

AFRICAN ECONOMIC RESEARCH CONSORTIUM

**THE COLLABORATIVE PHD DEGREE PROGRAMME
IN ECONOMICS FOR SUB-SAHARAN AFRICA**

JOINT FACILITY FOR ELECTIVES



AGRICULTURAL ECONOMICS

COURSE OUTLINE

(Revised: September, 2014)

Course Contents

AGRICULTURAL ECONOMICS I (ECON 616):

(Agricultural Production Economics)

- 1 Agriculture in a Development Context (4 Hours)**
 - 1.1 Agricultural Systems and Choice of Technology
 - 1.2 Shifting paradigms in Agricultural Development
 - 1.3 Contributions of Agriculture to Economic Development
 - 1.4 Agriculture, Environment and Development

- 2 Agricultural Production Economics (12 Hours)**
 - 2.1 Production Functions
 - 2.2 Farm Costs and Size Economies
 - 2.3 Profit Functions
 - 2.4 Analysis of Farm Risks and Uncertainties
 - 2.5 Optimization Techniques in Farm Analysis

- 3 Technological Change in Agriculture (6 Hours)**
 - 3.1 Technological Innovations
 - 3.2 Technology Choice and Transfer
 - 3.3 Agricultural Research and Extension in Africa
 - 3.4. Impact of Technological Change on Resource Allocation and Environment

- 4 Agricultural Household Models (8 Hours)**
 - 4.1 Demand Functions
 - 4.2 Agricultural Household Models and Applications
 - 4.3 Household Resource Allocation (Labour and Land)
 - 4.4 Revenue and Price Effects on the Household Welfare

- 5 Quantitative Approaches to Agricultural Decision (6 Hours)**
 - 5.1 Game Theory for Agricultural Risk Analysis
 - 5.2 Partial Equilibrium for Agricultural Households' Welfare Analysis
 - 5.3 Multisectoral Model
 - 5.4 Social Accounting Matrix
 - 5.5** General Equilibrium Models
 - 5.6 Policy Analysis Matrix (PAM)
 - 5.7 Data Collection, Processing and Analysis

AGRICULTURAL ECONOMICS II (ECON 617):

(Agricultural and Trade Policies)

- 
- 6 Policy Environment (6 Hours)**
- 6.1 Rationale for Policy Intervention
 - 6.2 Role of Stakeholders
 - 6.3 Agricultural Policy Instruments
- 7 Agricultural Markets and Food Price Policies (10 Hours)**
- 7.1 Information, Contracts and Incentives
 - 7.2 Agricultural Commodity Price Policies
 - 7.3 Advanced Food Policy Analyses
 - 7.4 Agricultural Credit Policies
 - 7.5 Agricultural Labour Markets Policies
 - 7.6 Agricultural Land Policies
- 8 Rural Infrastructure and Institutional Supports for Agricultural Development (4 Hours)**
- 8.1 Advanced Issues in Rural Infrastructure Studies
 - 8.2 Rural Institutions for Agricultural Development
- 9 International Agricultural Trade and Policies (8 Hours)**
- 9.1 International Price Formation
 - 9.2 Agricultural Protection and Export Promotion
 - 9.3 International Trade Negotiations and Agreements
 - 9.4 Trade and Regional Integration in Africa
- 10 Macroeconomic Adjustments and Agricultural Development (8 Hours)**
- 10.1 Emerging Issues on Agricultural Development and Structural Transformation
 - 10.2 MDGs and Agriculture
 - 10.3 NEPAD, CAADP Process and Agricultural Development
 - 10.4 Global Financial Crisis and Agricultural Development in Africa

Introduction, Duration and Scope of the Course

This course is designed to build an understanding of critical concepts of economic theory and their applications to issues in agriculture. It will also help to produce highly skilled applied economists with strong quantitative and analytical skills which are increasingly required by many private and public agencies in Africa. Graduates will therefore be well prepared for productive careers in research, academia, business, and government especially on the African continent. At the end of the course, students are expected to:

- a) Be well versed in critical thinking and the fundamental principles of agricultural economics from an African perspective.
- b) Have broad-based knowledge about the role and contribution of agriculture to the overall economic development of less developed countries;
- c) Be equipped with the required theoretical tools of economic analysis relevant to the problems of agriculture in developing countries;
- d) Expose students to the empirical techniques of testing theoretical propositions pertaining to agriculture;
- e) Familiarise students with the current policy debates relating to agriculture and with the methodologies used to address policy issues.

To achieve the above objectives, the course shall, whenever possible, focus on Sub-Saharan African examples, case studies and empirical results. The overall purpose of the course is to impress on students that there are no simple answers to the intractable problems facing sub-Saharan Africa in the process of agricultural development.

Organisation of the Course

The course requires a minimum of 72 hours of graduate credit beyond the Masters level. It includes two components: Agricultural Production Economics and Farm Management (Agricultural Economics I), and Agricultural Marketing, Finance and Policy (Agricultural Economics II). Each part of the course is to be covered in a semester of 36 hours of lectures, one week of revisions and a week of final examination. The first part of the course examines topics in agriculture and development and production decisions by agricultural households), while Part II is devoted to policy issues.

Mode of Assessment

The mode of assessment shall be by continuous assessment (tests, group work and presentations, one hour midterm examination) and a three-hour final examination.

Prerequisites

The student is expected to have completed the core courses in micro and macro economics, and quantitative methods. Preferably, he/she should also have taken Agricultural and Applied Economics, and/or Development Economics at the Masters level.

Textbooks

The following books are common to a number of chapters and could be considered as the general reference books:

Ray, D. (1998), *Development Economics*, Princeton University Press, (DR)

Eicher, Carl and J. Staatz (eds.) (1998), *International Agricultural Development.*, 3rd ed., Johns Hopkins.

Sadoulet E. and de Janvry A. (1995), *Quantitative Development Analysis*, Johns Hopkins University Press.

Mundlak, Y., (2000), *Agriculture and Economic Growth: Theory and Measurement*. Harvard University Press.

Deaton A. and Muellbauer, (1986) *Economics and Consumer Behavior*, reprint Ch 14.

Doll, P.D. and Orazem, F. (1984), *Production Economics: Theory with Applications*, 2nd Edition. John Wiley Sons.

Debertin, D, (1994), *Agricultural Production Economics*, 2nd Edition, University of Kentucky.

Ellis, F., (1988), *Peasant Economics: Farm Households and Agrarian Development*, Cambridge University Press, Cambridge.

Singh, I., L Squire, and J. Strauss, (1986), *Agricultural Household Models: Extensions, Applications and Policy*, World Bank, Washington DC.

Detailed Course Outline

AGRICULTURAL ECONOMICS I (ECON 616): AGRICULTURAL PRODUCTION ECONOMICS

1 Agriculture in a Development Context (4 hours)

1.1 Agricultural Systems and Choice of Technology

- Subsistence farming and commercial farming
- Strategies for modernizing agriculture

Main Readings

Netting McC. R. (1993), *Smallholders, Householders: Far Families and the Ecology of Intensive, Sustainable agriculture*, Stanford University Press.

Schultz, T.W., 1964, *Transforming Traditional Agriculture*, Yale University Press, New Haven.

Ball R. and Pounder L. (1996), "Efficient but Poor Revisited", *Economic Development and Cultural Change*, vol. 44, pp 735-760.

Allen, D.W. et Lueck D. (1997), Pourquoi les exploitations familiales sont-elles prédominantes dans l'agriculture, *Revue d'Economie du Développement* n° 2, juin.

Nikos Alexandratos (1995), *Agriculture Mondiale: Horizon 2010*, FAO, John Wiley and Sons, Ch. 1, 4.

Upton, M. (1976). *Farm Mangement in Africa, the Principle of Production Planning*. Oxford University Press.

Upton, M. (1996). *The Economics of Tropical Farming Systems*. Cambridge University Press.

1.2 Shifting paradigms in Agricultural Development

- Modernization and Growth (the 1950s and 1960s).
- The Basic Needs Approach (the 1970s)
- Economic Liberalization (the 1980s and 1990s).
- Contemporary issues in agricultural development

Main Readings

World Bank, (1975), *The Assault on World Poverty -Problems of Rural Development, Education and Health*, The World Bank - Rural Development, pp. 1-98.

World Bank (1981) (The Berg Report) (1981). *Accelerated Development for Sub-Saharan Africa : An Agenda for Action*. The World Bank : Washington DC.

Saris, A.H., (2001), "The Role of Agriculture in Economic Development and Poverty Reduction: An Empirical and Conceptual Foundation", Paper prepared for the Rural Development Department of the World Bank, January.

