

CLASSROOM BASED EARLY GRADE READING ASSESSMENT: A FRAMEWORK

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Classroom Based Early Grade Reading Assessment: A Framework

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Classroom Based Early Grade Reading Assessment: A Framework

Written by:

Dr Lekha Nath Poudel

Reviewed by:

Dr Parasmani Bhandari (Professor)

Dr Binod Luitel (Associate Professor)

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Preface

Government of Nepal has been implementing Early Grade Reading Programme focusing on developing reading skills of the students of grades 1 to 3. As early grade reading is the foundation for student's future educational outcomes, a high priority is needed to be given in developing early grade reading skills of the students. Along with implementing early grade reading Programme, as a stretch indicator for GPE, the Government of Nepal, Ministry of Education has agreed to conduct group administered early grade reading assessment (Classroom Based Early Grade Reading Assessment) at 2600 schools in 2017 and at 3000 schools in 2018. The responsibility of conducting CB-EGRA has been given to Education Review Office (ERO).

In this context, ERO has developed a framework for CB-EGRA including defining the contents (reading skill) domain and methodological framework that guides the tasks of tool development, test administration, reporting and dissemination. This framework is developed by reviewing the objectives, domain and process of Early Grade Reading Assessment as well as Group Administered Literacy Assessment (GALA). The difference between EGRA and CB-EGRA has been clearly articulated while developing this framework. CB-EGRA has been developed with the interest of designing formative tools to provide feedback for classroom practice on reading skill development rather than focusing on external and evaluative tools to provide feedback for policy improvement as in Early Grade Reading Assessment (EGRA).

This framework is the product of a number of conceptual discussions, reviews of the relevant international and national practices, preliminary workshops on tools development and feedback from the experts. Development of this framework and preparation for CB-EGRA and development of tools went side by side, and therefore they reinforced each other. However, this framework has been finalized before finalizing the tools for CB-EGRA. In this way, this document is developed with the inputs from the experts from RTI and NEGRP as well as national experts and stakeholders who participated in various workshops. For this, ERO expresses sincere thanks to all persons who directly or indirectly contributed in developing this document.

We welcome constructive suggestions and feedback to improve this framework.

Dr Lekha Nath Poudel

Joint Secretary

Education Review Office

2017, January

Contents

| | |
|---|----|
| 1. Introduction | 1 |
| Need for Group Administered Literacy Assessment | 1 |
| EGRA, GALA and CB-EGRA..... | 2 |
| Context and Objectives of CB-EGRA in Nepal..... | 5 |
| Assessment Cycle | 6 |
| Future Direction of CB-EGRA..... | 7 |
| 2. Content/Skill Domain..... | 8 |
| 3. Methodological Framework: Assessment Design | 9 |
| Sample | 9 |
| Preparation of Tools and Guidelines..... | 10 |
| Preparation for CB-EGRA Administration | 11 |
| Data collection/survey administration | 12 |
| Data analysis, report preparation and dissemination | 12 |
| References..... | 13 |

Abbreviation

| | |
|---------|--|
| ACER | : Australian Council for Educational Research |
| CB-EGRA | : Classroom Based Early Grade Reading Assessment |
| DEO | : District Education Office |
| DLI | : Disbursement Link Indicator |
| DTOT | : District Training of Trainers |
| EGRA | : Early Grade Reading Assessment |
| ERO | : Education Review Office |
| GALA | : Group Administered Literacy Assessment |
| GPE | : Global Programme for Education |
| MTOT | : Master's Training of Trainers |
| NEGRP | : Nepal Early Grade Reading Programme |
| RC | : Resource Centre |
| RTI | : Research Triangle International |
| SSDP | : School Sector Development Programme |

1. Introduction

It is evident that early reading skill is the foundation for student's future educational outcomes. Realising this fact, several education systems around the world have given a high priority to improve early reading skills of students. Designing effective teaching learning materials, improving classroom teaching and assessing students' reading skills are three key areas of intervention for improving students' reading skills. As assessment is a key intervention for improving reading skills, there are several purposes of conducting early grade reading assessment. We conduct reading assessment with the purpose of identifying the students who are at risk of reading difficulties – screening, determining whether a student is making progress, progress monitoring, and providing teacher with in-depth information on students' skills in particular area of reading. Similarly, one of the purposes of assessment is to assess the overall effectiveness of school's reading programme and curriculum – measuring the outcomes. Various types of informal as well as formal assessment tools have been practiced to assess the reading skill of students. However, assessment tools need to be determined based on the purpose of assessment as well as type of task or reading skill to be assessed.

