

CURRICULUM VITAE: MJ SWIFT

PERSONAL DATA

Name : MICHAEL JOHN SWIFT, MA (Cantab), Ph.D. (Lond.)

Born : Leicester, England, July 24th 1939

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UNIVERSITY EDUCATION

1961-1964 : University College of Rhodesia and Nyasaland, Salisbury, Rhodesia (in special relation with the University of London) Ph.D (Lond.), 1964.

1958-1961 : Downing College, University of Cambridge Natural Sciences Tripos (Botany), B.A. (Cantab.), 1961; M.A (Cantab.), 1964.

EMPLOYMENT HISTORY

2003 : **Consultant, Self-employed.**
Currently with projects at TSBF and FARA (Sub-Saharan Africa Challenge Programme).

2002 : **Director, TSBF Institute of CIAT.**
During 2001 I led negotiations with a number of International Agricultural Research Centres which resulted in a merger between TSBF and the International Centre for Tropical Agriculture (CIAT), the largest Centre in the CGIAR. The key issue in the merger was for TSBF to retain its identity and become an 'Institute within a Centre' the first such arrangement in the CGIAR. CIAT soil science staff have been assigned to the Institute and TSBF-CIAT is now the largest soils research unit in the CGIAR. Member, CIAT Directorate. (Retired December 31st 2002).

- 1993-2001 : Director, Tropical Soil Biology and Fertility Programme, UNESCO, Nairobi, Kenya**
 I was a founder member of TSBF in 1982 and served as Director on an unpaid basis until moving into full-time employment in January 1993. As Director I am responsible for fund-raising (more than \$25 million from about 15 donors), finance and human resource management (in an institution that went from one to nine full-time professionals and from two to more than 25 national staff in nine years) as well as for research direction. Co-supervised more than fifteen postgraduate students.
- 1989-1992 : Leader, Natural Resource Management Research Programme, International Institute of Tropical Agriculture, Nigeria**
 I provided leadership and research direction for a team of 23 senior scientists in all aspects of NRM research (soils, water, GIS, land management, economics, farming systems etc). I was responsible for drafting and implementing a development plan and research strategy for the newly opened Humid Forest Research Station in the Cameroon. In 1992 I led (with IFDC and ICRAF) the drafting of the first proposal to GEF for the Alternatives to Slash and Burn Project which subsequently became recognized as one of the most successful of the CGIAR Eco-Regional Projects. Supervised 4 PhD students. Continued to direct TSBF by arrangement with IITA. In 1989 the TSBF Coordination Office was moved, by invitation, to UNESCO, Nairobi.
- 1982-1989 : Professor of Botany, University of Zimbabwe**
 Following appointment I participated in the exciting process of restructuring of the University to serve the needs of the newly independent country. This resulted in the merger of the former Departments of Botany and Zoology to form a Department of Biological Sciences with a revised undergraduate and postgraduate curriculum and research strategy targeted at 'Biology for Development'. I was the inaugural Chairman from 1983-86. In the period 1987 to 1989 I served as Senate representative on the University Council and over the same period as the Deputy Chair (ie. senior Science representative) on the University Research Board. The TSBF Programme was established at UZ in 1984. Supervised 11 PhD and 4 MSc students.
- 1979-1980 : Professor of Biology, University of Papua New Guinea.**
 I was seconded from Queen Mary College for two years as Professor and Chair of the Department of Biology. I was a member of the Science Planning Committee and the University Development Committee. I initiated a programme of research on nutrient cycling in mangrove ecosystems, an important fisheries resource for the country. Supervised two MSc students.

- 1981** : **Reader in Ecology, University of London.**
I was promoted to this University-Appointed post on the basis of external review.
- 1974-1978** : **Lecturer, Department of Plant Biology & Microbiology, Queen Mary College, University of London**
I moved to QMC to teach undergraduate courses in Plant Pathology and Mycology. With colleagues I planned and implemented a new inter-departmental option in Ecology to which I contributed courses on Microbial Ecology and Ecosystem Ecology; During the period 1976-78 I was University Lecturer on a joint University of London-University of Glasgow course on Marine Microbiology. Supervised 8 PhD students.
- 1966-1973** : **Assistant Lecturer (1966) and then Lecturer, Botany Department, Birkbeck College, University of London**
Birkbeck is the College for mature student education in the University of London. I taught undergraduate courses in Plant Pathology, Microbial Physiology and Ecology and Microbial and Molecular Genetics. From 1967 I was the Lecturer in Charge for the MSc Microbiology Course with a similar spectrum of courses and responsibility for the dissertation research programme. Supervised 3 PhD and 6 MSc students.
- 1965** : **Lecturer in Biology, Medway College of Technology, Chatham, England**
I taught a wide range of topics for the University of London External Degree courses in Botany and the Higher National Diploma in Biochemistry.
- 1961-1964** : **Rockefeller Junior Research Fellow in Plant Pathology, University College of Rhodesia and Nyasaland**
PhD Thesis, University of London, 1964: The biology of *Armillaria mellea* in Central Africa.

SELECTED PUBLICATIONS

Decomposition Science

Swift, M.J., Heal, O.W. and Anderson, J.M. (1979). *Decomposition in terrestrial ecosystems. Studies in Ecology* 5. Blackwell Scientific Publications, Oxford. 372 pp.

