

# Education Quality in the OIC Member Countries (Part 2)

Prepared for the 11<sup>th</sup> Meeting of the COMCEC Poverty Alleviation Group,  
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by Dr M Niaz Asadullah

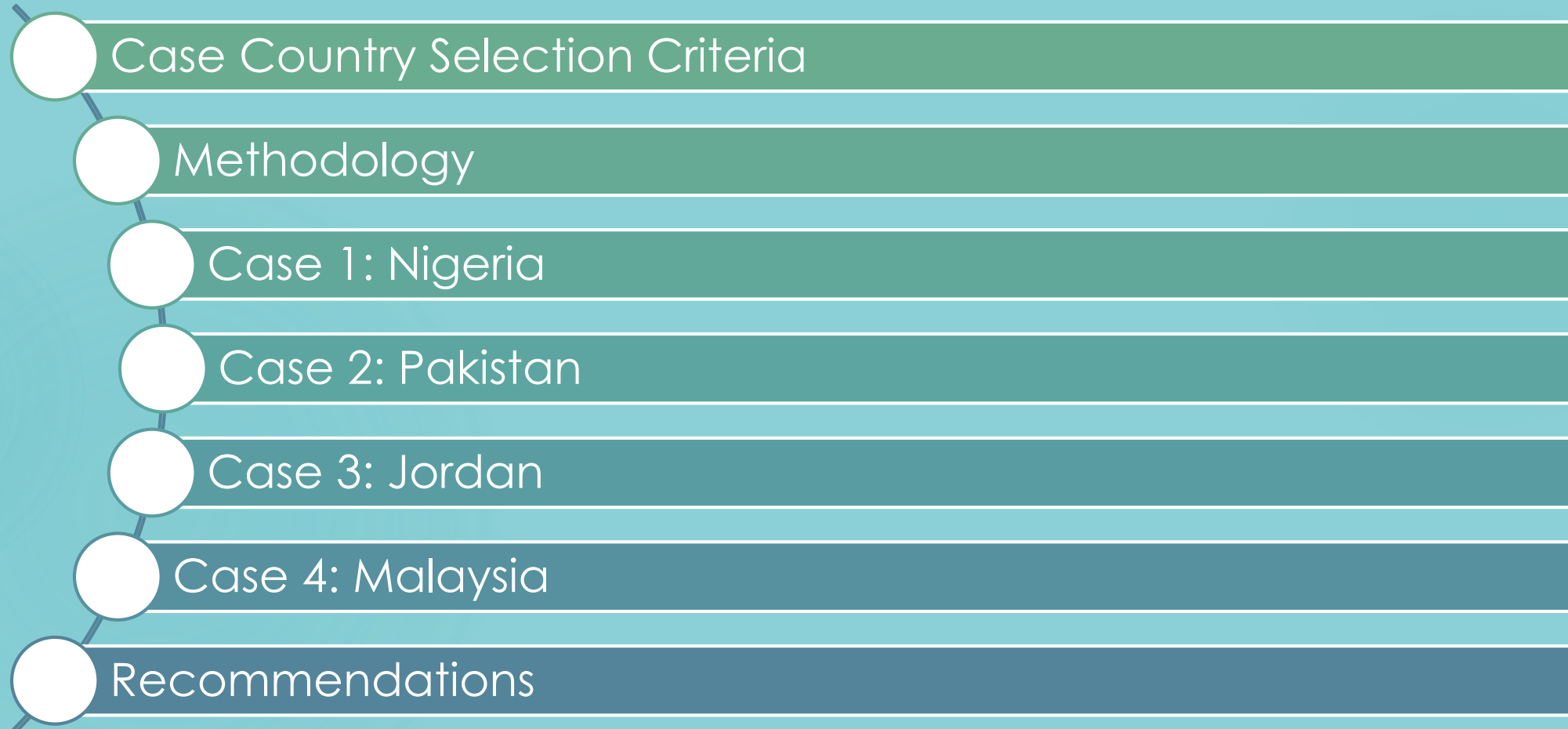


COMCEC

Standing Committee  
for Economic and Commercial Cooperation  
of the Organization of Islamic Cooperation (COMCEC)

# Outline

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# Case Country Selection Criteria

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▶ Selection took into consideration representation in terms of .....

Criteria	Malaysia	Jordan	Pakistan	Nigeria
1. Access to education: less than universal or unequal			√	√
2. Low level of literacy			√	√
3. Conflict / refugee crisis		√	√	√
4. Limited access to government data on child-level outcomes	√	√	√	√
5. Citizen-led assessment of learning outcomes			√	
6. Participation in international assessment: TIMSS / PISA	√	√		
7. Slow progress in improving student learning		√	√	√
8. Rising demand for non-state (private) schools		√	√	√
9. Income level	U middle	U middle	L middle	L middle
10. OIC Region	East Asia	Arab	South Asia	Africa

## Organisation of Islamic Cooperation



## Literature review

- Document available evidence on the determinants of student achievement and existing policies and programmes

## Microdata analysis

- Student level achievement scores
  - SCHOOL SURVEY (PISA 2012) for Jordan and Malaysia
  - SCHOOL SURVEY (EGRA 2014) for Nigeria [3,803 pupils from 257 primary schools]
  - HOUSEHOLD SURVEY (ASER 2013-2016) for Pakistan
- Simple descriptive statistics
- Regression analysis

## Stakeholder interviews

- Interviews to understand the country context and document perception of and barriers to education quality

# Case study 1: **Nigeria**

- ▶ Education system overview
- ▶ Trends in access to schooling
- ▶ Trends in student performance and learning outcomes
- ▶ Determinants of student achievement
- ▶ Stakeholder perceptions on quality education
- ▶ Recommendations and conclusions

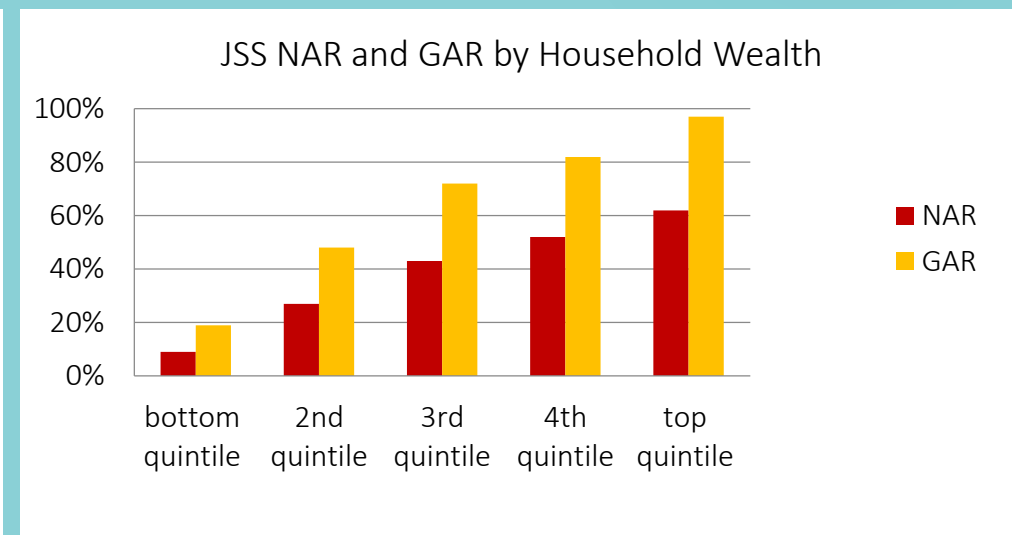
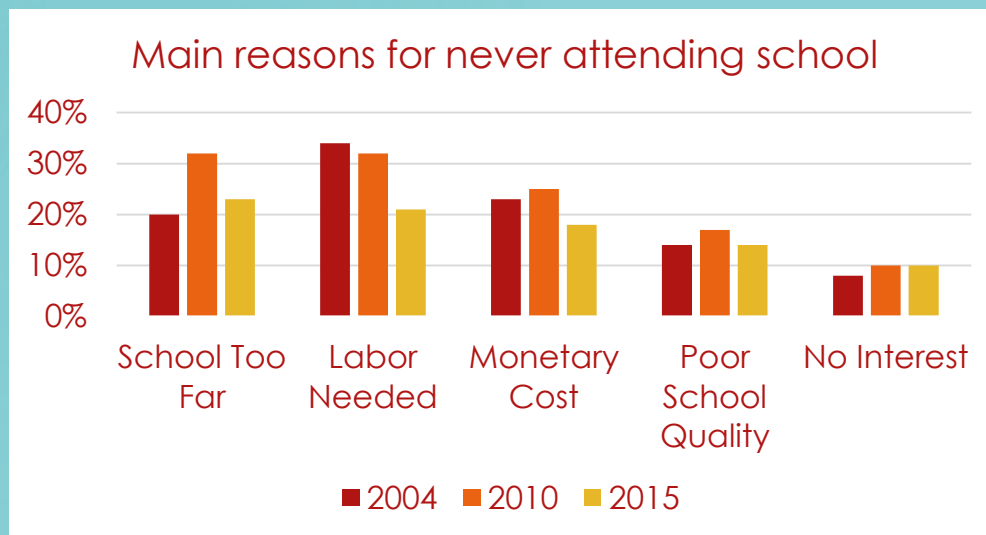
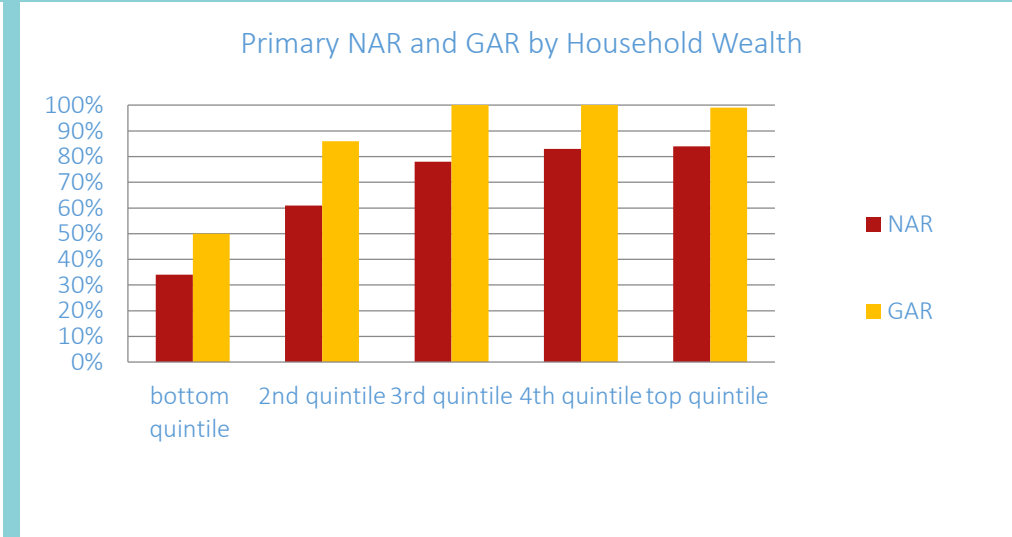
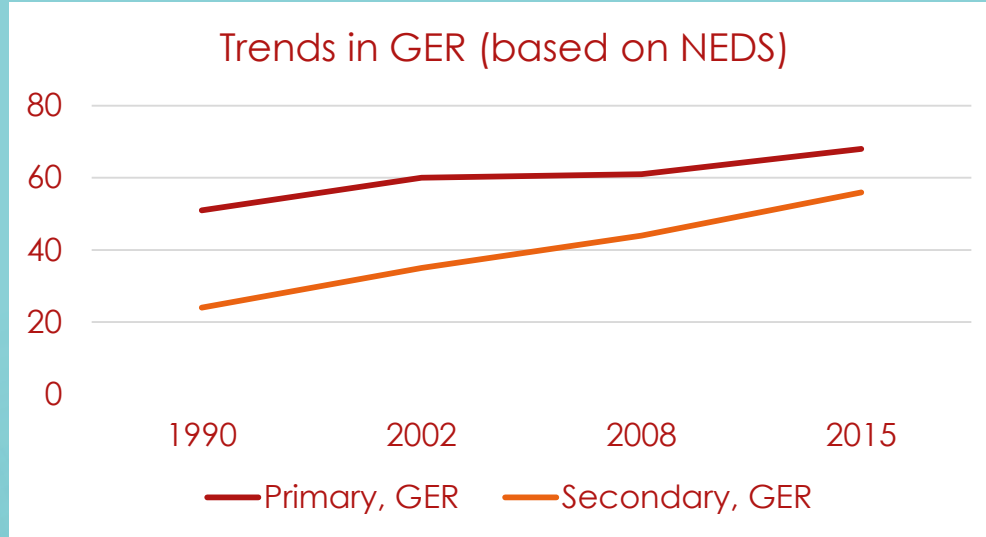
# Education System Overview

