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PAKISTAN EARLY GRADE READING ASSESSEMENT 2017

METHODOLOGY REPORT

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METHODOLOGY REPORT

Contracted under Order No. AID-391-C-15-00004

Performance Management Support Contract

CONTENTS

Figures and Tables

ACRONYMS

AJK	Azad Jammu and Kashmir
EGRA	Early Grade Reading Assessment
FATA	Federally Administered Tribal Agencies
GB	Gilgit Baltistan
ICT	Islamabad Capital Territory
KP	Khyber Pakhtunkhwa
MEP	Monitoring and Evaluation Program
MSI	Management Systems International
NEMIS	National Education Management Information System
ORF	Oral Reading Fluency
PERFORM	Performance Management Support Contract
PRP	Pakistan Reading Project
QCO	Quality Control Officer
SRP	Sindh Reading Program
USAID	United States Agency for International Development

BACKGROUND

The purpose of this assignment is to conduct an early grade reading assessment (EGRA) of students at the start of grades 3 and 5. The EGRA is a school-based assessment and survey to support the long-term measurement of improved reading skills as a direct result of the USAID/Pakistan Reading Project (PRP) and Sindh Reading Program (SRP) launched in the 2013-2014 school year. The assessment and survey will take place in all eight administrative units of Pakistan. This assignment will establish the midline for PRP Cohorts 1 and 2, SRP Cohort 1, and light intervention districts. It will also establish the baseline for PRP Cohort 3 and SRP Cohorts 2 and 3 (see Figure 3).

The 2017 EGRA will provide information for counting the number of children with improved reading skills, determining increases in the percentage of children reading at grade level after two years of reading instruction, identifying trends in strong or weak improvement per sub-skill, noting patterns of variance by region, gender, language or other factors, and observing other trends and changes over time. This will inform the implementation of reading programs in Pakistan and their scale-up and sustainability.

The 2013 baseline EGRA provides clear documentation of the initial literacy levels of students in the target beneficiary population prior to receiving any improved reading instruction support. By contrast, the 2017 midline assessment will provide data to inform high-quality monitoring and evaluation at the midpoint for USAID/Pakistan reading-focused activities. The results of the 2017 EGRA will be shared with USAID, PRP, SRP, federal and provincial Pakistani education authorities, donors, and other education stakeholders. The assessment and survey report will inform policy priorities for the scale-up and sustainability of improved reading instruction, and further strengthen the approaches used for teaching reading and training teachers in reading instruction, in both pre-service and in-service training.

In summary, USAID/Pakistan has requested the services of MSI to:

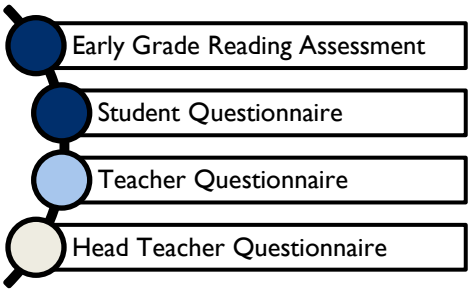
1. Execute an early-grade reading assessment that will measure the change in reading skills of children who received improved reading instruction in schools targeted by PRP and SRP,
2. Provide actuals for the first two Goal One indicators for the first two PRP cohorts and SRP:
    a. Percentage of learners demonstrating reading fluency and comprehension of grade level text at the end of grade-2;
    b. Number of primary school students who show improved reading skills; and
3. Administer a student/teacher/administrator questionnaire in a representative sample of PRP and SRP schools.

DATA COLLECTION INSTRUMENTS

The 2017 EGRA includes four data collection instruments: the early grade reading assessment (EGRA), student questionnaire, teacher questionnaire, and head teacher questionnaire. The EGRA and student questionnaire are administered sequentially to the same students and are printed together in the student response booklet. The teacher and head teacher questionnaires are two separate instruments.

These instruments were developed by MSI's Monitoring and Evaluation Program (MEP) as part of the 2013 EGRA baseline study. The 2017 EGRA content was developed by national and international language experts through a trans-adaptation and piloting process in 2014.[1] The questionnaires were updated by MSI PERFORM in consultation with USAID/Pakistan, PRP, and SRP in February 2017.

FIGURE 1: DATA COLLECTION INSTRUMENTS



The 2017 EGRA assesses the same elements of student literacy that were tested at the 2013 baseline. As summarized in Table 1 below, the EGRA developed by MSI MEP for Pakistan uses eight subtasks to test five reading skills.

TABLE 1: EGRA SUBTASKS

Reading Skills	EGRA Subtasks	Timed?
1. Pre-reading Skills	1. Orientation to Print	
2. Phonemic Awareness	2. Phoneme Isolation	🕒
3. Phonics	3. Letter Name Recognition	🕒
	4. Letter Sound Knowledge	🕒
	5. Familiar Word Reading	🕒
	6. Invented/Non-Word Decoding	🕒
4. Fluency	7a. Reading Passage	🕒
5. Comprehension	7b. Reading Comprehension	
	8. Listening Comprehension	

The teacher and head teacher questionnaires include questions on:

- Student time on task
- Use of instructional materials (core and supplemental) by teachers
- Use of reading/learning materials by students

[1] Pakistan Early Grade Reading Assessment: Guidelines for the Midline and Endline Assessments. Management Systems International and School-to-School International. June 2014.

- Time dedicated to reading instruction per day/week
- School/district assessment of student performance
- Languages spoken at home/mother tongue
- Materials read at home: newspapers, books, etc.
- School/classroom library available – how often used by class/students?
- Teacher observations – by whom? How often?
- Training offered on reading instruction

The study will be conducted in Urdu and Sindhi. The English versions of the student, teacher, and head teacher questionnaires are included in this report as **Error! Reference source not found.** for reference. The Urdu and Sindhi tools will be submitted to USAID separately. The EGRA subtasks are not attached to this report and will be submitted to USAID separately to ensure test security for both the 2017 and anticipated 2020 endline studies.

SAMPLING METHODOLOGY

2013 Sampling Structure

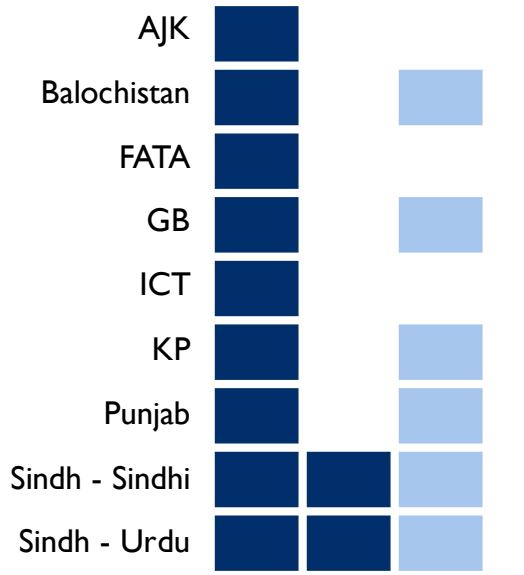
The 2013 EGRA baseline focused on a representative sample of schools anticipated to benefit from PRP and SRP. Working with USAID, subcontractors, and field staff, MSI MEP identified two types of schools: full treatment (i.e., schools in PRP or SRP districts that were expected to benefit from direct activities), and light treatment (i.e., schools in districts that would not be touched by PRP or SRP activities and may therefore have only indirect effects).

Next, districts for the full and light treatment groups were pre-selected by the provincial ministries of education and USAID between January and February 2013. Because district-level selection for the full and light treatment groups was not random, equivalence at baseline of the two treatment groups could not be assured, and therefore a quasi-experimental design was applied with the intent of being able to compare between these groups at midline. However, as detailed below in the section on Data Analysis and Reporting, these comparisons will no longer be possible due to change in project implementation and attrition.

Error! Reference source not found. and Table 2 summarize the number and type of sampling groups by region. While most regions included districts with the two treatment groups, two of the provinces – AJK and ICT – were anticipated to have full treatment across all districts. In FATA, no data were collected from the light intervention districts due to security concerns. In the figure, each box representing one sampling group of 70 schools of 15 grade 3 and 15 grade 5 students each. The combined target for the schools in 2013 was 1,120. This included:

- 700 schools in **Full Treatment districts;** and
- 420 schools in **Light Treatment districts**.

FIGURE 2: 2013 SAMPLE BY REGION



Each school included a sample of 15 grade 3 and 15 grade 5 students, two teachers, and one head teacher, for a total targeted sample size of 33,600 students, 2,240 teachers, and 1,120 head teachers.

TABLE 2: 2013 SAMPLE BY REGION

Region	Language	Full Treatment	Light Treatment	Total
AJK	Urdu	70	0	70
Balochistan	Urdu	70	70	140
FATA	Urdu	70	0	70
GB	Urdu	70	70	140
ICT	Urdu and English	140	0	140
KP	Urdu	70	70	140
Punjab	Urdu	70	70	140
Sindh	Urdu and Sindhi	140	140	280
TOTAL SCHOOLS		**700**	**420**	**1,120**

All Regions Except Sindh

Taking into consideration the requirements and the needs of the project, a stratified cluster random sampling method was chosen at baseline, with the data from 2011-2012 National Education Management Information System (NEMIS) as the base. The steps of the sampling process are summarized below for each province with the exception of Sindh full intervention. The selection process for Sindh province – which is more complicated – is detailed in the next section.

1. In each province, the team, in consultation with USAID, reviewed the selected full and light intervention districts (the sampled population) and eliminated those districts which were inaccessible due to security reasons.

2. In each province, one-third of the sampled population districts (up to a maximum of three and a minimum of two districts per treatment group) were chosen using a simple random sample, which resulted in clustered samples.

3. For the 35 sampled schools (male and female) within each region, the samples were divided between the selected districts according to the proportions of schools within those districts through stratified random sampling.

4. A second stratification was done at the "location" level, where sampled schools were allocated between rural and urban locations within each sampled district according to the rural/urban proportion of schools within the sampled district.

5. Only schools with 15 male students or 15 female students for grades 3 and 5 were targeted, according to the NEMIS data. (Note that there were exceptions of schools having less than 15 male or female students in the grade levels due to the lack of schools in some places having the requisite number of students.)

6. Preliminary sampling was conducted to select 35 schools within each group (full and light treatment, Urdu/Sindhi/English medium, and male and female).

7. In addition to the 35 preliminary sampled schools within each group (male and female), an additional 10 schools were selected by stratified random sampling as replacement schools in case of inaccessibility or highly inaccurate NEMIS data. (Note that mixed schools were sometimes selected as replacement schools due to not having enough options for replacement schools of strictly one gender. However, only students from the respective genders were included in the samples from the mixed schools.)

8. Teams of Quality Control Officers (QCOs), supplemented by EGRA senior managers, visited the provinces and districts to verify the preliminary sample schools, and replacements were made if the actual student numbers were fewer than the targeted numbers of 15 in grades 3 and 5. The process involved meeting with local education officials to verify enrollment data, location of the school, and contact information for the head teachers. In some cases, the head teachers were also contacted to verify enrollment. (Note that some schools were retained in the final sample if the number of students in each grade level was close to 15 and if the replacement schools also had fewer students.)

Sindh

In Sindh province, the baseline selection process for the light treatment schools using either Urdu or Sindhi as the medium of instruction followed the cluster sampling process as in other provinces. However, for the full intervention districts, the sampling process was purposeful in order to respond to the needs of SRP. Additional factors considered when selecting a sample of the full treatment schools included:

1. Those schools already selected for construction under a different USAID intervention implemented as part of the Sindh Basic Education Project with sufficient numbers of students in both grades 3 and 5 (at least 15 students per grade) per the SEMIS/NEMIS data. This was Group 1 for sampling; 35 Sindhi schools and nine Urdu schools were selected from this list for full treatment.