This framework document includes content framework (domain to be assessed) and methodological framework for CB-EGRA to be conducted at 2500 schools in 2017 and at 3000 schools in 2018 respectively. It begins with some introductory discussions including the discussion on the need for Group Administered Assessment, conceptual discussions on EGRA, GALA and CB-EGRA as well as their comparison, context and objectives of CB-EGRA in Nepal and proposed CB-EGRA assessment cycle. Second section of this document presents contents/reading skill domains to be tested in CB-EGRA. The third section presents methodological framework for CB-EGRA to be conducted in 2017 and 2018. This framework is a guideline for assessment in which, except some basic assumption, other process and activities may be updated during the assessment.

Need for Group Administered Literacy Assessment

Most of the international large-scale assessments have been administered in grade 4 and above. For grade 3 and below, school based and classroom based assessments have been practiced traditionally. Early Grade Reading Assessment (EGRA) for grades 1, 2 and 3 have been designed and implemented with the focus of basic reading skills in 2006 (RTI,

2011). "The original purpose of the EGRA instrument was to carry out sample-based national- or system-level diagnostic measurement. It aimed to examine gaps in reading competencies among students to inform education ministries and partner agencies regarding system needs for improving teacher professional development and pre-service programmes." (ACER, 2012)

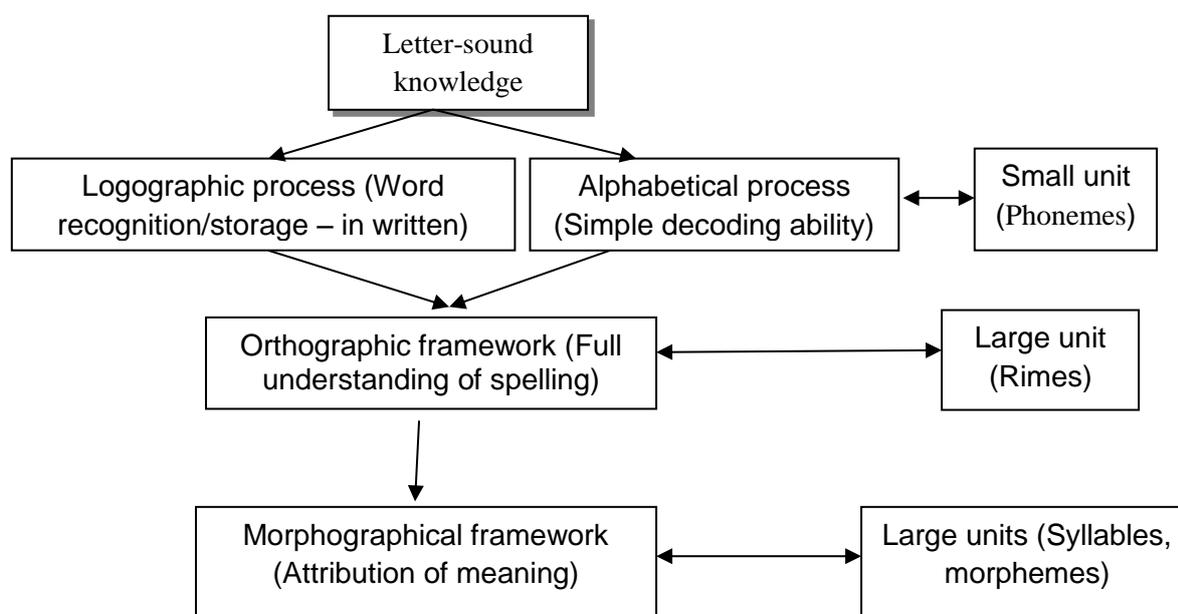
However, EGRA is a sample based assessment generally concentrated on system level feedback; therefore the need for an alternative assessment has been realised, particularly focusing on the improvement of classroom teaching and learning. Moreover, EGRA is conducted individually, which is time consuming and costly; and therefore Group Administered Literacy Assessment (GALA) has been designed to assess early reading skills of students. Classroom Based Early Grade Reading Assessment (CB-EGRA) planned for the students of grade 2 and 3 in Nepali public schools is also a group administered literacy (early grade reading) assessment.

