

## **Dr. NOPHEA K. SASAKI**

### **Summary of Achievements**

#### ***Honors & Awards (2005-onward):***

9/2008–8/2009: Charles Bullard Fellowship, Harvard Forest, Harvard University

2005 Zayed International Prize for the Environment "Scientific Achievements in the Environment"

**Nature News Coverage:** Forest definition comes under fire

<http://www.nature.com/news/2009/090819/full/news.2009.842.html>

### **Major Work Experience**

#### ***9/2008–8/2009***

**Bullard Fellow**, Harvard Forest, Harvard University

Research: Reduced emissions from deforestation and degradation (REDD) and compensated reductions

#### ***2004–present***

**Associate Professor** (tenure), Graduate School of Applied Informatics, University of Hyogo, Kobe, Japan. Taught such graduate courses as environmental information, environmental business, and environmental modeling.

Researched on climate policy and forestry, especially tropical forestry

#### ***2002–2004***

**Postdoctoral Fellow**, Max Planck Institute for Biogeochemistry. Hamburg, Germany

Research: Forestry and carbon cycling modeling

#### ***1995–1996***

**Trainee Operations Supervisor** (Forester), SL International LTD in Sarawak (Malaysia) and Cambodia

Responsibilities: Pre-harvest forest inventory, forest road alignments, data analysis, and logging planning

### **Other Work Experience**

Adjunct Associate Professor, Osaka University, (Japan): (01/2006–3/2007)

QUEST Scientific Visitor (UK) and Max Planck Institute for Biogeochemistry (Germany): 7–8/2005

Guest Scientist, Center for Ecological Research, Kyoto University (Japan): 8/2004–3/2006

Teaching Assistant, Shinshu University (Japan): 10/1999–3/2002

Research Assistant, Hosei University (Japan): 9/2000–01/2001

Cambodian Forestry Consultant, Hosei University (Japan): 01/1999–9/1999

### **Education**

#### ***Ph.D, Agriculture, 2002***

United Graduate School of Agriculture, Gifu University (with honor). Nagano, Japan

Specialization: Forest management

#### ***Master, Forest Science, 1999***

Faculty of Agriculture, Shinshu University. Nagano, Japan

Specialization: Forest management

#### ***Bachelor of Science in Forestry, 1994***

Royal University of Agriculture. Phnom Penh, Cambodia

Specialization: Agroforestry and forest management

**Languages:** Khmer, English, Japanese

**Activities:** Founding of Society of Khmer Naturalists, Khmer Association for Research and Development, Student leader, soccer & softball teams, fundraising to build 5 wells for local poor in Cambodia

## MAJOR PUBLICATIONS

### PEER-REVIEWED ARTICLES

- 2010 Sasaki, N. and Yoshimoto, A. (2009) Benefits of tropical forest management under the new climate change agreement—a case study in Cambodia. *Environmental Science and Policy* doi:10.1016/j.envsci.2010.04.007
- 2010 Etoh, H and Sasaki, N. (2010) Comparison on promotion policies for utilization of woody biomass between European countries and Japan. *Journal of the Japanese Forest Society* 92(2), 88-92
- 2009 Putz, F.E. and Sasaki, N. (2009) What is ‘forest’: response to Guariguata *et al.*" ? *Conservation Letters* 2(6), 288 - 289
- 2009 Sasaki, N. and Putz, F.E. (2009) Critical need for new definitions of forest and forest degradation in global climate change agreements. *Conservation Letters* 2, 226–232
- 2009 Sasaki, N., Knorr, W., Foster, D.R., Ninomiya, H., Etoh, H., Chay, S., Kim, S., Sun, S. (2009) Woody biomass and bioenergy potentials in Southeast Asia between 1990 and 2020. *Applied Energy* 86 (S1), S140-S150
- 2009 Sasaki, N. and Kim, S. (2009) Biomass carbon sinks in Japanese forests: 1966–2012. *Forestry*: 82(1),113-123
- 2008 Kim, S., Sasaki, N., and Koike (2008) Assessment of non-timber forest products in Phnom Kok community forest, Cambodia. *Asia Europe Journal* 6 (2), 345-354
- 2008 Kim, S., Sasaki, N., and Koike (2008) The role of resin trees in poverty alleviation – a case study in Phnom Kok forest community in Cambodia, *FORMATH* 7, 161-178
- 2008 Etoh, H. and Sasaki, N. (2008) Analysis of the role of wood bioenergy in GHG emission reductions. *FORMATH* 7, 239-252 (in Japanese)
- 2008 Sasaki, N. and Smith, B. (2008) Potential carbon sequestration in Japanese forests during the first commitment period of the Kyoto Protocol, *FORMATH* 7, 1-14
- 2006 Sasaki, N. (2006) Carbon emissions due to land-use change and logging in Cambodia- a modeling approach. *Journal of Forest Research* 11, 397-403
- 2006 Kim, S., Kim Phat, N., Koike, M., Hayashi H. (2006) Estimating actual and potential government revenues from timber harvesting in Cambodia. *Forest Policy and Economics* 8, 625- 635
- 2005 Kim, S., Kim Phat, N., Koike, M., Hayashi H. (2005) Cause of historical destruction of forest resource in Cambodia. *Journal of Forest Planning* 11, 23-31
- 2004 Kim Phat, N., Knorr, W. and Kim S., (2004) Appropriate measures for conservation of terrestrial carbon stocks – analysis of trends of forest management in Southeast Asia. *Forest Ecology and Management* 191, 283-299
- 2002 Kim, S., Kim Phat, N., Uozumi, Y., and Ueki, T. (2002) The impacts of floods on environment and economic development in Cambodia. *Chubu Forestry Research* 50, 134-139
- 2002 Kim Phat, N., Ouk, S., Uozumi, Y., Ueki, T., and Kim S. (2002) Management of mixed deciduous forest in central Cambodia- A case study in Sandan district. *Bulletin of Shinshu University Forest Research* 2, 290-309

