Use of ICT for Monitoring Progress and Impact of Uganda Post Primary Education and Training Project (UPPET) in real time

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Uganda Post Primary Education and Training (UPPET) Project - $150 M equivalent

Three components: (i) Increased Access to Lower Secondary Education (ii) Improve the Quality of Lower Secondary Education (iii) Enhance the Enabling Environment

Major investments in:
• Civil works ($92 million)-
• Supply of textbooks and science kits (approximately $20 million)
Preparation for implementing civil works through school based contracts

- Training of 7 members of the SMCs in procurement, financial management, and civil works supervision
- Detailed manuals and guidelines to complement the training
- Independent supervision firms
- Capacity of MoES’ construction management unit strengthened additional engineers, vehicles, budget for supervision
Challenges in Implementation

- Large number of schools (originally planned 759, revised to 659)
- Decentralized school based contracting
- Heavy reliance on firms contracted for supervision
- Implemented through MoES’ existing structures
- Inordinate delays within MoES (responsibilities dispersed among many agencies; seniority issues, hierarchy, checks and balances)
- Governance challenges due to large number of contracts
- Limited use of learning materials
Team Response to challenges

Options explored to inject transparency

• Notification through newspapers on: (i) status of school civil works and (ii) provision of learning materials to schools
  - Although effective for spreading awareness but was extremely expensive
• Began to explore ICT options/solutions.
Why ICT?

Enhance efficiency of MoES by providing a single-stop instrument to:

• Monitor progress of construction
• Provide visual images to assess quality
• Monitor number and frequency of visits by supervision firms as well as Ministry officials
• Generate awareness/obtain feedback from beneficiaries on use of learning materials
Why Taarifa/ComCol?

• Was already being used in Uganda by Ministry of Local Government with Bank technical expertise
• Was adaptable to education/project context and flexible for further adaptation
• Is based on open source technology making it free of cost
• Uganda has extensive and expanding mobile technology with decreasing costs of smartphone use
ComCol in UPPET

• Immediate goal: strengthen capacity of MoES to monitor progress and quality of on-going construction in 659 schools supported under the UPPET project

• Provide basic information for each school
  • Administrative: Head teacher, number of teachers by subject, enrollments disaggregated by gender;
  • Financial: funds released,
  • Quality: retention rates, pass rates, learning outcomes (high performing, low performing, etc.)

• Eventually: Put all schools and teacher training institutions on open portal (www.UgandaSchools.net)
What is Taarifa/ComCol?

- Smartphone-based platform for improved M&E and accountability:
  - Real-time monitoring mechanism for data capture
  - Participatory tracking of project impact/progress/irregularities
  - Service complaint/comment submission mechanism
  - Tool for placing ‘pressure points’ on authorities for action
  - Sector neutral
**STEP 1:** Using Smartphone, users capture data, Photo(s), and GPS coords.

**GPS coordinates automatically captured**

1. **Step i:** Select Appropriate form type to fill
2. **Step ii:** Fill relevant Questionnaire
3. **Step iii:** Upload photo(s)
4. **Step iv:** All form data + GPS coordinates + Photo(s) transmitted upon submission

Zero costs to tool usage: Requires No Mobile internet
Once verified, Reports become immediately viewable to all on a Website

Depicts where each report was generated

Categories are Customizable: Can add/delete/modify any category
New Email

From:
school@ugandaschools.net

To:
chris.kisinde@gmail.com, sbrar@worldbank.org, im

Subject:
Report for urgent attention

Message:
Please view the report here<br>
http://ugandaschools.net/index.php/reports/view/351
Sample Data Visualization

**Visualize Report Data**

1. **Select Chart Type**
   - Pie

2. **Customize Data**
   - Data Set1: Count of Report
   - Data Set2: Category

Pie Chart:
- Taarifa
- Laboratory - Yes: 21.7%
- Laboratory - No: 9%
- Schools...: 20.1%
- Problem...: 7.6%
- ERT Proj...: 10.5%
- Furnishin...:
Why U-report for monitoring use of learning materials?

- Technology was available and in use in Uganda by UNICEF
- An existing pool of 236,000 U-reporters built by UNICEF
- Seemed appropriate for obtaining feedback from students, teachers and parents whether textbooks and science equipment was being used in teaching
- UNICEF allowed use of technology free of cost
What is U-report?

• U-report is a free mobile SMS tool that registered citizens, in particular the direct beneficiaries of development programs, can use to report on what is happening in their communities by establishing a vibrant two-way flow of communication.

• U-report can also be used to deliver vital information to the reporters on issues related to projects and programs.
Identification of U-reporters

• Using the U-reporters data base 196,783 people were polled to identify those either attending or having a child who attends a lower secondary school
• 31,187 positive responses were received
• Of these 7975 respondents were matched to schools that had received textbooks and science kits
• These were then further polled to be identified as: students, parents, teachers
U-report Polls

• Four polls were conducted over 4 weeks targeting each category of respondents. example:

| Students: Hello U-reporter! Have you used any textbooks in the classroom in the last 5 days? Please reply with Yes/No |
| Thank you for your response. Last week, 60% of students said they used textbooks in class and 34% said they did not. |
| Parents: Hello U-reporter! The school where your child studies received textbooks. Has your child borrowed any textbooks from school to use at home in the last 5 days? Reply with Yes/No |
| Thank you for your response. Last week, 24% of parents said their children borrowed textbooks from school and used them at home and 66% said they did not. |
| Teachers: Hello U-reporter! The school where you teach from received textbooks. Have you used any textbooks in the classroom in the last 5 days? Please reply with Yes/No |
| Thanks a lot for your response. Last week, 59% of teachers said they used textbooks while teaching and 30% said they did not. |
U-report experience

• Discrepancies in responses from different beneficiaries and stakeholders
• Although limited in scope, this initiative has the power of speaking directly to beneficiaries (in this case over 2,000) at a relatively low cost to obtain feedback/gather information and take timely corrective measures.
• With refinements, U-report could add much greater value
Advantages of applying ICT strategies in M&E

- Invaluable role in prioritization of issues
- Provide in-depth & real-time snapshot of project performance in a resource-constrained environment
- Place pressure points on authorities for quick action
- Injects transparency, improves governance
- Forces accountability
- Motivates badly performing contractors and schools
Lessons Learned-Technology

• First identify issues to be addressed, then identify the technology
• Identify appropriate technology tools that can be adapted to address specific needs
• Technology is only a tool- it has its limitations
• Technology adoption is easy due to widespread mobile networks and improving access to internet
• Technology tools have evolved and continue to do so making it easier to adapt and use anywhere
Lessons Learned- Institutional

• Ownership from Government is a pre-condition
• The tool may be adapted to Government’s readiness to make information public
• Focal persons within M&E who have capacity to manage and analyze data and coordinate remedial responses
• Incentivizing actors is necessary
• How to realize the virtuous ‘self-enforcing’ cycle?
Lessons learned- Implementation

• For best results, and optimum utilization, the tool should be incorporated in projects at design stage
• Should be seen as complementary to and integrated within the M&E frameworks
• Should not be reduced to another data collection source but should drive response to remedy issues for which the tool is being applied
• Although financial resources required are modest, they should be factored into project costs
• Local technical expertise is essential
Questions?