

Inclusive land tenure data for reporting, policy engagement and the SDGs

1

replication with IFAD:
Brazil



target group and CSO representatives

Pilot: The Philippines

Integrated Diverse Data

Diverse data on land tenure

LandMonitor

Methodology

- Official data
- LANDex data
- Participatory data tools
- IFAD project-level data
- FGDs, key informants

2 Data integration, analysis, validation

- Collect data
- Integrate data
- Process data and extract key findings
- Validate data with target groups*

3 Comprehensive reporting

- LandMonitor report
- Overall assessment of land tenure security
- SDG monitoring
- IFAD reporting
- Land policy recommendations

*smallholders, agrarian reform beneficiaries, indigenous communities, small-scale fishers, pastoralists and the rural employed

SDG 1.4.2 documentation and security

- No SDG data
- Official data limited
- Proxy data tell us:
 - 86%documented
 - 57% secure
 - o document ≠ security
- Rural women are less secure
 - 53% secure
- Those on community land are the least secure
 - o 11% secure

Key Land SDGs

SDG 5.a.1
ag. land controlled
by women

- No SDG data
- Proxy data tells us that of agrarian beneficiaries (2015):
 - 33.64% are women



- No SDG data
- Legal assessment via LANDex found 4/6 proxies met:
- Proxy A: joint registration of land is compulsory

Proxy B: Spousal consent for transactions

Proxy C: Equal inheritance rights for women/girls

Proxy E: protections for women in customary law

Learni<mark>ng</mark>

- improve women's knowledge of rights and capacity to claim them
- promote and clarify titling process for IP land



 decentralize institutions to community level

Reflections from

Target Groups*

- guarantee space for women in policy process
- implement the Magna Carta on women's land rights
- provide legal support and funding for women's programs



Outcome

- titles must convey security
- women need their names on land titles

t numbers based on participation in two focus group discussions (FGDs)







validation







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Pilot: the Philippines



report

15,000

stakeholders

represented by

target groups + CSOs



focus

groups

concrete recommendations



participation in COSOP review



land tenure component in 2024 project



collaboration with NSO on more inclusive land data

Efficacy Evidence

- → Inclusive land tenure data

 Generated <u>for and with</u> target groups, informing IFAD's new COSOP, reflected in new project
- Beneficiary communities engage in data collection, VNR process
 Women, IPs and youth reps to join Interagency

Committees to provide input for the Community Based Monitoring System (CBMS) and 2023 census

Direct recommendations for policy, achievement of SDGs

Direct, concrete recommendations for policies and decisions regarding access, control and use of land supports monitoring of international frameworks through complementary data

Competitive Advantage

Simple, efficient methodology

- Standardized approach fills data gaps through the use of diverse data sources
- LANDex capacity
- Flexible process helps reach and include target groups
- Easily replicable at national level and with any development partner (public, private, IGO, other)

People at the heart of data

- Process aligns target group inputs to official land indicators
- Data can be qualitative or quantitative,
 but should be above all inclusive

The Ask

Raise USD 1.5M to scale-up approach and outreach by 2027

Launch in at least 20 countries, starting where ILC has members*

Strengthen skills for data collection, use and analysis through LANDex training

Translate data into national, regional and global advocacy products, complementary to official reports. Target groups' and CSOs' priorities will be central

Progress towards transformation and resilience









2022 IFAD Innovation Challenge



Behavioural Mindset Avanzar

June 2023

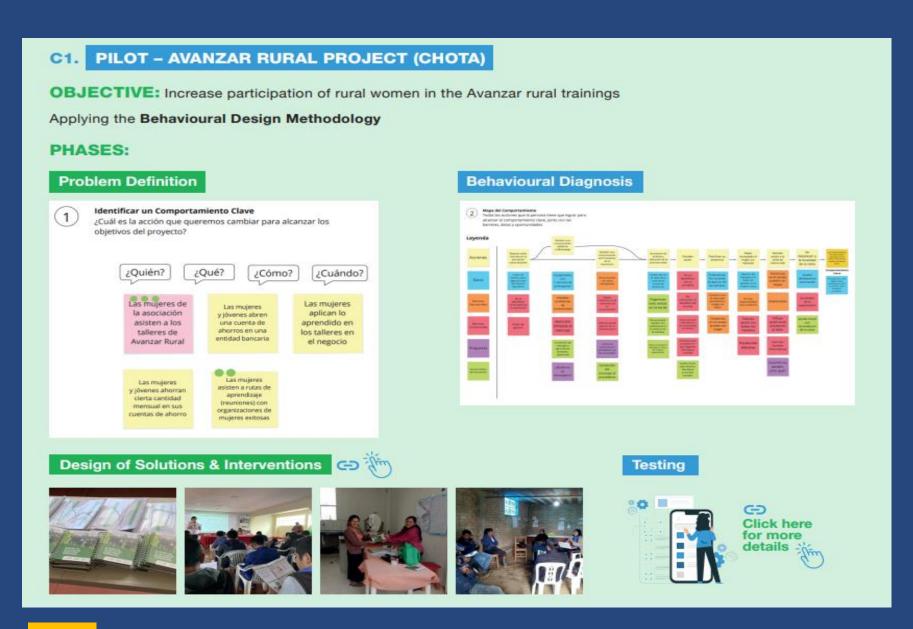
Problem

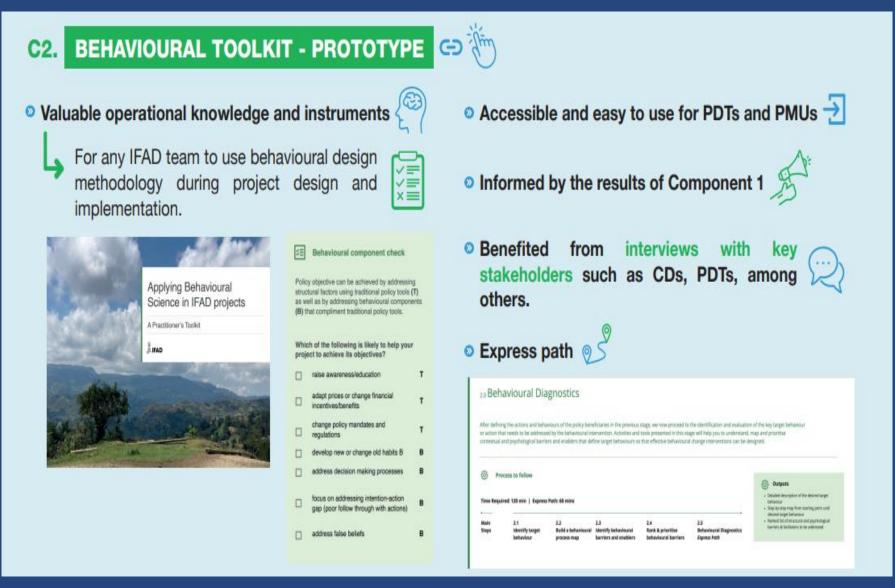
Underlying assumptions (design) do not take into consideration behavioural barriers

