EDDATA II

Task Orders 2 and 4 Annual Report

Oct. 2006–Sept. 2007

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EdData II Defined

In much of the developing world, a lack of reliable data hinders realistic education policy and decision making. Without good measurements of access, learning, and management factors, local and national stakeholders base their policies on vague or erroneous ideas about the needs of their students and schools. Similarly, international donors lack sound data and many times must make program decisions based on this incomplete and unreliable information.

EdData II, sponsored by the United States Agency for International Development (USAID), provides survey expertise to help national and local governments as well as the donor community to assess their education status and to design methods for improvement. Project advisors collaborate with USAID Missions, other donors, and stakeholders to find innovative and cost-effective ways to gather and analyze education data. They can then jointly establish relevant benchmarks that help governments, teachers, and parents or guardians provide meaningful education for their children.

The project offers diverse services such as school-based, household, and national surveys. Rapid assessments can examine student-focused issues such as literacy, the education needs of orphans and vulnerable children, and gender disparities. They can also measure school and district management capacity, highlight education needs as perceived by the business sector, and reveal potentially useful applications for information and communications technology (ICT).

The purpose of Tasks 2 and 4

The intent of both Task 2 and Task 4 is to allow the design and implementation of a variety of short and targeted research and assessment-related activities, as jointly determined and agreed to annually by the Cognizant Technical Officer (CTO) and the EdData II Project Director. The stated purposes of Tasks 2 and 4 are to develop and assess different models of data collection for educational decision making; to assist USAID/EGAT/ED with furthering its assistance to the field of educational data collection for decision making, particularly with survey options and their applications; and to promote the use of educational data collection for decision making by USAID Missions. The task order specifically addresses the achievement of EdData II's Result 2: *Accurate and timely education data collected through the participatory design and implementation of an innovative mix of smaller-scale qualitative and quantitative data collection methodologies.*

Activities

Several activities were planned and carried out in Kenya during this project year. The first was a set of district management assessments. Information from these assessments was anticipated to be used to help identify district capacity needs and to tailor training courses. The second was an Early Grade Reading Assessment (EGRA). The EGRA was to provide a baseline of students' performance in a subset of primary schools. Working with reading experts and in consultation with RTI staff, subcontractor Aga Khan Foundation (AKF) was to work to improve students' reading through one-on-one teacher observations and interventions. Students' reading would be reassessed a year later to evaluate progress made. Resulting student assessment data would be used in the district officers' survey course. The third activity, linked to the first two, was to design education survey workshop to be made available online after being successfully piloted.

Kenya Education Management Capacity Assessment (KEMACA)

The KEMACA was a "census" type survey that assessed national and subnational government ability to implement decentralization of education under the Kenya Education Sector Support Program (KESSP). The survey was carried out at the request of the government of Kenya, with funding from USAID, and executed by RTI International and East African Development Consultants (EADEC), a Kenyan firm specializing in data gathering.[1] At each level, areas of strength or weaknesses with regard to capacity (in particular skills), and rating of own performance on "objective" performance indicators, were assessed—in short, all the key capacities needed to run an education system.

Such an assessment would, among other things, help make it feasible to consolidate the gains made in various reforms in the sector, including free primary education (FPE). It would enable the government to establish what districts were least well equipped and hence deserved the most funding or capacity-development effort in general. It also would give the government a profile of which capacities were most lacking across all districts, and hence would require the most technical development in terms of courseware and training provision. By undertaking this capacity-assessment exercise, the government would become aware of the current levels of certain key performance indicators and whether they were related to levels of poverty and self-assessed capacity.

The survey was designed in late 2006 and early 2007, and carried out in early 2007. The final report was finalized and submitted to both the Ministry of Education and USAID during the summer of 2007. The following are the major milestones in the implementation of the KEMACA survey.

1. Analysis of education policy framework: Relevant policy documents were analyzed by RTI and EADEC between October and early December 2006. For example, the KESSP was carefully reviewed for its implications for capacity building. The constraints and issues identified in the literature review formed the basis for the draft survey instruments.

