

Geo-Enabling initiative for Monitoring & Supervision

Building Capacity among Clients and Local Stakeholders
to harness simple Technology for Real-Time Monitoring and
Evaluation, Remote Supervision & Third-Party Monitoring,
Beneficiary Engagement, Risk Management, & Portfolio Mapping

Offered by the World Bank's [Fragility, Conflict and Violence \(FCV\) Group](#)
in cooperation with the [Global Evaluation Initiative \(GEI\)](#)

Supported by the [Korea Trust Fund for Economic and Peacebuilding Transitions](#)
and the [WBG Partnership Fund for the Sustainable Development Goals](#)



For more information and additional resources, see the GEMS website at: www.worldbank.org/gems

GEMS

Creating a Public Good
through digital skills



Simplicity is Key
for ICT in FCV



Scan for more info

The GEMS Core Team: Providing operational support from HQ and 21 field locations (and growing)

 Hadil Al-Ashwal HQ / MNA	 Maria Anillo Team Lead LAC	 Nelly Bachelot Bamako	 Louis Boffan Cotonou/Lomé	 Jan Dams HQ / ECA / AFR	 Wesley De Witt Team Lead EAP	 Gaspard Dodo Abidjan	 Golda Vera Cruz Bissau	 Min Baek CA / EAP	 Tidjani Diarra Niamey	 Edgar Loua Brazzaville	 Hany Al Imam Beirut / Yemen
 Kella Douzoune N'Djaména	 Mitterand Madjita Bangui	 Elie Kaja Kinshasa	 Bernhard Metz HQ / TTL	 Josée Miakukila HQ / AFR / LAC	 Benard Mitto Nairobi	 Miguel Toquica HQ / LAC	 Helina Worku Addis Ababa	 Maxwell Kamba Lilongwe	 Mah Coulibaly Bamako	 Fatimatou Diagne Dakar	 Coming soon Colombo
 Rindra Randriamanantena HQ / IT	 Liana Razafindrazay Team Lead AFE	 Tino Toupene Conakry	 Edejude Jean Jacques Port-au-Prince	 Annabelle Vinois Team Lead AFW	 Elma Zahir Team Lead SAR	 Yann Bourgeois HQ / GIS	 Eric Nimungu Juba	 Roman Skorzus Manila	 Steve Kabore Ouagadougou	 Ibrahim Maidaneh Abdi Djibouti	 Coming soon Dhaka

GEMS Deployment and the Team have vastly expanded, to cover 85 Countries and 21 Field FPs



State of Deployment

Projects supported: **672**
Countries covered: **85**
PIU/WB staff trained: **~5,125**
VPU team awards: 🏆 **17**

Supported Countries

Ctr. covered by GEMS



CMU-funded work



Presence of the Team

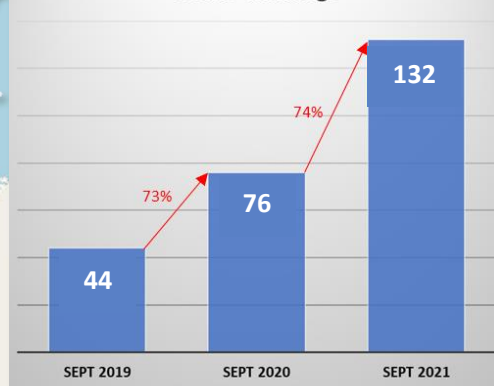
GEMS STC in Ctr. Office



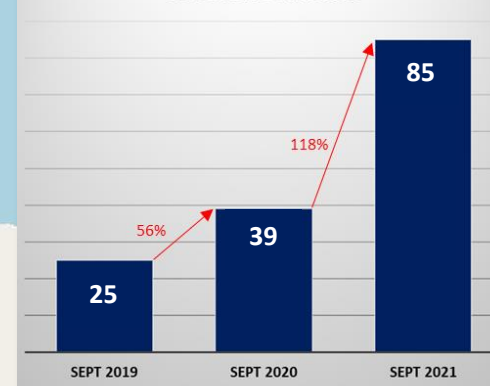
GEMS STC coming soon



GEMS Trainings



Covered Countries



Field Team members



Fragility and Conflict: Obstacles to Access, Crisis Response, and Development

Major Conflict Hotspots

Data source: UCDP | 2014-2016



Recorded conflict fatalities

Refugee & IDP camps

Data source: UNHCR



Camps & hosting sites

Food Insecurity Levels

February to May 2017

Data source: FEWS NET, IPC

- Stressed
- Crisis
- Emergency Status
- Famine declared (Unity State SSD)



The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of the World Bank Group, any judgement on the legal status of any territory, or any endorsement or acceptance of such boundaries.

Created by Geospatial Operations Support Team (GOST)
For questions on the map, contact:
Bernhard Metz | bmetz@worldbank.org

Lake Chad Basin Crisis



120k people in famine-like conditions



~ 5,900 recorded conflict deaths in 2016

South Sudan Crisis



100k people in famine, 1m on brink of famine



~ 3,500 recorded conflict deaths in 2016

Yemen Crisis



462k severely malnourished children



Over 10,000 conflict deaths since 2015

Somalia Crisis



185k severely malnourished children



~ 5,500 recorded conflict deaths in 2016

Remote Monitoring via GEMS: Getting Eyes on the Ground

Northeast Nigeria: Joint UN-WB HDP Stabilization Mission



Mafa Water Point

Fully Functional

City of Mafa | Mafa LGA | Borno State | 3,560 beneficiaries

Site Inspection Protocol

Inspected: Funke Mgwale | June 6, 2017 | 9:20 am

-Sample-

Observations:

- The water point has been completed and is intact
- Utilization by the local community is high

Example:

Fadama III project,
operating in Borno State,
Northeast Nigeria



Conflict Hotspot



Refugee / IDP camp



The “Rocket Science,”

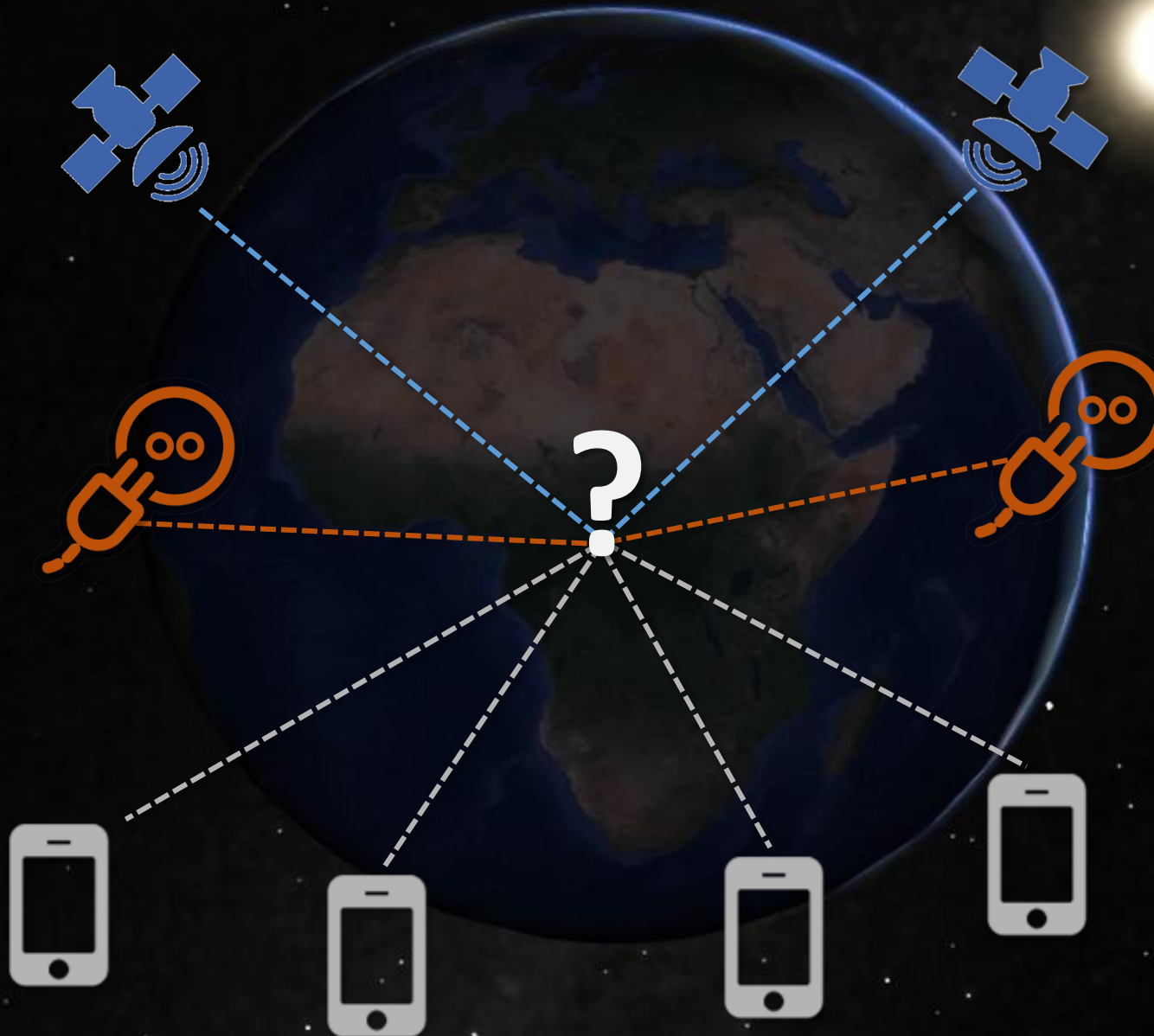
“Pocket Science,”

and “Socket Science”

Remote Sensing
Through Satellite
Imagery

‘Plugging In’
Spatial Data From
Various Sources

The GEMS Method:
Systematic Real-Time
Field Data Collection
through Smartphones



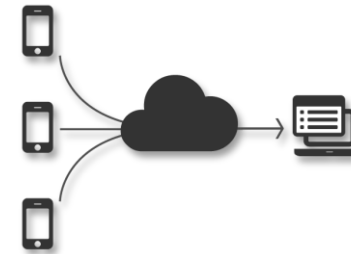
[See here for a summary video on the work with ESA](#)



The 'Pocket Science': Definition of the GEMS method

GEMS systematically builds client capacity in the creation of customized digital M&E systems. This is based on the use of **cost-free open source tools** and hand-held devices (smartphones/tablets) to collect granular **geo-tagged data** that **automatically** feeds into **interactive dashboards and web maps**.

