



Kefo Kebede and her son Dawit pose for a portrait at home in Mukecha Kebele, South Omo in Ethiopia, an area severely impacted by the effects of climate change.

Investing in early response systems for health emergencies

This project seeks to strengthen fragile public health systems in remote rural areas of Ethiopia. It will develop novel early warning and response systems to rapidly detect and control disease outbreaks and save lives.

A new approach to forecasting disease

In Their Lifetime is Christian Aid's seed fund for innovation and learning. Through this fund, we are able to invest in high impact, solutions-focused projects which build towards transformative change.

This project will test a new approach to disease forecasting, with a view to later scaling it up to national level. If successful, this will enable Ethiopia to issue nationwide early alerts about a range of climate-sensitive diseases, transforming the country's ability to prepare for and respond to outbreaks.

Given the urgency wrought by the climate crisis and the increased incidence of drought and other extreme events, this project will have a direct and meaningful impact on the lives of men, women and children living in poverty.

PROJECT SUMMARY

Full name of project: Preparedness and early response to public health emergencies in Konso and South Omo

Location: Konso and South Omo zones, southern Ethiopia

Duration: 2 years

Implementing partners: Action for Development, National Meteorological Agency, Ministry of Health

Reach: 93,000 direct beneficiaries

Budget: £298,965

Background: a health system under strain

With 115 million citizens, Ethiopia is one of the most populous countries in the world. But it is also one of the poorest, ranked 173 out of 189 countries for human development.

Christian Aid works in areas underserved by the government and other development organisations. These include Konso and South Omo zones, in the far south of the country.

Multiple simultaneous crises

Even before the Covid-19 pandemic, Ethiopia's chronically overburdened health system was struggling to cope with repeated, unexpected outbreaks of disease. Konso and South Omo are currently facing simultaneous outbreaks of cholera, measles and meningitis – on top of serious endemic threats such as malaria.

In these remote rural areas, poverty rates are particularly high. Only a third of people here have access to clean water and sanitation facilities such as latrines. Poor nutrition and hygiene mean that disease is rife, but health systems and infrastructure are extremely fragile. Disease surveillance and reporting is poor and rapid response teams are weak or non-existent.

The march of climate-sensitive disease

Health and climate are intrinsically linked, and as the climate changes so too do the health threats that people face. Increased droughts and floods lead to more failed harvests, food shortages and contaminated water, while rainfall and temperature changes can cause climate-

sensitive diseases to surge. These include mosquito-borne viruses, such as malaria and dengue, and bacterial illnesses such as cholera and meningitis.

There is an urgent need to develop and strengthen early warning systems for health emergencies, but disease forecasting systems, where they exist, are severely limited, focusing only on malaria and failing to take account of a host of other serious climate-related illnesses. This project seeks to change that.

Experimentation that builds on experience

Previous Christian Aid projects in Ethiopia have used climate information services to inform agricultural planning and to create early warning systems for disasters such as drought and floods. Initial work has also been undertaken around disease recording and reporting systems for malaria.

This project builds on these foundations, bringing these two strands of work together in an innovative and holistic approach to building health resilience in poor, rural communities. This involves **trialing the use of climate information to forecast the most common disease outbreaks**, thus enabling health authorities and meteorological agencies to issue joint early warnings, to be better prepared for health emergencies and to respond quickly and effectively when they occur. **At the moment there is no coordination between meteorological and health agencies. This project will bring them together for the first time.**

Understanding that information alone is not enough, this project will also build the ability of local communities, local authorities and health facilities to respond effectively to these health warnings when they occur, saving lives.

Thousands of preventable deaths

In Ethiopia, 60–80% of communicable diseases are linked to a lack of access to safe water, sanitation and hygiene facilities. Diarrhoea is the leading childhood killer, accounting for almost a quarter of all deaths among children under five – that's over 70,000 children dying from diarrhoea every single year. And the child mortality rate in Konso and South Omo is 10% higher than the national average.

The vast majority of these deaths are preventable, but in poor, rural areas there are no quick fixes. **However, when communities understand the nature of the threats they face and have the information they need on how to protect themselves and their children, they are empowered to take action.**



Mr Ato Shibabawu Abere, a health laboratory technician, has been involved in a previous project, building the capacity of health facilities in the Gambella region of Ethiopia.

'If we have information, we can do everything. We can even change our plans for our life.'

This is a unique project which seeks to build resilience against both emerging and entrenched health threats, combining cutting-edge research with community empowerment.

Prediction. Prevention. Detection. Response.

The project will support communities and health institutions in Konso and South Omo to anticipate and detect health hazards and take early action to save lives.

In the ongoing battle against disease, knowledge is power. This project will work at multiple levels to ensure that communities and health services have the information, skills and supplies they need to protect themselves and each other.