2. Those schools already identified as intervention schools for SRP with sufficient numbers of students in both grades 3 and 5 (at least 15 students per grade). This was Group 2 for sampling; 18 Sindhi schools *only* were selected from this group for full treatment.

3. Finally, a random sample of schools with a total enrollment of more than 200 students, and at least 15 students in grades 3 and 5, in all eight SRP/SBEP districts was selected to reach the required numbers of full treatment schools (i.e., 70 per instructional language). This selection was further stratified to include 35 male and 35 female schools. This was Group 3 for sampling; 17 Sindhi and 63 Urdu schools were selected from this group for full treatment.

Ultimately, in Sindh, eight areas (7 districts and 5 towns in Karachi City) were chosen as the sampled population for full treatment in Urdu and Sindhi, and six districts were chosen as the sampled population for light treatment in Urdu and Sindhi. Across the selected districts in Sindh, an equal number (35 each) of male and female Urdu and Sindhi medium schools were selected. Urban and rural schools were sampled proportionally for the light treatment districts. For the full treatment districts, rural/urban sampling was necessary due to the requirements detailed above.

Sampling Design Considerations for 2017

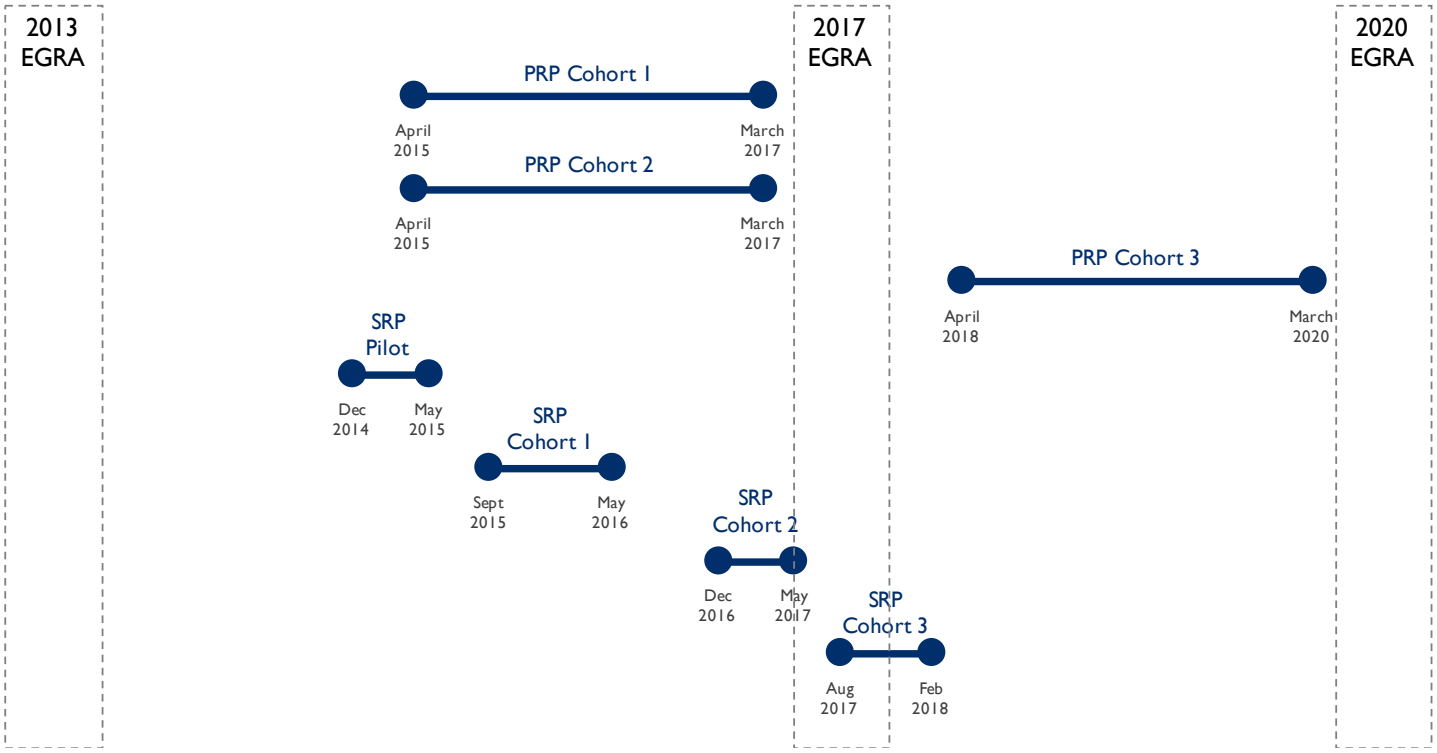
Due to changes in the timing and distribution of program implementation from the original design, MSI PERFORM will need to change the sampling structure for the 2017 EGRA. The 2017 EGRA will include five types of representative samples:

- Pakistan Reading Project (PRP) Intervention Districts
    a. Districts that received PRP interventions under Cohorts 1 and 2 - midline
    b. Districts that will receive PRP interventions under Cohorts 3 - baseline
- Sindh Reading Program (SRP) Intervention Districts
    a. Districts that received SRP interventions under Cohort 1 - midline
    b. Districts that will receive SRP interventions under Cohort 3 - baseline
- Light Intervention Districts
    a. Districts that did not receive direct support for improved reading instruction – midline

Due to these changes in design, MSI PERFORM recommends only making comparisons *within* sampling groups, and not *between* sampling groups, as discussed below under Data Analysis and Reporting.

Figure 3 below illustrates the timelines of the PRP and SRP interventions by cohort. It also includes the timeline of this external EGRA study, with data collection in the spring through fall of 2013, 2017, and 2020.

FIGURE 3: INTERVENTION AND ASSESSMENT TIMELINES



Pakistan Reading Project Intervention Districts

Cohorts

The original PRP design included implementation in all schools simultaneously. As such, the baseline design included only two types of districts – full intervention and light intervention. Through contract modifications, PRP split its intervention into three cohorts at the district level. Timing is shown above in Figure 3.

For the 2017 EGRA, MSI will select a sample of schools in Cohort 1 and Cohort 2 districts to measure as a midline and a sample of schools in Cohort 3 districts as a baseline. Wherever possible, MSI will retain the original baseline districts within the samples to be able to make comparisons to 2013.

District Assignment

PRP made some changes as to whether each district would receive full or light intervention between 2013 and 2017. As such, MSI PERFORM will replace any districts that have or will receive the full intervention that were designated as light intervention at baseline and vice versa.

Intervention Schools

For PRP, the original program design provided support to all the schools within the full intervention districts. At baseline, MSI MEP included a random selection of schools within each selected district. However, through contract modifications, PRP is only treating a subset of schools in their target districts. As such, the baseline sample included schools that did not receive intervention within the full intervention districts.

For the 2017 EGRA, MSI PERFORM will replace the schools in PRP full intervention districts that did not receive intervention with those that did. These schools were matched using EMIS data on school characteristics to provide the best comparison between baseline and midline.

Sindh

While the original PRP design included some policy level work in Sindh, it did not include plans for any direct implementation. As such, the 2013 baseline did not include any PRP full intervention. Once awarded, the PRP implementation plan was modified to include direct implementation in some districts in Sindh in which SRP was not actively working. The 2017 EGRA will include samples for PRP Cohort 1 and 2 (Sindhi and Urdu) and PRP Cohort 3 (Sindhi only).

Sindh Reading Program Intervention Districts

Cohorts

The original SRP design included implementation in all SRP-target schools simultaneously. As such, the baseline design included only two types of districts – full intervention and light intervention. Through contract modifications, SRP also split its intervention into three cohorts. Timing is shown above in Figure 3.

In addition to timing, there are difference in implementation for SRP Cohort 1 as compared to Cohorts 2 and 3 that require them to be measured separately. The teacher in-service support for Cohort 1 was delivered by SRP staff. For Cohorts 2 and 3, in-service support was provided by government staff who had been trained by SRP.

For the 2017 EGRA, MSI will select a sample of Cohort 1 schools to measure as a midline and a sample of Cohort 3 schools as a baseline. As Cohort 2 will have already concluded before data collection begins, findings for Cohort 3 will be extrapolated to apply to Cohort 2. Wherever possible, MSI will retain the original baseline schools within the samples to be able to make comparisons to 2013.

In some cases, schools received support under more than one cohort. These schools were removed from the school list before sampling in order to retain the integrity of each cohort's separate results.

Light Intervention Districts

District Assignment

PRP made some changes as to whether each district would receive full or light intervention between 2013 and 2017. As such, MSI PERFORM will replace any districts that have or will receive the full intervention that were designated as light intervention at baseline and vice versa.

2017 Sampling Structure

As in the 2013 baseline, the sampling frame will include 70 schools (35 boys schools and 35 girls schools) per intervention type and language tested in each region.

The student sample targets are 15 students each from grade 3 and grade 5 from each sampled school, selected as follows:

- Select girls in girls schools, boys in boys schools. If not enough of one gender and the other is present, sample the other gender to meet the target.
- Grade 3 – Select teacher who was in the school the year prior and have them identify their students. Randomly select additional students if needed to meet target. Additionally, grade 3 students will only be included in the sample if they completed grade 2 in the same school to ensure that the data are representative of the students who have received (or in the case of light intervention, not received) treatment.
- Grade 5 – Randomly select a grade 5 classroom. Random sample of students in classroom.

The teacher sample target will be one Grade 2 teacher per school, which will be selected randomly if there is more than one. The head teacher target will also be one per school.

The approach to sampling districts and schools for each group is summarized below in

Table 3.

TABLE 3: 2017 DISTRICT AND SCHOOL SAMPLING APPROACH

Sample Group	Districts	Schools
PRP Cohort 1/2	- Use baseline districts that received Cohort 1/2 intervention if possible. - If a district was assigned to Cohort 3 or did not receive intervention, replace with an adjacent district.	- Using the PRP school list, select all baseline schools that received intervention. - Replace those schools that did not with an exact matching method.
PRP Cohort 3	- Use baseline districts that will receive Cohort 3 intervention if possible. - Randomly sample additional Cohort 3 districts (up to 3 total).	- For baseline districts, use the same schools. - For new districts, filter for schools with 15+ students in grades 3 and 5. Randomly sample.
SRP Cohort 1	- Data collected from all SRP intervention districts.	- Using the SRP school list, take all baseline schools that received Cohort 1 intervention. - Replace those schools that did not with an exact matching method.
SRP Cohort 2/3	- Data collected from all SRP intervention districts.	- Using the SRP school list, take all baseline schools that did not receive the Cohort 1 intervention. - Replace those schools that did not with an exact matching method.
Light Treatment	- Use baseline districts that did not receive direct intervention whenever possible. - If a district has/will receive intervention, replace with adjacent district.	- For baseline districts, use the same schools. - For new districts, filter for schools with 15+ students in grades 3 and 5. Randomly sample.

Figure 4 and Table 4 summarize the number and type of sampling groups by region. In the figure, each box represents one sampling group of 70 schools of 15 grade 3 and 15 grade 5 students each. The combined target for the number of students tested in 2017 will be 50,400 students in 1,680 schools. This includes:

- 630 schools in **PRP Cohort 1 and 2 districts or SRP Cohort 1 districts**;
- 490 schools in **PRP Cohort 3 districts**;
- 140 schools in **SRP Cohort 3 districts**; and
- 420 schools in **Light Treatment districts**.