Khan, M. H., (2001), *Rural Poverty in Developing Countries, Implications for Public Policy*, International Monetary Fund, Washington, March.

Jazairy, I., M. Alamgir, and T. Panuccio, (1992), *The State of World Rural Poverty: An Inquiry into its Causes and Consequences*. IFAD, Rome.

Datt, G., and M. Ravallion, (1998), "Farm Productivity and Rural Poverty in India", *The Journal of Development Studies*, Vol. 34, No. 4, April, pp.62-85.

Alderman, H., L. Cord, N. Chaudhury, C. Cornelius, N. Okidegbe, C.D. Scott, and Schonberger, (2000), "Rural Poverty", World Bank, PRSP Source Book.

Gaiha, R., (1995), "Does Agricultural Growth Matter?" *Development and Change*, Vol. 26, No. 2, April, pp.285-304.

World Bank, (2000), *Can Africa Claim the 21st Century*, Chapter 3, "Addressing Poverty and Inequality", Washington DC.

Ray, D., (1998), *Development Economics*, Princeton University Press, Chapter 8.

Arnon, J., (1987), *Modernisation of Agriculture in Developing Countries*. John Wiley & Sons, New York.

Delgado, C.L., (1996), "Agricultural Transformation: The Key to Broad-based Growth and Poverty Alleviation in Africa". In B. Ndulu and N. van de Walle, eds, *Agenda for Africa's Economic Renewal*, New Brunswick, N.J., Transactions Publishers.

Delgado, C.L., (1998), "Africa's Changing Agricultural Development Strategies: Past and Present Paradigm as a Guide to the Future". *The Brown Journal of World Affairs*, 5(1).

Vyas, V. S., and D. Coasley, (1988), "Stimulating Agricultural Growth and Rural Development in sub-Saharan Africa" Policy Research Working Paper 15, World Bank, Washington D.C.

D'Sylva, E, and K. Bysouth, (1992), *Poverty Alleviation through Agricultural Projects*. An EDI Policy Seminar Report, World Bank.

1.3 Contributions of Agriculture to Economic Development

Main Readings

Timmer, C.P. (1988). "The Agricultural Transformation". In Chenery, H.B. and Srinivasan, T.N. (eds.). *Handbook of Development Economics*.

Schultz, T.W., 1964, *Transforming Traditional Agriculture*, Yale University Press, New Haven.

Ghatak, S., and K. Ingersent, (1996), *Agriculture in Economic Development*. Chapters 2, 3 and 5.

Basu, K, (1998), *Analytical Development Economics: The Less Developed Economy Revisited*, Oxford University Press. Chapter 11.

Hayami, Y., and V.W. Rutam, (1985), *Agricultural Development: An International Perspective*, John Hopkins, Baltimore.

Eicher, C.K. and Staatz, J.M. (eds.) (1990), *Agricultural Development in the Third World*. Chapters 1, 2, and 3.

World Bank (1989). *Sub-Saharan Africa. From Crisis to Sustainable Growth. A long-Term Perspective Study*. The World Bank. Washington D.C.

Eicher, C., (1992), "African agricultural development strategies"; in Stewart, F., Lall, S., and S. Wangwe, (eds.), (1992), *Alternative Development Strategies in Sub-Saharan Africa*; MacMillan, London.

John W. Mellor, (1966), *The Economics of Agricultural Development*. Chapters 1, 2, and 3.

Tsu-tan Fu, and Shun-yi Sheo, (1999), "Agriculture and the Foundation for Development: The Taiwanese Story", in Thorbecke, E, and H.Wan, (eds), *Taiwan's Development Experience: Lessons on Roles of Government and Market*, Kluwer Academic Publishers, Boston/London, Chapter 10.

Supplementary Readings

Reynolds, L.G., (1975), "Agriculture in development theory: an overview"; in Reynolds, L.G., (ed.), (1975), *Agriculture in Development Theory*.

Hoff, K., Braverman, A., and J. Stiglitz, (1993), "Introduction"; in Hoff, K., Braverman, A., and J. E. Stiglitz, (eds.), (1993), *The Economics of Rural Organization: Theory, Practice and Policy*; Oxford University Press (for the World Bank), Oxford (1993).

Beckerman, W., (1992), "Economic growth and the environment: whose growth? and whose environment?"; *World Development*, vol. 20, no. 4.

World Bank, (2000), *Can Africa Claim the 21st Century?*, Chapter Six – "Spurring Agricultural and Rural Development", World Bank, Washington DC.

Batie, S. S., (1992), "sustainable development: concepts and strategies"; in PST (1992).

Cleaver, K. M., (1993), *A Strategy to Develop Agriculture in Sub-Saharan Africa and a Focus for the World Bank*; World Bank Technical Paper No. 203.

John Levy and Michael Havinden, (1982), *The Economics of African Agriculture*, Longmans Group Ltd., UK.

World Bank, (1997), *Rural Development, From Vision to Action. A Sector Strategy Paper*. Washington D.C.

World Bank, (1975), *The Assault on World Poverty: How Non-Formal Education can Help* (Section on Rural Development).

1.4 Agriculture, Environment and Development

- Population growth, industrial growth, urbanization and natural resources
- Interface between agriculture, the environment and development
- Climate change and African agricultural development

Main Readings

Cleaver, K.M., and G. Schreiber, (1994), *Reversing the Spiral: The Population, Agriculture and Environment Nexus in sub-Saharan Africa*. The World Bank. Chapters 1, 2, 3, and 4.

Cleaver, K., (1997), *Rural Development and Environmental Protection in sub-Saharan Africa*. Washington D.C. World Bank.

Blackwell, J.M., M.N. Goodwillie, and R. Webb, (1991), *Environment and Development in Africa – Selected Case Studies*. EDI Development Policy Case Studies, No. 6. The World Bank. Chapters 2 and 3.

Supplementary Readings

Ray, D., (1998), *Development Economics*, Chapters 7 and 9.

Donovan, G., and F. Casey, (1998), *Soil Fertility Management in sub-Saharan Africa*. The World Bank Technical Paper 408, Washington DC.

Drenge, H. E., (1990), “Erosion of Soil Productivity in Africa” *J. of Soil and Water Conservation*, 45(4):432-436.

Voorman, R.L., B.G.J.S. Sonneveld, and M.A. Keyzer, (1998), *African Land Ecology: Opportunities and Constraints for Development*, AERC, Nairobi, Kenya.

Oldeman, L. R., 1998, *Soil Degradation: A Threat to Food Security*. Report 98/01, International Soil Reference and Information Centre, Wageningen, the Netherlands.

Hayami, Y, (2001), “Ecology, History and Development”, *WBRO*, Vol. 16, No. 2, Fall, pp. 169-198.

Margai, R., M. Ali, and D. Byerlee, (2001), *Productivity Growth and Sustainability in Post-Green Revolution Agriculture*, *WBRO*, Vol. 16, No. 2, Fall, pp.199-218.

Angelsen, A., and D. Kamowitz, (1999), *Rethinking the Causes of Deforestation*, *WBRO*, Vol. 14, No. 2, Feb., pp.73-98.

Kevane, M., (1996), “Agrarian Structure and Agricultural Practice in Western Sudan”, *AJAE*, 78(1):236-245.

Carter, M.R., (1997), “Technology, Environment and the Social Construction of West African Agriculture”, *Econ. Development and Cultural Change*, 45(3).

2 Agricultural Production Economics (12 hours)

2.1 Production Functions

Main Readings

Doll, P.D. and Orazem, F. (1984), *Production Economics: Theory and Applications*.

Chambers G.R. (1994), *Applied Production Analysis: a Dual Approach*, Cambridge University press, Ch.2, 3, 4.

Beattie, B.R., C.R. Taylor and W.J. Myles (2009). *The Economics of Production*. Krieger Publishing Company (2nd Edition)

Debertin, D. (1994), *Agricultural Production Economics*, 2nd Edition, University of Kentucky.

Fuss, M and McFadden (eds) (1978), *Production Economics: A Dual Approach to Theory and Applications*, Vol. 1 and 2, Amsterdam, North-Holland.

Taffesse S.A. (1999), “Compulsory Grain Delivery, Crop Prices and the Dynamics of Crop Supply”, Working Paper Series, The Centre for the Study of African Economies, the University of Oxford.

Perrin K. R., and Fulginiti R. L. (1996), Productivity Measurement in the Presence of “Poorly Priced” Goods, *AJAE*, Vol. 78, Number 5, December.

