Monthly Monitoring Strengthening
VR12

Report on Field Visits to Sialkot, Kasur and Lahore
June 2013

By:
Allan Findlay
Ali Tariq
## Issue and revision record

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Originator</th>
<th>Checker</th>
<th>Approver</th>
<th>Description</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version 1</td>
<td>23/06/2013</td>
<td>A Findlay</td>
<td>A Tariq</td>
<td>W Hu</td>
<td>Draft for discussion</td>
<td></td>
</tr>
<tr>
<td>Version 2</td>
<td>29/06/2013</td>
<td>A Findlay</td>
<td>A Tariq</td>
<td>W Hu</td>
<td>Draft for final review</td>
<td></td>
</tr>
<tr>
<td>Version 3</td>
<td>02/07/2013</td>
<td>A Findlay</td>
<td>A Tariq</td>
<td>W Hu</td>
<td>Updated on validation responsibility</td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>04/07/2013</td>
<td>A Findlay</td>
<td></td>
<td></td>
<td>For final distribution</td>
<td></td>
</tr>
</tbody>
</table>

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.
## Monthly Monitoring Strengthening

**Report on Field Visits to Sialkot, Kasur and Lahore**

### Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glossary</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Background</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Purpose of the Field Study Exercise</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Approach taken during the Field Visit</td>
<td>6</td>
</tr>
<tr>
<td>3.1</td>
<td>Initial Meeting with PMIU</td>
<td>6</td>
</tr>
<tr>
<td>3.2</td>
<td>Field Visit to Kasur District</td>
<td>6</td>
</tr>
<tr>
<td>3.3</td>
<td>Field Visit to Sialkot District</td>
<td>6</td>
</tr>
<tr>
<td>3.4</td>
<td>Review Visits in Lahore District (Schools CMMF, McKinsey, DfID, World Bank)</td>
<td>7</td>
</tr>
<tr>
<td>3.5</td>
<td>Review Visits at PMIU</td>
<td>8</td>
</tr>
<tr>
<td>3.6</td>
<td>Final Presentation to PMIU, CMMF and IDPs</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Initial Findings and Observations from Field Visit</td>
<td>9</td>
</tr>
<tr>
<td>4.1</td>
<td>Feedback/suggestions from the Monitoring and Evaluation Assistants (MEA)</td>
<td>9</td>
</tr>
<tr>
<td>4.2</td>
<td>Feedback and suggestions from Head Teachers</td>
<td>9</td>
</tr>
<tr>
<td>4.3</td>
<td>Feedback and suggestions from DMOs</td>
<td>9</td>
</tr>
<tr>
<td>4.4</td>
<td>Feedback and suggestions from EDOs, DCOs and other District Managers</td>
<td>10</td>
</tr>
<tr>
<td>4.5</td>
<td>Feedback and suggestions from Chief Ministers Monitoring Force (CMMF)</td>
<td>10</td>
</tr>
<tr>
<td>4.6</td>
<td>Feedback and suggestions from Program Monitoring and Implementation Unit</td>
<td>10</td>
</tr>
<tr>
<td>4.7</td>
<td>Feedback and suggestions from Data Users</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Proposed Approach for the Strengthening Process</td>
<td>12</td>
</tr>
<tr>
<td>5.1</td>
<td>Field Review (Complete)</td>
<td>12</td>
</tr>
<tr>
<td>5.2</td>
<td>Draft and Final Design of for Validation Surveys (In progress)</td>
<td>12</td>
</tr>
<tr>
<td>5.3</td>
<td>Execution of four validation surveys.</td>
<td>12</td>
</tr>
<tr>
<td>5.4</td>
<td>Conclusion of the four validation surveys.</td>
<td>13</td>
</tr>
<tr>
<td>5.5</td>
<td>Strengthening Proposal Systems Documentation.</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>Validation Exercises</td>
<td>14</td>
</tr>
<tr>
<td>6.1</td>
<td>Validation 1</td>
<td>14</td>
</tr>
<tr>
<td>6.2</td>
<td>Validation 2</td>
<td>14</td>
</tr>
<tr>
<td>6.3</td>
<td>Validation 3</td>
<td>15</td>
</tr>
<tr>
<td>6.4</td>
<td>Validation 4</td>
<td>15</td>
</tr>
<tr>
<td>6.5</td>
<td>Validation Summary</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>Operations Manuals and Documentation</td>
<td>17</td>
</tr>
<tr>
<td>8</td>
<td>Summary and Conclusions</td>
<td>18</td>
</tr>
</tbody>
</table>
### Annexes

<table>
<thead>
<tr>
<th>Annex</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex A.</td>
<td>Proposed Work Plan</td>
<td>20</td>
</tr>
<tr>
<td>Annex B.</td>
<td>Districts Visited Meetings and Schools Observed</td>
<td>23</td>
</tr>
<tr>
<td>Annex C.</td>
<td>Field Visit Point Presentation</td>
<td>24</td>
</tr>
<tr>
<td>Annex D.</td>
<td>Draft Scope of Proposed Publications</td>
<td>29</td>
</tr>
<tr>
<td>Annex E.</td>
<td>External Documents Reviewed</td>
<td>31</td>
</tr>
<tr>
<td>Annex F.</td>
<td>Sample Quality Review Checklist</td>
<td>32</td>
</tr>
<tr>
<td>Annex G.</td>
<td>Data Quality Assessment Framework Approach- Validation 2</td>
<td>34</td>
</tr>
<tr>
<td>Annex H.</td>
<td>Monthly Monitoring Form</td>
<td>37</td>
</tr>
</tbody>
</table>
# Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>Cambridge Education</td>
</tr>
<tr>
<td>CMMF</td>
<td>Chief Minister’s Monitoring Force</td>
</tr>
<tr>
<td>DCO</td>
<td>District Coordination Officer</td>
</tr>
<tr>
<td>DfiD</td>
<td>Dept. for International Development</td>
</tr>
<tr>
<td>DMO</td>
<td>District Monitoring Officer</td>
</tr>
<tr>
<td>DPO</td>
<td>Data Processing Officer</td>
</tr>
<tr>
<td>DQAF</td>
<td>Data Quality Assessment Framework</td>
</tr>
<tr>
<td>EDO(E)</td>
<td>Executive District Officer (Education)</td>
</tr>
<tr>
<td>IDP</td>
<td>International Development Partner</td>
</tr>
<tr>
<td>IRM</td>
<td>Institute of Rural Management</td>
</tr>
<tr>
<td>MEA</td>
<td>Monitoring and Evaluation Assistant</td>
</tr>
<tr>
<td>PMIU</td>
<td>Program Monitoring and Implementation Unit</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
</tbody>
</table>
1  Background

The consultancy support, to investigate the validation requirements of the existing data and processes and possible strengthening of the Punjab Government’s monthly monitoring of schools, was requested by PMIU.

The requirement came from a perceived opinion among the key users of the monthly monitoring data that the current approach is not delivering as expected and could potentially deliver more.

Concerns have been raised both in terms of the quality and accuracy of the data and the timeliness of reporting currently being delivered.

Trust needs to be maintained in the reliability of the findings on which a high level of resources is being committed to improve basic education. The monthly monitoring data along with EMIS data is being used to develop new initiatives, and monitor current progress on existing ones.

The data is also being used to address some key challenges including targeting of school repair budgets and improving teacher and student attendance. It is therefore critical that the information being used is both accurate and received and acted on in time to address specific issues.

It was felt the Monthly Monitoring could be strengthened in a number of areas including the quality of data gathering in the field, the data entry accuracy and accuracy of the cleaning, analysis and reporting.

There are a number of perceived inherent weaknesses in the current system and a great deal of speculation as to the causes. Little of this is currently supported by hard evidence derived from detailed studies of the activities or validation exercises on the key data gathering, processing analysis and reporting stages.

In order to address these shortcomings a strengthening exercise has been commissioned to look at the end to end process in detail, design validation exercises to examine the integrity of all the current processes and from the results identify areas where the processes could be strengthened.

NB This work commenced in May 2013 and is due to conclude by Dec 13. The end date may need to be extended however depending on the amount of strengthening work identified by the validation exercises. In addition discussions have still to be held on the final design of the validation surveys so their planned scope may change.

NB Included in the scope of this exercise is the design and implementation of the necessary validation work (four validations). At the time of preparing this report, these are only at the draft design stage. They cannot be fully scoped until agreement has been reached on the scale and coverage of these exercises. All work plans and timelines are therefore dependent on the current understanding of the work being requested. A meeting to clarify the scope will be held during the next in country visit planned for 16/7/13 to 2/8/13.

