

Dr. Achmad Siddik Thoha, S.Hut., M.Si.

Lecturer of Bachelor Degree of Forestry Study Program Study Program
Faculty of Forestry
Universitas Sumatera Utara

✉ a.siddik@usu.ac.id

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

☎ +62 812-8530-7940

🌐 fhut.usu.ac.id/en/lecturer/achmad-siddik-thoha

Dr. Achmad Siddik Thoha, S. Hut., M.Si., was born in Situbondo on February 3, 1975. He completed his undergraduate education in Forest Management at the Bogor Agricultural Institute (IPB) in 1998. He earned his Master's in Forestry Science from the Graduate School of IPB Bogor in 2006. In 2014, he completed his doctoral studies in Tropical Silviculture at the Graduate School of IPB Bogor, focusing on the research topic of Early Warning Systems for Forest and Land Fires.

The author also received an internship grant at the Earth Institute, Columbia University, USA, in 2012 and at the National Institute for Environmental Studies (NIES) in Japan in 2015. His research areas include Conservation of Biological Resources, Forest and Land Fire, Spatial Environmental Analysis, and Disaster Mitigation Due to Climate Change. He is actively involved in teaching, research, and community service related to hydrometeorological disaster mitigation and natural resource conservation.

In the midst of his busy schedule, he also authors books such as "Mitigasi Bencana Akibat Perubahan Iklim" (Disaster Mitigation Due to Climate Change), "Jejak-jejak Kemanusiaan Sang Relawan" (Traces of Humanity by Volunteers), and "Ketika Pohon Bersujud" (When Trees Bow Down). Additionally, he is actively engaged in providing training on mapping and the use of drones for research and humanitarian purposes.

Publications

2025

Prosiding seminar internasional

How important is the Siranggas Wildlife Reserve for conservation of Sumatran tiger habitat?

PINDI PATANA , RAHMAD HIDAYAD , ACHMAD SIDDIK THOHA

2025

Prosiding seminar internasional

Identification of Land Use Affected by Tidal Floods using Unmanned Aerial Vehicles in Coastal Medan City, North Sumatra, Indonesia

MUHAMMAD ARIFKY , SHIVA KARILLA UTIYA , ACHMAD SIDDIK THOHA

2025

Jurnal nasional terakreditasi

Perencanaan Pembangunan Pedesaan pada Sektor Pertanian di Desa Hilidaura Kecamatan Mandrehe Barat Kabupaten Nias Barat Berbasis Citra Drone

ACHMAD SIDDIK THOHA , EVAWANY YUNITA ARITONANG , EKA PUTRA JAYA GULO

2025

Jurnal nasional terakreditasi

Identifikasi Permukiman Kumuh Menggunakan Citra Unmanned Aerial Vehicle dan Object Based Image Analysis di Kecamatan Medan Belawan, Kota Medan

CHARLOQ ROSA NABABAN , ACHMAD SIDDIK THOHA

2025

Jurnal internasional bereputasi

Mapping above-ground carbon of mangroves using Sentinel-2 satellite imagery in the east coast of North Sumatra Province, Indonesia

2025

Jurnal nasional terakreditasi

Faktor-faktor yang Mempengaruhi Pengelolaan Sampah Berbasis Masyarakat di Kelurahan Bantan Kecamatan Siantar Barat Kota Pematangsiantar

ACHMAD SIDDIK THOHA , CHRISSANTY SIMANUNGKALIT , CHARLOQ ROSA NABABAN

2025

Prosiding seminar internasional

Analysis of potential land distribution for vertical farming development in Medan City, Indonesia

ACHMAD SIDDIK THOHA , SATIA NEGARA LUBIS , DWI LESTARI NALAI HULU

2025

Jurnal internasional bereputasi

Spatiotemporal evolution and influencing factors of blue carbon resilience in the East Java, Indonesia

PURWANTO , ACHMAD SIDDIK THOHA , PIPIT WIJAYANTI , RITA NOVIANI , LISTYO YUDHA IRAWAN , KRESNO SASTRO BANGUN UTOMO , SITI NUR FARIHAH , EVA INDRA SOFIANA , MOH. WAHYU KURNIAWAN ZAIN , CORRIE TERESIA PURBA , ERISA ELVADA , Ravinesh Rohit Prasad