Country teams do not have tools to identify and address behavioural barriers during project cycle

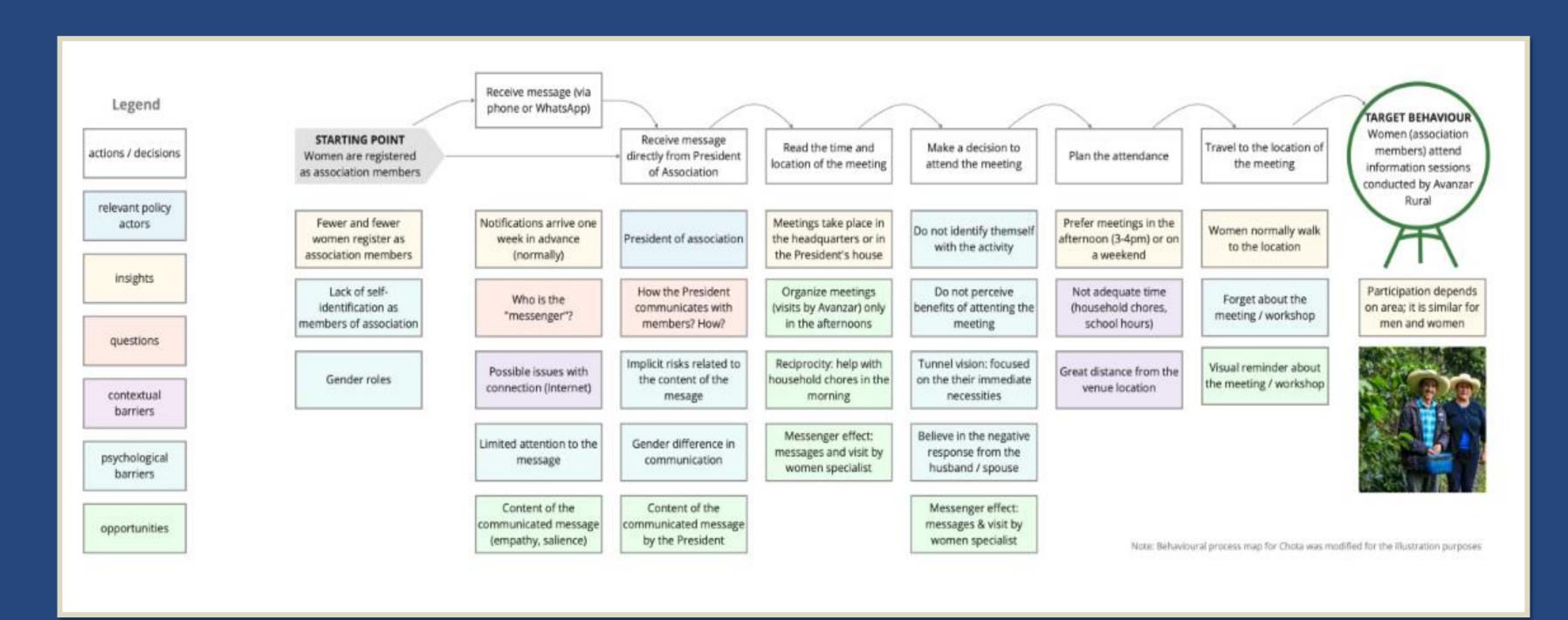
Behavioural Toolkit for IFAD projects

Quick and intuitive toolkit that helps IFAD teams <mark>diagnose and address behavioural barriers</mark> during project design and implementation





Example: Behavioural Mapping



Pilot – RCT intervention

Pilot - Avanzar Rural Project





SOLUTION DESIGN

BEHAVIOURAL SOLUTION



DEFINITION OF TESTING STRATEGY "Notebook" to accompany the trainings and encourage reflection, including interventions such as self-affirmation, plan making (calendar), note-taking, etc.

Sample: 60 OPPs where the extension specialist will still hold training sessions ("not liquidated") and are not too isolated.



Prototype validation: Project Management
Unit (PMU) – territorial office (OZ Chota);
Extension Specialist and Organizations (OPP)

RCT: Treatment randomized at OPP level.
Randomization stratified by gender composition of the OPP.

Treatment group: 30 organizations
Control group: 30 organizations

Each OPP has an average of 17 members, for a total of around 1000 members.

IMPLEMENTATION



WhatsApp group with Extension specialist of the treatment group



Training of Extension

(+ delivery of notebooks)

Specialist - ATP







Training of OPP (+ notebook)







Monthly reminders to ATPs about self-affirmation exercises ❖

Continuous monitoring of ATP through WhatsApp group (and google forms)

Implementation will take place until





TESTING

To be conducted on mid 2023.

Data: Administrative data about the OPP and its members, and an endline survey that collects data from the members after the intervention is implemented

Outcome variables:

- Meeting attendance and participation
- Positions filled by women in the OPP
- Empowerment
- Self-efficacy
- Aspirations
- Production

Why should IFAD teams use the Behavioural toolkit?

Enhance your team skills and expertise

Gain a deeper understanding of project beneficiaries

Improve beneficiary engagement

Streamline project development process

Strengthen stakeholder engagement

Generate systematic and actionable solutions

Potential for scaling up

- Use of the behavioural toolkit for project design
 Bolivia's design to promote attendance to agroecological fairs
- Partnerships with behavioural experts
- Digitalization of the toolkit (user friendly)



2022 IFAD Innovation Challenge



Thank you!



