

## Web Annex 2:

### **Digital for Impact: Leveraging FAO Digital Public Goods to accelerate progress towards agrifood systems transformation and SDG1 by The Rural-Multidimensional Poverty Index (R-MPI)**

1. FAO has a key role to play in promoting the use and adoption of digital technologies to facilitate the transformation of agrifood systems, as well as in advising on and promoting a policy agenda and policy investments to address the digital divide and maximise digital benefits, while making sure to leave no one behind. In this context, the Organization has continued to be at the forefront of digital transformation as a key contributor and accelerator towards alleviating the impact of climate change and emergent crisis such the COVID-19 and regional conflicts and disasters, promoting the long-term digital transformation of the food and agriculture sector worldwide and achieving the Sustainable Development Goals (SDGs).
  
2. FAO's Digital for Impact focus area is at the forefront of developing new digital capabilities and partnerships towards accelerating the four betters in the digital economy era. For this, FAO will continue to deepen the integration of cutting-edge information technology and agronomy, and employ agro-informatics as an instrument to promote the production and delivery of useful, usable and used digital public goods including actionable data and information, and fit-for-purpose agro-informatics tools to meet different levels of application demands in the domain of food and agriculture from Members.
  
3. Specifically, FAO is working on the following priority activities:
  - a) **Enhancing the Hand-in-Hand Geospatial Platform (HiH GP) for FAO Digital Public Goods**  
 The HiH GP was initially developed for the FAO Hand-in-Hand Initiative (HiHI) to promote the implementation of the SDGs, particularly SDG1 and SDG2. After its successful launch in 2020, the HiH GP has been extensively used in many projects in HiHI countries as well as other FAO Members.<sup>1</sup>  
 It is built as a collaborative platform for several FAO units, Members and external collaborators, forming a one-stop data hub for FAO and world agriculture. The HiH GP is still growing with additional data from FAO and external stakeholders, new and improved functions as well as better interoperability with other platforms.
  - b) **Enhancing the production and delivery of fit-for-purpose Digital Public Goods and digital transformation in food and agriculture**  
 With deep-integration of IT and agronomy, FAO is employing Agro-Informatics in the development of data platforms and applications, such as the Digital Services Portfolio (DSP), EMPRES-i, Crop Calendar, Water Productivity Open-access Portal (WaPOR), Framework for Ecosystem Restoration Monitoring (FERM) and the Climate Risk Toolbox (CRTB).<sup>2</sup>
  
4. In June 2020, the Secretary-General's Roadmap for Digital Cooperation<sup>3</sup> stated that "*Digital Public Goods are essential in unlocking the full potential of digital technologies and data to attain the Sustainable Development Goals, in particular for low- and middle-income countries*". The Roadmap concludes that "*Member States, the United Nations and other stakeholders can amplify these global initiatives by deploying Digital Public Goods as part of their immediate efforts to respond to the COVID-19 pandemic and, in the future, as part of their approaches to achieving the Goals*".