The aim is to contribute to **effective planning, real-time M&E, remote supervision, accountable TPM & geo-mapping** of projects and provide **Data Integrity** along the project cycle.

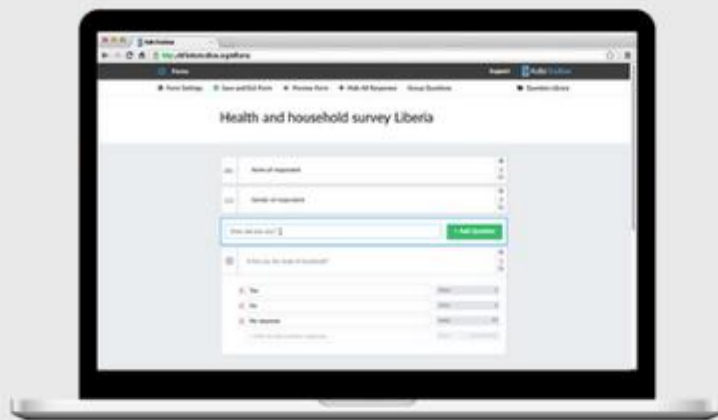


The used platform **KoBoToolbox**:

- Combines all relevant data related to operations, components, and field activities.
- Centralizes all collected data in one integrated system, connected to the M&E framework.
- Provides data in various formats incl. tables, text, photos, videos, audio, and maps.
- Allows for systematic recording of project indicators and survey responses to strengthen project planning implementation, risk assessments, and coordination across operations.
- Enables Bank Teams to directly access project data from PIUs in real-time.

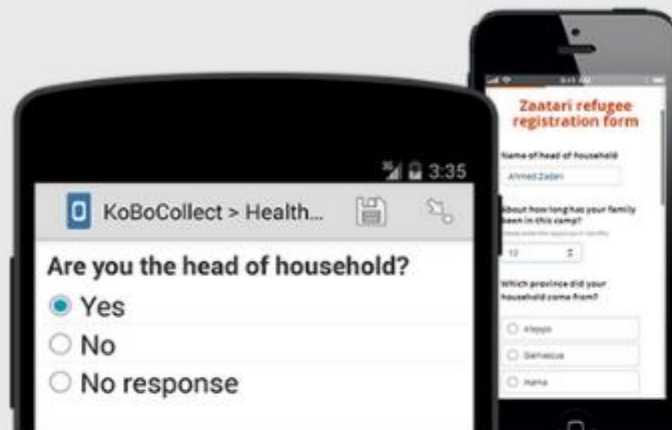


For client use and ownership: All-in-one cost-free open-source tool [KoBoToolbox](https://www.kobotoolbox.org/)



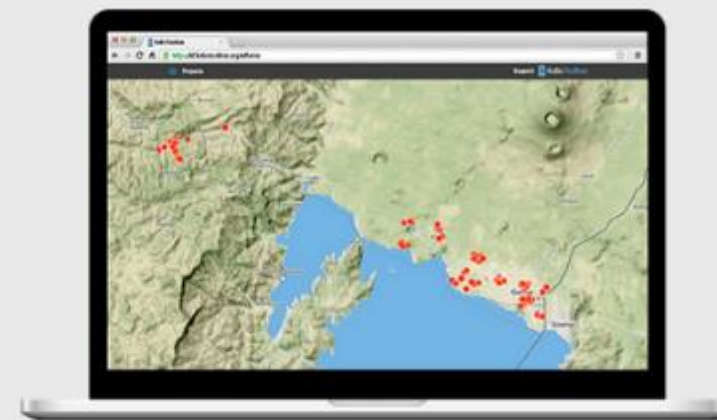
BUILD FORMS AND REUSE EXISTING QUESTIONS

Easily create survey forms through our intuitive and powerful tool. Store recurring questions in your library or share them with colleagues.



COLLECT DATA

Quickly and reliably collect your survey data on Android, iOS, and many other devices, online or offline, in any language and with complex skip logic.



ANALYZE AND MANAGE DATA

Inspect your data moments after it was collected - or download it for advanced analysis in other software in Excel, CSV, KML, and other formats.

<https://www.youtube.com/watch?v=4PNtT51h3CQ>

OPEN SOURCE DEVELOPMENT SUPPORTED BY



WITH ADDITIONAL SUPPORT FROM



The GEMS method is cheap, easy to implement, scalable & sustainable

- **Simple** and **cost-free** technology at front-end (the “pocket science”)
 - **Fully customized** data collection and M&E forms
 - **No internet** / network connection **needed**
 - **Automatic data synch** across platforms
 - **Automatic geo-mapping** of interventions
 - **Automatic statistical** and graphical outputs
 - **Easy to scale** across portfolio/partners
 - **No ICT experts needed**
- **Building Client Capacity for sustainable use**

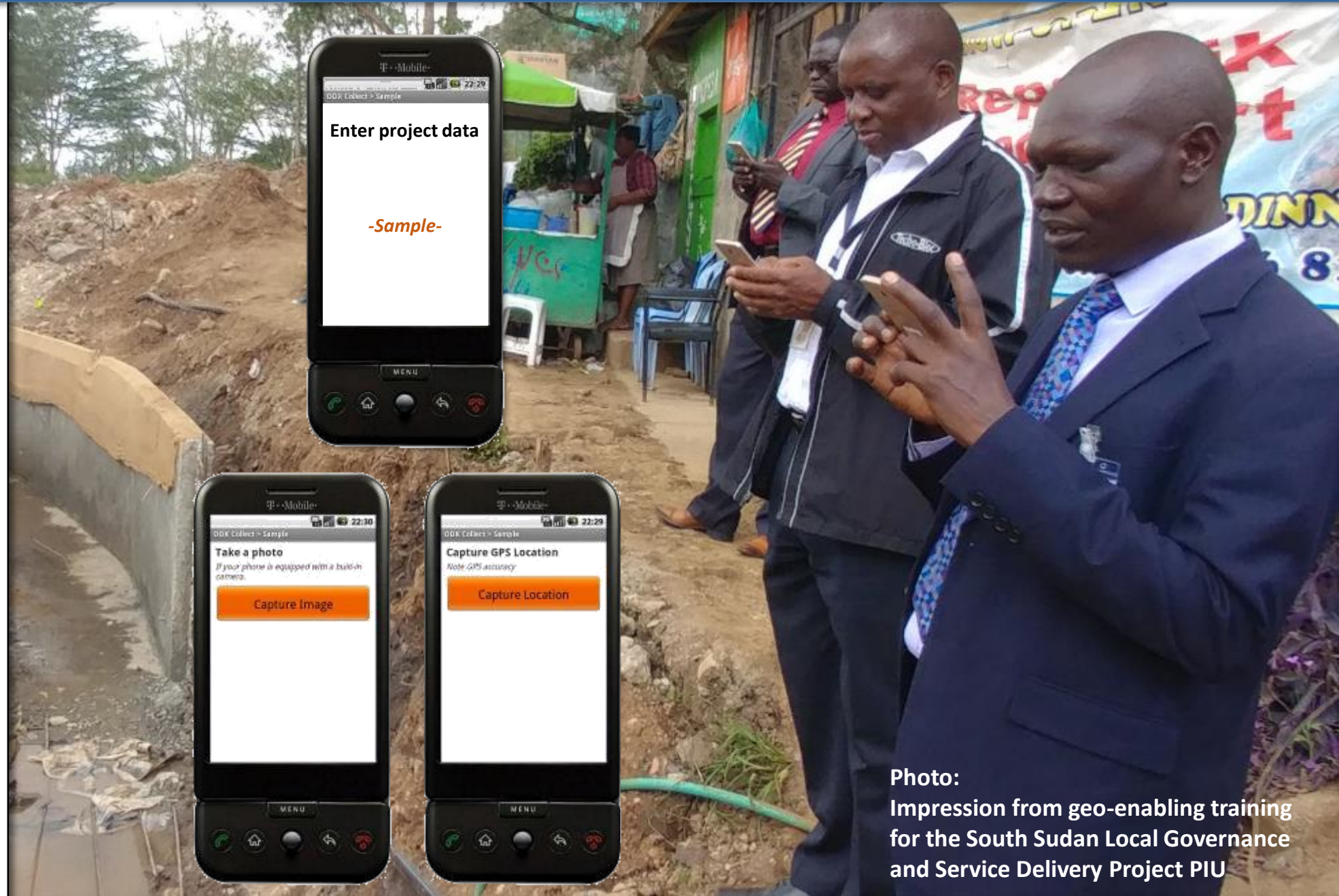


Photo:
Impression from geo-enabling training
for the South Sudan Local Governance
and Service Delivery Project PIU

Geo-Enabling initiative for Monitoring & Supervision

Want Support for your Projects?

