



**ACTION
AGAINST
HUNGER**



INNOVATING AGAINST HUNGER

12

**EXAMPLES OF HOW WE ARE WORKING
THROUGH INNOVATION AND RESEARCH TO
ERADICATE WORLD HUNGER**



INNOVATING AGAINST HUNGER

At Action Against Hunger we understand **INNOVATION** as a smart journey, designed to improve our coverage and increase our impact.

WE INNOVATE AS A DYNAMIC, CONTINUOUS LEARNING PROCESS.

In this way we gain competitiveness, strengthen our impact and generate more value.

WE INNOVATE FOR THE GENERATION OF EFFECTIVE SOLUTIONS.

To save, protect and improve the lives of people and communities.

WE INNOVATE FOR GOOD NUTRITION AND HEALTHY LIVES.

Developing new tools for rapid, reliable, simple and digital diagnosis of child undernutrition; Incorporating new approaches to optimise and simplify the treatment of undernutrition by making it shorter, less costly and more effective.

INNOVATING FOR A SUSTAINABLE FUTURE.

Developing prevention packages that improve the resilience of households and communities. Characterising the risk of malnutrition for anticipation and early warning. Improving efficiency in community management of productive natural resources.

WE INNOVATE FOR INCLUSION AND EQUITY.

Focusing on the development of gender equality and inclusion approaches as a transformative lever to strengthen inclusive economic and social growth.

In short,

WE INNOVATE FOR ACTION.

Amador Gómez, director of research, development and innovation at Action Against Hunger gives us the keys to why Action Against Hunger is an organisation that works through innovation to eradicate hunger.



12 EXAMPLES OF HOW WE ARE WORKING THROUGH INNOVATION AND RESEARCH TO ERADICATE WORLD HUNGER

1	SAM PHOTO, AN APP TO SCREEN CHILD MALNUTRITION. Sam Photo Diagnosis.....	4
2	WE BRING TREATMENT FOR CHILD MALNUTRITION TO THEIR DOORSTEP. ICCM+.....	5
3	WE ARE RESEARCHING HOW TO REDUCE CHRONIC MALNUTRITION IN CHILDREN UNDER FIVE YEARS OF AGE. CRESCER.....	6
4	WE ARE CREATING AN EARLY WARNING HUB TO ANTICIPATE HUNGER. SIG SAHEL.....	7
5	IDEAS AGAINST HUNGER: A CARD THAT SAVES LIVES. Solidarity Aid Card.....	8
6	DIGITAL TRANSFORMATION AGAINST HUNGER. Digital Ecosystem.....	9
7	THE BEACONS THAT GUIDE TECHNICAL KNOWLEDGE. Athena Knowledge Hub and Alexandria.....	10
8	WE ARE MEASURING THE IMPORTANCE OF ACCESS TO WATER IN ADDRESSING MALNUTRITION. TISA.....	11
9	WE ARE GREENING HUMANITARIAN RESPONSE IN EMERGENCY SITUATIONS. Greening Humanitarian Response.....	12
10	EMPLOYMENT AND HEALTH: A NECESSARY RELATIONSHIP. Vives Employs Healthy People.....	13
11	WE ARE REVITALISING SOILS AND COMBATING DESERTIFICATION IN SAHEL. Holistic Management.....	14
12	WE ARE IMPLEMENTING A FOOD INSECURITY EARLY WARNING SYSTEM IN SPAIN.	15

1 SAM PHOTO, AN APP TO SCREEN CHILD MALNUTRITION



© Carmen ABD Ali for Action Against Hunger

SAM Photo

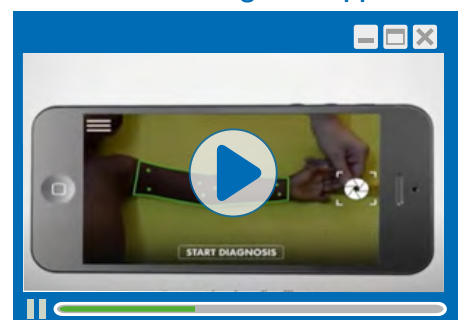
An Action Against Hunger community health worker takes a photo with her mobile phone using the SAM Photo app to identify malnutrition in Senegal.

The mobile application developed by Action Against Hunger SAM PHOTO DIAGNOSIS APP® is an innovative tool that identifies acute malnutrition in children from 6 months to 5 years old through a mobile phone. Its importance lies in the fact that diagnosis is essential for accessing treatment and, although treatment has a cure rate of over 90%, it is estimated that 75% of malnourished children who require treatment are unable to access it.