Chambers, R.G. and Pope R.D. (1996), Aggregate Productivity Measures, *AJAE*, Vol. 78, Number 5, December.

Supplementary Readings

Rosegrant M.W., Kasryno F. and Perez N.D. (1998), Output response to prices and Public investment in Agriculture: Indonesian Food crops, *Journal of Development Economics*, Vol. 55, Number 2.

Varian, H. (1992), *Microeconomic Analysis*, 3 ed., New York, Norton Ch 1-6.

Timmer C. P. et al (1983), *Food Policy Analysis*, a World Bank Publication, Johns Hopkins, Ch 3.

Reardon T. (1998), “African Agriculture: Productivity and Sustainability Issues”, *International Agricultural Development*, 3rd ed. Eicher, K.C. and Staatz J.M., (eds), Johns Hopkins.

2.2 Farm Costs and Size Economies

Main Readings

Chambers G.R. (1994), *Applied Production Analysis: a Dual Approach*, Cambridge University press, Ch.2, 3, 4.

Beattie, B.R., C.R. Taylor and W.J. Myles (2009). *The Economics of Production*. Krieger Publishing Company (2nd Edition)

Udry C. (1999), Efficiency and Market Structure: Testing for Profit Maximization in African Agriculture, in *Ranis and Raut eds, Trade, Growth and Development: Essays in Honor of T.N. Srinivassan*, Amsterdam, Elsevier Science.

Williamson O. (1989), “Transaction Costs Economics”, in Schmanlense, R. and R. Willig (ed), *Handbook of Industrial Organization*, Amsterdam, North-Holland.

Teal, F. (1996), “The Size and Sources of Economic Rents in Developing Country Manufacturing Labour Market”, *Economic Journal*, Vol. 106, pp 963-976.

2.3 Profit Functions

Required software

E-View, STATA 13, LIMDEP, FRONT 4.1,

Main Readings

Chambers G.R. (1994), *Applied Production Analysis: a Dual Approach*, Cambridge University press, Ch.6 and 7.

Beattie, B.R., C.R. Taylor and W.J. Myles (2009). *The Economics of Production*. Krieger Publishing Company (2nd Edition)

Debertin, D. (1994), *Agricultural Production Economics*, 2nd Edition, University of Kentucky.

Savadogo, K. Reardon Th. And Pietola K. (1995), *Mechanization and Agricultural Supply Response in the Sahel: a Farm-Level Profit Function Analysis*, *Journal of African Economies*, Volume 4, Number 3, December, 315-335.

2.4 Analysis of Farm Risks and Uncertainties

Main Readings

Deaton A. and Muellbauer, (1986) *Economics and Consumer Behavior*, reprint Ch 14.

Hazell, P.B. and R.D. Norton (1986). *Mathematical Programming for Economic Analysis in Agriculture*. New York: Macmillan Publishing Co.

Varian, H. (1992), *Microeconomic Analysis*, 3 ed., New York, Norton Ch 1-6.Ch11.

Upton, M. (1976). *Farm Management in Africa, the Principle of Production Planning*. Oxford University Press.

Diamond P. and Rothschild M. (1989) (eds.) *Uncertainty in Economics: Readings and Exercises* (revised edition), Academic Press San Diego.

Just R. and Pope R. (1979), "Production Function Estimation and Related Risk Considerations", *American Journal of Agricultural Economics*, May.

Supplementary Readings

Fafchamps, M., Udry C., and Czukas K. (1998), "Drought and Saving in West Africa: Are Livestock a Buffer Stock?", *Journal of Development Economics*, vol. 55, No. 2, pp. 2723-306.

Hirshleifer J. and Riley J. (1992), *The Analytics of Uncertainty and Information*, Cambridge University Press, Ch 5.

Bromley D. and Chavas J.P. (1989), "On Risk, Transactions and Economic Development in Semiarid Tropics", *Economic Development and Cultural Change*, Vol. 37, pp 719-736.

Dercon, S. (1996), "Risk, Crop-Choice and Savings: Evidence from Tanzania", *Economic Development and Cultural Change*, Vol. 44, No. 3, pp 485-513.

2.5 Optimization Techniques in Farm Analysis

Main Reading

Doll, P.D. and Orazem, F. (1984), Production Economics: Theory and Applications.

3 Technological Change in Agriculture (6 hours)

3.1 Technological Innovations

- Agricultural intensification models
- ICT and agricultural innovation
- Farm input development
- Technology development pathways

Main Readings

Ellis, F., (1988), Peasant Economics: Farm Households and Agrarian Development; Cambridge University Press, Cambridge.

Ruttan, V.W. (1975), "Technology transfer, institutional transfer, and induced technical and Institutional change in agricultural development"; in L.Reynolds, (ed.) Agriculture in Development Theory.

Binswanger, H., and Braun, J., (1991), "Technological change and commercialization of agriculture: the effect on the poor"; WBRO, vol.6, no.1.

Evenson, R., (1975), "Technology generation in agriculture"; in L. Reynolds, (ed.), (1975).

Ruttan, V. W., and Y Hayami, (1990), "Induced Innovation Model of Agricultural Development": In C.K, Eicher and J.M. Staatz, 1990, Agricultural Development in the Third World.

Pinstrup-Andersen, P., (199), Agricultural Research and Technology in Economic Development,

Peterson, W., and Y Hayami, (1994), "Technical Change in Agriculture". In L. Martin ed., A Survey of Agricultural Economics Literature, Vol. 1, American Agricultural Economics Association.

Ghatak, S., and K. Ingersent, (1996), Agriculture in Economic Development.

Bardhan and Udry, (1999), Development Microeconomics, Chapter 12.

Supplementary Readings

Ahmed, I., (1992), "Will biotechnology alleviate poverty"; in PST (1992).

Timmer, C.P. 1973, "Choice of Technology in Rice-milling in Java", In C.K, Eicher and J.M. Staatz, 1984, Agricultural Development in the Third World.

Gruen, F.H., (1061), "Agriculture and Technical Change". J. of Farm Economics, 1961, pp. 838-858.

Scobie, G. M., and P.T. Rafael, 1990, "The Impact of Technology Change on Income Distribution". In C.K, Eicher and J.M. Staatz, 1990, *Agricultural Development in the Third World*.

Herd, R. W., (1992), "Agricultural biotechnology and the poor in developing countries"; in PST (1992).

Gnaegy, S., and J. R. Anderson, (1991), "Agricultural technology in Sub-Saharan Africa"; World Bank Discussion Paper 126, Washington, D.C.

Ruttan, V. W., (1977). "The green revolution; seven generalisations"; *International Development Review*, Vol.19.

Singer, Hans, (1977), *Technology for Basic Needs*, ILO, Geneva.

Byerlee, D., and P. Gregory, 1999, "Agricultural Biotechnology and Rural Development: Options for the World Bank". *Biotechnology Task Force Discussion Paper*, World Bank, Washington D.C.

Simler, K., (1994), "Agricultural Policy and Technology Options in Malawi: Modelling Smallholder Responses and Outcomes". Working Paper No. 49, Cornell Food and Nutrition Policy Program, Ithaca, New York.

Knudson, M.K., and B.A. Larson, (1989), "A Framework for Examining Technical Change", *J. of Agric. Econ. Research*, 41, Fall, pp. 21-28.

Binswanger, H.C., and P. Pingali, (1988), "Technological Priorities for Farming in sub-Saharan Africa", *World Bank Research Observer*, 3, pp. 81-98.

Schultz, T.W., (1964), *Transforming Traditional Agriculture*, Chapters 9-11.

Ahmed, I, (1981), *Technological Change and Agrarian Structure – A Study of Bangladesh*, ILO, Geneva.

3.2 Technology Choice and Transfer

- Green revolution- impacts and lessons for Africa

Main Readings

Gisselquist D., and J.M. Grether, (2000), "An Argument for deregulating the Transfer of Agricultural Technology to Developing Countries". *The World Bank Economic Review*, Vol. 14, No. 1: 111-127.

Herbert, Y., and P.D. Goldsmith, (2000), "Using system Dynamics to Study Technology Adoption Process". Working Paper, Food and Agribusiness Management, Department of Agricultural and Consumer Economics, University of Illinois, March.

"Hildebrand, P.E., (1988), *Technology Diffusion in Farming Systems Research and Extension*" *HortScience*, 23, June, pp. 488-90.

Lesser, W., J. Bernard, and B. Kaafee, (1999), "Methodologies for Ex Ante Projections of Adoption Rates for Agbiotech Products: Lessons Learned from rBST," *Agribusiness*, 15, pp.149-162.

