



SDGs Report 2024

Srinakharinwirot University



About Srinakharinwirot University

Philosophy

Education is Growth

The five growth respects are

1. Growth of faith: trust in life, roles and one's own duty.
2. Growth of sacred precepts: ethics and goodness.
3. Growth of attentiveness: thoughtfulness and continuous learning.
4. Growth of abandonment: generosity and kindness to others
5. Growth of wisdom: living, thinking, and doing with intellect.

Vision

Learning university for the society

Mission

1. Produce and develop people of all ages with the desirable traits for national development through excellent learning process
2. Create high quality research and innovation for sustainable social development
3. Deliver valuable academic services based on social responsibility
4. Study, preserve, and enrich cultures and arts
5. Develop an administration system based on excellence and good governance

Core Values

S: Social Responsibility

W: Work Smart

U: Unity

Organizational Culture

1. Nobility and humility
2. Public mindset and dedication to the common good
3. Love of learning and virtue

Core Competencies

1. Expertise in learning provision of the modern disciplines at international quality standards
2. Participatory academic services for a resilient and sustainable society

1 NO POVERTY



End poverty in all its forms everywhere



OUTSTANDING PROJECT

Local start-up assistance

- SWU's "San Thai" Youth Volunteer Project 2024 provided low-income students with hands-on entrepreneurial experience through collaboration with a Thai Phuan weaving community.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-1/144>

Programmes for services access

- SWU provides extensive financial and wellbeing support to ensure low-income students can complete their studies without hardship. In 2024, over 9,900 students benefited from scholarships and student loans, reflecting the university's strong commitment to equitable access to higher education.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-1/143>

RESEARCH

SDG 1: No Poverty (3 paper)

Stuck in Labor Rights? Exploring Social Protection for Hairdressers in Northeast Thailand: An Ethnographic Case Study

- Phukrongpet, P., Wannachot, W., Daovisan, H.
- Journal of Human Rights and Social Work, 2024

Social Resilience and Community-Based Healthcare for Older Adults During COVID-19: A Phenomenological Case Study

- Phukrongpet, P., Daovisan, H., Wannachot, W., Rattanasuteerakul, K.
- Ageing International, 2024

NUMERICAL

Proportion of students receiving financial aid to attend university because of poverty

- Number of students 30,317 students
- Number of low income students receiving financial aid 15,999 students

POLICY

Policy addressing poverty

- SWU collaborated with the NRCT to promote elderly employment and strengthen community enterprises, supporting poverty reduction and sustainability.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-1/144>

2 ZERO HUNGER



End hunger, achieve food security and improved nutrition and promote sustainable agriculture



RESEARCH

SDG 2: Zero Hunger (11 paper)

Rhamnolipid-Enriched PA3 Fraction from *Pseudomonas aeruginosa* SWUC02 Primes Chili Plant Defense Against Anthracnose

- Sudyoung, N., Samosorn, S., Dolsophon, K., ...Oikawa, A., Sarawaneeyaruk, S.
- International Journal of Molecular Sciences, 2024

Nanomechanical resilience and thermal stability of RSJ2 phage

- Sae-Ueng, U., Bunsuwansakul, C., Showpanish, K., ...Thadajarassiri, J., Nehls, C.
- Scientific Reports, 2024

Analyzing temperature, humidity, and precipitation trends in six regions of Thailand using innovative trend analysis

- Kliengchuay, W., Mingkhwan, R., Kiangkoo, N., ...Aung, H.W., Tantrakarnapa, K.
- Scientific Reports, 2024

OUTSTANDING PROJECT

Access to food security knowledge

- Srinakharinwirot University (SWU) supports students facing food insecurity through lunch scholarships and by providing extended library hours with free late-night snacks during exam periods to sustain nutrition and academic performance.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-2/252>

