DODO J. THAMPAPILLAI -CURRICULUM VITAE

1. PERSONAL DETAILS

NAME: Jesuthason THAMPAPILLAI

DATE OF BIRTH: 28th May, 1947

CITIZENSHIP: Australian
MARITAL STATUS: Married

APPOINTMENTS: Visiting Professor Lee Kuan Yew School of Public Policy

National University of Singapore (2004 to present) Professor (Personal Chair – Environmental Economics)

Graduate School of the Environment, Macquarie University, (2001

- 2007); Adjunct Professor (2007 to present)

2. ACADEMIC QUALIFICATIONS

A. Degrees Awarded

<u>Institution</u>	<u>Date</u>	<u>Degree Awarded</u>
University of New England Australia	1982	Doctor of Philosophy (Economics)
University of New England Australia	1977	Master of Economics
University of Ceylon	1971	B. Sc. Agriculture (Honours)

B. Topics of Theses

- (i) An analysis of conflicts between income maximization and environmental quality: A linear programming approach to multiple objective planning in Dumaresq Shire. (Master of Economics)
- (ii) Optimal flood mitigation strategies through 'two-stage' stochastic programming and dynamic programming. (PhD)

C. Fields of Research and Professional Interest

- (i) **Environmental and Natural Resource Economics**: Environmental Policy Modelling, Environmental Macroeconomics, Water Resource Economics, Valuation of Environmental Intangibles, Soil Conservation and Energy Resources
- (ii) **Economics of growth and development**: Rural development, Absolute Poverty, and Environmental Policy for Development.
- (iii) **Quantitative Economics:** Operations Research including Mathematical Programming, Dynamic Programming and Simulation; and Applied Statistical Methods.
- (iv) **Applied Welfare Economics:** Cost-Benefit Analysis and Project Appraisal.

D. Current Research Projects

Global Financial Crisis Rescue Packages and Climate Constraints Environmental Capital in Factor Utilization Frameworks Economic Impacts of Sea Level Rise Book - Environmental Economics (Revised Edition)

3. SUMMARY OF EMPLOYMENT

	ll-time Positions	Position/Duties
Period	Employer	Position/Duties Position/Duties
2004 - Present	National University of Singapore	Professor/Associate Professor
1997 - 2007	Macquarie University	Professor
2007 - Present	Macquarie University	Adjunct Professor
1993 - 1997	Macquarie University	Associate Professor
1991 - 1992	Macquarie University	Senior Lecturer
1986 - 1990	University of Wollongong	Senior Lecturer
1981 - 1985	University of Wollongong	Lecturer
1980 - 1981	Bureau of Agricultural Economics	Senior Research Officer
1975 - 1980	University of New England	Teaching Fellow
1973 - 1974	University of Ceylon	Assistant Lecturer
B. Visiting Positions (overseas)		
2001 - 2008	Swedish University of Agricultural	Adjunct Professor
1999 - 2000	Sciences (Uppsala)	Visiting Professor
2002 - 2004	National University of Singapore	Senior Fellow/Visiting Professor
1999 - 2000	Christian Albrechts University - Kiel	Visiting Professor
1998 - 1999	National University of Singapore	Visiting Senior Fellow
1994 – 1995 &	Swedish University of Agricultural	Visiting Professor
1993 (April – June)	Sciences (Uppsala)	
$1988 - 1989 \; (Dec - May)$	Simon Fraser University	Visiting Associate Professor
1989 (May – June)	Swedish University of Agricultural	Visiting Fellow
	Sciences (Uppsala)	
$1989 (\mathrm{June-July})$	Christian Albrechts University - Kiel	Visiting Fellow
$1984 \; (\text{August} - \text{December})$	Simon Fraser University	Visiting Assistant Professor
$1984 (\mathrm{June-July})$	University of New England	Teaching Fellow
1973 - 1974	University of Ceylon	Assistant Lecturer
C. Visiting Positions (Australia)		
1980 - 1995	Australian National University National Centre for Development studies	Visiting Lecturer
1991 - 2002	University of Sydney, University of NSW, University Technology Sydney, University of South Australia, University of Wollongong	Guest Lectures