Please access the GEMS website on
www.worldbank.org/gems for more information

Contact the GEMS team at:
GEMS-team@worldbank.org

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ANNEX

Example Agenda for GP/CMU-specific Remote Trainings amid Travel Restrictions

Day	Time	Topic/Activities	Remarks	Specific Contents
Day 1 <i>tbd</i>	10.00am – 11.00am	Introduction to GEMS for operations & ESF monitoring	Fundamentals of GEMS for project M&E and real-time risk monitoring	Intro PPT; <u>Enketo</u> mock form; existing KoBo example in data and map view
	11.00am – 12.00pm	Introduction to digital form creation and data collection	<u>Account creation & administration</u> ; <u>questionnaire creation</u>	Accounts; landing page; form builder; all question types; form deployment
	12.00pm – 2.00pm	Lunch and work Break	<i>“Homework”: Quick data collection with mock form</i>	Participants fill in new test form from previous session at different locations
	2.00pm – 3.00pm	Data analysis and continuation of form creation	Detailed session on data analysis; nitty-gritty of KoBo forms	Details of question types; skip logic; conditionality; groups; metadata
	3.00pm – 4.00pm	Data architecture and intro to the mobile app	Intro to ODK collect and preparation of the ‘homework’	Data architecture (roles, sharing); ODK Collect; QR sharing; homework prep.
Between days		<i>Main Homework</i>	Participants create their own form, deploy it, collect data, share form	Forms need to have at least 10 questions, of 5 different types, sample data collected
Day 2 <i>tbd</i>	10.00am – 11.30am	Debrief of “Homework”:	Presentation of homework by all or select participants	Explanation of format and contents; discussion of use cases & technical issues
	11.30am – 12.00pm	Project-specific use cases	Discussion of sector/project-specific use cases	Best-practice sharing on forms, <u>questions</u> , data architectures, deployment
	12.00pm – 2.00pm	Lunch and work Break	<i>No “homework” this time</i>	
	2.00pm – 3.00pm	Continuation with digital questionnaire creation	Advanced functions in questionnaire creation and analysis (1)	Google Earth Pro; Cascades; Hyperlink creation specific functions of interest
	3.30pm – 4.00pm	Next steps Q&A and Any open issues	Questions on technical issues, protocols, and next steps	Summary of main concepts for deployment; <u>whatever</u> remains to be discussed
Day 3	<i>Tbd</i>	Office Hours	Teams can address individual issues	Technical issues and implementation plan

Possible Uses of GEMS for Clients, Task Teams, CMUs and Partners

Project Teams & Clients

Project Planning
& Baseline Data Collection



Project Progress Monitoring
& Remote Supervision



Stakeholder Surveys
& Iterative Beneficiary Monitoring



Real-time Tracking
of Service Delivery



Project
Impact Evaluation



Tracking of Project
Outputs and Outcomes



Citizen Engagement
& Grievance Mechanisms



WB Country Teams / Partners

Spatial Planning
& Portfolio Programming

Portfolio Mapping
& Coordination with Partners

Environmental and Social
Safeguards / ESF Monitoring

Real-time Tracking of Missions
and Security Issues

Portfolio-wide
Results Monitoring

Verifying TPM Activities
“Monitor-the-Monitors”

Communications
& Outreach

Operational Cycle

Examples of GEMS Use in the Field

>650 supported projects
in 85+ countries

[See detailed
examples by
sector: here](#)

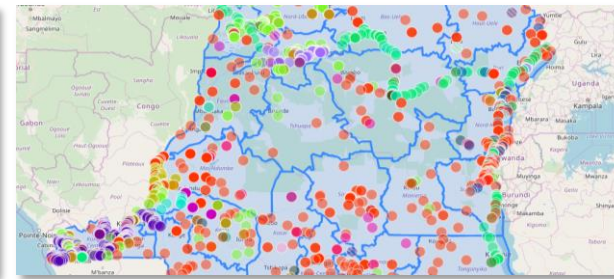


Or scan
QR code



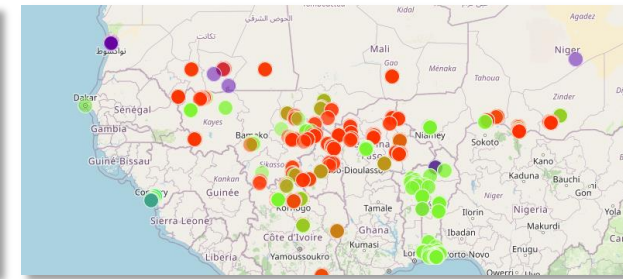
Project Planning and Preparation

Kosovo, Niger, Tuvalu, etc.



Portfolio Targeting and Programming

Madagascar, DRC, Iraq, Somalia, etc.



Portfolio Mapping & Coordination

20 countries in AFR and growing



Remote SPN in Conflict Contexts

Afghanistan, Mali, Cameroon, etc.



Real-time Tracking of Service Delivery

CAR, DRC, Haiti, Bangladesh, etc.



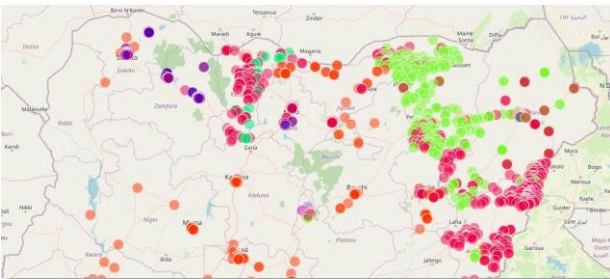
Project Progress Monitoring

Dozens of projects around the world



Real-Time Risk/ESF Management

Myanmar, Maldives, Brazil, etc.



Mapping of GBV Service Providers

Nigeria, Sahel, Pakistan, Mozambique



Citizen Engagement and GRM

Azerbaijan, Burundi, Philippines



Stakeholder Engagement and Surveys

Afghanistan, Kenya, Haiti, etc.

