PISA Capacity Needs Assessment

Egypt

Programme for International Student Assessment

OECD
BETTER POLICIES FOR BETTER LIVES

PISA CAPACITY NEEDS ASSESSMENT: EGYPT

This report has been authorised by Andreas Schleicher, Director of the Directorate for Education and Skills, OECD.

Acknowledgements

This report has been produced with the support of the Government of the Federal Republic of Germany, through its Programme for International Student Assessment (PISA) – Building data competences and increasing the usefulness of data for decision-making in education (2021-2022) arrangement with the Organisation for Economic Co-operation and Development (OECD).

The OECD has contracted the Australian Council for Educational Research (ACER) to undertake the Capacity Building and Implementation Support (CBIS) option for new countries participating in PISA. The Capacity Needs Assessment (CNA) presented in this report is an important element of the support. The CNA report for Egypt has been produced by ACER researcher, Ms Laila Helou (Research Fellow and CBIS Liaison Officer for Egypt), with valuable input from Dr Michael Ward, Senior Policy Analyst, and Ms Sophie Vayssettes, Analyst, Directorate for Education and Skills at the OECD. The publication was prepared by the OECD Secretariat, principally by Isis González Pérez, Noelle Geller and Kelly Makowiecki.

The OECD and ACER would like to thank the following stakeholders who contributed substantially to the establishment of a collaborative relationship between Egypt and ACER, the undertaking of the CNA for Egypt and the facilitating of the in-country visit and meetings. From the Egyptian Ministry of Education and Technical Education; His Excellency Minister Prof. Rida Hegazy, Former Minister Dr Tarek Shawky, and Dr Hanem Ahmed (Head of International Cooperation for the Minister of Education and Technical Education). From the National Centre for Examination & Educational Evaluation (NCEEE); Dr Ramdan Mohamed Ramdan (Assistant Minister for Education and Technical Education and Manager of the National Centre for Examination and Educational Evaluation) and Dr Khaled Mohamed Sayed (Nominated NPM for PISA 2025). We also express our special thanks to all those who contributed to the in-country meetings and CNA consultations. A complete list of people who were consulted for the CNA is included in Annex C.

The OECD and ACER would also like to express their gratitude to the national reviewers, Dr Ramadan Muhammed Ramadan (NCEEE Director), Dr Dalia Mahfouz Nagy (Researcher, NCEEE) and Dr Eman Galal Wahdan (Education specialist, NCEEE), who provided important input to this CNA report.

Table of contents

Acknowledgements **3**

List of acronyms **5**

Executive summary **6**

1. Introduction and background **9**

1.1. PISA 2025 Capacity Building and Implementation Support 9

2. Framework **11**

2.1. Dimensions 11
2.2. Indicators 11
2.3. Rating criteria 12

3. Methods **13**

4. Capacity needs assessment for Egypt **14**

4.1. CNA activities for Egypt 14
4.2. Summary of key findings 14

5. Conclusions **22**

Annex A. Detailed findings of the CNA **23**

Annex B. Stakeholder and document mapping **35**

Annex C. Capacity Needs Assessment consultations **38**

Annex D. CNA questionnaires **40**

Questionnaire for officials 40
Questionnaire for individuals 53

FIGURES

Figure 1. CBIS planning and preparation support for participants starting in 2022 10
Figure 2. Dimensions of integration in an EMIS 16

TABLES

Table 1. Rating of the Capacity Needs Assessment for Egypt 7

Table A A.1. Enabling Environment 24
Table A A.2. Organisational level 28
Table A A.3. Individual level 32
Table A B.1. Stakeholder mapping table 35
Table A B.2. Document mapping table 36
Table A C.1. List of participants in the CNA consultations and in-country meetings 38

List of acronyms

A&R	Analysis and Reporting
ACER	Australian Council for Educational Research
CBA	Computer-based assessment
CBIS	Capacity Building and Implementation Support
CBP	Capacity Building Plan
CAN	Capacity Needs Assessment
EMIS	Education Management and Information System
MOETE	Ministry of Education and Technical Education (of Egypt)
NC	National Centre
NCEEE	National Centre for Examination & Educational Evaluation
NPM	National Project Manager
OECD	Organisation for Economic Co-operation and Development
PBA	Paper-based assessment
PIP	Project Implementation Plan
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PISA-D	PISA for Development
SABER	Systems Approach for Better Education Results
TIMSS	Trends in International Mathematics and Science Study

Executive summary

The Organisation for Economic Co-operation and Development (OECD)'s Programme for International Student Assessment (PISA) measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges.

Based on the experiences of the support programs provided in PISA for Development (PISA-D) and in PISA 2022 through the Country Preparation and Implementation Support partnership option, PISA 2025 offers new participants the Capacity Building and Implementation Support (CBIS) option. CBIS aims at providing new participants with specific and targeted support for their successful implementation of PISA 2025. The CBIS option is implemented by ACER.

At the outset of CBIS, a Capacity Needs Assessment (CNA) is carried out to assess CBIS participants' capacity to implement PISA. The assessment focuses on the CBIS National Project Managers (NPM) and key National Centre (NC) roles, to gain information about their capacity assets and needs in relation to what is required to implement PISA successfully.

The capacity assets and needs to successfully implement PISA 2025 are structured into three dimensions:

1. The enabling environment
2. The organisation level
3. The individual level.

For each dimension, a number of capacity indicators are defined and rated according to the extent of capacity assets and needs a participant has. The ratings are as follows:

- Latent: There is little or no capacity [in this indicator area] -- significant capacity building required.
- Emerging: There is some capacity [in this indicator area] -- capacity building required.
- Established: There is sufficient capacity [in this indicator area] -- capacity building optional.

This report presents detailed findings of the CNA for Egypt.

In summary, the CNA ratings for Egypt are presented in Table 1.

.

Table 1. Rating of the Capacity Needs Assessment for Egypt

Indicator area	Rating		
	Established	Emerging	Latent
Enabling Environment dimension			
E1 Assessment system structure		✓	
E2 Legislation or policy		✓	
E3 Leadership		✓	
E4 Institutional arrangements		✓	
E5a Funding		✓	
E5b Funding from donors		✓	
E6 Use of assessment data			✓
E7 Educational Management Information System		✓	
Organisational Level dimension			
O1 Assessment team		✓	
O2 Mobilisation of funding			✓
O3 Temporary staff		✓	
O4 Physical infrastructure	✓		
O5 IT infrastructure and support	✓		
O6 Security policies and procedures	✓		
O7 Instrument development		✓	
O8 Translation and linguistic quality control		✓	
O9 Target population and sampling		✓	
O10 Survey operations and logistics	✓(PBA)		✓ (CBA)
O11 Data management	✓		
O12 Data analysis and reporting		✓	
O13 Dissemination and communication		✓	
Individual Level dimension			
I1 National Project Manager	✓		
I2 Assessment instruments co-ordinator		✓	
I3 Sampling manager		✓	
I4 Survey operations and logistics manager	✓ (PBA)		✓ (CBA)
I5 Data manager	✓		
I6 Data analyst		✓	
I7 Information Technology co-ordinator	✓ (PBA)		✓ (CBA)
I8 Communication in English	✓		

Note: PBA = Paper-based assessment; CBA = Computer-based assessment.

The Egyptian PISA NC will be located within the National Centre for Examination & Educational Evaluation (NCEEE). At the time of this CNA report, the PISA NC staff had been identified but not formally appointed. The individual level ratings have taken into consideration the expertise of the staff identified by the nominated NPM for the PISA NC positions.

An overview of the CNA ratings for Egypt shows that the capacity to implement PISA 2025 varies between established dimensions and others in need of capacity building. Egypt's experience in implementing large-scale assessments at both the national and international levels has provided it with many strengths and crucial areas of expertise. It is well-positioned to participate in PISA 2025 and will be able to draw upon those strengths during the implementation of PISA 2025. Further capacity is required, especially in the areas of sourcing of stable funding, in building expertise in analysis, and in reporting and use of data.

Participation in the CBIS programme and PISA 2025 will present many capacity-building opportunities for the Egyptian national team. These will be detailed in the upcoming Capacity Building Plan (CBP). In addition to the official capacity building opportunities that PISA 2025 presents, if the Egyptian team selects the computer-based assessment (CBA) option in PISA 2025, they will have the opportunity to gain experience in computer-based assessment delivery. It will also provide them with exposure to innovative digital assessment design and structure. These skills are crucial to any national assessment centre assessing 21st century skills. However, considerable challenges may be involved in implementing this option, especially if the target cohort has limited skills in using computers.

1. Introduction and background

The Organisation for Economic Co-operation and Development (OECD)'s Programme for International Student Assessment (PISA) is the world's largest international learning assessment. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. PISA provides an international benchmark of learning outcomes that inform evidence-based decision-making in education policy over time.

PISA 2025 is the 9th cycle of PISA, which has been conducted every three years since 2000.[1] The focus of PISA 2025 is science, and the assessment also includes the innovative domain of Learning in the Digital World. The innovative domain aims to measure students' ability to engage in self-regulated learning while using digital tools.[2] The overall management of contractors, the implementation of PISA 2025, as well as the instrument development for the innovative domain, is carried out by the Australian Council for Educational Research (ACER). Other contractors include Oxford University Press for the science framework development and Westat for sampling.

1.1. PISA 2025 Capacity Building and Implementation Support

Implementing a large-scale assessment that delivers high-quality data and using the data for evidence-based decision making are demanding tasks for any education system. While participating in PISA offers a range of capacity-building opportunities to participants, it can be particularly challenging for new participants. Therefore, capacity development has been an integral part of every PISA cycle.

Based on the experiences of the support programmes provided in PISA for Development (PISA-D)[3] and PISA 2022 Core E, PISA 2025 offers new participants the Capacity Building and Implementation Support (CBIS) option. CBIS aims at providing new participants with specific and targeted support for their successful implementation of PISA 2025. The CBIS option is implemented by ACER.

CBIS consists of the following five components of activities:

- Planning and preparation support
- Support through a CBIS Liaison Officer
- In-country visit
- Peer learning
- Implementation support.

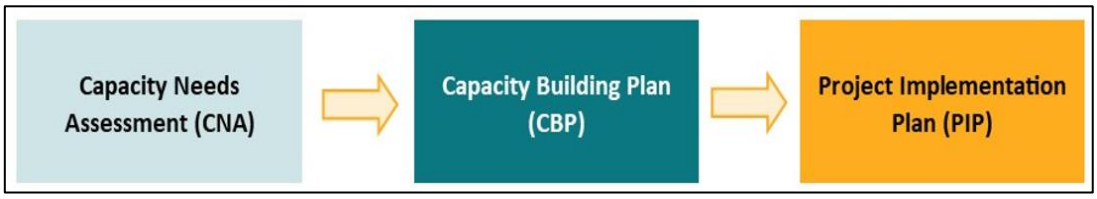
The planning and preparation support includes resources, tools and activities that are designed to assist participants with their planning and preparation for PISA 2025. The main features of the component are a Capacity Needs Assessment, Capacity Building Plan and Project Implementation Plan (see Figure 1).

[1] With the exception of PISA 2022, which was implemented four years after PISA 2018 due to the COVID-19 pandemic.

[2] www.oecd.org/pisa/innovation/learning-digital-world/

[3] www.oecd.org/pisa/pisa-for-development/

Figure 1. CBIS planning and preparation support for participants starting in 2022



1.1.1. Capacity Needs Assessment (CNA)

At the outset of CBIS, a CNA is carried out to assess CBIS participants' capacity to implement PISA. The assessment focuses on the CBIS National Project Managers (NPMs) and key National Centre (NC) roles, to gain information about their capacity assets and needs in relation to what is required to implement PISA successfully. Findings from the CNA are summarised in a report to highlight areas for capacity strengthening, which in turn will help the NC to allocate resources appropriately and focus on building capacity where needed.