The four separate exercises proposed are;
1. **Validation of Existing Data** - Carry out an initial analysis of existing data to try to identify current weaknesses in the processes. This work will look at a range of issues discussed in detail below.  
   NB This work will be carried out prior to the final design of the other three validations being agreed as it potentially could impact some of the areas of focus.
2. **Validation of Field Data Collection** – Examine the quality and accuracy of data collected and the quality of the collection process.

3. **Validation of Data Entry** – Looking at the returns checking, entering and validation of data before submission to PMIU.

4. **Validation of Analysis** – Looking at the data cleaning, analysis and data reporting.

Also included in the scope for the exercise is the development of all the necessary systems documentation and manuals required to strengthen the monthly monitoring exercise. The proposed work plan, <Annex B> shows the current planned activities and timeline which is subject to review.
2 Purpose of the Field Study Exercise

The purpose of the field study exercise was to review the complete end to end monthly monitoring process and see it in action in a live field context. This includes visiting a representative sample of the 36 Districts of Punjab that are included in the exercise. The work had to be carried out in late May and early June before the schools closed for the long summer break till late August.

The CE consultants visited the three districts in May and early June 2013 (see <Annex B> for details) with the purpose of carrying out a field study exercise to review and evaluate the current operation of the monthly monitoring exercise and identify potential weaknesses.

Given the uniform approach adopted in monthly monitoring, using the same cadre of monitoring and evaluation staff, using the same instrument and approach based on the same training, it was felt that three Districts would be sufficient. The districts chosen were Lahore, Kasur and Sialkot. The three Districts chosen offered a cross section in terms of their overall performance (as based on the Chief Ministers Stock take of Dec 2012). Out of 36, Lahore ranked 13th, Sialkot 16th and Kasur 26th.

Included as part of the field visit activities were interviews with a representatives from the various organisations playing a part in the monthly monitoring process.

Interviews were carried out:
- To obtain views from Monitoring and Evaluation Assistants (MEAs) on the operations of the current system, the challenges and the issues faced on a month to month basis.
- To obtain the views of the people involved in the district level data entry processes and the issues and challenges they face.
- To obtain the views of the teaching staff being interviewed as part of the process and the issues they face with the current process.
- To obtain the views of the District Monitoring Officers (DMO’s) at district level who have operational responsibility for the monthly monitoring Exercise.
- To obtain the views of the Executive District Officers, Education (EDO(E)’s) at district level who have operational responsibility for implementing the findings of the monthly monitoring exercise.
- Where possible, obtain the views of other senior staff involved in making decisions including the District Coordination Officer (DCO).

The CE consultants also held a number of meetings during the visit with the various parties in PMIU and CMMF Lahore who analyse, report on and use the data in planning and decision making. The various groups met were:
- The management of PMIU responsible for implementing the policies relating to the monthly monitoring exercise.
- The analysts and programmers at PMIU responsible for the software supporting the monthly monitoring exercise and carrying out the monthly data consolidation, cleaning, analysis and reporting.

In addition the external users of the data were consulted. These included:
- Staff from McKinsey, who in partnership with DfID, monitor the results of the monthly monitoring with the aim of identifying key issues in each District affecting the delivery of basic education services.
- Members of the World Bank team supporting education reform in the Punjab for which monthly monitoring is a key component.
Members of the Chief Ministers Monitoring Force (CMMF) responsible for employing the MEA personnel and ensuring action is taken on the issues identified in each District within the 45 days allowed.

This cross section of parties gave us a clear picture into the current operations of the monthly monitoring process, its current strengths and weaknesses and focal areas for review and potential strengthening.

The exercise covered the full end to end process of monthly monitoring activities. It also highlighted a number of processes that could be strengthened. A critical issue for both the review and the various activities undertaken is an almost complete lack of documentation for any of the processes undertaken.
3  Approach taken during the Field Visit

3.1  Initial Meeting with PMIU

The field study commenced with a meeting with the client PMIU to fully understand the background to the consultancy, the perceived issues with monthly monitoring and the strategic goals and objectives for the project overall. During this meeting efforts to determine the future strategic direction for monitoring in terms of resources, management and the relationships with the other key players in education improvement and delivery.

3.2  Field Visit to Kasur District

The visit then moved to the field observations. This part had to be carried out quickly given the lack of time available before schools closed and monitoring was suspended for 3 months. Initially two schools were observed, one rural and one urban in Kasur District.

The schools visited were scheduled for survey so there was no disruption to the planned monitoring activities. This work focussed on open discussions with the two separate MEAs involved and the teaching staff involved. No DMO or other senior staff were present, but consent to visit the schools concerned was provided by the School Education Dept.

The discussions with the MEAs and teaching staff and the observations of the process formed the basis of discussions with the DMO following the two school visits.

Discussions with the DMO were frank and open and included a clear list of the challenges faced in terms of resources, planning budgeting and management of the exercise.

The review then continued with a visit to the Data Processing department in the District. This covered discussions on the receipt and logging processes, checking returns, data entry and data and document storage. It covered the issues and challenges as well as going through the daily routines. Storage of existing survey documents and power supply issues faced by the team were also observed.

After the data processing visit a further short meeting was held with the DMO before moving to Sialkot.

3.3  Field Visit to Sialkot District

At Sialkot we were able to get a meeting with the DCO on the value of the monthly monitoring and the impact it has had on improving education delivery to date. There were also frank discussions on the effectiveness of the monitoring and the challenges. Overall the exercise was seen in a positive light.

In Sialkot three school monitoring visits were observed. Again a choice of a cross section of schools by type that were scheduled for monitoring that day were selected; a mixed rural school, an urban boys school, and a large urban girls school. A similar approach was taken to the Kasur visits but for each of these three schools we were accompanied by the DMO. This added to the value as a lot more specific issues and local examples could be discussed. The institutional knowledge of the process, how it has evolved and improved or changed over time was useful background information.
The range in school sizes highlighted the different challenges faced. The well organised senior schools all had strong management systems and good record keeping but presented serious monitoring challenges due to high teacher and student numbers and a large and diverse range of text books. The rural schools, as in Kasur had a weaker record keeping especially in terms of financial record keeping.

After the school visits there was an opportunity to hold a group meeting with a number of the MEAs, including the three monitored that day to discuss in a group forum the challenges, issues and their ideas for improvement. Again the DMO was present, and that added to the discussion.

This was followed by a review of the Sialkot data processing activities and detailed discussions with the data processing team on their recording and quality control and monitoring procedures.

The field reviews in Sialkot finished with a further brief meeting with the DCO and a long meeting with the EDO(E) and his team of assistant Directors. This meeting covered the quality of the data they are getting back from the reports and the issues with it, in particular with recording of teachers as absent when allocated to other duties.

The meeting covered their perceptions of the MEAs' effectiveness and alternative approaches including strengthening AEO support to monitoring and helping schools.

3.4 Review Visits in Lahore District (Schools CMMF, McKinsey, DfID, World Bank)

The mission then returned to Lahore to consolidate and document the discussions from Kasur and Sialkot and put together a summary of the findings, and observations to date. This was then followed up by a visit to a further two schools in Lahore to clarify and discuss some of the issues. During these visits the large discrepancy between official attendance registers and actual attendance was observed.

Following further analysis of the field exercises the visit moved onto looking at the analysis and reporting side with meetings with the teams responsible for the IT systems used to clean, aggregate and check returns analyse and report the data.

This started with a visit to CMMF. The Deputy Director there explained their role in recruiting MEAs and supporting them. He explained the numbers involved in each District, the resource requirements and the old motor cycles (2005 purchased) they are still using. He explained the challenges in terms of remote schools and weather faced by his team, the call on his resources for other duties not associated with monitoring etc. The lack of fuel subsidies for MEAs was also discussed.

There was a good demonstration on how his team use the results to monitor and take actions to improve education and a full presentation of the web based reporting system they have developed (www.schoools.Punjab.gov.pk). The CMMF team also outlined proposals for using the proposed mobile phone data collection pilot to feed into their web based reporting plans.

A meeting was then held with McKinsey on their strategic use of the data to monitor and drive targets in the Districts. We discussed the issues and how my findings compared to their own field monitoring and investigations.
A short meeting was held with DfID around the validation survey they carried out May 2012 through IRM. DfID shared the results and data from this survey with us. There is an opportunity as part of Validation 2 to repeat elements of the DfID survey and see how the various measures change in the 17-18 month period.

A brief meeting was held with the World Bank representative on the findings to date of the field visit and the proposed validation strategy. This has led to an alignment of the work proposed for this consultancy. We also looked briefly at PMIU’s strategy for Education going forward and EMIS2.