   Result(s): The education policy framework was analyzed, synthesized, and used to inform the design of draft survey instruments.

2. Development of draft instruments: A set of draft survey instruments was developed and became the foundation for a three-day, seminar-type discussion with education stakeholders in mid-December 2006. The aim of the seminar, which included participants from RTI, EADEC, Kenya Education Staff Institute (KESI), the MOE, Kenyan consultants, and counterparts, was to review and revise the draft survey instruments as well as to generate ownership and understanding of the survey and its potential use in capacity building.

   Result(s): (a) Draft instruments were developed, discussed, and improved by working together with the relevant stakeholders, and (b) government ownership and understanding of the survey was generated.

3. Pilot testing of draft instruments: Following the abovementioned stakeholder workshop, in close collaboration with RTI, EADEC finalized the survey instruments, which were then piloted in six districts in January 2006. The districts were of two categories. One category was used for *quantitative* assessment of the draft instruments, and the other for *qualitative* assessment.

[1] RTI competitively selected EADEC to implement a mostly quantitative survey of officials at all levels of government.

Important information and insights into the appropriateness and quality of instruments (such as clarity of questions, length of instruments, scheduling of instruments with the district offices, etc.) were gathered during the pilot. At this stage, participation from KESI was emerging as two KESI officers joined the pilot effort. They also provided valuable inputs into the finalization of draft instruments.

Results: (a) The instruments' reliability and validity were confirmed; (b) the capacity of the KESI officers to administer the instruments improved.

4. Revision and finalization of the instruments: Following the pilot-testing exercise, EADEC, with the support from RTI, KESI, and other government officers, finalized the instruments during January 19–26, 2007.

   Result(s): Six different instruments were prepared, each for a particular educational management level—except at the school level, for which there were two instruments. The instruments were designed for the Ministry headquarters (National Questionnaire), Provincial Education Offices, District Education Offices/Municipal Education Offices, Divisional Education Offices, zonal educational offices, the school head, and key teachers. The final set of instruments was completed on January 29 and subsequently approved by the Ministry.

5. Recruitment, training, and deployment of field enumerators: In the last week of January, 40 interviewers were selected and trained. They were deployed to the field on February 21. There were eight teams, each consisting of four interviewers and one supervisor. Four KESI staff participated in the training as well as joining several teams during the data collection.

   Result(s): (a) The capacity of 40 researchers improved; (b) the skills of four KESI officers improved.

6. Development of data entry program and training of data clerks: EADEC staff developed a data entry application with CSPro 3.1, the software package used for all of the instruments in the survey. This software was chosen for its user-friendly interface that enabled accurate data entry. EADEC recruited six data entry clerks and one supervisor for the overall data entry step. They were trained on how to edit instruments in order to identify gaps, and how use CSPro 3.1. The supervisor was made responsible for ensuring that data entry clerks correctly edited instruments, collected missing information, and entered data into the data entry application. Data entry for all instruments began on March 23 and was completed on May 15, 2007.

   Result(s): (a) Data entry software and quality checks were developed; (b) data entry was completed on time.

7. Qualitative assessment: RTI recruited an international expert to conduct a number of qualitative research interviews with education officers at the national, district, and school levels. The international expert assessed both institutional capacities and skills of education officers at these levels. The expert reported both findings and recommendations on how the identified gaps and deficiencies could be mitigated and overcome by future capacity-building efforts or, importantly, by making organizational improvements and assessing the issue of quantitative imbalance (numbers of staff at central level vs. subnational levels). The qualitative assessment interviews took place in the first two weeks of March 2007.

   In addition, EADEC senior staff carried out quantitative research interviews with the national-level education officers in the last week of March 2007. The interviews covered the senior

officers of the four directorates: Policy and Planning; Basic Education; Higher Education; and Quality Assurance and Standards. It also covered support departments: Procurement, Finance, and Accounts. The findings of these interviews were incorporated into an assessment report.