1.1.2. Capacity Building Plan (CBP)

A CBP is prepared for CBIS participants to assist with planning for strengthening their capacity to implement PISA. The CBP lists all the capacity building opportunities that will be offered to PISA participants throughout the PISA 2025 project as well as those catered specifically for CBIS participants according to the needs identified in the CNA. The CBP includes details of the PISA meetings and trainings and CBIS-specific activities.

1.1.3. Project Implementation Plan (PIP)

The PIP is a set of resources and tools designed to assist CBIS participants with the preparation for and implementation of PISA 2025. The PIP Schedule – the main feature of the PIP – is a tool that lists all the PISA tasks that PISA NCs are required to complete according to an agreed timeline. CBIS participants are supported to adapt the PIP Schedule to suit their national requirements and context. The PIP Schedule is updated continuously throughout the PISA 2025 implementation period and used as a comprehensive planning and monitoring tool.

This report presents the CNA for Egypt. The report describes the framework, methodology and findings of the CNA.

2. Framework

The PISA 2025 CNA aims to identify capacity assets and needs of CBIS participants to implement PISA 2025 successfully. The framework for the PISA 2025 CBIS CNA was developed based on the PISA-D Capacity Needs Analysis[4] and the PISA 2022 Core E Capacity Needs Analysis Framework (unpublished). In addition, specific PISA materials were consulted to identify capacity required for the successful implementation of PISA 2025. These include drafts of the PISA 2025 Technical Standards, PISA 2025 NPM Manual, and the PISA 2025 NPM and NC Roles and Responsibilities document.[5]

Focusing on the preparation and implementation of PISA 2025, capacity is defined as:

> *the ability of the individuals and institutions responsible for the project in each country to carry out the different tasks associated with the multiple steps of the PISA implementation and the options selected by the country (e.g. computer-based or paper-based assessment), to solve problems that may arise during implementation, adhere to project timelines, set and achieve project objectives in a sustainable manner and conduct national analysis and reporting.*

This definition is operationalised in the three framework dimensions and their capacity indicators.

2.1. Dimensions

The capacity assets and needs to successfully implement PISA 2025 are structured into three dimensions:

1. The enabling environment: Focuses on the context of large-scale assessments in the country at the system level. This dimension addresses more general aspects of the assessment system, such as policies and regulations, institutional arrangements and funding.
2. The organisational level: Focuses on capacity assets and needs to implement large-scale assessments at the national level. Organisational aspects of managing, designing, implementing and analysing data from large-scale assessments are covered, with a focus on the implementation of PISA.
3. The individual level: Focuses on the key roles and responsibilities and the knowledge, skills and experience required to successfully complete the diverse PISA tasks. Through these three dimensions, the CNA covers capacity assets and needs that are required to successfully implement PISA within the broader context of current and desired future capacities of a sustained assessment system.

2.2. Indicators

For each dimension, several capacity indicators are defined. The following areas are covered:

- **Enabling environment**: E1 Assessment system structure, E2 Legislation or policy, E3 Leadership, E4 Institutional arrangements, E5a Funding, E5b Funding from

[4] PISA-D Capacity Needs Analysis reports were produced for the eight participating countries. For more information see: www.oecd.org/pisa/pisa-for-development/pisa-for-development-documentation.htm

[5] All documents are forthcoming.

donors, E6 Use of assessment data, E7 Educational Management Information System.

- **Organisational level**: O1 Assessment team, O2 Mobilisation of funding, O3 Temporary staff, O4 Physical infrastructure, O5 IT infrastructure and support, O6 Security policies and procedures, O7 Instrument development, O8 Translation and linguistic quality control, O9 Target population and sampling, O10 Survey operations and logistics, O11 Data management, O12 Data analysis and reporting, O13 Dissemination and communication.
- **Individual level**: I1 National Project Manager, I2 Assessment instruments co-ordinator, I3 Sampling manager, I4 Survey operations and logistics manager, I5 Data manager, I6 Data analyst, I7 Information Technology co-ordinator, I8 Communication in English.

A complete description of capacity indicators is included in Annex A.

2.3. Rating criteria

Rating criteria are defined for each indicator area to support the assessment and identify capacity assets and needs. Three criteria are differentiated:

- **Latent**: There is little or no capacity [in this indicator area] -- significant capacity building required.
- **Emerging**: There is some capacity [in this indicator area] -- capacity building required.
- **Established**: There is sufficient capacity [in this indicator area] -- capacity building optional.

3. Methods

The CNA for CBIS participants is essentially qualitative in nature. Three major data collection methods are used to gain information on the capacity assets and needs:

- **Online questionnaires**: The capacity indicators for each dimension are operationalised into the CBIS CNA questionnaires, which include a questionnaire for officials and a questionnaire for individuals (Annex D). The former is designed to identify capacity assets and needs at the system and organisational levels while the latter does so at the individual level. Participants in the questionnaires are identified by the NPM, which, for Egypt, included senior government officials from relevant divisions of the Ministry of Education and Technical Education, senior representatives in education or assessment institutions, organisations, agencies, development partners and donors, the PISA National Centre head, the PISA NPM, and key National Centre staff. To assist with the identification of key stakeholders, a stakeholder mapping exercise is carried out.
- **Stakeholder consultations***:* Stakeholder consultations are undertaken by the CBIS Liaison Officer during a one-week in-country visit to collect further information that could not be obtained through the online questionnaires. The NPM assists the consultations by co-ordinating and scheduling the consultations and sourcing an interpreter where needed.
- **Document analysis**: Relevant documents that indicate capabilities in large-scale assessments are also analysed (e.g. policy documents, strategy documents). The NPM is asked to identify and source relevant documents available in English, or translate relevant documents to English, based on a document mapping exercise.

To analyse capacity assets and needs in the CBIS participant, the data obtained from the CBIS CNA questionnaires, stakeholder consultations and documents are consolidated and assessed as they relate to each dimension and capacity indicator. Each capacity indicator is then given:

- A rating using the defined rating criteria.
- A justification for the rating.
- A description of the identified capacity assets and needs.

This report was prepared to present the findings of the assessment for Egypt. To ensure accuracy and completeness of the findings presented, and to gain broad stakeholder agreement and engagement, the CBIS participants were encouraged to invite key stakeholders to review the report.

4. Capacity needs assessment for Egypt

The CNA activities for Egypt and a summary of key findings are presented in this chapter.

4.1. CNA activities for Egypt

CNA activities for Egypt started one month before the in-country visit. During this period the CBIS Liaison Officer held weekly virtual meetings with the nominated Egyptian NPM where they worked on creating a map of local stakeholders and documents relevant to PISA 2025. The list of supporting documents provided information regarding the enabling environment in Egypt, the NCEEE organisational structure and preparedness, and the NC nominated staff experience and involvement in large-scale assessment quality assurance processes (Annex B).

The CNA questionnaires were then translated into Arabic and administered to the key stakeholders who were identified at each level before the country visit. Valid responses were received from 6 respondents for the questionnaire for officials, and from 6 respondents for the questionnaire for individuals over the period of approximately 2 weeks in July 2022.

Thirdly, stakeholder consultations were carried out during the in-country visit undertaken by Laila Helou from ACER, between 17 and 21 July 2022 to obtain further information that was unable to be collected through the online questionnaires. The consultations took place in Cairo with staff and representatives from the MoETE and NCEEE. Annex C includes a complete list of participants in the stakeholder consultations.

The information collected during the stakeholder meetings, the in-country visit, the CNA questionnaires, the stakeholder and document mapping were then all collated and analysed. These served the basis for the CNA ratings and this report.

4.2. Summary of key findings

For each indicator area, a rating is provided together with a brief rationale and identified capacity needs. The details of the assessment are provided in Annex A.

4.2.1. Enabling environment

Assessment system structure (E1) – Emerging

National large-scale assessment programmes form part of the assessment system in Egypt. They are held at the end of primary education, lower secondary education, and upper secondary education. However, as part of the changes brought about by Egypt's education reform programme supported by the World Bank, Education 2.0 and Education 1.1, new assessments have been introduced alongside reform of the upper secondary-level assessments.

It is noted that Egypt's participation in international large-scale assessments, such as the Trends in International Mathematics and Science Study (TIMSS) and Progress in International Reading Literacy Study (PIRLS), has become increasingly more frequent. Egypt, however, does not have a requirement for participation in international large-scale assessments as part of its education policy or assessment system structure, nor do the proposed reforms include them in their scope.

Legislation or policy (E2) – Emerging

In Egypt, national assessments at the end of upper and lower secondary school are mandated by law and form part of the national assessment system. Assessment reforms brought about by Education 1.1 have required that some aspects of these legislations regarding upper secondary assessments be amended.

Currently there are no policies or legislations that mandate the implementation of international large-scale assessments in Egypt. It is expected that without official direction driving involvement in international large-scale assessments, Egypt's participation in these will remain inconsistent and limited.

Leadership (E3) – Emerging

National large-scale assessments are widely promoted and supported by the government. They are the target of reform and wide-ranging improvements and ministers have made these a priority when addressing national stakeholders.

International large-scale assessments do not receive the same amount of support as local assessments, even though stakeholders in the education sector have expressed support for their implementation and noted their usefulness in monitoring education in Egypt.

More leadership is needed to integrate international large-scale assessments into the educational system and raise awareness of their significance and role in providing information about education systems.

Institutional arrangements (E4) – Emerging

The NCEEE has clear roles and accountability mechanisms for the management and implementation of national large-scale assessments. There are plans for a new organisational hierarchy at the NCEEE that will allocate a team for international large-scale assessments, however, it is not clear when these will be implemented.

The establishment of a new division dedicated to international large-scale assessments would provide a strong institutional base for the implementation of international large-scale assessments. However, until this is implemented, the document only serves as an indicator that there is an awareness about the importance of embedding international large-scale assessments in the assessment system structure.

Funding (E5a) – Emerging

Funding for national large-scale assessments is secured via government sources or as part of the funding acquired from the World Bank for the implementation of Education 2.0 and Education 1.1.

Funding for international large-scale assessments is not earmarked in government budgets. Further capacity is needed for the government to expand its funding to provide sufficient amounts to cover participation in international large-scale assessments on a regular basis. Moreover, this difficulty in obtaining stable long-term funding can undermine the sustainability of their participation in international large-scale assessments.

Funding from donors (E5b) – Emerging

Egypt's participation in other international large-scale assessments was funded by international donor groups. Their funds were also used to cover the costs of study tours and capacity building.

There are no long-standing funding arrangements to support Egypt's participation in international large-scale assessments. Funding is often only secured on an annual basis, often as annexes to other projects, requiring new application and negotiations for each year of participation within the one assessment cycle. Limited funds have also resulted in Egypt only participating in the most basic of offerings available.

Use of assessment data (E6) – Latent

National large-scale assessments, although set at key intervals, in their current format have been limited to ability to provide data that can be analysed against standards, horizontally or vertically. This limits their ability to provide information about student growth and growth indicators, all of which are crucial to stakeholders interested in education. It is yet to be seen whether the new reforms brought in with Education 2.0 and Education 1.1 will provide more information to stakeholders.