2025

Jurnal nasional terakreditasi

Vegetation Composition of the Succession Forest of Sumatran Orangutan (Pongo abelii) Habitat in Tropical Lowland Forest, Gunung Leuser National Park

Rio Ardi , Mashhor Mansor , ONRIZAL , ACHMAD SIDDIK THOHA

2025

Jurnal nasional terakreditasi

Vegetation Composition of the Succession Forest of Sumatran Orangutan (Pongo abelii) Habitat in Tropical Lowland Forest, Gunung Leuser National Park

ACHMAD SIDDIK THOHA , Mashhor Mansor , Rio Ardi , ONRIZAL

2025

Prosiding seminar internasional

Tree height estimation using unmanned aerial vehicle-imagery in Kwala Bekala Arboretum of Universitas Sumatera Utara, Deli Serdang, Indonesia

ACHMAD SIDDIK THOHA , SHOFIA PUTRI NASIBAH

2025

Jurnal nasional terakreditasi

Analisis Sebaran Spasial Kerentanan Bencana Banjir di Kota Medan Tahun 2023

SATIA NEGARA LUBIS , ASIMA JULIANA , ACHMAD SIDDIK THOHA

2024

Jurnal nasional terakreditasi

DETERMINASI KEPUASAN PELANGGAN DAN KARAKTERISTIK SOSIAL EKONOMI TERHADAP WILLINGNESS TO PAY UNTUK AIR SIAP MINUM DI PERUMDA TIRTANADI MEDAN

ACHMAD SIDDIK THOHA , MIRIAN JACQUILINE MUNTHE , CHARLOQ ROSA NABABAN

2024

Jurnal internasional bereputasi

Estimating oil palm (Elaeis guineensis) production potential using Unmanned Aerial Vehicle

ACHMAD SIDDIK THOHA , ABU YAZID , AGUNG MUAMMAR SIDIQ , OPPIE APRILIA LUBIS , CHARLOQ ROSA NABABAN

2024

Jurnal nasional terakreditasi

Analisis Spasial Pengembangan Kawasan Air Terjun Janji Kabupaten Humbang Hasundutan

DARMANTO SILABAN , Muhammad Taufiq , ACHMAD SIDDIK THOHA

2024

Jurnal nasional terakreditasi

Analisis Tata Ruang Pada Kawasan Bergambut Di Kecamatan Dolok Sanggul Kabupaten Humbang Hasundutan

EDWAR DARMANSYAH POHAN , ACHMAD SIDDIK THOHA

2024

Jurnal internasional bereputasi

Estimation of mangrove above-ground biomass and carbon stocks from unmanned aerial vehicle-imagery in restoration forest, Langkat District, Indonesia

ACHMAD SIDDIK THOHA , DWI LESTARI NALAI HULU , HARI AGUNG ADRIANTO , PINDI PATANA

2024

Prosiding seminar internasional

Analysis of land cover changes on the Sumatran Orangutan (*Pongo abelii*) habitat due to forest fires in Gunung Leuser National Park

DAVID WIRANATA , NABILLAH SARASWITA , RIVANDA INALDI , SRY MULYANI KURNIAWATI SIRAIT , CHARLOQ ROSA NABABAN , ACHMAD SIDDIK THOHA

2024

Jurnal nasional

Identification of the Potential for Development of the Rainforest Lodges Kedah Ecotourism Area, Gayo Lues District, Aceh Province

NURDIN SULISTYONO , ACHMAD SIDDIK THOHA

2024

Jurnal internasional

A Study on the Relationship between Community Participation and the Improvement of Slum Settlement Quality in Medan City, Indonesia

SESILIA GLORIA SIMARMATA , SATIA NEGARA LUBIS , ACHMAD SIDDIK THOHA

2023

Prosiding seminar internasional

Unmanned aerial vehicles (UAV) utilization for mapping the health of oil palm plants (*Elaeis guineensis* Jacq.)

ACHMAD SIDDIK THOHA , CHARLOQ ROSA NABABAN , OPPIE APRILIA LUBIS

2023

Jurnal internasional bereputasi

Unmanned aerial vehicles (UAV) utilization for mapping the health of oil palm plants (*Elaeis guineensis* Jacq.)