Current, D., E. Lutz, and J.J. Scherr, (1999), “The Costs and Benefits of Agroforestry to Farmers”. WBRO, Vol. 11, No. 2, Aug., pp.223-248.

Timmer, C.P. (1980), “Public Policy for Improving Technological Choice”, Discussion Paper No. 84, Harvard Institute for International Development.

Hayami, Y. (1998), “The Peasant in Economic Modernization”, *International Agricultural Development*, 3rd ed. Eicher, K.C. and Staatz J.M., (eds.), Johns Hopkins.

Croppenstedt A. and Demeke M. (1996), “Determinants of Adoption and Levels of Demand for Fertiliser for Cereal Growing Farmers in Ethiopia”, Working Paper Series, The Centre for the Study of African Economies, the University of Oxford.

Weir S. And Knight J (2000), “Adoption and Diffusion of Agricultural Innovations in Ethiopia: the Role of Education”, Working Paper Series, The Centre for the Study of African Economies, the University of Oxford.

3.3 Agricultural Research and Extension in Africa

- Dimensions of market-led extension and research
- Group-based extension – institutional extension
- Agricultural seed systems
- Urban agricultural innovation

Main Readings

Das, M. D., (1995), Improving the Relevance and Effectiveness of Agricultural Extension Activities for Women Farmers: An Andre Mayer Research Study, FAO, Rome.

Pardey, P.G., J. Roseboom, and N.M., Beintema, (1997), "Investments in African Agricultural Research". World Development, 25, (3): 409-423.

Ellis, F., (1992), Agricultural Policies in Developing Countries.

Chambers, R., and J Jiggins, 1986, Agricultural Research for Resource-Poor Farmers, University of Sussex, Institute of Development Studies, Discussion Paper No. 220.

Saito K.A., and C. J. Weidemann, 1990, Agricultural Extension for Women Farmers in Africa, World Bank Discussion Paper No. 103.

Schultz, T.W., 1990, "The Economics of Agricultural Research" . In C.K, Eicher and J.M. Staatz, 1990, Agricultural Development in the Third World.

World Bank Research Observer, (1997), “An Exchange on Agricultural Extension Programs”, Vol. 12, No. 2, August, pp.183-258.

Bindlish, V., and R. Evenson, (1997), “The Impact of T&V in Africa: The Experience of Kenya and Burkina Faso”, WBRO, Vol. 12, No. 2, August, pp.183-202.

Umali-Deininger, D., (1997), “Public and Private Agricultural Extension: Partners or Rivals”, WBRO, Vol. 12, No. 2, August, pp.203-224.

Coombs, P.H. and M. Ahmed, eds, (1974), *Attacking Rural Poverty: How Nonformal Education can Help*. A World Bank . The Johns Hopkins University Press. Chapters 3-5.

Evenson R.E. (2001), "Economic Impacts of Agricultural Research and Extension", in B.L. Gardner and G.C. Rausser (eds.), *Handbook of Agricultural Economics*, Vol1A.

Feder G. and Slade R. (1986), "The Impact of Agricultural Extension: The Training and Visit System in India", the World Bank Research Observer, Vol. 1, N°2, pp 139-162.

3.4. Impact of Technological Change on Resource Allocation and Environment

- Organic agriculture and the environment
- Agro-biotechnology and environment

Main Readings

HBS (1993). *The Economics of Rural Organization Theory, Practice and Policy*. Part 111. A World Bank Handbook, Oxford University Press.

Kumar, S.K., (1994), *Adoption of Hybrid Maize in Zambia; Effects on Gender Roles, Food Consumption and Nutrition*, Research Report 100, International Food Policy Research Institute, Washington D.C.

Hayami, Y., and J.P. Plateau, (1997), "Resource Endowments and Agricultural Development : Africa vs Asia". *Serie Recherche (Belgium) 192*: 1-54. Facultes Universitaires Notre-Dame de la Paix, Namur, and Faculte des Sciences Economiques et Sociales, Cashiers.

Hayami, Y., (1990), "An Assessment of the Green Revolution". In C.K, Eicher and J.M. Staatz, 1990, *Agricultural Development in the Third World*.

Hardaker, J.B., Anderson R.J. and Dillon, L.J. (1984), "Perspectives on Assessing the Impacts of New Technologies in Developing Countries", *Australian Journal of Agricultural Economics*, vol. 28.

4 Agricultural Household Models (8 hours)

4.1 Demand Functions

Main Readings

Deaton A. and Muellbauer, (1986) *Economics and Consumer Behavior*. Cambridge University Press, Ch. 1, 2, 3, 4, 5, 6.

Varian, H. (1992), *Microeconomic Analysis*, 3 ed., New York, Norton Ch 1-6. Ch 7, 8

4.2 Agricultural Household Models and Applications

- Household models with missing market
- Recursive and non-recursive models
- Limitations of unitary models
- Intrahousehold models – empirical applications and limitations

4.3 Household Resource Allocation (Labour and Land)

Main Readings

Deaton A. and Muellbauer, (1986) *Economics and Consumer Behavior*. Cambridge University Press , Ch 10

Sadoulet, S., and de Janvry, 1995, *Quantitative Development Policy Analysis*. The Johns Hopkins University Press.

Singh I., Squire L. and Strauss J. (1986), *Agricultural Household Models*, World Bank.

Bergstrom T.C. (1997), “A Survey of Theories of the Family”, *Handbook of Population and Family Economics*, Vol. 1A, M.R. Rozenzweig and O. Stark (eds.), Amsterdam.

Singh I., Squire L., and Strauss J. (eds.) (1986), *Agricultural Household Models: Extension, Application*, Baltimore: Johns Hopkins, pp 17-47, and 71-91.

Alderman, H. et al (1995), “Unitary versus Collective Models of the Household: Is it Time to Shift the Burden of Proof? The World Bank Research Observer, Vol. 10, N° 1, pp1-20.

De Janvry A. and Sadoulet E. (1995), “Household Modelling for the Design of Poverty Alleviation Strategies”, *Revue d’Economie de Développement*, Vol.3 pp 3-23.

Kooreman, P. and S. Wunderink (1996). *The Economics of Household Behavior*. London: Macmillan.

Caillavet, F. , H. Guyomard and R. Lifran (1994). *Agricultural Household Modeling And Family Economics*. Amsterdam: Elsevier.

Supplementary Readings

Strauss J. (1986), “Estimating the determinants of Food Consumption and Caloric Availability in Rural Sierra Leone”, *Agricultural Household Models: Extension, Application*, Baltimore: Johns Hopkins, pp 116-152.

Benjamin D. (1992), “Household Composition, Labour Markets, and Labour demand: Testing for Separation in Agricultural Household Models”, *Econometrica*, 60: 287-322.

Thomas D. (1990), “Intra-Household Resource Allocation: An Inferential Approach”, *Journal of Human Resources*, 25: 635-664.

Doss, C.R. (1996), “Testing among Models of Intrahousehold Resource Allocation”, *World Development*, 24: 1597-1609.

Weir Sh. (2000), “Concealed Preferences: Parental Attitudes to Education and Enrolment Choice in Rural Ethiopia”, Working Paper Series, The Centre for the Study of African Economies, the University of Oxford.

Taffesse Seyoum A. (1999), “An economic Model of the Ethiopian Far Household”, Working Paper Series, The Centre for the Study of African Economies, the University of Oxford.

Ellis, F (1988). *Peasant Economics: Farm Households and Agrarian Development*: Cambridge University Press.

4.4 Revenue and Price Effects on the Household Welfare

Required Readings

Varian Ch 10.

Deaton and Muellbauer, Ch 7, 8, 9.

Supplementary Readings

Kanbur, R. and Grootaert, Ch. (1994), A New regional Price Index for Côte d'Ivoire using Data from the International Comparisons Project, *Journal of African Economies*, Volume 3, Number 1, April, 114-141.

Ravallion M. (1999), "Is More Targeting Consistent with Less Spending?", *International Tax and Public Finance*, Vol.6, pp 411-419.

Ravallion M., and Pradham M. (2000), "Measuring Poverty Using Qualitative Perceptions of Consumption Adequacy", *Review of Economics and Statistics*, Vol. 82, N° 3, pp 462-471.

Dercon, S and Krishnan P. (1996), "Income Portfolios in Rural Ethiopia and Tanzania: Choices and Constraints", *the Journal of Development Studies*, Vol. 32, N°6, pp 850-875.

Dercon, S. (1998), « Wealth, Risk and Activity Choice: Cattle in Western Tanzania », *Journal of Development Economics*, Vol. 55, pp1-42.

