know your weather
understand your risk
TriM consists in a team of multidisciplinary experts that combine a solid scientific background with a long international experience in the development of tailor-made and cutting-edge analytics tools able to transform data into meaningful information for prompt reactions. From meteorology and climatology to computer science, geography and social sciences, our expertise allows us to be flexible and support partners in all phases of the decision making process while favoring the use of the client’s language.

An inter-disciplinary team supporting Disaster Risk Reduction.

Our team

meteorology • computer science • social sciences
climatology • geography

hazards and impacts monitoring

We empower local communities to observe, measure, record and use relevant data for disaster risk reduction. Our tailored systems enable communities living in hardly accessible territories to systematically collect ground-based meteorological data essential to translate global processes into local-scale assessment and understanding of potential impacts. By connecting tradition, science and innovation, we strengthen the capacity of identifying relevant risk indicators, understanding the importance of collecting and recording data, sharing information, exchanging knowledge and designing effective decision support tools.

A network of community-based observatories.
our approach

Strengthening local scale monitoring and warning services to protect and promote the well-being of communities, animals and environments.

ENHANCING RISK KNOWLEDGE
Through a participatory methodology we involve heterogeneous actors in sharing experience, good practices and knowledge about risk. By integrating science and indigenous knowledge appropriate risk indicators, relevant to the context, are identified and translated into relevant data that can be systematically measured. Capacity building in the field is a key to create trained community based observatories able to timely spot signs for extreme weather events and prepare for impacts.

MONITORING AND RECORDING
We enable monitoring and recording of relevant data at a very local scale, through the use of manual weather stations and the involvement of community members. Rainfall, temperature and additional information about hazards or impacts can be collected using 3map, enabling the collection of geo-localized data even in absence of network. While network is available, data can be immediately uploaded to the Cloud Database and shared with other users.

COMMUNICATION AND SHARING
Appropriate communication tools are developed and agreed with users, to disseminate meaningful information tailored to different levels. Thanks to the use of instant messaging chat bot, technical and non-technical users are engaged in receiving feedbacks on collected data, such as real-time information or monthly bulletins, and in exchanging observations or comments with other users.

DATA VISUALIZATION AND ANALYSIS
A web-app has been designed to facilitate the access, management and analysis of data among different users. Location based risk information along with other relevant geospatial information (such as climate observation and remotely sensed data) is visualized in an interactive mapping platform. The tool is conceived to provide visual insight into the relationship between the different elements of the complex environmental system studied.

benefits

An innovative service connecting science, tradition and technology.

RELIABLE
A system for the monitoring of weather, climate, hazards and impacts, particularly reliable in remote areas with lack of electricity or network.

FLEXIBLE
A flexible web-app for the integration of qualitative and quantitative data collected on the ground, remote sensing data and meteorological models output.

PARTICIPATORY
A participatory analysis and interpretation of information, at all levels, for concrete actions and results.

SCALABLE
A scalable approach for enhancing risk knowledge at local, regional, national and global level.

HUMAN-ENABLED
An efficient integration of human observation, traditional experience, science and technology to create a hazard/impacts database available for real-time and future applications.

TIMELY
A timely dissemination of location-based information to decision makers and other relevant stakeholders, using easy to understand information such as instant messages or maps.

CROSS-SECTORAL
A cross-sectoral approach tailored to the needs and priorities of the context.

COMPATIBLE
A system compatible with open spatial data including open technologies for data collection.

An innovative service connecting science, tradition and technology.
our projects

North Horr Sub-County, Kenya
One Health Project - A Multidisciplinary Approach to Promote the Health and Resilience of Pastoralist Communities in North Kenya.

Filtu Region, Ethiopia
An integrated approach to improve living conditions and strengthen the resilience of pastoral and agro-pastoral communities affected by drought in the Somali Regional State.

Beitbridge and Mwenezi Districts (Zimbabwe)
CROPS 4 FOOD · CReate OPPortunities for a Sustainable agriculture and livestock development to enhance the resilience of Beitbridge and Mwenezi communities.

Integration of technology and local perception to identify meaningful symbols to represent risk indicators, in Zimbabwe.

Participatory data collection for the assessment of availability, quality and accessibility of natural resources, in Kenya.

North Horr Sub-County, Kenya
One Health Project - A Multidisciplinary Approach to Promote the Health and Resilience of Pastoralist Communities in North Kenya.

Implementation of a community-based weather monitoring network for Eastern Africa, to provide communities, local and regional institutions with near real time weather data at local scale.

Analysis and interpretation of collected data through the integration of science, technology and traditional knowledge, in Kenya.

North Horr Sub-County, Kenya
One Health Project - A Multidisciplinary Approach to Promote the Health and Resilience of Pastoralist Communities in North Kenya.

Development of a Web Application for the monitoring of natural resources and food insecurity, in Niger.

Capacity building on data analytics using TriM interactive Web-APP, in Ethiopia.

Capacity building on the importance of recording weather data to create local scale datasets for climate trends and climate impacts assessment, in Ethiopia.

Filtu Region, Ethiopia
An integrated approach to improve living conditions and strengthen the resilience of pastoral and agro-pastoral communities affected by drought in the Somali Regional State.

Fall Armyworm (FAW) monitoring using 3map mobile application, in Zimbabwe.

NieNNay and Say Department (Niger)
Milk & Honey: two high added-value supply chains as a response to food and economic insecurity in urban and rural areas in Niger.

Niamey and Say Department (Niger)
Development of a Web Application for the monitoring of natural resources and food insecurity, in Niger.

Filtu Region, Ethiopia
An integrated approach to improve living conditions and strengthen the resilience of pastoral and agro-pastoral communities affected by drought in the Somali Regional State.

Beitbridge District (Zimbabwe)
FAW Monitoring Pilot Project.