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- ▶ 6-3-3-4 system of education
  - ▶ 6 years of primary, 3 years of junior secondary, 3 years of senior secondary education (4 years of tertiary)
  - ▶ UBE (free and compulsory basic education) comprise primary & junior secondary
- ▶ Size
  - ▶ Primary schools - 96,901 (34,717 private)
  - ▶ Secondary schools 32,833 (20313 private)
  - ▶ Unknown # of madrasas (Islamic schools)
- ▶ Education system is decentralized
  - ▶ various types of schools
  - ▶ traditional and integrated Islamiyya schools.
- ▶ Strong donor-presence
  - ▶ Focus on northern provinces

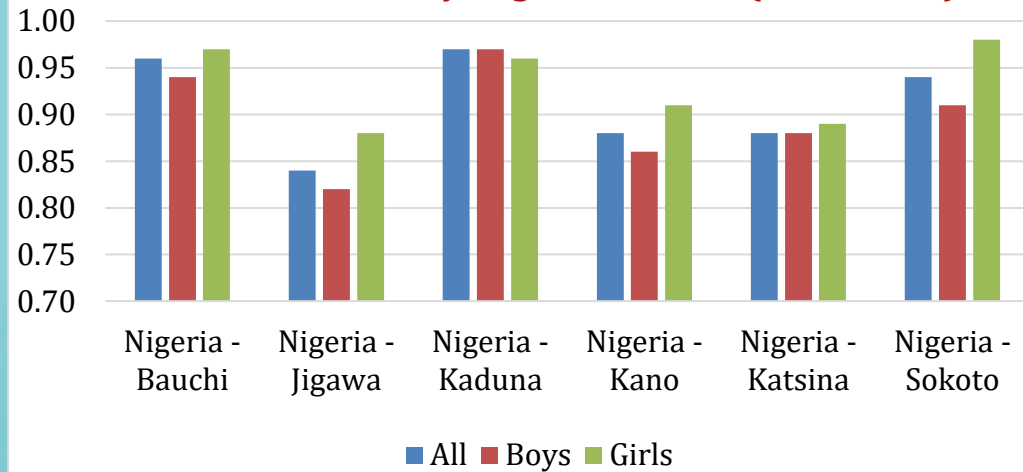
- ▶ Multiple donor-driven and region-specific programs
- ▶ **Integrated Islamiyya Quranic and Tsangaya Education (IQTE)**
- ▶ To integrate Qur'anic schools children into the Universal Basic Education Scheme, strengthen teaching capacity, mainstream core elements of basic education into the Qur'anic education
- ▶ **Girl-child Education Programme (GEP)**
- ▶ girls 'education enrolment campaign & targeted CCTs in 5 northern states
- ▶ **School Feeding and Health Programme**
- ▶ at least one meal a day for pupils in schools in 12 states

# Indicators of access to school

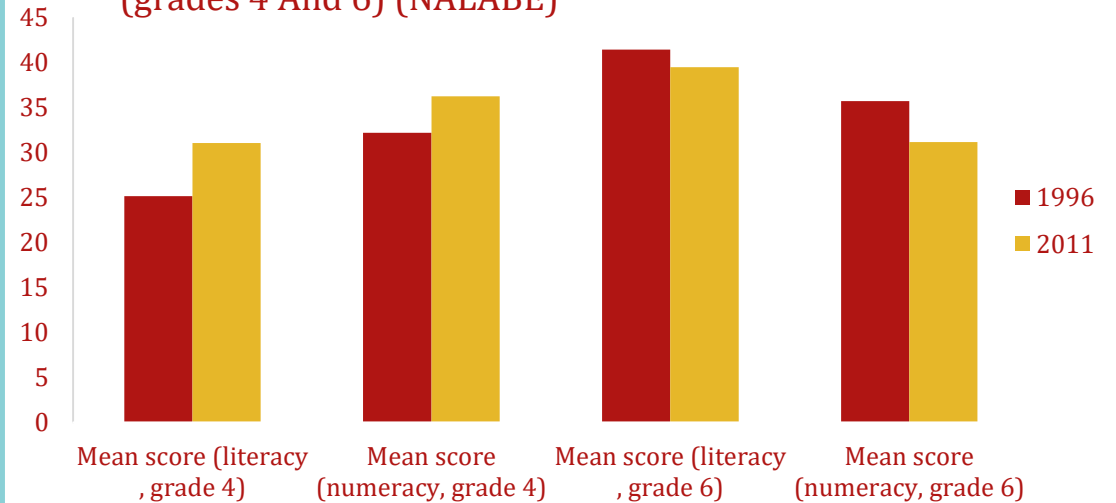


# Level of & trends in learning outcomes

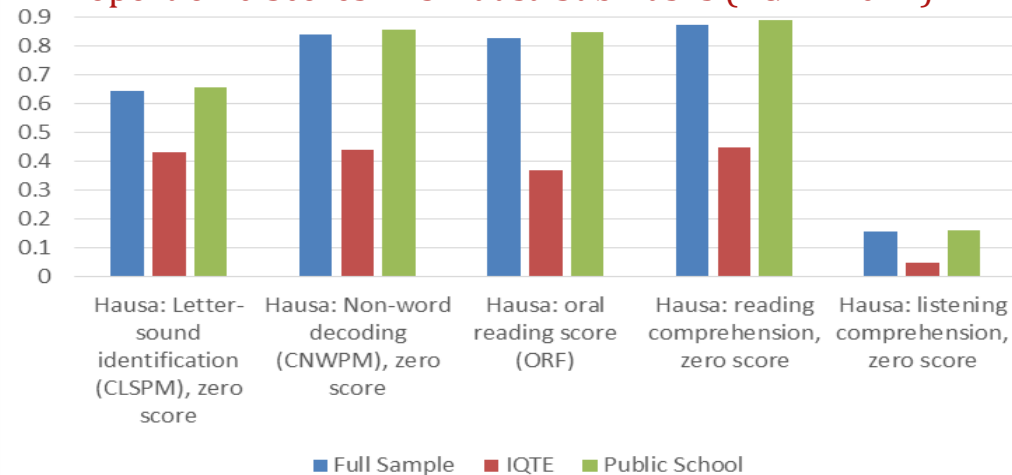
Proportion of 2 Grade Students Who Could Not Read A Single Word of Connected Text, by Region & Gender (EGRA 2014)



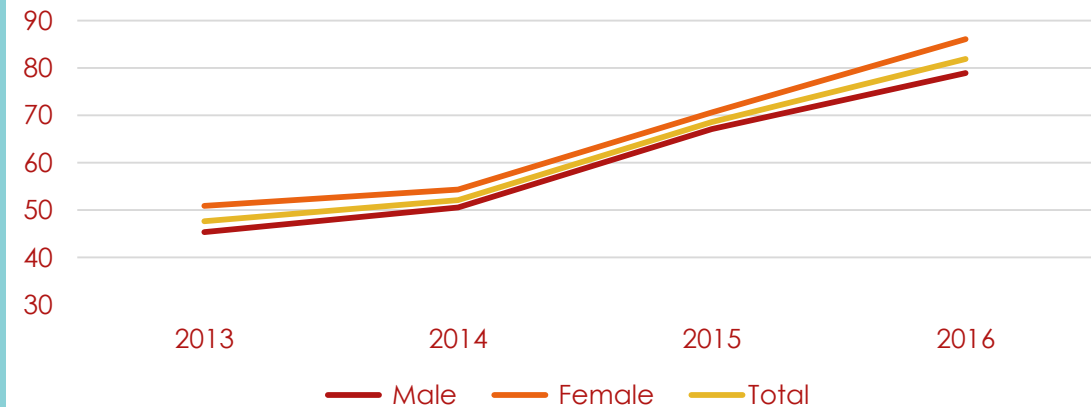
Literacy & Numeracy Scores in %, 1996-2011 (grades 4 And 6) (NALABE)



1 Proportion 0 Scores In 5 Hausa Sub-Tasks (EGRA 2014)

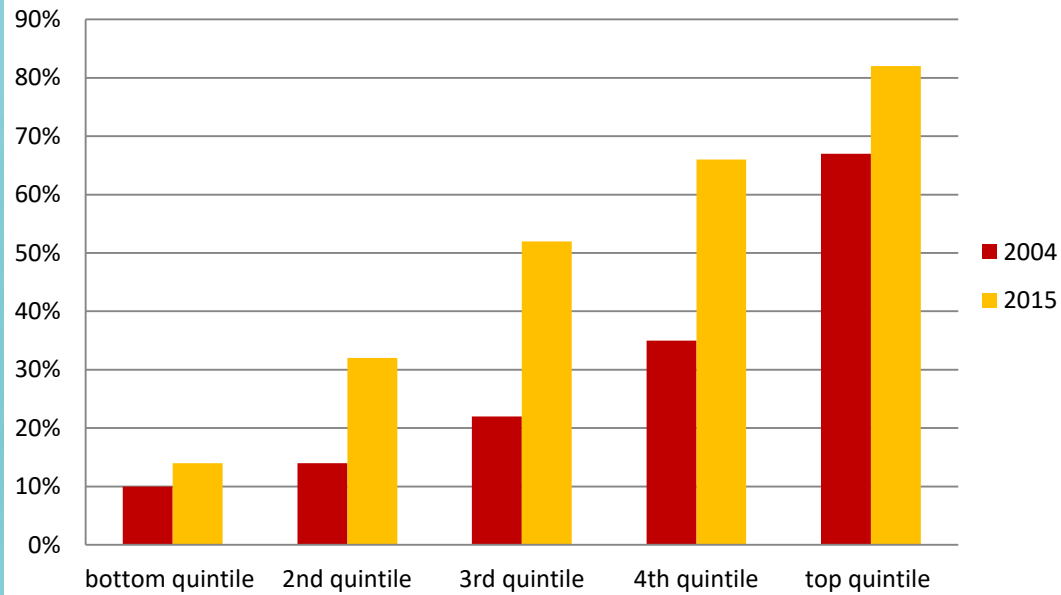


National Examination Council Final Senior Secondary Schools Examination, 2013-2016 (National Bureau of Statistics)