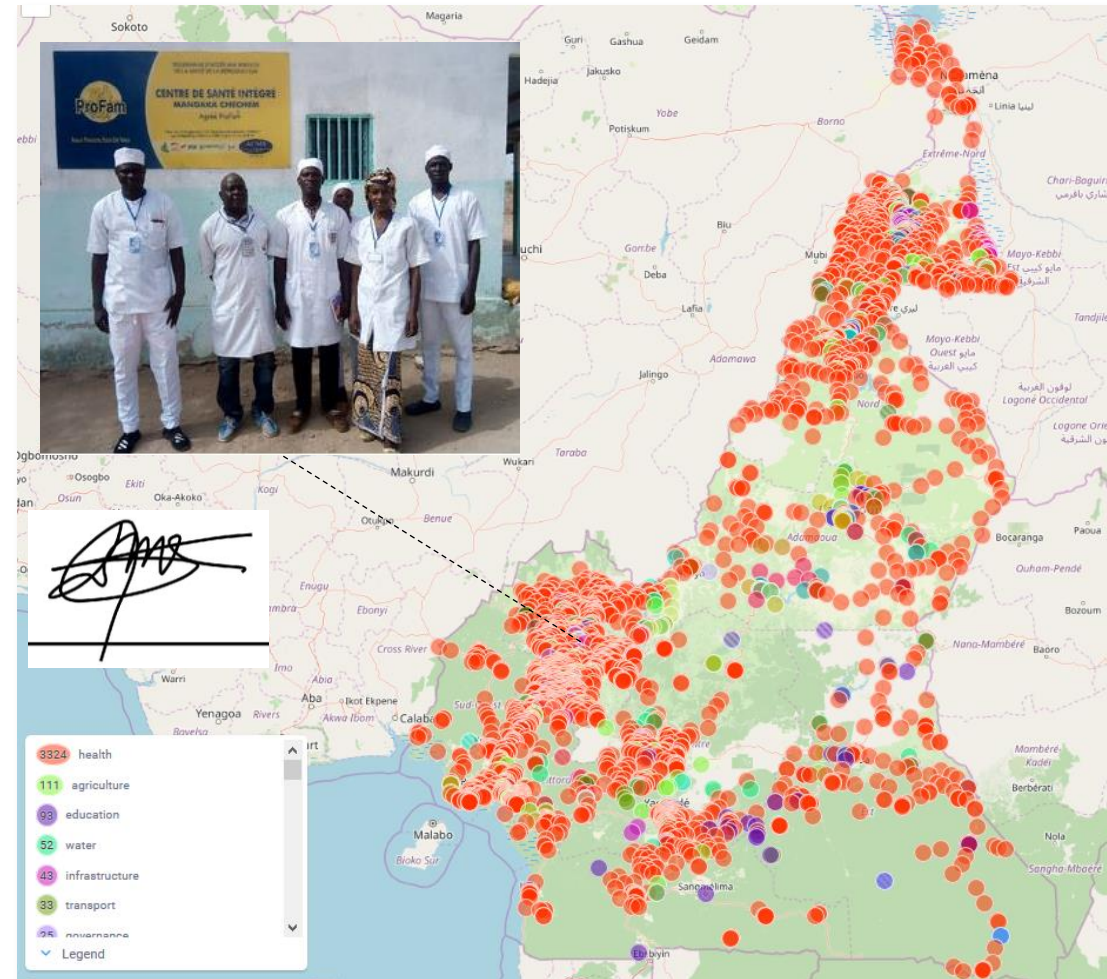


Tailored Client Use beyond WBG Ops

Various Adoptions around the World

Examples for Leveraging GEMS as Part of the COVID-19 Response

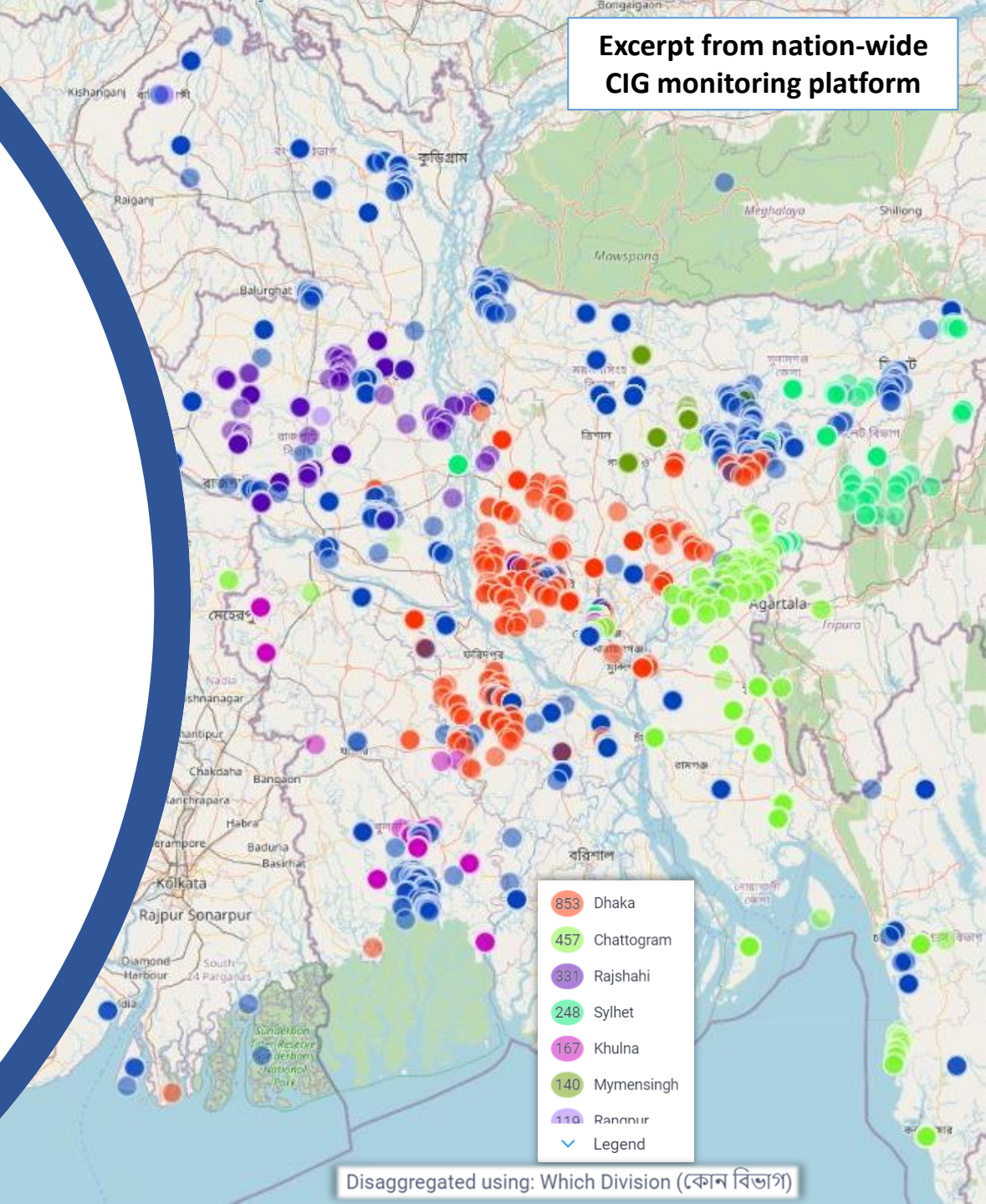
- **No use of GEMS for monitoring of the disease itself or any surveillance of individuals**
- **Operational planning, M&E and remote supervision amidst travel and access restrictions:**
 - Digital monitoring platforms across components, projects, programs and sectors.
 - Structured geo-mapping and recording of baseline data on service infrastructure (e.g. health clinics)
 - Remote supervision of a variety of activities (e.g. infrastructure construction, health trainings).
 - Real-time tracking of equipment stocks/delivery (e.g. through barcode recording).
 - Monitoring of social protection activities (e.g. LIPW/THIMO, psychosocial support).
 - Beneficiary or multi-stakeholder engagement (e.g. perception/feedback surveys).
 - Real-time monitoring of compliance with environmental and social safeguards/ESF.



In Bangladesh, the National Agricultural Technology Program Phase II (NATP-2) aims to increase farm yields, diversify production, and improve market linkages for smallholder farmers.

- Adopting the GEMS tools has enabled the PIU to collect and analyze data concurrently and digitize their previously manual data collection process. All project reports now flow into just 8 forms.
- By embracing the 'Train-the-trainers' approach, the team scaled the GEMS use across 270 sub-districts to monitor 40,000 Common Interest Groups (CIGs) nation-wide.
- With ~1M beneficiaries in mind, the collected data serve to assess indicators for decision making, M&E, portfolio mapping, and risk management.

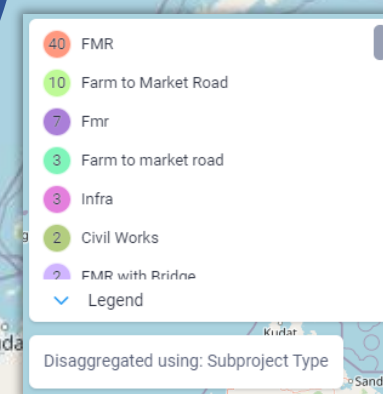
Excerpt from nation-wide
CIG monitoring platform



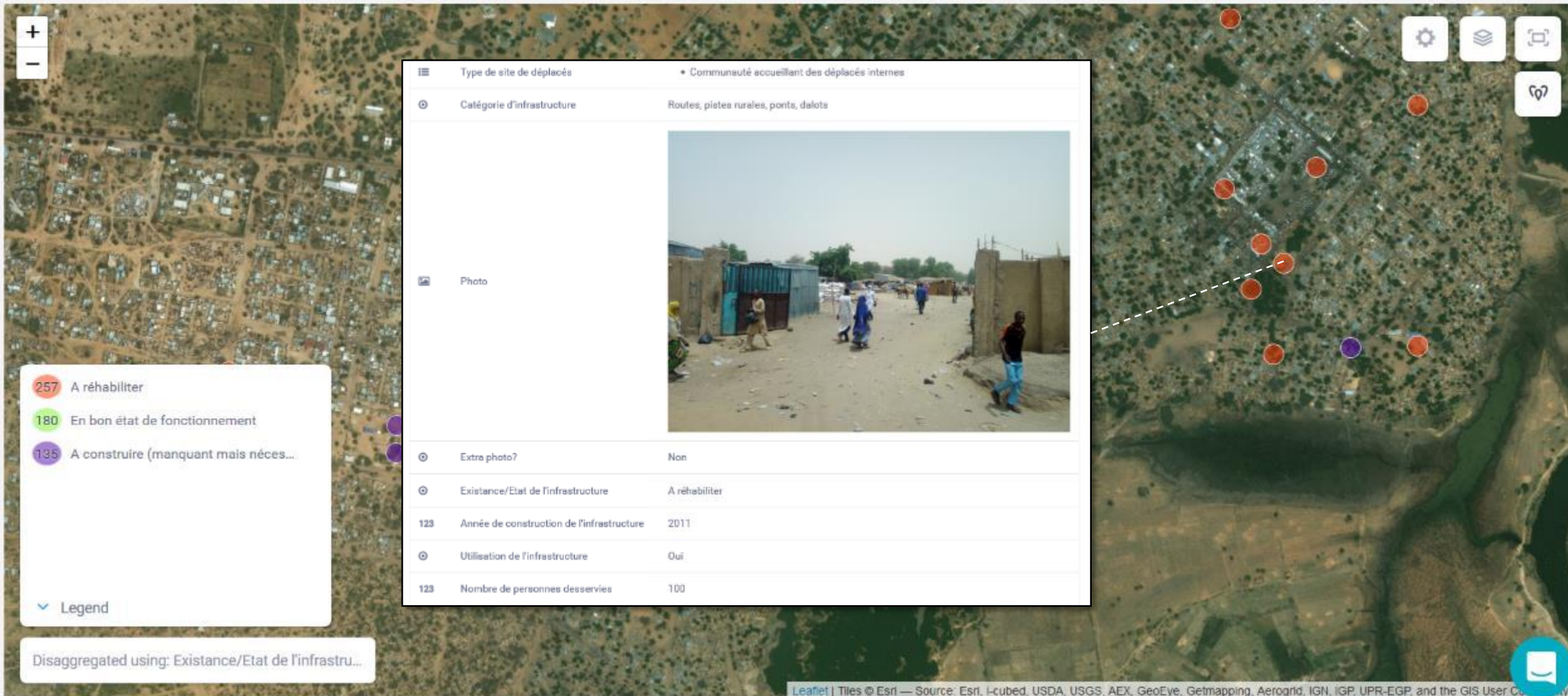
The Philippines Rural Development Project (PRDP) aims to support smallholder farmers and fisherfolk throughout the country to increase rural incomes and enhance farm and fishery productivity.