2022 IFAD Innovation Challenge



Digi Climate Risk

Transparently and effectively finance Climate Change Adaptation of the Most Vulnerable

HOW TO FINANCE CLIMATE CHANGE ADAPTATION?



What are the prevailing climate threats?

- Storms
- Drought
- Flooding
- Extreme heat
- (Frost)

HOW TO FINANCE CLIMATE CHANGE ADAPTATION?

How sensitive are IFAD borrowers to 5 climate threats?

- According to CROP
- According to ANIMAL
- According to HOUSING (types and materials)



HOW TO FINANCE CLIMATE CHANGE ADAPTATION?

What are borrowers doing?

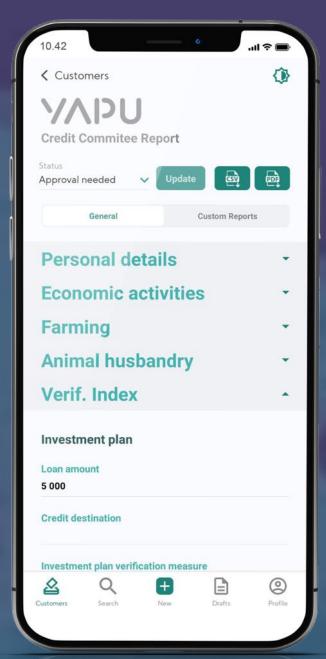
What can they do to confront climate change?

- Adaptation finance taxonomy
 - Regularly updated
 - Aligned with national strategies
- Monitoring and evaluation
 - Technical verification
 - Portfolio certification



SOLUTION: INTEGRATED TAXONOMY AND APP



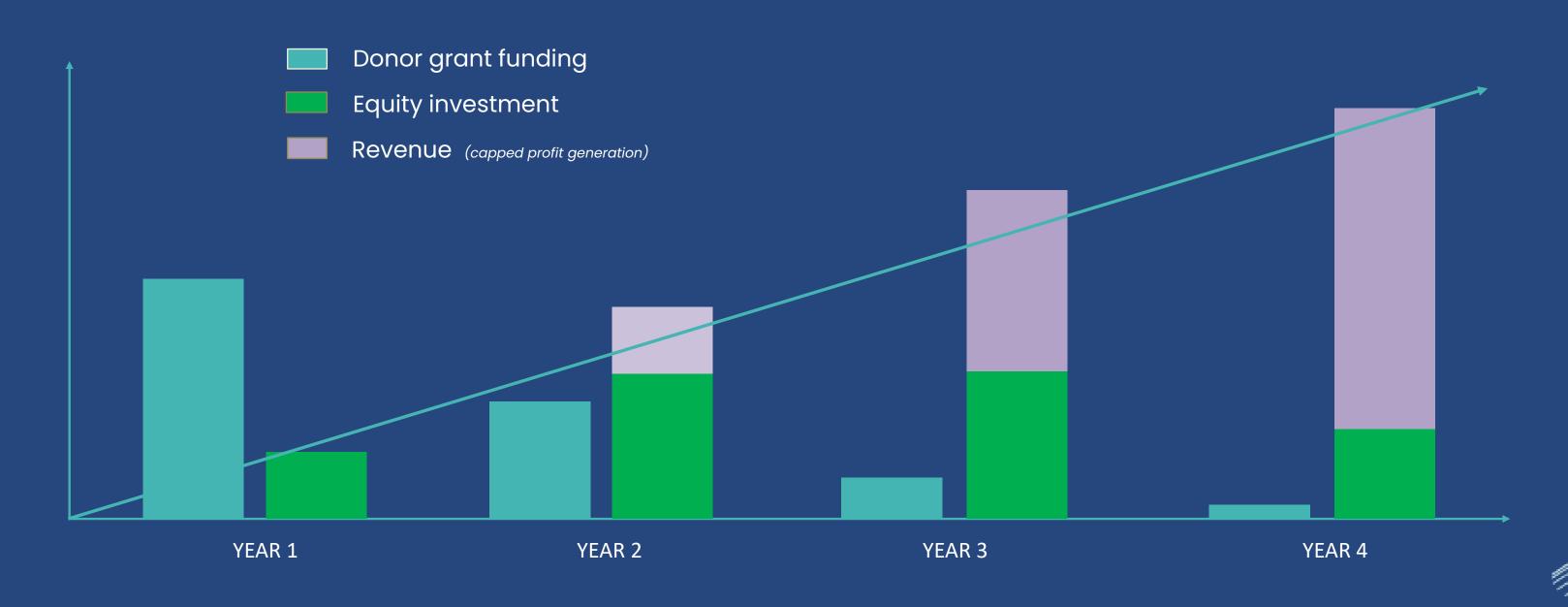


Enhanced impact reporting and transparency



Funding of operations

From donor-backed, grant-supported set-up to market-driven, revenue-based operations



Impact maximization * Attractive terms for early adopters * Capital market structuring

Sudan Pilot results to date (paused for now)

In 4 months implementation time

Capacity 7 42 Institutions Managers & staff

Taxonomy 50

Adaptation solutions prioritized

APP



Climate threat



Data productive

Report



Automated for each borrower

YAPU reference results in Resilience Finance (RF)