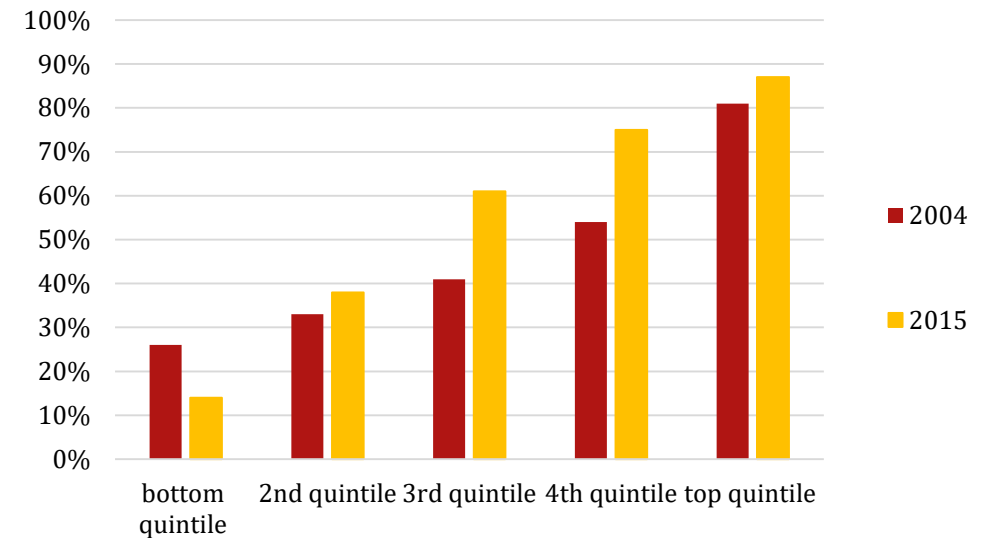


# Trends in wealth-learning profiles

### Literacy Skills by Household Wealth (Ages 5-16)



### Numeracy Skills by Household Wealth (Ages 5-16)



# Country specific challenges, barriers to quality education & stakeholder perceptions

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- ▶ *Challenges: conflict, ethnic diversity (Hausa, Yoruba & Igbo), poverty*
- ▶ *Barriers to quality education: lack of funding and facilities, the lack of good and motivated teachers, weak school leadership*
- ▶ *Attributes of a good school: school leadership (effectiveness of the principal) and high learning outcomes of children*
- ▶ *Attributes of a good teacher: “well-qualified/trained”, “being good at communication”, “being supportive of weaker students”*
- ▶ *Finance: primary and secondary govt. schools not adequately funded*
- ▶ *Overcoming the barriers: teaching/learning materials, scholarship for poor children , increase teacher salary, ICT for rural schools,*
- ▶ *Madrasah education: important only in North; more support for private schools*

# Determinants of student achievement (grades 2 and 3) in Hausa (EGRA 2014), total & 0-scores

- ▶ Household-specific factors
  - ▶ Family wealth matters though weak
- ▶ Child-specific factors
  - ▶ Female disadvantage
  - ▶ Pre-school attendance matters but weak effect
- ▶ School-specific factors
  - ▶ Significant: library, electricity and toilet availability; teacher presence; Islamic school
  - ▶ Insignificant: completing an extra year (grade 3) ; STR

- ▶ Serious learning gaps at all levels of the schooling cycle
- ▶ Despite a diverse set of interventions, education quality is declining
- ▶ Wealth gap in access and learning outcomes
  - ▶ 13.2 millions out-of-school
  - ▶ regional (north-south) disparities in gender and income gaps
    - ▶ Income effect on learning mostly works through school choice
- ▶ Weak implementation and low quality impact of the UBE
  - ▶ Shortage of inputs
- ▶ Information on nationwide learning outcomes sparse and lacks reliability

# Recommendations

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- ▶ Address learning shortfalls in foundational stage
- ▶ Increase budgetary allocations
- ▶ Improve governance and implementation capacity
  - ▶ Better M&E and diagnostics
  - ▶ Better poverty and gender targeting
- ▶ Improve accountability (teacher truancy)
- ▶ Integrate into the global assessment frameworks (TIMSS, PISA & PIRLS)
- ▶ Facilitate dissemination of data for diagnostics and M&E

# Case study 2: **Pakistan**

- ▶ Education system overview
- ▶ Trends in access to schooling
- ▶ Trends in student performance and learning outcomes
- ▶ Determinants of student achievement
- ▶ Stakeholder perceptions on quality education
- ▶ Recommendations and conclusions

## ▶ Structure

- ▶ Formal education comprise 1+10-2 system
- ▶ Primary (5), middle elementary (3), secondary (& vocational) (2) and higher-secondary (2)
- ▶ compulsory & free for 5 to 16 years

## ▶ Size

- ▶ 303,000 institutions, 47 million children, 1,723,790 teachers
- ▶ 191,065 public & 112,381 private institutions (PES 2015-2016)

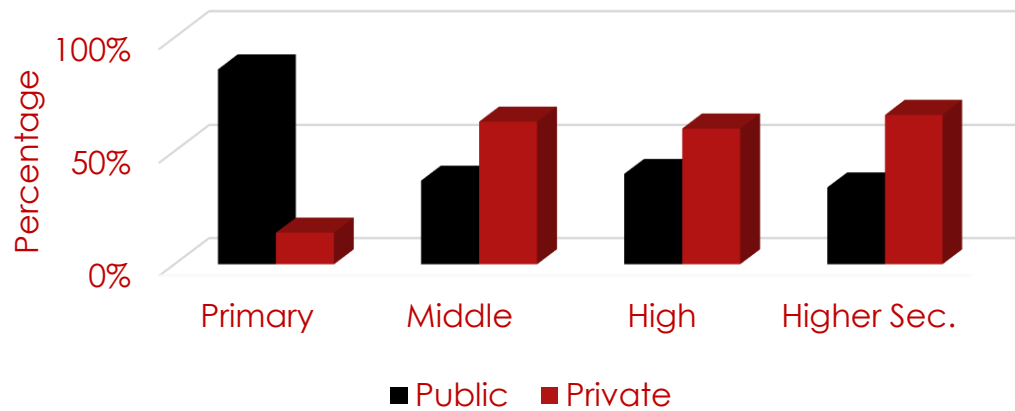
## ▶ Management

- ▶ Provincial autonomy in planning, policy, delivery and monitoring of education
- ▶ ICT, Sindh, Punjab, Balochistan & Khyber Pakhtoonkhwa have passed Compulsory and Free Education Acts.

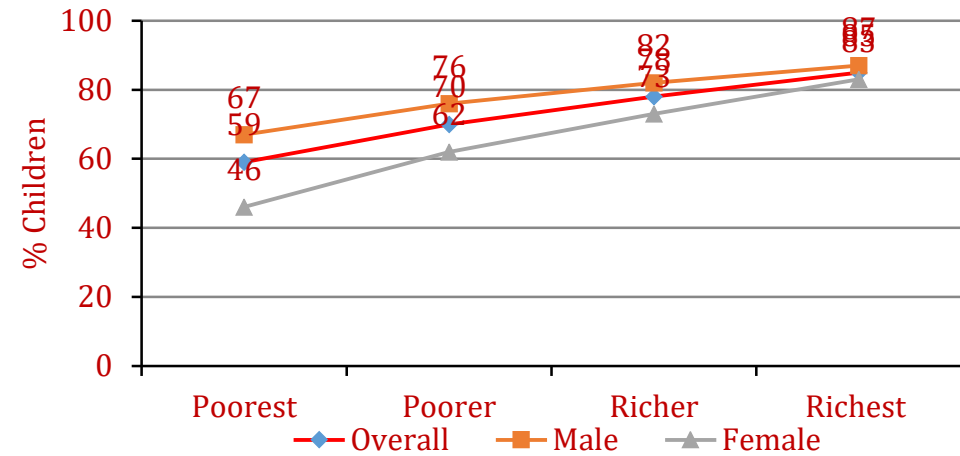
- ▶ Vision 2025 in 2015 & Provincial Education Sector Plans (ESPs)
- ▶ Active civil society organizations (CSOs) and development partners
- ▶ Annual Status of Education Report (ASER) report since 2010
- ▶ Public Private Partnerships (PPPs)
  - ▶ Provincial PPT acts in 2010 & 2014/5
  - ▶ The Citizens Foundation (TCF)
- ▶ Pre-service training - Strengthening Teacher Education in Pakistan (STEP)
- ▶ Teaching cadre - National Testing Service (NTS): independent teacher tests as pre-requisites for merit-based recruitment
- ▶ Social protection in Pakistan for conditional and unconditional cash transfers
  - ▶ The Benazir Income Support Program (BISP); Female School Stipend Programmes

# Indicators of access to school

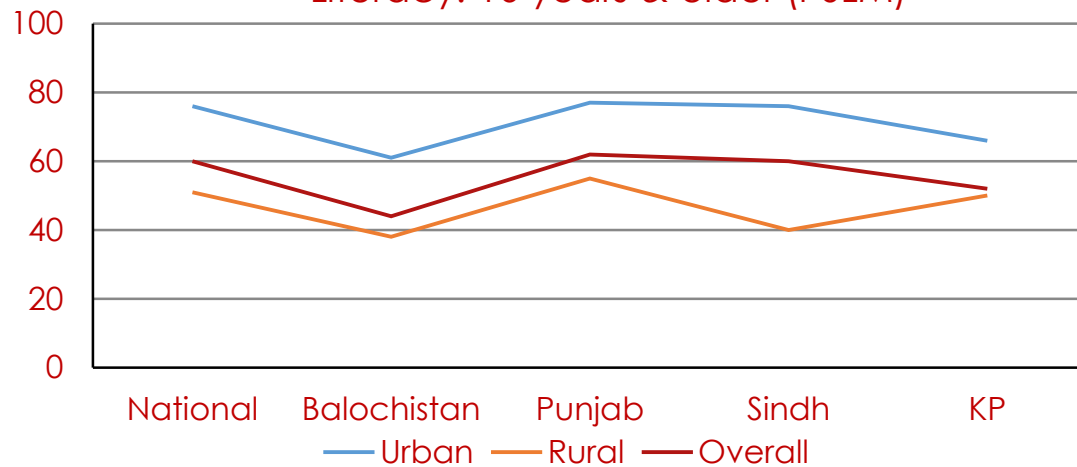
% of Institutions by type across levels of education