3.5 Review Visits at PMIU

The field visit then switched to PMIU. To detailed discussions with the Director M&E, the Database Analyst and the Systems Analyst covering the processes, procedures used to clean and join the various District datasets each month and to the extent that systems and process documentation exist.

Copies of parts of the PMIU dataset, cleaning scripts reports etc were collected to support validations 3 and 4 and the systems manual work.

3.6 Final Presentation to PMIU, CMMF and IDPs

Finally the field work concluded with a presentation to PMIU, IDPs, and CMMF on the initial findings and draft proposal. <See Annex C>
4 Initial Findings and Observations from Field Visit

4.1 Feedback/suggestions from the Monitoring and Evaluation Assistants (MEA)

Overall there are approx 1,000 MEA staff employed to monitor the 55,000 schools in the Punjab. Monitoring is carried out on a nine month cycle starting in September till the schools close for the summer in June. The MEA staff are individually responsible for a given number of schools on average 61 (currently ranging from 40 to 106 depending on the district and staff shortages). All MEAs are equipped with motorbikes for transport and travel up to 200km per day in the execution of their duties. The MEA staff are all on annual contracts, renewed on successful performance in the last 12 months. There is an approx 10% turnover of staff each year.

The main issues raised by the MEA staff were:
- Salary still at 2007 level. MEA staff recently went on strike over pay and conditions
- Additional duties allocated outside of core education monitoring duties
- Lack of reimbursement of fuel expenditure
- Lack of respect, and being kept waiting by head teachers in schools
- Manpower levels leading to not all schools being surveyed
- Replacement or increased maintenance spent on the aging motorcycles (purchased in 2005)
- Lack of guidance or instructions in carrying out their role
- Frustration at perceived poor record keeping and accounts in schools

4.2 Feedback and suggestions from Head Teachers

The Head teachers or their appointed deputies are responsible for providing the information to the MEAs. They have responsibility for maintenance of the school records and are looking for the monthly survey to accurately reflect their views on school conditions and issues.

The main issues raised by the Head Teachers were:
- Lack of understanding from MEAs on the difficulties and issues they face
- Lack of respect from “junior” MEA staff

4.3 Feedback and suggestions from DMOs

The District Monitoring Officers have overall day to day responsibility for the monthly monitoring in their respective districts. They allocate the school surveys to the MEA staff on a rotational basis ensuring the workload is rotated so that different schools are visited by the MEA each month. They are responsible for the welfare of the MEA and Data Processing Staff. They are responsible for communicating changes in questionnaires and processes to the staff and for training on new questions or processes. They have overall budgetary responsibility.

The main issues raised by the District Monitoring Officers were:
- Lack of budget to effectively support maintenance and fuel
- Lack of generators or other equipment to support data processing
4.4 Feedback and suggestions from EDOs, DCOs and other District Managers

The EDO(E)s have overall day to day responsibility for the delivery of education services in their respective districts. They use the reports generated by the monthly monitoring to take the actions needed to achieve district specific targets. These include ensuring repairs carried out to schools, managing teacher absenteeism and leave, allocating additional teacher duties e.g. exam monitoring, and achieving targets for pupil enrolment and attendance.

The main issues raised by the EDO(E)s were:
- Errors in the detailed information reported in particular in teacher absence
- Perceived lack of skills and tact by MEAs and complaints from teachers about the surveys carried out by MEAs.
- Perception that surveys would be better if carried out by in-house education staff rather than external potentially using existing Assistant Education Officers (AEO’s)

4.5 Feedback and suggestions from Chief Ministers Monitoring Force (CMMF)

The Chief Ministers Monitoring Force has overall day to day responsibility for the employment of the MEA staff and their resources. They are also responsible for ensuring any issues identified by the monthly monitoring are processed within the 45 day allowed.

The main issues raised by the CMMF staff were:
- Shortage in MEA staff leading to overwork of remaining and some schools not getting surveyed
- Diversion of MEA staff onto other unrelated duties by District personnel
- Lack of budgets to incentivise MEAs
- Lack of budget to support vehicles or provide sufficient fuel
- Need for quicker turn around in information from schools to action – currently up to 90 days

4.6 Feedback and suggestions from Program Monitoring and Implementation Unit

The PMIU has overall responsibility for implementation of policy and monitoring the effects of policy. It has, in collaboration with the CMMF Unit, control over the monthly monitoring questions and has responsibility for consolidating, cleaning analysing and reporting on the monthly data. Their staff produce manage and maintain the software used in the process.

The main issues raised by the PMIU staff were:
- Accuracy of the data collected and potential issues and sources of error
- Effectiveness of the monthly monitoring service and ways to improve it
- Understanding the real issues with the monitoring process
- A long term strategy of the monitoring process

4.7 Feedback and suggestions from Data Users

The main data users, other than the education department, are McKinsey, the World Bank and International Development Partners.
The main issues raised by the external data users were:

- Accuracy of the data collected and potential issues and sources of error
- Effectiveness of the monthly monitoring service and ways to improve it
- Understanding the real issues with the monitoring process
5 Proposed Approach for the Strengthening Process

It is proposed that the strengthening is carried out in five phases between now and Dec 2013 (or later if required). The phases are set out below and the draft work plan and draft timeline is detailed in Annex A.

5.1 Field Review (Complete)

This phase, reviewed the end to end process, identified the scope of the work required, prepared a detailed work plan (Annex A) and the range of activities are covered in this visit report.

5.2 Draft and Final Design of for Validation Surveys (In progress)

Phase 2a – This will provide a draft plan for the four validation surveys identified in phase 1 including the proposed approach, coverage and high level sampling strategies.

Phase 2b - Following discussions with PMIU and WB a detailed final validation strategy will be agreed upon. Once this is finalised, a validation strategy concept note will be prepared for approval by PMIU. This document will contain the final details of the planned validation approach, sample sizes, proposed survey instruments and indicative budgets. Once the concept paper is agreed and signed off, work will continue on the documentation and survey instruments and preparation of bid packs for contractors to bid for Validation Survey 2.

5.3 Execution of four validation surveys.

The first of the validation surveys looking at the existing data will be carried out prior to final instrument design and final planning of the remaining three studies. The results of this validation exercise will to some degree influence the design and focus of the other three survey exercises. This will aim to identify the causes of any issues identified in validation survey 1.

Validation survey 2 will look at the field activities both in terms of the accuracy and range of information collected and also the quality of the approach taken in collecting it. Parts of this survey will be based on the Data Quality Assessment Framework for gathering education statistics produced jointly between the World Bank and UNESCO. Validation Survey 2 will be carried out by a locally employed survey firm with experience of field surveys in Punjab. It will be awarded through competitive tender and interview. This survey will also gather the sample from the existing returned field survey forms to be used in validation survey 3 to examine the accuracy of the data processing. The sample will be drawn from the District school lists. A report will be prepared on the findings.

Validation 3 will be based on re-entering randomly selected questionnaires, already entered. This re-entry work will be carried out by a locally employed company, given training in quality data entry techniques. It is proposed to be carried out using different data entry software (to be developed) and checking routines from the current monthly process. The data entered will then be compared to the existing entered data and any differences will be investigated. From this a measure of the existing data entry accuracy will be obtained along with an identification of the issues, if any, with the current process. A report will be prepared on the findings.

Validation 4 will be based on existing monthly data, which will be checked against the existing cleaning rules to ensure it is fully cleaned. The cleaned data will then be analysed to produce the same reports as
previously produced by PMIU but using a totally different analysis software or approach. Again the new reports will be compared to the existing reports and any differences investigated.

5.4 Conclusion of the four validation surveys.

After the four validation surveys are concluded, an analysis of the results will be carried out. The results of the four separate validation exercises will be analysed to identify which stages in the monthly monitoring process are weak, where attention is required to strengthen the process and a proposed set of actions to address the issues.

A report will be prepared on the combined findings of the four exercises. This report will make recommendations for strengthening work and a proposed action plan and will be presented to PMIU and the World Bank.

5.5 Strengthening Proposal Systems Documentation.

It was clear from the field visit, even without the results from the validation exercises, that work is required to produce a set of manuals to guide the MEA and Head Teachers in the field surveys. The best practice approach to Data Entry needs to be documented as does the IT processes and systems at PMIU. See Chapter 7 and <Annex D> for details.

It is very unusual that no documentation exists pertaining to the IT systems, software programs, and procedures covering the development, checking, cleaning, analysis and storage and backup of the data for this vital survey of the Punjab Government.

This stage may also involve some training and capacity building activities depending on the outcome of the earlier work.

