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Pathways for Enhancing Farmers' Income, Nutritional Security and Sustainable Food Systems

Thematic Session: SCIENCE, TECHNOLOGY AND INNOVATION

Discussion Paper: Science, Technology and Innovation

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Abstract: Science, technology and innovation (STI), targeted to solve both generic and location-specific challenges, are key drivers for transforming agri-food systems. These can transform sustenance based, low return livelihoods to profitable and respectable occupations for smallholder farmers, while motivating, attracting and empowering youth and women in agriculture. A paradigm shift is needed to: i) increase productivity, profitability, inclusiveness and efficiency of human engagement, ii) achieve complete nutrition security, iii) address the challenges of climate change, iv) adopt environment-friendly sustainable practices, and v) establish efficient farmer-market linkages.

To achieve the desired goals, this paper highlights effective pathways for: i) scaling innovations by combining ITK, conventional methods, and adopting NextGen cutting edge technologies evolved nationally or internationally, ii) enduring STI through a Gold Class education system, and iii) leveraging strong public-private partnerships.

The paper also recommends increased investments in R&D, highlights the urgent need for an enabling policy environment for scaling innovations, and suggests clear transformative action points.

Keywords: technology, innovation, profitability, nutrition security, climate change

The full text of the paper is available on the NITI Aayog website or you may contact FAO at fao-in@fao.org for a soft copy. Your feedback is welcome; you may send your comments on the discussion paper to FAO at the above email id.