FIGURE 4: 2017 SAMPLE BY REGION

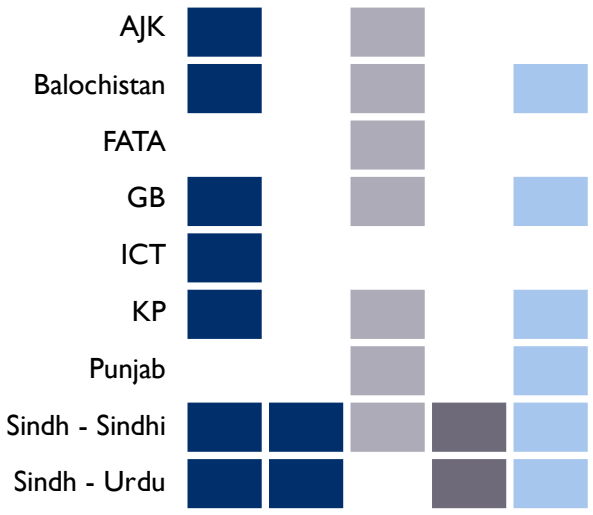


TABLE 4: 2017 SAMPLE BY REGION

Region	Language	PRP Cohort 1/2	PRP Cohort 3	SRP Cohort 1	SRP Cohort 3	Light Treatment	Total
AJK	Urdu	70	70	--	--	--	**140**
Balochistan	Urdu	70	70	--	--	70	**210**
FATA	Urdu	--	70	--	--	--	**70**
GB	Urdu	70	70	--	--	70	**210**
ICT	Urdu	70	--	--	--	--	**70**
KP	Urdu	70	70	--	--	70	**210**
Punjab	Urdu	--	70	--	--	70	**140**
Sindh	Urdu and Sindhi	140	70	140	140	140	**630**
TOTAL		**490**	**490**	**140**	**140**	**420**	**1,680**

Change in Sample Size

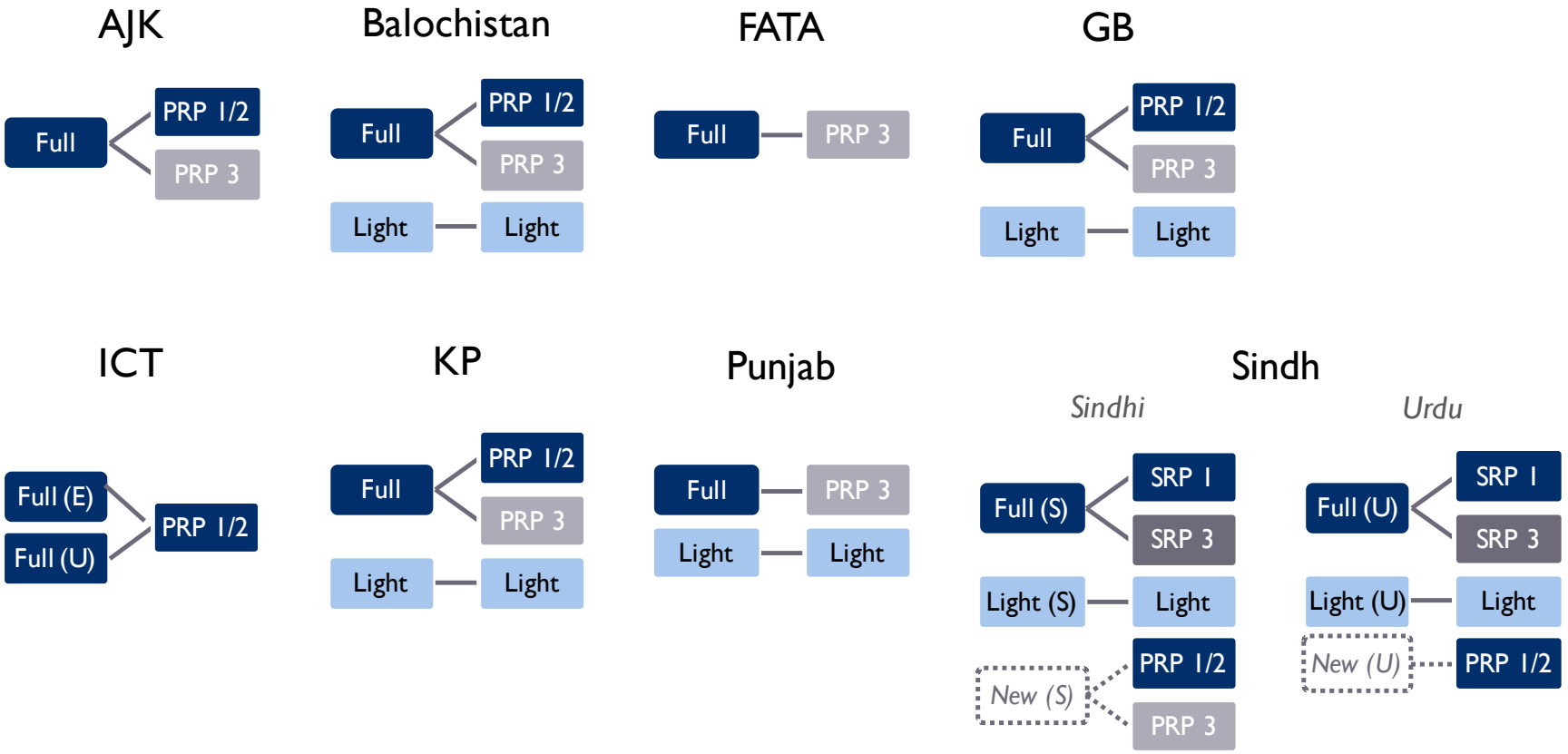
As shown in Table 5 below, the total number of schools in the Pakistan EGRA sample increased by 560 schools, from 1,120 in 2013 to 1,680 in 2017.

TABLE 5: DIFFERENCES IN SAMPLE SIZES BETWEEN 2013 AND 2017

Region	2013	2017	Difference
AJK	70	140	**70**
Balochistan	140	210	**70**
FATA	70	70	**0**
GB	140	210	**70**
ICT	140	70	**-70**
KP	140	210	**70**
Punjab	140	140	**0**
Sindh	280	630	**350**
TOTAL	**1,120**	**1,680**	**560**

Each box in Figure 5 below represents one sampling group of 70 schools. The primary reason for the increase in the sample size was adding a Cohort 3 sample, which increased the sample size by 70 schools in AJK, Balochistan, GB, and KP. The sample sizes in FATA and Punjab remained the same, as no interventions have yet taken place in those regions. The sample size in ICT decreased by 70 due to PRP not delivering an English language intervention. Finally, the sample size in Sindh increased by 350 schools due to adding an SRP Cohort 3 in Sindhi and Urdu (140 schools), and the PRP intervention (210 schools).

FIGURE 5: SAMPLE CHANGES BETWEEN 2013 AND 2017



Regional Sampling Plans

The following sections detail the number of schools sampled by region. Each section includes:

1. A narrative description of the sampling plan;
2. A detailed table of the number of schools in the sample by district, with a breakdown of the overlap with the 2013 sample and the 2013 district treatment (full vs. light intervention); and
3. A graphic representation of the sampling plan where each blue square represents one school that was assessed in 2013 and each red square represents one school that is a matched replacement or new school for the 2017 sample.

NOTE FOR USAID: The numbers presented below are for school counts BEFORE field verification and school replacement is completed for all regions other than ICT. Once school verification is complete and the samples are finalized, MSI will revise the numbers below for final submission. Additionally, we will include a comprehensive list of schools included in the sample under Annex 1: School Lists.

Azad Jammu and Kashmir

As shown in

Table 6 and Figure 6 below, the AJK sample includes two groups: PRP Cohort 1/2 and PRP Cohort 3.

Cohort 1/2 districts include Hattian, Kotli, and Muzaffarabad. Poonch was included in the Full Treatment group at baseline, but was assigned to Cohort 3. As such, it will be replaced by Hattian. The number of schools per district was reweighted for the 2017 sample due to this district replacement.

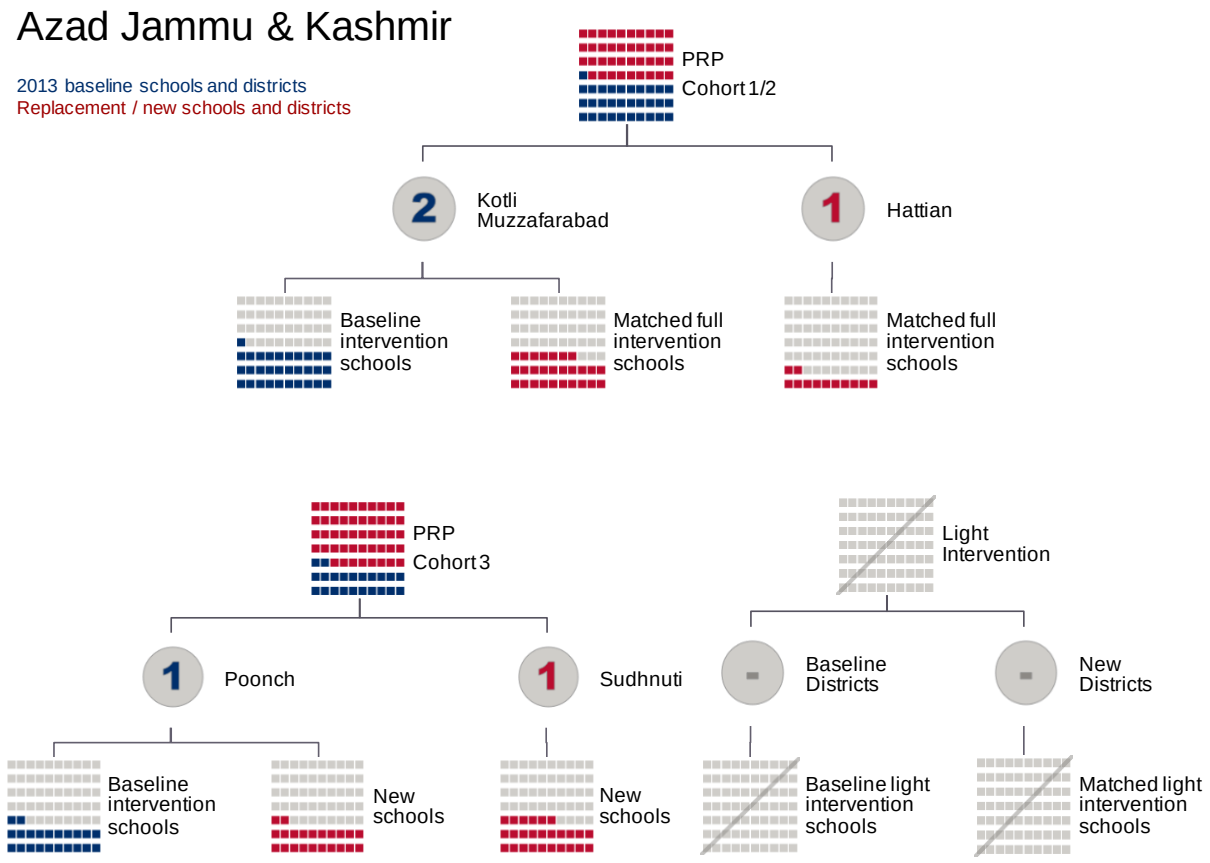
A total of 27 schools in Cohort 1/2 districts assessed at baseline did not receive treatment. An exact matching method will be used to pair the 13 schools from Kotli and 14 schools from Muzaffarabad assessed at baseline with replacement schools who did receive the intervention. All 12 schools in Hattian will be matched to the remaining baseline schools.

Cohort 3 districts include Poonch and Sudhnuti. The 22 schools in Poonch that were assessed as full intervention at baseline will remain in the sample. An additional 22 schools will be randomly selected. The 26 schools in Sudhnuti will be randomly selected.