It is likely that the documentation and manuals will fall into three distinct sets of documents:

- A field operations manual to support both the MEAs carrying out the surveys but also incorporate teacher guidance notes to help teachers understand the benefits of monthly monitoring and to assist them prepare for the exercise every month.
- A manual to assist data processors understand their role which will include new processes to improve on the data checking, validating and cleaning processes.
- A set of documentation supporting the core application software which will incorporate key system documentation, schemas, change logs, software cleaning, checking and reporting processes etc.

As part of this exercise, a list of historical documents was also reviewed to guide the design of the field study (see Annex E for details).
6 Validation Exercises

As described in Chapter 5 above four validation exercises are being proposed. This chapter sets out more details of the proposed approach, and sampling strategies. The overall approach is to maximise the opportunities presented by these four validation exercises to identify the weak areas in the process. It is proposed replicating some of the key areas of study in the DFID exercise to see the changes over the 17 months between surveys and to compare the trends with those being reported though the changes observed in monthly monitoring.

The opportunity exists to not only monitor the accuracy of the field collections but also the quality of the survey process.

6.1 Validation 1

The first validation is planned to take place in July to Sep. As this uses existing data, readily available from PMIU this exercise only requires a skilled IT analyst or statistician to carry out various analyses of the existing historic data looking for various factors.

It is hoped among other things this study will analyse:

- Monthly coverage of schools and identify schools visited irregularly or not at all over time possibly due to their remoteness. This should give a good indication of the average coverage and Districts with specific issues.
- The attendance and school enrolment can be studied to identify seasonal patterns and also fluctuations within schools. This may identify particular schools for follow up inspections by MEAs comparing recorded and physical headcounts and identify schools and Districts with reporting issues. When linked to the MEAs it may identify trends in weak reporting.
- Analysis of teacher absence will identify teachers with issues, schools and Districts with weak controls etc.
- Monthly variations in reporting across various school types and groupings could give an indication of the quality of data from various Districts and tehsils or differences in reporting data by school level or Urban/Rural.

Validation 1 will be completed before the final designs are agreed for Validations 2, 3, and 4 so that any areas identified can be fully addressed in those surveys.

Validation 1 will be carried out by an external survey company. The validation exercise will be monitored to ensure it is carried out in a professional manner, in accordance with the survey design in terms of sampling, approach, integrity etc. To do this an external reviewer will use a structured check list for assessing (see Annex F). The sample will be drawn from the current school lists.

6.2 Validation 2

The second validation is required to assess the integrity and accuracy of the data collected from the schools, each month. This validation exercise is required to ensure that the information gathered at the schools reflects the actual true picture in terms of student attendance and enrolment and teacher attendance. It will look at the range of data collected and follow the general approach taken in a Data Quality Assessment Framework (DQAF). <See Annex G>. It is proposed a quality questionnaire is
incorporated alongside the instruments to gather data on the school, pupil and teacher attributes. A sample questionnaire is presented in <Annex H>.

Part of Validation 2 will reflect the DfID survey of May 2012 as stated above.

Also this survey will carry out physical head counts of pupils and teachers and compare them to the physical records. For this reason it is proposed that permission be given by the District education authorities for unannounced visits to schools on the sample list and the sample itself known only to the survey team and external enumerators. That way a true measure of pupil and teacher attendance and register under or over reporting can be measured.

The survey teams will also visit the District offices to collect a sample of previously entered forms for Validation 3.

The DQAF Framework used will be the one established by the World Bank jointly with UNESCO to establish the quality of education data (See Annex G) for details.

The validation will also look at when the last data collection exercise took place, look for records of previous monthly collections and gather information about the last collection process. This includes information on the time taken, the attitudes of the collection agent and issues encountered. The validation exercise will also confirm the existence of various school registers and their accuracy.

6.3 Validation 3

The third validation exercise looks at the accuracy of the data processing work carried out in district offices by re-entering historic monthly survey documents held at the district offices and comparing the data to that originally entered. This will cover a range of Districts and time periods to see if the quality varies by either of these factors. The data will be entered by a well-trained data entry team and may potentially be double data entered to confirm quality before comparing with the original. The data cleaning and entry processes will be independent of the original so that any issues there can be identified.

6.4 Validation 4

The fourth validation looks at all aspects of the data consolidation, cleaning and analysis exercises by checking the records held for each district in the final cleaned dataset compared to those sent from the districts. It will also review the code used to clean the data to ensure the current process does not distort or alter the data. The validation will then independently of the software in use, recreate the analysis and reporting processes and compare the results.

6.5 Validation Summary

Between these four validations all aspects of the monthly process is validated.

Concept Note for Agreement and Sign Off
The consultant will prepare a validation concept note giving full details and proposed instruments that can be agreed and signed off prior to the various surveys starting.

**Contractor Bid Pack**

The concept note will be followed by bid packs for potential contractors for Validation Survey 2 and draft budget plans.

**Validation Scope**

Discussions are still going on as to the scope of survey 2 and to whether it should include an element of student monitoring and assessment. If this goes ahead it will make the exercise more costly, complex and will move the timeline into 2014 however it will give a measure of the quality of learning.

**Sample Sizes**

Sample sizes will depend on a number of factors including the exact nature of the survey (e.g. whether it is just schools or it will include a sample of teachers or pupils in the school). To some extent it will be influenced by the findings of validation 1.

**Inclusion of a Learning Assessment (or MLA) and Teacher Development Needs Assessments**

Monitoring of Learning Achievement and similarly any attempt to survey Teacher Development Needs are complex surveys to carry out and need a lot more in the way of instrument development, field procedures to ensure control over administration of the tests, segregation of tested pupils etc. It would involve employing specialist consultants to train in the marking schemes, the interpretation of results and matching results to defined criteria for reading and writing.
One of the initial observations was a complete lack of documentation supporting and strengthening the monthly monitoring activities.

It is likely that the documentation and manuals will fall into three distinct sets of documents;

- A field operations manual to support both the MEAs carrying out the surveys but also incorporate teacher guidance notes to help teachers understand the benefits of monthly monitoring and to assist them prepare for the exercise every month.
- A manual to assist data processors understand their role which will include new processes to improve on the data checking, validating and cleaning processes.
- A set of documentation supporting the core application software which will incorporate key system documentation, schemas, change logs, software cleaning, checking and reporting processes etc.

Details of the areas to be covered in each of the manuals are set out in <Annex D>. To some extent work on the manual design and content can proceed in parallel with the Validation work. But the final edits will need to take cognisance of the validation survey findings and final strengthening recommendations.
The findings from the field study show that there are a number of issues identified by the key players in the process, often conflicting and contradictory. In addition to those identified a number of other issues were identified during the field exercise which will impact on the overall strengthening of the process. The observations below are independent of any validation process. These are:

- Lack of a Field Operations Manual to clearly identify the process to be followed in school inspections and for use in training new MEA staff
- Lack of Guidance Notes to schools outlining the objectives of the monitoring and how to prepare for and assist in the process
- Lack of process documentation for data entry, cleaning, analysis and reporting
- Lack of storage for questionnaires or policy for disposal after time
- Lack of regular validation checking by peers during data entry
- Need to add additional schools for monitoring on a monthly basis
- Lack of version control on questionnaires
- Lack of retraining for MEA staff
- Need for random additional inspections to counter the knowledge that schools once inspected will not be inspected till beginning of the following month
- Need for more effective deployment of MEA resources to balance workload, and potentially additional resources
- Need to improve recording of teacher absence and sanctioned leave to bring all reporting into line
- Use ETO staff to reinforce head teachers skills in record keeping
- Need to review effectiveness of Smartphone Pilot data collection project for future strengthening
- Need for more use to be made of data in monitoring and reporting
- Need to feedback data collected to schools and school based management committees
- Need for data checking to include comparisons with previous month’s data
- Need for more reporting based on historical (time based) analysis for example consistently absent teachers or unrepaired school facilities
- Need for systematic, regular validation exercises to be introduced

In addition to these there is the need to carry out four validation exercises

- Validation 1 – to investigate quality of historic data and
- Validation 2 – on field data collection activities to be carried out once schools reopen in September
- Validation 3 – to review accuracy of data entry
- Validation 4 – to review data analysis and reporting
## Annexes

