

AI for Green Governance: Exploring the Role of Smart Technology in Environmental Management in Thailand

By Saira

As nations across Southeast Asia grapple with the escalating impacts of climate change, Thailand is emerging as a case study in integrating technology with sustainable development. One of the most promising developments is the role of Artificial Intelligence (AI) in supporting green governance — a concept that emphasizes transparent, inclusive, and environmentally responsible decision-making. Thailand is leveraging AI to support green governance as a driver of smarter environmental management throu...

One area where AI is already making a significant impact is in air quality monitoring. In Thailand's capital city of Bangkok, real-time air quality data is being collected through the use of smart sensors, which allows AI to analyze the data and identify patterns to help authorities take quicker, more informed actions. This is particularly useful during the burning season from January to mid-April, which is a period of significant air pollution caused by the burning of agricultural waste, forest fires, and...

Another fascinating application is in forest and wildlife protection. Thailand, being home to hundreds of national parks, is often targeted by illegal loggers and poachers. However, AI-powered drones and surveillance systems are now being used to monitor these areas. These technologies can almost immediately detect unusual activity, alerting authorities faster

than traditional methods. This ensures that Thailand's forests, as well as the wildlife that lives within them, are better protected from external ...

Believe it or not, agriculture is also benefiting from AI. As a country that relies heavily on farming, Thailand faces challenges like water shortages and unpredictable weather. That is why AI tools are being used to optimize irrigation, predict crop yields, and manage water resources more efficiently. For example, in Thailand's northern province of Chiang Mai, smart water management systems are helping local communities make better decisions about water usage, especially during dry seasons.

However, whi...

From a regional perspective, Thailand's approach to AI and sustainability has interesting implications for the rest of ASEAN, including Singapore. While Singapore is often seen as the tech leader in this region, Thailand's application of AI in rural and conservation settings is definitely worth paying attention to. It opens up opportunities for more collaboration, especially in areas like data sharing, ecosystem protection, and climate adaptation.

Thailand's use of AI for green governance shows that techn...