<sup>1</sup> <https://www.fao.org/hih-geospatial-platform/en/>

<sup>2</sup> <https://www.fao.org/agro-informatics/en/>

<sup>3</sup> <https://www.un.org/en/content/digital-cooperation-roadmap/>

5. The Roadmap also highlights the emergence of platforms to promote Digital Public Goods, *“including most significantly the Digital Public Goods Alliance, a multi-stakeholder initiative responding directly to the lack of a “go to” platform”*.
6. FAO is in the process of becoming a Member of the Digital Public Goods Alliance (DPGA). The objective of the collaboration will be to support and accelerate FAO’s contribution to the creation of Digital Public Goods in the food and agriculture domain.
7. FAO will look to leverage the Alliance’s knowledge and its certification process to systematically endorse FAO products as Digital Public Goods. FAO has already had four Digital Public Goods approved by the DPGA registry. These are the Hand-in-Hand Geospatial Platform, the FAO DSP, WaPOR, and Open FORIS. FAO will also work with other Alliance Members and contribute to subject-matter Communities of Practice in the Alliance, aiming to positively influence the food and agriculture ecosystem towards creating and using Digital Public Goods.
8. Through this Digital for Impact, FAO will focus on Digital Public Goods and specialized applications that help to translate this vision into concrete digital capabilities support and delivery for Members. FAO’s Digital for Impact works in an integrated way and contributes to the UN DATA and DPGA, fully aligned with the UN Secretary-General’s Roadmap for Digital Cooperation by championing Digital Public Goods and with extensive collaboration activities.
9. Enhanced data and indicators in support of evidence-based decision making are key FAO public goods, whose dissemination needs to increasingly rely on digital technology, to promote their impact in support of policy decision making.
10. One example of FAO’s work, in this connection, is the recently launched **Rural-Multidimensional Poverty Index (R-MPI)**.
11. Ending poverty and hunger are central goals of the 2030 Agenda for Sustainable Development, and FAO has a long-standing commitment towards reducing rural poverty and hunger. Evidence indicates that rural areas are home to most of the poor worldwide, and agriculture is central to the livelihoods and food security of these population groups. However, the possibility to identify, locate and understand the needs of the rural poor is still limited.
12. A key starting point for any policy intervention is a correct and operational identification of who the extreme poor are, where they live, and what prevents them from escaping poverty, particularly in rural areas. While data and information are an indispensable pre-requisite for designing effective policies that can support interventions, one additional key challenge is the lack of an established conceptual framework on rural poverty, which can inform a sound and harmonized measurement.
13. To tackle this issue, FAO and the Oxford Poverty and Human Development Initiative (OPHI) at the University of Oxford have started a programme of work aimed at proposing and implementing a conceptual framework for measuring multidimensional poverty in rural areas. This is the Rural-Multidimensional Poverty Index (R-MPI).
14. In recent times, multidimensional poverty measures have become widely accepted as tools to overcome the limitation of unidimensional metrics, such as monetary poverty measures. They bring into view the joint distribution of direct deprivations that a person or household experiences. As such, the UN 3rd Decade for the Eradication of Poverty uses both global monetary and multidimensional poverty indices to track trends. The Sustainable Development Goals Indicator 1.2.2 reports countries’ national multidimensional poverty metrics.
15. The joint work of FAO and OPHI on the R-MPI is presented in an extended Report, available at <https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1470849/> that is published within the FAO Statistical Development Series.

16. The R-MPI is a metric that encompasses five dimensions, namely food security and nutrition, education, living standards, rural livelihoods and resources and risk. This new metric can be applied in a variety of contexts, using data at the household or individual level. It can help informing and monitoring both interventions at different levels, as well as project activities.

17. The R-MPI expands the scope of the Global Multidimensional Poverty Index (MPI), which was launched in 2010 by the United Nations Development Programme and OPHI, with data on 109 countries and 5.9 billion people in 2021. By focusing on rural areas, the R-MPI adds to the Global MPI the dimensions of rural livelihoods and risks. Its implementation entails an innovative combination of geospatial and survey data that quantifies rural dwellers' risks of exposure to drought, floods or heat waves.

18. The R-MPI was calculated using data from four nationally-representative household surveys conducted in Ethiopia, Malawi, the Niger and Nigeria. Furthermore, the Index was tested in the field by the University of Malawi at Zomba, specifically in 64 rural areas of Malawi. Community members were asked to review the dimensions included in the R-MPI, based on their life experience, and define, in their own words, rural hardship and poverty.

19. Altogether, the results presented in the FAO Statistical Development Series Report demonstrate the effectiveness of the approach taken with the R-MPI in building operational rural poverty profiles and the potential that this tool has in providing additional evidence on poverty dimensions that are not captured by other metrics. The survey-based and empirical tests conveyed interesting and useful information, and to show that the Index, as proposed, does provide an insightful and specific measure of rural poverty. They demonstrate how, as data is available, the R-MPI can help building detailed rural poverty profiles disaggregated by gender, age range and typologies of households. In this respect, the R-MPI has the potential to provide granular insights, which are desirable to effectively target policies towards vulnerable population groups.

20. In the field test, while most dimensions turned out to be considered crucial, others – such as state of mind or physical appearance – also surfaced. While not all of these can easily be elicited in large-scale surveys, important lessons were learned about the limitation of money metrics and the importance of tailoring the measurement to rural contexts.