



DRIVING INNOVATION

Frontier technologies for supporting smallholder farmers and addressing food insecurity

The number of people facing acute food insecurity continues to grow at an alarming rate. The world is facing a food crisis that is driven by major supply shocks, such as conflicts, weather extremes and disrupted agricultural value chains. The November 2021 edition of *Frontier Technology Issues* examines smart, digital, and precision agricultural technologies that could help to address information asymmetries and deficiencies facing farmers, especially smallholders. The use of these technologies could improve agricultural productivity and output and play a significant role in addressing food insecurity. The report identifies frontier technologies that could be impactful at key stages of the agricultural cycle – preparation, production, and processing and sale.

Despite their potential benefits, the uptake of these technologies by smallholder farmers remains limited. To accelerate the

adoption of these technologies, the report calls for greater investment in promoting digital literacy in rural areas; a rethinking of the current model of agricultural extension services; a renewed effort to make digital platforms more user-friendly for smallholder farmers; and significant expansion of rural infrastructure to promote agricultural e-commerce.

Building trust and spurring transformation in international taxation

UUN DESA supported the Committee of Experts on International Cooperation in Tax Matters in translating its ambitious agenda into prioritized plans of work. The 24th Session had a heavy schedule due to its 11 subcommittees and 4 groups, which tackle a breadth of issues related to the effect of the COVID-19 pandemic on international taxation. Strong fiscal policies and international tax cooperation are critical to pandemic recovery and to avert a lost decade of sustainable development. This work is critical for developing countries. Fiscal policies can help the simultaneous

achievement of multiple goals such as reduction of inequalities and promotion of sustainable consumption and production.

The session pointed out the preference expressed by developing countries for simple, administrable solutions to taxing multinational enterprises and other non-residents. It also initiated work on options for a multilateral instrument, overlaid on existing bilateral treaties, to speed up implementation of the UN model bilateral tax treaty responses to taxing income from digital services. The committee recognized that developing countries will benefit from policies and actions that have the goal to curb trade mis-invoicing and other illegal practices that lead to illicit financial flows in the extractive industries. Looking ahead, UN DESA will support the committee in its plans for practical guidance on the interaction of carbon taxes with other national measures in the context of broader fiscal reform and transition to renewable energy sources.

Building global geospatial capacities

In May 2022, UN DESA and the Government of China officially launched the UN Global Geospatial Knowledge and Innovation Centre in Deqing, China. The centre will provide opportunities to build and expand global geospatial capacity, competence and capability and strengthen geospatial information management arrangements in countries, especially developing countries.

Building resilient and sustainable digital societies and economies

UN DESA is partnering with UN ESCAP in a forward-looking initiative to explore the viability of technology sandboxes through building the institutional capacity of Bangladesh, Kazakhstan and Maldives. This innovative and catalytic approach to digital government development is expected to accelerate progress towards sustainable development.

Sandboxes have gained popularity in FinTech in the recent years but could go beyond the financial sector to others, including health, education, transport, energy, connectivity and the digital economy, in fast-tracking smart and risk-aware implementation of digital policies.

The promise of sandboxes allows evidence-based decision-making and adaptive deployment of digital technologies in the pursuit of development aims. It allows institutions and regulators to experiment and trial with digital technologies and innovations at the edge or even outside of the existing policy space and regulatory framework.

UNITED NATIONS
MODEL DOUBLE TAXATION
CONVENTION
BETWEEN DEVELOPED AND
DEVELOPING COUNTRIES

LAUNCH
EVENT

2021 UN Model Tax Convention

26 April 2022, 9:00 a.m. – 11:30 a.m. New York Time. Virtual

Theme: Adapting to Changing Times - From Remote to Automated Digital Services and Beyond

DESA Financing for Development

UN Tax Committee

