

Dr. Ir. Samsuri, S.Hut., M.Si., IPM., ASEAN Eng

Lecturer of The Master Degree of Forestry Study Program Study Program
Faculty of Forestry
Universitas Sumatera Utara

✉ samsuri@usu.ac.id

📍 Kampus 2 USU Bekala, Simalingkar A, Pancur Batu, Deli Serdang, 20353, Sumatera Utara, Indonesia

☎ 08561033832

🌐 fhut.usu.ac.id/en/lecturer/samsuri

Samsuri was born in a village in the southern part of Ponorogo Regency, East Java, on January 9, 1974. He completed his Bachelor's degree in Forestry at the Faculty of Forestry, IPB University, in 1998 and obtained his Doctorate degree in 2014 with an innovation in compiling the Priority Index for the Restoration of Degraded Tropical Forests. Additionally, Samsuri, affectionately known as Pak Sem, attended a one-month short course in Thailand to deepen his expertise in the application of GIS and RS in tropical rainforest restoration planning, particularly mangrove forests.

Throughout his professional career, his focus has been on geographic information systems, spatial ecology, landscape conservation, and remote sensing. As a researcher, his studies concentrate on the application of Geographic Information System (GIS) and Remote Sensing (RS) in forest resource inventory and management. Some research topics he has explored include the application of remote sensing in estimating standing stock in peat swamp forests, GIS application for modeling and monitoring forest fires, GIS and RS applications for modeling and planning ecosystem restoration, forest biomass modeling, analysis of tropical forest biodiversity distribution, wildlife habitat suitability, GIS for ethnography and forest degradation, and other topics related to GIS and RS. Several national and international collaborative research projects have been conducted with research grant funding from the Directorate General of Higher Education, SEAMEO BIOTROP, JAFTA, and ITTO Japan.

Courses he teaches in the Undergraduate Program in Forestry include Forest Inventory, Forest Management, Forest Planning, Forest Management, Geographic Information Systems, System Analysis, Remote Sensing, and Geodesy and Cartography. Some of the published books authored by Samsuri include "Introduction to Spatial Analysis with ArcGIS," "Digital Image Analysis Techniques for Natural Resource Management," "Planning for Restoration of Degraded Tropical Forest Landscapes," and "Forest Management."

In fulfilling the third pillar of higher education, community service, Samsuri has contributed to assisting the government in planning Forest Area Spatial Planning, establishing Forest Management Units, and participating as a resource person in various activities related to forest management policy-making in Indonesia. He is also involved in assisting communities, such as facilitating the development of spatial information systems for village potential and conducting training on the use of ArcGIS, GPS usage, and forest potential survey techniques. To expand his network and knowledge sharing, he is a member of professional organizations such as the Indonesian Remote Sensing Society (MAPIN), the Indonesian Biodiversity Society (MBI), the Indonesian Engineers Association (PII), and the Indonesian Geospatial Association (PAGI).

Publications

2026

Jurnal internasional bereputasi

Multi-source validation of ecological sensitivity in the Toraja Highlands, South Sulawesi, Indonesia

SAMSURI , SYAMSU RIJAL , CHAIRIL A , MUNAJAT NURSAPUTRA , HENI MASRUROH

2025

Jurnal internasional bereputasi

Spatial assessment of ecosystem resilience in the Asahan Toba watershed, Indonesia

SYAMSU RIJAL , HENI MASRUROH , SAMSURI , D. Ary A Samsura , Thomas Groen

2025

Jurnal internasional bereputasi

Land Cover Dynamics of Social Forestry Using Google Earth Engine at

Latimojong Forest Management Unit, South Sulawesi, Indonesia

SAMSURI , SYAMSU RIJAL , MUNAJAT NURSAPUTRA , CHAIRIL A , MUKRIMIN

2025

Buku referensi

INDONESIA HIJAU DI UJUNG TANDUK Menakar Dari Kerawanan Ekologi

MUNAJAT NURSAPUTRA , SYAMSU RIJAL , CHAIRIL A , ROLAND ALEXANDER BARKEY , DAUD MALAMASSAM , ANDI VIKA FARADIBA MUIN , SAMSURI , HENI MASRUROH

2025

Buku lainnya

Indonesia Hijau di Ujung Tanduk: Menakar dari Kerawanan Ekologi

SYAMSU RIJAL , SAMSURI , CHAIRIL A , HENI MASRUROH , MUNAJAT NURSAPUTRA , DAUD MALAMASSAM , NUR ZAMZAM PUTRI ARDI , RIVALDA LESIMANUAYA , BINTANG ALVIONI PUTRI M , ROLAND ALEXANDER BARKEY , ANDI VIKA FARADIBA MUIN

