

DATATHON

NOVEMBER 2021 - MARCH 2022

THE DATA SCIENCE CHALLENGE BRIDGING INDIAN AGRICULTURAL PROTECTION GAP

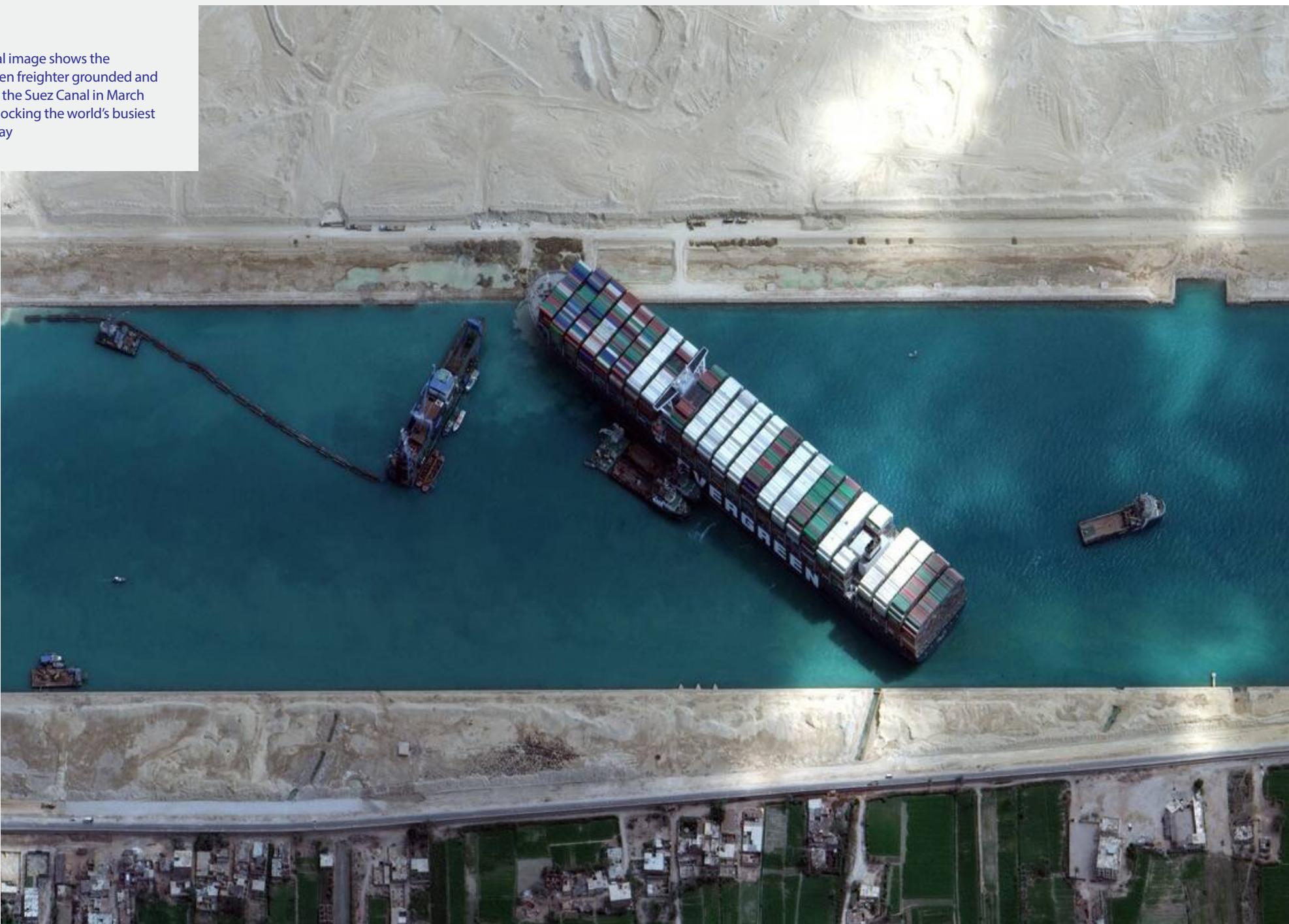
SCOR
The Art & Science of Risk

BEREXIA
GLOBAL ADVISOR FOR Change

**ÉCOLE
POLYTECHNIQUE**
IP PARIS

**ESCP
BUSINESS SCHOOL**

An aerial image shows the Evergreen freighter grounded and stuck in the Suez Canal in March 2021, blocking the world's busiest waterway



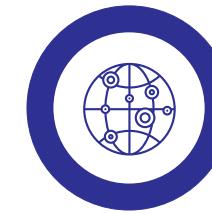
“All over the world the risk universe is expanding, pushing back the insurability frontier. This is the opportunity for SCOR to do what it does best: protect businesses and individuals by helping them manage risks.”