TABLE 6: AJK 2017 SCHOOL SAMPLE

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
PRP Cohort 1/2				
Hattian	--	0	12	**12**
Kotli	Full	17	13	**30**
Muzaffarabad	Full	14	14	**28**
Subtotal		***31***	***39***	***70***
PRP Cohort 3				
Poonch	Full	22	22	**44**
Sudhnuti	--	0	26	**26**
Subtotal		***22***	***48***	***70***
AJK TOTAL		**53**	**87**	**140**

FIGURE 6: AJK 2017 SAMPLE



Balochistan

As shown in Table 7 and Figure 7 below, the Balochistan sample includes three groups: PRP Cohort 1/2, PRP Cohort 3, and light intervention.

Cohort 1/2 districts include Jaferabad, Pishin, and Quetta. A total of 34 schools in Cohort 1/2 districts assessed at baseline did not receive treatment. An exact matching method will be used to pair the 14 schools from Jaferabad, 12 schools from Pishin, and 8 schools from Quetta assessed at baseline with replacement schools that received the intervention.

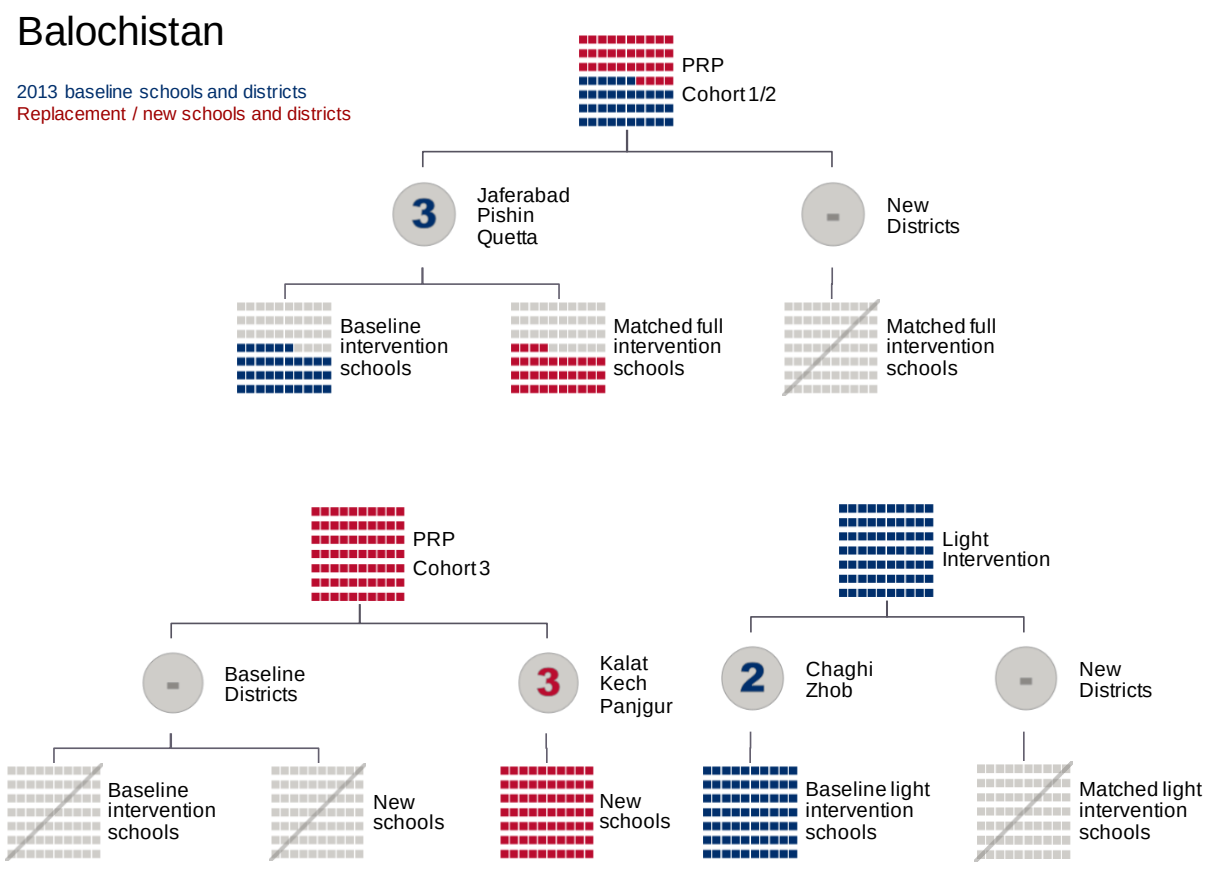
Cohort 3 districts include Kalat, Kech, and Panjgur. None of these districts were included in the 2013 EGRA. Twenty-two schools in Kalat, 30 schools in Kech, and 17 schools in Panjgur will be randomly selected.

Light intervention districts include Chaghi and Zhob, which were both assessed as light intervention districts at baseline. All 70 schools will be the same as those assessed at baseline.

TABLE 7: BALOCHISTAN 2017 SCHOOL SAMPLE

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
PRP Cohort 1/2				
Jaferabad	Full	14	14	**24**
Pishin	Full	16	12	**28**
Quetta	Full	6	8	**14**
Subtotal		***36***	***34***	***70***
PRP Cohort 3				
Kalat	--	0	22	**22**
Kech	--	0	30	**30**
Panjgur	--	0	17	**17**
Subtotal		***0***	***70***	***70***
Light Intervention				
Chaghi	Light	30	0	**30**
Zhob	Light	40	0	**40**
Subtotal		***70***	***0***	***70***
BALOCHISTAN TOTAL		**106**	**104**	**210**

FIGURE 7: BALOCHISTAN 2017 SAMPLE



Federally Administered Tribal Areas

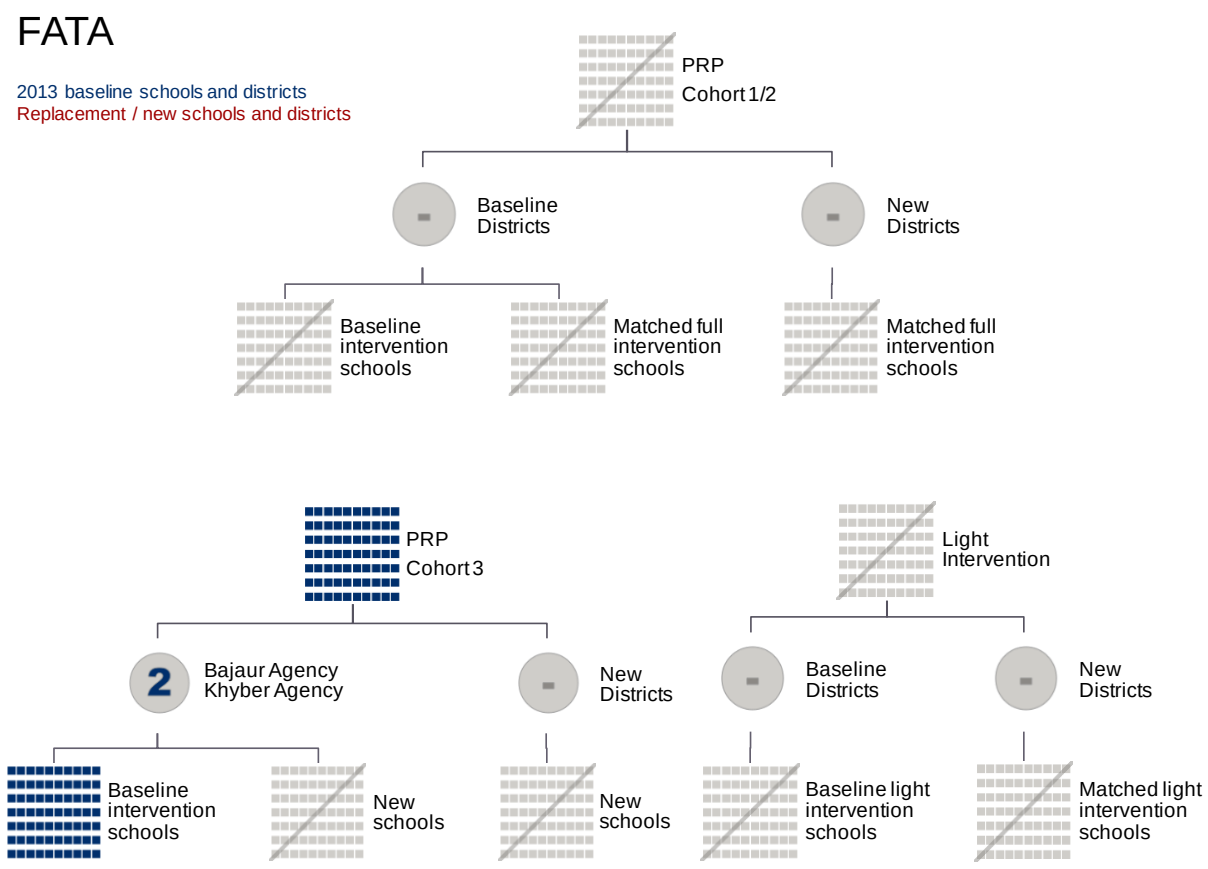
As shown in Table 8 and Figure 8 below, the FATA sample includes one group: PRP Cohort 3. Intervention was delayed in FATA, but PRP anticipates including FATA in Cohort 3.

Cohort 3 includes Bajaur Agency and Khyber Agency, which were both assessed as full intervention districts at baseline. All 70 schools will be the same as those assessed in 2013.

TABLE 8: FATA 2017 SCHOOL SAMPLE

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
PRP Cohort 3				
Bajaur Agency	Full	32	0	**32**
Khyber Agency	Full	38	0	**38**
Subtotal		***70***	***0***	***70***
FATA TOTAL		**70**	**0**	**70**

FIGURE 8: FATA 2017 SAMPLE



Gilgit-Baltistan

As shown in Table 9 and Figure 9 below, the GB sample includes three groups: PRP Cohort 1/2, PRP Cohort 3, and light intervention.

Cohort 1/2 districts include Ghizer and Skardu. Ghizer was designated as a light intervention district at baseline, but received intervention. The number of schools per district was reweighted for the 2017 sample due to this district replacement.

A total of 17 schools in Cohort 1/2 districts assessed at baseline did not receive treatment. An exact matching method will be used to pair the 17 schools from Skardu assessed at baseline with replacement schools that received the intervention. The 14 schools in Ghizer will be randomly selected from the 24 schools assessed at baseline as light intervention schools.