There are **four** key strands to the project:

- 1. Prediction:** Forewarned is forearmed. When health services and communities know when and where particular diseases are likely to surge, based on seasonal and climatic variables, they can prepare themselves. Research will identify the most prevalent diseases, define their relationship with climatic variables and use scientific modelling to develop thresholds for the production and dissemination of health alerts.
- 2. Prevention:** Most disease transmission can be limited through simple preventative measures such as handwashing, using latrines and drinking clean water. But in remote rural areas, awareness and facilities are limited. By integrating this component into the project, we can

build the preparedness and resilience of communities to future health emergencies.

- 3. Detection:** Effective surveillance is the bedrock of any early warning system for disease outbreaks. Unless health authorities know about an outbreak, it is impossible for them to respond quickly. Konso has no disease surveillance system at all, while in South Omo reporting ranges from poor to patchy.
- 4. Response:** Established emergency action plans and well-trained rapid response teams can prevent local outbreaks unfolding into major disasters. Konso has no rapid response teams and health facilities lack equipment and medicine. While teams do exist in South Omo, planning, training and coordination is limited, severely impacting effectiveness.

This project has **three** objectives:

1: To strengthen the Public Health Emergency Management (PHEM) system, embedding preparedness and early response plans.

This includes activating and strengthening rapid response teams and using health-meteorological information to forecast and detect outbreaks of climate-sensitive diseases. The project will work with health institutions to develop consistent disease recording, reporting and alert systems, providing local health authorities with the information they need to make timely decisions and take prompt action.

2: To enhance the capacity of health institutions to prepare for and respond to public health emergencies and disasters.

The project will provide emergency management and health-meteorological training to health workers, laboratory technicians and to 'health development armies' made up of community volunteers. It will also provide logistical support to local health institutions, including contingency supplies of emergency medicines and personal protective equipment. This will ensure that these frontline institutions have the means to interpret and respond effectively to health warnings.

The project will test this approach in South Omo and Konso, generating data and learning that it will be shared widely. We hope that this approach can then be scaled up and applied across the country. As such, the project works extremely closely with government health structures. This guarantees local sustainability and also maximises the chance of replication in other regions if successful.

3: To improve community resilience to and preparedness for health hazards.

The project will support communities to identify and understand common health risks and to develop their own prevention and response plans to reduce those risks. As part of this, the project will deliver training on hygiene, healthy environments and disease transmission, and support communities to improve water and sanitation facilities. This community-led approach, with project staff on hand to provide technical support, embeds knowledge and ensures sustainability.

Kefo Kebede (26) lives in Mukecha, South Omo, with her husband and three children Kludie (9), Tency (7) and Dawit (2).



Knowledge is power

Kefo and her family have benefited from previous Christian Aid projects to share weather forecasts that inform their farming decisions, and from training in how to save money, food and seeds so that they have contingency supplies to fall back on when times are tough.

Kefo very much values the knowledge she has gained and likens making decisions without information to doing calculations 'with a zero' at the centre.

"If we have information, we can do everything," she explains, "we can even change our plans for our life."

This project focuses on providing communities and health authorities with the information they need to effectively plan for the threats they face. For Kefo's children and thousands like them, climate related illnesses such as diarrhoea and malaria, are a serious and ever-present threat. Your support can help protect vulnerable families both now and for the future.

Project budget	Total GBP (£)
Project objectives and activities	162,962
Strengthening the Public Health Emergency Management system (PHEM) to ensure improved disease surveillance, health-meteorological systems and reporting	44,329
Enhancing the capacity of health institutions to respond to public health emergencies and disasters, so they are better equipped to cope with future health hazards	63,928
Improving community resilience and preparedness to health hazards and equipping communities to prevent communicable diseases	26,243
Project delivery costs (includes in-country and partner project expenditure such as travel by partners to projects, project initiation workshop, and other non-salary expenditure)	28,462
Project delivery staff	72,378
Local partner: Public health officer	12,960
Local partner: Development facilitators	3,250
Local partner: Field office coordinator	3,948
Local partner: Finance team	7,084
Local partner: Support staff (driver and guard)	2,848
Local partner: Executive director	3,278
CA Ethiopia: Senior humanitarian program officer	9,533
CA Ethiopia: Senior program officer (climate change)	19,344
CA Ethiopia: Program finance officer	4,309
CA Global: Global resilience advisor	5,824
Monitoring evaluation and oversight	63,625
Monitoring, evaluation, reporting and learning	24,629
Christian Aid global support costs	38,995
TOTAL:	298,965

This budget reflects the full project costs. In addition a small percentage of ITL funds will be utilised for ITL Portfolio Management costs. This includes the costs of the ITL Programme Manager salary and additional fundraising and communications costs. As per Christian Aid's organisational policy, 15% of the overall budget has been allocated towards Christian Aid's global operational costs: this includes Christian Aid global information and financial systems, global procurement, and support for global governance, accountability and strategic operational development.

To find out more about investing in this project, please contact ITL@christian-aid.org

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