53.511

Loans over platform

267K

People impacted

43%

Women borrowers served

61

Financial Institutions supported in resilience finance

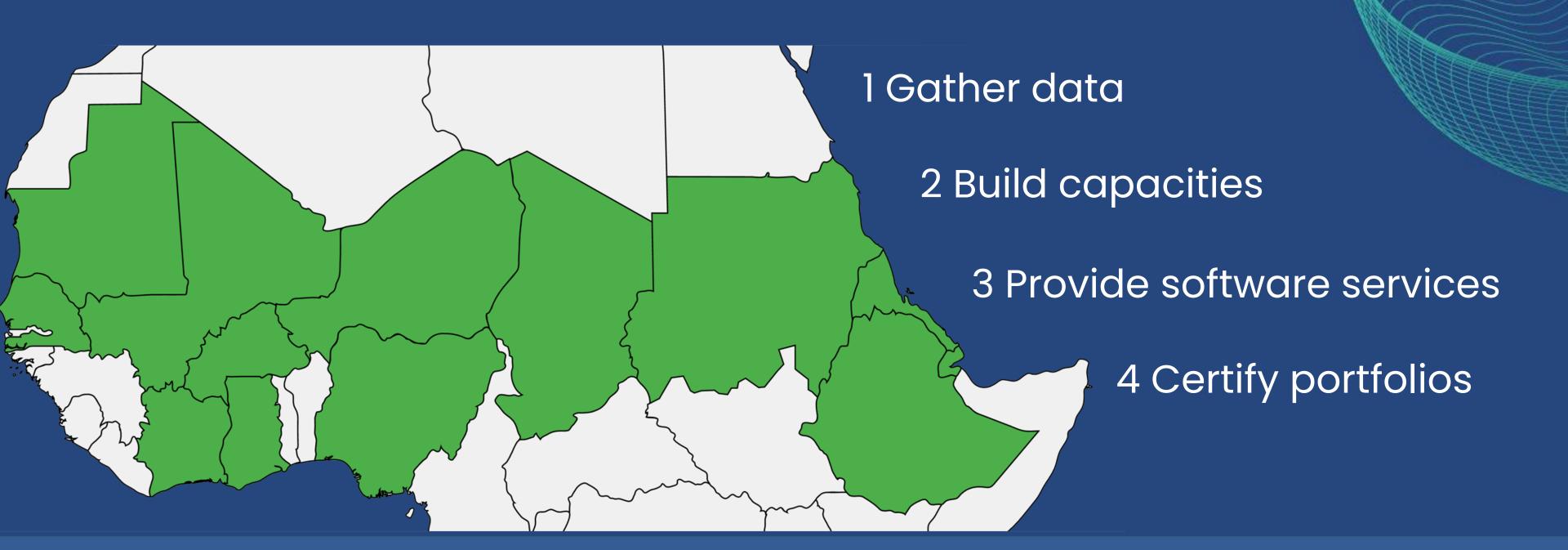
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Countries served

USD 100+

million USD in Resilience Finance

Scale-up: Country programs and iGreenFin II support



Replicable Country * Financial Institution * Sector * Taxonomy

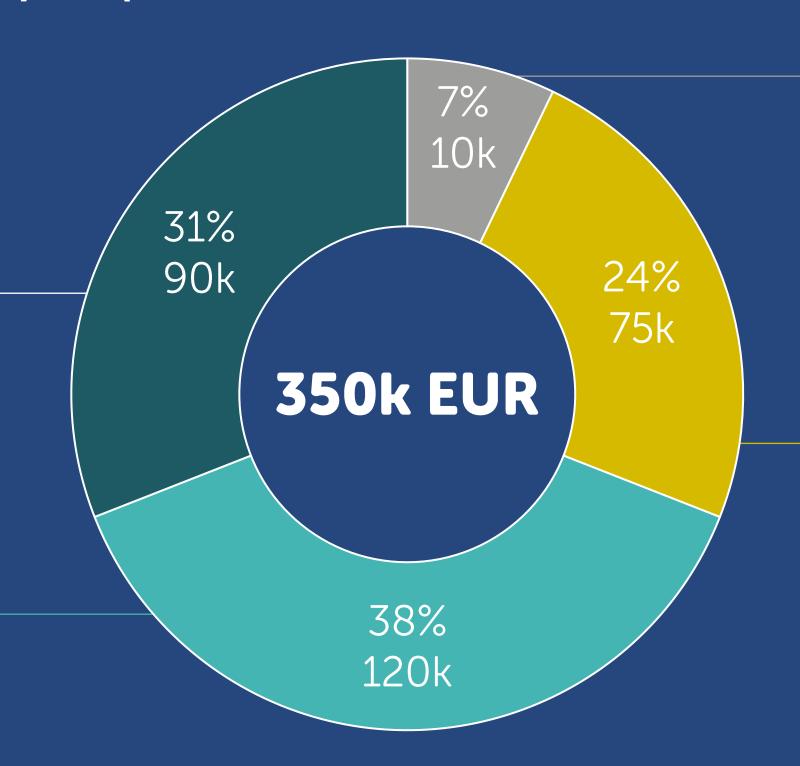
Our ask – 1 country replication*

1 Capacity building

- IFAD country teams
- Local implementing partners
- Local PFIs
- Adaptation solution providers

2 Data Gathering

- Climate data
- Production data
- Resilience Finance Taxonomy



4 Certifications

- For IFAD portfolios
- In prioritized segments

3 Structure

For expected 5 PFIs

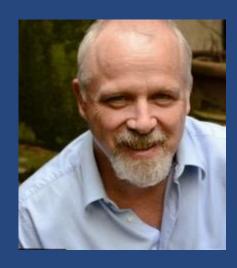
- Free software for 3 years
- Online training and onboarding
- Integrated to legacy systems



2022 IFAD Innovation Challenge



Thank you from our team



Marc DeSousa-Shields

Lead Technical Specialist
Rural Finance, Markets

IFAD



Esha Singh
Global Technical Specialist
ICT4D in Agriculture
IFAD



Christoph Jungfleisch
General Manager









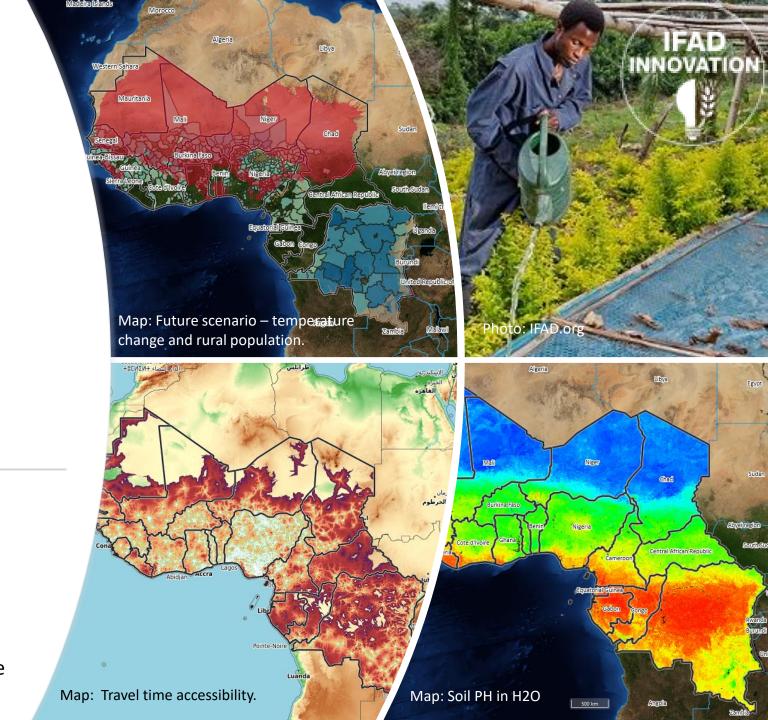
GeoScan:

