SDG's REPORT

2 ZERO HUNGER

2 ZERO HUNGER

"The ability to feed the world is a key element of sustainable development. If done right, agriculture, forestry and fisheries can provide nutritious food for all. At the same time it can ensure rural development with people at the centre of the process, supporting the incomes of those who rely on agriculture.
Universities need to be able to demonstrate how they are contributing to end hunger, achieve food security and improved nutrition and promote sustainable agriculture."

-THE Impact Rankings

Number of	
1.75 metric ton	Total food waste
31.364	Campus population

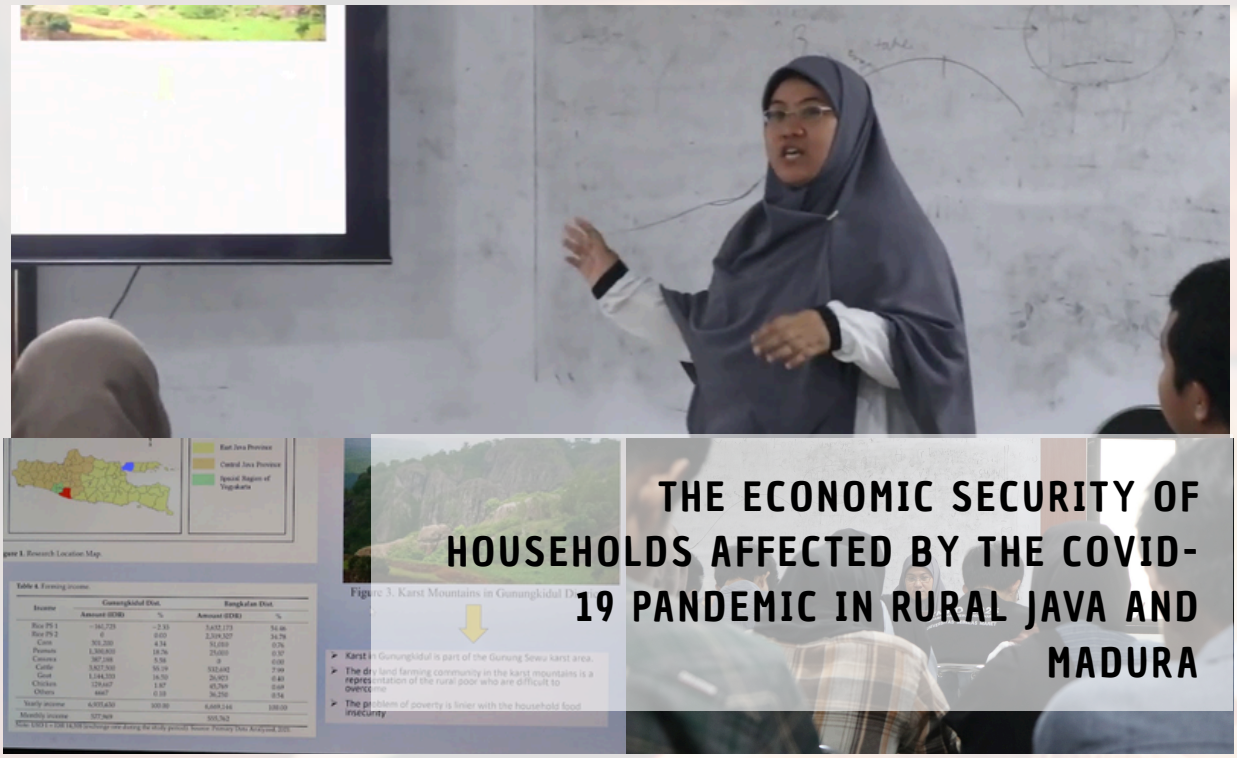
RESEARCH IN NUMBERS (2024)

15.4
Impact Factor

113
publications

Universitas Sebelas Maret (UNS) is committed to disseminating and implementing the values of SDGs 1–17 through a wide range of education, research, and community engagement programs. One example of this commitment is the dissemination of this research on