Result(s): A report on the qualitative assessment of capacity needs across different levels was written and used in preparing the final survey report.

8. Data analysis and report writing: EADEC began data analysis on May 16 and the first draft of the report was ready by June 1. The draft report was then shared with RTI staff, who reviewed the draft report and conducted analyses. The analyses were done by using STATA9 statistical software and Excel. Between June and August 20, a number of revisions were made to the draft report.

   Result(s): (a) Early drafts of the report were shared with USAID/Washington and USAID/Kenya in August 2007, and (b) the final version of the report was submitted to USAID and the government on Kenya in the first week of October.

9. Dissemination of survey findings:

   Result(s): EADEC presented a final version of the report on October 1 during the Joint Donor Meeting Review.

   Result(s): The final report was submitted to the MOE.

Education survey course

RTI developed the education survey course materials in September 2007. The aim of the course material was to teach the most basic skills for monitoring progress on various learning indicators. By the end of the workshop, participants would be able to both design and implement a survey (including all steps from constructing a budget needed to implement the survey to writing and disseminating the survey results). The Kenya Early Grade Reading (EGR) project and analyses were used as an example, but skills taught to the participants could be used in other contexts as well.

Result: The course was to be piloted shortly after this annual reporting period, in November 2007. It was expected that as a result of the workshop, the skills of some Education for Marginalized Children in Kenya (EMACK II)[2] officers would be built so that the courses could be integrated into and used in their work with districts in the EMACK II target areas. Additionally, the course was to be shared with relevant stakeholders at the national level, such as KESI, and the Education Management Information System (EMIS) and Quality Assurance and Standards (QAS) units of the MOE. Possibilities for its future use were discussed.

Kenya Education Staff Institute

KESI was singled out by the MOE to be both the key repository of the knowledge derived from the abovementioned activities and the key central government agency tasked with absorbing the methodologies used in doing this sort of activity. It was anticipated that through its involvement in learning by doing in the capacity-assessment exercise, KESI would have officers able to spearhead other

[2] EMACK II is a USAID-funded project whose implementation is led by the Aga Khan Foundation (period of performance January 2007–October 2010).

related activities in training needs assessment, evaluation of training programs, and performance management in the education sector. As a part of the agreement between the Ministry and USAID/Kenya, funding for KESI's involvement in EdData activities was provided through a contract between RTI and KESI.

At the outset of the KEMACA survey, RTI and EADEC worked hard to ensure the needed involvement of the KESI representatives. Although incremental at the beginning, KESI's interest in—and more importantly, support for—EdData activities grew stronger every month, beginning with the early stages of the KEMACA survey (more specifically with the pilot test of the instruments in early January 2007). The extent of their involvement is best illustrated by the fact that KESI began sending more and more officers to accompany the EdData activities. For example, KESI sent four officers to accompany the first EGR baseline assessment that took place in July 2007.

KESI representatives indicated on a number of occasions that the EdData activities were very important to their capacity-building efforts. These statements were shared through both e-mail and oral discussions. One intent of the course in education survey design and implementation was to further solidify the relationships with KESI. Other activities planned under Tasks 2 and 4 will serve this purpose as well.

Early Grade Reading Assessment

Another activity of EdData II Tasks 2 and 4 is the Early Grade Reading Assessment and intervention. The EGRA tool is a limited but scientifically rigorous and well-informed instrument to help assess needs for reading improvement, develop remedial interventions, and measure the results. The working hypothesis is that such an intervention can be designed, implemented, and tested within the period of one year (may need to span more than one calendar year). In addition, in Kenya, RTI proposed to document the results and incorporate them into training on the use of simple assessment and statistical techniques in quality monitoring.