Access to food security knowledge

- Srinakharinwirot University (SWU) supports students facing food insecurity through lunch scholarships and by providing extended library hours with free late-night snacks during exam periods to sustain nutrition and academic performance.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-2/252>

NUMERICAL

Campus Food Waste

- Total food waste 12 mt
- Campus population 36,678 persons

Proportion of graduates in agriculture and aquaculture including sustainability aspects

- Number of graduates 6,183 students
- Number of graduates from agriculture and aquaculture courses including sustainability aspects 180 students

3 GOOD HEALTH AND WELL-BEING



Ensure healthy lives and promote well-being for all at all ages



RESEARCH

SDG 3: Good Health and Well-being (119 paper)

Benja-ummarit induces ferroptosis with cell ballooning feature through ROS and iron-dependent pathway in hepatocellular carcinoma

- Sandech, N., Yang, M., Juntrangoor, P., ...Pradidarcheep, W., Maiuthed, A.
- Journal of Ethnopharmacology, 2024

Novel naphthoquinones as potent aromatase inhibitors: Synthesis, anticancer, and in silico studies

- Leechaisit, R., Mahalapbutr, P., Suriya, U., ...Prachayasittikul, V., Pingaew, R.
- Journal of Molecular Structure, 2024

NUMERICAL

Number of students graduating in health professions

- Number of graduates 6,183 students
- Number of graduates in health professions 651 students

POLICY

Smoke-free policy

- SWU enforces a strict smoke-free policy across all its areas, requiring no-smoking signs, anti-smoking campaigns, and a ban on tobacco sponsorships.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-3/336>

OUTSTANDING PROJECT

Current Collaborations with Health Institutions

- Srinakharinwirot University (SWU) collaborates with domestic and international universities, organizations, and agencies to advance education, research, and healthcare through its health science faculties.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-3/331>

Mental health support for students

- The Student Affairs Division at Srinakharinwirot University (SWU) promotes student mental well-being through counseling, preventive programs, and collaborations with internal and external partners, offering workshops, peer support, and awareness activities to foster a supportive, stigma-free campus environment.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-3/335>

4 QUALITY EDUCATION



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



RESEARCH

SDG 4: Quality Education (26 paper)

The interrelationships between emotional intelligence, achievement motivation and students' employability: exploring the mediating effect of self-efficacy

- Li, X., Pu, R., Phakdeephirot, N.
- Education and Training, 2024

Work education and educational developments around sustainable livelihoods for sustainable career development and well-being

- Caringal-Go, J.F., Carr, S.C., Hodgetts, D.J., ...Searle, R.H., Teng-Calleja, M.
- Australian Journal of Career Development, 2024

NUMERICAL

Proportion of graduates with teaching qualification

- Number of graduates 6,183 students
- Number of graduates who gained a qualification that entitled them to teach at primary school level 449 students

POLICY

Lifelong learning access policy

- In 2023, SWU issued the Regulation on Lifelong Learning Education (B.E. 2566) to provide inclusive, non-discriminatory access to courses and training, allowing all learners to earn certificates or credits through flexible pathways like the University Credit Bank System.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-4/435>

OUTSTANDING PROJECT

Vocational training events (lifelong learning)

- SWU promotes lifelong learning through vocational and social enterprise training programs that enhance skills, knowledge, and social responsibility, supporting sustainable development and aligning with the UN Sustainable Development Goals.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-4/433>

Education outreach activities beyond campus

- In 2024, SWU's Volunteer Center expanded outreach programs connecting students with communities through workshops, sustainability campaigns, and social initiatives, fostering practical skills and civic engagement while supporting local educational and social development.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-4/434>

5 GENDER EQUALITY



Achieve gender equality and empower all women and girls



OUTSTANDING PROJECT

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- <https://rankings.swu.ac.th/swu-sdgs/sdg-4/433>

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- <https://rankings.swu.ac.th/swu-sdgs/sdg-4/434>

RESEARCH

SDG 5: Gender Equality (6 paper)