EGRA, GALA and CB-EGRA

Three types of assessment (EGRA, GALA and CB-EGRA) are basically designed to assess reading skills in early grades. However, each has some overlapping as well as some distinct methods, process and tools. The following paragraphs briefly describe these assessments.

Early Grade Reading Assessment (EGRA)

EGRA is a tool developed to assess students' reading skills in grade 1 to 3. "The early grade reading assessment (EGRA) is one tool used to measure students' progress toward learning to read. It is a test that is administered orally, one student at a time. In about 15 minutes, it examines a student's ability to perform fundamental pre-reading and reading skills" (RTI, 2011). This assessment is not a traditional type of group test; rather it is an individually (one student at a time) and orally administered reading test. In EGRA, assessor records individual student's response, using an electronic device in most cases. The assessment domains are set on the basis of the following understanding regarding various stages of reading skill development:

Figure 1: Stages of reading skill development

(Adopted from Seymour et al, 2003 and RTI, 2011)

Based on the above stages and framework of early reading skill development, EGRA assesses the following five areas of early reading skills:

1. Phoneme – the ability to differentiate linguistically distinctive units of sounds allowing for differentiation of two words within a specific language;
2. Phonics – the ability to understand and apply the knowledge of how letters are linked to sounds (phonemes) to form letter-sound (grapheme-phoneme) correspondences and spelling patterns;
3. Fluency – the ability to read orally with speed, accuracy, and proper expression;
4. Vocabulary – the knowledge of word-meaning in both oral and printed forms; and
5. Comprehension – the ability to derive meaning from the texts they read.

The following table elaborates the above 5 areas of early grade reading skills, corresponding to the sub-task and their measurement in EGRA in the Nepali language:

Table 1: Early grade literacy skill and sub-tasks for EGRA

| Early literacy skill | sub-task |
|---|--------------------------------|
| Alphabetic knowledge | Letter-sound knowledge |
| Matra knowledge | Matra (or syllables) knowledge |
| Phonic/alphabetical principles | Nonwords decoding |
| Fluency | Oral passage reading |
| Comprehension (i) Reading (students read and recall) (ii) Listening (facilitator reads and students recall) | Oral recall |

GALA and CB-EGRA

Group Administered Literacy Assessment (GALA) has been designed to simplify the administration of Early Grade Reading Assessment by administering the test in a group of students at a time. Assessor reads the question and text, and student gives response based on the reading in an answer sheet. "The GALA was designed to maximize the benefits of a group-administered instrument, while also taking advantage of lessons learned from the individually administered Early Grade Reading Assessment (EGRA)." (RTI, 2016). RTI (2016) further states that "It limits administration time; can be administered with minimal training; has a simplified scoring system; is based on a previously validated tool; assesses a full range of early grade literacy skills; does not rely on passage reading; and can be adapted for new contexts and languages."

As mentioned in RTI (2016), GALA:

- limits the time of administration to approximately 45 minutes for a full classroom assessment;
- can be administered with minimal training;
- has a simplified scoring system;
- is based on a previously validated tool;
- assesses a full range of early grade literacy skills;
- does not rely on reading of passage; and
- can be adapted for new contexts and languages.