CHARLOQ ROSA NABABAN , ACHMAD SIDDIK THOHA

2023

Jurnal internasional

The impact of industrial agglomeration on air quality from a regional development perspective

SRI HANDAYANI , SINAR INDRA KESUMA , ACHMAD SIDDIK THOHA

2023

Jurnal internasional

Analysis of adaptation and mitigation recommendations for Banjir rob disasters in the coastal area of Belawan, Medan

HASAN BASRI TARMIZI , AFRIYANA EKA SARVELENI , ACHMAD SIDDIK THOHA

2023

Prosiding seminar internasional

Spatial distribution of 2019 forest and land fires in Indonesia

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2022

Prosiding seminar internasional

Utilization of UAV (Unmanned Aerial Vehicle) technology for mangrove species identification in Belawan, Medan City, North Sumatera, Indonesia

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2022

Prosiding seminar internasional

Utilization of UAV technology for mapping of mangrove ecosystem at Belawan, Medan City, North Sumatera, Indonesia

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2022

Jurnal internasional bereputasi

Analysis of land cover changes due to forest fires in Gunung Leuser National Park, North Sumatra Province, Indonesia

NURDIN SULISTYONO , ACHMAD SIDDIK THOHA

2021

Prosiding seminar nasional

Perencanaan Tapak Ekowisata Menggunakan Teknologi Drone di Desa Timbang Lawan Kecamatan Bahorok Kabupaten Langkat Sumatera Utara

YUNUS AFIFUDDIN , TIKA YUANA S , ACHMAD SIDDIK THOHA , PINDI PATANA , MARIAH ULFA

2021

Prosiding seminar internasional

Analysis of the attractions of Tangkahan Nature Tourism Area, Gunung Leuser National Park, North Sumatra Province

ACHMAD SIDDIK THOHA , AGUS PURWOKO

2021

Jurnal internasional bereputasi

A spatial model of forest and land fire vulnerability level in the Dairi District, North Sumatra, Indonesia

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2021

Prosiding seminar internasional

Identification of land cover trajectories before and after forest and land fires in Jambi Province in 2019

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2019

Prosiding seminar internasional

Monitoring the Spatial Distribution of Mangrove Ecosystem Damage in Percut Sei Tuan

ACHMAD SIDDIK THOHA , PINDI PATANA , NURDIN SULISTYONO

2019

Prosiding seminar internasional

Spatial Model of Canopy Density in Mangrove Forest of Percut Sei Tuan

ACHMAD SIDDIK THOHA , PINDI PATANA , NURDIN SULISTYONO

2019

Jurnal internasional bereputasi

Characteristics and causes of forest and land fires in Kapuas District, Central Kalimantan Province, Indonesia

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2018

Jurnal internasional bereputasi

Modeling of Forest and Land Fires Vulnerability Level in North Sumatera Province, Indonesia

ACHMAD SIDDIK THOHA

2026

Jurnal internasional bereputasi

Siosar Village Community Socio-Economic Role In Regional Development Efforts

ACHMAD SIDDIK THOHA

2026
Prosiding seminar nasional

Upaya Membangun Harmoni Penghidupan Manusia dan Konservasi Harimau Sumatera Melalui Program Desa Binaan USU di Timbang Lawan, Kabupaten Langkat

ACHMAD SIDDIK THOHA

Researches

2024
Penelitian Kerjasama Antar Perguruan Tinggi

Analisis Urban Resilience Terhadap Emisi Karbon Melalui Pendekatan Model Urban Cross-media Carbon Metabolism: Study Kasus Kota-kota Di Indonesia

PIPIT WIJAYANTI , ACHMAD SIDDIK THOHA , PURWANTO

2022
Penelitian Kompetensi

Model Kelembagaan Mitigasi Bencana Banjir Berbasis Masyarakat di Kecamatan Bahorok Kabupaten Langkat Sumatera Utara