Dercon, S and Krishnan P. (2000), "Vulnerability, Seasonality and Poverty in Ethiopia", in B. Baulch and J. Hoddinot (eds.), *Economic Mobility and Poverty Dynamics in Developing Countries*, London: Frank Cass.

Lipton M. and Ravallion M. (1995), "Poverty and Policy, in J. Behrman and T.N. Srinivasan, (eds.), *Handbook of Development Economics*, Vol. III.

Greer, J., and Thorbecke E. (1986), "A Methodology for Measuring Food Poverty Applied to Kenya", *Journal of Development Economics*, Vol. 24, pp 59-74.

Ahluwalia, M.S. (1976), Inequality, Poverty and Development, *Journal of Development Economics*, 3, 307-342.

5 Quantitative Approaches to Agricultural Decision (6 hours)

5.1 Game Theory for Agricultural Risk Analysis

5.3 Partial Equilibrium for Agricultural Households' Welfare Analysis

5.3 Multisectoral model

5.4 Social Accounting Matrix

5.6 General Equilibrium Models

5.6 Policy Analysis Matrix (PAM)

Required software

GAMS, MATLAB

Main Readings

- Sadoulet E. and de Janvry A. (1995), *Quantitative Development Analysis*, Johns Hopkins University Press, Ch 11.
- Dostie B., Cockburn J. and Decaluwe B. (1996), Market Structure and Trade Policy in Developing Countries: A General Equilibrium Approach, AERC special Paper N° 24, 51 pp.
- Baum H. K. and Schertz P.L. (eds.) (1983), *Modeling Farm Decisions for Policy Analysis*, Westview Press.
- Hertel T.W. (1989), “Quantifying the Effect of Agricultural Trade Liberalization on the LDCs: A Survey of the Models”, Document presented at the OECD – World Bank Symposium on *Agricultural Trade Liberalization: Implications for Developing Countries*, Paris.
- De Melo, J. and Robinson S. (1989), “Product Differentiation and Treatment of Foreign Trade in Computable General Equilibrium Models of Small Economies”, *Journal of International Economics*, Vol. 27.
- De Melo J. (1988), “Computable General Equilibrium Models for Trade Policy Analysis in Developing Countries: A Survey”, *Journal of Policy Modelling*, Vol. 10, pp 469-503.
- Tower, E. et Loo T. (1989), « On Using Computable General Equilibrium Models to Facilitate Tax, Tariff and Other Policy Reforms in Less Developed Countries”, in M.S. Gillis (ed), *Tax Reform in Less Developed Countries*, Duke University.
- Shoven, J.B. and Whaley (1992). *Applying General Equilibrium*. Cambridge: Cambridge University Press.

5.7 Data Collection, Processing and Analysis**Software required**

SPSS 21, STATA 13, Microsoft Excel,

Required Readings

- Cochran W (1977), *Sampling Techniques*, 3rd ed., John Wiley and Sons.
- Fomby Th. (1998), *Données Malpropre-observations manquantes...*, John Wiley and Sons.
- Deaton, A. (1997). *The Analysis of Household Surveys: A Microeconomic Approach to Development Policy* Baltimore: The John Hopkins University Press.

AGRICULTURAL ECONOMICS II (ECON 617):

AGRICULTURAL AND TRADE POLICIES

6 Policy Environment (6 hours)

6.1 Rationale for Policy Intervention

6.2 Role of Stakeholders

Main Readings

Maletnlema, T. N., (1990), Food Nutrition and Health in Africa: The Role of Government, PEW/CORNELL Lecture Series on Food and Nutrition Policy, CFNPP, Cornell University, October.

Pinstrup-Andersen P. (1989), Government Policy, Food Security and Nutrition in Sub-Saharan Africa, PEW/CORNELL Lecture Series on Food and Nutrition Policy, CFNPP, Cornell University, October.

World Bank, (1997), World Development Report: The State in a Changing World. New York: Oxford University Press.

6.3 Agricultural Policy Instruments

Required Readings

Ellis, F. (1992). Agricultural Policies in Developing Countries: Cambridge University Press. Cambridge.

Delgado, C.L., and J. Mellor, (1984), "A structural view of policy issues in African agricultural development"; AJAE, vol. 66.

Schiff, M., and Valdes, A., (1992), The Plundering of Agriculture in Developing Countries; World Bank, Washington, D.C.

Stiglitz, J., (1987), "Some theoretical aspects of agricultural policies"; WBRO.

Johnson, D.G., (1986), "Policy issues in rainfed agriculture"; paper presented at the World Bank's 6th Agricultural Symposium; Washington, D.C.

Townsend, R.F., (1999), Agricultural Incentives in sub-Saharan Africa: Policy Challenges. World Bank, Technical Paper 444, Washington DC.

Supplementary Readings

Jayne, T.S., and S. Jones, (1997), "Food Marketing and Pricing Policy in Eastern and Southern Africa: A Survey", World Development, 25(9), 1505-1527.

Biswanger, H.P. and K. Deininger, (1997), "Explaining Agricultural and Agrarian Policies in Developing Countries", Journal of Economic Literature, 35, 1958-2005.

Valdes, A.J., and J. Zielch, (1995), "Distortions in World Food Markets in the Wake of GATT: Evidence and Policy Implications". World Development, 23(6) 913-926.

7 Agricultural Markets and Food Price Policies (10 hours)

7.1 Information, Contracts and Incentives

Main Readings

Ray D. (1998), *Development economics*, Princeton University Press, Ch 12, 14, and 15.

Dubois P. (2001), « Contrats Agricoles et Développement : Revue Critique », *Revue d'Economie du Développement*, N°3, pp 75-106.

Brousseau E. (1993), « Les théories des contrats : une revue », *Bilans et Essais, Revue d'Economie Politique*, 103(1), pp 3-81

Otsuka, K., Chuma H. and Haymi Y (1992), "Land and Labour Contracts in Agrarian Economies: Theories and Facts", *Journal of Economic Literature* XXX, pp 1965-2018

Sadoulet E., de Janvry A. and Fukui S. (1997), "The Meaning of Kinship in Sharecropping Contracts", *American Journal of Agricultural Economics*.

7.2 Agricultural Commodity Price Policies

Main Readings

Ellis F. (1992), *Agricultural Policies in Developing Countries*, Cambridge University Press, Ch 13.

Sadoulet E. and de Janvry A. (1995), *Quantitative Development Policy Analysis*, The Johns Hopkins University Press, Ch 7,

International Conference of Agricultural Economics (1999), *Food Security, Diversification and Resource Management: Refocusing the Role of Government*, Proceedings of the 23rd ICAE, edited by G. Peters and J. von Braun, Aldershot, England, Ashgate for IAAE.

Timmer, C.P. (1986), "Private Decisions and Public Policy: the Price Dilemma in Food Systems of Developing Countries", *MSU International Development Paper* N°7.

Abdulai A. and Rieder P. (1995), "the Impact of Agricultural Price Policy on Cocoa Supply in Ghana: an Error Correction Model", *Journal of African Economies*, vol. 4, N°3.

Nikos Alexandratos (1995), *Agriculture Mondiale: Horizon 2010*, FAO, John Wiley and Sons, Ch. 1, 4.

De Janvry A. and Sadoulet E. (1989) "Economic, Welfare and Political Consequences of Stabilization Policies: A General Equilibrium Approach", Background Paper for the World Development Report of 1990, the World Bank.

Supplementary Readings

Colman D. and Young T. (1995), *Principles of Agricultural Economics: Markets and Prices in Less Developed Countries*, Cambridge University Press, Ch 12.

Goldin I. And Winters L.A. (eds.) (1992), *Open Economies: Structural Adjustment and Agriculture*, Center for Economic Policy Research, OECD, Ch 10.

Streeten P. (1987), *What Price Food? Agricultural Price Policies in Developing Countries*, St Martin's Press.

Bates H.R. (1998), "The Political Framework for Agricultural Policy Decisions", in *International Agricultural Development*, third edition, Eicher K.C. and Staatz M.J. (eds.), Johns Hopkins.

Timmer C. P. et al (1983), *Food Policy Analysis*, a World Bank Publication, Johns Hopkins, Ch 4, pp189-211.

Newbery D., and Stiglitz J. (1981), *The Theory of Commodity Price Stabilization: A Study in the Economics of Risk*, Oxford University Press.

Kanbur S.M.R. (1984), "Agricultural Price Stabilization in Developing Countries", The World Bank, Agriculture and Rural Development Department, Agricultural Policies Division, Washington D.C.