CB-EGRA is also a group administered literacy assessment, and therefore it is the assessment with similar design and process as GALA. In the context of Nepal GALA has been renamed as CB-EGRA. However, CB-EGRA will give more flexibility to adopt local context. The following table compares EGRA and CB-EGRA:

Table 2: Comparison of EGRA and CB-EGRA

| S. No | Area | EGRA | CB-EGRA |
|-------|---------------------------------|---|--|
| 1 | Purpose | <ul style="list-style-type: none"> To assess reading competencies by external agencies To inform policy and programme design For national comparisons | <ul style="list-style-type: none"> To assess reading competencies by teachers To inform school, parents and the local government about the status of students' reading For school, RS or local/district comparison, but not for national comparison |
| 2 | Process | <ul style="list-style-type: none"> Individual assessment Sampling is highly structured and is nationally representative Independent (third party) assessment Closed process with no internal participation | <ul style="list-style-type: none"> Group assessment Both practices: all children or a sample of children Teacher/Head-teacher -administered SMC or PTA member observes |
| 3 | Tools and Domain to be assessed | <ul style="list-style-type: none"> Standardized tool Measures – phonemic awareness, phonics, vocabulary, comprehension (reading and listening), and writing with accuracy and fluency (correct words or letters per minute) It is not necessarily curricula based test | <ul style="list-style-type: none"> Standardized assessment Measures – reading skills in phonological awareness, Ghraphophonic awareness, vocabulary, comprehension (only listening) and writing, but it does not measure fluency and pronunciation Curricular-based |

Context and Objectives of CB-EGRA in Nepal

EGRA has been designed as the reporting tool of USAID-supported Nepal Early Grade Reading Program (NEGRP) in Nepal. However, along with reporting as well as evaluation tools for NEGRP, it also informs policy and programme design and compares results at national levels with some disaggregated forms. Three EGRAs have been planned during the NEGRP period (base line, mid-line and end-line).

CB-EGRA is not a part of NEGRA agreement, and there has been no formal discussion at the Ministry of Education, but it came through GPE stretch indicators and agreed as a Disbursement Link Indicator (DLI) of School Sector Development Programme (SSDP). The task of conducting CB-EGRA at 2600 schools in 2017 and at 3000 schools in 2018 has been assigned to Education Review Office (ERO). This framework document has been developed to design and administer CB-EGRA in 2017 and 2018.

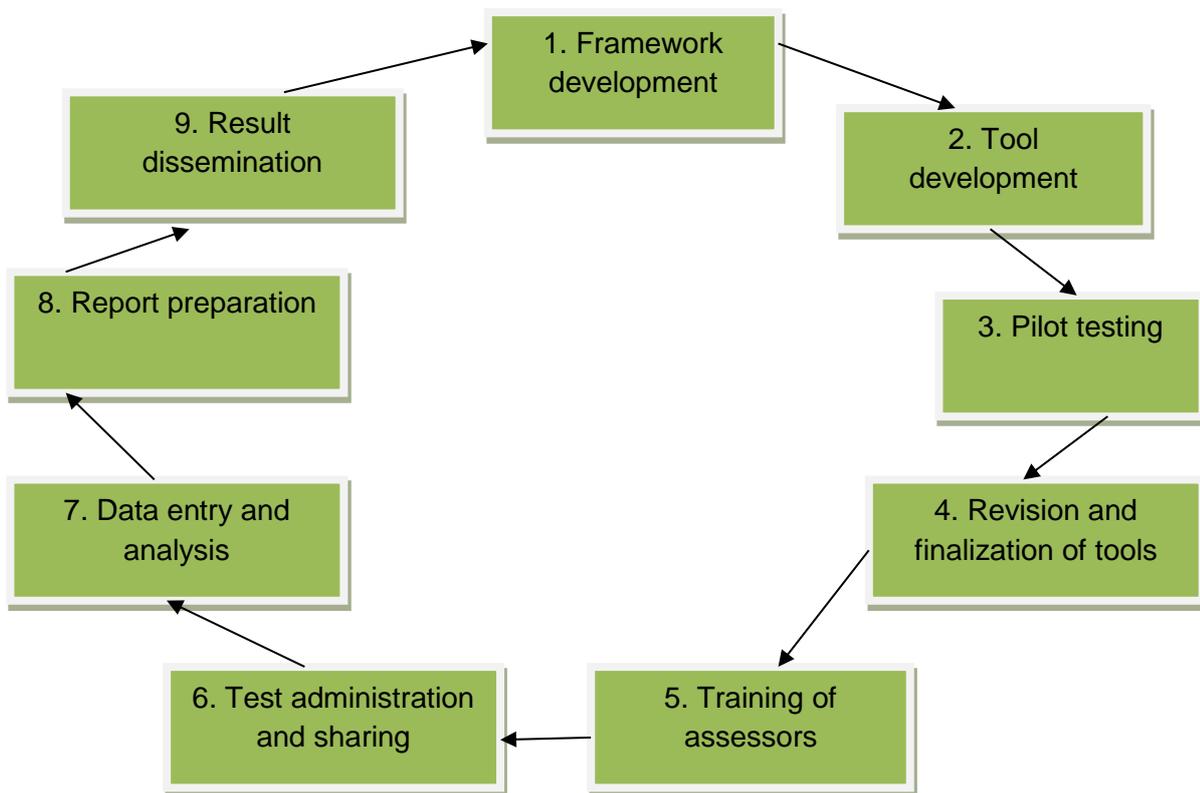
CB-EGRA will be administered using standardized tools, conducted by trained assessors (teachers of the same school), and its administration will be observed by parents; and then the results will be shared to the parents immediately after the completion of test.

