

Shifting cultivation: A new old paradigm for managing tropical forests

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References:

1. Alcorn, J., Indigenous agroforestry strategies meeting farmers' needs (1990) *Alternatives to Deforestation: Steps Toward Sustainable Use of the Amazon Rain Forest*, pp. 141-151. , Anderson A, ed. New York: Columbia University Press
2. Alford, D., Streamflow and sediment transport from mountain watersheds of the Chao Phraya Basin, Northern Thailand: A reconnaissance study (1992) *Mountain Research and Development*, 12, pp. 257-268
3. Brookfield, H., Padoch, C., Appreciating agrodiversity: A look at the dynamism and diversity of indigenous farming practices (1994) *Environment*, 36 (5), pp. 6-45
4. Chazdon, R., Tropical forests (log 'em or leave 'em) (1998) *Science*, 281, pp. 1295-1296

5. Collins, B.S., Pickett, S.T.A., Influence of canopy opening on the environment and herb layer in a Northern Hardwood forest (1987) *Vegetation*, 70, pp. 3-10
6. Conklin, H., (1957) *Hanunoo Agriculture*, , Rome: Food and Agriculture Organization of the United Nations
7. Van Sam, D., Shifting cultivation in Vietnam: Its social, economic, and environmental values relative to alternative land use (1994) *IIED Forestry and Land Use Series*, 3. , London: International Institute for Environment and Development
8. Dove, M.R., *Ethnographic atlas of the Ifugao: Implications of theories of agricultural evolution in Southeast Asia* (1983) *Current Anthropology*, 24, pp. 516-520
9. Government versus peasant beliefs concerning imperata and eupatorium: A structural analysis of knowledge, myth, and agricultural ecology in Indonesia (1984) *East-West Center Working Paper*, 54. , Honolulu: East-West Center
10. Enoksson, B., Angelstam, P., Larsson, K., Deciduous forest and resident birds: The problem of fragmentation within a coniferous forest landscape (1995) *Landscape Ecology*, 10, pp. 267-276
11. Forsyth, T., The use of cesium-137 measurements of soil erosion and farmers' perceptions to indicate land degradation amongst shifting cultivators in Northern Thailand (1994) *Mountain Research and Development*, 14, pp. 229-244
12. Fox, J., Krummel, J., Yarnasarn, S., Ekasingh, M., Podger, N., Land use and landscape dynamics in Northern Thailand: Assessing change in three upland watersheds (1995) *Ameba*, 24, pp. 328-334
13. Giambelluca, T.W., Tropical land cover change: Characterizing the post-forest land surface (1996) *Climate Change: Developing Southern Hemisphere Perspectives*, pp. 293-318. , Giambelluca TW, Henderson-Sellers A, eds. London: John Wiley & Sons
14. Giorgi, F., Two-dimensional simulations of possible mesoscale effects of nuclear war fires. I. Model description (1989) *Journal of Geophysical Research*, 94, pp. 1127-1144
15. Henderson-Sellers, A., Dickinson, R.E., Durbidge, T.B., Kennedy, P.J., McGuffie, K., Pitman, A.J., Tropical deforestation: Modeling local- to regional-scale climate change (1993) *Journal of Geophysical Research*, 98, pp. 7289-7315
16. (1996) The Implementation Plan of GAME-Tropics: Draft at July 1996, , climate.gsfc.nasa.gov/~taikan/ GAME-T/Imple2e/imple2e.html (18 Apr 2000)
17. Jamieson, N.L., Culture and development in Vietnam (1991) *East-West Center Working Papers Indochina Series*, 1. , Honolulu: East-West Center
18. Janzen, D., Gardenification of wildland nature and the human footprint (1998) *Science*, 279, pp. 1312-1313
19. Kummer, D.M., Turner B.L. II, The human causes of deforestation in Southeast Asia (1994) *Bioscience*, 4, pp. 323-328
20. Kunstadter, E., Chapman, C., Sabhasri, S., (1978) *Farmers in the Forest: Economic Development and Marginal Agriculture in Northern Thailand*, , Honolulu: East-West Center Press
21. Lawrence, D., Peart, D., Leighton, M., The impact of shifting cultivation on a rainforest landscape in West Kalimantan: Spatial and temporal dynamics (1998) *Landscape Ecology*, 13, pp. 135-148
22. Cuc, L.T., Swidden agriculture in Vietnam (1996) *Montane Mainland Southeast Asia in Transition*, pp. 104-119. , Rerkasem B, ed. Chiang Mai (Thailand): Chiang Mai University Consortium
23. Cuc, L.T., Gillogly, K., Rambo, A.T., (1990) *Agroecosystems of the Midlands of Northern Vietnam*, , Honolulu: Environment and Policy Institute, East-West Center. Occasional Paper no. 12
24. McClanahan, T.R., Wolfe, R.W., Accelerating forest succession in a fragmented landscape: The role of birds and perches (1993) *Conservation Biology*, 7, pp. 279-288
25. Moran, E.F., Brondizio, E., Mausel, P., Wu, Y., Integrating amazonian vegetation, land-use, and satellite data (1994) *BioScience*, 44, pp. 329-338
26. Murcia, C., Edge effects in fragmented forests: Implications for conservation (1995) *TREE*, 10, pp. 58-62