4. PUBLICATION LIST

A. Books

- 1. *Environmental Economics: Concepts, Methods and Policies*, Oxford University Press, Revised Edition (with J. A. Sinden) E-Book February 2013; Hard Copy April 2013
- 2. *Environmental Economics: Concepts, Methods and Policies*, Oxford University Press, Melbourne 2002; (Reprinted 2006)
- 3. An Introduction to Benefit-Cost Analysis, (with J.A. Sinden), Longman Australia, Melbourne, 1995.
- 4. Development Economics, Oxford University Press, Melbourne, 1992.
- 5. Environmental Economics, Oxford University Press, Melbourne, 1991, (Reprinted 1993).
- 6. Statistics for Business and Economics: Solutions Manual and Instructor's guide, (with D.E. Lewis and D.T. O'Brien), Harcourt Brace Jovanovich, Sydney, 1991.
- 7. *Statistics for Business and Economics*, (with D.E. Lewis and D.T. O'Brien), Harcourt Brace Jovanovich, Sydney, 1990.
- 8. *Taxation and the Environment*, Tax Research Foundation of Australia, (Editor of the proceedings of the Conference on Taxation and Environment held at Sydney, February 1993), Australian Tax Research Foundation, 1993.

B. Refereed Monographs

- 9. *Environmental Macroeconomics* (with C-H Hanf and H-E Uhlin), Department of Agricultural Economics, Christian Albrechts University of Kiel, 2000.
- 10. *Environmental Economics for Business Management* (with Bö Ohlmer), Department of Economics, Swedish University of Agricultural Sciences, Uppsala, 2000.
- 11. Environmental Macroeconomics: Some Illustrations with Reference to the Indonesian Economy, (with S. Mahendrarajah), GSE Research Report 9702, Macquarie University, 1997.
- 12. Valuation in Distorted Factor Markets, (with S. Mahendrarajah), GSE Research Report 9703, Macquarie University, 1997.
- 13. On the Measurement of Environmental Depreciation in Macroeconomic Analysis, (with H-E. Uhlin), Swedish University of Agricultural Sciences, Department of Economics, Uppsala, 1994
- 14. Environmental Macroeconomics: Some Conceptual Considerations, Sveriges Lantsbruksuniversitet, Småskriftsserien nr 73, Uppsala, Sweden, 1993.

- 15. Prospects for Aquaculture in New South Wales: Measurement of Benefits and Costs, Total Environment Centre, Sydney, 1992.
- 16. Quantification of the Trade-offs in Zambia between Environment, Employment, Income and Food-security, (with P.T. Maleka and J.Milimo), International Labour Office, Working Paper, Geneva, 1992.
- 17. Soil Conservation Project and Policy Intervention in Developing Countries (with J.R. Anderson), Paper No. 8, Policy and Research Series, The World Bank, Washington D.C., 1990

C. Refereed Articles in Journals

- 18. "Macroeconomics Vs Environmental Macroeconomics", Australian Journal of Agricultural and Resource Economics, July 2012
- 19. "Value of Sensitive In-Situ Environmental Assets in Energy Resource Extraction", *Energy Policy*, October 2011.
- 20. "Perfect Competition and Sustainability: A Brief Note", *International Journal of Social Economics*, May 2010.
- 21. "Fiscal Balance: Environmental Taxes and Investments" (with Wu Xun and Tan Seck Leng), *Journal of Natural Resources Policy Research*, May 2010.
- 22. "Environmental Capacity Constraints in Macroeconomic Policy Analysis", *International Journal of Environment Workplace and Employment*, 2008
- 23. "Meeting the Environmental Challenges of China and India: Towards Innovative Policy Formulation", *Journal of Administration and Governance*, September 2007
- 24. "The Scarcity of Environmental Capital and Economic Growth: A Comparative Study of Australia and the United States", *Singapore Economic Review*, August 2007.
- 25. "The Environment and the Economy: Some Questions Regarding the Performance of the Chinese Economy" *International Journal of Environment Workplace and Employment*, (with Wu Xun and L. Sunderaj) September 2007
- 26. "The Value of Nature in Thailand", *International Journal of Environment Workplace and Employment*, (with Quah, E and Thangavelu, S. M.), September 2006.
- 27. "An Extension of a John O'Brien Proposition: Altruism as an Instrument of Public Policy", *International Journal of Social Economics*, (with Bo Ohlmer and Lim Boon Tiong), 32(10), 2005.
- 28. "Towards Unitary Economics: Valuation of Environmental Capital for Environmental Stewardship", (with S. Thangavelu) *International Journal of Social Economics*, 2004.