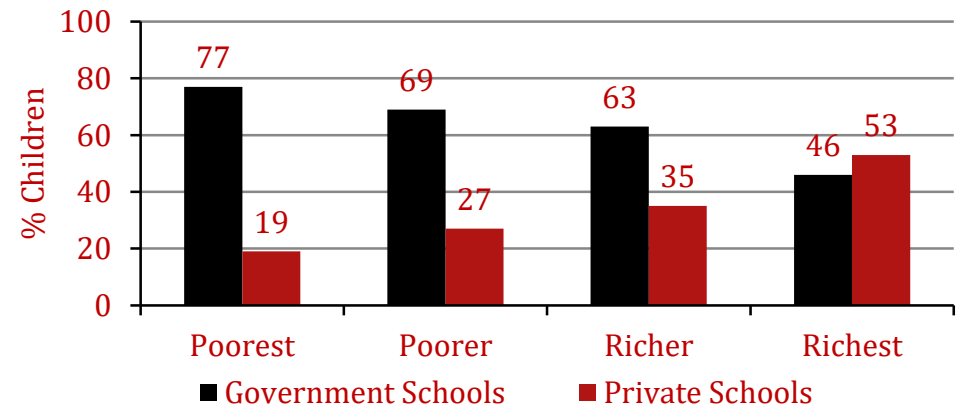
Enrollment by Gender



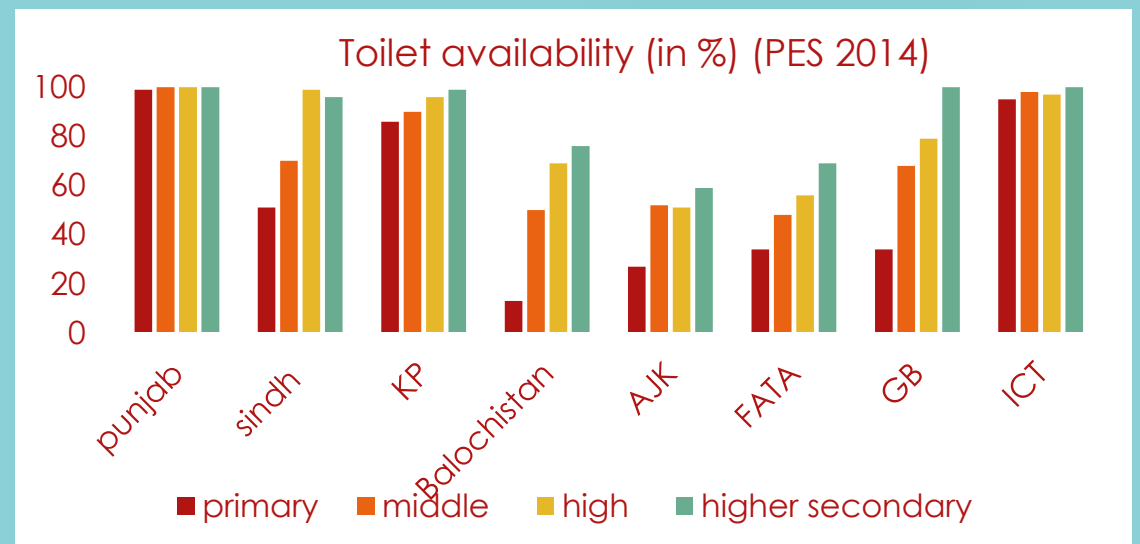
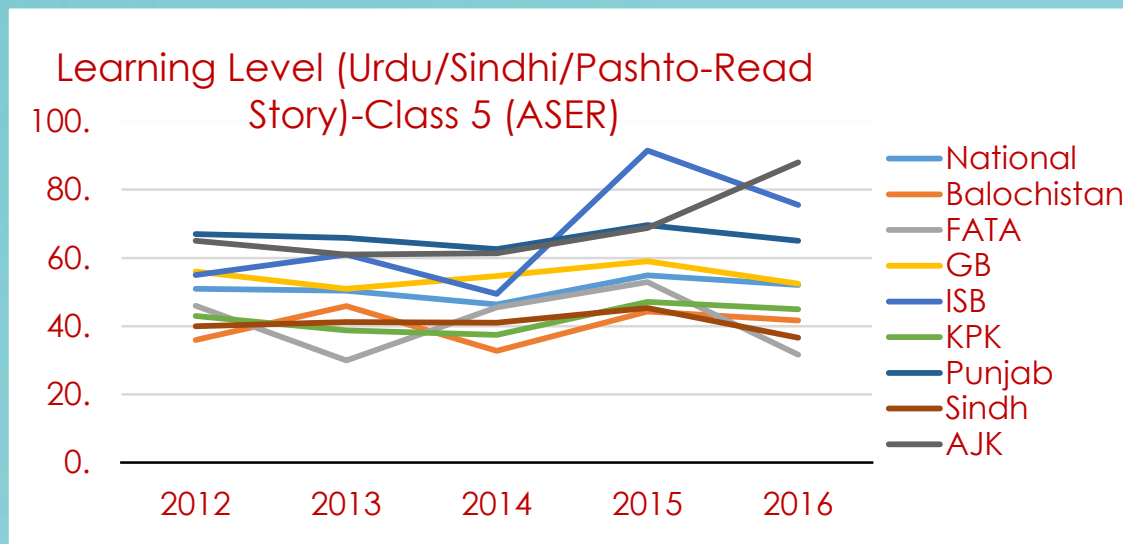
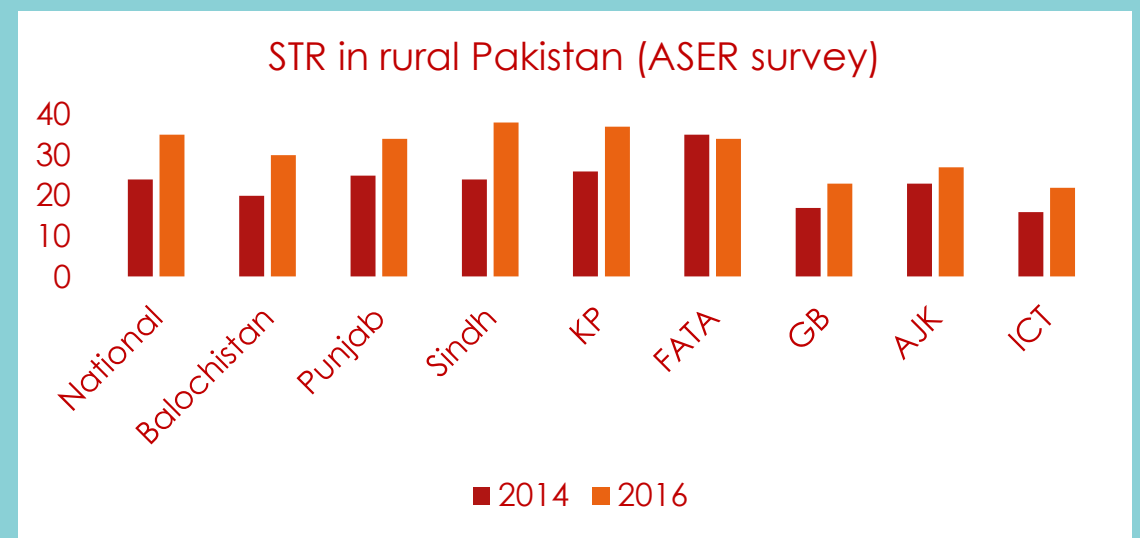
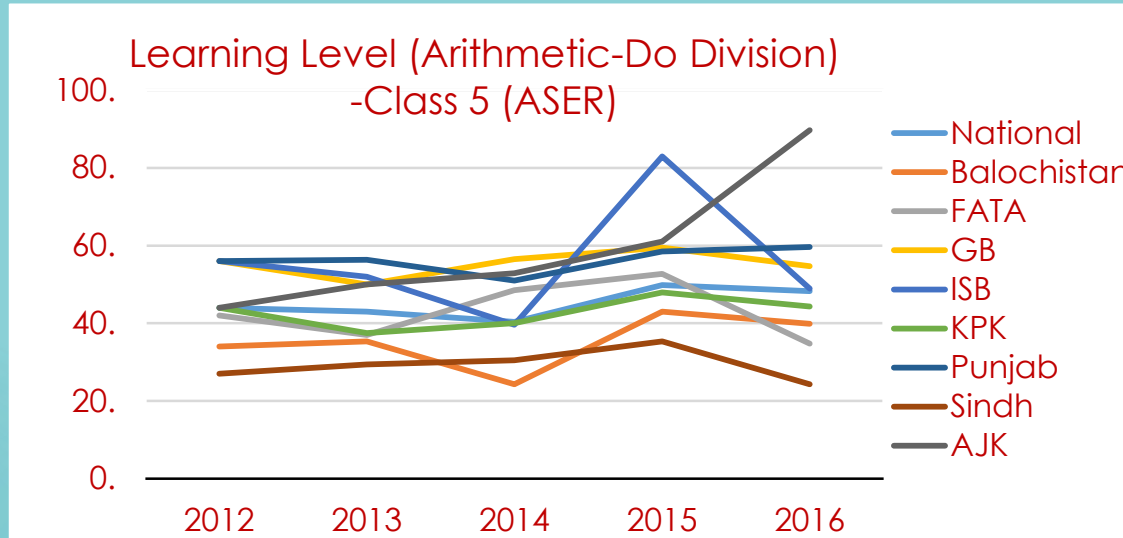
Literacy: 10 years & older (PSLM)



Enrollment by School Type



# Trends in inputs & learning outcomes



# Country specific challenges, barriers to quality education & stakeholder perceptions

- ▶ *Challenges: ethno-linguistic & regional diversity; poverty; conflict*
- ▶ *Barriers to quality education: a lack of school leadership, lack of teacher motivation, medium of instruction, lack of facilities and a dearth of qualified teachers*
  - ▶ *Attributes of a good school: effective school head-teacher and motivated teachers*
  - ▶ *Finance: primary and secondary schools not adequately funded*
- ▶ *Inequality in quality: Widening performance gap (rural-urban; boy-girl; rich-poor households)*
- ▶ *Madrasah education: Recognition as a pro-poor model of education but also strong support for reform*

# Determinants of Numeracy & Reading Skills in rural Pakistan, 5-16 years in school (ASER)

- ▶ Household-specific factors
  - ▶ Family wealth effect is strong
- ▶ Child-specific factors
  - ▶ Female disadvantage
    - ▶ Bigger amongst poorest quartiles
- ▶ School factors
  - ▶ Negative association w.r.to government school & madrasa attendance
- ▶ Location factor
  - ▶ Sindh most backward
- ▶ Gaps widening over time (2013-2016)
  - ▶ gender