Newberry D. (1987), "Agricultural Taxation: The Main Issues", in Newberry D. and Stern N. (eds.), *The Theory of Taxation for Developing Countries*, a World Bank Research Publication, pp366-386.

7.3 Advanced Food Policy Analyses

Main Readings

FAO (2003), *The state of food insecurity in the World*, Rome

FAO Country Reports on Food and Nutrition

Organization of African Unity, 1996, *African Common Position on Food Security and Agricultural Development*. Adopted by the Thirty-second Ordinary Session of the Assembly of Heads of State and Government, 8-10 July, Yaounde, Cameroon.

World Bank, (1986), *Poverty and Hunger: Issues and Options for Food Security in Developing Countries*; World Bank, Washington.

FAO Materials for Training Agricultural Planning. No. 31 (1991). *Agricultural Price Policy: Government and the Market*.

Ellis, F., (1992), *Agricultural Policies in Developing Countries*; Cambridge University Press, Cambridge.

Srinivasan, T.N., (1989), "Food aid: a cause of development failure or an instrument for success?"; *WBER*, vol.3, no.1.

Gyeke, A. and Rempel, H. (1995). "Regional co-operation as a means to food security in the SADC". *The Southern African Journal of Economics* Vol 63 (2):272-282.

Siddig A. Salih, 1995, "Food Security in Africa", *World Development Studies* 3, World Institute for Development Research (WIDER), Helsinki.

Supplementary Readings

Parikh, K., (1992), "Food security: issues and options"; in PST (1992).

Mellor, J., Delgado, C., and M. Blakie, (1988), *Accelerating Food Production in Sub-Saharan Africa*; Johns Hopkins University Press, Baltimore.

Timmer, C.P., Falcon, W., and S.R. Pearson, (1983), *Food Policy Analysis*; Johns Hopkins University Press, Baltimore.

Quisumbing A., L.R. Brown, H.S. Feldstein, L. Haddad and C. Pena, 1995, "Women; The Key to Food Security", International Food Policy Research Institute, Washington D.C.

Lavy, V., (1992), "Alleviating transitory food crisis in sub-Saharan Africa: international altruism and trade"; WBER, vol.6, no.1.

Jaeger, W. K. 1992, "The Causes of Africa's Food Crisis", *World Development*, 20(11), 1632-1645).

Quinn V., M. Chiligo, and J. Price Gittinger, 1990, "Malnutrition, Household Income, and Food Security in Rural Malawi", *Health Policy and Planning*, Vol. 5, No. 2:139-148.

Sahn D., (ed). 1989, *Seasonal Variability in Third World Agriculture; The Consequences for Food Security*, Baltimore MD: Johns Hopkins University Press.

Alderman, H, 1992, *Incomes and Food Security in Ghana*, Cornell Food and Nutrition Policy Program, Working Paper 26, May.

Oldeman, L. R., 1998, *Soil Degradation: A Threat to Food Security*. Report 98/01, International Soil Reference and Information Centre, Wageningen, the Netherlands.

7.4 Agricultural Credit Policies

Main Readings

Ray D. (1998), *Development economics*, Princeton University Press, Ch 11, 14, 15.

Besley J.T. (1998), "Do Market Failures Justify Interventions in Rural Credit Markets?" in *International Agricultural Development*, third edition, Eicher K.C. and Staatz M.J. (eds.), Johns Hopkins.

Ledgerwood J. (1998), *Microfinance Handbook: An Institutional Financial Perspective*, The World Bank Publication.

Fafchamps, M. (1992), "Solidarity Networks in Pre-Industrial Societies: Rational Peasants with Moral Economy", *Economic Development and Cultural Change*, Vol. 41, N° 1, pp 147-174.

Udry, C. (1994), "Risk and Insurance in a Rural Credit Market: An Empirical Investigation in Northern Nigeria", *Review of Economic Studies*, Vol. 61, N° 3, pp 495-526.

Coate, S. and Ravallion, M. (1993), "Reciprocity without Commitment: Characterization and Performance of Informal Insurance Arrangements", *Journal of Development Economics*, Vol. 40, N° 1, pp 1-24.

Besley, T. (1995). "Savings, credit and Insurance". In: J. Behrman and T.N. srinivasan, (eds). *Handbook of Development Economics*. Vol. III A. Amsterdam: Elsevier.

Besley, T. (1995). "Non- market Institutions for credit and Risk-sharing in Low-Income Countries", *Journal of Economic perspectives*, vol.9, No.3, pp 113-127.

Supplementary Readings

Hoff K. and Stiglitz J.E. (1999), "Moneylenders and Bankers: Price-Increasing Subsidies in a Monopolistically Competitive Market", *Journal of Development Economics*, Vol. 52, N°2.

Carter R. M. and Wiebe K. (1990), « Access to Capital and its Impact on Agrarian Structure and Productivity in Kenya", *American Journal of Agricultural Economics*, Vol.72, N°5, pp1146-1151.

Kumar, S.K. (1994). " Imperfect Information and Rural Credit Markets: Puzzles and Policy perspectives", K Hoff, A. Braverman, and J.E. stigliz, eds, *The Economics of Rural Organizations: Theory, practice, and policy*. Oxford University Press, Oxford.

7.5 Agricultural Labour Markets Policies

Main Readings

Ray D. (1998), *Development economics*, Princeton University Press, Ch 11 and 13.

Lewis, W.A. (1954). Economic Development with Unlimited Supply of Labour. *The Manchester School*, 22(2): 139-191.

Reardon Th., Taylor J.E. (2000), "Effects of non-Farm Employment on Rural Inequality in Developing Countries: An Investment Perspective", *Journal of Agricultural Economics*, May.

Von Braun J. an Kennedy E. (eds.), (1994), *Agricultural Commercialization, Economic Development and Nutrition*, International Food Policy Research, Ch. 2.

Supplementary Readings

Bauer Kai (2000), "Modelling Agricultural Labour Response to Market Development during Transition", *Idra Working Paper*.

Kingdon G. and Knight J. (1999), *Unemployment and Wages in South Africa: a Spatial Approach*", Working Paper Series, The Centre for the Study of African Economies, the University of Oxford.

7.6 Agricultural Land Policies

Main Readings

Ray D. (1998), *Development economics*, Princeton University Press, Ch 11 and 12.

Bardhan P. and Urdy C; (1999), *Development Microeconomics*, Oxford University Press, Ch 6.

Binswanger P.H., Deininger K. and Feder G. (1995), "Power, Distortion, Revolt and Reform in Agricultural Land Relations", *Handbook of Development Economics*, Vol. IIIB, and Amsterdam: Elsevier.

Binswanger P.H. and Elgin M. (1998), "Reflections on Land Reform and Farm Size", in *International Agricultural Development*, third edition, Eicher K.C. and Staatz M.J. (eds.), Johns Hopkins.

Supplementary Readings

Otsuka K. and Hayami Y. (1988), "Theories of Share Tenancy: a Critical Survey", *Economic Development and Cultural Change*, vol. 37, pp 31-68.

Pinckney, C. Th., and Kimuyu P. (1994), "Land Tenure Reform in East Africa: Good, Bad or Unimportant?", *Journal of African Economies*, Vol. 3, N°1, pp 1-28.

Migot-Adholla, s.,p. Hazel, B. Blarel, and F. Place (1991). Indigenous Land Rights Systems in Sub-saharam Africa: Constraint to Productivity? "*World Bank Economic Review*, Vol. 5, No. 1.

Feder G. and. Feeny (1991)." Land Tenure and Property Rights. Theory and Implications for Development Policy". *World Bank Economic Review* vol.5 No, 1.

Toulman, C. and J. Quan, eds, (2000). *Evolving Land Rights, policy and Tenure in Africa*. London: Department for International Development, DF/IID/NRI.

Bruce, J. (1993). "Do Indigenous Tenure systems constrain Agricultural Development? "In: J. Thomas et al eds, *Land in African Agrarian systems*. The university of Wisconsin press.

Hazell, p. (1993). "Productivity Effects of Indigenous Tenure system in sub-Saharan Africa", *America Journal of Agricultural Economics* vol.75, Issue1.

8 Rural Infrastructure and Institutional Supports for Agricultural Development (4 hours)

8.1 Advanced issues in rural infrastructure studies

- Rural roads.
- Electricity, communication,
- Post-harvest analyses, market information systems, etc.

Main Readings

African Development Bank, (1999), *Africa Development Report, 1999 - Infrastructure Development in Africa*, ADB, Abidjan.

Ayogu, M., (1999), *Addressing Infrastructure Constraints*, Background Paper prepared for "Africa in the 21st Century Project", World Bank.