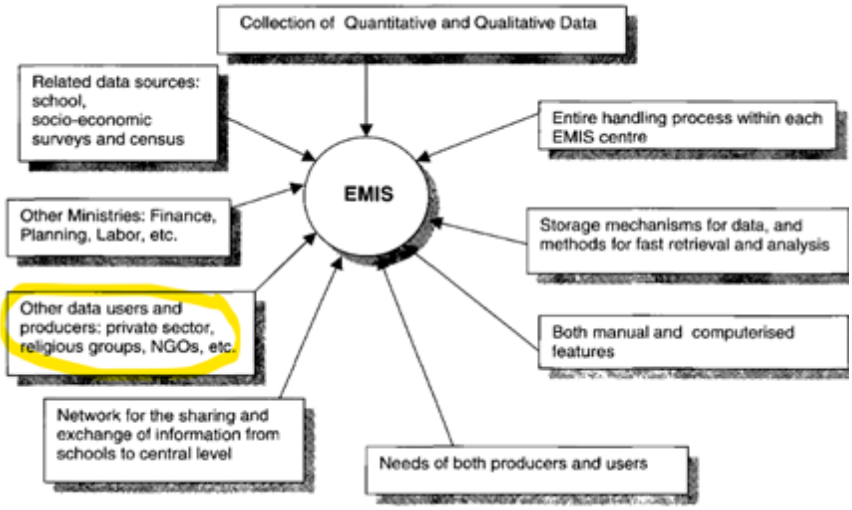
There is limited evidence that the data from large-scale assessments is being used to inform policy. Further capacity is required in areas of assessment design, data analysis and reporting to increase the utility of assessments for stakeholders. Capacity is also required to interpret and use large-scale assessment data in policy planning and reform.

Educational Management Information System (E7) – Emerging

As part of the co-operation with the World Bank to implement Education 2.0, an Education Management Information System was developed by the MoETE. It collects data at the student, teacher and school levels. It also provides the various stakeholders with access to a central database, national statistics and indicators. However, this database does not include the Azhar schools.

The Azhar schools represent a sizable portion of the schools in Egypt, and they have their own EMIS. The lack of a central unified source of data on all schools in Egypt is a limitation as these two databases are not connected and do not share their data.

Figure 2. Dimensions of integration in an EMIS



Source: Source: UNESCO (2003), "Education Management Information System (EMIS) and the formulation of Education for All (EFA): Plan of action, 2002-2015", p.7, available at https://unesdoc.unesco.org/ark:/48223/pf0000156818.

4.2.2. Organisational level

Assessment team (O1) – Emerging

The Egyptian PISA NC is situated within the NCEEE. The NCEEE is a dedicated national centre for assessment and research for school education in Egypt. It manages the year 12 nationwide assessment and includes the NC for other international assessments such as TIMSS and the PIRLS. The team that has been nominated to work on PISA has experience working on multiple cycles of TIMSS and PIRLS.

As part of the co-operation with the World Bank, NCEEE staff working on item development and data reconciliation have had the opportunity to participate in some capacity building training with an international contractor. Other capacity building opportunities at the organisational level are available via partnerships on projects with international donors.

There is still some capacity building required in the area of designing and creating assessments that provide data which is comparable across cohorts and time.

Mobilisation of funding (O2) – Latent

The NCEEE has a budget to cover its direct staffing costs and day to day operations for national large-scale assessment projects. Once funding is allocated to the NCEEE, project managers are able to distribute it to project expenses. The NCEEE budget does not have funds to cover the costs of participation fees, study trips or capacity building for staff. In previous cycles of large-scale international studies these have been covered by international donor organisations.

The NCEEE does not have any long-standing or future agreements in place to cover the funding of international large-scale assessments. If sourced, funding often does not cover the entire assessment cycle and requires negotiation efforts to secure the remainder of costs for the ongoing assessment cycle.

Temporary staff (O3) – Emerging

The NCEEE does not have any arrangements for sourcing temporary staff from outside the NCEEE or the MoETE. All temporary staff, such as test administrators and field operations staff for other large-scale assessments, have been sourced from the MoETE. There is limited capacity to source outside of the MoETE or the NCEEE, as this would require additional funding, while all MoETE and NCEEE staff salaries are covered by the government. It is noted that other international large-scale assessments have been carried out without the need to hire temporary staff outside the MoETE or the NCEEE.

If technical expertise were needed that is not available at the NCEEE or MoETE, this would need to be budgeted for and possibly funded by an external donor.

Physical infrastructure (O4) – Established

The NCEEE has a large building that is well-equipped with the necessary facilities for the national team staff. Each staff member has their own dedicated workstation and storage areas for their documents. The building has sufficient space and facilities, it can also provide a space to be designated for a team during the course of a project. There are also suitably fitted-out meeting rooms.

IT infrastructure and support (O5) – Established

Each employee has their own personal workstation and computer from which they can access the internet. There are specialised personnel to support the assessment team in all IT related aspects. The internet speed is good, and employees have access to secure cloud storage and email via their personal log in. Specialised staff have access to software needed to complete their tasks i.e. SPSS for data analysis.

Security policies and procedures (O6) – Established

There are legally binding laws to ensure the security of large-scale assessment materials. At the NCEEE, confidentially agreements and exclusions of employees who have family members participating in high-stakes assessments are in place for national assessments. Secure areas are also designated when dealing with test papers. All visitors must sign upon entry, and the building is guarded. It has secure areas for storage and data processing.

Instrument development (O7) – Emerging

In international large-scale assessments such as PISA, participating countries are not responsible for the design and development of the assessment and context materials. Countries are provided with manuals that detail the quality assurance steps they need to follow to ensure their country's national items are valid, reliable and fair.

When participating in other international large-scale assessments, the Egyptian NC team has followed the quality assurance processes that have been outlined in the study manuals. However, there are still some areas that require further capacity building such as the area of translation and linguistic quality control.

The current design of the national large-scale assessment structure in Egypt does not allow for some quality assurance mechanisms to be applied. It also is of limited utility for policy analysis and tracking student growth. Further training in assessment design to enable analysis and comparability across time and cohorts is required.

Translation and linguistic quality control (O8) – Emerging

The staff working on the translation and linguistic quality control have experience working on other international large-scale assessments. Their reported experiences on other large-scale assessments, as well as a review of some national instruments, suggest some capacity building in the area of adaptation is required. The translation and adaptation team would benefit from training in item performance data to gain further understanding of how subtle differences in translation can impact an item's performance.

Target population and sampling (O9) – Emerging

The national team has experience carrying out sampling activities for both large-scale international assessments and the Grade 4 nationwide assessment. The MoETE EMIS is up to date and contains a comprehensive database, but it is limited to schools under the government umbrella.

PISA sampling will differ from the national team's previous sampling experience, and the addition of the Azhar schools in the PISA sample will mean a new sampling frame will need to be created. Since it is the first time the Azhar and government databases have been used for PISA sampling which is age-based rather than grade-based, additional effort is expected to be required.

Survey operations and logistics (O10) – Established for PBA; Latent for CBA

The survey and operations team have experience in the management and dissemination of fully paper-based assessments. They also have experience in managing the delivery of basic assessments on tablets. The logistics and operations of PBA differ substantially from that of CBA. The Egyptian team's tablet-based delivery experience will be very different from the complex PISA CBA requirements. Therefore, if the Egyptian team selects computer-based delivery of PISA 2025, significant capacity building will be needed at all stages of survey operations.

Data management (O11) – Established

The national data management team is experienced and has trained with an international contractor to reconcile the outputs of its national large-scale assessments. It has also worked with the data collected from other international large-scale assessments, such as TIMSS, and is experienced in using statistical software, such as SPSS.

Data analysis and reporting (O12) – Emerging

The national data analysis team includes experienced psychometricians. The team is highly qualified and has experience training other country national data analysis teams. They have successfully completed multiple cycles of large-scale international assessments and have experience using statistical software SPSS.

There is limited detailed reporting on large-scale assessments and limited use of large-scale assessment data to make detailed inferences regarding populations of interest. Training is needed to build on the existing experience and strengthen their reporting and analysis abilities.

Dissemination and communication (O13) – Emerging

Results from large-scale assessments are widely disseminated to the public via specialised channels and media. Media outlets have commented on Egypt's results in international assessments and have reported widely on the results of national large-scale assessments.

There is a lack of visible use of large-scale assessment data in policy, and limited tailoring of results to suit the needs of the various stakeholders. Further capacity is required to improve the tailoring of results to meet the information needs of various stakeholder groups. A strategy is needed to improve the awareness of stakeholders and their understanding of the role that international large-scale assessments have in providing findings that relate to their areas of interest.

4.2.3. Individual level

As funding for Egypt's participation in PISA 2025 has not yet been finalised, the PISA national team designations had not been officially assigned at the time of the CNA. The staff members who would be leading each area were identified and recognised within the NCEEE. Most of the NCEEE team members have responsibilities on other assessments, and their availability to work on PISA when their area of expertise is needed needs to be confirmed.

National Project Manager (I1) – Established

An appropriately skilled NPM is (expected to be) appointed for the entire cycle of PISA. The NPM has experience in managing other international large-scale assessments and liaised with the international contractor during those to achieve a successful outcome. He

has good English skills and a clear understanding of the activities required to be carried out by the NPM. He has a good grasp of PISA operations, and these have been strengthened through regular meetings with the CBIS Liaison Officer.

Assessment instruments co-ordinator (I2) – Emerging

The NPM will also lead the co-ordination of the assessment instruments. The rest of the PISA national team will assist him within their areas of specialisation.

Although the team has experience in adapting other large-scale assessments, there is further room for capacity building in the area of translation and adaptation. This is to ensure that adaptation experts raise their concerns where needed and understand the item performance review process that takes place after the field trial to be able to assess the potential impact that translations may have had.

Sampling manager (I3) – Emerging

Sampling tasks at the national level will be managed by a sampling manager/s, who will also play the role of data manager/s. They are experienced psychometricians who have worked on sampling for other large-scale assessments such as TIMSS. They have experience using statistical software such as SPSS for other large-scale assessments. However, the inclusion of the Azhar schools in the PISA sample, alongside it being age-based rather than grade-based will present some areas of challenge.

Survey operations and logistics manager (I4) – Established for PBA; Latent for CBA

The survey and operations manager has experience in the management and dissemination of fully paper-based assessments and digital tablet-based assessments. If the Egyptian team opts for computer-based assessments in PISA, there will be capacity-building needed and ongoing support for the survey and logistics manager will need to be provided.

Data manager (I5) – Established

The data managers have extensive experience and have managed all other data-related activities for large-scale assessments at the national level and large-scale international assessments such as TIMSS. They have also co-ordinated with international contractors to reconcile datasets for national assessments.

Data analyst (I6) – Emerging

The data analysts are experienced and have managed analyses for other nationwide assessments. They have also worked on 2 cycles of PIRLS and four consecutive cycles of TIMSS. They have experience using statistical packages, such as SPSS.

The analyst team does not have experience drafting analysis reports with policy implications based on the interpretation of large-scale assessment data. Egypt's national reports from other large-scale assessments lack in-depth analysis of the results and are mostly limited to descriptions of the resulting data.

Information Technology co-ordinator (I7) – Established for PBA; Latent for CBA

If Egypt selects the computer-based option, this would be its first experience in computer-based assessments at this scale. The team leader is experienced with data collection via tablets. PISA computer-based assessments present a new level of complexity that needs to

be taken into consideration. Capacity building may be required to assist with the first cycle of computer-based assessments.

If Egypt selects the paper-based option, the IT co-ordinator will have a limited role in managing the delivery of PISA.

Communication in English (I8) – Established

Key NC members have good English skills.

5. Conclusions

The CNA ratings indicate that while there are areas which remain in need of capacity building, Egypt has a national team that is experienced in many aspects of large-scale assessments. As part of Egypt's participation in CBIS, a formal Capacity Building Plan will be provided to the Egyptian team during the upcoming phase. It will list the capacity building opportunities that will be available for Egyptian NC team to participate in during the course of PISA 2025 as both a participant in PISA 2025 and the CBIS programme.