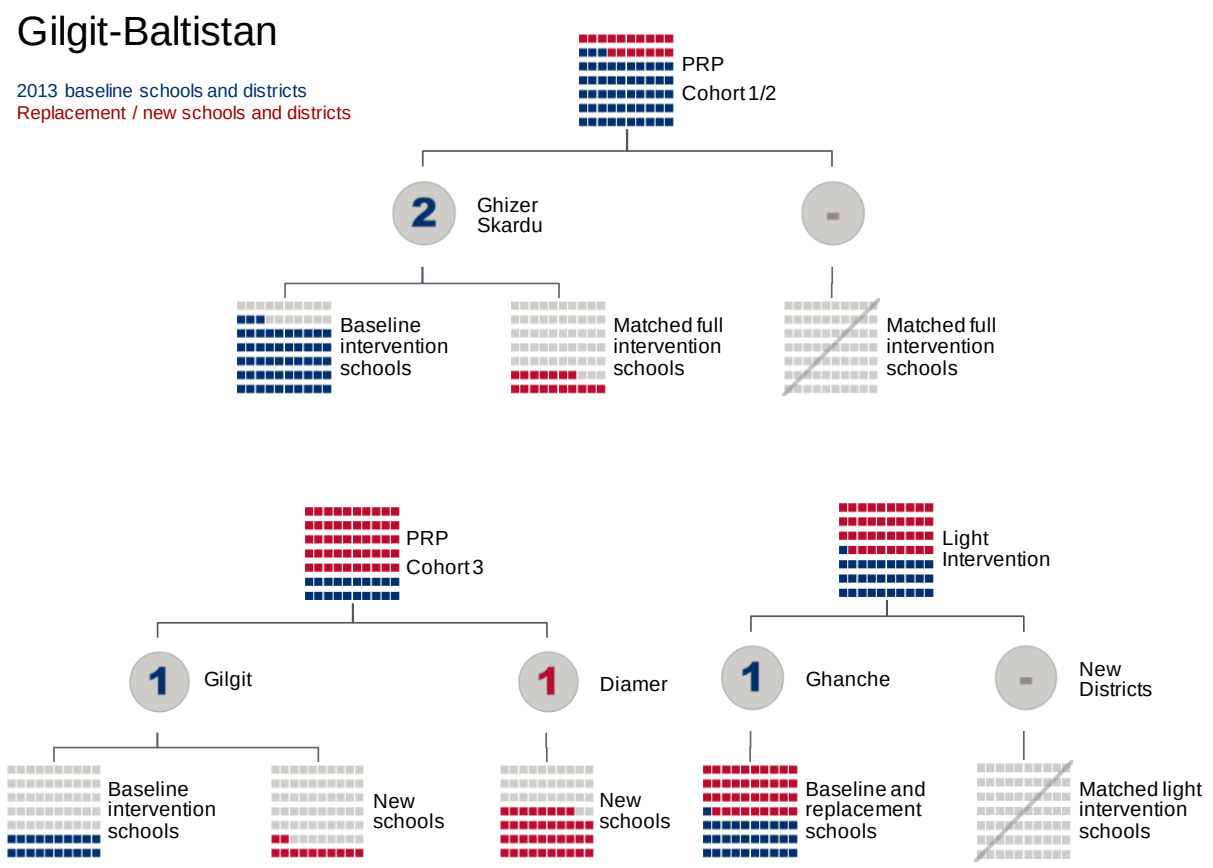
Cohort 3 districts include Diamer and Gilgit. As Gilgit was included as a full intervention at baseline, the sample will include those 20 schools. The additional 12 schools will be randomly selected. Diamer was not included in the 2013 EGRA. Thirty-eight schools in Diamer will be randomly selected.

The only light intervention district in GB is Ghanche, which was assessed as light intervention at baseline. The 31 schools included at baseline will be assessed in 2017, and the additional 39 schools will be selected using an exact matching method.

TABLE 9: GILGIT-BALTISTAN 2017 SCHOOL SAMPLE

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
PRP Cohort 1/2				
Ghizer	Light	14	0	**14**
Skardu	Full	39	17	**56**
Subtotal		***53***	***17***	***70***
PRP Cohort 3				
Diamer	--	0	38	**38**
Gilgit	Full	20	12	**32**
Subtotal		***20***	***50***	***70***
Light Intervention				
Ghanche	Light	31	39	**70**
Subtotal		***31***	***39***	***70***
GB TOTAL		**104**	**106**	**70**

FIGURE 9: GB 2017 SAMPLE



Islamabad Capital Territory

As shown in

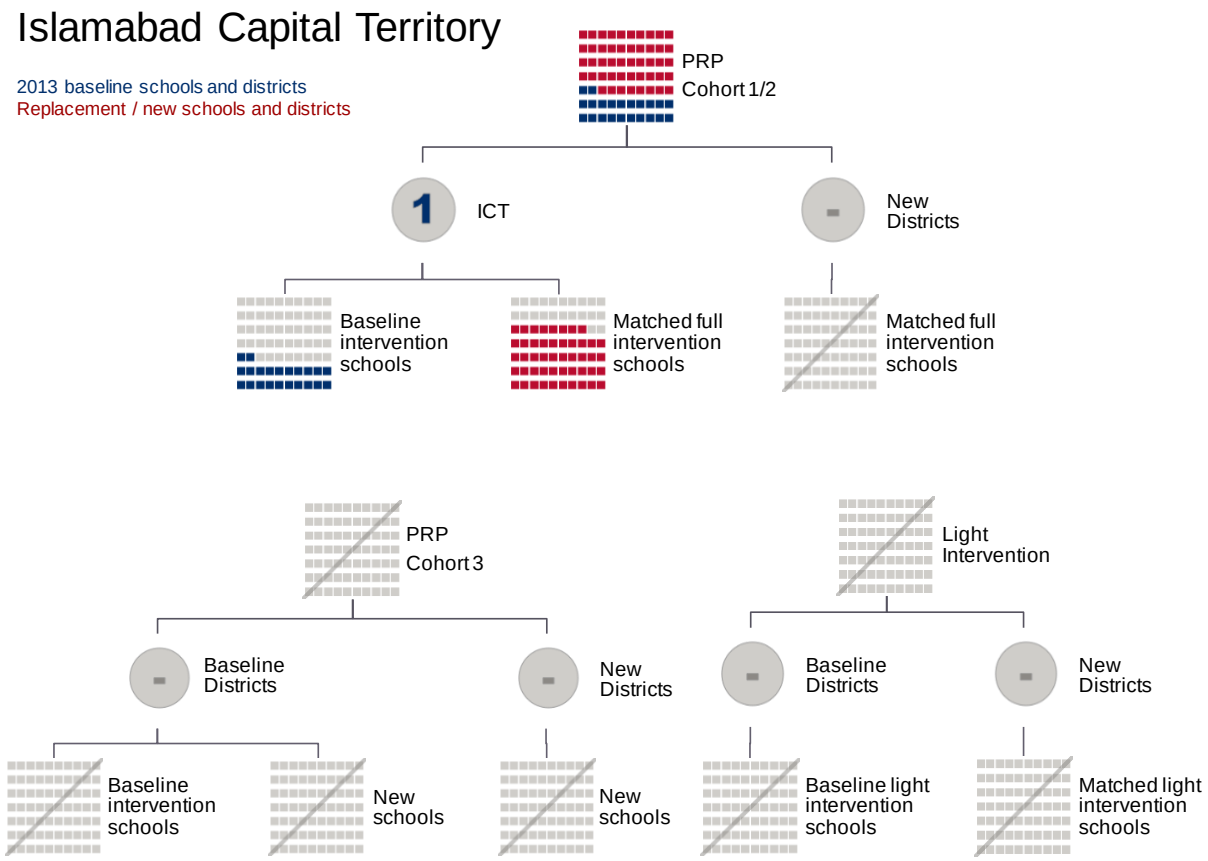
Table 10 and Figure 10 below, the ICT sample includes one group: PRP Cohort 1/2, as the vast majority of PRP's intervention schools in ICT were included in Cohort 1. For the baseline, there were two sampling groups in ICT: 70 Urdu-medium schools and 70 English-medium schools. The PRP intervention only worked with Urdu in ICT in both Urdu-medium and English-medium schools. As such, the midline will include only one sampling group of 70 school which will be tested in Urdu. There are a small number of Cohort 3 schools in ICT, but not enough to include an additional sampling group.

Twenty-two schools assessed in Urdu at baseline received Urdu intervention. An exact matching method will be used to pair the remaining 48 schools with replacement schools that received the intervention.

TABLE 10: ICT 2017 SCHOOL SAMPLE

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
PRP Cohort 1/2				
ICT	Full	22	48	**70**
Subtotal		**22**	***48***	***70***
ICT TOTAL		**22**	**48**	**70**

FIGURE 10: ICT 2017 SAMPLE



Khyber Pakhtunkhwa

As shown in Table 11 and Figure 11 below, the KP sample includes two groups: PRP Cohort 1/2 and PRP Cohort 3.

Cohort 1/2 districts include Mansehra, Mardan, and Peshawar. All three districts were assessed as full intervention at baseline. A total of 53 schools in Cohort 1/2 districts assessed at baseline did not receive treatment. An exact matching method will be used to pair the 23 schools from Mansehra, 21 schools from Mardan, and 9 schools from Peshawar replacement schools that received the intervention.

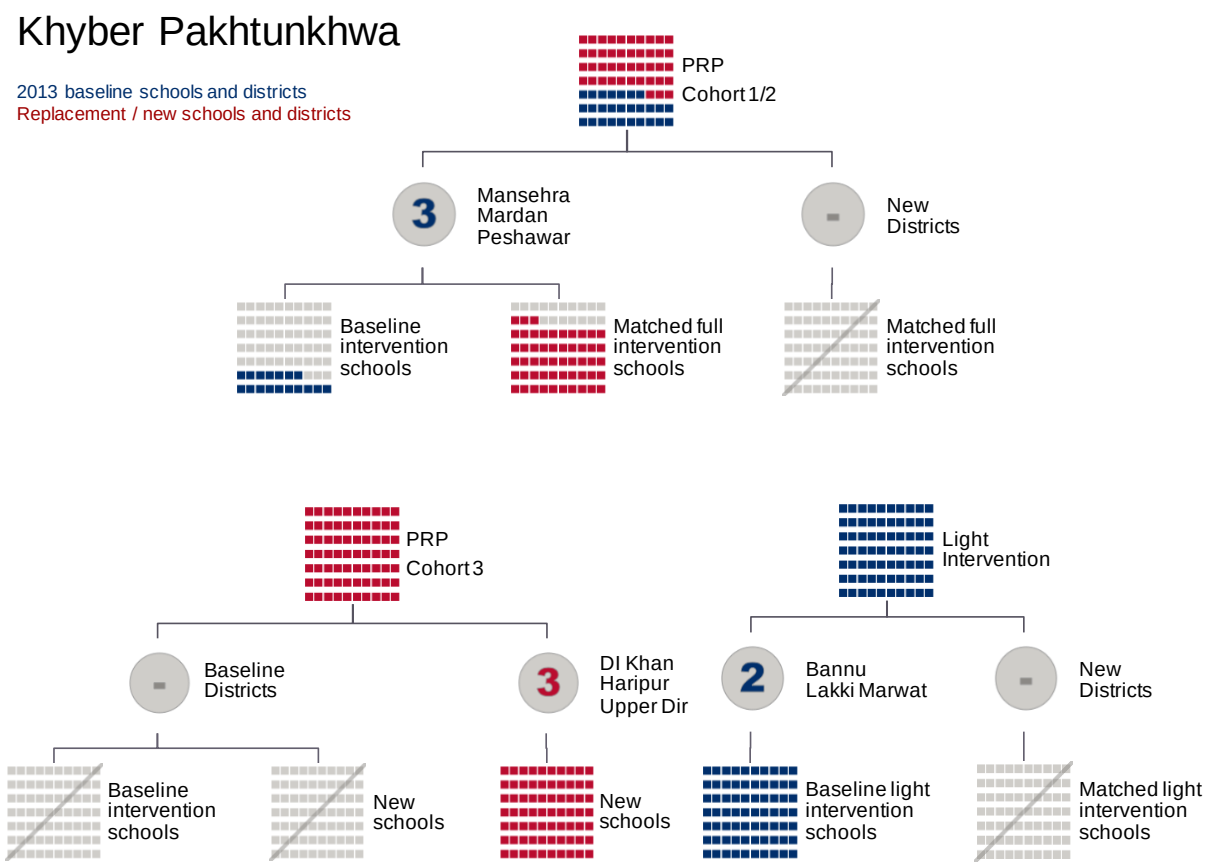
Cohort 3 districts include DI Khan, Haripur, and Upper Dir, none of which were previously assessed. Twenty-eight schools in DI Khan, 24 schools in Haripur, and 18 schools in Upper Dir will be randomly selected.

Light intervention includes Bannu and Lakki Marwat, which were both assessed as light intervention districts at baseline. All 70 schools will be the same as those assessed in 2013.