- Adopting GEMS allowed the project team to migrate their traditional pen-and-paper data collection process into a simplified mobile app.
- So far, the PRDP team have piloted GEMS to monitor completed infrastructure and enterprise subprojects and to assess farming clusters for consolidation.
- Within 3 months the PIU trained over 600 participants through multiplier capacity-building sessions, with more scheduled to roll out the GEMS tools across key offices.

Please see [PRDP Newsletter](#) and [Video](#): GEMS use on PRDP monitoring



Example Niger: Online Dashboard for Project Planning and Real-Time Analysis



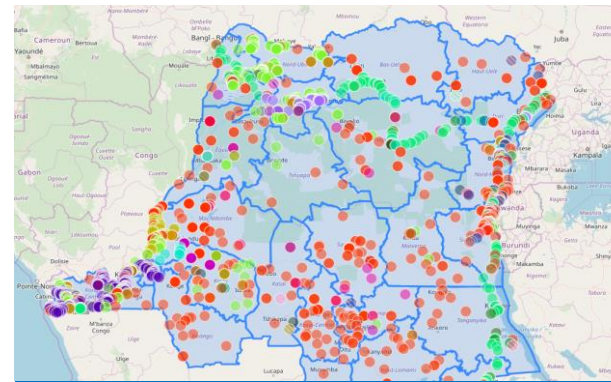
Examples of GEMS Use in the Field

Among >650 supported projects in 85+ countries



Remote Supervision in Conflict Contexts

In Afghanistan, GEMS helped track the distribution of seeds to over 280,000 farmers across the country, as part of a COVID emergency project



Infrastructure Mapping & Coordination

In the DRC, detailed data on 25,000+ schools was collected via GEMS in 3 months, changing the perspective of the Ministry of Education



Project Planning and Preparation

In Niger, GEMS helps plan and supervise infrastructure investments for refugees, internally displaced people and host communities



Communications and Citizen Engagement

In Azerbaijan, GEMS supported a country-wide Community-Driven Development project to establish a digital Citizen Engagement platform



Real-time Tracking of Service Delivery

In Haiti, GEMS helps closely monitor the provision of livelihood support to 40,000 vulnerable people during the COVID-19 pandemic



Project Progress Monitoring

In Uganda, a multisectoral nutrition project uses GEMS to track vital school feeding and deworming activities to prevent stunting



Real-Time Risk Management

In Myanmar, GEMS helps manage environmental and social risks and safeguards during implementation of a nation-wide electrification project

Potential Risks and Risk Mitigation (1): Privacy and Data Protection

- 1. Data Protection:** Potential risks related to data protection are inherent to digital data collection and storage. This can be of particular concern in FCV contexts when the collected data might contain information related to for instance conflict activities, sensitive survey responses, or personal information (PII) of victims or displaced people.
 - The data platform is provided by the Harvard Humanitarian Initiative. The tool and servers comply with the latest industry standards in terms of data protection, incl. the EU's General Data Protection Regulation (GDPR).
 - Users retain full ownership of all submitted data, which is hosted on password-protected, encrypted accounts. The data is neither accessed by the platform provider, nor shared with any third parties.
 - For additional data protection, the GEMS team also has an agreement with UNHCR to use their server, which enjoys diplomatic immunity, for PII or any data related to displacement.
- 2. Privacy:** In addition to data protection in the technical sense, data privacy protocols are a main focus of GEMS.
 - During the GEMS capacity-building workshops, the clients are also trained in best practices regarding data collection and privacy. This includes, among others, guidance in the following points:
 - The teams must adhere to the specific legal requirements of the respective country.
 - GPS coordinates must not be collected for displaced populations of less than 250 (UNHCR guidelines).
 - GPS coordinates of individual households are only collected in exceptionally and must never be shared publicly.
 - Before taking photos of people, enumerators must obtain their consent and have them sign a digital form.
 - **GEMS team provides very detailed guidance material on privacy and data protection (can be shared)**
 - **Client show generally positive uptake of best-practices for privacy and data protection during trainings**

Potential Risks and Risk Mitigation (2): Sustainable use of GEMS

3. **Limited Technological Capacity in FCV Contexts:** FCS, often have low capacity in terms of digital infrastructure as well as ICT skills among government employees. Therefore, tools and methods that depend on sophisticated technology and steady network connectivity face limitations on the ground. In brief, simplicity is key for ICT in FCV!
 - This is addressed by the design of the GEMS method and the used ICT tools. A central element of the method is to use 'simple-enough,' low-cost tools and procedures that are appropriate for low capacity environments.
 - Technically, the GEMS method is based on the use of cost-free software and common smartphones that allow for offline field data collection (i.e., no internet or network connectivity are required in the field).
4. **Sustainable Use and Scaling:** A potential risk is that the tools and methods are not used efficiently and sustainably for the benefit of projects. This could be due to weak capacity, budget limitations, or a lack of incentives.
 - The system provides incentives for sustainable use. The main aim of the GEMS methodology lies on building lasting capacity among the clients themselves to use the tools based on their specific needs.
 - Project Task Teams and Country Teams on WBG-side are explicitly involved in the system setup and training.
 - Dedicated GEMS focal points are designated within the projects and Country Teams to oversee the systematic and sustainable implementation of the method.
 - Regular follow up by GP and CMU staff with the project team creates incentives to properly run the system.
 - **GEMS is simple, low-cost & easy to scale, with no/limited need for procurement (solely smartphones, if needed).**
 - **However, local ownership by GPs/TTLs or CMUs and close coordination with clients is key!**

Protection of Privacy and collected Data in KoBoToolbox

Hi Liana,

As you certainly heard, the new European Union General Data Protection Regulation (GDPR) came into effect on May 25, 2018. This new legislation aims to provide individuals with more control over how their personal data and information is used. We have updated [our data privacy policy](#) to reflect transparently what has always been our policy: KoBoToolbox is provided so that you can collect the data you need, and we never share or sell it. We value your trust and care about the security and privacy of your information.

We invest heavily in our security infrastructure, employ the best practices for security and privacy, and use encryption throughout our systems. Visit our [help article for more details](#).

If you have any questions, please feel free to reach out to the Support Team by replying to this message. If for any reason you object to the new terms, please contact us or you may choose to delete your account.

Thank you,
Emily



Emily from KoBoToolbox

Server:

- KoBo offers free access to a server (Amazon Web Services) with unlimited space for every account (up to 10,000 submissions per month by default, more upon request – but **always cost free**).
- The server hosts the created questionnaires and collected data.
- KoBo does not access or forward any data or questionnaires.

Data protection:

- KoBo makes frequent backups of its entire database to safeguard against data losses.
- Accounts are protected by usernames and passwords and underlying data is encrypted according to the latest standards.

Rights and data ownership:

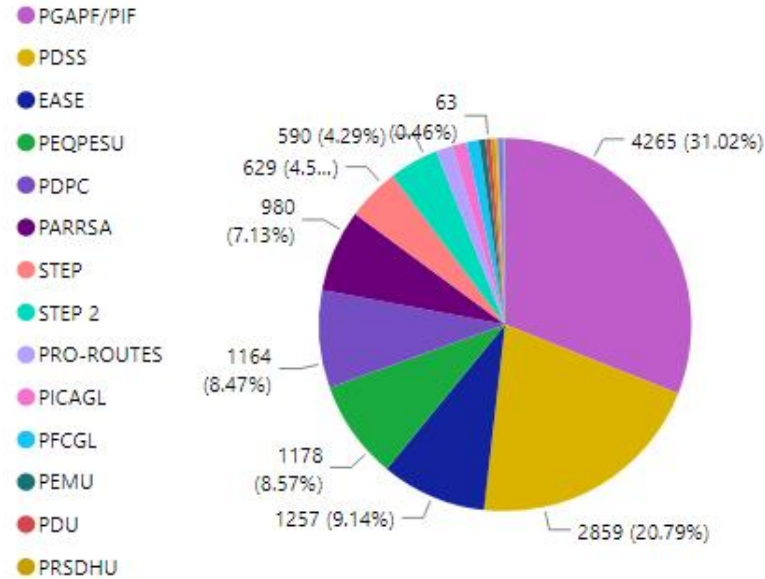
- The account users are the sole owners of any data and questionnaires hosted on KoBo.
- The account users are responsible for the collection and administration of personal data according to national or international data protection legislation (see the EU's General Data Protection Regulation – GDPR).
- Exclusively information (questionnaires and collected data) that has explicitly been made accessible for the public are available for internet users without the respective passwords. Data made public data may e.g. be included in Google searches, but access can be restricted any time.