- 29. "Environmental Valuation", (with Quah, E) Chapter 4 in Quah, E. and Tan, K.C., Siting Environmentally Unwanted Facilities: Risks, Trade-Offs and Choices, Edward Elgar, London, 2002.
- 30. "The Relationship Between Environmentally Sustainable Income, Employment and Wages in Australia", (with S. Mallick and J.A. Sinden), *Australian Economic Papers*, June 2000.
- 31. "The Internalisation of Environmental Capital into an Aggregate Cobb-Douglas Function" (with C-H. Hanf), *Economic Analysis and Policy*, September 2000
- 32. "Willingness to Pay and Willingness to Accept: A simple Conceptual Exposition", *Applied Economics Letters*, September 2000.
- 33. "The Environment in Macroeconomic Analyses Comparisons between the United States and Sweden" (with S. Wandén, M. Larsson and H-E Uhlin), *Australasian Journal of Regional Studies*, December 1998.
- 34. "An Economic Analysis of Terminal Aerodrome Forecasts (TAFs) with Special Reference to Sydney Airport, Australia" (with R. Leigh and L. Drake), *Journal of Transport Economics and Policy*, September 1998.
- 35. "Environmental Capital and Sustainable Income: Basic Concepts and Empirical Tests", *Cambridge Journal of Economics*, (with H-E Uhlin), May, 1997.
- 36. "Benefits of Meteorological Services: Evidence of Research in Australia" (with K. Anaman, A. Henderson-Sellers, P.F. Noar, and P.J. Sullivan), *Meteorological Applications*, 1997.
- 37. "Sustainable Income: Extending some Tisdell Considerations to Macroeconomic Analyses", (with H-E Uhlin), *International Journal of Social Economics*, June, 1996.
- 38. "Environment and the Macroeconomy: Some conceptual consideration within in a Keynesian Framework", *Australasian Journal of Regional Studies*, December 1995.
- 39. "Environmental Macroeconomics: Towards Filling an Empty Box", *Indian Economic Journal*, April-June 1995.
- 40. "Methods for Assessing the Benefits of Meteorological Services in Australia" (with K. Anaman, A. Henderson-Sellers, P.F. Noar and P. J. Sullivan), *Journal of Meteorological Applications*, 2(1), 1995
- 41. "A Review of the Socio-Economic Analysis of Soil Degradation Problems for Developed and Developing Countries", (with J.R. Anderson), *Review of Marketing and Agricultural Economics*, 62(3), 1994.
- 42. "Optimal Taxation Policies for a Nonrenewable but Quasi-Infinite Energy Resource", (with C-H. Hanf), *Australian Economic Papers*, June, 1993.

- 43. "Environmental Policy within a Keynesian Framework", in Thampapillai, D.J., (ed.) *Taxation and the Environment*, Australian Tax Research Foundation, Sydney, 1993.
- 44. "Taxation of a Nonrenewable but Quasi-Infinite Energy Resource: A Two-Period Framework", (with C-H. Hanf), *International Journal of Energy Research*, 16 (8), November 1992.
- 45. "The Elimination of Absolute Poverty: Some Approaches to Monetary Valuation Further Extensions", *Indian Economic Journal*, April-June, 1992.
- 46. "Soil conservation in developing countries: a review of the causes and remedies", (with J.R. Anderson) *Quarterly Journal of International Agriculture* June, 1991.
- 47. "The Marginal Cost of Extracting Light Crude Oil in Australia and the Analysis of Specific Policy Issues", *International Journal of Energy Research*, (with R. Kolednik), 14(4), May-June 1990.
- 48. "The Valuation of the Natural Environment and the Social Cost of Black Coal Extraction: A Small Case Study in the Hunter Valley", *Economics*, (with H-Y Park), 25(2), 1989.
- 49. "The Elimination of Absolute Poverty: Approaches to Monetary Valuation", *Indian Economic Journal*, April-June 1989.
- 50. "The Value of Natural Environments in the Extraction of Finite Energy Resources: A Method of Valuation", *International Journal of Energy Research*, 12(3), July-September 1988.
- 51. "Transport Energy from Agriculture in the European Community: Some Conceptual Considerations for Economic Analysis", *International Journal of Energy Research*, (with C-H Hanf), 12(1), January-March 1988.
- 52. "Trade-offs for Conflicting Social Objectives in the Extraction of Finite Energy Resources", *International Journal of Energy Research*, 9(2), April-June 1985.
- 53. "Flood Damage Mitigation: A Review of Structural and Non-Structural Measures and Alternative Decision Frameworks", *Water Resources Research*, (with W.F. Musgrave), 21(4), April 1985.
- 54. "Towards the Monetary Valuation of Absolute Poverty", *Occasional Paper No. 31*, *Development Studies Centre*, *Research School of Pacific Studies*, Australian National University, Canberra, 1982.
- 55. "Trade-offs for Multiple Objective Planning Through Linear Programming", *Water Resources Research*, (with J.A. Sinden), 15(5), October 1979.
- 56. "The Opportunity Cost Criterion for Land Allocation", *Review of Marketing and Agricultural Economics*, (with M.T. Hitchens and J.A. Sinden), 46(3), December 1978.
- 57. "Methods of Multiple Objective Planning: A Review", World Agricultural Economics and Rural Sociology Abstracts, 20(12), December, 1978.