TABLE 11: KP 2017 SCHOOL SAMPLE

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
PRP Cohort 1/2				
Mansehra	Full	7	23	**30**
Mardan	Full	1	21	**22**
Peshawar	Full	9	9	**18**
Subtotal		***17***	***53***	***70***
PRP Cohort 3				
DI Khan	--	0	28	**28**
Haripur	--	0	24	**24**
Upper Dir	--	0	18	**18**
Light Intervention				
Bannu	Light	40	0	**40**
Lakki Marwat	Light	30	0	**30**
Subtotal		***70***	***0***	***70***
KP TOTAL		**87**	**123**	**210**

FIGURE 11: KP 2017 SAMPLE



Punjab

As shown in Table 11 and Figure 12 below, the Punjab sample includes two groups: PRP Cohort 3 and light intervention. While no intervention has taken place in Punjab, it may be included in Cohort 3.

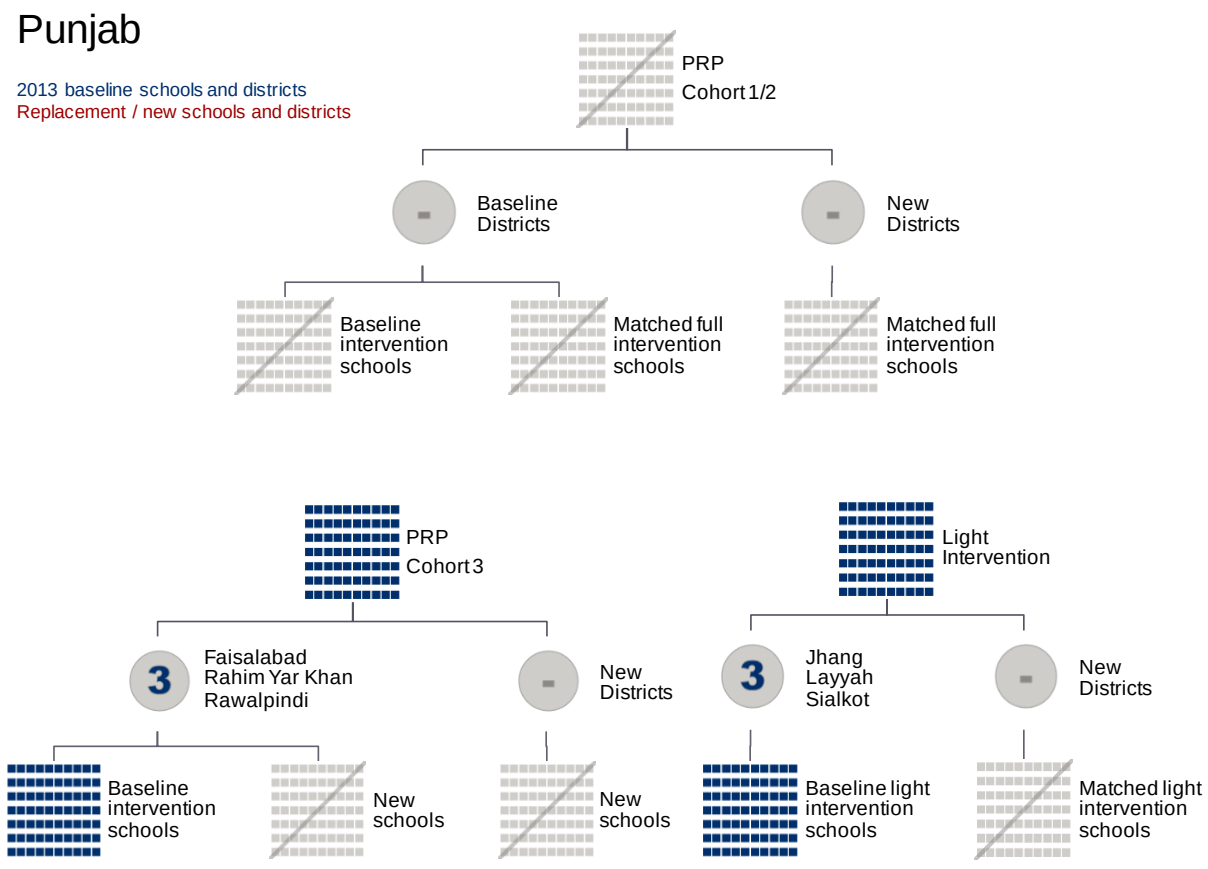
Cohort 3 districts include Faisalabad, Rahim Yar Khan, and Rawalpindi. All three districts were assessed as full intervention at baseline. The same schools will be assessed in 2017.

Light intervention districts include Jhang, Layyah, and Sialkot. All three districts were assessed as light intervention at baseline. The same schools will be assessed in 2017.

TABLE 12: PUNJAB 2017 SCHOOL SAMPLE

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
PRP Cohort 3				
Faisalabad	Full	20	0	**20**
Rahim Yar Khan	Full	30	0	**30**
Rawalpindi	Full	20	0	**20**
Subtotal		***70***	***0***	***70***
Light Intervention				
Jhang	Light	22	0	**22**
Layyah	Light	22	0	**22**
Sialkot	Light	26	0	**26**
Subtotal		***70***	***0***	***70***
Punjab TOTAL		**140**	**0**	**140**

FIGURE 12: PUNJAB 2017 SAMPLE



Sindh

As shown in Table 13 and

Figure 13 (Urdu) and

Figure 14 (Sindhi) below, the Sindh sample includes nine sampling groups:

1. SRP Cohort 1 midline – Urdu
2. SRP Cohort 1 midline – Sindhi
3. SRP Cohort 3 baseline – Urdu
4. SRP Cohort 3 baseline – Sindhi
5. PRP Cohort 1/2 midline – Urdu[2]
6. PRP Cohort 1/2 midline – Sindhi
7. PRP Cohort 3 baseline – Sindhi
8. Light intervention midline – Urdu
9. Light intervention midline –Sindhi

All SRP Urdu interventions are in Karachi City. A total of 56 Urdu-medium schools assessed in 2013 were selected for SRP Cohort 1 Urdu. The remaining 14 schools will be selected randomly from the SRP school list. Likewise, a total of 18 Urdu-medium schools assessed in 2013 may be included in SRP Cohort 3, and the remaining 52 schools will be randomly selected.

All PRP Urdu interventions are also in Karachi City. As none of the PRP Cohort 1/2 Urdu schools were assessed in 2013, the schools will be selected randomly from the PRP Cohort 1/2 Urdu school list. There are no Urdu-medium schools in PRP Cohort 3.

SRP Sindhi intervention districts are Dadu, Jacobabad, Kambar Shahdadkot, Kashmore, Khairpur Mirs, Larkana, Sukkur, and Karachi City. In contrast to the PRP and light intervention samples, this study includes schools in all eight SRP intervention districts, as described above in the section on 2013 sampling.

A total of 21 Sindhi-medium schools assessed in 2013 were selected for SRP Cohort 1 Sindhi. The remaining 49 schools will be selected randomly from the SRP school list based on the distribution between the districts. All 70 SRP Cohort 3 Sindhi schools will be randomly selected.

PRP Cohort 1/2 Sindhi districts include Matiari, Naushero Feroze, and Tando Allah Yar. As none of these schools were assessed in 2013, the schools will be randomly selected.

PRP Cohort 3 Sindhi districts include Ghotki, Thatta, and Umerkot. Twenty-two schools were assessed in Thatta at baseline as light intervention schools. These schools will remain in the 2017 sample. The remaining 18 schools in Ghotki, 8 schools in Thatta, and 22 schools in Umerkot will be randomly selected.

Urdu light intervention districts include Hyderabad, Mirpur Khas, and Sanghar, all of which were assessed as light intervention at baseline. The same 70 schools will be assessed in the 2017 sample.

Sindhi light intervention districts include Badin and Tando Muhammad Khan. Eighteen schools were assessed in Badin at baseline as light intervention schools. These schools will remain in the 2017 sample. The remaining 34 schools in Badin and 18 schools in Tando Muhammad Khan will be selected using an exact matching method.

[2] In Sindh, all PRP Cohort 1 schools are Urdu medium of instruction, and all PRP Cohort 2 schools are Sindhi medium of instruction. However, to maintain consistency in terminology throughout this report, we will continue to refer to PRP Cohort 1/2 in this section for both groups.

TABLE 13: SINDH 2017 SCHOOL SAMPLE

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
SRP Cohort 1 - Urdu				
Karachi City	Full	56	14	**70**
Subtotal		***56***	***14***	***70***
SRP Cohort 1 - Sindhi				
Dadu	Full	3	6	**9**
Jacobabad	Full	5	4	**9**
Kambar Shahdadkot	Full	3	6	**9**
Kashmore	Full	1	8	**9**
Khairpur Mirs	Full	2	7	**9**
Larkana	Full	2	7	**9**
Sukkur	Full	3	6	**9**
Karachi	Full	2	5	**7**
Subtotal		***21***	***49***	***70***
SRP Cohort 3 - Urdu				
Karachi City	Full	18	52	**70**
Subtotal		***18***	***52***	***70***
SRP Cohort 3 - Sindhi				
Dadu	Full	0	9	**9**
Jacobabad	Full	0	9	**9**
Kambar Shahdadkot	Full	0	9	**9**
Kashmore	Full	0	9	**9**
Khairpur Mirs	Full	0	9	**9**
Larkana	Full	0	9	**9**
Sukkur	Full	0	9	**9**
Karachi	Full	0	7	**7**
Subtotal		***0***	***70***	***70***
PRP Cohort 1/2 - Urdu				
Karachi City	--	0	70	**70**
Subtotal		***0***	***70***	***70***
PRP Cohort 1/2 - Sindhi				
Matiari	--	0	16	**16**
Naushero Feroze	--	0	40	**40**
Tando Allah Yar	--	0	14	**14**
Subtotal		***0***	***70***	***70***
PRP Cohort 3 - Sindhi				
Ghotki	--	0	18	**18**
Thatta	Light	22	8	**30**
Umerkot	--	0	22	**22**

District	2013 EGRA Status	Same schools to be assessed in 2013 and 2017	Replacement schools to be assessed in 2017	Total number of schools
Subtotal		**22**	***48***	***70***
Light Intervention – Urdu				
Hyderabad	Light	10	0	**10**
Mirpur Khas	Light	24	0	**24**
Sanghar	Light	34	0	**34**
Subtotal		***70***	***0***	***70***
Light Intervention - Sindhi				
Badin	Light	18	34	**52**
Tando Muhammad Khan	Light	0	18	**18**
Subtotal		***18***	***52***	***70***
Sindh TOTAL		**205**	**425**	**630**