- ▶ Off target on access mainly on account of quality challenges
- ▶ Serious regional disparities in access, facilities and learning outcomes
  - ▶ Confirmed by both citizen led and government high stakes assessments
- ▶ Significant inequalities in access to education and learning outcomes
  - ▶ Gender and poverty
  - ▶ Declining regional performance
- ▶ Some promising policies and programmes to ensure 'progressive universalism'
  - ▶ Close state-NGOs collaboration

- ▶ Address early shortfalls in learning
- ▶ Prioritize gender equality and equity in access to education
  - ▶ Better poverty & regional targeting
- ▶ Improve pre and in-service training programs
  - ▶ child centered pedagogies
- ▶ Continue reforms of madrasahs to address 'mimetic-pedagogy' and rote learning
- ▶ Promote evidence based reforms

# Case study 3: Jordan

- ▶ **Education system overview**
- ▶ **Access to Schooling**
- ▶ **Trends in student performance and learning outcomes**
- ▶ **Determinants of student achievement**
- ▶ **Stakeholder perceptions on quality education**
- ▶ **Recommendations and conclusions**

# Education System Overview

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## ▶ Structure

- ▶ Formal education comprise 10-2 system
- ▶ Ten years of compulsory (aged 5-15 years) & two years of secondary education (aged 16-18 years)

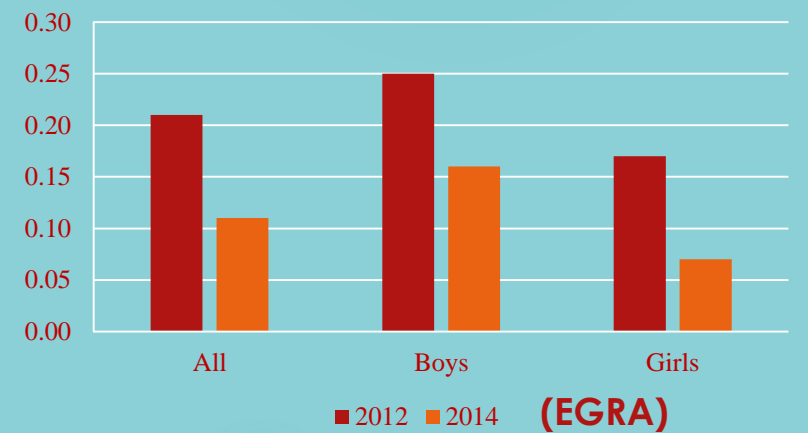
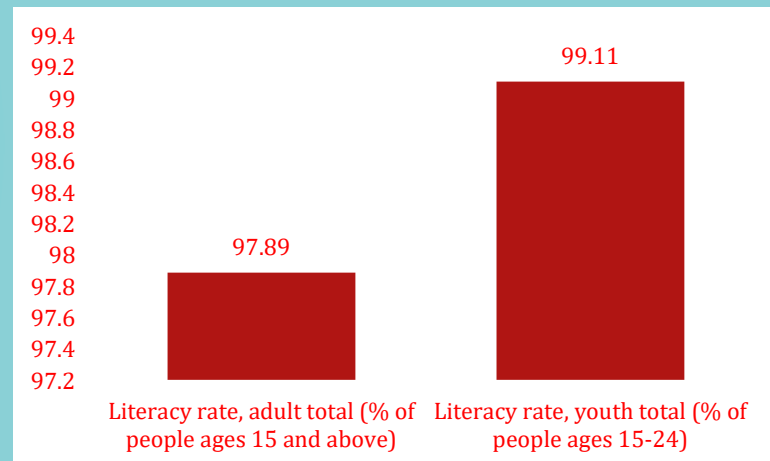
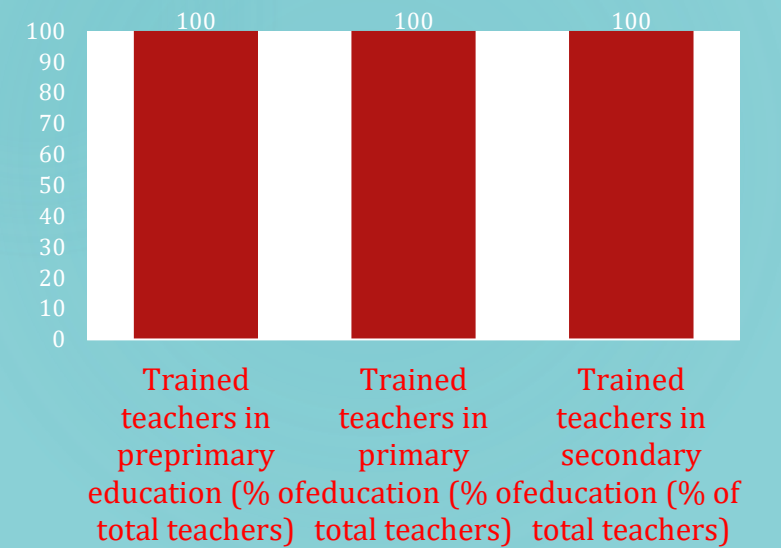
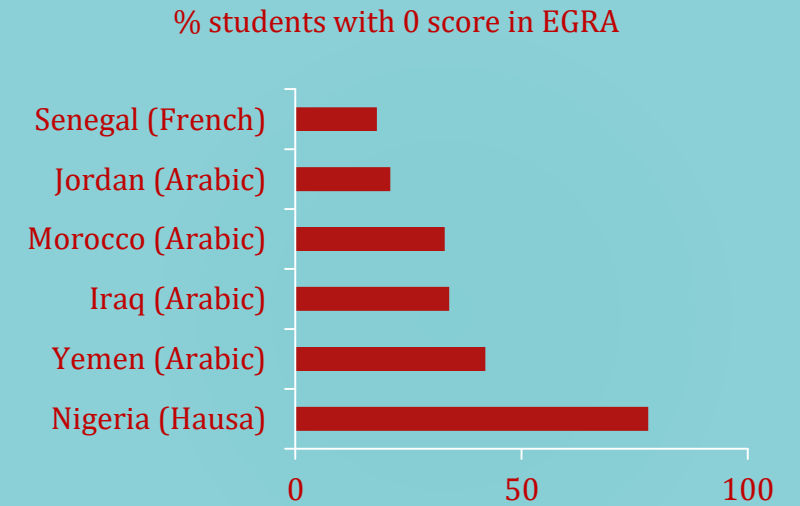
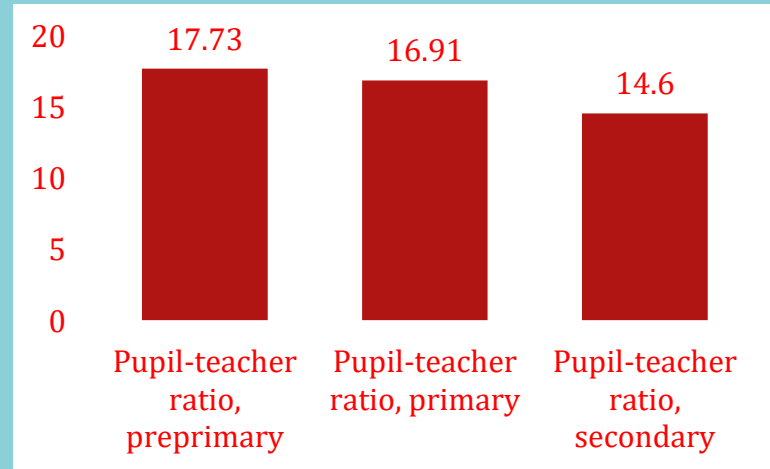
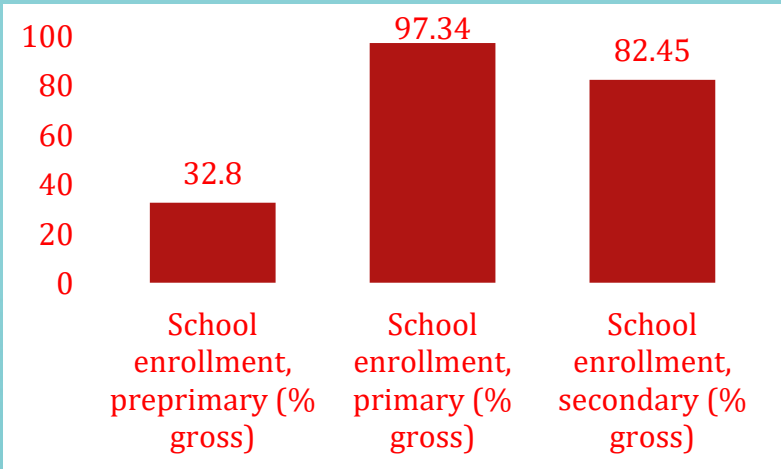
## ▶ Size

- ▶ 2787 government schools & 1493 private schools
  - ▶ UNRWA schools for Syrian refugees