Heal, O.W., Swift, M.J. and Anderson, J.M. (1982). Nitrogen cycling in United Kingdom forests: the relevance of basic ecological research. *Philosophical Transactions of the Royal Society of London*, **B296** : 427-444.

Biodiversity

Swift, M.J. (1987). Organisation of assemblages of decomposer fungi in space and time. pp. 229-253 In: P. Giller and J. Gee (Eds.), *Organisation of communities past and present*. British Ecological Society Symposium 27, Blackwell Scientific Publishers, Oxford.

Swift, M.J. and Anderson, J.M. (1993). Biodiversity and ecosystem function in agricultural systems. pp. 15-41 In: E.D. Schultz and H. Mooney (Eds.) *Biodiversity and ecosystem function*. Springer-Verlag, Berlin.

Swift, M.J., Vandermeer, J., Ramakrishnan, P.S., Anderson, J.M., Ong, C.K. and Hawkins, B.A. (1996). Biodiversity and Agroecosystem Functioning. pp. 433-443 In: V.H. Heywood and R.T. Watson (Eds.) *Global Biodiversity Assessment*: UNEP. Cambridge University Press.

Swift, M.J., Izac, A.M.N. and Van Noorwidjk, M.N. (2002) Biodiversity and ecosystem services in agricultural landscapes – are we asking the right questions? *Agriculture, Ecosystems and Environment* (In Press).

Soil Fertility Management and Sustainable Agriculture

Woomer, P.L. and Swift, M.J. (Ed and Author.) (1994). *The Biological Management of Tropical Soil Fertility*. John Wiley, Chichester, 243 pp.

Swift, M.J., Seward, P.D., Frost, P.G.H., Qureshi, J.N. and Muchena, F.N. (1994). Long-term experiments in Africa: Developing a database for sustainable land use under global change. pp. 229-251 In: R.A. Leigh and A.E. Johnston (Eds.) *Long-term Experiments in Agricultural and Ecological Sciences*. CAB International, Wallingford, UK.

Izac, A-M.N. and Swift, M.J. (1994). On agricultural sustainability and its measurement in small scale farming systems in sub-Saharan Africa. *Ecological Economics* **11**: 105-125.

Swift, M.J. (1997). Biological management of soil fertility as a component of sustainable agriculture: perspectives and prospects with particular reference to tropical regions. pp. 137-159 In: L. Brussaard and R. Ferrera-Cerrato (Eds.) *Soil Ecology in Sustainable Agricultural Systems*. Lewis Publishers, Florida.

Matson, P.A., Parton, W.J., Power, A.G. and Swift, M.J. (1997). Agricultural Intensification and Ecosystem Properties. *Science* **277**: 504-509.

Swift, M.J. (1999). Integrating soils, systems and society: plenary lecture 16th World Congress Soil Science, Montpellier. *Nature & Resources* **35**: 12-20.

Palm, C. A., Giller, K.E., Mafongoya, P.L. and Swift, M.J. (2001). Management of Organic Matter in the Tropics: Translating Theory into Practice. *Nutrient Cycling in Agroecosystems* **61**: 63-75.

OTHER APPOINTMENTS & DISTINCTIONS

- 2002-** : Visiting Professor, Centre for Environment and Society, University of Essex
- 1998-2002** : Member of Council, International Union of Soil Sciences: Chair, Commission on Soil Fertility and Plant Nutrition.
- 1992-** : Visiting Professor, Queen Mary & Westfield College, University of London
- 1996** : Lead author, Agro-biodiversity for Global Biodiversity Assessment, UNEP.
- 1995-96** : Member SCOPE committee for 'Biodiversity and Ecosystem function', lead author, agro-biodiversity section for Global Biodiversity Assessment.
- 1992-96** : Chair, Global Change and Terrestrial Ecosystems Activity on Multi-Species Agro-ecosystems; member Steering Committee of GCTE Core Project.
- 1987-1989** : Member, Commission for Ecology, International Union for the Conservation of Nature
- 1984-1989** : Chairman, Co-ordinating Committee, IUBS-UNESCO Programme on 'Tropical Soil Biology & Fertility'
- 1984-1989** : Member Standing Committee on Agriculture and Natural Resources, Scientific Council of Zimbabwe
- 1971 (Nov-Dec)** : Visiting Research Fellow, Smithsonian Tropical Research Institute, Panama
- 1969-1978** : Examiner for the Membership Examinations of Institute of Biology
- Consultancies:**
- 2003-** : Forum for Agricultural Research in Africa: Lead author for the Sub-Saharan Africa Challenge Programme full proposal.
- 1996** : World Bank, Natural Resource Management and Sustainable Agriculture
- 1995** : FAO, Sustainable Land Management
- 1994** : FAO, Integrated Plant Nutrient Systems
- 1973-1978** : Ministry of Overseas Development - Ecological Effects of Pesticide Residues in Tropical Soils

1981 : Department of Trade and Industry – future of Microbiological Collections in the UK

Editorial Committees

- 2003-** : Editorial Board, Ecosystem Sciences
- 1986-1989** : Founder Editorial Board: Trends in Ecology and Evolution
- 1984- 2000** : Editorial Board, Pedobiologia.
- 1984- 2000** : Founder Editorial Board, Biogeochemistry.
- 1984-1992** : Editorial Board, Soil Biology & Biochemistry; Biogeochemistry.
- 1983-1987** : Editor, Kirkia, Zimbabwe Journal of Botany