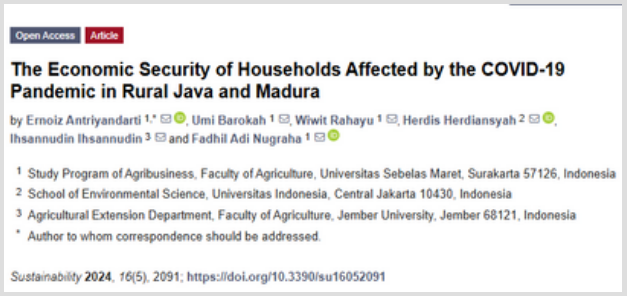
SDG 2



THE ECONOMIC SECURITY OF HOUSEHOLDS AFFECTED BY THE COVID-19 PANDEMIC IN RURAL JAVA AND MADURA

RESEARCH ARTICLE

This reasearh analyzes how rural families in Gunungkidul and Bangkalan coped economically during the pandemic. It finds that **household resilience depended on income, assets, and market access**, with Bangkalan households showing greater resilience than those in Gunungkidul. The study **concludes that stronger community support and government collaboration are needed to improve rural economic resilience.**



Open Access Article

The Economic Security of Households Affected by the COVID-19 Pandemic in Rural Java and Madura

by Ernoiz Antriyandarti [1,*], Umi Barokah [1], Wiwit Rahayu [1], Herdis Herdiansyah [2], Ihsannudin Ihsannudin [3] and Fadhil Adi Nugraha [1]

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2 ZERO HUNGER

END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

1 Agricultural Education for Sustainable Food Security

The guest lecture program organized by the Agrotechnology Study Program, Faculty of Agriculture, Universitas Sebelas Maret, carried the theme **"Utilization of UAV (Unmanned Aerial Vehicle) Imagery for Field Crop Performance Evaluation."** Through drone imaging approaches, experts explained how to monitor crop conditions with precision, efficiency, and accuracy.

Precision agriculture is a data-driven farming concept designed to enhance efficiency and environmental sustainability. UAVs or Unmanned Aerial Vehicles play a crucial role in supporting this practice through **aerial mapping, sensor applications, and software capable of identifying agricultural issues in detail**. Fixed-wing UAVs, with a flight radius of up to 700 hectares, enable efficient monitoring of large agricultural areas.

The data recording process involves three stages: **mission preparation, flight, and data processing**. This technology facilitates the early detection of pest infestations, plant diseases, and nutrient deficiencies that are often invisible to the naked eye, thereby **strengthening sustainable and resilient food production systems**.

2 Strengthening Food Security Through Diversification and Local Preservation

Students from the Faculty of Agriculture, Universitas Sebelas Maret (UNS) Surakarta, who are part of the Student Creativity Program in Entrepreneurship (PKM-K), have developed **an innovative functional food** product—cereal made from processed hanjeli (Job's tears) and bananas. The product, named Hanipang (short for Hanjeli Pisang), offers a **healthy alternative source** of nutrition while utilizing the economic and nutritional value of local crops.

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Hanipang combines nutrient-rich hanjeli with banana flour. The selected banana flour type is uter banana flour, which contains up to 17.588% resistant starch. This type of starch has been shown to effectively lower total and LDL (bad) cholesterol levels while increasing HDL (good) cholesterol levels by up to 50%. Although Hanipang is an instant breakfast product, it **retains significant health benefits, as the combination of flavonoids and resistant starch provides synergistic positive effects on the body**.

In addition, the Regional Science and Technology Application Program (PIPK) team from the Vocational School of Universitas Sebelas Maret collaborated with the Puntukrejo MSME Group in Ngargoyoso, Karanganyar, **to develop various innovative products made from purple sweet potatoes**.

Twenty-five MSME members participated in an innovation workshop at The Lawu Fresh. They learned to process purple sweet potatoes into two flagship products: fiber-rich purple sweet potato cereal, ideal for healthy vegan or vegetarian breakfasts, and klengkam—a crispy, nutrient-rich snack. The training also covered modern packaging techniques using continuous sealer machines **to maintain product quality and expand market reach through smart packaging and informative labeling**.

3 Social Action Through the Qurban Sampai Pelosok (QSP) Program to Achieve Food Security

The Zakat Collection Unit of Universitas Sebelas Maret (UPZ UNS), through the Qurban Sampai Pelosok (QSP) program, invites the public to share the blessings of qurban with underprivileged communities in remote areas that face food scarcity. Qurban donations entrusted to UPZ UNS are distributed through partner organizations and volunteer networks. In 2024, UPZ UNS once again implemented the QSP program with a total of **15 cows and 138 goats/sheep, supported by 214 individual donors and 6 institutional contributors**.