Oshikoya, T.W., A. Jerome, M.N. Hussain, and K.Mlambo, (1999), *Closing the Infrastructure Deficit*, Background Paper prepared for "Africa in the 21st Century Project", World Bank.

Weiss, J., (1998), *Infrastructure and Economic Development*, Background Paper prepared for the African Development Bank, Abidjan.

Supplementary Readings

FAO Training Materials for Agricultural Planning No. 31 (1992). *Agricultural Price Policy: Government and the Market*.

Cleaver, K.M. (1993). *A Strategy to Develop Agriculture in Sub-Saharan Africa and a Focus for the World Bank*; World Bank Technical Paper No. 23.

8.2 Rural Institutions for Agricultural Development

- Cooperatives
- Farmers' and Trade Associations
- NGOs and Community Based Organisations
- Financial Institutions
- Political institution, mass media and ideology in agricultural policy implementation

Main Readings

Besley, T. (1995). "Savings, credit and Insurance". In: J. Behrman and T.N. srinivasan, (eds). *Handbook of Development Economics*. Vol. III A. Amsterdam: Elsevier.

Besley, T. (1995). "Non- market Institutions for credit and Risk-sharing in Low-Income Countries", *Journal of Economic perspectives*, vol.9, No.3, pp 113-127.

Dusgupta, p. and I. Seragedin (2000). *Social capital A Multifaceted Perspective: The World Bank*. Washington D.C.

Townsend, R.M (1995). "Consumption Insurance: An Evaluation of Risk-Bearing Systems in Low – Income Economies", *Journal of Economic Perspectives*, Vol.9, No.3, pp 83-102.

Zeller, M.G.et al (1997). *Rural finance for food security for the poor*, IFRI, Washington, D.C.

Morduch, J. (1999). " The Micro Finance Promise", *Journal of Economic Literature*, 37; 1569-1614.

Ghosh, p, (1995). *On the Coexistence of Share, Rent and Wage Contracts in a Rural Economy*. Boston University Studies Department of Economics, Boston University, Boston.

Udry, C. (1994). " Risk and Insurance in a Rural Credit market: An Empirical Investigation of Northern Nigeria", *Review of Economic studies*, vol.61 No. 3 pp 495-526.

Bardhan, p. (ed) (1989). *The Economic Theory of Agrarian Institutions*. Clarendon Press, Oxford.

Bardhan, P. and C. Udry (1999). *Development Microeconomics*, New York: Oxford University Press (Chapter 8: Risk and Insurance in an Agricultural Econmy).

Sadoulet, S. and A. de Janvry (1995). *Quantitative Development policy Analysis*. The John Hopkins University Press.

Ostrom, E. (1998). *Efficiency, sustainability and Access Under Alternative Property Regimes*. Paper Presented at the IMU/W.DER project, Held in Santiago, Chile, April 27-29.

Jayne, T.S. et al. (2002), False Promise or False Premise? The experience of Food and Input Market Reform in Eastern and Southern Africa, in T.S. Jayne, Isaac Minde, and Gem Argwings-Kodhek (eds.), *Perspectives on Agricultural Transformation: A View from Africa*, New York, Nova Science.

Menard C. (1989), “Les Organisations en économie de marché”, Bilans et Essais, Revue d’Economie Politique, 96(6), pp 771-809.

Besley J.T., Banerjee A. and Guinnane (1994), “Thy Neighbor’s Keeper: The Design of a Credit Cooperative with Theory and Test”, *Quarterly Journal of Economics*, pp 491-515.

Besley J.T., Coate S. and Loury G. (1994), “Rotating Savings and Credit Associations, Credit Markets and Efficiency” *Review of Economic Studies*, vol. 61, No. 4, pp 701-719.

Feder G, Willet A. and Zijp W. (1999), *Agricultural Extension: Generic Challenges and Some Ingredients for Solutions*, Working Paper No. 2129, The World Bank.

Hayami Y. (1997), *Development Economics: From the Poverty to the Wealth of Nations*, Oxford University Press, Ch. 9.

Perotti, Enrico, Laixiang Sun and Liang Zou (1999), “State-Owned versus Township and Village Enterprises in China”, *Comparative Economics Studies*, Vol.41, No. 2-3, pp 151-179.

Robinson S. M. (1998), “Microfinance: the Paradigm Shift from Credit Delivery to Sustainable Financial Intermediation”, in *International Agricultural Development*, third edition, Eicher K.C. and Staatz M.J. (eds.), Johns Hopkins.

Ledgerwood J. (1998), *Microfinance Handbook: An Institutional Financial Perspective*, The World Bank Publication.

Supplementary Readings

Aredo, D (1999). “ Property Rights in Land; Theory And Evidence from Ethiopia”. *Ethiopia Journal of Development Research*, vol. 21 No. 2.

Aryeetey, E (1992). *The Relationship Between the Formal and Informal sectors of The Financial Markets in Ghana*, AERC RP No. 10.

Aryeetey, E. (1997). “ Rural Finance in Africa: Institutional Developments and Access for the Poor.” In: M. Bruno and B. Pleskovic, eds. *Annual World Bank Conference on Development Economics*, Washington D.C., World Bank.

Ghatak, S. and K. Ingersent (1996). *Agriculture in Economic Development*, Cambridge; Cambridge University Press.

Cheung, S.N. (1969). *The Theory of Share Tenancy*. Chicago University Press.

Hayami, Y. and K. Otsuka (199). *The Economics of Contract Choice* Oxford: Clarendon Press.

Ray D. (1998), *Development economics*, Princeton University Press, Ch 14.

World Bank (1994), *Infrastructure for Development, World Development Report*, Oxford University Press.

Gabre-Madhin, E. et al. (2001), *Agricultural Market Reforms in Africa: Experience and Challenges*, Baltimore: Johns Hopkins University Press.

Antholt H. Ch. (1998), “Agricultural Extension in the Twenty-first Century”, in *International Agricultural Development*, third edition, Eicher K.C. and Staatz M.J. (eds.), Johns Hopkins.

9 International Agricultural Trade and Policies (8 hours)

9.1 International Price Formation

Main Readings

Anderson, K. And T. Josling (2005). *The WTO and Agriculture (Critical perspectives on the Global Trading Systems and the WTO)*. ISBN 9781843762799.

Colman D. and Young T. (1995), *Principles of Agricultural Economics: Markets and Prices in Less Developed Countries*, Cambridge University Press, Ch 11.

Krueger O.A., Schiff M. and Valdés A. (1988), “Agricultural Incentives in Developing Countries: Measuring the Effect of Sectoral and Economy wide Policies”, the World Bank Economic Review, Vol. 2, N° 3, pp 255-272.

Södersten Bo, and Reed G. (1994), *International Economics*, St Martin Press, Ch 18.

Gavin M. (1993), “Adjusting to a Terms of Trade Shock: Nigeria, 1972-88”, in *Policymaking in the Open Economy; Concepts and Case Studies in Economic Performance*, Dornbusch R. ed., pp172-219.

World Bank (1986), *World Development Report, Part II on “Trade and Pricing Policies in World Agriculture”* Oxford University Press, pp 61-153.

Mundlak Y. and Larson F. D. (1992), “On the Transmission of World Agricultural Prices”, the World Bank Economic Review, Vol. 6, N° 3, pp 399-422.

Supplementary Readings

Tyers R. and Anderson K. (1986), “Distortions in World Food Markets: A Quantitative Assessment”, Background Paper for the World Development Report, World Bank, Washington D.C.

Nikos Alexandratos (1995), *Agriculture Mondiale: Horizon 2010*, FAO, Ch 8.

9.2 Agricultural Protection and Export Promotion

Main Readings

Olper A. (2001), “Determinants of Agricultural Protection: The role of Democracy and Institutional Setting”, *Journal of Agricultural Economics*, May.

Swinnen F.M. J. (1994), “A Positive Theory of Agricultural Protection”, *American Journal of Agricultural Economics*, Vol. 76, No. 1, pp 1-15.

9.3 International Trade Negotiations and Agreements

Main Readings

Södersten Bo, and Reed G. (1994), *International Economics*, St Martin Press, Ch 17, 18.

Nikos Alexandratos (1995), *Agriculture Mondiale: Horizon 2010*, FAO, Ch 8.

Collier P. et al (1997), « L’Avenir de Lomé : que peut l’Europe pour la croissance de l’Afrique ? Politique Etrangère, Vol. 62, pp 151-166.

Collier P. et al (1999), « Reforming Stabex », *the World Economy*, Vol. 22 (5), pp 669-682.