<table>
<thead>
<tr>
<th>Annex</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex A</td>
<td>Proposed Work Plan</td>
<td>20</td>
</tr>
<tr>
<td>Annex B</td>
<td>Districts Visited Meetings and Schools Observed</td>
<td>23</td>
</tr>
<tr>
<td>Annex C</td>
<td>Field Visit Point Presentation</td>
<td>24</td>
</tr>
<tr>
<td>Annex D</td>
<td>Draft Scope of Proposed Publications</td>
<td>29</td>
</tr>
<tr>
<td>Annex E</td>
<td>External Documents Reviewed</td>
<td>31</td>
</tr>
<tr>
<td>Annex F</td>
<td>Sample Quality Review Checklist</td>
<td>32</td>
</tr>
<tr>
<td>Annex G</td>
<td>Data Quality Assessment Framework Approach- Validation 2</td>
<td>34</td>
</tr>
<tr>
<td>Annex H</td>
<td>Monthly Monitoring Form</td>
<td>37</td>
</tr>
</tbody>
</table>
## High Level Work plan for strengthening of monthly monitoring of schools in Punjab

### Key IC1 - In country visit 1 (23/5/13 - 8/6/13)  
### IC2 - In country visit 2 (14/7/13 - 3/8/13)  
### XX Out of Country/Remote  
### IC3 In Country 3 Dates TBA (Sep/Oct 13)  
### IC4 In Country 4 Dates TBA (Nov/Dec 13)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Activity</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Work plan/Roadmap</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Field Monitoring Visit</td>
<td>IC1</td>
<td></td>
<td></td>
<td>IC1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>1.2</td>
<td>Visit report on the field visits to the districts and provincial headquarters (PMIU &amp; CMMF)</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>1.3</td>
<td>Data validations 1-4 methodology/design – approach, strata, sample size etc.</td>
<td>XX</td>
<td></td>
<td></td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>2</td>
<td>Technical Review Report on CMMF monthly monitoring process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Draft Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC1</td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>2.2</td>
<td>Final Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>3</td>
<td>Data validation survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Validation 1 – Forensic analysis of past 3 years data (By PMIU)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1.1</td>
<td>Gather 3 Years Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC2</td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>3.1.2</td>
<td>Develop Test Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC2</td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>3.1.3</td>
<td>Analysis of Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC2</td>
<td>IC2</td>
<td>CE</td>
</tr>
<tr>
<td>3.1.4</td>
<td>Recommendations on findings from forensic analysis of past 3 years data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>3.2</td>
<td>Validation 2 – Field data collection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.1</td>
<td>Bid pack, notes to contractors, invitation to contractors, selection of contractors</td>
<td>XX, IC2</td>
<td></td>
<td></td>
<td>IC2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Selected company carry out survey of field data collection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC2</td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Training of enumerators for field validation survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC3</td>
<td></td>
<td>CE</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Field Activities by Survey Company (Plus data collection for Validation Survey 3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Contractor A</td>
<td>IC3</td>
<td>CE</td>
</tr>
<tr>
<td>3.2.5</td>
<td>Monitoring of field activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC3</td>
<td>IC3</td>
<td>CE</td>
</tr>
<tr>
<td>3.2.6</td>
<td>Data entry, cleaning, analysis and reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Contractor B</td>
<td>XX</td>
</tr>
<tr>
<td>3.2.7</td>
<td>Review, analysis and recommendations on findings from field validation survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CE</td>
</tr>
</tbody>
</table>
### High Level Work plan for strengthening of monthly monitoring of schools in Punjab

<table>
<thead>
<tr>
<th>Task</th>
<th>Months</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.8 Return all field survey forms to data entry, check and receipt delivery</td>
<td>May</td>
<td>CE Nat</td>
</tr>
<tr>
<td>3.2.9 Monitoring of Data Entry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.10 Analyse Data and prep draft report</td>
<td></td>
<td>XX</td>
</tr>
<tr>
<td>3.2.11 Review findings, final report and present</td>
<td></td>
<td>IC4</td>
</tr>
</tbody>
</table>

#### Validation 3 – Data entry

<table>
<thead>
<tr>
<th>Task</th>
<th>Months</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3.1 Validation 3 Sampling Design</td>
<td>May</td>
<td>IC2</td>
</tr>
<tr>
<td>3.3.2 Data Entry Planning, Design and selection of DE Contractor for Val 2 Data</td>
<td>June</td>
<td>IC2</td>
</tr>
<tr>
<td>3.3.3 Selected company carry out survey of data entry</td>
<td>July</td>
<td>IC2</td>
</tr>
<tr>
<td>3.3.4 Data Entry work for Val 3 Data</td>
<td>Aug</td>
<td>Contractor B</td>
</tr>
<tr>
<td>3.3.5 Analysis of validation data and report/recommendations on findings from data entry validation survey</td>
<td>Sept</td>
<td>XX</td>
</tr>
</tbody>
</table>

#### Validation 4 – Data analysis and reporting

<table>
<thead>
<tr>
<th>Task</th>
<th>Months</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.1 Validation 4 Test Data and Process Design</td>
<td>May</td>
<td>IC2</td>
</tr>
<tr>
<td>3.4.2 Collection of Test Months Data (? 2 months x 2 district - 4 checks)</td>
<td>June</td>
<td>IC2</td>
</tr>
<tr>
<td>3.4.3 Collection of existing cleaning, checking, analysis and reporting software code</td>
<td>July</td>
<td>IC2</td>
</tr>
<tr>
<td>3.4.4 Investigation of code and effects on data</td>
<td>Aug</td>
<td>IC2</td>
</tr>
<tr>
<td>3.4.5 Analyse of Data by alternate approach and compare results</td>
<td>Sept</td>
<td>XX</td>
</tr>
<tr>
<td>3.4.6 Analysis of findings and analysis compare and report/recommendations on findings from data analysis and reporting validation survey</td>
<td>Oct</td>
<td>XX</td>
</tr>
</tbody>
</table>

#### Operational Manuals

<table>
<thead>
<tr>
<th>Task</th>
<th>Months</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1 Develop/draft document structure and content for field operations manual</td>
<td>May</td>
<td>XX IC3</td>
</tr>
<tr>
<td>4.1.2 Second draft and peer review of field operations manual</td>
<td>June</td>
<td>IC3</td>
</tr>
<tr>
<td>4.1.3 Field testing of field operations manual</td>
<td>July</td>
<td>IC3</td>
</tr>
<tr>
<td>4.1.4 Final document of field operation and TG manual</td>
<td>Aug</td>
<td>IC4</td>
</tr>
<tr>
<td>4.1.5 Publication and distribution of field operations and TG manual</td>
<td>Sept</td>
<td>IC4</td>
</tr>
</tbody>
</table>

#### Manual 2 - Data entry, processing, manual

<table>
<thead>
<tr>
<th>Task</th>
<th>Months</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.1 Develop/draft document structure and content for data entry, processing, analysis, and reporting procedures Manual</td>
<td>May</td>
<td>XX IC3</td>
</tr>
<tr>
<td>4.2.2 Second draft and peer review of data entry, processing, manual</td>
<td>June</td>
<td>IC3</td>
</tr>
</tbody>
</table>
### High Level Work plan for strengthening of monthly monitoring of schools in Punjab

| 4.2.3 | Field testing of data entry, processing, analysis and reporting procedures manual | CE Nat |
| 4.2.4 | Final document of data entry, processing, procedures Manual | IC4 CE |
| 4.2.5 | Publication and distribution of data entry, manual | IC4 CE |
| 4.3 | Data processing analysis and reporting Manual | May June July Aug Sept Oct Nov Dec Responsible |
| 4.3.1 | Develop/draft document structure and content for Data processing analysis and reporting Manual | XX IC3 CE |
| 4.3.2 | Second draft and peer review of Data processing analysis and reporting manual | IC3 CE |
| 4.3.3 | Field testing of Data processing analysis and reporting manual | CE Nat |
| 4.3.4 | Final document of Data processing analysis and reporting manual | IC4 CE |
| 4.3.5 | Publication and distribution of Data processing analysis and reporting manual | IC4 PMIU |

### 5 Consolidated report with CMMF strengthening plan

| 5.1 | Draft Report | XX CE |
| 5.2 | Final Report | IC4 CE |
## Districts Visited Meetings and Schools Observed