FIGURE 13: SINDH 2017 SAMPLE - URDU

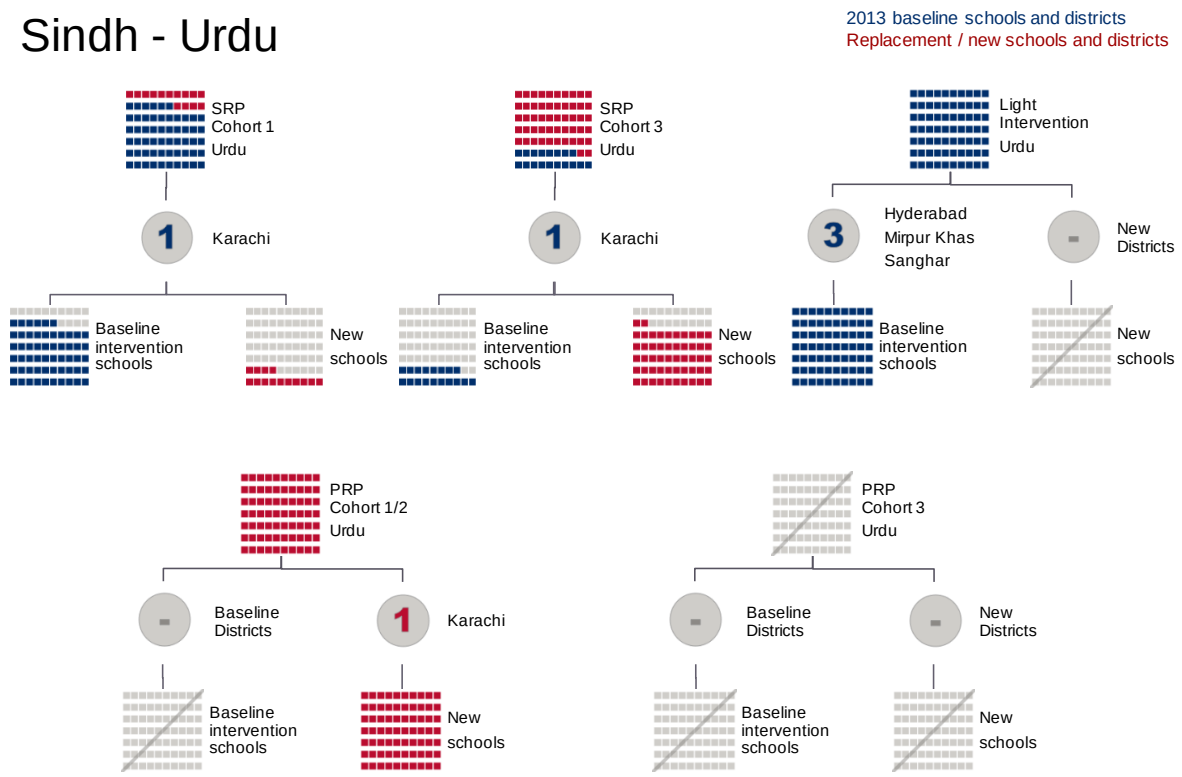
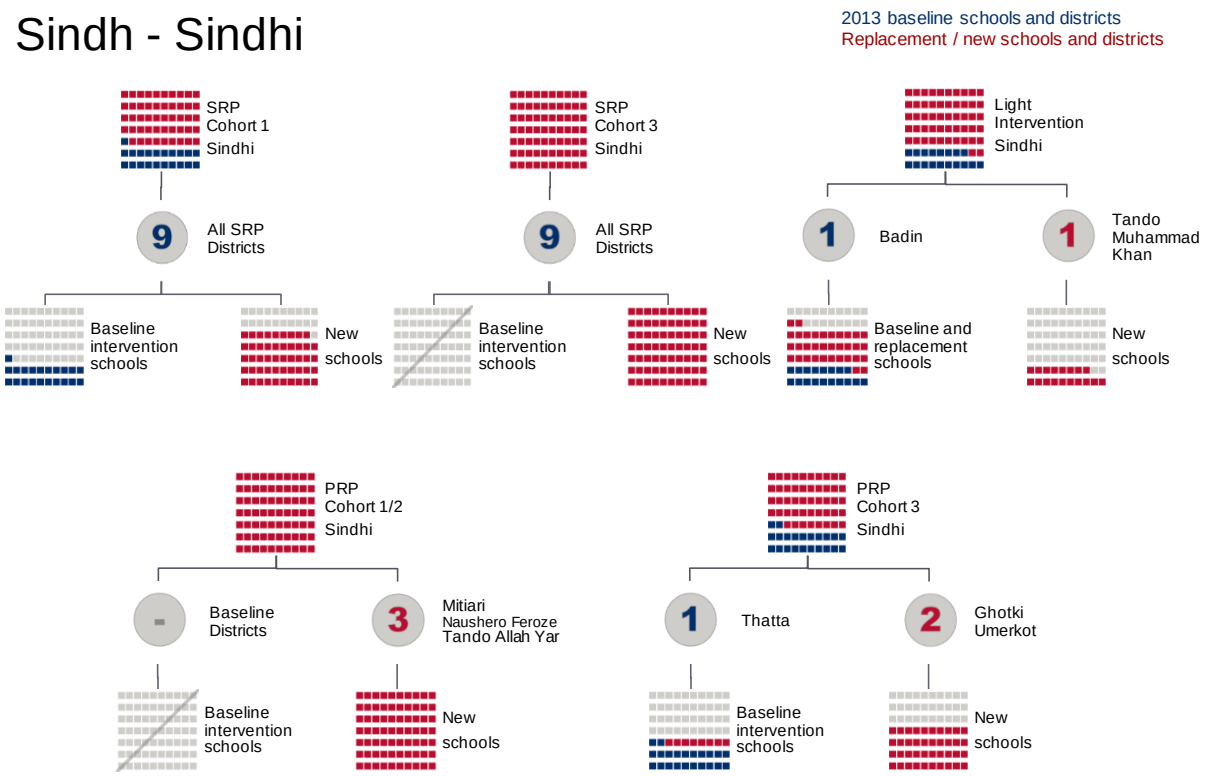


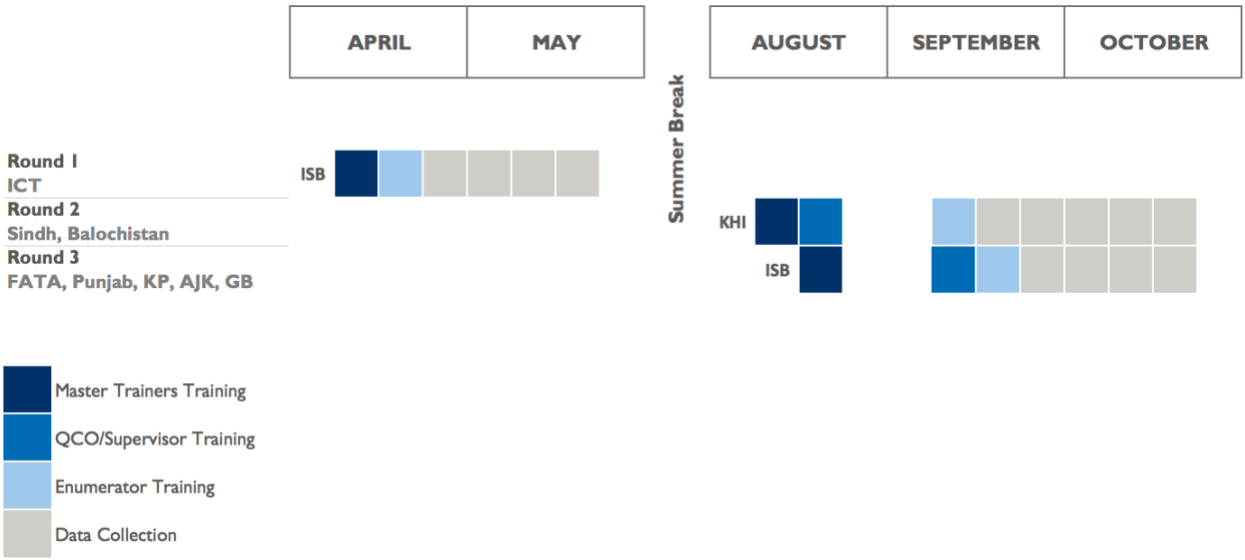
FIGURE 14: SINDH 2017 SAMPLE - SINDHI



DATA COLLECTION PLAN

Data collection will be split into three rounds. The first round of data collection (ICT) will be in spring 2017. The second (Sindh and Balochistan) and third (AJK, FATA, GB, Punjab, and KP) rounds will be in the fall 2017. While the original plan specified that all data should be collected in the spring, delays in receiving contractual approvals for subcontractors necessitated a shift for all regions other than ICT to the fall. Figure 15 provides a summary of the training and data collection schedule.

FIGURE 15: 2017 TRAINING AND DATA COLLECTION SCHEDULE



Data collection will include the following four steps:

1. **Master Trainer workshops:** MSI staff will conduct three training workshops to train master trainers on the data collection instruments and to develop the sessions and materials for the QCO/supervisor/enumerator training sessions. The trainings will include both an Urdu and Sindhi language expert. The master trainers will later train the QCOs as well as the supervisors and enumerators from local partner firms prior to the spring and fall rounds of data collection.

2. **QCO/Supervisor training:** The Master Trainers will conduct QCO/supervisor trainings for each of the three rounds of data collection. The master trainers will lead five-day training sessions for the QCOs, with a sixth day for fieldwork planning and preparation. The supervisors and regional coordinators will join for the last two days for fieldwork preparation. These trainings will be centralized in two locations (Islamabad and Karachi) in order to increase oversight and the quality control of the training and to provide additional training support to the master trainers.

3. **Enumerator training:** The Master Trainers will conduct a one-week enumerator training for each of the three rounds of data collection. The master trainers will lead five-day training workshops for the enumerators on the EGRA instrument and surveys, with a sixth day for fieldwork planning and preparation. The previously-trained QCOs and supervisors will also be present during these workshops for additional training, to support the enumerators, and to

build team rapport prior to data collection. These trainings will be centralized in two locations (Islamabad and Karachi) in order to increase oversight and the quality control of the training and to provide additional training support to the master trainers.

4. **Data collection:** Data collection will take place over a four-week period for Round 1 in the spring, and five and four weeks for Rounds 2 and 3 respectively in the fall. The selected local subcontractors will be responsible for implementing the field aspects of the assessments and surveys, in accordance with the assessment administration plan and with the cooperation of the government education officials. Each data collection team will consist of four enumerators and one QCO, and will collect data from one school per day. The QCOs will provide oversight for all aspects of administration and ensure the methodology is closely-adhered to.

DATA ANALYSIS PLAN

Data Collection and Processing

Data for this assessment will be collected using the 2017 EGRA tools, along with the student, teacher, and head teacher questionnaires.[3] For 2017, the MSI PERFORM team will develop paper forms that are machine readable. The paper booklets will be scanned and digitized using Remark, an optical mark recognition software. An assessment team member will review the processed data in Remark and correct any reading errors flagged by the software such as double marking and incorrect processing. The data will be then exported to a .csv format.

The quantitative data collected will be processed and analyzed using Stata software by MSI's analysis team. Data cleaning, processing, and analyses will be done separately by region. During the data cleaning, data patterns and responses will be verified and school identification numbers will be reconciled if necessary. The schools with available data will be compared to those expected from the data sampling plan, and comparisons versus targets will be reported.

Prior to data analysis, MSI will equate the 2017 EGRA forms back to the 2013 forms using item response theory (IRT) using both common person and common item techniques. With the phonemic awareness subtask, common items were maintained in the 2013 and 2017 forms for equating purposes. For the oral reading and listening subtasks, the passages and comprehension items were changed for test security purposes. Both the 2013 and 2017 versions of these subtasks were administered to a representative sub-sample (also called an equating sample) of the same student sample during the 2017 data collection to allow for person equating. The remaining subtasks, e.g., letter name recognition, will not require equating since anchor items were maintained in both forms (with the order of the items changed for test security purposes). The 2017 scores will be adjusted for differences in difficulty so that the 2013 and 2017 results can be compared.

In addition, MSI will apply sampling weights to the 2013 and 2017 data (along with the equated scores from 2017). We will apply the same weights to the data from baseline and midline. The sampling weights will allow us to generalize the results from the sample-based assessments to the populations. The equating and weighting will be done for each region, with the weighting done separately for each

[3] Pakistan Early Grade Reading Assessment: Guidelines for the Midline and Endline Assessments. Management Systems International and School-to-School International. June 2014.

sampling group within regions (for those regions that have more than one type of intervention) and by language (for Sindh).