But SAM PHOTO goes further: it strengthens local health systems by digitising and analysing data in real time, providing a solid basis for public health decision-making. This ensures the collection of accurate and reliable information on child malnutrition, optimising the use of human and financial resources. In addition, SAM PHOTO promotes the participation of communities in nutritional identi-

fication and treatment, improving coordination between health centres and families. With projects in Senegal, Guatemala and India, SAM PHOTO aims to become a global tool in the fight against malnutrition. ■

Find out how SAM Photo Diagnosis App works



2 WE BRING TREATMENT FOR CHILD MALNUTRITION TO THEIR DOORSTEP



©Toby Madden for Action Against Hunger

THE HAWA EFFECT

Hawa is a community health worker trained by Action Against Hunger in Mali who has been able to save the lives of malnourished children.

Approximately 8,500 children die every day due to malnutrition. However, there is a very effective treatment for severe acute malnutrition that consists of administering ready-to-use therapeutic food for 6-8 weeks.

More than 90 per cent of undernourished children who receive treatment are cured. Unfortunately, more than two thirds of the world's 45 million acutely malnourished children do not have access to treatment.

At Action Against Hunger, we improve the coverage of nutritional care services through the ICCM+ approach which consists of training community health workers. Our studies have shown that community health workers are just as effective as health workers in health centres, and have a similar cure rate.

After a few training sessions, they can effectively identify and treat severe acute malnutrition early. ■

The Hawa effect



3 WE ARE RESEARCHING HOW TO REDUCE CHRONIC MALNUTRITION IN CHILDREN UNDER FIVE YEARS OF AGE



© Action Against Hunger

CRESCER Project

One of our researchers from the CRESCER project in Angola.

The CRESCER project, developed by Action against Hunger in collaboration with the Tropical Medicine and International Health Unit of the Vall d’Hebron Foundation, brings together an outstanding international consortium of academic and research institutions from Angola and Spain. Its mission is clear: we study the effectiveness of different basic actions to prevent and reduce chronic malnutrition and mortality in children under five years of age.

CRESCER directly targets the factors that hinder the development and threaten the lives of children from early pregnancy to the age of five. To achieve this, we are implementing a range of direct actions, including

support for breastfeeding, provision of essential micronutrients and cash transfers, among other measures and comparing its efficiency, in the provinces of Huíla and Cunene. These two provinces in Angola are hard hit by climate change, which is eroding livelihoods and increasing the vulnerability of the most vulnerable populations.

But CRESCER is not limited to direct action. This project also aims to establish links with the Angolan government and other actors and academic institutions to foster the exchange of scientific and technical knowledge and mutual learning. ■

4 WE ARE CREATING AN EARLY WARNING HUB TO ANTICIPATE HUNGER



© Peter Caton for Action Against Hunger

SEVERE DROUGHTS

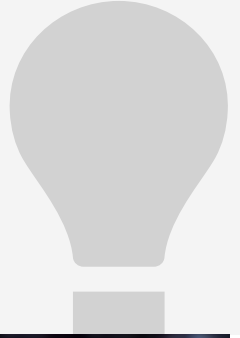
A herder tends his livestock in an area of Ethiopia where severe droughts have occurred.

At Action Against Hunger, we are pioneers in incorporating into our work a range of monitoring and early warning systems that collect and analyse key data to better anticipate and plan the fight against hunger. We are now working on an EARLY WARNING HUB that uses new technologies, satellite imagery and artificial intelligence to provide a more accurate picture of the reality of hunger-affected communities.

One such system is the Sahel Geographic Information and Early Warning System. This livestock-dependent region of Africa suffers from recurrent droughts and heat waves. To address this issue, we have developed the Pastoral Monitoring and Early

Warning System, which uses artificial intelligence to process satellite data in real time to provide information on biomass, water availability, livestock status, market prices, animal diseases and bush fires. This system combines satellite imagery with local informants who respond to weekly questionnaires via mobile devices without the need for internet.

These technological advances enable Action Against Hunger to make more informed decisions and provide accurate and timely support to vulnerable communities in the fight against hunger. This groundbreaking milestone reinforces our organisation's commitment to excellence and innovation in hunger eradication. ■



5 IDEAS AGAINST HUNGER: A CARD THAT SAVES LIVES



© Ana Mora for Action Against Hunger

In 2020, in the midst of the global COVID-19 pandemic, Action Against Hunger took an innovative and significant step by launching the SOLIDARITY HELP CARD in Spain. It was the first time we implemented an emergency response in this country.

The Solidarity Aid Card became a symbol of support and hope for many vulnerable families. With a monthly amount of €346, set as the standard cost to guarantee a basic and healthy basket, families could go to supermarkets and buy essential food and hygiene products.