2025

Prosiding seminar internasional

Preface

SAMSURI

2025

Jurnal internasional bereputasi

Comprehensive Assessment of Fuzzy-based Ecological Vulnerability Using PCA-Entropy-SRP Model and Weighted Multi-scenario Analysis Based on OWA Operator in Mondangan Watershed, Blitar Regency, East Java, Indonesia

SAMSURI , HENI MASRUROH , SYAMSU RIJAL

2025

Jurnal internasional bereputasi

Ecological Sensitivity of the Mata Allo Sub-Watershed, South Sulawesi: A Spatial Analysis Using Principal Component Analysis

SAMSURI , SYAMSU RIJAL , HENI MASRUROH , MUNAJAT NURSAPUTRA

2024

Jurnal nasional

Peningkatan Ekonomi Lokal Petani Melalui Pendampingan Penanaman Benih Kopi Arabika Bersertifikat di Desa Pansur Napitu Kecamatan Siatas Barita Kabupaten Tapanuli Utara

SAMSURI

2024

Jurnal nasional

Pendampingan UKM Dalam E-Commerce (Digital Marketing) Sebagai Sarana Menerobos Pasar Sayuran Hidroponik di Kota Binjai

SAMSURI

2023

Tulisan ilmiah

Model Spasial Indeks Restorasi Lanskap Hutan Tropis Terdegradasi Daerah Aliran Sungai Batang Toru, Sumatera Utara

SAMSURI

2023

Prosiding seminar internasional

Analysis of the Potential of Non-Timber Forest Products at Siarsikarsik Village Forest Management Institute, Lumban Julu Village, Lumban Julu District, Toba Regency

RAHMAWATY , SAMSURI

2023

Jurnal nasional terakreditasi

Strategy to Strengthening Forest Farming for Sustainable Mangrove Forest Management in the Coastal Area, Deli Serdang, Indonesia

ALFAN GUNAWAN AHMAD , SAMSURI

2022
Prosiding seminar internasional

Land suitability evaluation for forestry plants in Tao Lake, Padang Lawas Utara District, North Sumatra

SAMSURI

2022
Jurnal nasional terakreditasi

Study of Policy Determination to Create A Healthy Watershed: A Case Study of Lengan Watershed In Langkat District, North Sumatera, Indonesia

SAMSURI

2021
Prosiding seminar internasional

Spatio-temporal pattern of urban forest vegetation density, Medan Baru city, Indonesia

SAMSURI

2021
Prosiding seminar internasional

The Bamboo Standing Stock Analysis in Karo Highland, North Sumatera - Indonesia

SAMSURI

2021
Prosiding seminar internasional

Mapping of mangrove forest tree density using SENTINEL 2A satelit image in remained natural mangrove forest of Sumatra eastern coastal

SAMSURI

2021
Jurnal internasional bereputasi

Mapping and assessment of vegetation cover change and species variation in Medan, North Sumatra

SAMSURI

2021
Jurnal internasional bereputasi

Vegetation structure of sumatran orangutan (Pongo abelii) habitat in north sumatra, indonesia

SAMSURI

2020
Prosiding seminar internasional

Change vegetation density analysis of Sumatran orangutan (Pongo abelii) habitat in Bukit Lawang and Sub-district of Bahorok

SAMSURI

2019
Prosiding seminar internasional

Analysis of vegetation density change in coastal villages of Tapanuli Tengah and Sibolga using landsat images

SAMSURI

2019
Prosiding seminar internasional

Land degradation index of tropical forest landscape in Batang Toru watershed using spatial analysis

SAMSURI , I NENGGAH SURATI JAYA , CECEP KUSMANA

2019
Jurnal nasional terakreditasi

Analysis The Degree of Community Participation Possibility on Restoration Planning for Lowland Forest Landscape of Lengan Watershed-Langkat District

ALFAN GUNAWAN AHMAD , SAMSURI

2019
Prosiding seminar internasional

Mitigation Option on Converted Forest Zone Through Agroforestry System for Improving the Hydrological Function of Upper Singkil Watershed

ABDUL RAUF , BEJO SLAMET , SAMSURI

2018
Buku referensi

Pengantar Analisis Spasial dengan ArcGis

SITI LATIFAH , SAMSURI , RAHMAWATY

2017
Prosiding seminar internasional

Estimating of Gonystiluss Bancanus Growing Stock in Indonesia (Case study: Riau and Central Kalimantan)

SAMSURI

2016
Jurnal internasional

Connectivtiy of Remained Tropical Rain Forest in Langkat District, Indonesia

I NENGAH SURATI JAYA , CECEP KUSMANA , SAMSURI

2014
Jurnal internasional bereputasi

Analysis of Tropical Forest Landscape Fragmentation in Batang Toru Watershed, North Sumatra.