Successful laparoscopic management of strangulated left paraduodenal hernia: A case report and review of minimally invasive approaches

- Yodying, H.
- International Journal of Surgery Case Reports, 2024

A Loop-Mediated Isothermal Amplification Assay Utilizing Hydroxy Naphthol Blue (LAMP-HNB) for the Detection of *Treponema pallidum* Subsp. *pallidum*

- Phurijaruyangkun, S., Tangjitrongrot, P., Jaratsing, P., ...Chansiri, K., Santiwatanakul, S.
- Pathogens, 2024

NUMERICAL

Proportion of first-generation female students

- Number of women starting a degree 5,014 students
- Number of first-generation women starting a degree 2,817 students

POLICY

Policy for women applications and entry

- <https://rankings.swu.ac.th/swu-sdgs/sdg-5/532>

Policy of non-discrimination against women

- <https://rankings.swu.ac.th/swu-sdgs/sdg-5/561>

Non-discrimination policies for transgender

- <https://rankings.swu.ac.th/swu-sdgs/sdg-5/562>

Maternity policy

- <https://rankings.swu.ac.th/swu-sdgs/sdg-5/563>

Policies protecting those reporting discrimination

- <https://rankings.swu.ac.th/swu-sdgs/sdg-5/563>

Paternity policy

- <https://rankings.swu.ac.th/swu-sdgs/sdg-5/569>

6 CLEAN WATER AND SANITATION



Ensure availability and sustainable management of water and sanitation for all



RESEARCH

SDG 6: Clean Water and Sanitation (13 paper)

Fabrication of tannic acid-incorporated polyvinylpyrrolidone/polyvinyl alcohol composite hydrogel and its application as an adsorbent for copper ion removal

- Chunhakowit, P., Phabjanda, Y., Aunwisat, A., ...Songsrirote, K., Prayongpan, P.
- Scientific Reports, 2024

Isolation and Identification of Lipase-producing Bacteria from Wastewater Treatment Pond for the Removal of Oil and Grease in Wastewater Treatment

- Sukplang, G., Narasettiti, C., Chunhachart, O., ...Krajangsang, S., Panyachanakul, T.
- Chiang Mai Journal of Science, 2024

NUMERICAL

Water consumption per person

- Volume of water used in the university: Inbound (treated/extracted water) 1,112,443 m³
- Campus population 36,678 persons

POLICY

Water reuse policy

- In 2024, SWU implemented a Water Reuse and Conservation Policy at Ongkharak Campus, utilizing rainwater and upgraded fixtures to promote efficient water use and sustainable resource management.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-6/641>

OUTSTANDING PROJECT

Free drinking water provided

- In 2024, SWU provided free, safe drinking water across campus through filtered dispensers, promoting hygiene, equitable access, and environmental sustainability by reducing single-use plastics.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-6/633>

Water-conscious planting

- In 2024, SWU implemented water-conscious landscaping using drought-tolerant and efficiently irrigated species, maintaining over 5,000 trees to support sustainable greenery and responsible water use.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-6/635>

7 AFFORDABLE AND CLEAN ENERGY



Ensure access to affordable, reliable, sustainable and modern energy for all



RESEARCH

SDG 7: Affordable and Clean Energy (28 paper)

Effective deep eutectic solvent pretreatment in one-pot lignocellulose biorefinery for ethanol production

- Jose, D., Vasudevan, S., Venkatachalam, P., ...El Bari, H., Sriaryanun, M.
- Industrial Crops and Products, 2024

Electronic structures and charge transport mobilities in hybrid organic-inorganic mixed Sn-Pb alloyed perovskites

- Teeratchanan, P., Pinsook, U., Busayaporn, W., Thongnum, A.
- Nanoscale, 2024

NUMERICAL

Energy use density

- Total energy used 178,920GJ
- University floor space 695,705m²

OUTSTANDING PROJECT

Energy-efficient renovation and building

- SWU has enhanced energy efficiency by designing well-ventilated buildings, installing automatic lighting controls, and introducing a solar power system to support sustainable energy use.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/721>