<table>
<thead>
<tr>
<th>District</th>
<th>Interview Meeting/Visit</th>
<th>Objective</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lahore</td>
<td>Initial Meeting and Brief by PMIU</td>
<td>To get background to exercise, monthly monitoring cycle, and thoughts on main issues and problems</td>
<td>1</td>
</tr>
<tr>
<td>Kasur</td>
<td>Monitoring visit to Urban Mixed Primary Monitor Enumeration Exercise</td>
<td>Monitor Enumeration Exercise</td>
<td>2</td>
</tr>
<tr>
<td>Kasur</td>
<td>Monitoring visit to Rural Female Primary Monitor Enumeration Exercise</td>
<td>Monitor Enumeration Exercise</td>
<td>3</td>
</tr>
<tr>
<td>Kasur</td>
<td>Meeting with Kasur DMO</td>
<td>Discuss effectiveness of process in District and any issues encountered</td>
<td>4</td>
</tr>
<tr>
<td>Kasur</td>
<td>Meeting with Senior DP and team</td>
<td>Review of Data Entry process in District, controls, procedures, issues etc.</td>
<td>5</td>
</tr>
<tr>
<td>Sialkot</td>
<td>Meeting with DCO</td>
<td>To understand from a DCO perspective the benefits to education from the monthly monitoring Process, the challenges and the strategic thinking and benefits of the process</td>
<td>6</td>
</tr>
<tr>
<td>Sialkot</td>
<td>Monitoring visit to Rural Mixed Primary</td>
<td>Monitor Enumeration Exercise</td>
<td>7</td>
</tr>
<tr>
<td>Sialkot</td>
<td>Monitoring visit to Urban Boys Intermediary Monitor Enumeration Exercise</td>
<td>Monitor Enumeration Exercise</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Monitoring visit to Urban Girls Secondary School</td>
<td>Monitor Enumeration Exercise</td>
<td>9</td>
</tr>
<tr>
<td>Sialkot</td>
<td>Meeting with DMO and MEAs from field visits</td>
<td>To understand the challenges faced implementing the process</td>
<td>10</td>
</tr>
<tr>
<td>Sialkot</td>
<td>Senior DP and team</td>
<td>Review of Data Entry process in District, controls, procedures, issues etc.</td>
<td>11</td>
</tr>
<tr>
<td>Sialkot</td>
<td>EDO(E) and team (Depute Women, Depute Male, Depute Secondary</td>
<td>To discuss the quality of the data and reporting and their perceptions as to the quality and effectiveness of the activity.</td>
<td>12</td>
</tr>
<tr>
<td>Lahore</td>
<td>Monitoring visit to Urban Girls Primary School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>Boys Intermediary School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>CMMF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>McKenzie</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>DFID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>World Bank Consultant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>PMIU - DD M&amp;E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>PMIU - Systems Analyst</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>PMIU - Database Analyst</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahore</td>
<td>Meeting of Key Development Partners, PMIU and CMMF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The contents of the field visit power point presentation made at the end if the first in Country visit was as below:

1. **Government of Punjab Education Dept.**
   Review, Validation and Strengthening of Monthly Monitoring System

2. **Background?**
   PMIU has requested Cambridge Education to carry out a review of the Punjab Education Dept Monthly System and design and implement a validation exercise to assess the level of completeness, consistency, accuracy, and reliability of the existing data collection system.

   To ensure that the results from the validation exercise will be relevant and helpful in improving the data quality through a strengthened monitoring system.

   The Monthly Monitoring is a key element of the overall M&E Framework for SED.

3. **In Country Review**
   Started 24/5/2013
   Three Districts Visited – Kasur, Sialkot and Lahore
   Seven School Visit Reviews
   - interviews with MEAs (all different)
   - interviews with Head Teachers/Deputies
   - Interviews with DCO, DMO, EDO, and SDP in Districts
   - Interviews with key personnel from PMIU, OMMF, and McKinsey

4. **In Country Review**
   Process reviewed end to end
   Initial findings categorised into four areas
   - Field Work
   - Data Entry (Districts)
   - Data Checking, Cleaning, Analysis and Reporting
   - Overview/Future Strategy
Monthly Monitoring Strengthening
Report on Field Visits to Sialkot, Kasur and Lahore

Introduction

What the Punjab Education Dept. has, with the monthly monitoring process, is a good system that is making a significant difference to the quality of education in the Punjab.

<table>
<thead>
<tr>
<th>Month</th>
<th>Teacher Present</th>
<th>Student Attendance</th>
<th>Functioning of Facilities</th>
<th>Visit by Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 21</td>
<td>105</td>
<td>92</td>
<td>65</td>
<td>12</td>
</tr>
<tr>
<td>Nov 21</td>
<td>104</td>
<td>93</td>
<td>63</td>
<td>10</td>
</tr>
<tr>
<td>Dec 21</td>
<td>106</td>
<td>94</td>
<td>64</td>
<td>14</td>
</tr>
</tbody>
</table>

With some validation checking and strengthening it should function even better, be trusted more, and provide a wealth of (more) timely information for continued improvements.

Key Recommendations – Field 1

- Overall the monthly monitoring continues using basically same approach and timings, with strengthening measures, plus introduction of new collection approaches – long term reduce monitoring to min quarterly

- Review of remuneration package for MEAs - still 2007 levels

- Review MEA manpower levels in some Districts if new 5 day working conditions continue. Current workload per MEA varies from 40 to 106 schools per month – Avg 61 (also to allow for introduction of additional unannounced 3% sampling in same month)

Key Recommendations – Field 2

- Replacement of aging motorcycle fleet row approx 7 years old

- Sufficient funding for fuel to support MEA activities

- Process improvements in MEA allocations and questionnaire version controls

- Minor questionnaire changes to support data entry, version control and new fields to capture interview start time on questionnaire. Possible capture both register and physical attendance.

Key Recommendations – Field 3

- Comprehensive field operations manual supporting all field activities and training (approx 10% turnover in MEA staff annually). Include guidance on subjective judgements and support interaction with teachers. Also physical count processes. (will double as training and refresher training – 10% MEA turnover per annum)

- Preparation and distribution of guidance notes for head teachers on the monitoring process. The benefits to them, What they need to do to facilitate and how to prepare

Key Recommendations – Field 4

- Both Operations Manual and Guidance Notes linked to thorough review of recording types of teacher absence, timing of recording and clarity on sanctioned leave

- Improved physical monitoring of teacher and student attendance – new processes to check a number of random classes against attendance registers

Key Recommendations – Field 5

- Use of ETO staff to reinforce teacher’s skills in record keeping

- Refresher training for MEA field staff in line with Operations Manual recommendations – copy manual to all MEAs

- Validation (1) of field activities carried out in Oct 2013

- Review of CIDA project of smart phone data capture (5 Districts) and if successful accelerated roll out – Real time and positional data capture

275694/1/A 10 July 2013
Monthly Monitoring Strengthening
11

**Key Recommendations**

**District Data Processing 1**

- Data Processing Manual and other documentation covering the full entry, cleaning, analysis and reporting processes. (Full documentation inc change control)

- Improvements to Power Supply Contingencies UPS and Generator capacities

- Improved data entry control procedures and introduction of 5% peer review quality control on entry (signed on questionnaires)

12

**Key Recommendations**

**District Data Processing 2**

- Defined set of quality checks and investigations prior to transmission to “Head Office” – includes Data Validation comparisons with previous months data

- Document Storage, Disposal and Retention Policy for questionnaires (allow for validations)

- Ability to add new schools throughout year and identification of consolidated schools

13

**Key Recommendations**

**District Data Processing 3**

- Standard Returns Control Procedure (% returns per week) and reporting of schools not enumerated in a given month. Ensure these prioritised next month

- Validation (2) on quality of historic data entry – re-entry of a random sample of historic questionnaires for each District over a 12 month period

14

**Key Recommendations - Data Consolidation, Checking, Analysis and Reporting 1**

- Investigate options for one organisation responsible for all above activities (both strategic and operational) – currently 3. One set of monthly data

- More quality controls in checking including comparison with previous months results

- Monthly report on cleaning activities and issues

- Central point of contact at EDO office to identify non present teachers (maternity leave, long term sick etc)
Key Recommendations - Data Consolidation, Checking, Analysis and Reporting 2

- Full system documentation, process documentation, software documentation and a defined set of business rules for validation — currently no documentation and one key analyst since 2007

- Integration of Monthly Monitoring results with existing school level EMIS results on public web (Project Objective)

- Publication of District Pack data on web (inc historic)

Key Recommendations - Data Consolidation, Checking, Analysis and Reporting 3

- Additional reporting on consistently bad schools, teachers etc and monitoring of schools not surveyed over time and several other additional management reports. (More management monitoring of process)

- Improved monthly feedback on actions taken as a result of monitoring — teachers interviewed, disciplined, and identification of permanent enrolment/attendance discrepancies for example (exists in CMMF)

Key Recommendations - Data Consolidation, Checking, Analysis and Reporting 4

- Validation 3 - Data analysis and reporting — production of sets of monthly district packs from same data with a different approach

- Potentially Validation 4 — Forensic analysis of last 3 years data.