27. Myers, N., Tropical forests: Present status and future outlook (1991) *Climatic Change*, 19, pp. 3-32
28. Tropical forests: The main deforestation fronts (1993) *Environmental Conservation*, 20, pp. 9-16
29. Nepstad, D.C., Uhl, C., Serrao, E.A.S., Recuperation of a degraded amazonian landscape: Forest recovery and agricultural restoration (1991) *Ambio*, 20, pp. 248-255
30. Khiem, N.D., Van Der Poel, P., (1993) Land Use in the Song Da Watershed (Northwest of Vietnam), , Hanoi (Vietnam): Vietnamese-German Technical Cooperation Social Forestry Development Project (SFDP) Song Da. SFDP Baseline Study no. 2
31. Padoch, C., Peters, C., Managed forest gardens in West Kalimantan, Indonesia (1992) *Perspectives on Biodiversity: Case Studies of Genetic Resource Conservation and Development*, pp. 167-176. , Potter CS, Cohen JI, Janczewski D, eds. Washington (DC): American Association for the Advancement of Science
32. Padoch, C., Harwell, E., Sustanto, A., Swidden, sawah, and in-between: Agricultural transformation in Borneo (1998) *Human Ecology*, 26, pp. 3-20
33. Shengji, P., Some effects of the Dai people's cultural beliefs and practices on the plant environment of Xishuangbanna, Yunnan Province, Southwest China (1985) *Cultural Values and Human Ecology in Southeast Asia*, pp. 321-339. , Hutterer K, Rambo AT, Lovelace G, eds. Ann Arbor (MI): University of Michigan Press. Michigan Papers on South and Southeast Asia, no. 27
34. Pimentel, D., Stachow, U., Takacs, D.A., Brubaker, H.W., Dumas, A.R., Meaney, J.J., O'Neil, J.A.S., Corzilius, D.B., Conserving biological diversity in agricultural/forestry systems (1992) *BioScience*, 42, pp. 354-362
35. Potter, L., Brookfield, H., Byron, Y., The Sundaland region of Southeast Asia (1994) *Regions at Risk: Comparisons on Threatened Environments*, pp. 460-518. , Kasperson JX, Kasperson RE, Turner BL II, eds. Tokyo: United Nations University Press
36. Rambo, A.T., Slash-and-burn farmers: Villains or victims (1990) *Earth-watch*, 39, pp. 10-12
37. Defining highland development challenges in Vietnam: Some themes and issues emerging from the conference (1995) *The Challenges of Highland Development in Vietnam*, pp. xi-xxvii. , Rambo AT, Reed RR, Le Trong Cuc, Di Gregorio MR, eds. Honolulu: East-West Center
38. The composite swiddening agroecosystem of the tay ethnic minority of the northwestern mountains of Vietnam (1996) *Montane Mainland Southeast Asia in Transition*, pp. 69-89. , Rerkasem B, ed. Chiang Mai (Thailand): Chiang Mai University Consortium
39. Rambo, A.T., Cuc, L.T., Some observations on the role of live-stock in composite swiddening systems in Northern Vietnam (1997) *Workshop on Upland Farming Systems in the Lao PDR*, Vientiane, , 18-23 May 1997
40. Vientiane, Lao PDR
41. Rao, Y., Forest resources of tropical Asia (1989) *Environment and Agriculture - Environmental Problems Affecting Agriculture in the Asia-Pacific Region*, pp. 1-20. , World Food Day Symposium
42. 11 October 1989
43. Bangkok (Thailand): Food and Agriculture Organization of the United Nations
44. Schelhas, J., Greenberg, R., (1996) *Forest Patches in Tropical Landscapes*, , Washington (DC): Island Press
45. Schmidt-Vogt, D., Defining degradation: The impacts of swidden on forests in Northern Thailand (1998) *Mountain Research and Development*, 18, pp. 135-149
46. Skole, D., Salas, W., Silapathong, C., Interannual variation in the terrestrial carbon cycle: Significance of Asian tropical forest conversion to imbalances in the global carbon budget (1998) *Asian Change in the Context of Global Change*, pp. 162-186. , Galloway J, Melillo J, eds. New York: Cambridge University Press