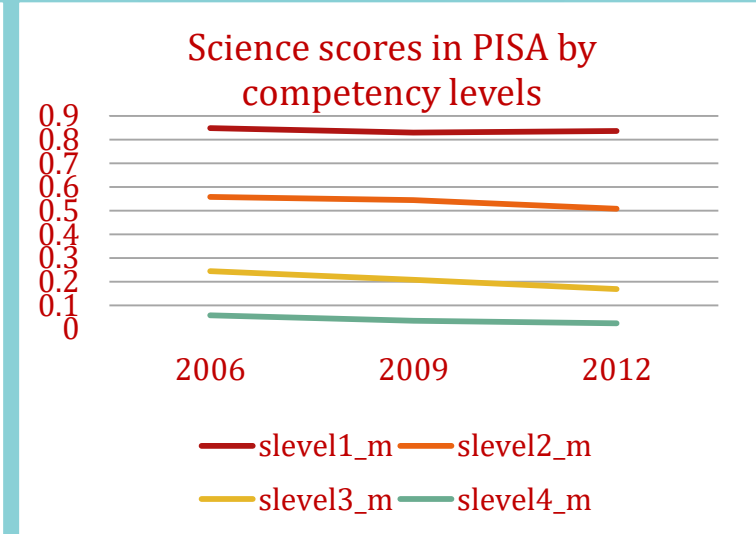
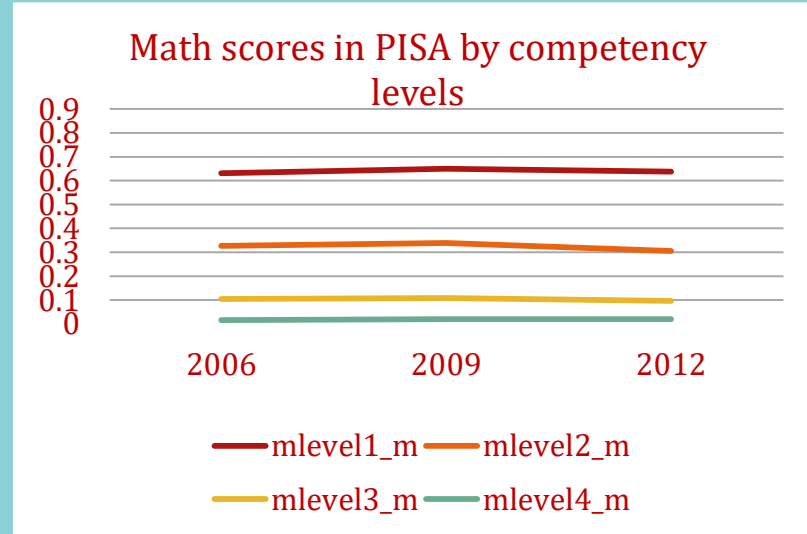
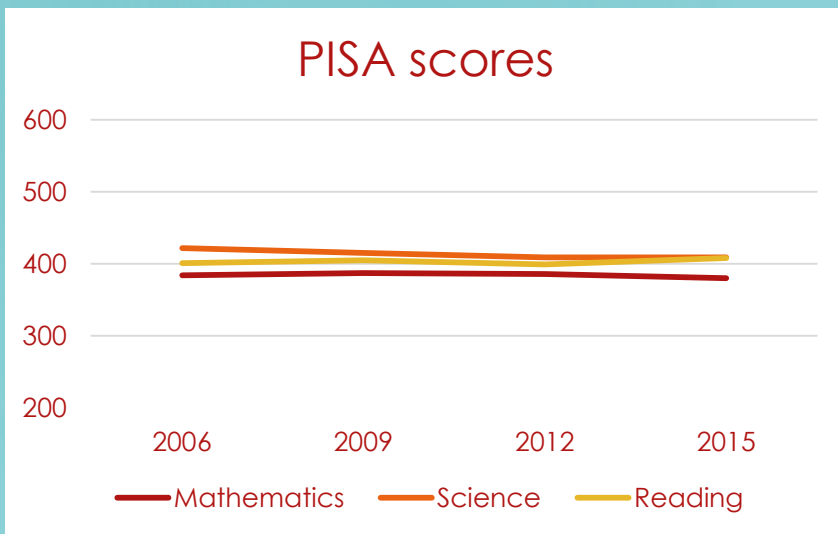
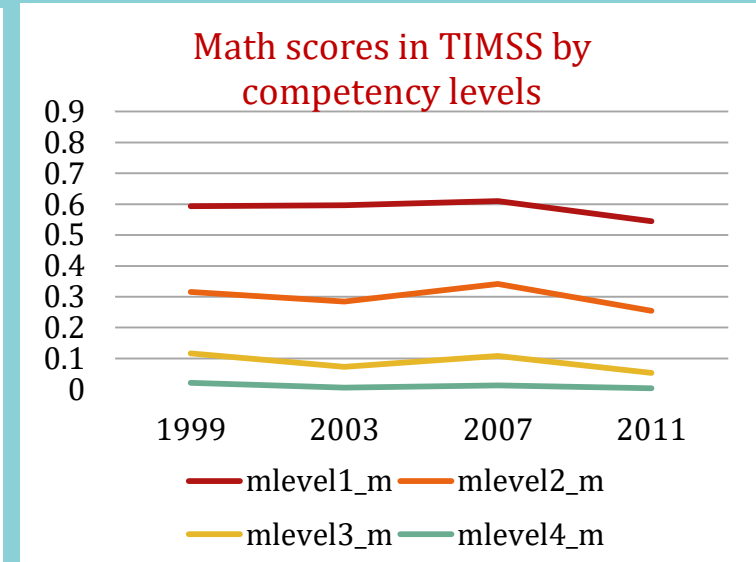
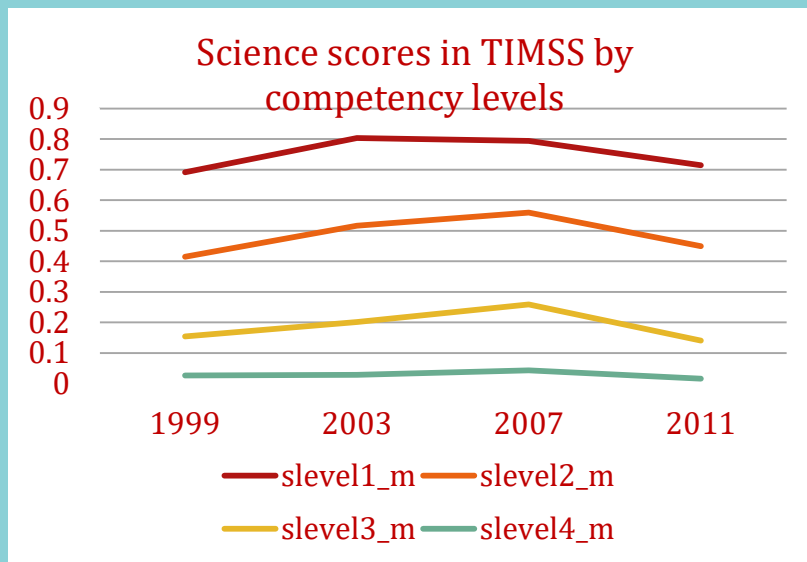
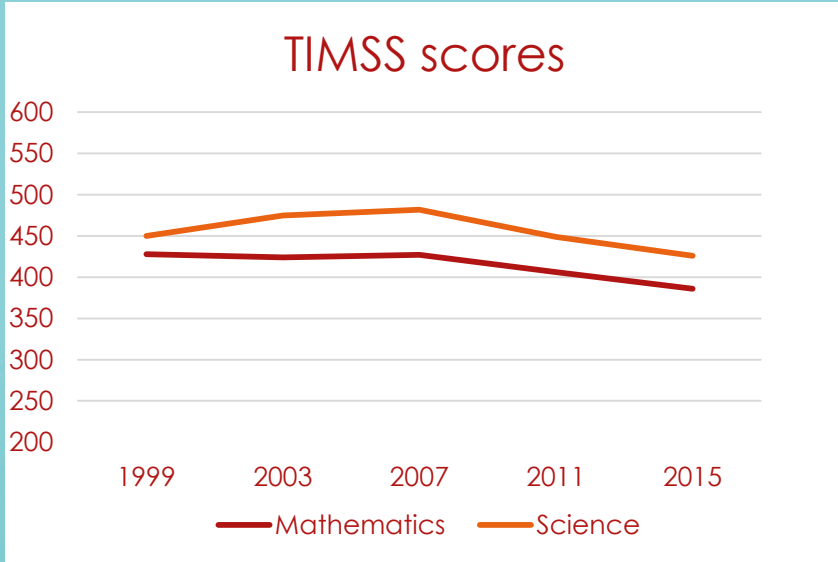
## ▶ Management

- ▶ centrally planned, delivered and monitored
  - ▶ management of personnel, production of textbooks and the development of the curriculum
- ▶ Some decentralized at the governorate and school-level

# Indicators of access & quality



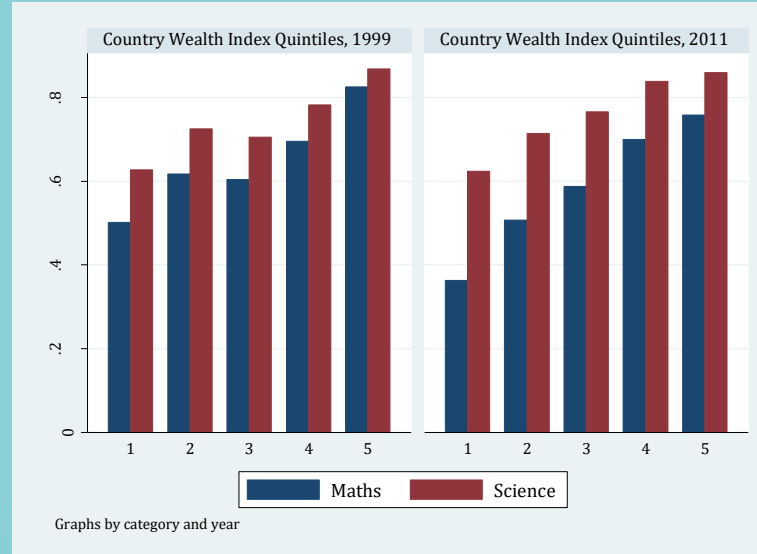
# Trends in learning outcomes



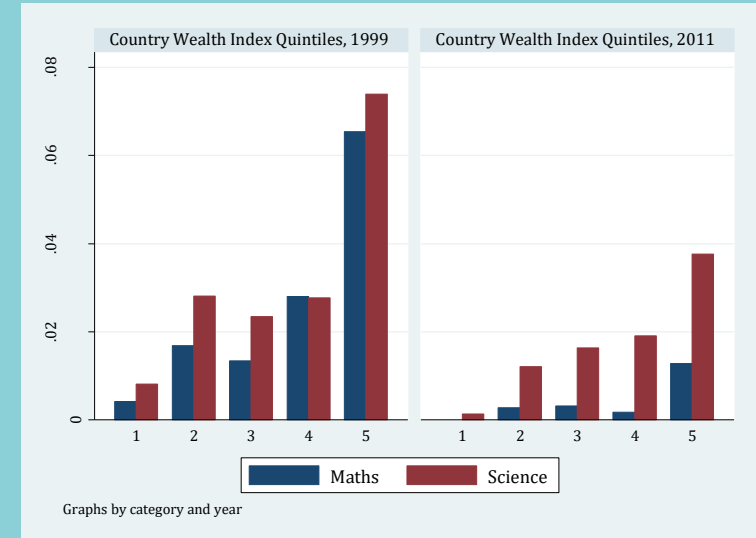
# Trends in wealth-learning profiles

- ▶ Sizable wealth gap
- ▶ A slight fall over time because of declining performance across wealth groups in higher order skills
- ▶ TIMSS
- ▶ PISA