The CNA revealed that securing stable ongoing funding for international large-scale assessments is an area in need of substantial development. Without clear government funding allocated for international large-scale assessments or long-standing agreements with donors, Egypt's participation in international large-scale assessments will continue to be inconsistent. The national team would also benefit from increased awareness about grant funding opportunities and grant application training to support individual capacity building.

The areas of assessment instrument design, data analysis and reporting also showed a need for capacity building. Improving the quality of assessment and data outputs from national and international large-scale assessments is a critical step towards providing stakeholders with the information they need to reform the education system. It is recommended that the key NC staff participate in all the capacity development opportunities provided by PISA through the Capacity Building and Implementation Support (CBIS) partnership option, and the Analysis and Reporting (A&R) partnership option.

Another area of potential challenge will be the inclusion of the Azhar schools in the PISA sample. The MoETE and the Azhar are entirely independent of each other, and each system has its own EMIS. Creating a combined sample that is age-based on two different EMISs might introduce some challenges. Also co-ordinating with schools across two different systems might present challenges for survey operations. However, during the in-country visit, the Azhar schools expressed their commitment and enthusiasm to participate in PISA and had good working relations with the NCEEE.

If the Egyptian team elect the computer-based mode of delivery for PISA 2025, it will present a significant additional area of challenge for the NC given their limited experience with CBA. In addition, the target cohort's exposure to computers will need to be assessed for adequacy.

CBA presents many advantages, such as adaptive testing, and is central to 21st century skills assessment. Global large-scale assessments are moving away from PBA, and CBA assessments are an inevitable part of the future. A careful decision regarding the mode of delivery will need to be made. The selection of CBA while participating in the CBIS partnership option, will provide much-needed additional support to the national team that is participating for the first time in PISA.

Egypt's participation in PISA 2025, CBIS and the A&R programme will provide the national team with valuable experience that extends across all aspects of large-scale assessment and will assist in building capacity in areas that need it most. This capacity, once built, will translate into improved assessment practices for the Egyptian education system, as members of the PISA national team are also responsible for many other significant national assessments. It would also provide Egypt with a solid foundation in assisting it to move towards CBA for other national and international assessments.

Annex A. Detailed findings of the CNA

Annex A presents the detailed findings of the CNA for Egypt for each dimension:

- Table A A.1 Enabling environment
- Table A A.2 Organisational level
- Table A A.3 Individual level

For each capacity indicator a rating is provided and the justification with a description of the capacity assets and needs. The identified capacity needs are stated in the last column.

Table A A.1. Enabling Environment

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
E1 Assessment system structure	Large-scale assessment programmes form part of the assessment system to provide performance data in key learning domains and relevant context data at key stages of primary and secondary school education at relevant levels of the education system.	Emerging	National large-scale assessment programmes form part of the assessment system in Egypt. These assessments provide performance data in key learning areas alongside basic context data. They are held at the final years of primary education (Grade 6), lower secondary education (Grade 9) and upper secondary education (Grade 12). The Egypt Education Reform project, which is supported by World Bank, includes five main components: • Improving access to and the quality of early childhood education. • Developing a reliable student assessment and examination system. • Enhancing capacity of teachers, education leaders and supervisors. • Using modern technology for teaching and learning, assessing students and collecting data. • Expanding the use of digital learning resources. These are to be implemented over two main projects: Education 2.0 and Education 1.1. Although Egypt has participated international large-scale assessments, including 4 cycles of TIMSS since 2003 and the 2016 and 2021 PIRLS assessments, its participation has been subject to donor funding availability. There is limited evidence that education stakeholders have utilised the resulting data to direct policy or provide key insight into the education system. Furthermore, participation in international large-scale assessments does not constitute part of the assessment system structure in Egypt. There was no evidence that the planned education reforms included the participation in international large-scale assessments in their scope or even utilised their data. There was also no official direction to participate in international large-scale assessments.	Integrate the implementation of international large-scale assessments into the official assessment system structure.
E2 Legislation or policy	The large-scale assessment programmes that form part of the assessment system are guided by legislation or policy.	Emerging	In Egypt, there are legislations that mandate the implementation of national large-scale assessment programmes at the end of key learning stages. Education system reform has required that the laws related to the Grade 12 assessments be amended to include the reform changes. Although there is an understanding of the value of international large-scale assessments at the highest ranks, this has not yet translated into official legislation or policy to ensure the implementation of these assessments. The scope of education legislation reform has been limited to national-level assessments.	Integrate the implementation of international large-scale assessments into official legislation and policies.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
E3 Leadership	The government demonstrates senior leadership and political will in support of large-scale assessments. A strategy is in place to promote participation, effective implementation and dissemination of results amongst all relevant national stakeholders.	Emerging	The Minister of Education and Technical Education and his deputies are working towards implementing wide ranging reforms to the Egyptian national assessment programme and the education system as part of the Education 2.0 and Education 1.1 plans. To support these changes the previous Minister of Education and Technical Education made televised appearances with the head of the NCEEE to promote the changes to the Grade 12 large-scale assessments and promote participation. Challenges remain in gaining public support for the new reforms and engaging stakeholders in the reform process. There is room for improved dissemination of large-scale assessment results to a larger cohort of stakeholders. Despite stakeholders in the education sector voicing their support for the implementation of international large-scale assessments and noting their value in monitoring education in Egypt, international large-scale assessments do not receive the same level of support as local assessments. Currently, there are no policies or legislations that mandate the implementation of international large-scale assessments. It is expected that without official direction driving involvement in international large-scale assessments, Egypt's participation in these will remain inconsistent and limited. Further leadership is required to embed international large-scale assessments in the education system and raise awareness about the importance of international large-scale assessments and their role as indicators of education system quality.	Support is required to embed international large-scale assessments into the education system.
E4 Institutional arrangements	The government has well-established institutional arrangements for large-scale assessments with clear accountability mechanisms.	Emerging	Institutional arrangements for the implementation of national large-scale assessments within the NCEEE are established. Clear accountability mechanisms and roles regarding the management and implementation of national large-scale assessments are in place. At the institutional level, international large-scale assessments do not have the same levels of organisational clarity as their national counterparts. Plans for a new organisational hierarchy at the NCEEE to allocate a division for international large-scale assessments have been made, although it is not yet clear when they will be applied. The creation of a new division dedicated to international large-scale assessments would provide a strong institutional base for the implementation of international large-scale assessments. However, until this is implemented, the document only serves as an indicator that there is an awareness about the importance of embedding international large assessments in the assessment system structure.	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
E5a Funding	The government provides sufficient and stable funding for large-scale assessments.	Emerging	Funding is secured for the main national large-scale assessments, whether it be through government sources or as part of the funding acquired from the World Bank for the implementation of Education 1.1 and Education 2.0. Funding for international large-scale assessments is not specified in the government budget. Participation costs in previous international large-scale assessments were funded by external donors on an irregular basis, while the government covered the Egyptian team staff salaries and most of the internal costs of administration of the assessments. Further capacity is needed for the government to expand its funding to provide sufficient amounts to cover regular participation in international large-scale assessments. Without stable government funding, participation in large-scale international assessments will be dependent on external donors, undermining the sustainability of their participation and the ability to use these assessments to drive reforms and make data-driven decisions through indicator monitoring.	Further capacity is needed for the government to expand its funding to provide sufficient amounts to cover participation in international large-scale assessments.
E5b Funding from donors	The government receives funding from donors for large-scale assessments.	Emerging	The World Bank has provided Egypt with a loan to assist with the implementation of its Education Reform plan. This includes amounts stipulated for the reform of Grade 12, and Grade 9 assessments, and the creation of new national large-scale assessments at Grades 10, 11 and 4. International donors also contributed to the funding of Egypt's participation in PIRLS and TIMSS. They also were provided funding to cover the costs of study tours and capacity building for the national Egyptian team working on these assessments. However, there are no long-standing funding arrangements or future agreements to support Egypt's participation in international large-scale assessments. Often, funding is only secured on an annual basis within the one assessment cycle, or sometimes as annexes to other projects. Frequently requiring new application and negotiations for each year of participation within the one assessment cycle. The lack of secure funding to support the implementation of international large-scale assessments has meant that Egypt's participation in them is often limited to the most basic of offerings, for example Egypt did not assess Grade 4 students in TIMSS, and instead it only assessed Grade 8 students.	Capacity support is needed to create long-term funding partnerships with donors to build assessment capacity.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
E6 Use of assessment data	Government and key stakeholders have capacity to use data from large-scale assessments for evidence-based education policy and planning.	Latent	Assessment data is a tool that informs education policy and guides reform while serving as a critical monitor of the health of an education system. Analysis, interpretation and reporting of data are essential to be able to make sense of the data for it to be used in evidence-based policy and planning. National large-scale assessments, although set at key intervals, in their current format have limited ability to provide data that can be analysed against standards, across time or students. This limits their ability to provide information about student growth, and other indicators, which are crucial to stakeholders interested in education. As part of the co-operation with the World Bank to implement Education 2.0, a Grade 4 national assessment will be held every two years from 2023 and report at the level of the school, district, directorate and nation. This assessment is planned to be an indicator of literacy and numeracy levels. It is yet to be seen whether the new reforms brought in with Education 2.0 will provide more information to stakeholders and if their design will allow for better quality data. Overall, there is limited evidence that large-scale assessment data is used in policy and planning. There was a lack of in-depth analysis and reporting on large-scale national and international assessments and their data. Further capacity is required in areas of assessment design, data analysis and reporting to increase the utility of assessments for stakeholders. Capacity is also required to interpret and use large-scale assessment data in policy planning and reform.	Further capacity is required in areas of assessment design, data analysis and reporting to increase the utility of assessments for stakeholders. Capacity is also required to interpret and use large-scale assessment data in policy planning and reform.
E7 Educational Management Information System	The government has developed a system for the collection, integration, processing, maintenance and use of data and information related to school, teachers and students.	Emerging	An EMIS provides stakeholders with the ability to monitor an education system's statistics and equips policy makers with the real time data. These are critical to improving the quality of education and reforming an education system. As part of the co-operation with the World Bank to implement Education 2.0, an Education Management Information System was developed. It maintains an up-to-date database, as students who register at a school are immediately added to the central system upon registration. Data is collected and presented at the student, teacher and school levels. The central database provides stakeholders with access to national statistics and indicators. The database only includes schools that fall under the authority of the MoETE. The Azhar school system is independent from the MoETE and represents an estimated 9% to 10% of the schools in Egypt. They have their own EMIS that is not connected to the MoETE database. The lack of a unified EMIS that combines both the MoETE and the Azhar schools' data is a limitation and area requiring further capacity building.	A unified database that contains all the schools in Egypt is required.