The objectives of CB-EGRA are as follows:

1. To provide feedback to schools, parents, students and local authorities on early grade reading skill of students.
2. To identify the domains having low and high achievements.
3. To find out the average reading assessment score of students of grade 2 and 3 in the selected districts.
4. To develop the capacity of schools and teachers in conducting CB-EGRA and to integrate it to the regular system of continuous assessment as a formative assessment tool.
5. To fulfil GPE stretch indicator (SSDP-DLI) related to Early Grade Reading Assessment (classroom based).

Assessment Cycle

The assessment cycle begins with the development of assessment framework and continues with developing tools, piloting and revising the tools, training of assessors, administration of test and sharing of results, data entry and analysis, report preparation, and dissemination of results. The following figure shows the steps of cyclic process of CB-EGRA.

Figure 2: CB-EGRA administration Cycle

Future Direction of CB-EGRA

The reason beyond conducting CB-EGRA is to assess students' reading skills by incorporating relevant contextual adjustments in tools and process. It involves relatively flexible tools aprocess than those of EGRA with the formative purpose that is with the purpose of improving classroom delivery. However, proposed centrally administered CB-EGRA may not have sufficient space to utilise it as formative tools to improve classroom practices. Therefore, it would be more appropriate to develop CB-EGRA as a tool to be utilized by classroom teachers to assess students' reading skills regularly so that the results of assessment could be used as the feedback to improve students' learning. The learning of these two rounds of CB-EGRA could be employed to develop and implement CB-EGRA as an effective formative tool for improving early grading reading skills of students. For this, some revisions and adjustments may be required on assessment process, assessment cycle as well as methodological framework. However, such adjustments are not the scope of this document.

2. Content/Skill Domain

The content domains for Classroom Based Early Grade Reading Assessment (CB-EGRA) have been adopted from the five domains of early grade reading skills: Phonemic awareness, phonics, fluency, vocabulary and comprehension. However, fluency is not possible to assess through group testing like CB-EGRA and therefore fluency has been dropped and writing has been added to the content domain. Similarly, some of the sub-tasks within the four domains also differ between EGRA and CB-EGRA. Skills domain and sub-tasks are basically adopted from GALA with some adjustment of the local context of Nepal, particularly with the nature and structure of the Nepali language. With this, the following content domains and sub-tasks have been suggested for CB-EGRA to be conducted in 2017 and 2018. For the purpose of CB-EGRA within the five skill (contents) domains, ten sub-tasks have been identified.

