Times Higher Education Impact Rankings

SDG 13 Climate Action

13.3 Environmental education measures

13.3.2 Indicator:

Climate Action Plan, shared

Universitas Sriwijaya (Unsri) actively conducts various research and community engagement initiatives related to climate change issues. Through these efforts, Unsri aims to contribute valuable insights and practical solutions to address the challenges posed by climate change. Researchers and experts at Unsri collaborate on projects focusing on climate change adaptation, mitigation strategies, environmental conservation, and sustainable development. Additionally, the university actively engages with local communities, policymakers, and non-governmental organizations to raise awareness about climate change impacts and promote environmentally friendly practices. Unsri's commitment to research and community outreach underscores its dedication to finding innovative solutions and creating positive change in the face of climate change. Here are examples of community services and research carried out by Unsri academics related to climate change:

Titles of Community Services:

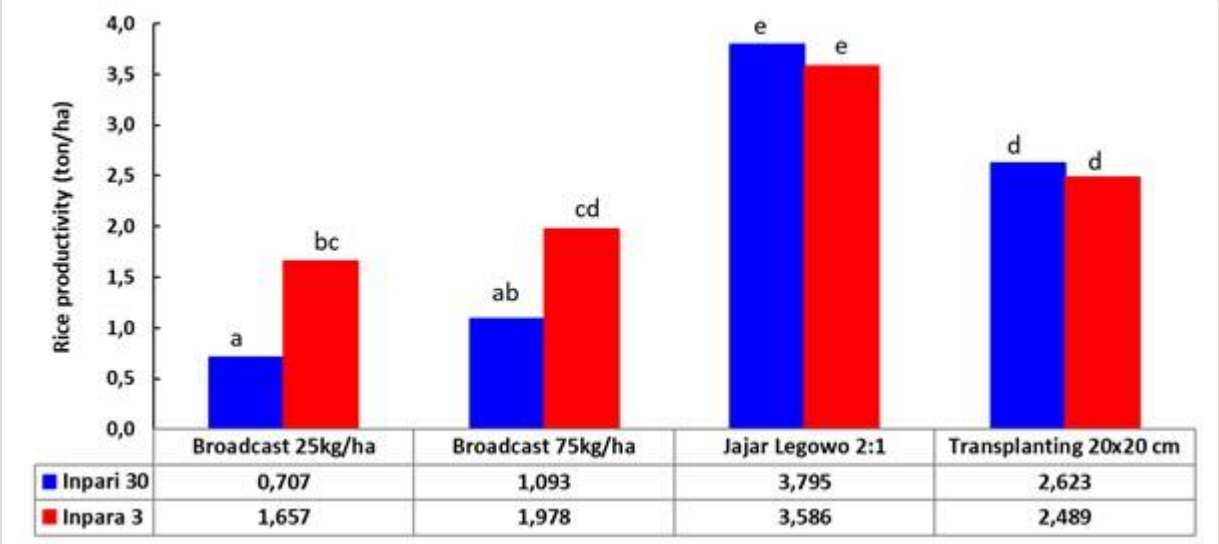
- PELATIHAN PEMBUATAN LKPD BERBASIS PROJECT UNTUK TOPIK PEMANASAN GLOBAL DAN PERUBAHAN IKLIM
- IMPLEMENTASI GREEN HOUSE PADA AGROPARK DI DESA TANJUNG PINANG II KECAMATAN TANJUNG BATU KABUPATEN OGAN ILIR

Titles of Research:

- GREEN GOVERNANCE FOR SUSTAINABLE DEVELOPMENT OF THE CITIES ON POST COVID 19 PERIOD
- DAMPAK INISIASI KEBERLANJUTAN TERHADAP KINERJA KEUANGAN PERUSAHAAN (PENDEKATAN INTENSITAS EMISI KARBON)
- STRATEGI PENGEMBANGAN UMKM PADA DAERAH SEKITAR TAMBANG BATUBARA UNTUK MENDORONG PEMULIHAN EKONOMI HIJAU YANG BERKELANJUTAN MELALUI PEMANFAATAN SOLAR POWER

Unsri's scientists have introduced enhanced methods that result in increased crop yields and do not involve harmful burning techniques for land preparation. 'We found that the broadcasting treatments produced the lowest numbers of tillers compared to the others,' said Rujito Agus Suwignyo, professor with the Center of Excellence on Peatland Research at Sriwijaya University and corresponding author of the research team's report. 'The jajar legowo treatment had higher productivity than the other planting treatments, with 3.7 tonnes per hectare. It is interesting that the Inpara 3 rice variety showed better growth and production on degraded peatlands under the sonor method but the Inpari 30 showed higher growth and production under jajar legowo. This action research was done without applying agricultural lime, so we believe that we can get 5–6 tonnes per hectare if we add lime before planting.'

The improved planting methods increased rice yields in terms of total number of tillers (the specialized grain-bearing branches of the rice plant), number of productive tillers, number of grains per panicle (the top part of the rice plant that bears the rice grains), grain weight per panicle, grain weight per m^2, and plant biomass.



	Broadcast 25kg/ha	Broadcast 75kg/ha	Jajar Legowo 2:1	Transplanting 20x20 cm
Inpari 30	0,707	1,093	3,795	2,623
Inpara 3	1,657	1,978	3,586	2,489

Rice productivity under different planting methods and rice varieties.
Source: Sriwijaya University/Rujito Agus Suwignyo

'These results are very promising for contributing to the eradication of fire used to clear peatland for planting,' said Himlal Baral, senior restoration scientist with CIFOR-ICRAF and a co-author of the journal article, 'while at the same time improving farmers' livelihoods and health as part of efforts to restore degraded peatland. The experiments were conducted on the same sites where the team have also been studying integration of trees for bioenergy and food along with fish for consumption and sale, a concept known as "agrosilvofishery", that can also play a role in restoration of degraded peatland.'

https://worldagroforestry.org/blog/2022/07/18/more-rice-and-no-fire-degraded-peatland-indonesia