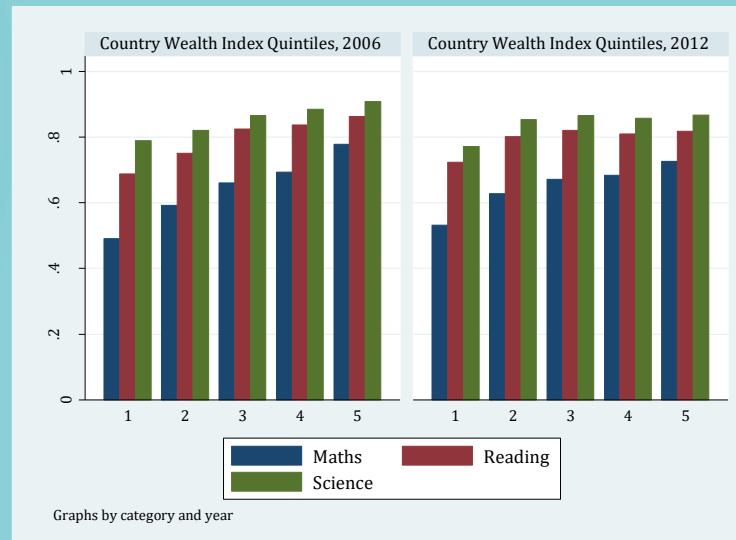
### TIMSS - basic



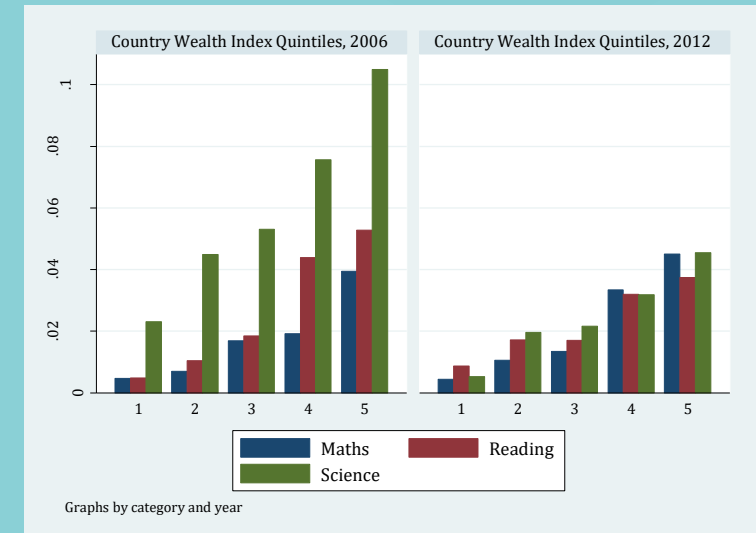
### TIMSS - advanced



### PISA - basic



### PISA - advanced



# Country specific challenges, barriers to quality education & stakeholder perceptions

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- ▶ Country specific challenge
  - ▶ Nearly half fail in public secondary school exit exam (Tawjihi)
  - ▶ Unclear how Jordan's advantage in TIMSS was lost
  - ▶ PISA and TIMSS perceived as low-stake assessments
- ▶ *Barriers to quality education*: effective school leadership, lack of teacher motivation, lack of good/qualified teachers, pressure of external evaluation
  - ▶ *Attribute of a good teacher*: motivation
  - ▶ *Finance*: perceived government schools thought to be inadequately funded
- ▶ *Overcoming the barriers*: : leadership training program, increase teacher salary, ICT
- ▶ Consistent with NHRD report 2016 & QRF survey of teachers

# Determinants of student achievement (PISA 2012)

- ▶ Household-specific factors
  - ▶ Family wealth effect is modest
- ▶ Child-specific factors
  - ▶ Pre-school attendance matters
    - ▶ Also true for poor households
  - ▶ Female advantage in science and language and the absence of gender gap in mathematics.
- ▶ School-specific factors
  - ▶ Significant: private school advantage (nearly 30 points gain in PISA); Average disciplinary climate effect is positive; STR (negative and though small in size)
  - ▶ Insignificant: School size, teacher shortage and proportion of certified teachers; Parental engagement not significant

# Notable schemes, strategies & reforms

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- ▶ Education Reform for the Knowledge Economy Program (ErfKE I & II), 2001-2015
  - ▶ improve learning environment in schools as well as promote early childhood education.
- ▶ NHRD 2016
- ▶ Recommended 22 projects and specific bold time-bound policy targets
  - ▶ promote research and data driven policy
    - ▶ disseminate data to show progress on student performance, teacher quality and other indicators
  - ▶ achieve regional/global targets in assessments such as TIMSS, PISA, EGRA & EGMA
  - ▶ Make teaching an employment of choice
  - ▶ quality of pre- and in-service training for teachers
  - ▶ community engagement to improve school performance
  - ▶ parental involvement to support student learning in and out-of-school hours
- ▶ Queen Rania Foundation (QRF) and Queen Rania Teachers Academy (QRTA)
- ▶ Jordan Education Initiative (JEI) for ICT & PPP models
- ▶ Early Grade Reading and Math Project (RAMP)

- ▶ Impressive progress in equitable access to schooling
- ▶ Growing inequalities in learning outcomes
  - ▶ Wealth
  - ▶ Gender (male disadvantage)
- ▶ Some progress in foundational cognitive skills
- ▶ Some improvement in secondary school learning outcomes though not sustained over time
- ▶ Low pass rate in national examination (*Tawjihi*)
- ▶ Strong political support for “equitable quality education”
  - ▶ Government-NGOs partnership
  - ▶ Active participation in international assessments (PISA, TIMSS, TALIS & EGRA)

- ▶ Address early shortfalls in learning
  - ▶ Increasing access to quality ECDC/pre-primary schooling
- ▶ Arrest high failure rate in *Tawjihi*
  - ▶ Reduce associated social and psychological pressure.
- ▶ Review examination criteria
  - ▶ routine procedures and memorization vs problem solving, critical thinking and communication abilities.
- ▶ Improve training and governance
  - ▶ better support through in-classroom coaching; regular supervisor visits; in-service training
- ▶ Formulate a data dissemination policy to facilitate research
  - ▶ ...also create feedback loops between research and practice

# Case study 4: **Malaysia**

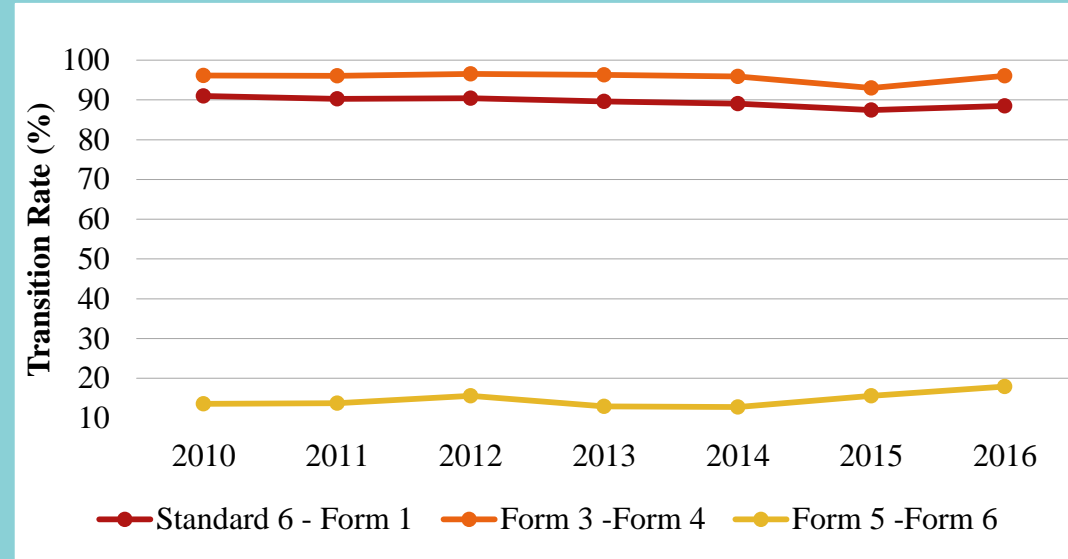
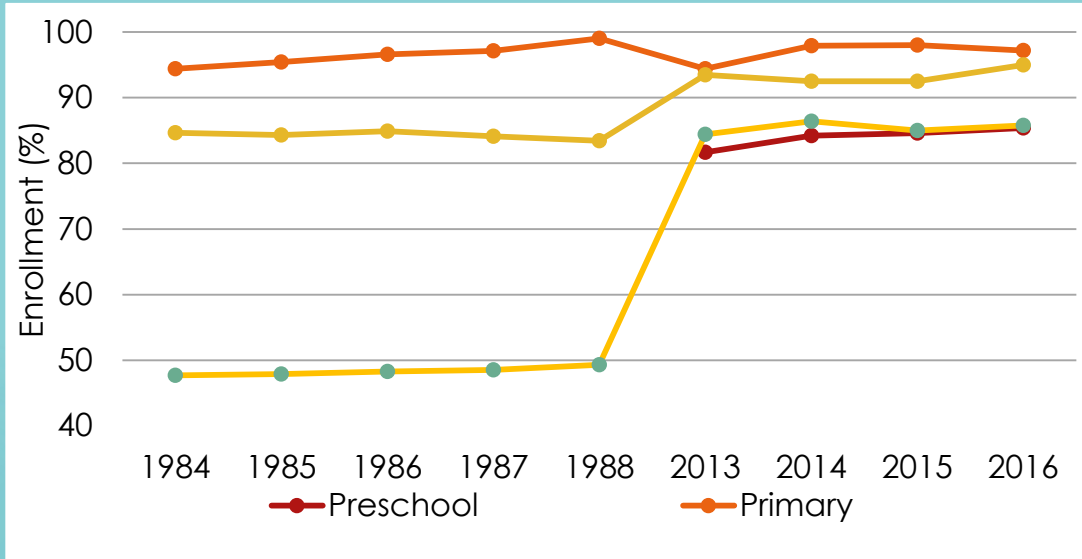
- ▶ Education system overview
- ▶ Access to Schooling
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- ▶ Stakeholder perceptions on quality education
- ▶ Recommendations and conclusions