Table A A.2. Organisational level

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O1 Assessment team	There is a dedicated and skilled assessment team to complete the diverse tasks associated with large-scale assessments, including management, instrument development, translation and linguistic quality control, test design, sampling, survey operations and logistics, data management, data analysis, reporting and dissemination. Capacity-building is provided for assessment centre staff.	Emerging	The Egyptian PISA NC is situated within the NCEEE. The NCEEE is a dedicated national centre for assessment and research for school level education in Egypt. It manages the year 12 nationwide assessment and other international assessments such as TIMSS and PIRLS. The team that will be working on PISA has experience working on multiple cycles of other large-scale international assessments. As part of the co-operation with the World Bank, NCEEE staff working on item development and data reconciliation have had the opportunity to participate in capacity building training with an international contractor. Other capacity building opportunities are available via partnerships on projects with international donors. The current national large-scale assessment design lacks the ability to provide information across time and grade levels. There is a need for further training in design and structure of assessments, so they provide data that is comparable, equitable and provides valuable information to inform policy.	Capacity building is required in assessment design and structure.
O2 Mobilisation of funding	The large-scale assessment centre is able to mobilise the allocated funds to complete the diverse tasks associated with large-scale assessments. Funding is also mobilised to provide for capacity-building of assessment centre staff.	Latent	The NCEEE has a budget to cover its direct staffing costs and day-to-day operations for national large-scale assessment projects. Once funding is earmarked for the NCEEE, project managers can allocate it to project expenses. Costs of participation fees and study trips in previous cycles of large-scale international studies have been covered by international donor organisations. The national budget does not include amounts for the participation in international large-scale assessments. In addition, there are no long-standing agreements or future agreements with donor organisations to cover participation in international large-scale assessments and the costs of study trips associated with them. Often funding does not cover the entire assessment cycle and requires negotiation efforts to secure the remainder of funding for the ongoing assessment cycle. There is no funding for capacity building at the individual level.	Capacity is needed to establish long-term funding arrangements with donors. Capacity is also needed to train staff to apply for international grants. It is recommended that funding be provided for capacity building at the individual level.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O3 Temporary staff	Clear and transparent criteria and procedures are in place for recruiting and remunerating temporary staff, including translators and reconcilers, test administrators, quality monitors, coders of constructed response items, coders of occupational data, and data entry and data management support staff.	Emerging	All extra staff required to assist with the large-scale assessments are sourced from the MoETE staff. The MoETE has a vast staff base that are often allocated to work on NCEEE work. There is limited ability to source staff from outside the MoETE. Sourcing staff outside government agencies would require additional funding to be allocated and the NCEEE does not have any arrangements for sourcing temporary staff from the private market. It is noted that other international large-scale assessments have been carried out successfully without the need to hire temporary staff outside the MoETE and the NCEEE. If technical expertise were needed that is not available at the NCEEE or MoETE, this would need to be budgeted for and possibly funded by an external donor.	Capacity will be needed if staff from outside of the MoETE or NCEEE are required.
O4 Physical infrastructure	The physical infrastructure of the large-scale assessment centre is adequate, i.e. there is sufficient and secure office space, meeting rooms, telephones with international access, secure facilities for data processing, coding operations and storage of assessment material.	Established	The NCEEE has a large building that is well equipped with the necessary facilities for the national team staff. Each member has their own workspace and area to store their documents. There are meeting rooms of various sizes that have specialised presentation equipment. It has secure areas for storage and data processing as well as the capacity to designate a specific area for PISA activities. Access to the building is restricted and all visitors must register upon entry.	
O5 IT infrastructure and support	The IT infrastructure of the large-scale assessment centre is adequate, i.e. there are computers running Windows with up-to-date Microsoft Office, high bandwidth internet connection, secure networked environment, secure servers, cloud access/storage, printers, copiers, scanners and email. Necessary specialised software licenses are identified, acquired, installed and maintained. IT personnel is available to support the assessment team in all IT related aspects.	Established	Each employee has their own personal computer from which they can access the internet. There are specialised personnel to support the assessment team in all IT related aspects. The internet speed is good, and employees have access to secure cloud storage and email via their personal access. Back up servers are available and are used for national assessment data that is highly secure. Specialised staff have access to software needed to complete their tasks, i.e. SPSS for data analysis.	
O6 Security policies and procedures	Security policies and procedures are established to ensure assessment material and data is kept secure and confidential. Legally binding measures are in place to ensure compliance (e.g. confidentiality agreements).	Established	There are legally binding laws to ensure the security of large-scale assessment materials. Confidentiality agreements and exclusions of NCEEE employees who have family members participating in high-stakes assessments are in place. All visitors must sign upon entry, and the building is guarded. It has secure areas for storage and data processing. National assessment data that is highly secure is dealt with at a dedicated facility that is heavily guarded and has restricted access.	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O7 Instrument development	Quality assurance mechanisms are in place to ensure the assessment instruments (tests and contextual questionnaires) are reliable, valid and fair.	Emerging	In international large-scale assessments such as PISA, participating countries are not responsible for the design and development of the assessment and context materials. Countries are provided with manuals which detail the quality assurance steps that they need to follow to ensure that their country's national items are valid, reliable and fair. When participating in other international large-scale assessments, the Egyptian NC team has followed the quality assurance processes that have been outlined in the study manuals. However, there are still some areas that require further capacity building such as the area of translation and linguistic quality control. The current design of the national large-scale assessment structure in Egypt does not allow for some quality assurance mechanisms to be applied. It also is of limited utility for policy analysis and tracking student growth. Further training in designing assessments that can inform policy is needed.	Further capacity is required to improve instrument design and utility for analysis.
O8 Translation and linguistic quality control	Where assessment instruments are developed in multiple languages, linguistic quality assurance procedures are in place to ensure the items are linguistically and psychometrically equivalent across multiple languages.	Emerging	The staff working on the translation and linguistic quality control have experience working on other international large-scale assessments. There is some room for capacity building in the area of translation and adaptation. During interviews with the translation and adaptation team and upon reviewing instruments from other large-scale assessments, it became clear that team was not aware that they could raise issues to the international contractor if the topics were not suitable at the national level. The translation and adaptation team would also benefit from training in item performance data to gain further understanding of how subtle differences in translation can impact an item's performance.	Capacity is needed in some areas of questionnaire adaptation and localisation of cognitive items.
O9 Target population and sampling	The sample frame provides complete coverage of the defined target population. Practicalities for assessing the target population are considered in the sampling design. Exclusions are clearly defined and documented.	Emerging	The national team has experience carrying out sampling activities for both large-scale international assessments and the Grade 4 nationwide assessment. The Azhar schools will be also participating in the PISA 2025 cycle. This will be the first time that they have been included in a sample for a large-scale study meaning a new sample frame will need to be established. In addition, PISA sampling differs from their previous sampling experience, and the addition of the Azhar schools in the PISA sample will mean a new sampling frame will need to be created. Since it is the first time the Azhar and government databases have been used for PISA sampling, which is age-based rather than grade based, additional effort is expected to be required.	Changes to the sample will require some training and support.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O10 Survey operations and logistics	Quality assurance mechanisms are in place to ensure survey operations are standardised, monitored and documented. Measures are in place to ensure participation and to monitor response rates.	Established for PBA Latent for CBA	The survey and operations team have experience in the management and dissemination of fully paper-based assessments. Tablets were used for some of their national upper secondary assessments. For these the assessment design was simple and included only multiple-choice items and some constructed response items. The team has not worked with fully digital assessments at the scale and complexity of PISA and do not have experience in the processes for CBA.	If the Egyptian team opts for computer-based delivery, there will be capacity needed.
O11 Data management	Quality assurance mechanisms are in place to ensure the final database is free from discrepancies and errors, appropriately structured and documented.	Established	The national data management team is experienced and has trained with an international contractor to reconcile the outputs of its national large-scale assessments. It has also worked with data collected from other international large-scale assessments such as TIMSS. They are also experienced in using statistical software such as SPSS.	
O12 Data analysis and reporting	Technically sound and appropriate data analysis techniques are used to provide analytical results that permit valid and useful inferences about the population(s) of interest. Analytical results are fully documented and reproducible.	Emerging	The national data analysis team includes experienced psychometricians. The team is highly qualified and has experience training other country national data analysis teams. The team has successfully completed multiple cycles of large-scale international assessments and have experience using statistical software SPSS. There is limited detailed reporting on large-scale assessments and limited use of large-scale assessment data to make detailed inferences regarding populations of interest. Training is needed to build on the existing experience and strengthen their reporting and analysis abilities.	Capacity is required to enhance the ability to make inferences from the data and provide detailed reports in areas of focus.
O13 Dissemination and communication	Appropriate products and approaches to reporting and dissemination are tailored to the different stakeholder groups and promote appropriate and effective use of the assessment data and results by those groups.	Emerging	Results from large-scale assessments are widely disseminated to the public via specialised channels and media. Media outlets have commented on Egypt's results in international assessments and have reported widely on the results of national large-scale assessments. However, there is a lack of visible use of large-scale assessment data in policy and limited tailoring of results to suit the needs of the various stakeholders. Further capacity is required to improve the tailoring of results to meet the information needs of various stakeholder groups. A strategy is needed to improve the awareness of stakeholders and their understanding of the role that international large-scale assessments have in providing findings that relate to their areas of interest.	Capacity is required to improve the tailoring of results to meet the information needs of various stakeholder groups.

Table A A.3. Individual level

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
I1 National Project Manager	There is an appropriately skilled and experienced National Project Manager (NPM) with decision-making authority within the assessment centre to lead the assessment team and oversee all assessment activities. The NPM is able to communicate effectively, orally and in writing in English. The NPM is employed on a full-time basis for the duration of the assessment cycle.	Established	The NPM has experience managing other international large-scale assessments and liaised with the international contractor during those to achieve a successful outcome. He has good English skills and a clear understanding of the activities required to be carried out by the NPM.	
I2 Assessment instruments co-ordinator	The national-level tasks related to the assessment instruments are overseen by an appropriately skilled and experienced team member, including national item review, organisation of translation, adaptation and verification, coding of constructed response items and coding of occupational data. If needed, domain and contextual experts are engaged to assist with national item review, linguistic and contextual adaptation, supervising coders and interpretation of findings.	Emerging	The NPM will also lead the co-ordination of the assessment instruments. The rest of the PISA national team will assist him within their areas of specialisation. Although the team has experience in adapting other large-scale assessments, there is further room for capacity building in the area of translation and adaptation, to ensure that adaptation experts raise their concerns where needed and understand the item performance review process and the possible impact that translation may have had on the performance data of some items.	Capacity is required to organise translation, adaptation and verification in accordance with the PISA technical standards. Training is needed in data interpretation.
I3 Sampling manager	The sampling manager is appropriately skilled and experienced in sample design and in the use of scientific sampling methods to oversee and manage all sampling-related activities at the national level.	Emerging	The national-level sampling tasks will be managed by a sampling manager/s who will also perform the role of data manager/s. They are experienced psychometricians who have worked on sampling for many other large-scale assessments such as TIMSS. They have experience using statistical software such as SPSS for other large-scale assessments. Some further support might be required, as this is the first time that the Azhar schools will be included in the sample and the PISA sample is aged-based not grade-based.	Some support might be needed to assist the national sampling manager, as this is the first assessment where Azhar and MoETE schools will be doing an aged-based sample.
I4 Survey operations and logistics manager	The survey operations and logistics tasks are organised and overseen by an appropriately skilled and experienced team member, including preparation of school-level materials, school contact and co-ordination, assessment logistics, test administration and training, and national quality monitoring (including monitoring response rates at school and student levels). A good understanding of the security and confidentiality requirements and the technical support requirements for computer-based delivery (as applicable) is critical.	Established for PBA Latent for CBA	The survey operations and logistics manager are experienced in co-ordinating contacting schools and training of staff. He also has experience in the management and dissemination of fully paper-based assessments and assessments that use tablets for data collection. If the Egyptian team opts for computer-based assessments in PISA, there will be capacity-building needed to ensure the requirements for computer-based delivery are met.	If the CBA option is selected, capacity is required to assist with training staff to manage computer-based delivery.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
I5 Data manager	The data manager is appropriately skilled and experienced in data management, data processing, quantitative data analysis and using statistical packages, such as SPSS, SAS, STATA or R, to oversee and manage all data-related activities at the national level.	Established	The data managers are highly experienced and have managed all other data related activities for both national level large-scale assessments and international large-scale assessments such as TIMSS. They have also co-ordinated with international contractors to reconcile datasets for national assessments.	
I6 Data analyst	There is a senior data analyst who is appropriately skilled and experienced in quantitative data analysis and using statistical packages (e.g. SPSS, SAS, STATA or R), to assist with national-level data analysis and reporting. The senior data analyst is familiar with Item Response Theory and is able to interpret item statistics. The senior data analyst is familiar with methods for calculating appropriate standard errors of statistics in complex survey designs to support interpretation of assessment results.	Emerging	The data analysts are experienced and have managed analysis for other nationwide assessments. They have also worked on many consecutive cycles of TIMSS from 2003 onwards and on 2016 and 2021 PIRLS. They have experience using statistical packages such as SPSS. The analyst team, however, lacks experience in drafting analysis reports with policy implications based on the interpretation of large-scale assessment data. Egypt's national reports from previous large-scale assessments are for the most part summaries of the generated data rather than in-depth analyses of the findings. A partnership with the OECD for the A&R option would be greatly beneficial for Egypt. As part of this partnership, a lead analyst will be trained in Paris with the OECD team and other international experts. The main deliverable of this partnership would be Egypt's national PISA report. The resulting report would provide decision-makers and stakeholders with vital information and insights that will support their education reform goals.	
I7 IT co-ordinator (If CBA option selected)	The team has a full-time IT co-ordinator for PISA's IT-related activities for the implementation of the computer-based survey within schools in their country/economy (if this option is taken).	Latent for CBA	If Egypt selects the computer-based option, this would be its first experience in computer-based assessments at this scale. The team leader is experienced with data collection via tablets. However, computer-based assessments present a new level of complexities that needs to be taken into consideration.	Capacity building is expected to be required to assist with the first cycle of CBA.
I7 IT co-ordinator (if PBA option selected)	The team has a full-time IT co-ordinator for PISA's IT-related activities for the implementation of the paper-based survey	Established for PBA	If Egypt selects the paper-based option, the IT co-ordinator will have a limited role in managing the delivery of PISA. The Egyptian team has experience delivering its own national assessments and other international large-scale assessments in paper-based format.	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
I8 Communication in English	The National Centre ensures that qualified staff are available to respond to requests in English by the OECD and international contractors during all stages of the project.	Established	Most of the key staff members of PISA NC are generally fluent in English.	