Key Recommendations - Data Validation

Three/Four separate Validation Processes

1. Field Validation
2. District DP Validation
3. Merging, Cleaning Analysis and Reporting Validation
4. Last 3 years forensic audit (To be discussed)

Key Recommendations - Data Validation 1

Field Validation

School Visit Based Validation
- Random structured sample — all 36 Districts
- Sample drawn from current school list
- Covers
  - Student Attendance Number Verification
  - Physical Counts and dated photos at schools
  - Teacher Attendance Verification
  - Physical Counts and dated photos at schools
  - Audit of Actual Field Visits

(Already Contracted for by World Bank? As DFID Review?)

Key Recommendations - Data Validation 2

Field Validation

District DP Dept Based Validation
- All 36 Districts — possible data gathered with Val 1
- Sample drawn from existing paper questionnaires over a 9 month period (12 of each)
- Covers
  - Physical independent re-entry and comparison of results original final monthly District data
- Measures
  - Accuracy of current DP Process at District Level
  - Adulteration of data post entry pre analysis

275694///1/A 10 July 2013
Monthly Monitoring Strengthening
**Key Recommendations - Data Validation 3**

Merging, Cleaning Analysis and Reporting Validation

PMU-based Validation
- Using existing raw data (if available or deemed if not) over last school year
- Recalculation of all 36 District Packs by month
- Measures
  - Effectiveness of cleaning process/scripts
  - Accuracy of Reporting software
  - Adulteration of data post analysis
  - Trust in existing data packs

**Key Recommendations - Data Validation 4**

Forensic Validation last 3 years data

Based on existing data
- Desk Based Exercise
- Forensic Check to evaluate possible issues with existing processes for future strengthening
- Potential issues (Politically if seriously wrong)
- Measures
  - Effectiveness of existing processes
  - Guarantee or otherwise of progress to date
  - Possible additional strengthening measures

**Key Recommendations - Long Term Strategies 1**

- Validation of data as above every 2 or 3 years by an independent organisation (Validation 1-3)
- If successful pilot move to real time data collection/uploads with geo and date tagging
- Long term integration of monthly monitoring into core Education Dept activities (Alignment/Integration/cooperation between MEAs and AEO’s duties)

**Key Recommendations - Long Term Strategies 2**

- Review of District Ranking process to remove pressure to falsify report elements
- Improved use of MM Data in school planning and District Budgeting (Not only EMIS Data)
- Use of MM Data for research
- Build capacity in SED/AEO for monitoring
Annex D. Draft Scope of Proposed Publications

Scope of Operations Manual

- Scheduling Process for Enumeration – Allocating MEAs monthly workload on a school rotation basis
- Monthly checks on schedules, questionnaire changes, additional questions
- Planning and Preparation for School Visits
- Arrival at Schools – Approach to be followed by MEAs
- Arrival at Schools – Approach to be followed by Head Teachers or Deputies
- Records to be maintained and ready for random inspections
- Interview Process
- Interpretations of Questions, whether mandatory or discretionary
- Guidance Notes on Good Average and Bad Facilities
- Checking and Signing of Report with Teachers
- Difference of Opinions and Reconciliation
- Measurement Rules for Attendance and other data (when to physically count and when to use registers)
- Rules for comparing register and physical attendance
- Rules pertaining to teacher attendance. Allowable categories of non-attendance
- Rules pertaining to schools status (open or closed)
- Checking of completeness of questionnaires before sign off by head teacher
- Copy of record to be left with teacher
- Alternate approaches when surveying using smart phones
- Logging Process with school of visit
- Disciplinary rules for falsification of data, collusion and false record keeping

Scope of Data Processing Manual

- Process for logging receipt of questionnaires from the field
- Checking of questionnaires prior to data entry and follow up with MEAs over completeness
- Data Entry Software version checking and updates
- Checks to be made during data entry
- Recording of entered questionnaires
- Control Processes
- Mandatory issues for follow-up with MEAs before finalising record
- Local verification scripts to be run
- Transmission of data to PMIU and recording
- File naming standards and version control
- Minimum specifications for Data Processing Units and backup power support
- Logging of issues identified, resolution process followed and corrections made
- Monthly Backups Process and secure offsite storage rules
- Paper questionnaire storage, retention and disposal rules

Scope of Data Checking, Cleaning, Analysis and Reporting Manual

- Software Documentation
- Database Scheme
- Software Version Control
- Software Change Process
- Software testing and User Acceptance Testing
- Data Cleaning Scripts Approval and Version Control
- Monthly District Data File logging, and filing
- Data cleaning and checking process – Map of process steps and checks and logging of issues
- New time based data checking rules
- Data Analysis process – Map of process steps and checks and logging of issues
- Rules on changing data and when to revert to source
- Data storage filing and retention
- Data and results distribution to external parties
- Map of data processes and responsibilities
- Version control of reports and tables
- Time series analysis and reporting
- Publications, Web Publication and report distribution and dissemination
Annex E. External Documents Reviewed

As part of the initial process review a number of existing documents and reports were taken into account. These were:

<table>
<thead>
<tr>
<th>Document</th>
<th>Source</th>
<th>Dated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power point of Field Validation of Punjab enrolment numbers</td>
<td>DfID/ Institute of Rural Management</td>
<td>July 2012</td>
</tr>
<tr>
<td>Data Collection Optimisation</td>
<td>McKinsey</td>
<td>18/06/2013</td>
</tr>
<tr>
<td>M&amp;E Punjab Design Note</td>
<td>PMIU</td>
<td>18/06/2013</td>
</tr>
<tr>
<td>Terms of Reference - Package D: Improving Quality, Access and Governance in Education Data Validation and Evaluation System</td>
<td>(CMMF/PMIU)</td>
<td>18 June 2012</td>
</tr>
<tr>
<td>TORs for M and E data validation</td>
<td>Cambridge Education</td>
<td>13 May 2013</td>
</tr>
<tr>
<td>Punjab Annual School Census Form</td>
<td>PMIU</td>
<td>03 Sep 2012</td>
</tr>
<tr>
<td>Data Supply and Use Chain</td>
<td>PMIU</td>
<td>07 May 2013</td>
</tr>
<tr>
<td>District Setup Organogram</td>
<td>PMIU</td>
<td>07 May 2013</td>
</tr>
<tr>
<td>Government of Punjab monthly monitoring form</td>
<td>PMIU</td>
<td></td>
</tr>
<tr>
<td>Monthly Flow of Information Diagram</td>
<td>PMIU</td>
<td>29 May 2013</td>
</tr>
<tr>
<td>PMIU in Focus - external relationships to PMIU</td>
<td>PMIU</td>
<td>07 May 2013</td>
</tr>
<tr>
<td>School Dept Organogram</td>
<td>PMIU</td>
<td>07 May 2013</td>
</tr>
<tr>
<td>Manual of School Monitoring</td>
<td>PMIU</td>
<td>Aug 2012</td>
</tr>
<tr>
<td>Punjab School Reforms Roadmap Stock take with the Chief Minister</td>
<td>McKinsey Presentation</td>
<td>22 Nov 2012</td>
</tr>
<tr>
<td>ToRs for Research Firm for Data Validation</td>
<td>World Bank</td>
<td>23 June 2012</td>
</tr>
<tr>
<td>Ranking of Districts Report</td>
<td>PMIU</td>
<td>Dec 2012</td>
</tr>
<tr>
<td>Monthly District Summary Pack for Lahore</td>
<td>PMIU</td>
<td>21 May 2013</td>
</tr>
</tbody>
</table>
Annex F. Sample Quality Review Checklist

The following is a draft of the type of checklist to be employed to monitor or externally monitor the enumeration process in Validation 1.

Data Quality Checklist for monthly monitoring Evaluation 1

Dimension 0 - Pre-requisites of Quality
1. Were the resources provided by the funders adequate to complete the fieldwork, including allowances, materials, transport and payment of salaries to field staff? Were qualifications of enumerators observed adequate? Did enumerators drop out during fieldwork/got replaced? If there were replacements, was there additional training?
2. Had the enumerators signed contracts which would protect the confidentiality of the information provided by the respondents?

Dimension 1 – Integrity
a. Did the enumerators abide by the ethical norms involved in interviewing teachers?
b. Did they all obtain the consent from the respondent before starting the interview?
2. Did the teachers seem comfortable with the interviews – was the rapport between enumerator and respondent good?
3. Did the enumerator conduct himself professionally with the respondents
   a. Introduction
   b. Identification
   c. Was the enumerator appropriately dressed (dress code in Punjab)?
4. Was there adequate privacy during the tests?
5. What precautions were taken to ensure that teachers were not helped in giving their answers by enumerators?
6. Where the procedures on questionnaire security adequate – could forms be lost or tampered with?
   a. E.g. possibility to tamper school conditions or attendance data
7. Did data entry start immediately following the fieldwork?