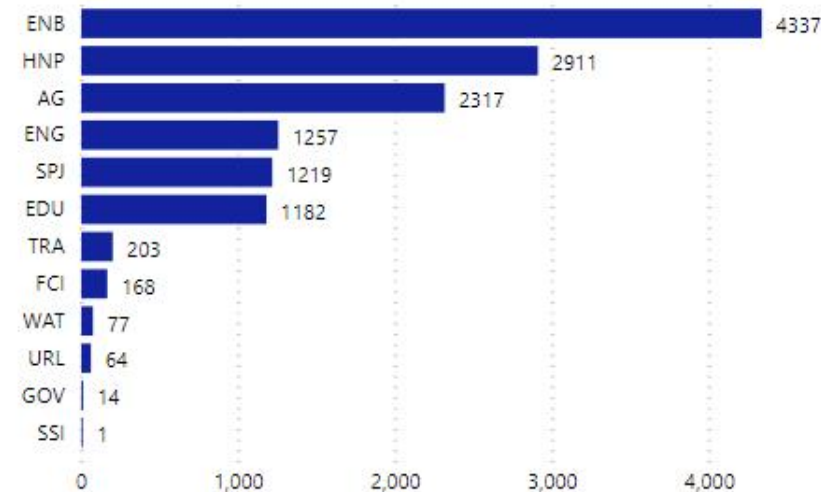
You can also connect your own server to KoBoToolbox!

Real-Time Supervision: Leveraging GEMS for interactive Portfolio Dashboards

Number of geolocated implementation sites by Project



Number of geolocated implementation sites by GP



GEMS PORTFOLIO MAPPING IN THE DRC MONTHLY DASHBOARD: August 2021

Project sites mapped as of today
13750

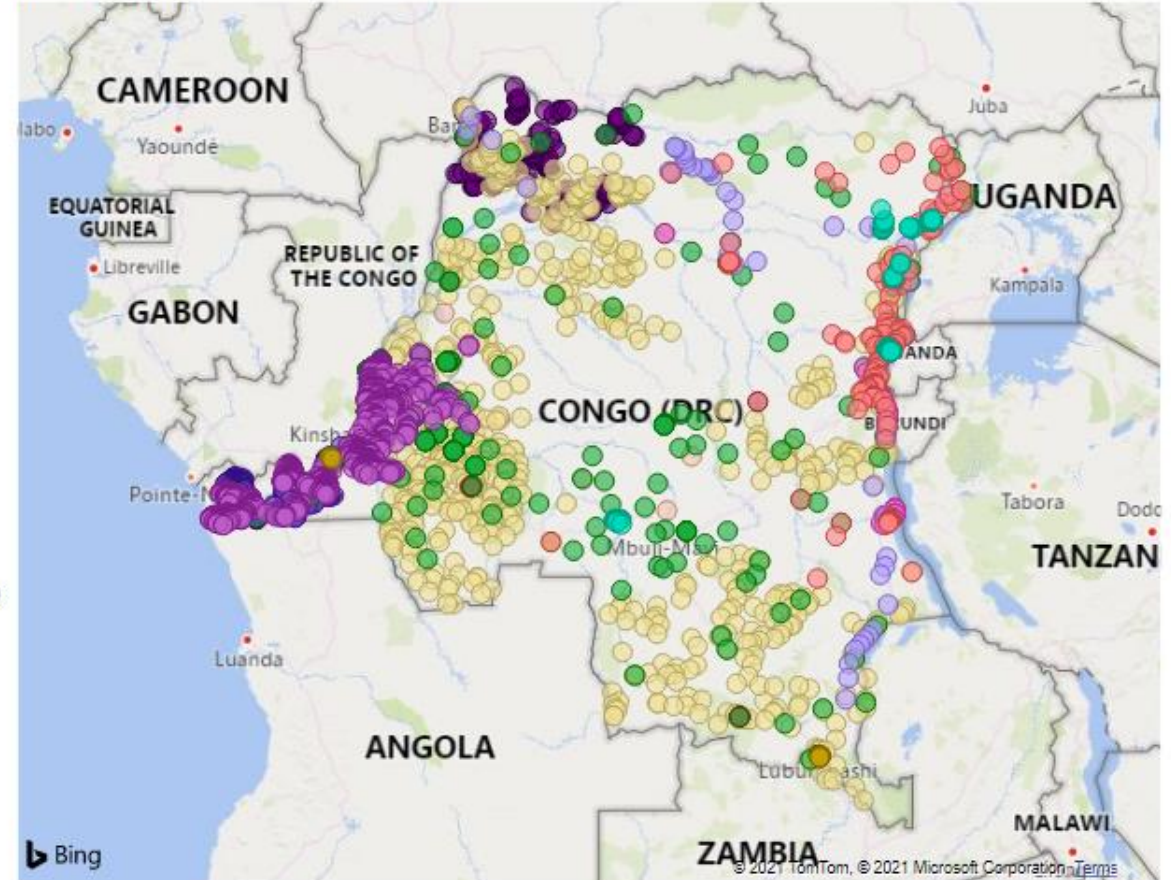
Last recorded Data
Collection on
August 3, 2021



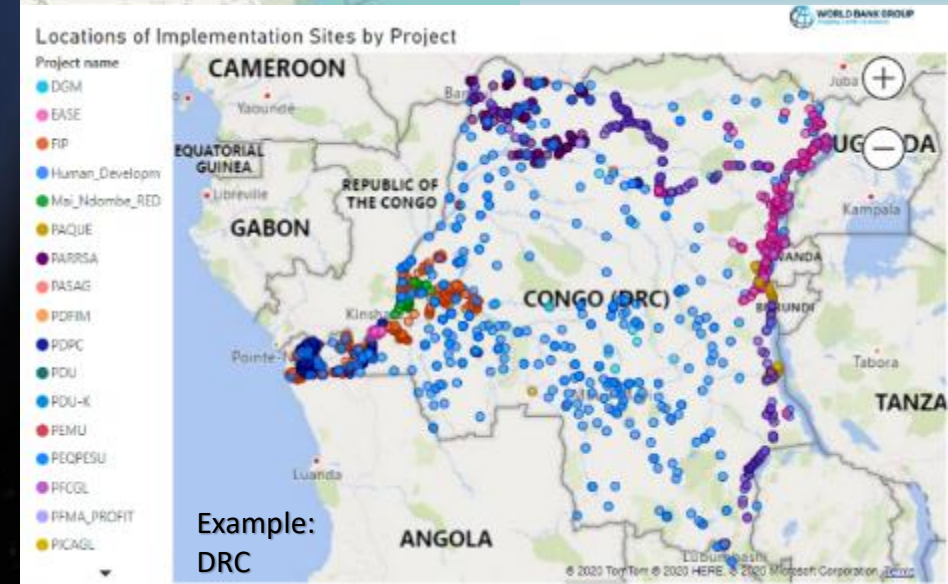
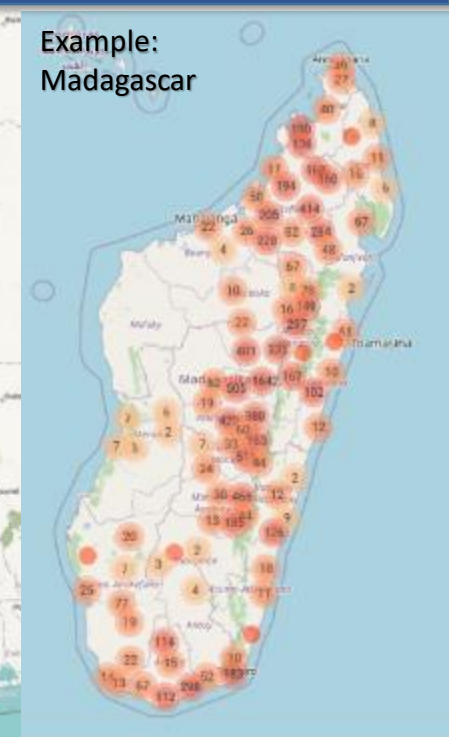
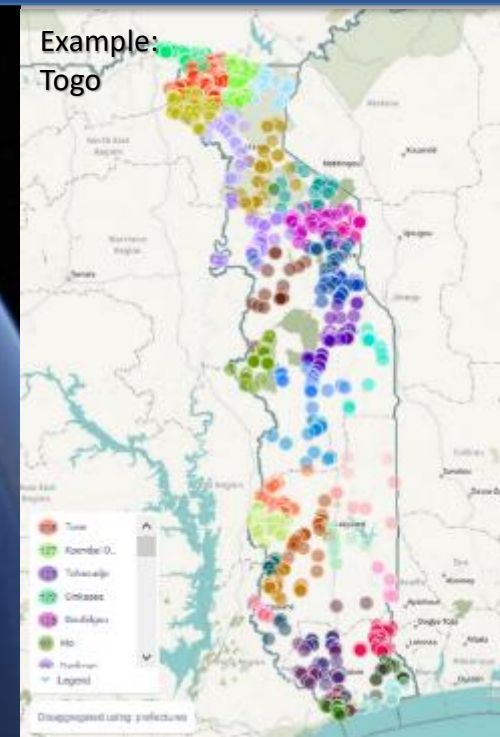
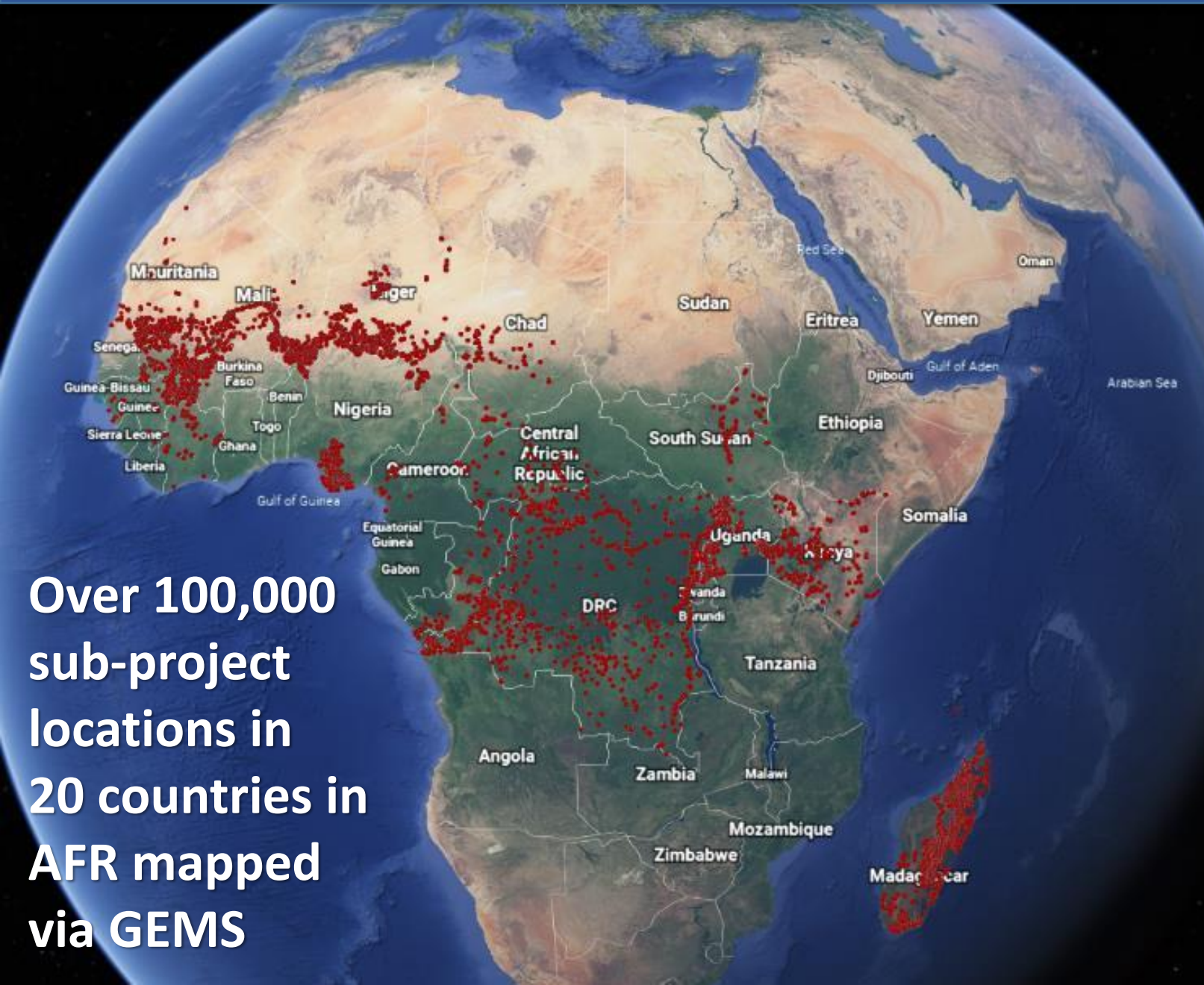
Location of Implementation Sites By Project