- 2002 Kim Phat, N., Kim S., Ouk, S., Uozumi, Y., and Ueki, T. (2002) Management of mixed forest in Cambodia – A case study in Sandan district, Kampong Thom. *Bulletin of Faculty of Agriculture, Shinshu University* 38, 45-54
- 2002 Kim Phat, N., Kim, S., Uozumi, Y., and Ueki, T., (2002) An outline of the causes of illegal logging in Cambodia –constraints and prospects-. *Chubu Forestry Research* 50, 147-151
- 2001 Kim Phat, N., Ouk, S., Uozumi, Y., and Ueki, T. (2001) A case study of the current situation for forest concessions in Cambodia – Constraints and prospects- *Journal of Forest Planning* 7 (2), 59-67
- 2000 Kim Phat, N., Ouk, S., Uozumi, Y., and Ueki, T., (2000) Stand dynamics of Dipterocarp trees in Cambodia's evergreen forest and management implications- A case study in Sandan district, Kampong Thom -, *Journal of Forest Planning* 6, 13-23.
- 1999 Kim Phat, N., Ouk, S., Uozumi, Y., and Ueki, T. (1999) Present status and problems of mangrove forests in Cambodia. *Chubu Forestry Research* 47, 163-166 (in Japanese)
- 1999 Kim Phat, N., Ouk, S., Uozumi, Y., and Ueki, T. (1999) Analysis of forest management problems in Cambodia – a case study of F company – *Journal of Forest Planning* 5, 65-71
- 1999 Kim Phat, N., Ouk, S., Uozumi, Y., and Ueki, T. (1999) An outline of the causes of deforestation in Cambodia. *Transactions of Japanese Forestry Society* 109, 142-146
- 1998 Kim Phat, N., Ouk, S., Uozumi, Y., and Ueki, T. (1998) Present status and problems of Cambodia's forests. *Chubu Forestry Research* 46, 213-216 (in Japanese)

#### **BOOKS**

- 2008 Sasaki, N. and Yoshimoto (2008) A forest resource management and mathematical modeling,". FORMATH Vol. 7. Japan Society of Forest Planning Press, 272p.

#### **BOOK CHAPTERS**

- 2006 Kim Phat, N., Knorr, W. and Susandi, A. (2006) The role of improved tropical forest management in climate change mitigation and sustainable development. In Fort, B. and Iglesias, S. (eds) The Jakarta 12 Asia-Europe Agendas for Sustainable Development. 106-111. Singapore
- 2005 Kim Phat, N. (2005) Carbon Emissions from deforestation and logging in tropical forests – a Cambodian case study. In Naito, K. (eds) The Role of Forests for Coming Generations – Philosophy and Technology for Forest Resource Management. Japan Society of Forest Planning Press: 341-356p
- 2005 House, J., Brovkin, V., Betts, R., Constanza, B., Silva Dias, M. A., Holland, B., Kim Phat, N., Riebesel, U., Scholes, M., Prentice, C., le Quèrè, C., Tegan, I., Manizza, M., Barrett, D. (2005) Climate and air quality. Chapter 13 of the UN Millennium Ecosystem Assessment (MA): 181-216. *Island Press*
- 1999 Kim Phat, N. (1999) Forests and forest industry in Cambodia. A Step toward Forest Conservation Strategy (2). –Interim Report 1999- IGES (Institute for Global Environmental Strategies) Forest Conservation Project: 1-31
- 1998 Kim Phat, N., Uozumi, Y., Ueki, T., Drury, W. (1998) Analysis on the demand for Cambodia's forest products. In Yoshimoto, A. & Yukutake, K. (eds) Proceedings of International Symposium on Global Concerns for Forest Utilization – Sustainable Use and Management. Japan Society of Forest Planning Press: 111-121

#### **Working paper**

- 2008 Sasaki, Nophea and Putz, Francis E., Do Definitions of Forest and Forest Degradation Matter in the REDD