Local community outreach for energy efficiency

- In 2024, SWU's campuses consumed 49.7 million electricity units (178,920 GJ), averaging 0.257 GJ/sqm, providing a baseline for monitoring energy efficiency and planning future reductions.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/741>

POLICY

Energy-efficient renovation and building

- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/721>

Divestment policy

- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/726>

Policy development for clean energy technology

- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/744>

8 DECENT WORK AND ECONOMIC GROWTH



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



OUTSTANDING PROJECT

Employment practice living wage

- SWU ensures all staff and faculty receive at least a living wage aligned with Thailand's living-wage standards and the local poverty benchmark for a four-person household, with minimum salary floors of ≥20,250 THB/month for Bachelor-level operational staff and ≥36,200 THB/month for Doctoral-level academic staff.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-8/821>

Employment practice unions

- In 2024, SWU supports the Senate and Staff Council as key mechanisms to communicate policies, protect staff rights, and improve welfare with inclusive participation for all.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-8/822>

RESEARCH

SDG 8: Decent Work and Economic Growth (20 paper)

Rhamnolipid-Enriched PA3 Fraction from *Pseudomonas aeruginosa* SWUC02 Primes Chili Plant Defense Against Anthracnose

- Sudyoung, N., Samosorn, S., Dolsophon, K., ...Oikawa, A., Sarawaneeyaruk, S.
- International Journal of Molecular Sciences, 2024

Stuck in Labor Rights? Exploring Social Protection for Hairdressers in Northeast Thailand: An Ethnographic Case Study

- Phukrongpet, P., Wannachot, W., Daovisan, H.
- Journal of Human Rights and Social Work, 2024

NUMERICAL

Proportion of students taking work placements

- Number of students 30,317 students
- Number of students with work placements for more than a month 6,577 students

Proportion of employees on secure contracts

- Number of employees 6,361 persons
- Number of employees on contracts of over 24 months 5,772 persons

POLICY

Employment policy on discrimination

- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/721>

Employment policy modern slavery

- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/726>

Employment practice equivalent rights outsourcing

- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/744>

Employment policy pay scale equity

- <https://rankings.swu.ac.th/swu-sdgs/sdg-7/744>

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



NUMERICAL

Research income from industry and commerce

- Research income from industry and commerce: Total ฿172,611,826
- Research income from industry and commerce by subject area: STEM ฿69,565,820
- Research income from industry and commerce by subject area: Medicine ฿25,429,452
- Research income from industry and commerce by subject area: Arts & Humanities / Social Sciences ฿77,616,554



Research income from industry and commerce

- Number of employees 6,361 persons
- Number of academic staff 2,016 persons
- Number of academic staff by subject area: STEM 304 persons
- Number of academic staff by subject area: Medicine 677 persons
- Number of academic staff by subject area: Arts & Humanities / Social Sciences 1,035 persons



10 REDUCED INEQUALITIES



Reduce inequality within and among countries



RESEARCH

SDG 10: Reduced Inequality (5 paper)

The use of community-engagement approaches to identify strategies for increasing workplace well-being among LGBTQ+ adults

- Sakunpong, N., Mahantamak, R., Sukcharoen, P., Matthews, A.K., Heliyon, 2024

Bibliometric analysis of adaptive physical education in inclusive education to promote Sustainable Development Goals

