

## **Sustainable Use of Artificial Intelligent Technology: What Is It for the Global South in Achieving Inclusive Development Goals?**

Fabiano Jamba & Sheltar Marambi

### **Abstract**

The purpose of this literature review is to investigate the possible applications of artificial intelligence (AI) for smallholder farmers in developing countries in the Global South. AI is a fast-expanding field that can provide data-driven insights and solutions for a wide variety of agricultural problems. Some examples of these challenges include managing pests and diseases, selecting and optimising crops, predicting weather, and gaining access to markets. Smallholder farmers, on the other hand, have a distinct set of needs, resources, and agricultural practises than large-scale farms in the industrialised world. As a result, it is vital to examine how artificial intelligence might be customised to the circumstances and preferences of smallholder producers in countries in the Global South. The literature review presents a summary of the findings of numerous studies that have investigated the benefits and limitations of AI for smallholder farmers in terms of crop yields, food security, adaptability to climate change, and access to technology. These studies were conducted to investigate their benefits and challenges. In addition, the literature evaluation outlines the limitations of the existing research and makes suggestions for future research. The conclusion of the literature study is that AI can be a beneficial tool for smallholder farmers in the Global South; however, additional research is required to address the hurdles to the adoption of AI and to guarantee that AI is aligned with the needs and values of smallholder farmers.