WTO Doha round of talks, AGOA

9.4 Trade and Regional Integration in Africa

Main Readings

Goldin, I and O. Knudsen (1990). *Agricultural Trade Liberalization Implications For Developing Countries*, OECD.

Singh, Ajit & Tabatabai Hamid (1993). *Economic Crisis and Third World Agricultural*, Cambridge University Press, Cambridge.

Gyeke, A. and Rempel, H. (1995). “Regional co-operation as a Means to food security in The SADC,” *The Southern African Journal of Economics*, Vol. 63 (2): 272-282.

Sidding, A Salih (1995). “ Food Security in Africa”, *World Development Studies* 3, Helsinki: WIDER.

Timmer C. P. et al (1983), *Food Policy Analysis*, a World Bank Publication, Johns Hopkins, Ch 2.

Von Braun J. and Kennedy E. (eds.), (1994), *Agricultural Commercialization, Economic Development and Nutrition*, International Food Policy Research, Ch. 6.

Behrman R.J., Deolalikar B.A., and Wolfe B. (1988), “Nutrients: Impacts and Determinants”, *The World Bank Economic Review*, Vol. 2, N°3, pp 299-320.

Beerlandt H., Tollens E. and Dercon S. (1997), “Methodology for Addressing Food Security in Development Projects: Experiences from Kigoma, Tanzania”, in F. Heidhues and A. Fadani (eds.) *Food Security and Innovations: Successes and Lessons Learned*, Frankfurt am Main, Peter Lang,

10 Macroeconomic Adjustments and Agricultural Development (8 hours)

10.1 Emerging issues on agricultural development and structural transformation

10.2 MDGs and Agriculture

10.3 NEPAD, CAADP process and agricultural development

10.4 Global financial crisis and agricultural development in Africa

Main Readings

- Thorbecke, E. (2000), "Agricultural Markets beyond Liberalization: the Role of the State", in A. van Tilburg, H.A.J. Moll and A. Kuyvenhoven (eds.), *Agricultural Markets beyond Liberalization*, Kluwer.
- Guillaumont, P. (1994). "Adjustment Policy and Agricultural Development". In: *Policies For Growth and Development in Africa*, International Growth Center for Economic Growth, ICS Press, San Francisco.
- Osita, O. and Gbetibouo (1990). "Agricultural supply Response in Sub-Saharan Africa: A Critical Review of the Literature," *Africa Development Review*, Vol. 2, No.2.
- Hermann, R. (1997). "Agricultural Policies and Producer Price Incentives in Developing Countries: Cross-Country Results for Major crops", *Journal of Developing Areas*, 31, 203-220.
- Schift, M and C. Montenegro (1997). "Aggregate supply Response in Developing Countries: A survey of Selected Issues," *Economic Development and Cultural Change* 45:393-410.
- Key, N., E. Sadoulet, & A. de Janvry (2000). "Transaction costs and Agricultural Household supply Response", *American Journal of Agricultural Economics*. Vol. 82, No.5, pp 1075-1087.
- Gladwin, C.H. ed, (1991). *Structural Adjustment and African Women farmers*, Gainesville, University of Florida Press.
- Beynon, J.G. (1989). "Pricism Versus Adjustment in African Agriculture", *Journal of Agricultural Economics*, Vol. 40, No.3.
- Commander, S, ed., (1989). *Structural Adjustment and Agriculture: Theory and Practice in Africa and Latin America*, London: ODI.
- Mosley, P. and L. Smith (1989). "Structural Adjustment and Agricultural Performance In Sub-Saharan Africa 1980-1987", *Journal of International Development*, Vol. 1, No.3.
- Due, J.M. and C.H. Gladwin (1991). "Impact of Structural Adjustment on Africa Women Farmers and Female Headed Households", *American Journal Of Agricultural Economics*, 73(5): 1431-1439.
- Afshar, H. and C. Dennis eds. (1992). *Women and Adjustment Policies in the Third World*. New York: St.Martin Press.
- Binswanger, H.P. and K. Deininger (1997). "Explaining Agricultural and Agrarian Policies", *Journal of Economic Literature*, 35: 1958-2005.
- Timmer, P. (1990). *Getting Prices Right: The Scope and Limits of Agricultural Policy*. Cornell University Press.
- Dervis, K.J. de Melo and S. Robinson (1982). *General Equilibrium Models for Developing Countries*. Washington D.C.: The World Bank.
- Chowdhury, A. and C. Kirkpatrick (1994). *Development Policy and Planning; An Introduction to Model and Techniques*, London: Rutledge.
- Timmer, C.P.W Falcon and S.R. Pearson (1983). *Food Policy Analysis*. Baltimore: The John Hopking University Press.

Sadoulet, S. and A. de Janvry (1995). *Quantitative Development Policy Analysis*. The John Hopkins University Press.

Supplementary Readings

Isabelle Tsakok (2011). *Success in Agricultural Transformation: What it means and what makes it happen*. Cambridge University Press.

Townsend, R.F. (1999). "Agricultural Incentives in Sub-Saharan Africa: Policy Challenges", World Bank Staff Technical Paper 444, Washington, D.C.

Oyejide, T.A. (1990). *Supply Response in the context of structural Adjustment in Sub-Saharan Africa*, AERC, Special Paper No, 1.

Kwanarshie, M, Abdul-Ganiyu Garba and I. Ajilima (1997). *Policy Modeling in Agriculture: Testing the Responses of Agricultural to Adjustment Policies in Nigeria*, AERC, RP 57, Nairobi.

Kwanarshie, M.I. Ajilima and Abdul-Ganiyu Garba (1998). *The Nigerian Economy; Response of Agriculture to Adjustment Policies*, AERC, RP 78, Nairobi.

Duman, A. and J. Howell, (1995). *Structural Adjustment and the African Farmer*. London: ODI.

Thorbeke, E and S. Kone (1995). "The Impact of stabilization and structural Adjustment Programs on performance in Sub-Saharan Africa," *Wither African Economics*, Paris:OECD.

Tweeten L. (1989). *Agricultural Policy Analysis Tools for Economic Development* Boulder:Westview.

Goldin, I and L.A. Winters, eds., (1992). *Open Economies, Structural Adjustment and Agriculture*, OECD, Cambridge; Cambridge University Press.

Jammal, V. (1995). *Structural Adjustment and Rural Labour Markets*, ILO. ST, Martins Press.

Timmer, C.P. (1991). "The Role of the State in Agricultural Development". In: C.P.Timmer, ed., *Agriculture and the state*, Ithaca & London: Cornell University Press.

Chambers, R.G. (1995). "The Incidence of Agricultural policies," *Journal of Developing Areas*, 57: 317-335.

Heueiner, G.K (1992). "Structural Adjustment and Long-term Development in Sub-Saharan Africa". In: F. Stewart, S. Lall and S. Wangwe, eds. *Alternative Development Strategies in Sub-Saharan Africa*, London:Macmillan.

Elmin, N.A Hag and E.M. EL Mak (1997). *Adjustment programmes and Agricultural Incentives in Sudan: A Comparative study* (corrected Version), AERC, Nairobi, RP 63.

FAO (1992). *Agricultural Price Policy Analysis* Rome.

Ellis, F. (1992). *Agricultural Policies in Developing Countries*. Cambridge: Cambridge University Press.

Binswanger, H, P, and J, Quizon (1984). *Distributional Consequences of Alternative Food Policies in India*. Washington D.C. The World Bank.

Banjamin, N. (1993). *Income Distribution and Adjustment in an Agricultural Economy: A General Equilibrium Analysis of Cameroon*: 41, Cornell Food and Nutrition Policy Program, Ithaca, Cornell University.

Nikos Alexandratos (1995), *Agriculture Mondiale: Horizon 2010*, FAO, Ch. 4, 7.

The International Association of Agricultural Economics (1994), *Agricultural Competitiveness: Market Forces and Policy Choice*, Proceedings of the XXII International Conference of Agricultural Economists, Harare, Zimbabwe.

Devarajan S. and Rodrik D. (1989) "Trade Liberalization in Developing Countries: Do Imperfect Competition and Scale Economies Matter?" *American Economic Review*.

Kherallah M. and Gvindan K. (1999), "The Sequencing of Agricultural Markets Reform in Malawi", *Journal of African Economies*, Vol. 8, N°2.

Hazell, P.B.R. and Ramaswamy C. (1991), *The Green Revolution Reconsidered*, the Johns Hopkins University Press.

Johnson D.G. (1997), "Agriculture and the Wealth of Nations", *American Economic Review*, Vol 87, pp 1-12.