

# Mathematics for Change: Enriching Mathematics Education through Global Challenges and the Sustainable Development Goals

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## **Abstract**

*Mathematics for Change* is an innovative digital platform that enriches, rather than replaces, the existing mathematics curriculum by connecting it to real global challenges and the UN Sustainable Development Goals (SDGs). Designed by a mathematics educator, it provides ready-to-use, data-driven lessons that help teachers integrate sustainability topics into their classroom practice with no extra preparation required.

Each lesson combines authentic datasets, guided inquiry, and AI-assisted assessments to make mathematics meaningful, engaging, and socially relevant. Students explore mathematical concepts while analysing issues such as water access, overfishing, and renewable energy. Teachers can easily share their screen, guide discussion, and receive automated feedback on student performance.

The project has already been tested with schools in Italy and the United States, showing strong student engagement and teacher satisfaction. Starting in January 2026, *Mathematics for Change* will expand its pilot phase to new schools worldwide, which are currently being selected.

By linking mathematics education to real-world issues, *Mathematics for Change* empowers both educators and learners to see mathematics as a tool for understanding and shaping a sustainable future. The presentation will showcase the project's pedagogical framework, early pilot results, and future directions for scaling an innovative, globally relevant model of mathematics education.

**Website:** [www.mathematicsforchange.com](http://www.mathematicsforchange.com)

**Keywords:** Mathematics Education, Innovation, Sustainable Development Goals, Digital Learning, AI-assisted Assessment