spatial data country profiles

Lyubomir Filipov,
IFAD ICT GIS Consultant

28.06.2023, Rome.

Innovation Challenge Project, funded by IFAD's Change Delivery and Innovation Unit (CDI).



Why GeoScan?

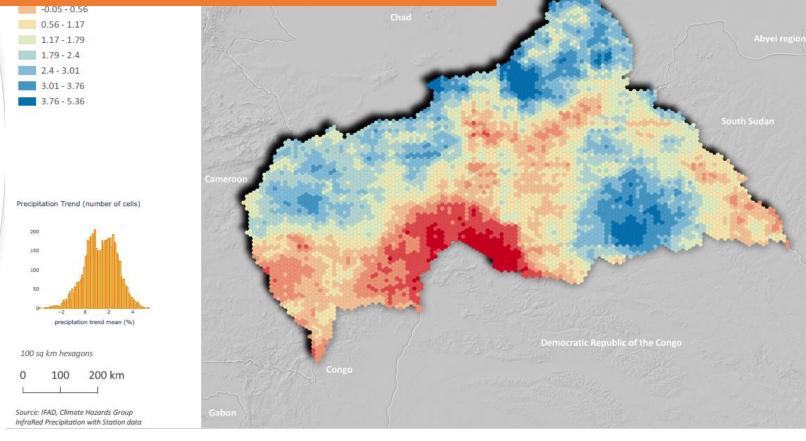
Central African Republic | Precipitation Trend



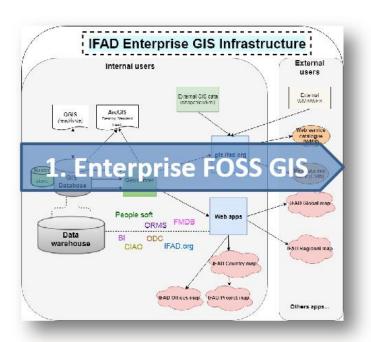
Realizing the vision of informed decision making for solving the complex challenges of poverty in remote, rural areas, fragile environment....

....requires more than knowledge, organization, technology, data...

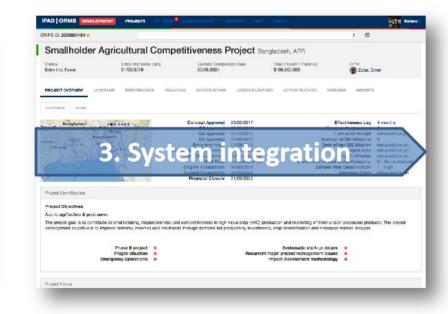
- Collaborating
- Understanding patterns
- Exploring solutions
- Embracing innovation

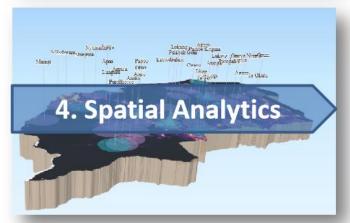


ICT GIS activities: enterprise level of integration

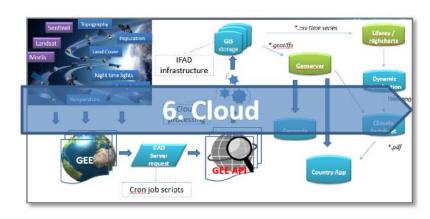
















Data sources





































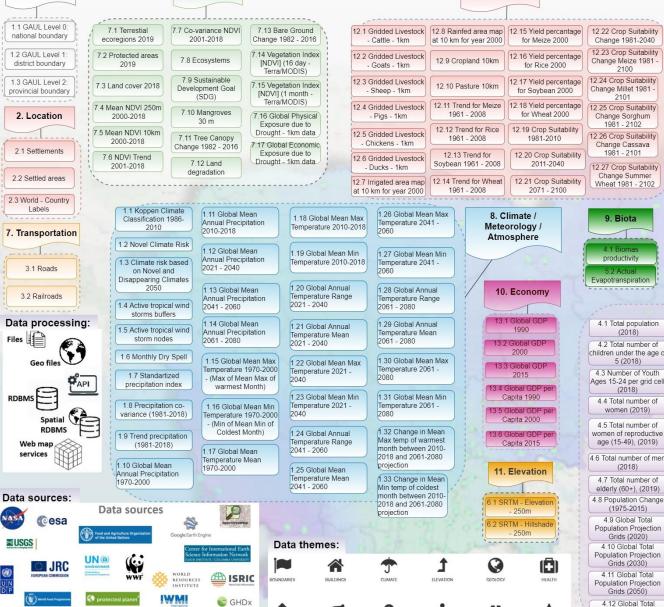


GIS data ontology

ocean of data # data standardization # data model

Innovation Challenge, funded by IFAD' Innovation Unit (CDI) and implement Communications Technology