LAURENT ROUSSEAU, GROUP CHIEF EXECUTIVE OFFICER



7,993*

victims from catastrophe events
in 2020



274*

number of catastrophe events
in 2020

A WORLD OF SCIENCE AND SCENARIOS

Far too many people today remain underinsured or uninsured. Every time catastrophe strikes, this lack of coverage sets back the ability of societies to recover and move forward. SCOR is working to bridge the protection gap, pushing back the limits as far as possible by offering new products and improved services.

Meanwhile, the horizon of emerging risks is expanding. Today, society is balancing efforts to address a global pandemic with the need to anticipate potential damage from threats like cyber-attacks, and to mitigate and adapt to climate change. Yet many of these phenomena are not, as yet, fully understood.

Building resilience in this rapidly evolving landscape is our challenge, as well as our opportunity. We insure the insurers. Large risks and catastrophes are the raw material of reinsurance. Unlike the insurance universe, which is marked by cycles and trends where shocks are exceptional, reinsurers need to focus on the tail end of the probability spectrum – on low-frequency, high-severity events for which the variance per risk is much higher. The insurer’s risk probability distribution is based on abundant and granular data. For the reinsurer, however, data is limited because we know so little about the many potential catastrophes we face. This is why we use probabilistic rather than statistical tools. We don’t foresee what is going to happen – we infer it. More and more, this means entering a world of scenarios.

*Source: SIGMA No 2/2021



BRIDGING INDIAN AGRICULTURAL PROTECTION GAP

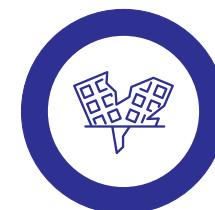
Mitigating the risks facing the Indian agriculture sector

— Agriculture plays a vital role in India's economy. Exploiting the second-largest arable land area in the world, India has doubled its food grain production capacity over the last 40 years, shifting from a state of self-sufficiency to one of surplus. However, agricultural production in the country is under continuous threat from both natural and man-made hazards, including earthquakes, droughts, floods, cyclones, hailstorms, frosts, fire, land degradation, pest attacks and chemical pollution. These threats to agricultural production could potentially cause irreparable damage to the country's entire agriculture sector, and in turn to the Indian economy.

Climate change and the frequency and severity of climate-related hazards are adding a new dimension to India's existing agricultural risk profile. Climate change alters the qualitative and quantitative characteristics of natural disasters like floods, droughts, hailstorms and pest attacks, which

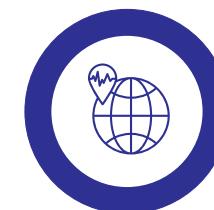
can cause irreversible harm to agricultural systems across the country. The impacts of climate change can affect crop yields (both negatively and positively), as well as the types of crops that can be grown in certain areas. They can also significantly alter agricultural input requirements, such as water for irrigation, and micro and macro nutrients for soil and for pest and insect control. Given that nearly two-thirds of India's population (which includes most of its rural population) depend on agriculture to make a living, climate change may threaten livelihoods and further aggravate issues linked to food security for a large proportion of the country's inhabitants.

Based on historical crop records and other available data sources, the aim of this Datathon is to understand the challenges facing Indian agriculture in terms of climate change and natural disasters, and to build a better loss prediction model in order to push back the frontiers of insurability and contribute to the resilience of Indian society.



\$89 billion*

global insured losses from disaster event in 2020



\$202 billion*

global economic losses from disaster event in 2020

*Source: SIGMA No 2/2021

THE DATA SCIENCE CHALLENGE

#OBJECTIVES

The goal of this Datathon - using all available data, regardless of the source and as inventively as possible - is to explore alternative methods to assess the roots and characteristics of agricultural losses in India.



#PRIZES

The following prizes will be awarded to the winners of this second Datathon:

- 1st prize: €8,000
- 2nd price: €4,000
- 3rd prize: €3,000



#AGENDA

Kick-Off – November 4th
Mid-Project review – January
Final presentation – March



ABOUT SCOR

TIER-ONE REINSURER

SCOR is the world's fourth-largest reinsurer. We offer diversified, innovative solutions and services to help our clients control and manage risk, balancing a global presence with industry-recognized expertise and cutting-edge financial solutions.

With over 50 years in the business of reinsurance, SCOR aims to be the reinsurance company of the future. We offer our clients an optimum level of security and we contribute to the welfare and resilience of Society by helping to protect insureds against the risks they face. Our *Raison d'être*, as a reinsurer, is to make this world livable, despite an expanding risk universe and an increasing number of catastrophes. Resilience is at the heart of our business.

16.4
billion EUR
gross written premiums in 2020

4TH
largest reinsurer
in the world

36
Offices worldwide



“Alleviating the damage from climate change is a major concern for society. With a team of 100+ experts in data science, actuarial and geophysical sciences, SCOR is well placed to understand and manage the impacts of climate change.”

LAURENT ROUSSEAU,
GROUP CHIEF EXECUTIVE OFFICER

4,400
clients throughout the world



The Art & Science of Risk



GLOBAL ADVISOR FOR CHANGE



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