IMC and FCDO agree way forward to complete important schools project in Pakistan

27th October 2020

The FCDO has confirmed that classrooms at 1015 schools out of 1389 **have been proven to be safe** in the Pakistan Schools Construction and Rehabilitation Programme (SCRP) which was the subject of a lengthy design review. The cleared classrooms are currently being handed back to the local authorities. Individual classrooms at 374 schools require some retrofitting which is also underway.

The FCDO decision follows many months of extensive analysis, testing and investment by IMC Worldwide and intensive discussions with FCDO's technical partners at University College London to confirm the safety of the school buildings. The FCDO has also approved the retrofitting method for those classrooms that need works following consultation with other specialist advisors.

FCDO signed a contract amendment at the end of September 2020 to cover the remaining school construction, the retrofitting works and handovers. The project will be completed by 31 July 2021.

IMC exists to make life better for people. We would never put children and teachers at risk so throughout this process we have taken a cautious and conservative approach. We are pleased to proceed to complete this very important project to improve the life chances of children in Pakistan.

Background

IMC Worldwide is an international development consultancy based in Redhill, Surrey. We work with donors such as the UK's Foreign, Commonwealth and Development Office (FCDO), the World Bank and USAID. Our work has been recognised with awards from British Expertise, the Association of Project Management, the International Federation of Consulting Engineers, the Institution of Civil Engineers, and the UK Association for Consultancy and Engineering.

Since 2014, we have managed the FCDO Humqadam Programme in Pakistan. This programme is also known as the Schools Construction and Rehabilitation Programme (SCRP). We work on selected classrooms and other facilities - not the entire school - in two provinces.

A design review conducted by University College London using mathematical modelling was shared with IMC in May 2019. This review identified some issues regarding the design and construction of some of the schools, namely:

- Concerns over a type of brickwork bond used in wall construction called Chinese Bond. The review recommended testing to confirm the strength of the masonry bond and materials.

- The overall compliance of confined masonry building design used in some of the buildings with codes and best practice requirements.

IMC acted swiftly on the findings of the design review:

- We commissioned independent, expert consultants to review these designs and advise on the development of retrofitting methods suitable to the Pakistan construction context.
- As a further precaution we hired the structural analysis consultants that wrote the software that UCL used to test all designs. This has given us a more robust view of building structural behaviour and compliance.
- We engaged reputable Pakistani universities and highly regarded experts to test and analyse the Chinese Bond masonry construction and materials.
- We worked with local governments to provide alternative learning environments whilst we tested designs, and if necessary, whilst we carry out any improvement works. All children will continue their lessons at school whilst improvement works proceed.

We have undertaken comprehensive checks of all school designs to identify potential issues which have been reviewed by FCDO technical advisors. The expert partners of FCDO and IMC researched a very complex and dynamic mix of building codes, standards and designs and carried out extensive laboratory and field testing. This work required time for brickwork panels to be built and tested and much peer review but has resulted in a new body of knowledge and leading-edge science for construction projects in developing countries.

Safe places to study were provided for all schoolchildren affected throughout this process. We developed detailed individual plans with each school affected in close liaison with the school management, the provincial government and FCDO. The majority of children used other facilities at their own school. 210 schools required temporary classrooms which IMC provided together with fans, low energy lighting, plastic flooring and whiteboards to ensure the education environment is acceptable.

We would also like to make some important details and factors clear:

- The original plan was to use modular designs for primary school classrooms which would be built by local communities. However, the government of Khyber Pakhtunkhwa, Pakistan, requested upgrades to 364 Higher Secondary Schools (HSS), including construction of many other facilities which FCDO agreed to. This change in scope had a significant impact on the programme. It meant the 'modular' design would not work. Some higher secondary schools required an extra 30-40 classrooms with additional facilities. Construction by local communities was not possible in the project time frame and with the changes in design scope. Conventional contracting was required, but as a result the cost of classroom construction increased.
- FCDO wanted IMC to introduce innovative techniques to improve the education environment in the classrooms, reduce costs and carbon emissions. In response to this, IMC proposed the Chinese Bond technique as it is used extensively and successfully in earthquake prone areas in India – including in a large FCDO-funded programme.
- Building designs were approved by engineering consultants registered with the Pakistan Engineering Council. This is a legal requirement in Pakistan.

- FCDO hired specialist third party consultants to verify design integrity and quality on site throughout the programme. As issues were raised, IMC responded fully.
- IMC passes on approximately two thirds of the budget to construction companies in Pakistan. On average we receive about one third of the total budget for technical assistance (TA) - but much of this goes to external suppliers. This level of TA reflects the scale of the programme, the numbers of schools and the challenging terrain. It covers approximately 26% of project expenses including: office, transport and travel, accommodation and security; programme management and procurement of the works; site supervision at more than 1300 locations over a 130,000 km2 area; administering contracts; managing community committees; environmental assessment; liaison with the education authorities; monitoring progress and evaluating impact.

Key points:

- At no point during the last five years was any child or teacher hurt as a result of any of the design issues identified by UCL in 2019. IMC exists to make life better for people. We would never put children and teachers at risk.
- FCDO requested several changes in scope to the programme as requested by the provincial governments which accounted for the increased cost and signed it off
- Any issues raised by FCDO third party consultants on the design and construction of the schools between 2016 and 2018 were responded to fully by IMC at the time.
- FCDO rated IMC's work as 'good' on average across all its programmes in its most recent review
- IMC is a small company of less than 100 full-time staff. Our leadership and staff are committed totally to using their skills and talents to help improve living conditions for the poor around the world.