47. Spencer, J., *Shifting cultivation in Southeast Asia* (1966) University of California Publications in Geography, 19. , Berkeley (CA): University of California Press
48. Tomich, T., Noordwijk, M., Budidarsono, S., Gillison, A., Kusumanto, T., Murdiyarso, D., Stolle, F., Fagi, A., (1998) *Alternatives to Slash-and-burn in Indonesia: Summary Report and Synthesis of Phase II*, , Bogor (Indonesia): International Centre for Research in Agroforestry. ASB-Indonesia Report no. 8
49. Turner, B.L., Moss, R.H., Skole, D.L., *Relating land use and global land-cover change: A proposal for an IGBP-HDP core project* (1993) International Geosphere-Biosphere Programme: A Study of Global Change and the Human Dimensions of Global Environmental Change, , Stockholm: Royal Swedish Academy of Science. IGBP Report no. 24
50. Uhl, C., Buschbacher, R., Serrao, E.A.S., *Abandoned pastures in eastern amazonia. I. Patterns of plant succession* (1988) *Journal of Ecology*, 76, pp. 663-681
51. Williams, M., *Forests* (1990) *The Earth As Transformed by Human Action*, pp. 179-201. , Turner BL II, Clark WC, Kates RW, Richards JF, Mathews JT, Meyer WB, eds. Cambridge (UK): Cambridge University Press
52. Xu, J.C., Li, Y.H., Pei, S.J., Chen, S.Y., Wang, K.L., *Swidden-fallow succession in the Mengsong area of Xishuangbanna, Yunnan Province, China* (1993) *Regional Study on Biodiversity: Concepts, Frameworks, and Methods*, pp. 183-196. , Pei S, Sajise P, eds. Kunming (China): Yunnan University Press
53. Yan, H., Anthes, R., *The effect of latitude on sea breeze* (1987) *Monthly Weather Review*, 115, pp. 936-956
54. Zinke, P., Sabharsi, S., Kunstadter, P., *Soil fertility aspects of the Lua' forest fallow system of shifting cultivation* (1978) *Farmers in the Forest*, pp. 134-159. , Kunstadter P, Chapman E, Sabharsi S, eds. Honolulu: University Press of Hawaii