Note: As funding for Egypt's participation in PISA 2025 has not yet been finalised, the PISA national team designations had not been officially assigned at the time of the CNA. The staff members who would be leading each area were identified and recognised within the NCEEE. Most of the NCEEE team members have responsibilities on other assessments, and their availability to work on PISA when their area of expertise is needed needs to be confirmed

Annex B. Stakeholder and document mapping

Table A B.1. Stakeholder mapping table

Dimensions	Government (national or sub-national level)	Education or assessment institutions, organisations, agencies (external to ministries)	Representatives in education development partner/ donor organisations
Enabling environment/ Organisation level	Officials: • **Professor Reda Hegazy** (Minister of Education and Technical Education at time of report) • **Dr Tarek Shawki** (Minister of Education and Technical Education at time of in-country visit) • **Dr Hanem Ahmed** (Head of International Cooperation for the Minister of Education and Technical Education- at time of in-country visit)	• NCEEE • Al-Azhar Schools • Ein Shams University • Social Research Centre of the American University in Cairo • Professional Teacher Academy (PAT) • Curriculum and materials development centre (CCIMD) • The National Center for Educational Research and Development (NCERD)	• UNICEF • The World Bank • USAID • UNESCO-UNEVOC • Save the Children

Individual level		• PISA NPM
		• PISA National Centre key roles (or key roles in other national/ international large-scale assessment) in the areas of:
		  ○ Assessment development (domain and context experts)
		  ○ Sampling
		  ○ Adaptation/ translation
		  ○ Administration and logistics
		  ○ Data management
		  ○ Data analysis and reporting
		  ○ IT	

Table A B.2. Document mapping table

Dimensions	Documents
Enabling environment (Information about education in Egypt)	• Education sector analysis: https://oxfordbusinessgroup.com/overview/forging-ahead-new-reforms-investment-and-initiatives-are-aimed-fixing-ongoing-problems-and • Strategic Plan for Pre-University Education 2014 – 2030 www.unesco.org/education/edurights/media/docs/c33b72f4c03c58424c5ff258cc6aeaee0eb58de4.pdf • UNESCO Institute for Statistics: Mapping of Educational Level and Programs (obtained) • TIMSS 2019 Encyclopedia: Education Policy and Curriculum in Mathematics and Science: Egypt https://timssandpirls.bc.edu/timss2019/encyclopedia/pdf/Egypt.pdf (obtained) • Education sector plan, e.g. Education 2.0: Education 1.1 Assessment for secondary education as a part of Education 2.0 • G10-G11 Assessment Framework-English -Not available in public domain • G12 Assessment Framework- English -Not available in public domain • https://unevoc.unesco.org/home/Explore+the+UNEVOC+Network/centre=432 • Egypt knowledge bank and online learning during Covid https://www.oecd-ilibrary.org/docserver/7e988508-en.pdf?expires=1656488484&id=id&accname=guest&checksum=95D9E0A35C503B014D99E6842D896B77 • National legislation on personal data- • Dealing with data- exam papers-Arabic (Not available in public domain) (obtained) • World bank financing improving teaching and learning conditions www.worldbank.org/en/news/press-release/2018/04/13/world-bank-provides-us500-million-to-egypt-for-improving-teaching-and-learning-conditions-in-public-schools • Education in Egypt World Bank https://documents1.worldbank.org/curated/en/884561509632497421/pdf/Concept-Project-Information-Document-Integrated-Safeguards-Data-Sheet.pdf • MOEEE National statistical book: http://emis.gov.eg/annual_book.aspx?id=400 • MOEE statistics information: http://emis.gov.eg/statistics.aspx?id=402 • Developing mathematics teaching in the preparatory stage in the light of the results TIMSS 2019 (Arabic with English abstract) https://armin.journals.ekb.eg/article_163270_13a858be6d4500203bb920e22c802632.pdf • An analytical and comparative study between the content of the mathematics curriculum for the fourth grade of primary school in Egypt and the UAE; In light of the criteria TIMSS 2019 (Arabic with English abstract) https://jsre.journals.ekb.eg/article_107644_a8c0e3786d4622402cd7002d4619025a.pdf • Assessment of School's Evaluation Systems in Egypt Before and During COVID-19 (English) https://www.researchgate.net/publication/349692059_Assessment_of_School%27s_Evaluation_Systems_in_Egypt_Before_and_During_COVID-19 • Egypt ISCED mapping: http://uis.unesco.org/en/files/isced_2011_mapping_en_egypt-xlsx • World Bank: Supporting Egypt Education Reform Project. https://documents1.worldbank.org/curated/en/929431580338425317/pdf/Disclosable-Version-of-the-ISR-Supporting-Egypt-Education-Reform-Project-P157809-Sequence-No-04.pdf • World Bank: Supporting Egypt Education Reform https://documents1.worldbank.org/curated/en/884561509632497421/pdf/Concept-Project-Information-Document-Integrated-Safeguards-Data-Sheet.pdf • Egyptian legislation: law 139 of 1981
Organisation level (Information about assessment in Egypt)	• SABER (Systems Approach for Better Education Results) questionnaires/ report developed by the World Bank SABER Egypt: 2014 - 2013 https://documents1.worldbank.org/curated/en/407621467995621575/pdf/105610-WP-ADD-SERIES-PUBLIC-SABER-SA-Country-Report-Egypt-Final-2013.pdf (obtained) • National assessment documentation and reports, e.g. assessment framework, technical reports, sampling manual or guidelines, test administration/field operations manual or guidelines, data management manual or guidelines, results dissemination products o TIMSS 2015 NCEEE study (Arabic) -Not available in public domain (obtained) o TIMSS 2019 NCEEE study (Arabic) - Not available in public domain (obtained) o PIRLS 2016 NCEEE study (Arabic) - Not available in public domain (obtained) • Egyptian MoETE EMIS website: https://emis.gov.eg/home.aspx

Individual level (Information about PISA National Centre/ Assessment centre)	• Organisational chart of the NCEEE future plan: https://moe.gov.eg/media/cjynk3eg/national-examination-center.pdf -
	• Training documents
	  ○ PIRLS 2021 Training Test Manger-Arabic - Not available in public domain (obtained)
	  ○ PIRLS 2021 Test Manger- Guide-Arabic - Not available in public domain (obtained)
	  ○ TIMSS 2019 Training Test Manger-Arabic - Not available in public domain (obtained)
	  ○ TIMSS 2019 Test Manger- Guide-Arabic - Not available in public domain (obtained)

Annex C. Capacity Needs Assessment consultations

Table A C.1. List of Senior Officials in the CNA consultations and in-country meetings

Name	Title
Professor Reda Hegazy	Minister of Education and Technical Education at time of report
Dr Tarek Shawki	Minister of Education and Technical Education at time of in-country visit
Dr Ramadan Ramadan	Deputy Minister of Education and Technical Education and Head of the National Centre For Examination & Educational Evaluation
Dr Hanem Ahmed	Head of International Cooperation for the Minister of Education and Technical Education- at time of in-country visit.

Table A C.2. List of Ministry of Education and Technical Education Staff in the CNA consultations and in-country meetings

Name	Title	Department/ Division
Nermen Zanaty Abdelhaleem	Director	Basic Education
Dr Shaimaa Hamoda Elharon	Assistant professor	Curriculum Development Research Division
Aml Mohamed Aly Eltabakh	Chemistry curriculum expert	Curriculum and scientific subjects' development centre
Hala Abdelslam Khfagy	Head of the Central Administration for Special Education Affairs and Supervisor of the Central Administration of Kindergarten and Basic Education	Basic Education MOETE
Hatem Mohammed Emam El Llabban	A language expert in Arabic language development office at minister of Education	Arabic language development office at MOETE
Prof. Ayman Eid Bakry	Head of the Department of Preparation of Educational Materials and Textbooks	National Centre for Educational Research and Development
Othman Mostafa Othman	General inspector of Mathematics	Mathematics Consultant Office
Mohamed Abdel Latif Mohamed Moussa	Biology Expert	General Management of Science Development
Sheriff Atef Elborhamy	Expert	Mathematics
Dr Nour Henry Nour Dous	Senior specialist	General Management of Planning and Projects/ Central Management of Planning and Quality
Dr Aziza Ragab Khalifa Mohammed	General director of science development	General Administration for Science Subject Development
Gamal Youssef El Shahed	Mathematics consultant	Mathematics Consular
Ehab Father Zaky	Mathematics Expert	Mathematics Consular Office
Khaled Mohei Elden Esmeil Mohamed	Managing director	MOETE
Hussein Abd El Rahman Bakhat Hassan	Senior Education specialist	General Administration for Science development
Prof. Osama Maher Hasan	Researcher NCEEE	Training Division-NCEEE

Table A C.3. List of National Centre for Examination & Educational Evaluation Staff in the CNA consultations and in-country meetings

Name	Title	Department/ Division
Dr Khaled Mohamed Sayed	Researcher	Test Development
Dr Ekram Hamza	Researcher	Analysis Department
Haseep Mhamed Haseep	Head of Information Department	Information and Operation
Dr Zienb Safout	Researcher	Evaluation department
Professor Mohamed Galal	Researcher	Analysis Department
Professor Mohamed Sayed	Researcher	Analysis Department
Dr Sara Mohyi	Researcher	Analysis Department
Dr Nagla Wasel	Researcher	Analysis Department
Dr Hanan Ak Dosoki	Researcher	Analysis Department
Dr Eman Abd Allah	Researcher	Test Development
Professor Mona Al Lbody	Head of Test Development Department	Test Development
Dr Omima Reyad	Researcher	Test Development
Dr Hana Mohamed	Researcher	Test Development
Dr Abd Ala Zakry	Researcher	Research Development
Professor Heba Allah Adly	Researcher	Test Development
Professor Moatz Zen Al Dien	Researcher	Test Development
Professor Mohamed Husien Salem Saqr	Researcher	Test Development
Dr Dalia Mahfouz	Researcher	Test Development
Dr Eman Galal	Researcher	Test Development
Mr Mohamed Alwany	Assistant Researcher	Test Development
Professor Essam Abdelraheem Afifi Farag	Researcher	Training Development

Annex D. CNA questionnaires

Questionnaire for officials

Participant information

Please enter your information.