D. Book Chapters

- 58. "The Economic Valuation of Urban Ecosystem Services" in Savage, V. and Lye L. H. (Editors), *Environment and Climate Change in Asia: Ecological Footprints and Green Prospects*, Pearson Singapore 2011
- 59. "A Climate Change Burden Sharing Model Using Bayes Theorem" (with W. L. Poh), in Lye, L.H., Chou, L-M., Chia, A., Gunawansa, A. And Kua, H-W., *Sustainability Matters*, Pearson, Singapore 2011.
- 60. Assessment of fiscal intervention measures in China: Perspectives from environmental macroeconomics", (with S. Tan) in *Environmental Taxation in China and Asia Pacific: Achieving Environmental Sustainability Through Fiscal Policy*, Ashiobar, H., Kreiser, L., and Sirisom, J. (Editors), Edward Elgar, 2011.
- 61. "Environmental Taxes and Cumulative Pollution Loads and Fiscal Balance", (with Wu Xun) in *Critical Issues in Environmental Taxation Volume VII*, Lye, L.H., Milne, J., Ashiobar, H., Kreiser, L., and Deketelaere, K (Editors), Oxford University Press, 2009.
- 62. "Environmental Economics and Stewardship", Chapter 5 in Staib, R. (Editor), *Business Management and Environmental Stewardship*, (with Bo Ohlmer) Palgrave MacMillan, London; 2009
- 63. "The Value of Nature in Economic Growth: A Case Study of Australia" Chapter 5 in Chung, R. K. and Quah, E, T. (Editors), *Pursuing Green Growth in Asia and the Pacific*, Cenage Learning Asia Pte Ltd., Singapore, 2009
- 64. The Value of Nature in Thailand" (with Quah, E and Thangavelu, S. M.) Chapter 7 in Wilson, P. (Editor), *Economic Policies and Social Welfare in the 21st Century*, Cenage Learning Asia Pte Ltd., Singapore, 2009
- 65. "An Introductory Macroeconomic Framework for China: Implications for West China Development" (with S. Thangavelu and E. Quah), in Ding, L. and Nielson, W. A. (Eds), *China's West Region Development: Domestic Strategies and Global Implications*, World Scientific, 2005.
- 66. "Taxation for Environmental Efficiency and Issues of Income Distribution", (with P. Mukhopadaya, S. M. Thangavelu and E Quah), in Deketelaere et al., *Critical Issues in Environmental Taxation Volume II*, Richmond Law and Tax, 2005.
- 67. "Economic and Social Benefits of Meteorological Services Provided by the Australian Bureau of Meteorology" (with K. Anaman, A. Henderson-Sellers, P.F. Noar, and P.J. Sullivan) in Zaitaev, A.S. (ed), *Proceedings of the Conference on the Economic Benefits of Meteorological and Hydrological Services*, World Meteorological Organisation, Geneva, 1996.
- 68. "Quantification of the Trade-offs in Zambia between Environment, Employment, Income and Food-security" (with P.T. Maleka and J.Milimo), in Ahmad, I. and Doeleman, J.A. (eds.) *Beyond Rio: The Environmental Crisis, Technological Dilemma and Sustainable Livelihoods in the Third World*, Macmillan, London 1995.

