy and administration**

Reform in indirect tax structure of India: MODVAT, CENVAT, Value Added Tax (VAT), Issue of taxation of services in India, Goods and Service Tax (GST), Problem of Tax Evasion and Parallel Economy. (12)

## **Issues on Federal Finance in India**

Devolution Criteria, Division of fiscal powers between the centre and states and local bodies, problems of inter-jurisdictional spillovers and issues of tax harmonisation, Report of latest Finance Commission.(12)

### **Suggested Readings:**

1. Richard A. Musgrave (1989), Public Finance in Theory and Practice McGraw Hill Book Company, New York.
2. M. Govinda Rao and Tapas Sen (1998) : Financial Federalism in India, McMillan, Delhi.
3. Arun Kumar (1998) : Black Economy in India, Penguin Books, New Delhi.
4. Buchaman J.M. (1970), The Public Finances, Richard D.Irwin, Homewood.
5. Hemlata Rao (2006) Fiscal Federalism –Issues and Policies, New Country Publications, New Delhi.
6. Atkinson A.B. and J.E. Siglitz (1980). Lectures on Public Economics, Tata MacGraw Hill, New Delhi.
7. Comes R. and T.Sandler (1986) The theory of Externalities, Public Goods and Club Goods, Cambridge University Press, Cambridge.
8. Alan, A. Tait, (1972): The Value Added Tax, McGraw- Hill Publications.
9. National Institute of Public Finance and Policy, (1989): The Operation of MODVAT, NIPFP, New Delhi

## **REGIONAL ECONOMIC ANALYSIS**

**Total Credit: 04**

**Subject Code: ECPHD12**

### **Preamble**

It is being increasingly recognized that market forces do not result automatically in regionally balanced development of economics. For effective and meaningful intervention to pull up economically and socially the less developed regions, it is necessary to understand the dynamics of regional development. This paper attempts to teach to the students the dynamics of regional development right from the meaning and concepts related to regional development to a broad overview of the techniques of regional analysis.

### **I Basics of Regional Economics: (15)**

Need for study of Regional Economics, Definition of a region, Different types of regions, Differences between region and a nation; Regional income, Problems of estimation, Indicators of regional development, Social, Economic and Political factors in regional growth.

## **II Regional Allocation of resources; (15)**

Balanced regional development; Cumulative Causation Models, Regional linkage-spread and backwash effects; Regional Convergence and divergence theories, Regional Polarisation, regional Economic Multiplier.

The basis of interregional trade, Regional trade and factor price equalization, Regional trade and factor migration, issues and challenges in regional trade

## **III Transport costs and location; (15)**

Location and regional growth, Transportation and regional growth, the role of cities in regional development, Thunen's, Weber's theory of location; Locational and weight triangles; Locational interdependence. Locational – Views of Christaller, Losch, Perroux, Florance, Hoover, Polander and Isaxd – Dynamic theory of regions. Hotelling Principle

## **IV Regional Development in India: (15)**

Socio-Economic Regional imbalance in India; Regional planning; Rural urban inequality; Role of Planning commission and finance commission in regional development, Trends in Regional Disparities in Income & Consumption, Sectoral Income and Employment Pattern across regions, Spatial Concentration of Industries in Liberalised Regime, Trends in regional agro production and productivity, Regional Distribution of Infrastructure, Trends in regional disparities in Infrastructure. Key issues in regional development of Rajasthan.

## **READING LIST**

Adelman, I. and C.T. Morris (1973) – Economic Growth and Social Equity in Developing Countries, Stanford, USA

Ahluwalia, M. (1976) – “Inequality, Poverty, and Development”, Journal of Development Economics, Vol. 6

- Anand, S. and R. Kanbur (1993) – “The Kuznets Process and the Inequality-Development Relationship”, *Journal of Development Economics*, Vol. 40
- Anand, S. and R. Kanbur (1993a) – “Inequality and Development: A Critique”, *Journal of Development Economics*, Vol. 41
- Hoover, Edgar M., *An Introduction to Regional Economics*. New York. Alfred A. Knopf, 2nd edition.
- Isard, Walter, (1976), *Methods of Regional Analysis*, The M.I.T. Press Massachusetts and London, England, Chaps, 4,6,7,9 & 11.
- Kuznets, S. (1955) – “Economic Growth and Economic Inequality, *American Economic Review*, Vol. 45,
- Kuznets, S. (1963) – “Quantitative Aspects of Economic Growth of Nations: VIII, Distribution of Income by Size”, *Economic Development and Cultural Change*, Vol. 12.
- Mathur, Ashok (2000), *National and Regional Growth Performance in the Indian Economy, in Reform and Employment*, New Delhi, IAMR and Concept Publishers.
- Needleman, L., (ed.), 1968), *Regional Economics*, Penguin Books Ltd., Part-II, Cha. 4.
- Parioff, Harvey et. al., *Regions, Resources and Economic Growth*. University of Nebraska Press, Lincoln USA. Part II, pp.55-104.
- Richardson, Harry W., (1976): *Regional Economics*, Weidenfold and Nicolson, London, Chaps. 1 to 5,7,9 & 13.
- Shand, Ric and S. Bhide (2000), “Sources of Economic Growth: Regional Dimensions of Reforms,” *Economic and Political Weekly*, Vol. 35, No. 42, October 14.
- Smith, David, (1971), *Industrial Location: An Economic Geography Analysis*, Hohn Wiley, New York.