Project name

- DGM/PACDF
- EASE
- PAQUE
- PARRSA
- PDIFM
- PDPC
- PDSS
- PDU
- PEMU
- PEQPESU
- PFCGL
- PFMA/PROFIT
- PGAPF (GEF AF)
- PGAPF/PIF
- PICAGL
- PRO-ROUTES
- PRSDHU
- STEP
- STEP 2



Systematic Mapping & Creation of Databases on Sub-Projects at Activity Level





Empowering Women & Youth with digital Skills

- More than half of GEMS team members and two thirds of in-country focal points are women.
- GEMS trainings encourage the participation of women and the proportion of female participants is continuously tracked.
- The technology and M&E skills taught by GEMS provide women and youth with new opportunities.

Closing crucial Data Gaps on Gender and Youth

- GEMS trainings build capacity in M&E on gender and demographic issues and raise client awareness on the importance of collecting disaggregated data
- The contents of GEMS surveys often focus on issues that are crucial for women's and youth inclusion, such as livelihoods, jobs, maternal and children health, nutrition, agriculture, and water.



The growing Community behind KoBo Toolbox

OPEN SOURCE DEVELOPMENT SUPPORTED BY



HARVARD
HUMANITARIAN
INITIATIVE



BRIGHAM AND
WOMEN'S HOSPITAL



WITH ADDITIONAL SUPPORT FROM



FIDELITY FOUNDATION



HUMANITY
UNITED



International Organization for Migration (IOM)



MacArthur
Foundation



Save the Children



UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés



OCHA

United Nations Office
for the Coordination of
Humanitarian Affairs



USAID

FROM THE AMERICAN PEOPLE



WCS



World Food Programme



THE WORLD BANK

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WORLD
RESOURCES
INSTITUTE

Creating a Public Good: Inclusion of Partners for more effective Collaboration



Principles *for* Digital Development



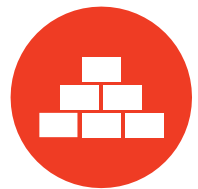
**Use Open Standards, Open Data,
Open Source, and Open Innovation**



Be Collaborative



Design for Scale



Build for Sustainability

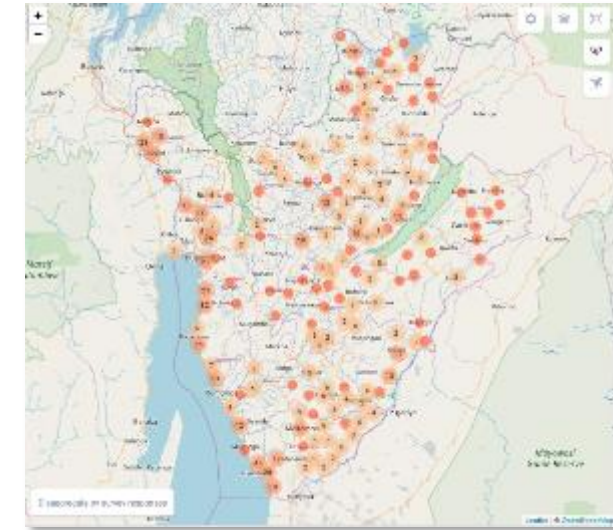
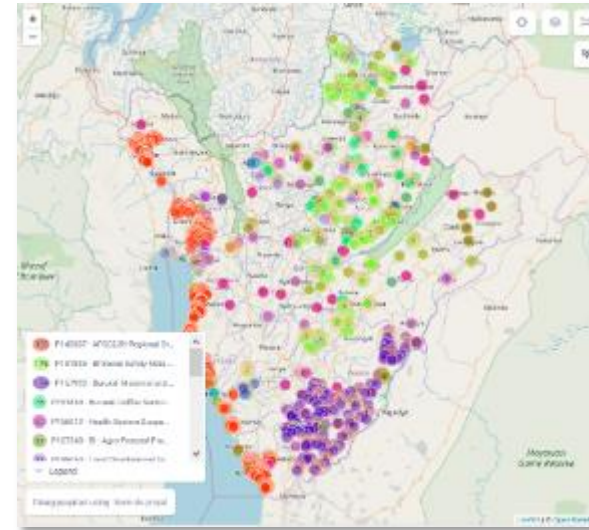
All partners are invited to join!