69. "The Valuation of Environmental Goods and Services", in Hay, J.E. and Sharp, B.M.H. (Editors), *Contributions to Training in Environmental Economics in the Asia-Pacific Region*, NETTLAP Publication No. 6, United Nations Environment Programme, Regional Office for Asia and the Pacific, Bangkok, 1994.

E. Conference and Workshop Papers (Invited)

- 70. "Towards a New Way of Thinking in Economics", Australian Agricultural and Resource Economics Society, Sydney, Australia December 2012 (http://www.aares.org.au/AARES/Branches/NSW/NSW_Seminars.aspx)
- 71. :"Entropy and Economics: A Serious Rethink", Stockholm Resilience Centre, University of Stockholm, November 2012.
- 72. "Environmental Macroeconomics: A New Way of Thinking for Dealing with Global Crises", Paper Presented to the *Workshop on Advances in Economic Theory* Conference on New Thinking about Global Challenges, Umweltforum, Berlin, October 2011
- 73. "Value of Sensitive in-situ Environmental Assets in Energy Resource Extraction", Victoria Department of Primary Industry, Melbourne, July 2011 http://www.spp.nus.edu.sg/docs/wp/2011/WP1102.pdf
- 74. "Economic Valuation of Urban Ecosystem Services", Urban Sustainability R&D Congress, Singapore June 2011. (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1876210)
- 75. "Towards an Environmental Macroeconomics", Australian Agricultural and Resource Economics Society New England Chapter, Armidale, Australia, May 2011. (http://www.spp.nus.edu.sg/docs/wp/2011/WP1101.pdf)
- 76. "Macroeconomics Vs Environmental Macroeconomics", Macroeconomics Workshop Series, University of Melbourne, November 2010 (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1711702)
- 77. "Environmental Macroeconomics: Focus on Factor Utilization", Environmental Economics Unit Swedish Environment Protection Agency, Stockholm, October 2010
- 78. "Environmental Macroeconomics Dynamics of Environment and Society Interactions" European Climate Forum, Berlin, November 2009.
- 79. "Environmental Taxes and Cumulative Pollution Loads and Fiscal Balance", Global Conference on Environmental Taxation, Singapore, November 2008 (Key Note Paper)
- 80. "Environmental Capacity Constraints in Macroeconomic Policy Analysis", Keynote Paper-International Conference on "Business, Environment, International Competitiveness and Sustainable Development of the Asia Pacific Economies" 03 December 2007 Monash University Kuala Lumpur Malaysia (Key Note Paper)

- 81. "Economic Growth and the Environment, Invited Paper presented to the Harvard Project in Asia and International Relations, Beijing, August 2007 (Key Note Paper)
- 82. "Environmental Protectionism and Resource Management: The Biggest Kids in the Sandbox China and India", Paper presented to the Harvard Project in Asia and International Relations, August 2006. (Key Note Paper)
- 83. "The Scarcity of Environmental Capital and Economic Growth: A Comparative Study of Australia and the United States", Panel on Sustainable Development Myth or Reality, Singapore Economic Review Conference, August 2005.
- 84. "Economic Growth and Environment: A Case Study of Australia", Eminent Environmental Economists' Symposium, UNESCAP, Seoul, Korea, March 2005.
- 85. "Macro level Values for Environmental Depreciation: Using Proxies in Environmental Accounting", The Fenner Conference on Environmental Accounting, The University of New South Wales, October 1996.
- 86. "The Valuation of Environmental Goods and Services: A Review", Workshop on Environmental Economics, United Nations Environment Programme, Singapore, October 1993.
- 87. "Resource Management: An Environmental Economics Perspective", Workshop for Economics Teachers, Economics Education Resources Centre, Sydney, March 1993.
- 88. "Extensions of Environmental Accounting: Conceptual Considerations of Fiscal Measures", Paper presented to the Conference on Taxation and the Environment, Tax Research Foundation of Australia, Sydney, February 1993.
- 89. "Environmental Accounting: Demonstrating the Role of Environmental Valuation", Paper presented to the Workshop on Environmental Valuation, Environmental Protection Authority of NSW, Sydney, February 1993.
- 90. "Trade-offs between Economic Growth and Environmental Quality Policy Case Study in Zambia", Paper presented to The Technical Department of The Africa Division, The World Bank, Washington D.C., December, 1992.
- 91. "Extensions of Environmental Accounting: Internalizing the Environment in a Keynesian Framework", Paper to The Environmental Policy and Research Division, The Environment Department, The World Bank, Washington D.C., December 1992.
- 92. "Economic Issues Surrounding the Eden Wood-chip Industry", Paper presented to the Forum on the Forests of South Eastern NSW, University of Wollongong, September, 1989.