ACHMAD SIDDIK THOHA , SURI FADHILLA

2017
Penelitian Dana Lokal Perguruan Tinggi

Pola dan Model Spasial Deforestasi di Lanskap Hutan Mangrove

PINDI PATANA , NURDIN SULISTYONO , ACHMAD SIDDIK THOHA

2015
Penelitian Unggulan Perguruan Tinggi

Indeks prioritas tapak restorasi lanskap hutan tropis terdegradasi Sumatera Utar

SAMSURI , ACHMAD SIDDIK THOHA , ANITA ZAITUNAH

2009
Penelitian Hibah Bersaing

ANALISIS PERUBAHAN PENGGUNAAN LAHAN HUTAN DAN PEMBAYARAN JASA LINGKUNGAN DI DAERAH ALIRAN SUNGAI DELI

NURDIN SULISTYONO , ACHMAD SIDDIK THOHA

Community Services

2026
Ipteks Bagi Wilayah

Kegiatan Pengabdian kepada Masyarakat penyiapan pangan, perlengkapan tidur dan penyediaan air bersih bersama Pemerintah Kabupaten Langkat

ACHMAD SIDDIK THOHA , MEUTIA NAULY

2024

PENANAMAN SERAI WANGI DI SEKITAR KAMPUS KEHUTANAN USU BEKALA

PINDI PATANA , ACHMAD SIDDIK THOHA , RUDI HARTONO , LUKMAN HAKIM , KIRANA ARVIANTI ALI , THOYIBAH POHAN

2024

Penanaman Sere Wangi Di Sekitar Kampus Kehutanan USU Bekala

PINDI PATANA , ACHMAD SIDDIK THOHA , RUDI HARTONO , LUKMAN HAKIM , KIRANA ARVIANTI ALI , THOYIBAH POHAN

2018

PESBUK (Penganan Sehat Ibu Kreatif) untuk AUD (Anak Usia Dini)

RIKA ENDAH NURHIDAYAH , SRI LESTARI , ACHMAD SIDDIK THOHA

Intellectual Property Rights

2025

Hak cipta nasional

Serai Kampus Kehutanan USU Bekala

RUDI HARTONO , ACHMAD SIDDIK THOHA , LUKMAN HAKIM , PINDI PATANA

2024

Hak cipta nasional

Peta Bentuk Perkotaan Kota Surakarta Tahun 2024

PIPIT WIJAYANTI , PURWANTO , ACHMAD SIDDIK THOHA , Istiyanti Nur Marfu'ah , RITA NOVIANI

2024

Hak cipta nasional

Peta Estimasi Karbon Diatas Permukaan Tanah Di Hutan Restorasi Mangrove Kabupaten Langkat Sumatera Utara 2024

PINDI PATANA , ACHMAD SIDDIK THOHA

2024

Hak cipta nasional

Peta Estimasi Stok Karbon Di Atas Permukaan Tanah Di Hutan Restorasi Mangrove Kabupaten Batubara Sumatera Utara 2024

ACHMAD SIDDIK THOHA , PURWANTO , PIPIT WIJAYANTI , RITA NOVIANI

2024

Hak cipta nasional

Peta Sebaran Karbon Biru Kawasan Muara Sungai Bengawan Solo Kabupaten Gresik Jawa Timur

ACHMAD SIDDIK THOHA , PURWANTO , PIPIT WIJAYANTI , LISTYO YUDHA IRAWAN , RITA NOVIANI

2024

Hak cipta nasional

Peta Zonasi Ekowisata Di Desa Timbang Lawan Kecamatan Bahorok Kabupaten Langkat Provinsi Sumatera Utara

TARICHA AUDREY NOVANDY , ACHMAD SIDDIK THOHA

2024

Hak cipta nasional

Peta Zonasi Ekowisata Di Desa Tanjung Rejo Kecamatan Percut Sei Tuan Kabupaten Deli Serdang Provinsi Sumatera Utara

TARICHA AUDREY NOVANDY , ACHMAD SIDDIK THOHA

2023

Hak cipta nasional

Peta Tematik Tingkat Kerentanan Kebakaran Hutan Dan Lahan Provinsi Sumatera Utara

ACHMAD SIDDIK THOHA

2023

Hak cipta nasional

Buku ajar mitigasi bencana akibat perubahan iklim

SURI FADHILLA , ACHMAD SIDDIK THOHA