Table 3: Reading skills (content domain) and sub-task for CB-EGRA

| S. No. | Reading skills (Content domain) | Grade 2 | | Grade 3 | |
|--------|---|---|--------------------------------|---|---|
| | | Sub-task | Time | Sub-task | Time |
| 1 | Phonological awareness | - Letter and Matra identification | 2-4 min | -Letter and Matra identification | 2-4 min |
| 2 | Grapho phonic awareness | - Familiar words recognition | 3-4 min | - Familiar words recognition -Sentence reading | 2-4 min 3-5 min |
| 3 | Comprehension | - Listening comprehension - Reading comprehension - Calendar reading | 3-5 min 4-6 min 4-5 min | - Picture describing -Poster reading - Listening comprehension - Reading comprehension - Calendar reading | 4-5 min 4-5 min 4-5 min 4-5 min 3-4 min |
| 5 | Vocabulary | - Selecting the correct words - Matching the correct words - Separating correct words | 4-6 min 4- 6 min 4-6 min | - Selecting the correct words - Matching the correct words - Separating correct words | 2-4 min 3-5 min 4-6 min |
| 6 | Writing (Assessor reads and students write) | - Dictation | 4-6 min | - Dictation | 4-6 min |
| | | Total time | 40-46 min | | 40-48 min |

3. Methodological Framework: Assessment Design

The design of the assessment will be quantitative. Survey method will be adopted to collect assessment data. Data will be collected using assessment the questions that are prepared using the standard procedures.

Sample

For the first round, i.e. for the assessment of 2017, first of all 11 districts among 75 districts will be selected for assessment representing three ecological zones (Mountain, hill and Tarai) and five development regions (Eastern, Mid, Western, Mid-west and Far-west). As the number of schools to be covered by this assessment is fixed to 2600, the selection of districts will also be based on the number of schools in the districts so that there will be altogether 2600 public schools with grades 2 and 3. There are around 3000 schools within the selected districts of which about 2600 schools have at least 5 students in each of the grades 2 and 3. Therefore, 2600 school should be selected for CB-EGRA survey. As this assessment is group administered, the minimum number of students for assessment in each grade should be fixed to 5.

In each of the selected schools and grade, 5 to 20 students can take part in the assessment. It means all the students of the grade will participate in the test if there are 5 to 20 students, whereas randomly selected 20 students will participate in the test if there are more than 20 students in a class. As more than 20 students in a group is difficult for group test using oral questions, 20 students should be fixed as maximum limit.

Table 4: Districts and number of schools for CB-EGRA, 2017

| S. No. | Districts | No. of schools (Tentative) | Remarks |
|--------------|------------|----------------------------|---------|
| 1 | Banke | 300 | |
| 2 | Bardiya | 290 | |
| 3 | Bhaktapur | 115 | |
| 4 | Dang | 370 | |
| 5 | Dhankuta | 190 | |
| 6 | Kanchanpur | 245 | |
| 7 | Kaski | 310 | |
| 8 | Manang | 10 | |
| 9 | Mustang | 10 | |
| 10 | Parsa | 360 | |
| 11 | Saptari | 400 | |
| Total | | 2600 | |

The main purpose of this assessment is to provide feedback to school, teachers, parents, and to compare results locally at school, Resource Centre/local government units, districts, but not the national comparison and setting national standards. So, its nature is rather representative sample type as most of the cases all the schools of the selected area covered by the assessment.

For the second round, i.e., for the assessment of 2018, the number of schools is fixed to 3000. Therefore, the same process will be followed in the selection of schools and students in this round also, provided that those 11 districts where the first round assessment will be conducted are not included for the second round. For the second round, 9 districts among remaining 64 districts are selected for assessment in 2018. Using the same process and logic as in the selection of schools and students in the first round, schools and students will be selected for the second round.

School selection for each round of assessment will be done during the month of July-August in the concerning year of assessment. This will provide more accurate recent data of schools and students.