E. Conference and Workshop Papers (Contributed)

93. "Meeting the Environmental Challenges of China and India: Towards Innovative Policy Formulation", NAPSIPAG Conference, University of Sydney, December 2006

- 94. "The Environment and the Economy: Some Questions Regarding the Performance of the Chinese Economy" (with Wu Xun and L. Sunderaj), Paper presented to the International Convention of Asian Scholars, Shanghai, August 2005.
- 95. "An Introductory Environmental Macroeconomic Framework for China: Implications for West China Development", Paper presented to the International Conference on West China Development: Domestic Strategies and Global Implications, (with S. M. Thangavelu and E Quah), University of Victoria, B. C. Canada, March 2003.
- 96. "Taxation for Environmental Efficiency and Issues of Income Distribution", Paper presented to the NUS-University of Tokyo Workshop, (with P. Mukhopadaya, S. M. Thangavelu and E Quah), Faculty of Arts and Social Sciences, NUS, Singapore November 2002.
- 97. "Internalization of Environmental Capital in Keynesian Model of Income Determination: Revised Approaches to Public Policy", Paper presented to the NUS-University of Nottingham Workshop on Current Economic Policy Issues in Asia and Europe, (with S. M. Thangavelu and E Quah), Singapore April 2002.
- 98. "The Valuation of Environmental Capital and the Implications for Sustainability Considerations in Germany, Sweden and Australia" (with C-H. Hanf, H-E Uhlin and J.A. Sinden), Conference on Planning Research 2000, London School of Economics and Political Science, March 2000.
- 99. "Internalizing the Environment in a Keynesian Model of Income Determination: Concepts and Empirical Tests", Paper presented to the Canadian Economics Association, (with H-E Uhlin) University of Qubec at Montreal, June 1995.
- 100. "Internalizing the Environment in a Keynesian Model of Income Determination: Concepts and Empirical Tests", Paper presented to the Australian Economics Society, (with H-E Uhlin) University of Adelaide, September 1995.
- 101. "Systems Modelling Approach to Drought Management Strategies in Zambia", Paper presented to the 32nd Conference of the Australian Agricultural Economics Society, (with P. Maleka) La Trobe University, Melbourne, February 1988.
- 102. "The Emergence of Agriculture as a Source of Energy and the Resultant Structural Change in Fossil Fuel Based Economies", IVth European Congress of Agricultural Economists, University of Kiel, Germany F.R., September 1984.
- 103. "Trade-off Model for Conflicting Social Objectives in Resource Extraction Policy", Paper presented to the 11th Conference of Economists, Adelaide, August 1982.
- 104. "Systems Modelling Approach to Environmental Policy", Paper presented to the Workshop on Teaching Environmental Policy, Macquarie University, December, 1981.
- 105. "Flood Plain Management through Two-Stage Stochastic Programming and Dynamic Programming", Paper presented at the 24th Conference of the Australian Agricultural Economics Society, Adelaide, February 1980.

F. Teaching Monographs

- 106. *Introduction to Benefit-Cost Analysis*, (with J. A. Sinden), University of New England, Armidale, 1990.
- 107. An Introduction to Macroeconomics for Development, Special Courses Programme, The National Centre for Development Studies, Australian National University, Canberra, 1988.
- 108. *An Introduction to the Economics of Poverty and Inequality*, Special Courses Programme, Development Studies Centre, Australian National University, Canberra, 1984
- 109. An Introduction to Cost-Benefit Analysis for the Evaluation of Rural Development Projects, Special Courses Programme, Development Studies Centre, Australian National University, Canberra, 1983.