- Umar, F., Misbah, M., Jannah, M., Mahakeeta, A. E3s Web of Conferences, 2024

NUMERICAL

International Students from developing countries

- Number of international students from developing countries 61 students

Students with disabilities

- Number of students with disability 24 students

Employees with disabilities

- Number of employees with disability 36 students

POLICY

Non-discriminatory admissions policy

- <https://rankings.swu.ac.th/swu-sdgs/sdg-10/1061>

Anti-discrimination policy

- <https://rankings.swu.ac.th/swu-sdgs/sdg-10/1064>

OUTSTANDING PROJECT

Support for underrepresented groups

- SWU has formal governance for diversity, equity, inclusion, and human rights through the Committee for the Promotion of Sexual Safety and Gender Awareness. The committee drives policy, training, and response to harassment/discrimination, with faculties supporting through campus-wide gender-equality activities.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-10/1066>

Disability access scheme

- SWU supports students with disabilities through the DSS Center, providing accommodations, counselling, career support, and accessible resources. Assistive technology and accessible media are also provided onsite and online, free of charge.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-10/1069>

11 SUSTAINABLE CITIES AND COMMUNITIES



Make cities and human settlements inclusive, safe, resilient and sustainable



OUTSTANDING PROJECT

Public access to libraries

- SWU Central Library provided free onsite access for the general public, allowing use of study spaces and Wi-Fi without enrollment status. While book borrowing remained limited, the library ensured open access to physical resources. This initiative promotes equitable access to knowledge and supports lifelong learning for the community.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-11/1122>

Public access to museums

- SWU provided public access to cultural and exhibition spaces, including Art Gallery G23 and the University Archive & Museum. These spaces host diverse art exhibitions and historical collections, with regular opening hours and booking for external visitors, supporting cultural learning and community engagement.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-11/1123>

RESEARCH

SDG 11: Sustainable Cities and Communities (12 paper)

Unveiling the Intricate Tapestry: Malay (Melayu) Wood Carving Patterns of Southern Thailand as Reflections of Muslim Cultural Identity

- Jaisuda, T.
- International Journal of Islamic Thought, 2024

Index of Atmospheric Purity (IAP) Related to Potential Ecological Risk Indexes (RI) of Heavy Metals Accumulation in Urban Area

- Silprasit, K., Rimlumduan, T., Phowan, N., Thummajitsakul, S.
- Current Applied Science and Technology, 2024

The construction of urban cultural and creative industries using deep learning and information management

- Zhao, Z., Garcia-Campayo, J.J., Liang, J., ...Portugal, L.M., Aganan, J.B.
- Heliyon, 2024

Effects of trust and customer perceived value on the acceptance of urban air mobility as public transportation

- Vongvit, R., Maeng, K., Lee, S.C.
- Travel Behaviour and Society, 2024

NUMERICAL

Expenditure on arts and heritage

- University expenditure ฿10,516,660,100
- University expenditure on arts and heritage ฿44,608,057

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Ensure sustainable consumption and production patterns



OUTSTANDING PROJECT

Proportion of waste recycled

- SWU monitors total waste generation and recycling volumes across different waste categories, including general waste, hazardous and chemical waste, agricultural waste, and food waste. The university tracks the proportion that is successfully recycled and uses this information to assess progress in reducing waste and strengthening circular resource management.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-12/1232>

Publication of a sustainability report

- SWU reports its environmental and sustainability performance in the 2024 Annual Report, including actions on waste, resources, and renewable energy. The report also confirms the University's commitment toward Carbon Neutrality 2040.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-12/1241>

RESEARCH

SDG 12: Responsible Consumption and Production(29 paper)

Rhamnolipid-Enriched PA3 Fraction from *Pseudomonas aeruginosa* SWUC02 Primes Chili Plant Defense Against Anthracnose

- Sudyoung, N., Samosorn, S., Dolsophon, K., ...Oikawa, A., Sarawaneeyaruk, S.
- International Journal of Molecular Sciences, 2024

Towards sustainable construction: Harnessing potential of pumice powder for eco-friendly concrete, augmented by hybrid fiber integration to elevate concrete performance

- Farooq, U., Rizwan, M., Khaliq, W., ...Hussain, Q., Joyklad, P.
- Case Studies in Construction Materials, 2024