JIFAD Geo-scan data model 2022, by ICT esting in rural people 1. Boundaries 3. Environment 4. Farming 5. Inland waters 1.1 GAUL Level 0: 5.12 Annual Riverine 5.20 Annual Water 5.1 Water ways 7.1 Terrestial 7.7 Co-variance NDVI 7.13 Bare Ground 12.1 Gridded Livestock | 12.8 Rainfed area map | 12.15 Yield percantage | 12.22 Crop Suitability national boundary Stress Future Value flood risk ecoregions 2019 2001-2018 Change 1982 - 2016 Cattle - 1km at 10 km for year 2000 Change 1981-2040 5.2 Lakes by 2040 Usual 5 13 Annual Season: 12.23 Crop Suitability 1.2 GAUL Level 1 7.2 Protected areas 7.14 Vegetation Index 12.2 Gridded Livestock 12.16 Yield percentage 5.21 Annual Water 5.3 Annual Base line 7.8 Ecosystems 12.9 Cropland 10km Change Meize 1981 variability [NDVI] (16 day district boundary 2019 - Goats - 1km for Rice 2000 Stress Future Value 2100 water stress Terra/MODIS) 5.14 Annual by 2040 Optimistic 7.9 Sustainable 12.24 Crop Suitability 5.4 Annual Base line 1.3 GAUL Level 2: 12.3 Gridded Livestock 12.17 Yield percentage Unimproved no 7.3 Land cover 2018 7.15 Vegetation Index 12.10 Pasture 10km 5.22 Annual Water Development Goal Change Millet 1981 - Sheep - 1km for Soybean 2000 water depletion drinking water provincial boundary [NDVI] (1 month -Stress Future Value (SDG) Terra/MODIS) 5.5 Annual Coastal 5.15 Annual by 2040 Pessimistic 12.11 Trend for Meize 12.18 Yield percentage 7.4 Mean NDVI 250m 12.4 Gridded Livestock 12.25 Crop Suitability eutrophication Unimproved no 7.10 Mangroves 2. Location 7.16 Global Physical - Pigs - 1km 1961 - 2008 for Wheat 2000 2000-2018 Change Sorghum 5.23 Global Economic potential sanitation 30 m Exposure due to 1981 - 2102 Exposure due to 5.6 Annual Coastal 12.12 Trend for Rice 12.19 Crop Suitability 5.16 Annual 7.5 Mean NDVI 10km Drought - 1km data Flood - 1km data 12.5 Gridded Livestock 12.26 Crop Suitability 7.11 Tree Canopy 1961 - 2008 1981-2010 flood risk Untreated connected 2000-2018 7.17 Global Economic - Chickens - 1km Change Cassava Change 1982 - 2016



P DRYAD

5.24 Global Physical 5.7 Annual Drought 1981 - 2101 Exposure due to risk 5.17 Annual Water Flood - 1km data 12.27 Crop Suitability Stress Change from Change Summer 5.25 Global Risk Data baseline by 2040 Annual Groundwater Wheat 1981 - 2102 Usual for Flood - 1km data table decline 5.18 Annual Water 5.9 Interannual 5.26 Floods Hazard Stress Change from variability baseline by 2040 9. Biota 5.10 Annual overall water risk 5.19 Annual Water 5.11 Annual ESG Risk Stress Change from baseline by 2040 productivity Pessimistic Evapotranspiration 12. Society 4.13 Global Rural Population Projection 4.25 Global multi-4.1 Total population Grids (2020) temporal settlement (2018) 4.14 Global Rural data 4.2 Total number of Population Projection children under the age of Grids (2030) 4.26 Food Security index 5 (2018) 4.15 Global Rural Population Projection 4.3 Number of Youth 4.27 Prevalence of Child Ages 15-24 per grid cell Grids (2050) 2014 Malnutrition: 4.16 Global Rural (2018)Underweight Children Population Projection 4.4 Total number of Grids (2100) women (2019) 15cm depth 4.17 Global Population 4.28 Human 4.5 Total number of Development Index Projection Change women of reproductive (2020-2100) age (15-49), (2019) 4.29 Mean Years of water content -4.18 Global Population Education for Females 15cm depth 4.6 Total number of men Density (2000) age 15-49 (2000)

4.30 Mean Years of

Education for Females

age 15-49 (2005)

4.31 Mean Years of

Education for Females

age 15-49 (2010)

4 32 Mean Years of

Education for Females

age 15-49 (2014)

4.33 Population Based

Global Carbon

Emissions Dataset

4.34 Global urban

growth projection model

(SLEUTH)

4.19 Global Population

Density (2005)

4.20 Global Population

Density (2010)

4.21 Global Population

Density (2015)

4.22 Global Population

Density (2020)

4.23 Accessibility Map to

areas of over 50,000

4.24 Livelihood

(2018)

(1975-2015)

Grids (2020)

Grids (2030)

Grids (2050)

Population Projection

Grids (2100)

A

13. Geoscientific Information 6.1 SoilGrids250m 6.9 Global Predicted USDA Frequency of andslide caused by EQ - 1km data

6. Health

stunting under the age of

(2000)

unting under the age of

(2005)

tunting under the age of

stunting under the age of

(2015)

children under the age of

hildren under the age of

hildren under the age of

children under the age of

(2015)

(2015) - 1km

Malnutrition (1990-2002

5km

6.10 Global

Frequency of

l andslide caused

by Precip - 1km

6.12 Global

6.2 SoilGrids250m Soil pH in H2O

6.3 SoilGrids250m Derived saturate

Physical Exposure 6.4 SoilGrids250m due to Landslide Derived saturated caused by EQ -1km data water capacity

15cm depth 6.5 SoilGrids250m Depth to bedrock (R horizon)