G. Working Papers and OPEDs

- 110. "Financial Crisis Vs Environmental Crisis", YaleGlobal, October 2011.
- 111. "Quo Vadis Energy Policy", Global Is Asian, August 2011.
- 112. "Financial Crisis Climate Risks Rescue Packages" SPP-09 06, LKY School of Public Policy, 2009
- 113. "Environment as Capital", Ethos, (World Cities Summit Issue) June 2008
- 114. "Driving Forces of Integration and Regionalism in the Greater Mekong Sub-region: Cambodian Experience" Working Paper #16-05, LKY School of Public Policy, 2005.
- 115. "Can Altruism Become an Instrument of Public Policy", LKY School of Public Policy. Working Paper #12-05, 2005
- 116. "The Value of Nature in Economic Growth: A Case Study of Australia", Working Paper #09-05; LKY School of Public Policy, 2005.
 - 117. "The Value of Nature in Thailand: A Macroeconomic Perspective and Implications for Social Policy", (With Thangavelu, S, M and Quah. E. T.) Working Paper #60-04, 2004.
 - 118. "The Environmental Kuznets Curve Effect and the Scarcity of Natural Resources: A Simple Case Study of Australia", (With Thangavelu, S, M and Quah. E. T.) Working Paper #59-04, 2004.
 - 119. "Regional Värmeförsörjning. En studie av regionala samhälls-och privatekonomiska effekter av trädbränsle för värmeproduktion i WX-regionen (Dalarnas och Gävleborgs län)". FoU rapport nr 9, (with Hans-Erik Uhlin in Swedish), Högskolan i Gävle, 2001.
 - 120. "Extensions of Environmental Accounting: Internalizing the Environment in a Keynesian Framework", *GSE Working Paper 92-1*, Macquarie University, 1992.

- 121. "Cost-Benefit Analysis" in *Sydney Melbourne Freight Transport*, Report to Energy Research and Development Corporation, 1992.
- 122. "Optimal Taxation Policies for a Nonrenewable but Quasi-Infinite Energy Resource: A Two-Period Framework", (with C-H Hanf), Department of Economics Working Paper, University of Wollongong, 1990, (refereed).
- 123. "Optimal Taxation Policies for a Nonrenewable but Quasi-Infinite Energy Resource: A multi-period framework", (with C-H. Hanf), Department Economics working paper, University of Wollongong, 1990, (refereed).
- 124. "An Economic Analysis of the Light Crude Oil Industry in Australia", (with R. Kolednik), Economics Discussion Paper 89-8, Simon Fraser University, Burnaby, Canada, March 1989.
 - 125. "Systems Modelling Approach to Environmental Policy", in R. Robinson (ed.) *Proceedings of the Vice-Chancellor's seminar*, University of Wollongong, 1982.
 - 126. A review of: Butlin, J.A., "Economics and Resources Policy", *Australian Journal of Agricultural Economics*, August 1982.
- 127. "The irreversibility of natural environments and the benefits from preservation", *Chiasma*, 1979.

5. RESEARCH AND PROJECT GRANTS FACILITATED/RECEIVED

- (i) Asian Development Bank (2010): Public Policy Training for Vietnamese Civil Servants by the Lee Kuan Yew School of Public Policy – Faculty Chair and Program Formulation for Funding (Approx SGD 2 Million)
- (ii) Asian Development Bank Phnom Penh Plan (2005 -2010): Capacity Building Program on Leadership in Greater Mekong Sub-region by the Lee Kuan Yew School of Public Policy Faculty Chair and Program Formulation for Funding (Approx cumulative total SGD 500, 000)
- (iii) Asian Development Bank Phnom Penh Plan (2005 -2008): Capacity Building Program on Trade Policy Development in Greater Mekong Sub-region by the Lee Kuan Yew School of Public Policy Faculty Chair and Program Formulation for Funding (Approx cumulative total SGD 320, 000)
- (iv) *Ministry of Information Communication and the Arts* Singapore Government (2007): Socio-economic Evaluation of the Singapore Design Festival (SGD 70, 000)
- (v) National University of Singapore (LKY School of Public Policy) (2006): Research on Environmental Macroeconomics in ASEAN; (SGD 44, 000) External Funding from Swedish University of Agricultural Sciences (Approx SGD 20, 000)
- (vi) National University of Singapore (Faculty of Arts and Social Sciences) (2003): Research on Environmental Macroeconomics in ASEAN; (SGD 40, 000) – External Funding from Swedish University of Agricultural Sciences (Approx SGD 20, 000)