Name	
Job title	
Organisation	
Role in PISA 2025	

Introduction

[Country] is participating in the OECD Programme for International Student Assessment – PISA 2025. ACER has been engaged by the OECD to support [country] in preparing and implementing PISA 2025. One part of this support is to conduct a Capacity Needs Assessment (CNA). The aim of this CNA is to identify capacity assets and needs of [country's] assessment system for the successful implementation of PISA 2025.

This CNA questionnaire asks you about the capacity assets and needs at the system and organisational levels. We have around [number] questions to ask you and the questionnaire is expected to take approximately 30 minutes.

Voluntary participation and informed consent:

Your participation in this questionnaire is entirely voluntary and explained in the consent form that is provided separately.

Section A: Experience in large-scale assessments

A1.	Has your country implemented a large-scale **national** assessment before? (please circle your answer)	Yes	No	Not sure

If you have answered "No" or "Not sure", proceed to A9 {these will be automatically routed online}

A2.	Please list, up to three, most recent **national** large-scale assessment(s) your country implemented and tell us about when, and with whom it was implemented.	**A3.** In which year(s) was it implemented?	**A4**. What were the targeted grades of school education?
#1	[Enter the name of the national large-scale assessment]		
#2	[Enter the name of the national large-scale assessment]		
#3	[Enter the name of the national large-scale assessment]		

Please answer the following questions about the **national** large-sale assessment you listed as #1 in A2.

Name of the national large-scale assessment (this will be populated by the answers above)	
A5. What learning domains were included?	(drop down menu of: • Reading/literacy/language • Mathematics/numeracy • Sciences • Social sciences • Computing/information literacy/IT/ICT • 21st century skills/global citizenship/civics)

A6.	How was the performance data measured?	(Please tick all that apply)
a	Raw scores (or averages of raw scores)	
b	Percent correct (per learning domain)	
c	Scale scores	
d	Performance levels on a scale	
e	Described proficiency levels	
f	Linked performance data (to monitor changes over time/between grades)	

A7.	What type of contextual information was collected?	(Please tick all that apply)
a	Gender	
b	Socio-economic status	
c	Language spoken at home	
d	School structures and resources (e.g., public/private status, location of school, school and class sizes)	
e	Teaching and learning practices (e.g. teaching methods, classroom management)	

A8.	What areas of the large-scale national assessment was led by your country? (Please tick all that apply)	(Please tick all that apply)
a	Coordination of the assessment program	
b	Design of the assessment	
c	Item development	

d	Sampling	
e	Implementation of the assessment	
f	Analysis	
g	Reporting	
h	Dissemination of results	

{Questions A5 to A8 will be repeated for each of the national assessments listed in A2.}

A9.	Has your country implemented a large-scale **international** assessment before? (please circle your answer)	Yes	No	Not sure

If you have answered "No" or "Not sure", proceed to A20 {these will be automatically routed online}

A10.	Please list, up to three, most recent **international** large-scale assessment(s) your country implemented and tell us about when, and with whom it was implemented.	**A11.** In which year(s) was it implemented?	**A12**. What were the targeted grades of school education?
#1	[Enter the name of the international large-scale assessment]		
#2	[Enter the name of the international large-scale assessment]		
#3	[Enter the name of the international large-scale assessment]		

Please answer the following questions about the **international** large-sale assessment you listed as #1 in **A10**.

Name of the international large-scale assessment (this will be populated by the answers above)	
A13. What learning domains were included?	(drop down menu of: • Reading/literacy/language • Mathematics/numeracy • Sciences • Social sciences • Computing/information literacy/IT/ICT • 21st century skills/global citizenship/civics)

A14.	How was the performance data measured?	(Please tick all that apply)
a	Raw scores (or averages of raw scores)	
b	Percent correct (per learning domain)	
c	Scale scores	
d	Performance levels on a scale	
e	Described proficiency levels	
f	Linked performance data (to monitor changes over time/between grades)	

A15.	What type of contextual information was collected?	(Please tick all that apply)
a	Gender	
b	Socio-economic status	
c	Language spoken at home	
d	School structures and resources (e.g. public/private status, location of school, school and class sizes)	
e	Teaching and learning practices (e.g. teaching methods, classroom management)	

A16.	What areas of the international large-scale assessment were led by your country? (Please tick all that apply)	(Please tick all that apply)
a	Coordination of the assessment program	
b	Design of the assessment	
c	Item development	
d	Sampling	
f	Implementation of the assessment	
g	Analysis	
h	Reporting	
i	Dissemination of results	

{Questions A13 to A16 will be repeated for each of the international assessments listed in A10.}

A17.	Is there currently an established centre that is responsible for implementing PISA 2025? (please circle your answer)	Yes	No	Not sure

If you have answered "Yes" please continue to question A18.
If you have answered "No", please continue to Section B.

A18. What is the name of the centre and where does this centre sit? (For example, a unit or department within the Ministry of Education or external to the ministry and/or government)

_____

_____

_____

A19.	Is the assessment centre widely recognised in your country as an authority in student assessment? (please circle your answer)	Yes	No	Not sure

A19.a. Please explain the reason for your answer in A19?

_____

_____

_____

A20.	Which body is the assessment centre accountable to?	(Please tick the most accurate answer)
a	An autonomous board or committee that is institutionally separate from the assessment centre (e.g. the centre is within the MoE and reports to a board not within the jurisdiction of the MoE)	
b	A board or committee that belongs to the same institution as the assessment centre (e.g. the centre is within MoE and reports to a board from within MoE)	
c	An internal board or committee that sits within the assessment centre unit	
d	Other	

A20.e If you ticked "Other" in A20, please specify:

_____

_____

_____

A21.	How much autonomy does the assessment centre have?	(Please tick the most accurate answer)
a	Has complete autonomy. It can make decisions regardless of political party or matters.	
b	It has some autonomy. Some decisions can be made, but decisions may be reversed due to political matters.	
c	It does not have any autonomy at all. It is completely affected by political matters	

Section B: Implementation of PISA 2025

B1.	Has an assessment team been established that is primarily responsible for implementing PISA 2025 in your country? (Please circle your answer)	Yes	In progress	No	Not sure

If you have answered "Yes" of "In progress" please continue to question B2.
If you have answered "No", or "Not sure" please continue to Section C.

B2.	Is there an organisation chart of the PISA assessment team? (Please circle your answer)	Yes	In progress	No	Not sure

If you have answered yes to B2, please provide a copy of the organisation chart to your liaison officer.

B3.	What is the availability of the PISA assessment team members to fill the following key roles to work on PISA 2025? (Please tick that apply)	Full-time	Part-time	Not sure
a	National Project Manager			
b	Survey operations and logistics manager			
c	Administrative Officer			
d	Sampling Manager			
e	Assessment instruments coordinator			
f	Data Manager			
g	Data analyst			
h	IT Coordinator			
i	Translation/Adaptation coordinator			

B4.	Are there written job descriptions for each of the key roles for each of the core assessment team members? (please circle your answer)	Yes	In progress	No	Not sure

If you answered "Yes" or "In progress" to B4, please provide a copy (in English) of any of the available job descriptions to your liaison officer

B5.	Are there processes and procedures in place to secure extra permanent or temporary staff if needed? (Please circle your answer)	Yes	No	Not sure

B6. Can you describe the office space available for the PISA assessment team?

_____

_____

_____

_____

B7.	Are there adequate and secure (i.e. safe from unauthorised access, theft, fires, floods): (Please tick the relevant box in each row)	Yes	No
a	Workstations		
b	Meeting rooms		
c	Facilities for data processing		
d	Facilities for coding operations		
e	Storage rooms for assessment material		

B8.	Is there adequate: (Please tick the relevant box in each row)	**Yes**	**No**
a	Number of computers running Windows with up-to-date Microsoft Office (one per assessment team member)?		
b	High bandwidth internet connection? (e.g. at least 50mbits/sec)		
c	Secure network and servers? (e.g. requires password to access)		
d	Secure cloud access/storage? (e.g. requires password to access)		
e	Number of printers, copiers and scanners?		
f	Email accounts specific for PISA 2025?		

B9.	Do you have security policies and procedures in place to ensure all PISA 2025 assessment material and data is kept secure and confidential at all times? (please circle your answer)	Yes	No	Not sure

If you answered "Yes" to B9, please provide a copy (in English) of the security policies and procedures to your liaison officer

B10.	Are confidentiality agreements in place with all relevant staff and contractors who have access to assessment materials and data? (please circle your answer)	Yes	No	Not sure

If you answered "Yes" to B10, please provide a copy (in English) of the confidentiality agreement to your liaison officer

B11.	In your opinion, do all relevant individuals understand the security and confidentiality requirements? (please circle your answer)	Yes	No	Not sure

B12. What measures are in place to ensure assessment material and data are kept secure from unauthorised access, theft, fire and flood? Please also consider factors such as storage and transportation/delivery in your answer.

_____

_____

_____

Section C: Legislation and engagement

C1.	Are there national policies and/or guidelines for the implementation of large-scale assessments? (please circle your answer)	Yes	No	Not sure

If you answered "Yes" to C1, please provide a copy (in English) of the policies or guidelines to your liaison officer

C2.	Is there official documentation that outlines:	(Please tick all that apply)
a	The purpose of large-scale assessments	
b	How large-scale assessments inform education policy and practice	
c	The intended uses of assessment data	

C3.	Are large-scale assessments in your country enacted by legislation? (please circle your answer)	Yes	No	Not sure

If you answered "Yes" to C3, please provide a copy (in English) of the legislation to your liaison officer

C4.	Is the participation in large-scale assessments of schools and students enacted by this law or regulation? (please circle your answer)	Yes	No	Not sure

C5. How do senior government officials promote large-scale assessments?

_____

_____

_____

C6.	Are there any key stakeholders who oppose large-scale assessment programs? (please circle your answer)	Yes	No	Not sure

C6.a. If you answered 'yes' to C6, what are their main reasons for opposition?

_____

_____

_____

_____

C7.	What kinds of products will be developed to communicate the assessment results to stakeholders?	(Please tick all that apply)
a	Reports	
b	Policy briefs	
c	Assessment database	
d	Press releases	
e	Media reports	
f	Other	

C7.f. If you answered 'other' to C7, please specify

_____

_____

_____

Section D: Funding

D1. How is the implementation of PISA 2025 going to be funded?

_____

_____

_____

_____

D2.	In your opinion, is there adequate funding for the implementation of PISA 2025? (please circle your answer)	Yes	No	Not sure

D2.a. If you answered "no" to D2, please specify why.

_____

_____

_____

_____

D3.	Has funding been fully secured to participate in PISA 2025 international meetings and trainings? (please circle your answer)	Yes	No	Not sure

D3.a. If funding has not yet been fully secured, do you expect to secure the funding, and by when?

