

2 ZERO HUNGER



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

Community-led solutions help tackle child malnutrition in India

An innovative programme that combines community engagement with research across three UCL faculties is designing interventions to tackle child malnutrition in India.

A programme of participatory interdisciplinary research to tackle malnutrition has brought together schools, frontline health workers and communities in two villages in India with academics from the UCL Great Ormond Street Hospital Institute for Child Health, Institute of Education and UCL Civil, Environmental & Geomatic Engineering.

They assessed the environmental and engineering factors affecting nutrition and found that clean water, safe sanitation systems, clean kitchen utensils and availability of soap have a vital role to play. The collaborative team trains community champions to engage with their communities via schools and rural healthcare centres to ensure proposed interventions are acceptable to the people they are designed to help.



Exploring the impacts of agricultural expansion in Africa

Experts from UCL's Centre for Biodiversity & Environment Research are part of Sentinel, an interdisciplinary collaboration involving 10 research teams in the UK and Africa, which is exploring the trade-offs needed to achieve 'zero hunger' in sub-Saharan Africa.



Photo: Barbara Adolph

Helping to achieve Target 2.2

Helping to achieve Target 2.1



Providing an accurate picture of Chinese wheat production

An award-winning UK-China partnership is improving crop monitoring across the North China Plain to increase productivity and develop sustainable agriculture.

Experts at UCL are working in partnership with colleagues at the Chinese Academy of Agricultural Sciences and China Agricultural University on the Sentinels of Wheat project to improve the efficiency of wheat production across northern China.

China is the world's largest single producer of wheat and, with a population of more than 1.2 billion, it is also one of the largest consumers. As the population of China – and the world – grows, more intensive agriculture methods are needed to ensure food security for all.

“Accurate digital monitoring of agricultural productivity is essential for both global food security and the livelihoods of low-income rural regions, but until now, monitoring

methods haven't met the challenge,” says Professor Philip Lewis (UCL Geography), the project's UK lead.

Sentinels of Wheat is combining remote sensing and ground-sourced datasets using more advanced remote sensing technologies, new satellites and advanced data-assimilation techniques. This is

enabling the team to provide more detailed and accurate information on crop growth and yields.



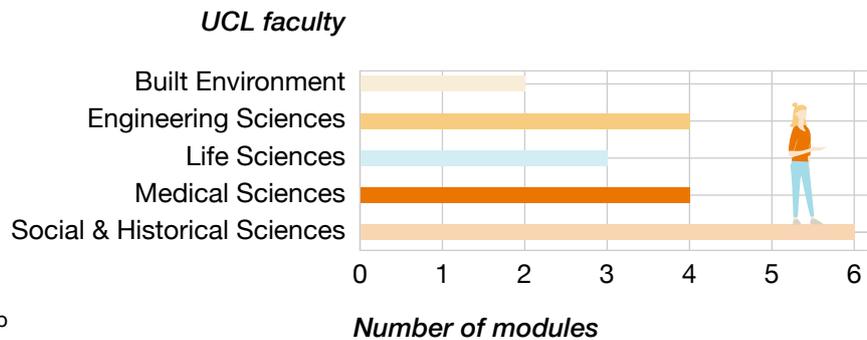
Redistributing surplus meals to tackle food poverty in London

Teams of students have redistributed more than 3,000 meals that would otherwise have gone to waste from UCL to The Marylebone Project, a shelter for homeless women in west London, which relies on donations for food. More than 50 students registered their interest in the project's first year in 2018 and the number of volunteers has continued to grow, reaching 120 in 2020–21.



Taught modules at UCL supporting SDG2 in 2021–22

Source: PPMI, a partner in the UN AI Lab – more details in the [methodology](#)



1,026

SDG2-related policy citations in 2016–20

Source: Overton – see [methodology](#)

Tackling rice poverty

Rice Inc, a social enterprise founded by UCL students and supported by UCL Innovation & Enterprise, is working with south-east Asian farmers to make rice sustainable and eliminate the 30% of rice that is currently wasted. It designs, manufactures, and deploys cost-effective post-harvest farming equipment to small holder rice farmers so they can move away from traditional wasteful practices.

One such technology is the biomass rice dryer, which helps farmers nearly double their income, recovering up to 30% of rice that would otherwise be wasted.

Rice supplied by Rice Inc is now offered in UCL's food outlets, so the university community can support a UCL student start-up and farmers in south-east Asia when buying lunch.

Rice Inc is currently based in the Hatchery, a dedicated start-up space within BaseKX, UCL's entrepreneurship hub in King's



Photo: Rice Inc

Cross, where it has access to free office space, event space and entrepreneurship advice to develop their company further.

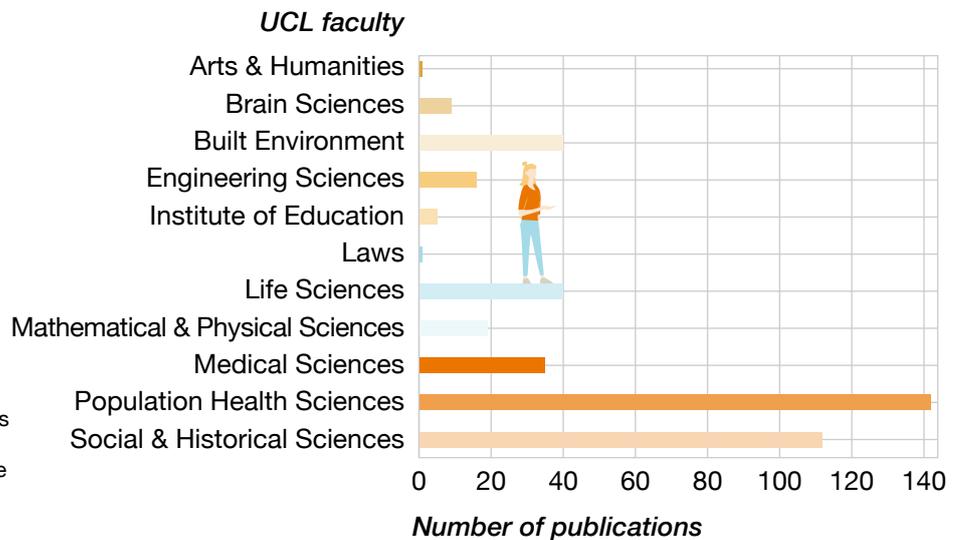
Helping to achieve Target 2.1

Helping to achieve Target 9.4

Helping to achieve Target 13.3

Number of UCL's research publications supporting SDG2 by faculty in 2016–20

Graph based on keywords searches of publication databases using a set of SDG keywords developed by Elsevier. Read more about the methodology used on the [SDGs Initiative website](#)



26.5%

of UCL's SDG2-related publications are in the top 10% most cited for all research of similar papers in 2016–20

Source: Scopus and Clarivate – see [methodology](#)

76.6%

of UCL's SDG2-related research publications are international collaborations, 2016–20

Source: Scopus and Clarivate – see [methodology](#)

DISCOVER MORE

Read more on these activities and other examples of how UCL is helping to achieve SDG2 are on the [UCL SDGs Initiative website](#).