

## GEO-ENABLING INITIATIVE FOR MONITORING AND SUPERVISION (GEMS)



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### MISSION

The aim of GEMS is to systematically build capacity among clients, partners and Bank staff to use simple and cost-free open source tools for digital data collection and analysis, to enhance M&E, supervision and real-time risk management.

The unique identity of GEMS, compared to other teams working on geospatial data within the Bank, is that they work with a very simple open source tools, which can be used by anyone for free. GEMS aim to create a Global Public Good through skills-building in digital data collection and analysis. The team helps to implement simple solutions based on 'pocket science' that work in developing countries and FCV settings with low capacity.

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.

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### CAPACITY

#### TEAM

The GEMS team currently has 15 team members, 5 of them in the field (Bamako, Nairobi, Kinshasa, Bangui, and Conakry). In addition, there are GEMS focal points in around 25 WBG client countries to provide for local ownership.

#### WORKSHOPS/EVENTS

In terms of training, GEMS provide regular (~monthly) GEMS TTL two-hour crash courses for HQ and Country Office staff (via WebEx). Moreover, they deliver about two dozen 3-days in-country trainings for clients, partners and local staff per year.

The interactive training covers everything needed for project teams 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.

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## SERVICES OFFERED

GEMS has developed a methodology to teach the effective use of open source tool KoBoToolbox (that is free and open for any user around the world) and other simple tools to set up customized and locally owned digital monitoring systems.

The GEMS team provides access to cost-free technology and create capacity in digital data collection and analysis. Concretely, this can be used for project M&E, portfolio mapping, ESF data platforms, Citizen Engagement/GRM, third-party monitoring, Iterative Beneficiary Monitoring. A special focus lies on creating skills among low-capacity clients in FCV countries. Support can be one-off (a 3-day training) or imply longer hand-holding.

The team can support the setup of project M&E systems, portfolio mapping platforms and (under certain circumstances) citizen engagement platforms. This is based on simple tools for digital in-field data collection via handheld devices. Yet, it can also be connected to more advanced remote sensing support, which is typically provided through our partnership with GOST.

The GEMS team offers hands-on in-country training workshops with two main objectives:

- a) Build capacity among government agencies, WB Teams, and partners to use simple ICT tools for digital data collection and analysis, customized to their specific project needs.
- b) Implement the system across country & regional portfolios to allow for real-time supervision & coordination of operations via a centralized platform that registers all projects on interactive maps.

The tools are completely cost-free, including accounts, mobile apps, and server space, and the method can be implemented within short time frames. The sole costs factors of GEMS implementation the training sessions (travel for 2 trainers & staff/STC time), smartphones for data collection (low-cost Android devices) and potential field data collection costs on the side of the projects.

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## PRODUCTS

- General ICT-based monitoring capacity,
  - Digital project M&E systems,
  - Dashboards/MIS with automated maps, statistical data and rich data (photos, audio, videos, bar code scans, signatures, drawings
  - Portfolio mappings at the level of implementation sites (~40,000 sub-projects mapped so far)
  - ESF monitoring systems
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## PARTNERSHIPS

### INTERNAL

- All CMUs in FCV countries and all GPs (mostly Education, Health and Social)
- Work with GOST and offer complementary services
- Cooperation with OPCS-FM on the Smart Supervision app
- Feed portfolio data into the ITS Geospatial Platform

### EXTERNAL

- Harvard Humanitarian Initiative (providing KoBoToolbox)
- Over 15 UN and bilateral development that participated in trainings

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## OTHER HIGHLIGHTS

### To know more about GEMS:

- Type gems/ in any WBG intranet browser to access the GEMS website  
GEMS intranet site:  
<https://worldbankgroup.sharepoint.com/sites/wbsites/GEMSGeoEnablinginitiativeforMonitoringandSupervision/Pages/index.aspx?e=1:878ee2e608e94b8c8986822c25927fc2>
- Interview from August 2018 (partly updated in September 2019)  
<https://bit.ly/2uKV5N3>
- Internet Article - Using "Pocket Science" to Monitor and Supervise Operations in Fragile and Conflict-Affected Settings  
<https://bit.ly/2IAIqjT>
- GEMS Sway site