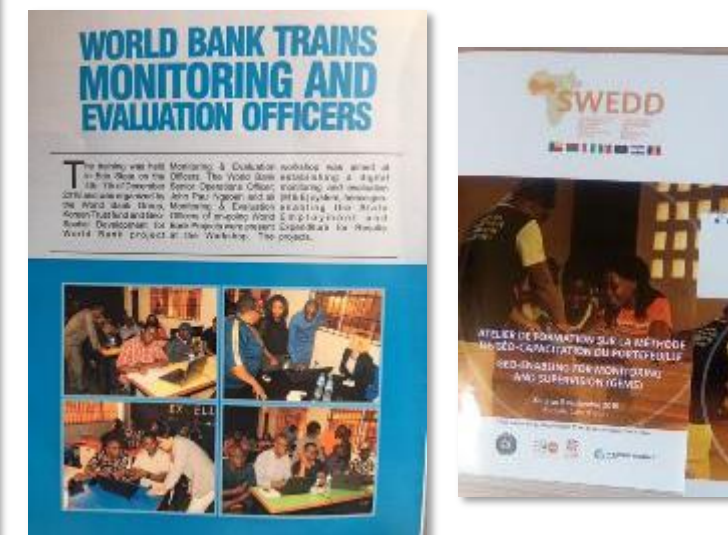
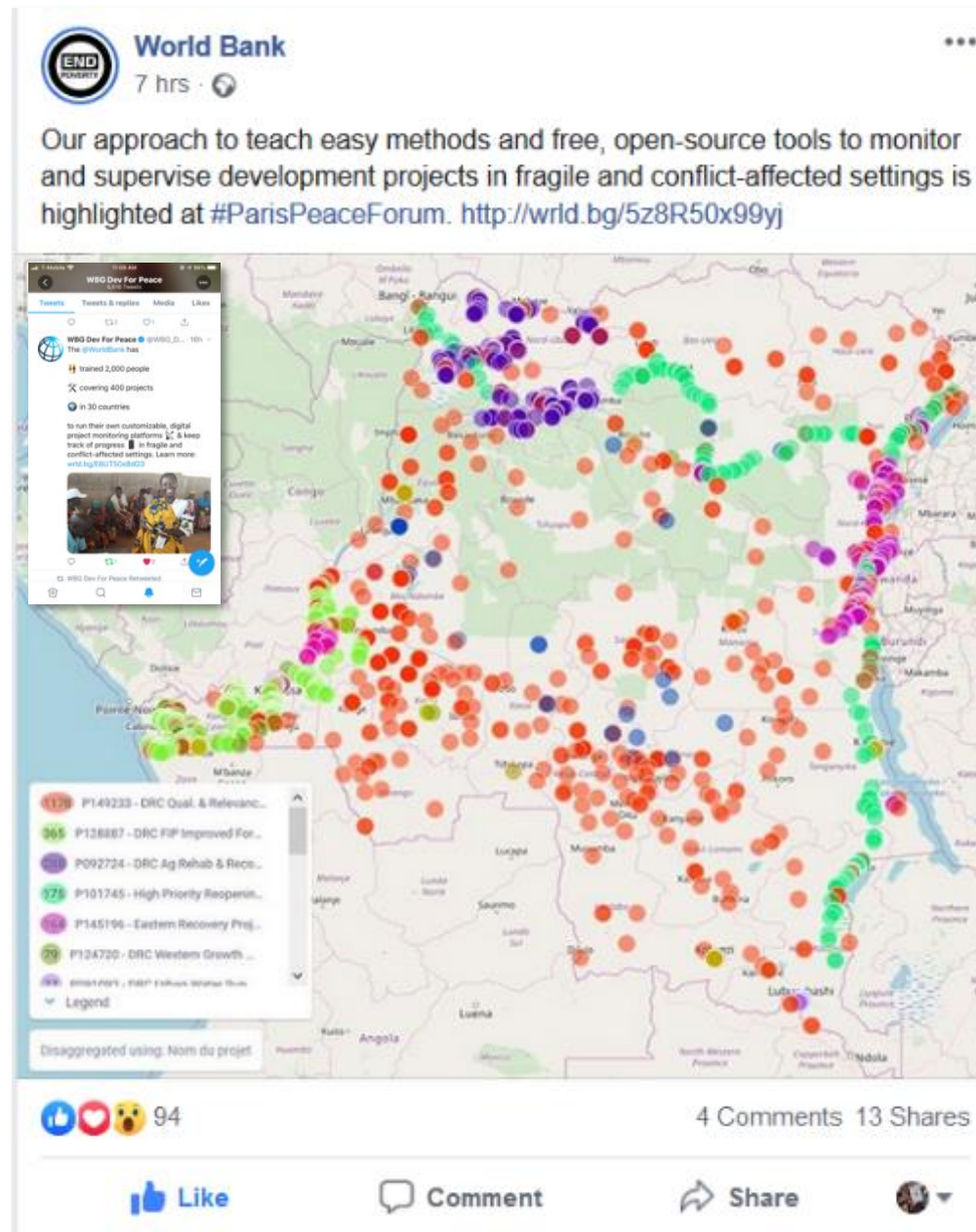
<https://digitalprinciples.org/principles/>

Examples: Country-Wide and Project-specific supervision platforms

- **Throughout Africa:** Portfolio-Mapping and Monitoring Platforms
- **Sahel:** Cross-Agency Coordination and Portfolio Mapping Tool
- **Niger:** Project Planning, Monitoring and Evaluation Tool
- **Azerbaijan:** Project M&E and Citizen Engagement Tool
- **Uganda:** Real-Time M&E System to track diverse project components
- **DRC:** Structured mapping of all schools in the country (> 50,000)



(Social) Media coverage: GEMS' impacts highlighted by the WBG and partners



Check our website ([gems/](#)) for general information, documents, follow-up

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COVID-19 Response
GEMS support for the COVID-19 response

The Geo-Enabling Initiative for Monitoring and Supervision (GEMS) was launched by the FCV Group to systematically enhance Monitoring and Evaluation (M&E) as well as supervision in FCV settings. This is achieved by building capacity among clients, partners, and Bank teams on the ground, to leverage field-appropriate technology for digital data collection and analysis. Using these tools and methods allows operations to enhance the transparency and accuracy of M&E and increase the accountability of third-party monitoring (TPM). At the same time, GEMS provides platform for remote supervision, real-time risk monitoring, and portfolio mapping for coordination across projects and partners.

State of GEMS Implementation

In 30 Countries	Trained 2,000 Clients
Covering 450 Projects	

Offered by the FCV Group | Supported by the KTF | ITS/GEMS Geospatial Platform | GEMS Crash Courses

More on GEMS

Video

GEMS Summary Note - several languages

GEMS Summary PowerPoint

Korea Trust Fund (KTF) Report

GEMS on Social Media

Search

Keyword:

GEMS News

Using Pocket Science to Monitor and Supervise Operations in Fragile and Conflict-Affected Settings

What's the Geo-Enabling Initiative for Monitoring and Supervision (GEMS)?

Post on GEMS by the WBG Facebook Account

Case Study: Corporate Social Responsibility & Digital Data Collection Tool for Humanitarians

Ethiopia: Enhancing Capacity on Geo-Enabling Initiative for Monitoring and Supervision for Informal Development Effort

Our approach to learn key mobility and flow, demonstrate tools to monitor and supervise development projects in fragile and conflict-affected settings is highlighted at #PhotoForum. My friend tag: @WBGcountry

World Bank @WorldBank

We have:

Trained 2,000 people covering 450 projects

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The GEMS capacity-building focus and versatile tools allow for a vast array of use cases along the project cycle and across stakeholders:

For project teams:

- Baseline data collection & project planning
- Progress monitoring and tracking of service delivery
- Beneficiary engagement and quick surveys in real-time
- Real-time risk management
- Impact evaluation and GRM

For Country teams and partners:

- Portfolio mapping and coordination
- Remote project supervision
- Enhanced third-party monitoring (monitor-the-monitors)
- Environmental and Social risk management
- Real-time tracking of missions and security issues

Use cases

Real-time Tracking of Service Delivery

In South Sudan, remote health facilities have been mapped with detailed information on equipment and provided services.

Project Planning and Supervision

In Niger, GEMS helps to plan and supervise infrastructure investments for refugees, internally displaced people and host communities

What Your Colleagues Are Saying About GEMS

Feedback from training participant, Guinea, April 2019 -

« Il est important de préciser que cette formation nous permettra d'améliorer nos outils de suivi et évaluation afin de faciliter la prise de décision de

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World Bank Group Strategy for FCV, 2020-2025

More on GEMS:

- Data Protection & Privacy
- TPM & Training of Trainers
- Low-Capacity Context

GEMS Initiative: Building Capacity in the Use of Simple and Low-Cost ICT Tools for M&E, Real-Time Risk Management, Third-Party Monitoring, and Portfolio Mapping

Development challenge: Fragility and violent conflicts do not only result in destruction, displacement, and devastation, but also often result in access constraints on the ground, for security-related and logistical reasons. A lack of physical access and insights into specific dynamics and needs in FCV contexts effectively inhibits operational engagement, precisely in some of the areas where development interventions are most critically needed. Therefore, there has been urgent demand by project teams operating in FCV contexts for solutions to remotely supervise operations and improve the capacity of clients to conduct accountable and well-structured M&E. The GEMS initiative was launched by the FCV Group to close information gaps in areas with limited access to get eyes on the ground, where we cannot always have feet on the ground.

Development Objective: The GEMS method enables project teams to use open source tools for in-field collection of structured digital data that automatically feeds into a centralized M&E system. The integrated data can include any kind of indicators, based on tailor-made forms; photos, audio, videos; time and date stamps; and GPS coordinates that allow for automated geo-mapping of the information. Using GEMS systematically allows operations to enhance the transparency and accuracy of M&E, and the accountability of third-party monitoring. Moreover, it provides a platform for remote supervision, real-time risk & safeguards monitoring, and portfolio mapping for coordination across projects and partners.

Capacity-building approach: The core of rolling out the GEMS method is a 3-day hands-on training with two main objectives:

- Building capacity among government agencies, WBG Task Teams, Country Teams and partners to use simple ICT tools for digital data collection and analysis independently and sustainably, customized to their specific project needs.
- Implementing the system across country and regional portfolios to allow for real-time supervision and coordination of operations via a centralized platform that registers all projects on an interactive map.

The training covers everything needed for project teams and CMUs to run the system independently: (a) Data platform creation and administration; (b) digital questionnaire design and deployment; (c) in-field project data collection; (d) geo-mapping and analysis of collected data within the application; (e) data export, spatial/Excel analysis; and (f) creation of a customized data architecture.

Participants: Participants can comprise Implementing Agencies (PIUs/PMUs), WBG Task Team members working on M&EIS, safeguards and procurement specialists, CMU focal points and