Table 5: Districts and number of schools for CB-EGRA, 2018

| S. No. | Name of the district | No. of schools | Remarks |
|--------|----------------------|----------------|---------|
| 1 | Taplejung | 290 | |
| 2 | Dhanusha | 350 | |
| 3 | Rasuwa | 100 | |
| 4 | Tanahu | 460 | |
| 5 | Rupandehi | 480 | |
| 6 | Surkhet | 500 | |
| 7 | Dolpa | 100 | |
| 8 | Kailali | 500 | |
| 9 | Dadeldhura | 220 | |
| | Total | 3000 | |

Preparation of Tools and Guidelines

Drafting of tools and guidelines

A 5-10 days workshop of teachers, representative from central level agencies of the Ministry of Education, experts and representatives of various NGOs working in the field of early grade reading will be organised to draft the tools and guidelines for the assessment. Multiple sets of tools are expected to develop by the workshop. The drafted tools and guidelines should be edited and finalized by the subject committee. The tools should cover

reading skills as well as sub-tasks as indicated in the content framework included in this document.

Piloting the tools

Developed tools will be piloted in selected schools and students. Pilot testing should be carried out at least 350 students from randomly selected schools. Data from pilot test will be tabulated and items will be analysed.

Reviewing and finalising the tools and guidelines

A similar workshop of 5-10 days may be required to review and revise the tools and guidelines taking into consideration the results of piloting and item analysis. The revised tools and guidelines should be edited and finalized by the subject committee. At least 4 sets of tools should be prepared, one for study purpose, one for training purpose and other for item baking purpose.

Preparation for CB-EGRA Administration

Assessors' training

As a part of the preparation for CB-EGRA, 2-3 days assessors' training is suggested, most probably a cascade model because a large number of assessors will be needed to conduct the assessment in 2600 schools in 2017 and 3000 schools in 2018.

Master Training of Trainers (MTOT) should be conducted at central level, for about 40 persons. Master trainers will conduct District Training of Trainers (DTOT) at 10 districts. In each district, about 30 participants will participate the training. The DTOT will be conducted by the master trainers trained for the same purpose. About 30 participants will participate in the district orientation in each district. District trainers will conduct the training at Resource Centre (RC) level covering the schools in the RC clustered. Each group of training will set about ten schools with 30 participants.

Three teachers from each school will participate in the training of assessors. The following table presents the summary of cascade model of training for assessors:

Table6: Assessor training

| S. No. | Training level | CB-EGRA 2017 | | CB-EGRA 2018 | |
|--------|----------------|---------------------------|------------------|---------------------------|------------------|
| | | Total no. of Participants | No. of Trainings | Total no. of Participants | No. of Trainings |
| 1 | MTOT | 40 | 1 | 40 | 1 |
| 2 | DTOT | 300 | 11 | 300 | 10 |
| 3 | RC/Cluster | 8000 | 260 | 9000 | 300 |

Data collection/survey administration

After printing and packing, tools will be delivered to each of the resource centres. The trained assessors from each school will receive the tools from RC at the end of the assessors' training. In each school, assessment will be conducted on a fixed date. As in the assessors' guidelines, trained assessors (teachers) conduct assessment. As it is a group assessment, assessor provides the response and activity sheet to each student and reads the questions or demonstrates the activity in front of the students and gives time to respond to the questions and activities in the response sheet. If there are more than 20 students in a grade, assessor should select the student using random sampling method.

When the assessment is over, assessors will mark the answer papers and share the results with the parents and members of School Management Committee (SMC), and then provide a copy of results to the school on the same day so that it can be used when required.

Once the works of test administration, scoring and sharing are completed at school, the data sets should be sent to DEO by the assessor through RCs. Each District Education Office should tabulate the data in Excel sheet and send the complied data to ERO.

Data analysis, report preparation and dissemination

ERO will compile and clean the data received from DEOs. Data will be analyzed using some statistical tools, basically descriptive statistics. Data analysis will be carried out using SPSS software and the results will be presented in diagrammatic and tabular form as deemed appropriate.

A report including aggregate results, comparisons among various sub-tasks and skills will be prepared, most probably by hiring external expert. When the report is finalized, it will be disseminated at central level as well as regional and district levels.

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