hysical Exposure due to Landslide caused by Precip 1km data 6.13 Global

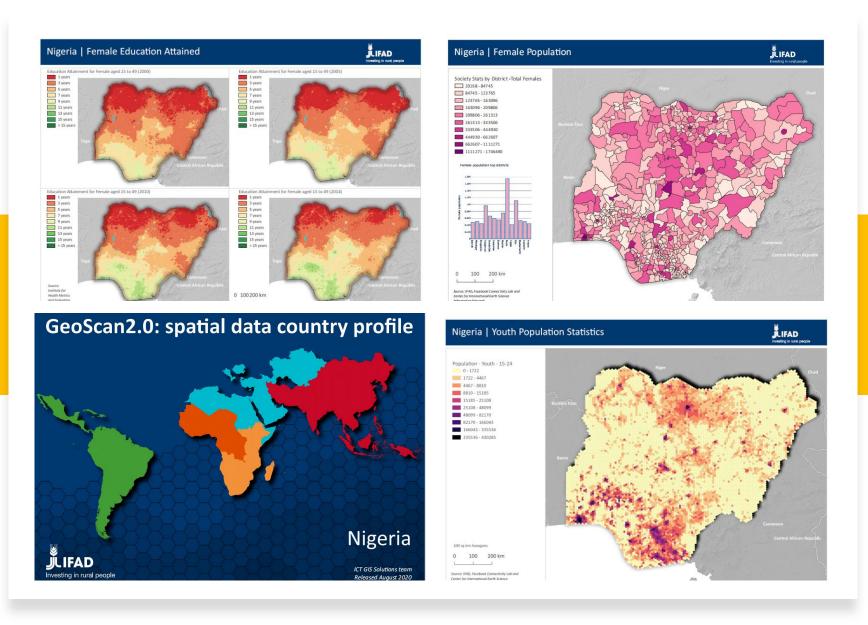
Total Nitrogen (N at 30cm depth

Economic Exposure due to Landslide caused 6.7 SoilGrids250m by EQ - 1km data

Textural class at 15cm 6.8 Global Risk

6.14 Global Economic Exposure due to Data for Landslide andslide caused by Precip - 1km

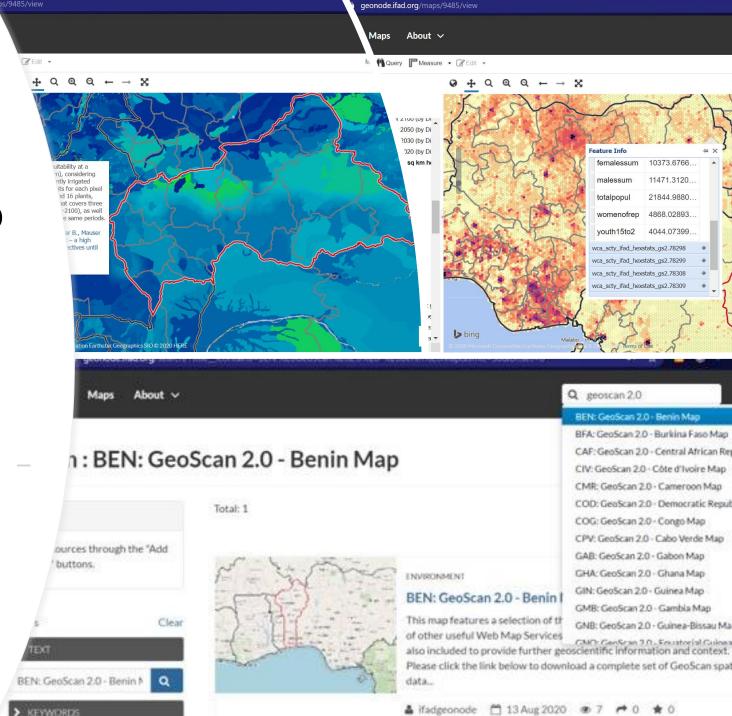
Results: Country atlases



Results: IFAD Enterprise GIS – Geonode populated with hundreds of layers and 37 Web Applications.

- Search for layers and map applications by country, topic or area.
- Share, comment, make your own web maps.

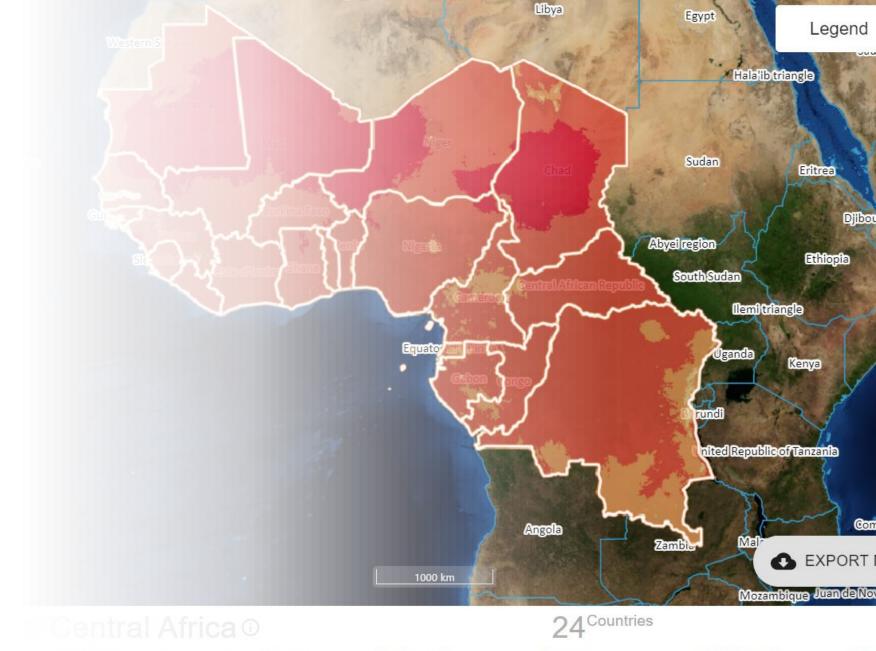
Innovation Challenge, funded by IFAD's Change Delivery and Innovation Unit (CDI) and implemented by Information and Communications Technology Division (ICT).



Results: Interactive Web GIS Dashboard

* available for IFAD internal usage only

https://geoscan.ifad.org





CO2 emissions (kt)

GDP (US\$)

