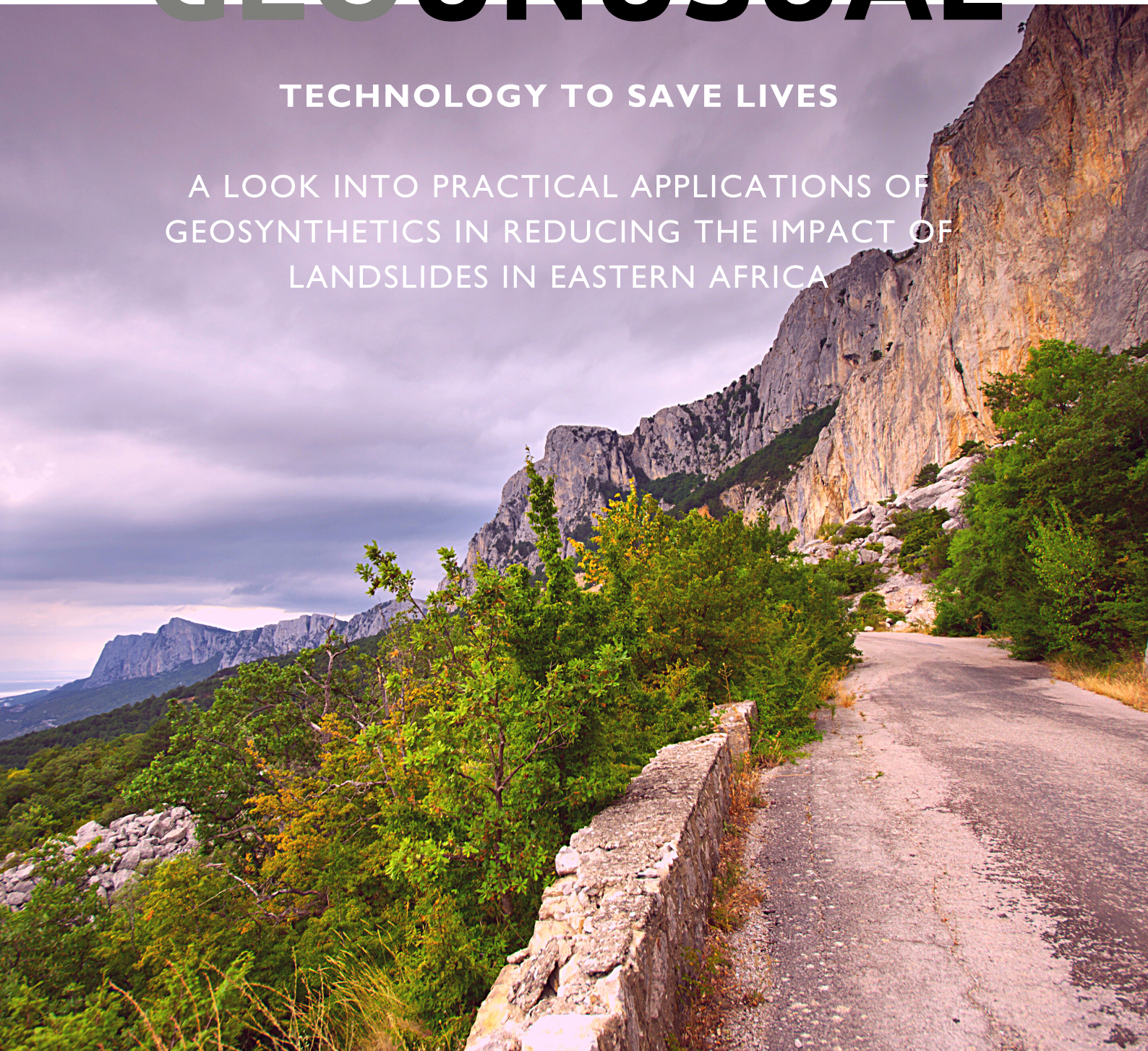


SOIL STABILITY SOLUTIONS SERIES

GEOUNUSUAL

TECHNOLOGY TO SAVE LIVES

A LOOK INTO PRACTICAL APPLICATIONS OF
GEOSYNTHETICS IN REDUCING THE IMPACT OF
LANDSLIDES IN EASTERN AFRICA



TECHNOLOGY TO SAVE LIVES

BY LIZ NEKE
18TH JUNE 2020

Every year, heavy rains lead to the destruction of roads, bridges, houses, property and infrastructure in Kenya and the African continent at large. On May 18 2020, the Advancing Earth & Science Blogosphere declared landslides a crisis in East Africa.

There have been a cumulative 375 fatal landslides in the region between January 2004 & May 2020. In Kenya alone, more than 200 people died with an additional 100, 000 plus displaced since April 2020.

According to this source, flooding has affected 29 of the country's 47 counties, with more than 600, 000 people being adversely affected by the ongoing heavy rains. A defining factor for most fatal landslides in the Sub-Saharan region is heavy rainfall and poor soil stabilization techniques for infrastructure built on slope regions.

This does not only happen in 'undeveloped' regions. We have seen dams such as Patel in Solai recently burst, leading to huge destruction of both life and property.

It is increasingly clear to Drilmatic and our affiliates that this is a problem that needs a long-term solution. Partnering with Ace Geosynthetics, a lead manufacturer and distributor from Asia, we have developed the technology that help curb this problem on a massive scale. Geosynthetics are man-made products manufactured to meet specific functions in earthworks and geotechnical projects, such as bridges, roads and dams. Typically, the product has the following key functions; filtration, separation, reinforcement, drainage, barrier; surface erosion control, and protection.

This emerging technology is being favored over more traditional methods of slope stabilization due to its significant cost-saving element, with a proven track record of improving the quality and shelf-life of infrastructure and protecting the environment while reducing several effects of climate change.

Even with these benefits, a key challenge faced in Geosynthetics is awareness. The construction industry has been slow to adapt to it, sometimes with huge consequences ranging from expensive repairs to loss of property, and even life, as we have witnessed in various landslides. However, this is changing as market trends shift towards 'green engineering'. Both ACE Geosynthetics and Drilmatic are at the forefront of this, thanks to heavy investment in research and development in cut-throat technology and high quality products suitable for roads, highways, railways, artificial basins and erosion control projects various sensitization programs in the region, we are seeing perceptions shift, albeit slowly. Because it is a new product, information on quality, suppliers and use cases is not as easily accessible as it should be.

However, as one of the experts in this industry, Drilmatic & ACE Geosynthetics will ensure prospective and existing clients are technically sound with the material. This includes installation guidelines, product guidelines, exhaustive test reports, informative case studies, technical in-person workshops, and several informational videos.

Geosynthetics are fast becoming an essential in Civil and earthworks. Partnering with Drilmatic ensures cost-effectiveness, better quality in infrastructural development and reduction of long-term maintenance of civil engineering works