_____

_____

_____

D4.	What is the main source of funding for the implementation of PISA 2025? (please circle your answer)	Internal sources	Donors or sponsors	Equal contribution of internal sources and donors/ sponsors	Not sure

D5.	Which development partners/donors (if any) have been actively supporting/funding the development of education in your country?	

D6.	Please list below the current and planned education assessment projects/programs funded by the development partners/donors:
a	
b	
c	

Section E: Use of large-scale assessment data

E1. If assessment data is used to inform educational policy and practice in your country, please provide examples of how this happens. For example:

- Education policy processes, including education sector planning, monitoring and evaluation
- Resourcing/funding allocation
- Curriculum development
- School development
- School education workforce development (e.g., qualification and professional development of teacher trainers, teachers, school principals)

_____

_____

_____

_____

E2.	Do you expect to face any of these challenges when using large-scale assessment data in your country?	(please tick all that apply)
a	Lack of confidence in the reliability and validity of assessment results	
b	Inability to analyse and interpret assessment data	
c	Your own difficulty in understanding the purpose, intent and findings of the assessment	
d	Wider stakeholders have difficulty in understanding the purpose, intent and findings of the assessment	
e	Difficulty in using the results to inform decision making in education policies and practices	
f	Difficulty in dissemination of the results widely to engage wider stakeholders	
g	Fear of reprisal in light of poor assessment results	
h	Other	

E2.i. If you answered "Other" to E2, please specify:

_____

_____

Section F: Educational Management and Information System

F1.	Has an Educational Management and Information System (EMIS[6]) been developed within the Ministry of Education? (please circle your answer)	Yes	No	Not sure

[6] EMIS is a centralised system for the collection, integration, processing, maintenance and use of data and information related to schools, teachers, and students.

F2. If you answered “Yes” to F1, which department or unit of the Ministry of Education or agency/institution is responsible for managing EMIS in your country?

_____

_____

_____

_____

F3. If you answered “No” to F1, please explain how data and information related to schools, teachers and students are currently collected, integrated, processed, maintained, and used:

_____

_____

_____

_____

Section G: Training

G1.	Please select the opportunities (if available) to build capacity of core assessment team members outside of PISA international meetings and trainings. For the areas selected, what form will the capacity building take place (For example, formal qualification, workshop, short course)?	(Please tick all that apply)
a	No opportunities are available	
b	Test development	
c	Translation and adaptation	
d	Test design	
e	Item writing	
f	Sampling	
g	Field operations	
h	Data management	
i	Data analysis	
j	Project management	
k	IT	
l	Other	

G2. If you ticked any of the options in G2, please comment on what form the capacity building will take place.

_____

_____

_____

_____

Thank you very much for completing this Capacity Needs Assessment questionnaire!

Questionnaire for individuals

Participant information

Name	
Job title	
Organisation	
Role in PISA 2025	

Introduction

[Country] is participating in the OECD Programme for International Student Assessment – PISA 2025. ACER has been engaged by the OECD to support [country] in preparing and implementing PISA 2025. One part of this support is to conduct a Capacity Needs Assessment (CNA). The aim of this CNA is to identify capacity assets and needs of [country's] assessment system for the successful implementation of PISA 2025.

This CNA questionnaire asks you about the capacity assets and needs at the individual level. We have around [number] questions to ask you and the questionnaire is expected to take approximately 30 minutes.

Voluntary participation and informed consent:

Your participation in this questionnaire is entirely voluntary and explained in the consent form that is provided separately. If you agree to participate, please sign the second page of the form.

Section A: Your role

A1. Which title best describes your role in PISA 2025?

{Drop down menu for}:

- National Project Manager
- Survey operations and logistics manager
- Administrative officer
- Sampling manager
- Assessment instruments coordinator
- Data manager
- Data analysis
- IT coordinator
- Translation/ Adaptation coordinator
- Other

A1.a. If you selected "Other" in A1, please specify your role.

_____

_____

_____

A2. What previous work experience have you had that has helped you to prepare for your role in PISA 2025?

_____

_____

_____

_____

_____

A3.	Are you a regular employee of the assessment centre[7]? (please circle your answer)	Yes	No	Not sure

A4.	Are you aware of processes and procedures in place to secure extra permanent or temporary staff if needed? (please circle your answer)	Yes	No	Not sure

A5.	Do you have a written job description for your roles in PISA 2025? (please circle your answer)	Yes	No	Not sure

If you answered "Yes" to A5, please provide a copy (in English) of your job description to your liaison officer

A6.	Will you be available to attend the NPM meetings and international training if required? (please circle your answer)	Yes	No	Not sure

A6.a. If you answered "No" or "Not sure" to A6, please explain why.

_____

_____

_____

_____

A7.	Which aspects of PISA 2025 do you anticipate will be most challenging for your country?	(please tick all that apply)
a	Developing a sampling frame	
b	Translation of materials	
c	Engaging schools to participate	
d	Coordination of participating schools	
e	Training test administrators	
f	Data management	

[7] By "assessment centre" we are referring to the centre which is responsible for the implementation of PISA 2025 in your country

g	Data entry (if paper-based option is taken)	
h	Data analysis	
i	Dissemination and reporting of data	
j	Other, please specify	

A7.k Please explain why you have chosen those aspects in A7.

_____

_____

_____

_____

A8.	Do you have: (please tick all that apply)	Yes	No	Not sure
a	Your own work computer running Windows with up-to-date Microsoft Office			
b	High bandwidth internet connection (e.g. at least 50mbits/sec)			
c	Access to a secure work network and server (e.g. requires a password for access)			
d	Access to secure cloud access/storage for work (e.g. requires a password for access)			
e	Access to professional printers for school materials			
f	Access to a work email account specific for PISA 2025?			
g	Your own workstation/desk cubicle			
h	Access to meeting rooms that you can book and freely use			
i	Access to video-conferencing software that you can freely use			

A9.	Have you signed a confidentiality agreement to ensure all PISA 2025 assessment material and data is always kept secure and confidential? (please circle your answer)	Yes	No	Not sure

If you answered "Yes" to A9, please provide a copy (in English) of the confidentiality agreement to your liaison office

{Depending on what role was selected at the drop-down menu, selected questions for the following roles will appear on screen.}

Section B: Specific aspects of implementing PISA 2025

National Project Manager

B1.	Do you have authority to make decisions regarding the implementation of PISA 2025 for:	Yes	No	Not sure	If no, please state who has the authority
a	Budgeting				
b	Personnel				
c	Infrastructure				

B2.	Have you been responsible for any of the following for other large-scale surveys (e.g. TIMSS, other national assessments)?	Yes	No	Not sure
a	Establishing an assessment team			
b	Using promotional materials to raise awareness of the assessment			
c	Supervising staff to complete tasks			
d	Maintaining ongoing communication with international contractors			
e	Distribution of assessment materials electronically			
f	Distribution of paper-based assessment materials			
g	Contacting schools			
h	Informing schools of assessment requirements			
i	Recruiting test administrators			
j	Training test administrators in standardised material and delivery			
k	Monitoring the quality of test administration			
l	Ensuring security policies and procedures are always followed (including test administrators, schools)			
m	Developing national reports to summarise all data			
n	Developing national dissemination strategy to communicate key findings			
o	Implementing national dissemination strategy to communicate key findings			

If you have any written plans/procedures (in English) relating to any of the above measures, please provide a copy to your liaison officer

B3.	Will you be available to work on PISA 2025 in a full-time capacity from 2023 onwards? (please circle your answer)	Yes	No	Not sure

B4. What challenges do you anticipate that you could face in ensuring that you have sufficient staff in your assessment centre to implement PISA 2025?

_____

_____

_____

B5. In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

_____

_____

_____

IT Coordinator

B1.	In your opinion, do you have the IT personnel available to support the assessment team in these IT-related aspects of implementing large-scale assessments?	Yes	No	Not sure
a	Troubleshooting problems with hardware			
b	Troubleshooting problems with networks and internet services			
c	Maintaining data and communications security			

B2. What challenges do you anticipate you could face in ensuring that you have sufficient staff to support the assessment team in the IT-related aspects?

_____

_____

_____

B3. In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

_____

_____

_____

Translation/ Adaptation Coordinator

B1. Please describe your experience in translating and/or adapting tests or questionnaires for large-scale assessments to the national context.

_____

_____

_____

B2.	Will domain experts and contextual experts be available for assisting with national adaptations of items and questionnaires? (please circle your answer)	Yes	No	Not sure

B3.	Will the PISA 2025 assessment items and questionnaires need to be translated for the national context? (please circle your answer)	Yes	No	Not sure

B4.	Will domain experts and contextual experts be available for:	Yes	No	Not sure
a	Reviewing the translated science test items			
b	Reviewing the translated mathematics test items			
c	Reviewing the translated reading test items			
d	Reviewing the translated questionnaire items			
e	Reviewing the translated items from the innovative domain “Learning in the Digital World”			

B5.	Are you aware that translation of the PISA instruments will require at least three professional translators to work individually on every element of the translation? (please circle your answer)	Yes	No	Not sure

B6. In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

_____

_____

_____

Sampling manager

B1.	In relation to sampling activities, do you have access to:	Yes	No	Not sure
a	A central database such as an education Management Information System (EMIS)?			
b	A database that provides full details about every school in your country			
c	A database that provides the number of students per age and grade in each school in your country			
d	Accurate and up-to-date enrolment and attendance data for each school in your country			

e	Accurate data for children and youth that are out-of-school[8]			
f	A complete list of the number of students with special needs in each school			

B2. Please describe any potential challenges in assessing the target population in the sampling design, including students with special needs, students in areas that are difficult to reach (e.g. as a result of conflict, remoteness), and students with a minority language or specific ethnic background.

_____

_____

_____

B3. In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

_____

_____

_____

Data manager

B1. In previous large-scale assessments, how have you monitored school participation and student response rates?

_____

_____

_____

_____

B2.	Do you have previous experience from large-scale assessments to:	Yes	No
a	Validate data collected from students		
b	Train and supervise data entry and data management support staff		

B3.	Will the assessment centre be able to:	Yes	No	Not sure
a	Undertake national-level data analysis			
b	Use statistical packages (e.g. SPSS, SAS, STATA, or R)			
c	Interpret scale scores and performance levels			
d	Perform descriptive analysis (e.g. frequencies, comparison of mean scores and variances)			
e	Perform regression analyses depending on the research questions			

[8] Children and youth who are not enrolled or not attending school

f	Calculate standard errors to provide information about the spread or variability of a sample statistic around its mean			
g	Use correction techniques in the form of sampling weights to adjust the sample and account for biases			

B4. Please describe your previous experience in recording and reporting statistical analysis from national-level data

_____

_____

_____

B5. In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

_____

_____

_____

Thank you for completing this Capacity Needs Assessment questionnaire!

PISA

Capacity Needs Assessment: Egypt

The Organisation for Economic Co-operation and Development (OECD)'s Programme for International Student Assessment (PISA) measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges.

Based on the experiences of the support programmes provided in PISA previously, PISA 2025 offers new participants the Capacity Building and Implementation Support (CBIS) option. CBIS aims at providing new participants with specific and targeted support for their successful implementation of PISA 2025.

At the outset of CBIS, a Capacity Needs Assessment is carried out to assess the participants' capacity to implement PISA. The assessment provides information about their capacity assets and needs in relation to what is required to implement PISA successfully. This report presents detailed findings of the assessment for Egypt. The results are being used to design a capacity building plan for Egypt that will be implemented by the OECD, its contractors, and Egypt's National Centre for Examination & Educational Evaluation.

Supported by the

Federal Ministry
for Economic Cooperation
and Development