Dimension 2 – Methodological Soundness
1. How many days training did the enumerators receive?
2. How much time passed between the latest training and the fieldwork?
3. Were there unforeseen delays in fieldwork or access to the school?
4. Was there an evaluation of the training by supervisors and enumerators?
5. Did they have field manuals available?
6. Were all the schools selected in the sample covered?
7. Were all the questions in the survey questionnaire asked and checked against documentation where relevant?
8. Observe a number of interviews – did the enumerators administer the questionnaire using the same procedures? Probing as prescribed in questionnaire.
9. Did the test duration vary? Were there large discrepancies in duration?
10. What was the non-response? Was the head teacher or deputy cooperating and willing to participate?
11. Were there numeracy errors in calculating and recording income data?
12. Were there any language or translation problems observed?
Accuracy & reliability
1. Were any supervisors (DMOs) involved during your visit to ensure that quality standards were maintained? If yes, were there debrief sessions with supervisors and enumerators?
2. Were there procedures to check forms for completeness prior to leaving the school?
3. Did the fact the visit took place get recorded in the school visitors book?
4. How were any problems encountered by enumerators solved – what is the problem solving process?
5. What was done to reduce non-response?
6. Did enumerators and supervisors keep a logbook of completed interviews, replacements, problems encountered/enumerator observations?
7. When were the questionnaires checked/mark after the enumeration had occurred?
Annex G.  Data Quality Assessment Framework Approach-Validation 2

A Framework for Assessing the Quality of Education Statistics

WORLD BANK
Development Data Group

and

UNESCO Institute for Statistics

Points of contact for this framework are:

Suletsha Patel Masako Hiruga, and Liminga Wang
Development Data Group
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Fax No. (202) 522 3669
Emails: Spateh@worldbank.org, rhiruga@worldbank.org and lwangw@worldbank.org

Doug Drew and Doug Lynd
UNESCO Institute for Statistics
C. P. 6128
Station Nord Cite-Verte
Montreal, Q.C., Canada H3C 3J7
Fax No. (514) 343 6872
E-mails: DDrew@unesco.org, D.Lynd@unesco.org

January 2003
CONTENTS

Introduction................................................................................................................. ii
A. Purpose of the Framework...................................................................................... ii
B. Organization of the Framework.............................................................................. iii
C. Structure of the Framework................................................................................... iii
0. Pre-requisites of quality.......................................................................................... 1
  0.1 Legal and institutional environment ................................................................. 1
  0.2 Resources ........................................................................................................... 3
  0.3 Quality awareness............................................................................................... 4
1. Integrity..................................................................................................................... 6
   1.1 Professionalism ................................................................................................. 6
   1.2 Transparency ..................................................................................................... 7
   1.3 Ethical standards .............................................................................................. 8
2. Methodological soundness...................................................................................... 10
   2.1 Concepts and definitions .................................................................................. 10
   2.2 Scope ................................................................................................................ 10
   2.3 Classification/sectorization ............................................................................. 11
   2.4 Basis for recording ........................................................................................... 12
3. Accuracy and reliability......................................................................................... 13
   3.1 Source data........................................................................................................ 13
   3.2 Statistical techniques ...................................................................................... 18
   3.3 Assessment and validation of source data ......................................................... 20
   3.4 Assessment and validation of intermediate data and statistical outputs .......... 20
   3.5 Revision studies ............................................................................................... 21
4. Serviceability ......................................................................................................... 22
   4.1 Relevance ......................................................................................................... 22
   4.3 Consistency ....................................................................................................... 23
   4.4 Revision policy and practice ............................................................................ 24
5. Accessibility............................................................................................................. 25
   5.1 Data accessibility ............................................................................................. 25
   5.2 Metadata accessibility ...................................................................................... 26
   5.3 Assistance to users .......................................................................................... 27
Data Quality Assessment Framework for Education Statistics

Introduction

A. Purpose of the Framework

The main purpose of the Framework is to provide a flexible structure for the qualitative assessment of education statistics.

A general Data Quality Assessment Framework has been developed by the IMF and applied to statistics in a number of different subject matters – including poverty statistics. The World Bank in collaboration with the UNESCO Institute for Statistics has undertaken the application of the framework to education statistics. The approach followed has been to describe the general framework in a manner that is independent of the subject matter being applied in the main text of the document, and to highlight those elements which are specific to education statistics in boxes embedded within the report. This allows both a view of the general framework, while highlighting how it has been applied to education statistics.

The Framework covers all aspects of the statistical environment or infrastructure in which data are collected, processed, and disseminated, by integrating aspects of the quality of institution and of the quality of products.

The Framework could be used in a variety of contexts, including

(i) the data module of the Reports on the Observance of Standards and Codes (ROSCs)
(ii) reviews performed in the context of technical assistance programs and new initiatives related to statistical capacity building and data collection;
(iii) self-assessments performed by data producers such as Education Management and Information Systems (EMIS) unit in the ministry of education, and national statistical offices; and
(iv) assessments by other groups of data users.

B. Organization of the Framework

The Framework is organized in a cascading structure that progresses from the abstract/general to the more concrete/specific.

The first-digit level defines the prerequisites of quality and five dimensions of quality: integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility. The first-digit level is sub-divided by elements (two-digit level) and indicators (three-digit level).
Annex H. Monthly Monitoring Form

### GOVERNMENT OF THE PUNJAB
PMU-PERSIP
EDUCATION DEPARTMENT
MONTHLY MONITORING PROFORMA FOR SCHOOLS REFORM ROADMAP

**SCHOOL INFORMATION**

<table>
<thead>
<tr>
<th>EMS Code:</th>
<th>Name of School:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet:</td>
<td>Marking:</td>
</tr>
<tr>
<td>PP No.:</td>
<td>NA No.:</td>
</tr>
<tr>
<td>Me:</td>
<td>UC Name:</td>
</tr>
<tr>
<td>Contact No.:</td>
<td>Monitoring Date:</td>
</tr>
<tr>
<td>Name of AEO:</td>
<td>Ref No.:</td>
</tr>
<tr>
<td>Name of MEA:</td>
<td>Form No.:</td>
</tr>
<tr>
<td>Time of Arrival at School:</td>
<td></td>
</tr>
<tr>
<td>School Status: Open/Closed:</td>
<td></td>
</tr>
<tr>
<td>If closed then select reason: 1- Students &amp; Staff is absent 2- School is non-functional 3- Building under illegal occupation: Yes/No:</td>
<td></td>
</tr>
<tr>
<td>Whole Part:</td>
<td>Shed Month (ms):</td>
</tr>
<tr>
<td>Year (yyyy):</td>
<td></td>
</tr>
</tbody>
</table>

### HEAD OF INSTITUTION / SCHOOL

<table>
<thead>
<tr>
<th>Name:</th>
<th>Designation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Headmaster/Headmistress:</td>
<td>Ph./Cell Number:</td>
</tr>
</tbody>
</table>

### CURTAILING ILLEGAL COLLECTION

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kachi</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Amount actually received (in Rs.):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasons for excess charging (if any):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TEACHERS PRESENCE

<table>
<thead>
<tr>
<th>Detail</th>
<th>Total Teachers as per School Register</th>
<th>Teachers Physically Present in the School</th>
<th>On Sanc. Leave</th>
<th>On Official Duty</th>
<th>Un-authorized Absent</th>
<th>Late</th>
<th>Corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>Sanctioned</td>
<td>Filled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DETAILS OF ABSENT TEACHING STAFF

<table>
<thead>
<tr>
<th>CNIC</th>
<th>Full Name</th>
<th>Designation (RtC)</th>
<th>Absence during last cal. month</th>
<th>Leave Type</th>
<th>Remarks for today</th>
<th>Leave/Duty (Absence/Late)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NON-TEACHING STAFF PRESENCE

<table>
<thead>
<tr>
<th>Detail</th>
<th>Total Non-Teaching Staff as per Register</th>
<th>Non-Teaching Staff Physically Present in the School</th>
<th>On Sanc. Leave</th>
<th>On Official Duty</th>
<th>Un-authorized Absent</th>
<th>Late</th>
<th>Corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>Sanctioned</td>
<td>Filled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DETAILS OF ABSENT NON-TEACHING STAFF

<table>
<thead>
<tr>
<th>CNIC</th>
<th>Full Name</th>
<th>Designation (RtC)</th>
<th>Absence during last cal. month</th>
<th>Leave Type</th>
<th>Remarks for today</th>
<th>Leave/Duty (Absence/Late)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signature of Head of Institution

Initiate of MEA