Each family received this assistance for two months. We accompanied this initiative with training and awareness-raising sessions on healthy and affordable diets. We wanted not only to alleviate immediate hunger, but also to empower families to make more informed and sustainable food choices.

Today we continue to distribute Solidarity Aid Cards and work tirelessly to ensure that the 13% of food insecure families in Spain have access to essential food and hygiene products. ■

The story of Nazareth
(video in Spanish)



6 DIGITAL TRANSFORMATION AGAINST HUNGER



© Action Against Hunger

At Action Against Hunger, as the innovative organisation that we are, we are now in the midst of a profound digital transformation that is changing the way we work. We are exploring new ways to connect processes, people and technology.

HOW DO WE DO IT?

Through a DIGITAL ECOSYSTEM designed to digitise our internal processes and deliver innovative services. This transformation translates into more effective action, a deeper understanding of the causes of hunger and the ability to anticipate crises. An exciting journey into a future where innovation and technology are the keys to a world without hunger. ■

Find out more about our digital ecosystem (video in Spanish)



7 THE BEACONS THAT GUIDE TECHNICAL KNOWLEDGE



ACTION AGAINST HUNGER TEAM
Using our digital tools during the implementation of a project.

© Guy Calaf for Action Against Hunger

At Action Against Hunger, access to information is a priority. For this reason, we have two platforms that bring together the organisation's technical knowledge.

ATENEA KNOWLEDGE HUB is our analytics platform. It houses all our essential data, driving knowledge generation, which helps us make a difference in the fight against hunger.

ALEXANDRIA represents another of Action Against Hunger's most innovative achievements. This platform, inspired by the ancient Library of Alexandria,

has been designed to overcome previous challenges in managing technical knowledge within the organisation. Its vision is to be an open, unique and collaborative source of information, where all members of Action Against Hunger can access technical documents, guidance and tools in a simple and effective way. In addition, Alexandria promotes collaboration and the exchange of ideas between colleagues from all missions and offices, who can resolve their doubts in real time through a platform that functions as a social network. ■

8 WE ARE MEASURING THE IMPORTANCE OF ACCESS TO WATER IN ADDRESSING MALNUTRITION



© Sandra Calligaro for Action Against Hunger

ACCESS TO WATER

Children play with a water bowl installed by Action Against Hunger in a village in Afghanistan.

Can access to clean water improve the treatment of severe acute malnutrition in children under 5? To answer this question, we are developing the TISA (Treatment of Acute Malnutrition Integrated Care) project.

This project investigates whether incorporating access to water, sanitation and hygiene into nutritional treatment can increase the rate of recovery in cases of acute malnutrition. For example, one of our interventions is to provide a hygiene kit that includes the necessary accessories to convert contaminated water into safe drinking water.

Action Against Hunger is working in close collaboration with local authorities in Senegal and the

London School of Hygiene and Tropical Medicine to lead a study analysing the integration of access to water and hygiene in the treatment of acute malnutrition in children under 5 years of age. To date, we have completed a sample of 2,400 children and their families and have carried out highly relevant analyses that will allow us to generate scientific evidence and therefore be more effective in the fight against hunger. The TISA project exemplifies how science and humanitarian action merge to combat acute malnutrition and transform lives. ■

9 WE ARE GREENING OUR RESPONSE IN HUMANITARIAN SITUATIONS



© Peter Caton for Action Against Hunger

SOURCE OF ENERGY

Gatwal Nhial, 9, repairs a solar panel that is his only source of energy on his floating grass island in what used to be Wangkotha village.

Today, renewable technologies offer a sustainable and secure alternative. But during humanitarian crises, energy needs are often met with solutions based solely on fossil fuels, which has a direct and detrimental impact on the environment.

GREENING HUMANITARIAN RESPONSE is a project led by Action Against Hunger that will provide humanitarian organisations and other stakeholders with a practical and easy-to-use tool with two objectives: first, to measure the energy demand required by humanitarian deployments during crises and second, to provide a set of renewable solutions that can be implemented on the ground based on

the needs identified, including the installation and use of equipment using alternative energy sources such as solar power.

The project has been recognised as one of the best Sustainability Actions 2023 during the Sustainability Day 2023, a day in which companies, institutions, administrations and non-governmental organisations meet to share experiences and success stories related to the sustainability of their operations and activities. ■

10 EMPLOYMENT AND HEALTH: A NECESSARY RELATIONSHIP



VIVES EMPLOYEES HEALTHY PEOPLE

A picture of the Valussi family.

