

## **REPORT OF SDGs 2: ZERO HUNGER**

**End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture**



**UNIVERSITAS SYIAH KUALA  
SUSTAINABILITY REPORT  
2023**

## 2 ZERO HUNGER



### End Hunger, Achieve Food Security and Improved Nutrition, and Promote Sustainable Agriculture

SDG 2 aims to end hunger by 2030, a growing challenge worsened by factors like the pandemic, conflict, climate change, and rising inequalities. Universitas Syiah Kuala (USK) is actively contributing to this goal through various programs focused on reducing hunger and improving food security in the region.

#### 1. USK's Research on Zero Hunger

Universitas Syiah Kuala (USK) has made substantial strides in zero-hunger research, publishing 225 articles in 2023, 10% of which appeared in top-tier journals as ranked by Citescore. USK emphasizes research on food security, enhanced nutrition, and sustainable agriculture, aligning its efforts with global goals to address hunger and malnutrition while promoting environmentally and economically sustainable farming practices. This focus is crucial for advancing solutions that strengthen food systems and support resilient agriculture, particularly in Aceh and across Indonesia.

#### 2. Proportion of graduates in agriculture and aquaculture including sustainability aspects

In 2023, Universitas Syiah Kuala had a total enrollment of 33,486 students, with 2,941 in the Faculty of Agriculture and 1,322 in the Faculty of Aquaculture (Marine and Fisheries). That year, 7,143 students graduated from USK overall, including 913 graduates (12.78%) from these two faculties—615 from Agriculture and 298 from Marine and Fisheries.

#### 3. Universal access to safe and nutritious food: USK Jamik Mosque Charity House Distributes 120 Basic Food Packages to USK Students

USK is actively committed to advancing Sustainable Development Goal (SDG) 2: Zero Hunger, through targeted initiatives that address food insecurity among students. Recognizing that financial difficulties can impact students' access to nutritious food, Rumah Amal USK has established a series of annual programs that provide essential food items, including rice, cooking oil, eggs, and instant noodles, to students living in USK dormitories. By supporting students with these food packages, USK aims to reduce hunger and improve students' well-being, allowing them to focus on their studies without the added burden of food scarcity. In addition, Rumah Amal USK distributed 120 food packages to students facing challenges in affording meals. These packages are designed to meet students' daily nutritional needs, ensuring they remain healthy and able to focus on their academic responsibilities without the concern of food insecurity.

7,143

Number of Graduates

913

Number of Graduates in Agriculture and Aquaculture



#### 4. Increasing productivity aquaculture practices and income of small-scale food producers : Innovation in Mangrove Crab Cultivation with Apartment Technology

USK plays an active role in increasing the productivity and income of small-scale food producers by providing training, research, and mentoring that focuses on innovation in agricultural technology and food processing. Through entrepreneurship programs and partnerships with various parties, USK helps local food producers access wider markets, improve product quality, and strengthen their competitiveness, thus supporting the improvement of the economic welfare of the surrounding community.

On 19 July 2023, USK organized events designed to connect farmers and local food producers. These events, which included workshops, exhibitions, and low-cost markets, provided the community with affordable access to essential food items. Additionally, they created valuable opportunities for farmers to establish stronger networks and collaborations. In 2023, the USK team from the Faculty of Marine and Fisheries successfully introduced an innovative mangrove crab cultivation technology using an apartment system based on the Recirculating Aquaculture System (RAS). This groundbreaking approach demonstrated to farmers that mangrove crab farming can be done on limited land, utilizing available space around homes through a vertical farming method.



#### 5. Sustainable food production and resilient agriculture practices : Developing 5 Ha of Shallots in Pidie, Aceh Shallot Consortium Partners with USK and Kadin

USK plays a key role in increasing sustainable food production and resilient agricultural practices through research, development, and application of environmentally friendly agricultural technologies. By involving academics in research on efficient and adaptive cultivation techniques to climate change, USK supports farmers in adopting agricultural practices that not only increase yields but also maintain environmental sustainability for long-term sustainability.

On 4 September 2023, USK implemented a mentoring program for shallot farmers located in Gampong Sukon Bambi, Peukan Baro District, Pidie on a 5 ha land. The team from the USK Faculty of Agriculture plays a role in providing technology education to ease the burden on farmers. In addition to providing education to the community, the activity is also a form of learning, research, and at the same time dedication of the University to the community. The technologies applied are Trichoderma compost and Biochar.



#### 6. USK's Food Waste

Based on data from USK's Waste Bank, Universitas Syiah Kuala produced food waste of about 21.6 mt (23.9 tons) in 2023. This food waste came from several sources such as students' canteens at USK, seminars/conferences, and university internal meetings. With the population including lecturers, students, and administration staff being 37.899 persons, the University produced 0.63 kg/person/year of food waste. All organic materials are processed into organic fertilizer at USK's Waste Bank. USK's Waste Bank has adequate waste processing equipment.