NUMERICAL

Proportion of recycled waste

- Amount of waste generated 2,192mt
- Amount of waste recycled 13mt
- Amount of waste sent to landfill 2,179mt

POLICY

Policy waste disposal – hazardous materials

- <https://rankings.swu.ac.th/swu-sdgs/sdg-12/1223>

Policy waste disposal – landfill policy

- <https://rankings.swu.ac.th/swu-sdgs/sdg-12/1224>

Policy for minimisation of plasticuse

- <https://rankings.swu.ac.th/swu-sdgs/sdg-12/1225>

Policy for minimisation of disposable items

- <https://rankings.swu.ac.th/swu-sdgs/sdg-12/1226>

Disposable policy: extensions to services

- <https://rankings.swu.ac.th/swu-sdgs/sdg-12/1227>

Minimisation policies extended to suppliers

- <https://rankings.swu.ac.th/swu-sdgs/sdg-12/1228>

13 CLIMATE ACTION



Take urgent action to combat climate change and its impacts



OUTSTANDING PROJECT

Local education programmes on climate

- SWU provides climate education through degree programmes and community-based learning to build capacity in climate science and GHG assessment. The university also conducts climate activities such as SWU Carbon Neutrality 2040 lectures and carbon tree surveys to strengthen practical skills in mitigation and risk awareness.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-13/1331>

Inform and support government

- SWU supports government climate action by sharing expertise and promoting climate-resilient development. In 2025, SWU presented its Green University model at Bangkok Climate Action Week to support green skills and low-carbon transition.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-13/1334>

RESEARCH

SDG 13: Climate Action (12 paper)

Large rupture strain cotton ropes hybridized with affordable fiberglass chopped strand mat sheets for enhanced compressive behavior of reinforced concrete columns

- Saingam, P., Krishna, C.K., Hussain, Q., ...Khan, K.M., Suparp, S.
- Heliyon, 2024

Greenhouse Gas Emission Estimation Using Extended Input-Output Tables for Thailand's Biomass Pellet Industry

- Buasan, P., Sajjakulnukit, B., Bowonthumrongchai, T., Gheewala, S.H.
- Resources, 2024

Work education and educational developments around sustainable livelihoods for sustainable career development and well-being

- Caringal-Go, J.F., Carr, S.C., Hodgetts, D.J., ...Searle, R.H., Teng-Calleja, M.
- Australian Journal of Career Development, 2024

Determination of Fe³⁺ in Water Samples by Reduced Schiff Base Ligand

- Doungchandeng, S., Apiratikul, N., Sungwienwong, I., Srivilai, P., Tongraung, P.
- Science Essence Journal, 2024

Predictive modeling of engine performance and emissions for castor oil ethyl ester biodiesel blends: A Gaussian process regression approach

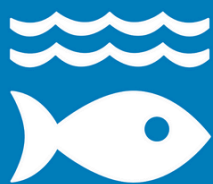
- Ariyarit, A., Aengchuan, P., Wiangkham, A., ...Chuepeng, S., Sukjit, E.
- Results in Engineering, 2024

NUMERICAL

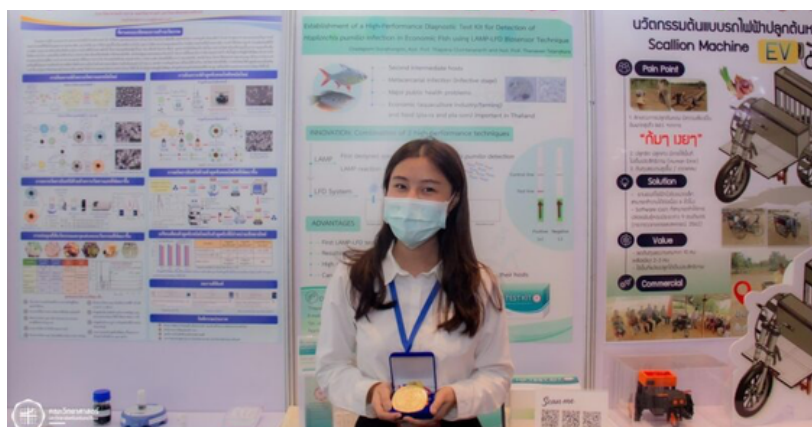
Proportion of recycled waste

- Amount of waste generated 2,192mt
- Amount of waste recycled 13mt
- Amount of waste sent to landfill 2,179mt