Data Analysis and Reporting

The analyses will allow for producing basic descriptive statistics, inferential analyses, and cross tabulations. Basic descriptive statistics include analyses of frequencies, mean, mode, and distribution of the responses. Inferential statistics will be used to describe relationships between different sets of variables. Cross tabulations will present data disaggregated by region, year, and other categorical variables according to the data structure (e.g., demographic for survey data, categories of tasks, for EGRA data, etc.). Specifically, for EGRA data, MSI PERFORM will produce: 1) reliability estimates, 2) task and item statistics, 3) mean and grand mean scores, 4) data plots, 5) timed and untimed task scores, and, 6) questionnaire results.

MSI PERFORM will produce one report per region, for a total of eight regional reports. Reporting of results will be done separately by year (2013 and 2017), language (Urdu and Sindhi), and sampling group (PRP cohorts, SRP cohorts, light intervention). As shown in Table 14 below, comparisons will be made between baseline and midline for PRP Cohorts 1 and 2, SRP Cohort 1, and light intervention. These comparisons may be limited in some regions due to the need to replace schools in the sample as described above in Sampling Design Considerations for 2017.

TABLE 14: COMPARISIONS BETWEEN 2013 AND 2017 DATA

Intervention	Sampling Group	Comparisons	Notes
Pakistan Reading Project	Cohorts 1 and 2	2013 Full Intervention	Comparisons may be limited in some regions due to high numbers of replacement schools.
	Cohort 3	None – baseline study	
Sindh Reading Program	Cohort 1	2013 Full Intervention	Comparisons may be limited due to high numbers of replacement schools.
	Cohort 3	None – baseline study	The endline results for Cohort 3 will be extrapolated for the Cohort 2 results.
Light Intervention	Light Intervention	2013 Light Intervention	Comparisons may be limited in some regions due to high numbers of replacement schools.

While the 2013 baseline was designed to be able to compare between full intervention (now the PRP and SRP cohorts) and light intervention districts, MSI PERFORM no longer believes that these comparisons will be valid in most cases. There are four issues with comparing between these groups:

1. **High number of replacement schools.** The original PRP design included implementation in all schools within full intervention districts. However, the project only provided assistance for a subset of schools. As such, a high number of schools needed to be replaced between baseline and midline.

2. **Attrition of students.** The attrition rates of student enrollment are different in the full intervention districts as compared to the Light Treatment districts. For example, the anticipated achievement rate in GB for PRP Cohort 1/2 based on verified enrollment records is that more

than 90 percent of the student target will be assessed. However, the anticipated achievement in light intervention is 60 percent due to low enrollment numbers.

3. **Attrition of schools.** Between 2013 and 2017, a number of schools have closed or been merged. Initial estimates from the school verification exercise show that a higher number of schools in light intervention districts have closed as compared to full intervention.

4. **Changes in assignment.** There are cases of districts changing assignment between full and light intervention between 2013 and 2017. In GB, Ghizer was originally a light intervention district, but was reassigned to Cohort 3. In Sindh, Thatta was also originally a light intervention district, but was selected to be in PRP Cohort 3 when PRP expanded into Sindh.

With these limitations in mind, MSI PERFORM will report on full intervention (PRP and SRP cohorts) and light intervention separately. While comparisons cannot be made between the groups, the data collected for the light intervention districts can still be used by USAID/Pakistan to report on gains for beneficiaries in those districts.

Data Tabulation Plan

The objective of the data tabulation plan is to present generic table shells of the intended analyses of the EGRA 2017 data. It is not exhaustive and is expected to change by region to reflect the different types of sampling and stages (i.e. baseline or midline). For summarizing purposes, some of the tables or sections of the tables presented below might be placed in the Annex section of the reports so that the most salient information is prioritized.

In line with the sampling characteristics, only region-level indicators will be reported, and there will not be school or district-level reporting of any kind. When the sample size of unweighted data is too low to report a valid estimate (less than 25 observations), data will not be reported. Tabulations using unweighted data will be clearly identified.

Tabulation will primarily focus on EGRA outcomes (disaggregating by outcome categories when available) and cross-tabulating with pupil, teacher, and head teacher characteristics. When applicable, tabulation will follow the baseline layout, and additional tabulation will show differences between 2013 and 2017 data.

TABLE 15: ACTUAL PUPIL SAMPLE BY GRADE

By sample group

Grade Level	Sample	Male	Female	Total
Grade 3	Students			
	% of target			
Grade 5	Students			
	% of target			
Total	Students			
	% of target			

TABLE 16: TEST RELIABILITY

By sample group

Number of Subtasks	Grade 3		Grade 5	
	Baseline	Midline	Baseline	Midline

TABLE 17: TASK CORRELATIONS

By grade and sample group

Subtask	1. Orientation to Print	2. Phoneme Isolation	3. Letter Name Recognition	4. Letter Sound Knowledge	5. Familiar Word Reading	6. Invented/Non-Word Decoding	7a. Reading Passage	7b. Reading Comprehension	8. Listening Comprehension
1. Orientation to Print									
2. Phoneme Isolation									
3. Letter Name Recognition									
4. Letter Sound Knowledge									
5. Familiar Word Reading									
6. Invented/Non-Word Decoding									
7a. Reading Passage									
7b. Reading Comprehension									
8. Listening Comprehension									

TABLE 18: ITEM STATISTICS

By grade and sample group

Item	Baseline		Midline	
	Item Difficulty	Item-Total	Item Difficulty	Item-Total

TABLE 19: ORF PERFORMANCE CATEGORIES

By language

Category	CWPM
Fluent reader	
Emergent reader	
Beginning reader	
Zero reader	

TABLE 20: PERCENTAGE OF READERS BY ORF PERFORMANCE CATEGORIES

By sample group

Category	Grade 3			Grade 5		
	Baseline	Midline	Difference	Baseline	Midline	Difference
Fluent reader						
Emergent reader						
Beginning reader						
Zero reader						

TABLE 21: PERCENTAGE OF READERS BY ORF PERFORMANCE CATEGORIES, GRADE, AND GENDER

By sample group

Grade	Gender	Zero	Beginning	Emergent	Fluent
3	Male				
	Female				
5	Male				
	Female				

TABLE 22: PERCENTAGE OF READERS BY NUMBER OF CORRECT RESPONSES BY GRADE

By sample group

Total Number of Correct Responses	Grade 3			Grade 5		
	Baseline	Midline	Difference	Baseline	Midline	Difference
0 Correct						
1 Correct						
2 Correct						
3 Correct						
4 Correct						
5 Correct						

TABLE 23: AVERAGE SCORES BY GRADE AND SUBTASK

By sample group

Subtask	Grade 3			Grade 5		
	Baseline	Midline	Difference	Midline	Baseline	Difference
1. Orientation to Print						
2. Phoneme Isolation						
3. Letter Name Recognition						
4. Letter Sound Knowledge						
5. Familiar Word Reading						
6. Invented/Non-Word Decoding						
7a. Reading Passage						
7b. Reading Comprehension						
8. Listening Comprehension						

TABLE 24: PUPIL CHARACTERISTICS AND ORF

By sample group

Characteristic	Group	Grade 3		Grade 5	
		Percent	ORF	Percent	ORF
Age (in years)					
Home language	Language				
	Language				
	Other				
School language	Urdu				
	Language				
	Other				
Pupil takes books to read at home	No				
	Yes				
Pupil missed any school days last week	No				
	Yes				
Pupil works after of before school	No				
	Yes				
Last time pupil did not well in a test parents found out	No				
	Yes				

TABLE 25: PUPIL READING AND MATERIALS AT HOME AND ORF

By sample group

Question	Response	Grade 3		Grade 5	
		Percent	ORF	Percent	ORF
Someone read stories aloud to pupil at home	No				
	Yes				
Pupil practice reading stories aloud at home	No				
	Yes				
Pupil practice silent reading at home	No				
	Yes				
Pupil has read "Qurani Qaida" at home	No				
	Yes				
Pupil take library books to read at home	No				
	Yes				
Teacher assigns reading for pupil to do at home	No				
	Yes				

TABLE 26: PUPIL-SCHOOL CHARACTERISTICS AND ORF

By sample group

Characteristic	Group	Grade 3		Grade 5	
		Percent	ORF	Percent	ORF
Class size	Below 21				
	21-25				
	26-30				
	31-35				
	36-40				
	Above 40				
School has a library	No				
	Yes				
School has PTA/SMC/PTC	No				
	Yes				

TABLE 27: TEACHER CHARACTERISTICS AND ORF

By sample group

Characteristic	Group	Grade 3	
		Percent	ORF
Gender	Male		
	Female		
Highest qualification	PhD.		
	M.Phill		
	MA/MSc		
	BA/BSc		
	FA/FSc		
	Matric		
Years of experience	Below 6		
	6-9		
	10-19		
	20-29		
	More than 29		
In this job by choice	No		
	Yes		
Type of commute	On foot		
	Public transport		
	Personal transport		

TABLE 28: TEACHER MATERIALS AND INSTRUCTION

By sample group

Characteristic	Group	Grade 3	
		Percent	ORF
Enough textbooks for each student	No		
	Yes		
Number of instructional materials available in classroom	None		
	One		
	Two		
	Three		
	Four or more		
Has meetings with parents	No		
	Yes		
Frequency of meetings with parents	Monthly		
	Bi-monnthly		
	Quarterly		
	Bi-annually		
	Yearly		
Number of material teacher reads	None		
	One		
	Two		
	Three		
	Four or more		
Number of alternatives teacher uses to update teaching knowledge	None		
	One		
	Two		
	Three		
	Four or more		
Number of times of in-service training during past year	None		
	One		
	Two		
	Three		
In-service training innitiated by	MoE		
	School		
	Parents		
	School board		
	NGO		

TABLE 29: TEACHER TEACHING PRACTICES AND ORF

By sample group

Characteristic	Group	Grade 3	
		Percent	ORF
Uses phonics in teaching	No		
	Yes		
Thinks phonic helps students learn better	No		
	Yes		
Tells pupil the meaning of new words	No		
	Yes		
Practices letter sounds with pupil	Never		
	Sometimes		
	Always		
Reads aloud to pupil	Never		
	Sometimes		
	Always		
Pupil practice silent reading at school	No		
	Yes		
Practices sounding of unfamiliar words with pupil	Never		
	Sometimes		
	Always		
Preferred method to teach language	Translation		
	Direct		
	Both		

TABLE 30: HEAD TEACHER CHARACTERISTICS AND ORF

By sample group

Characteristic	Group	Percent	Grade 3	Grade 5
Gender	Male			
	Female			
Years in position	0-5			
	6-9			
	10-19			
	20-29			
	30 or more			
Highest qualification	PhD.			
	M.Phill			
	MA/MSc			
	BA/BSc			
	FA/FSc			
	Matric			

TABLE 31: HEAD TEACHER TRAINING AND INSTRUCTIONAL SUPERVISION

By sample group

Question	Group	Percent	Grade 3	Grade 5
Training in school management	Yes			
	No			
Training to implement a program in reading	Yes			
	No			
Supports teachers on how to teach reading	Yes			
	No			
Is satisfied with student's reading performance at Grades 3 and 5	Yes			
	No			
Responsible for teacher observation	Head Teacher			
	Deputy Head Teacher			
	Other			
	No One			
Frequency of teacher observation per term	Never			
	One time			
	Two times			
	Three times			
	Four times			
Frequency of lesson plan review	Never			
	1 per year			
	2-3 months			
	1 per month			
	1 per 2 weeks			
	1 per week			
	1 per day			
Head teacher monitors pupils' learning	Classroom observation			
	Tests by teachers			
	Evaluate learners orally			
	Review learners' assignments or homework			
	Teachers provide head teacher progress reports			

ANNEX 1: SCHOOL LISTS

[Note: This report will be revised to include the final school lists once data collection is complete.]