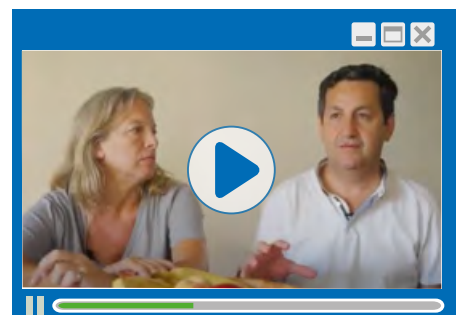
© RJ Producciones for Action Against Hunger

The close relationship between health and employment is not a coincidence, but a reality. However, evidence in this regard is scarce. A recent study developed through a collaboration between Action against Hunger, the Epinut research group of the Complutense University of Madrid and other universities sheds light on this crucial issue. The results are revealing: those who improved their healthy habits experienced an improvement in their job prospects.

In response to this evidence, Action Against Hunger has launched an innovative programme in Spain called VIVES EMPLEA SALUDABLE, a pioneering programme in Spain that offers a wide range of activities related to nutrition, physical activity, sleep and rest, among other aspects.

An example of the positive results is the story of the Valussi family, pictured here, whose testimony supports its effectiveness. Vanessa and her husband, Roberto, found themselves in a difficult situation after losing their jobs and with two children to care for. However, their decision to join the programme gave them the tools they needed to improve their lives. ■

[Learn more about the Valussi family story \(video in Spanish\)](#)



11

WE ARE REVITALISING SOILS AND COMBATING DESERTIFICATION IN THE SAHEL



© Action Against Hunger

HOLISTIC MANAGEMENT
 We regenerate degraded soils, reverse desertification, increase biodiversity and adapt to climate change in the Sahel.

Holistic Management is a methodology developed by Zimbabwean biologist Allan Savory, which helps farmers manage their animals by mimicking how nature functioned before the advent of agriculture and animal husbandry. Before the domestication of plants and animals, herbivores moved in large herds to fend off predators. In their passage, they created in a very short time a great impact in terms of trampling, grazing and natural fertiliser (dung, urine), and then abandoned those lands, allowing enough time for the plants to grow again, until the next “visit” of a new herd of herbivores.

This natural cycle supported soil health, increased the capacity to absorb water from rainfall and maintained high biodiversity. With the advent of agriculture and livestock farming, these cycles were interrupted, resulting in soil degradation and loss of biodiversity. Holistic Management gives livestock farmers the tools they need to manage the complexity of their fields in a way that enhances ecosystem processes.

Holistic Management is currently applied on more than 20 million hectares on 5 continents, mainly in private fields, with one or a few decision-makers. In the case of Action Against Hunger, we promote the application of this approach on community lands in the Sahel, in environments with recurrent droughts and highly vulnerable to climate change. The complexity of an environmentally fragile environment is compounded by the difficulty of community management of natural resources (soil, water, pastures) involving hundreds of community actors.

We rely on Holistic Management to regenerate degraded soils, reverse desertification, increase biodiversity and adapt to climate change. Environmentally healthy environments produce more food for livestock and people. ■

12 WE ARE IMPLEMENTING AN EARLY WARNING SYSTEM FOR FOOD INSECURITY IN SPAIN



© Action Against Hunger

In Spain, one in four people live with too low an income, severe material deprivation or very low employment intensity, which has a direct impact on food insecurity. Action against Hunger has developed a food insecurity tracking and early warning system to monitor invisible hunger by region in Spain and anticipate action by social, health and political entities at the local level.

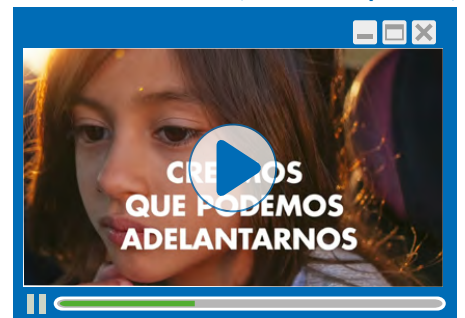
This began with the development of a vulnerability index that uses data from various sources, such as INE and secondary sources, to graphically represent and define the level of vulnerability in various areas and regions. Completion of this project is a priority for 2024, and has been supported by national Next Generation funds. Next, a pilot test of the Food Insecurity Early Warning System funded by the Community of Madrid will be developed, interlinking data related to socio-economic barriers, consumption data and the FIES scale of food insecurity.

DIGITAL DATA

We use AI to manage large datasets that allow us to stay ahead of hunger.

At the end of this pilot test in the Community of Madrid, this Early Warning System will be rolled out nationally. The product is expected to be tested in the Community of Madrid in 2025. ■

Against Hidden Hunger
(video in Spanish)



THANK YOU!

#AGAINSTHUNGER

www.accioncotraelhambre.org

