FAIR Forward – Artificial Intelligence for All

A global German development cooperation initiative that promotes the open and sustainable use of artificial intelligence

BACKGROUND

Artificial intelligence (AI) is driving digital transformation around the world. Computer programs can automatically recognise connections and patterns, make decisions and learn new skills. However, AI applications must first be developed and trained with large amounts of suitable data. Only then can they autonomously translate between languages or make predictions in areas from climate to health.

AI also offers developing and emerging economies new opportunities to overcome obstacles and achieve the global Sustainable Development Goals. In Tunisia and India, AI is used to help detect plant diseases, for instance. Users simply take a photo of the plant with their smartphone. The AI-based analysis then not only identifies the disease, but also suggests appropriate countermeasures. Forest conservation projects use the AI-based evaluation of satellite data to identify climate-related damage at an early stage. At the same time, developing and emerging economies are at risk of being left behind in the use and development of AI. This is caused by their lack of access to training data and technologies, insufficient capacities and unsuitable regulatory frameworks.

OBJECTIVES AND IMPLEMENTATION

The German development cooperation initiative, Artificial Intelligence for All – FAIR Forward, is working towards a **more open and sustainable application of AI** that involves developing and emerging economies. Together with our six partner countries – Ghana, India, Kenya, Rwanda, Uganda and South Africa – we are pursuing three objectives also defined in the German Government's AI strategy:

1. **Establish access to training data and AI technologies for local innovations:** FAIR Forward promotes the provision of open, discrimination-free, local training data and open-source AI technologies. Open voice data gives disadvantaged groups voice-supported access to services; earth observation data facilitates the provision of climate-adapted agricultural advisory services.

2. **Build local AI expertise in Africa and Asia:** FAIR Forward supports digital learning opportunities surrounding AI and collaboration with German and European academia and the private sector.

3. **Shape the policy framework for value-based AI and better data protection:** FAIR Forward advocates for value-based AI centred on human rights and international standards such as accountability, transparency in decision-making and privacy protection.

CURRENT STATUS

→ **Open language technology for local languages**
Together with the Mozilla Foundation and local partners in Kenya, Rwanda and Uganda, FAIR

Forward is developing open AI training datasets in Kinyarwanda, Kiswahili and Luganda – languages spoken by more than 150 million people. Collecting open language data supports the development of innovative solutions and products such as voice assistants. In Rwanda, FAIR Forward worked with the national health authority and a local start-up to develop the official Rwandan COVID-19 chatbot 'Mbaza', which delivers information on the state of the pandemic in the national language.

→ **E-learning courses on open and fair AI**
FAIR Forward collaborated with Makerere University in Uganda to develop a five-part e-learning course on the creation of open datasets for AI-based applications. The course is freely accessible on the atingi e-learning platform and can easily be adapted for use in other countries – for example, with subtitles in the respective national language.

→ **Open satellite data for sustainable development**
FAIR Forward cooperates with the Radiant Earth Foundation to create local datasets for machine learning. In South Africa's Western Cape Province, for example, the datasets enable the automatic recognition of crops in fields. These models are open and freely available on the global platform Radiant Earth ML Hub. Local AI companies and institutions can use them to monitor agricultural production.

→ **AI fellowship programme**
FAIR Forward is working together with the German IBS Foundation and the Rwandan team at Leapr Labs to build local capacity for AI. The three-month fellowship programme provides university graduates and young professionals in Rwanda and Ghana with technical expertise and industry knowledge through targeted project work in companies, thereby improving their chances of eventually working in AI.

→ **Continental regulatory recommendations on AI**
With support from FAIR Forward, Smart Africa has formulated a recommendation for a pan-African regulatory framework for AI – the AI for Africa Blueprint. Under the leadership of the South African Government, the AI Blueprint was developed in a multi-stakeholder process with the participation of the Smart Africa member countries, civil society and the private sector. Other countries can now use this blueprint as a model for developing their own national AI strategies.

→ **Data protection and privacy guidelines for AI developers**
To raise awareness of value-based AI and better data protection among AI developers, FAIR Forward cooperated with the Data Security Council of India to develop guidelines with clear, applicable criteria. FAIR Forward is supporting a similar initiative in Kenya, as AI developers there are confronting additional challenges posed by the new data protection law.