Agriculture value added

Crop

Methodology



Source: IFAD ICT Division - GIS Solutions Team



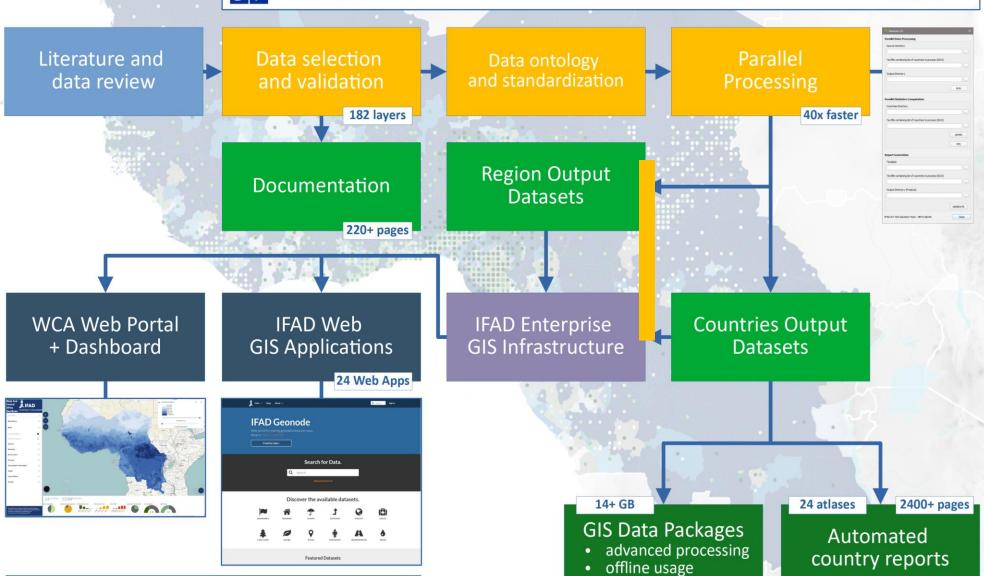
28 data providers









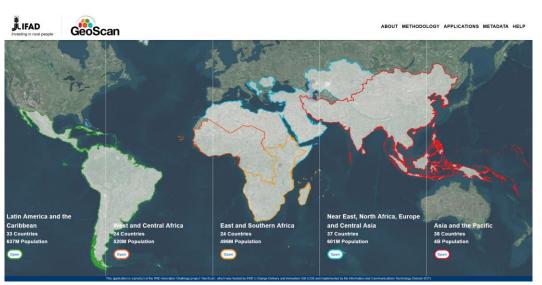


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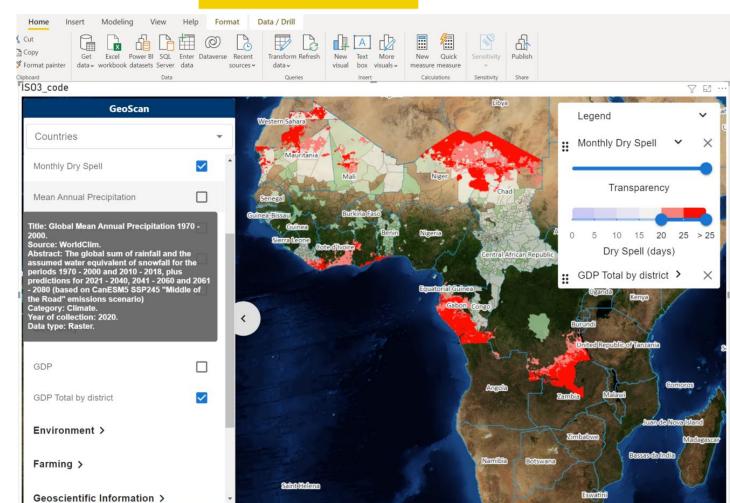


GIS tools: custom visuals





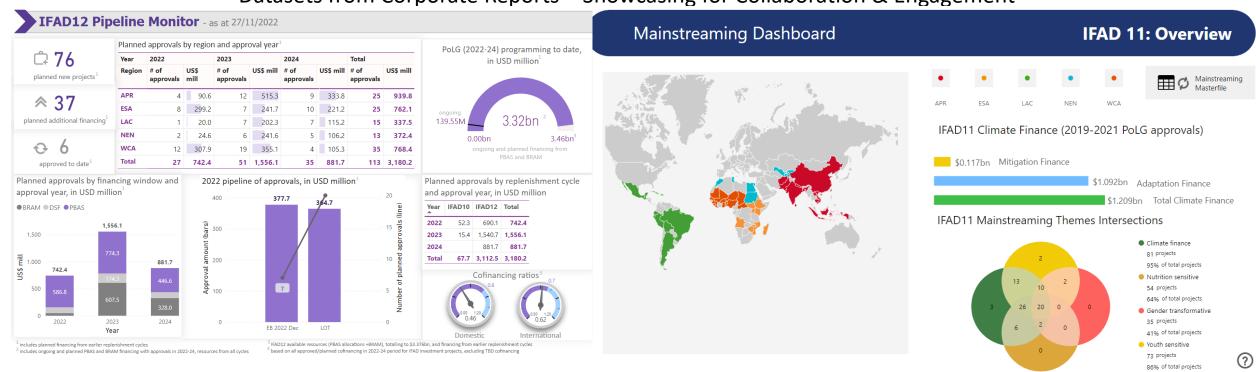
Enhanced spatial visualizations for deeper insights



Omnidata - platform to access, analyse and visualize data

Build, publish and share interactive IFAD dashboards

Datasets from Corporate Reports – Showcasing for Collaboration & Engagement



OPR Dashboards – merging data from corporate systems, OPR x-desk and locally managed files

Summary: Efficacy evidence

Is your solution helping?

- simplify the access to variety of data providers;
- It saves time;
- It provides ready to use processed data;
- It facilitates integration.

If yes, how much does it change the previous situation?:

- It introduces new ways for geographic targeting;
- It pilots geospatial data in COSOP design;
- It initiated spatial analytics within SECAP.

What are the minimum conditions for it to work?

- Mainstreaming GIS in IFAD's operations;
- Raise more awareness of the full value of geospatial applications;
- Drive greater use of geospatial applications and insights through capacity building.

Lessons learned

- We achieved our vision by exploring new ideas, learning through pilot projects and monitoring innovation.
- We scale one step at a time with continuous enhancements.
- We took a whole-system approach, considering not only technology and data, but also leadership, governance, policies, standards, security and skills.
- We benchmarked our approach outside IFAD:
 - International FOSS4G conference vote of the public;
 - COP26 presenters;
 - UNICEF/World bank collaborations;
 - UN Geo Spatial Network engagements;

Thank you! for contact: geoscan@ifad.org









David Hughes

Lleïr Borràs Metje

Giuseppe Baiamonte Abdelilah Adiba







Tom Hughes

Marcello Barnaba

Lyubomir Filipov