14 LIFE BELOW WATER



Conserve and sustainably use the oceans, seas and marine resources for sustainable development



RESEARCH

SDG 14: Life Below Water (5 paper)

Interior modification of *Macrobrachium rosenbergii* nodavirus-like particle enhances encapsulation of VP37-dsRNA against shrimp white spot syndrome infection

- Muikham, I., Thongsom, O., Jaranathumakul, S., ...Jariyapong, P., Weerachatanukul, W.
- BMC Veterinary Research, 2024

A new highly sensitive lateral flow immunochromatographic assay for the detection of PirB toxin from acute hepatopancreatic necrosis disease-causing *Vibrio* species

- Wangman, P., Pengsuk, C., Hajimasalaeh, W., ...Sithigorngul, P., Longyant, S.
- Aquaculture International, 2024

A prototype pond water management system (dissolved oxygen, pH and temperature) for giant freshwater prawn farming in Pak Phanang, Southern Thailand

- Songpayome, P., Sutin, S., Sukmak, W., ...Sricharoen, P., Musik, P.
- Heliyon, 2024

Comparison of astaxanthin and oxidized β -carotene in red tilapia diets: Effects on growth, pigmentation, immunity, and antioxidative functions

- Duangjai, S., Jintasataporn, O., Kokau, S., Saetang, T., Therdthai, N.
- Edelweiss Applied Science and Technology, 2024

OUTSTANDING PROJECT

Fresh-water ecosystems

- SWU offers field-based learning on freshwater ecosystems and watershed conservation with community partners. Students engage in ecological observation, water quality assessment, and dialogue with local stewards. The programme is free and strengthens long-term conservation awareness.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-14/1421>

Maintain ecosystems and their biodiversity

- SWU conducted direct marine conservation through "SWU Together for Good," installing artificial fish homes to help restore reef habitats and support marine species recovery in partnership with local communities.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-14/1433>

POLICY

Food from aquatic ecosystems (policies)

- <https://rankings.swu.ac.th/swu-sdgs/sdg-14/1432>

Reducing marine pollution (policy)

- <https://rankings.swu.ac.th/swu-sdgs/sdg-14/1443>

15 LIFE ON LAND



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



OUTSTANDING PROJECT

Events about sustainable use of land

- SWU, through Bodhivijjalaya College, converted unused land into organic agriculture areas and engaged students in organic rice farming to promote sustainable land use, improve soil quality, and support ecosystem regeneration.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-15/1521>

Collaboration for shared land ecosystems

- SWU partners with government and communities to co-manage agricultural land, herbal gardens, organic farms and community agro-tourism areas. These collaborations restore soil, support biodiversity, and improve sustainable production. The University contributes science, planning and monitoring to strengthen shared ecosystem management.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-15/1535>

RESEARCH

SDG 15: Life on Land (2 paper)

Medical ethnobotany and utilization of medicinal plants in the Don Pu Ta Forest Thai Yoi Ethnic Groups, Sakon Nakhon Province, Thailand

- Saensouk, S., Saensouk, P., Ragsasilp, A., ...Niamngon, P., Appamaraka, S.
- Biodiversitas, 2024

Influence of Acetic Acid Pretreatment and its Residue on Bioethanol and Biogas Production from Water Hyacinth

- Jose, D., Tawai, A., Divya, D., ...Cheng, Y., Tantayotai, P.
- Applied Science and Engineering Progress, 2024