The Kenya EGR activity targeted approximately 40 schools—20 treatment and 20 control schools. Reading was assessed in both treatment and control schools using a specially developed reading assessment instrument. Teachers in the treatment schools were trained and were to be supervised with a given number of days of support each over the year, using a set of EdData remedial or improvement interventions. At the end of the EGR activity, reading was assessed in both treatment and control schools and results compared. (In addition, teachers were urged to use the instruments themselves over the year and were to be assisted with this classroom-based assessment.) Anticipated outputs of the EGR activity are:

- EGR assessment tools appropriate to EMACK II schools developed;
- Remedial interventions planned and applied;
- Teachers in treatment schools exposed to EGR assessment and intervention;
- Experience documented and captured on the use of surveys and statistics and made available to the community at large.

The EGR activity officially started in April 2007 and the following activities had been completed by September 30, 2007.

1. Design of EGR assessment instruments: On April 23–27, 2007, RTI organized the first EGR workshop with the objective to assist Kenyan education experts in the development of draft EGRA tools, one in English and one in Kiswahili, for grades 1–3. At the end of the workshop, at a meeting between RTI and AKF in Nairobi on May 2, the partnership between RTI and Aga Khan Foundation was clarified and the following was agreed: (a) that RTI would conduct external

reading assessments and provide technical assistance in development of both reading assessment instruments and pedagogical intervention protocols, as well as teaching a course in education survey design and implementation; and (b) AKF would implement the teacher training interventions as a part of the EMACK II project.

2. Baseline data collection: RTI contracted with EADEC to conduct two external reading assessments (the first in July 2007 and the second in July 2008) of 20 second graders in 20 treatment and 20 control schools. The rationale behind choosing second graders for testing was that pupils in pre-unit, class 1, and class 2, would benefit from the extra EGR help. Given that pupils in grade 1 would be receiving reading improvement interventions for a whole year, it would be possible to detect some improvement in class 2 (after the completion of year 1) by 2008, even after the first round of interventions. The full effects would not be felt until 2009, however. This contract does not cover 2009 but it is possible that USAID would fund a further assessment at that point.

   As noted above, KESI showed continued interest in participating in the EGR project by allowing four officers to accompany the baseline survey. The officers accompanied the data collection teams and in the end provided a report on a number of qualitative issues. These inputs were incorporated into a final report.

   The baseline data were collected in the last week of July 2007 and submitted to RTI on August 2, 2007. RTI developed the first draft report and shared it with EMACK II, USAID/Kenya, and USAID/Washington on August 20, 2007. The second, improved draft report was shared with the EMACK II project team on September 27, 2007.

   Lesson learned: Some of the schools that were randomly selected were inaccessible due to a need to cross swamps and had to be replaced with other schools that were a bit further away. Additionally, there was a need to garner the district government's ownership, which required more time from the EADEC senior staff member. Finally, there was a need to include more supervision time. Altogether, the original budget for the baseline activity was insufficient to perform all of the necessary tasks. This lesson learned will be taken into account for the next round of data collection as well as for adjustments to be made to the first data collection baseline.

3. Design of remedial interventions: RTI extended a contract to an international early grade reading expert, Sylvia Linan-Thompson, in order to assist EMACK II with the design of the remedial intervention. A workshop took place August 27-31, 2007, during which sequences for both the English and Kiswahili languages were designed. Following this step, 45 lesson plans for English and 27 for Kiswahili were developed. The lessons were developed along a continuum beginning with letters and ending with more complex phonics elements such that students could be placed in the appropriate lesson regardless of grade. Additionally, the steps for student progress monitoring, fidelity of implementation, and teacher training implementation were discussed.

   Lesson learned: RTI found that the design of remedial interventions for two languages, Kiswahili and English, as well as development of teacher training and strategies for assessment of learning progress, deserved more time than had been allotted (the workshop took place during one week—i.e., five working days).

4. Finalization of remedial interventions: After the remedial interventions workshop, EMACK II project staff finalized the lesson plans for both languages. The English lessons were reviewed and improved by RTI's EGR consultant, Dr. Linan-Thompson, by September 15, 2007. The EMACK II project team informed RTI that the Kiswahili lessons plans, plans for teacher training

and learning assessment, and assurance of district support for EGR would be completed during September 2007.

5. Next steps: Implementation of the remedial intervention was planned for the next project year, in January 2008.