SAMSURI , I NENGAH SURATI JAYA

2014
Jurnal internasional bereputasi

Restoration Priority Index Development of Degraded Tropical Forest Landscape in Batang Toru Watershed, North Sumatera Indonesia

SAMSURI , I NENGAH SURATI JAYA , CECEP KUSMANA

2014
Jurnal internasional bereputasi

Restoration priority index development ofdegraded tropical forest landscape in batang toru watershed, North Sumatera, Indonesia

SAMSURI , I NENGAH SURATI JAYA , CECEP KUSMANA

2012
Jurnal nasional

Model Spasial Tingkat Kerawanan Kebakaran Hutan dan Lahan (Studi Kasus Propinsi Kalimantan Tengah) (Spatial Model of Land and Forest Fire Risk Index, Case Study in CentralÂ ...

SAMSURI

2010
Buku referensi

Teknik Inventarisasi Sediaan Ramin di Hutan Rawa Gambut.

SAMSURI

2010
Buku referensi

PANDUAN INVENTARISASI SEDIAAN RAMIN DI HUTAN RAWA GAMBUT

SAMSURI

2010
Buku referensi

Teknik Inventarisasi Sediaan Ramin di Hutan Rawa Gambut

SAMSURI

2005
Jurnal internasional bereputasi

DIRECTIVES FOR MANGROVE FOREST AND COASTAL FOREST REHABILITATION IN EARTHQUAKE AND TSUNAMI DISASTER AREA IN THE

PROVINCES OF NANGGROE ACEH DARUSSALAM AND SUMATERA UTARA (NIAS ISLAND), INDONESIA

SAMSURI

2026

Jurnal nasional

Analisis Perubahan Garis Pantai Dan Tutupan Lahan Pasca Tsunami di Pantai Lhoknga, Kecamatan Lhoknga, Kabupaten Aceh Besar

SAMSURI

Researches

2025

FORMULASI DAN PEMETAAN STANDAR (SKALA) INDEKS SENSITIVITAS EKOSISTEM PADA DAERAH ALIRAN SUNGAI

SAMSURI , SYAMSU RIJAL , HENI MASRUROH

2024

Optimasi Model Spatio-Temporal dengan Google Earth Engine untuk Evaluasi Penutupan Lahan dan Sekuestrasi Karbon Kawasan Perhutanan Sosial di Sulawesi Selatan

SAMSURI , SYAMSU RIJAL , CHAIRIL A , MUKRIMIN , MUNAJAT NURSAPUTRA

2024

RISET KOLABORASI INDONESIA: FORMULASI DAN PEMETAAN INDEKS EKOSISTEM LANSKAP HUTAN PADA DAERAH ALIRAN SUNGAI

SAMSURI , SYAMSU RIJAL , HENI MASRUROH

2024

FORMULASI DAN PEMETAAN INDEKS EKOSISTEM LANSKAP HUTAN PADA DAERAH ALIRAN SUNGAI

SAMSURI , SYAMSU RIJAL , HENI MASRUROH

Community Services

2021

Ipteks Bagi Masyarakat

Budidaya Tanaman Sayuran dengan Sistem Hidroponik sebagai Strategi Pemberdayaan Ibu-Ibu PKK Lingkungan XV Tanjung Mulia Medan di Masa Pandemi Covid 19

SAMSURI , RUDI HARTONO

Intellectual Property Rights

2025

Hak cipta nasional

PETA SENSITIVITAS EKOLOGI KABUPATEN TANA TORAJA DAN TORAJA UTARA

SYAMSU RIJAL , SAMSURI , JOSUA PRAYOGA F. WOOF , KLARA TASIK DAWA , HENI MASRUROH

2025

Hak cipta nasional

PETA SENSITIVITAS EKOLOGI DAS BRANTAS

SYAMSU RIJAL , HENI MASRUROH , SAMSURI

2024

Hak cipta nasional

**PETA ZONASI KAWASAN HUTAN DENGAN TUJUAN KHUSUS (KHDTK)
PANTAI GURAH, KABUPATEN BLITAR, PROPINSI JAWA TIMUR**

SAMSURI , HENI MASRUROH , SYAMSU RIJAL