POLICY

Sustainable use, conservation and restoration of land (policy)

- <https://rankings.swu.ac.th/swu-sdgs/sdg-15/1531>

Monitoring IUCN and other conservation species (policies)

- <https://rankings.swu.ac.th/swu-sdgs/sdg-15/1532>

Alien species impact reduction (policies)

- <https://rankings.swu.ac.th/swu-sdgs/sdg-15/1534>

Policy on plastic waste reduction

- <https://rankings.swu.ac.th/swu-sdgs/sdg-15/1542>

Water discharge guidelines and standards

- <https://rankings.swu.ac.th/swu-sdgs/sdg-15/1541>

Policy on hazardous waste disposal

- <https://rankings.swu.ac.th/swu-sdgs/sdg-15/1543>

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



RESEARCH

SDG 16: Peace, Justice and Strong Institutions (13 paper)

Creating Food History for Value Added Food Tourism Cham Muslim Ban Krua Community

- Bunjoon, O.
- Journal of Thai Studies, 2024

The use of community-engagement approaches to identify strategies for increasing workplace well-being among LGBTQ+ adults

- Sakunpong, N., Mahantamak, R., Sukcharoen, P., Matthews, A.K.
- Heliyon, 2024

NUMERICAL

Proportion of graduates in law and civil enforcement

- Number of graduates 6,183 students
- Number of total graduates from law and enforcement related courses 97 students

POLICY

Identify and engage with local stakeholders

- <https://rankings.swu.ac.th/swu-sdgs/sdg-16/1623>

Academic freedom policy

- <https://rankings.swu.ac.th/swu-sdgs/sdg-16/1626>

Policy- and lawmakers outreach and education

- <https://rankings.swu.ac.th/swu-sdgs/sdg-16/1632>

OUTSTANDING PROJECT

Provide expert advice to government

- SWU supports government working groups by providing expert advice, research, and academic services. This helps strengthen policy implementation and contributes to advancing society.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-16/1631>

Neutral platform to discuss issues

- SWU provides a neutral and safe platform for open political dialogue among diverse groups. Through public forums and academic seminars, the University promotes respectful discussion, reconciliation, and inclusive participation. These initiatives support constructive engagement and strengthen democratic development in society.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-16/1634>

17 PARTNERSHIPS FOR THE GOALS



Strengthen the means of implementation and revitalize the global partnership for sustainable development

OUTSTANDING PROJECT

International collaboration data gathering for SDG

- SWU hosted SWUICE 2024 to strengthen international collaboration in education. The conference promoted knowledge exchange, best practices, and evidence-based policymaking. This supports SDG 4 on inclusive, equitable, and lifelong quality education..
- <https://rankings.swu.ac.th/swu-sdgs/sdg-17/1723>

Sustainability Literacy

- SWU encouraged students to apply interdisciplinary knowledge to advance sustainable development. The University promoted collaboration with local communities, public organizations, and civil society to strengthen sustainability initiatives.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-17/1744>

Education for SDGs: specific courses on sustainability

- SWU provides sustainability-focused programmes and SDG-integrated courses through specialised faculties and colleges. In 2024, the University expanded sustainability teaching and community-engaged learning to strengthen student, alumni, and community collaboration for societal sustainability.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-17/1742>

Collaboration with NGOs for SDGs

- SWU collaborated with NGOs through three pathways: student volunteering on urban well-being initiatives, research on homelessness with national foundations, and co-developing impact-measurement training with Social Value Thailand. These partnerships contributed to advancing the SDGs through civic engagement, evidence generation, and capacity building.
- <https://rankings.swu.ac.th/swu-sdgs/sdg-17/1725>





Srinakharinwirot University
114 Sukhumvit 23, Wattana District, Bangkok 10110, THAILAND
Explore: <https://sdg.swu.ac.th/sdg>
E-mail: rankingswu@g.swu.ac.th