- (vii) *Deutsche Forschunds Gesellschaft Berlin* (1999): Research on Comparative Environmental Macroeconomics 1999-2000; (DM 130,000)
- (viii) *United Nations Development Programme* (1998): Training Programme on Environmental Macroeconomics for the Philippines; (AUD 46, 000)
- (ix) United Nations Development Programme (1997): Training Programme on Environmental Policy in Transition Economy for Professionals from Vietnam; (AUD 51, 000)
- (x) Deutscher Akademischer Austauschdienst Bonn (1997): Research on Comparative Environmental Macroeconomics; (DM 6,000)
- (xi) Australian Research Council (1997): Environmental Macroeconomic Analyses on the Australian Economy; (AUD 10, 000)
- (xii) Swedish Environment Protection Authority (1995/97): (with Hans-Erik Uhlin) for formulating and applying an Environmental Macroeconomic model of Sweden; (SEK 60, 000)
- (xiii) Asia Pacific Economic Co-operation (APEC) Human Resource Development Group (1994): (with Richard Braddock) Environmental Accounting and Macroeconomic Modelling in APEC countries; (AUD 20, 000)
- (xiv) Australian Research Council (1993-96): (with A. Henderson-Sellers and the Australian Bureau of Meteorology) For the Economic Evaluation of Climate Information Services; (AUD 267, 000)
- (xv) Australian International Development Assistance Bureau (1993-97): For formulation and implementation of a professional training programme on Environmental Economics for Developing Countries; (Approximately \$ AUD1.2 Million- cumulative total)
- (xvi) *Swedish University of Agricultural Sciences* (1993): Teaching and Research on Environmental Economics; (SEK 150, 000).
- (xvii) *International Labour Office* (1991): Research on environmental quality economy linkages in Zambia; (US\$ 10, 000).
- (xviii) Deutscher Akademischer Austauschdienst Bonn (1989 and 1984): Research with Professor C-H Hanf on economics of energy resources; (DM 9, 000)
- (xix) Swedish University of Agricultural Science-Uppsala (1989): Valuation of Unpriced Effects in Cost-Benefit Analysis; (SEK 20, 000).
- (xx) Department of External Affairs-Canada (1987): To visit Canadian Universities and initiate collaborative teaching and research programmes on the economics of energy resources; (CDN 6, 000).
- (xxi) Water Research Foundation of Australia (1982):To conduct research on flood mitigation strategies on the Shoalhaven River; (AUD 5, 000).
- (xxii) Australian Universities International Development Programme (1982): To conduct collaborative research with University Pertanian Malaysia; (AUD 3, 000).

6. TEACHING

A. Courses for which I am currently responsible

<u>Graduate courses</u> in Macroeconomics, Environmental Economics, Natural Resource Economics; Project Appraisal and Cost-Benefit Analysis

B. Courses for which I have been responsible in previous years

Graduate and undergraduate courses in Economics of Energy Resources, Cost-Benefit Analysis, Operations Research, Applied Statistics, Mathematical Economics, Economic Policy and General Micro and Macroeconomics

C. Thesis Supervision

My supervision load varies between years. My current load is 5 students.

So far 26 students have completed their degrees under my supervision (6 Honours, 12 Master and 8 PhD)

D. Short Courses

I have chaired and delivered programs on leadership and trade policy for the Asian Development Bank for the LKY School of Public Policy I have also offered short courses on environmental economics, operations research, and cost-benefit analysis for various Ministries of Singapore Government, Macquarie University, The Australian National University, The University of Sydney, University of South Australia, and selected Australian Commonwealth and State Government Departments.

7. ADMINISTRATION AND PROFESSIONAL RECOGNITION

- i. Member Teaching Excellence Evaluation Committee NUS Since 2005
- ii. Member Research Committee LKY School of Public Policy NUS since 2004
- iii. Member Graduate Studies Committee Department of Economics NUS (2002-2003)
- iv. Head of the Graduate School of the Environment (July 2000 December 2001), and member of internal university committees
- v. Member Expert group on Internalizing Environmental Externalities, United Nations Environment Programme.
- vi. Expert adviser on CREED projects (Free University of Amsterdam and the International Environment and Development Institute at London).
- vii. Member Advisory Panel for the Projects and Policy Section of the Environmental Protection Authority of NSW.
- viii. Deputy Director of the Climatic Impacts Centre at Macquarie University
- ix. Represented Macquarie University on the advisory committee on Commonwealth Climatic Impact Management (COMCIAM) program

8. REFEREES

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- 3. Professor Peter Phibbs, Department of Urban and Regional Planning, University of Sydney, Sydney, NSW 2006, Australia; (<u>peter.phibbs@sydney.edu.au</u>) Ph: +61-420-303-867