# Education System Overview

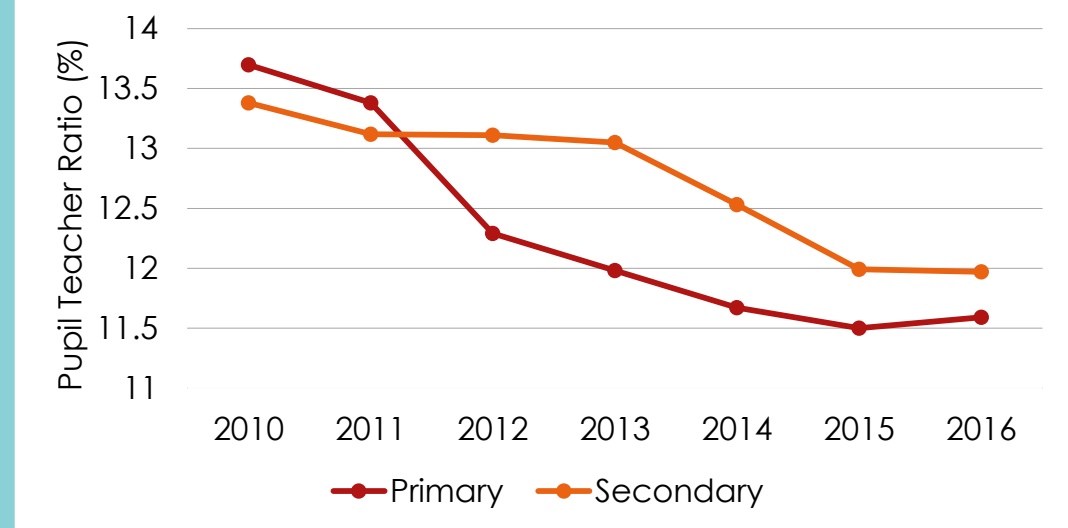
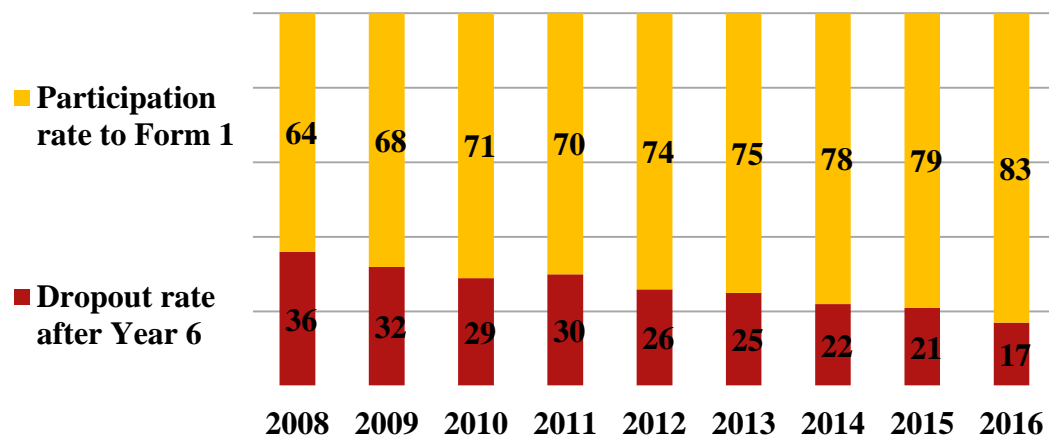
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- ▶ Formal education based on a 6-3-2-2-4 organization
  - ▶ six years of compulsory primary (Standard 1-6), three years of lower secondary school (Form 1-3), and two years of secondary (Form 4-5), two years of upper secondary (Form 6 Lower and 6 Upper) and 4 years of university education
  - ▶ eleven years of free education (6-3-2)
- ▶ Diverse types of providers
  - ▶ Primary: government (national, Chinese & Tamil) and others (Islamic)
  - ▶ Secondary: government (daily & residential) and private
- ▶ Centralized management - MoE is the main government body
  - ▶ schools enjoy some autonomy

# Indicators of access to school

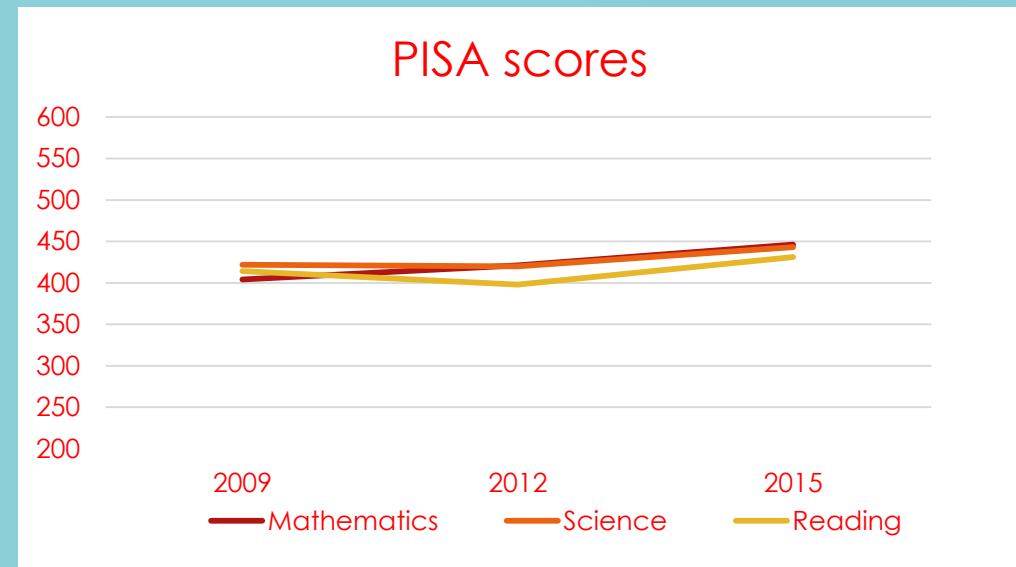
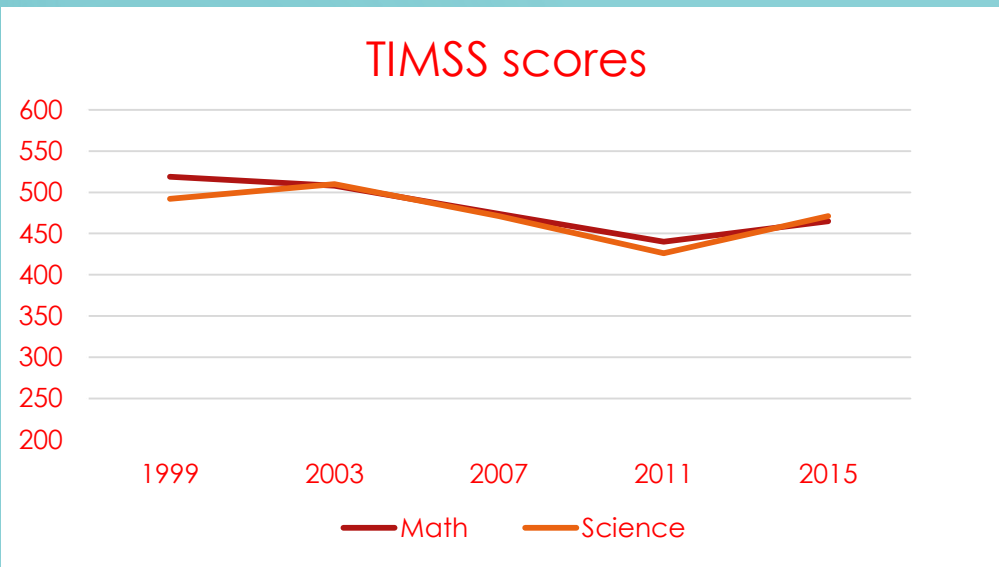
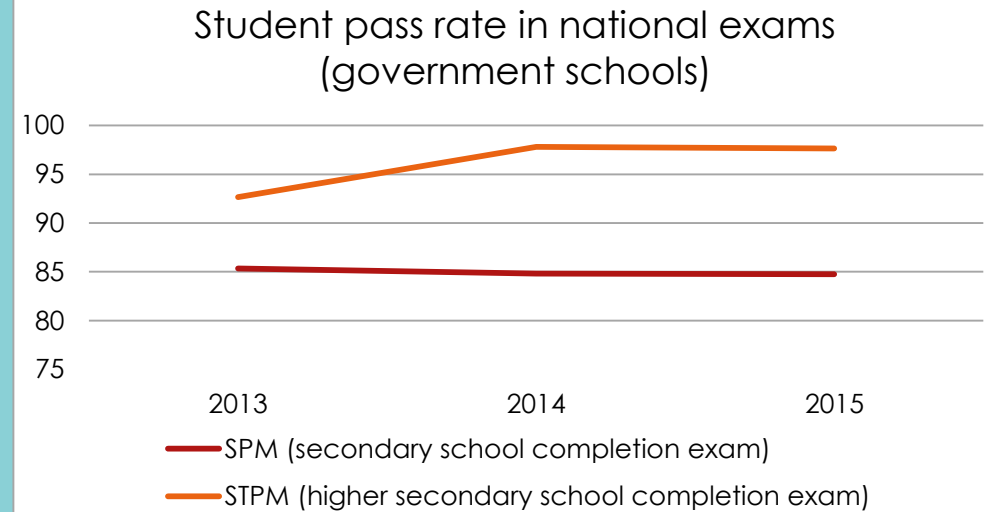


## indigenous children's school participation



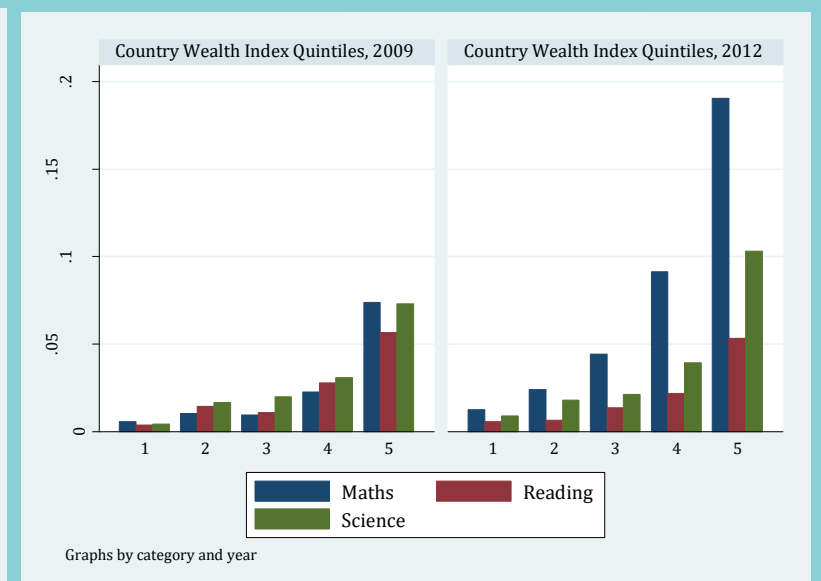
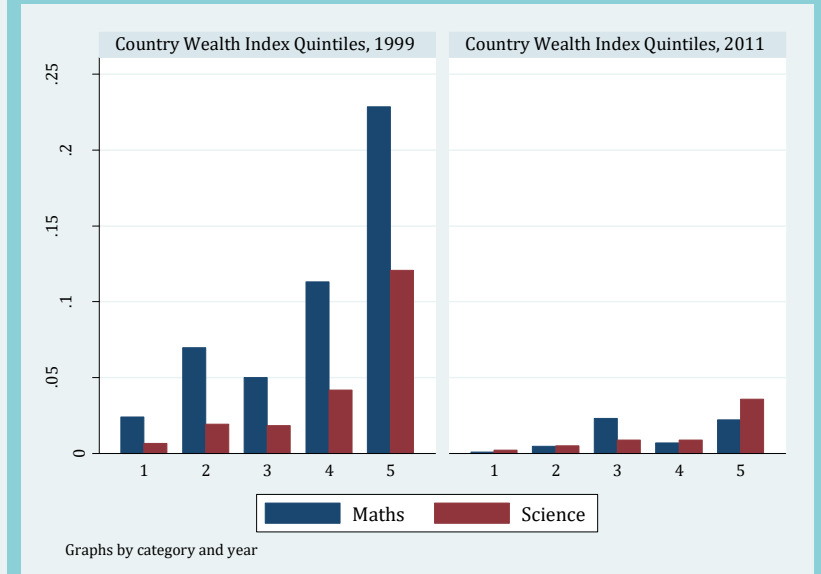
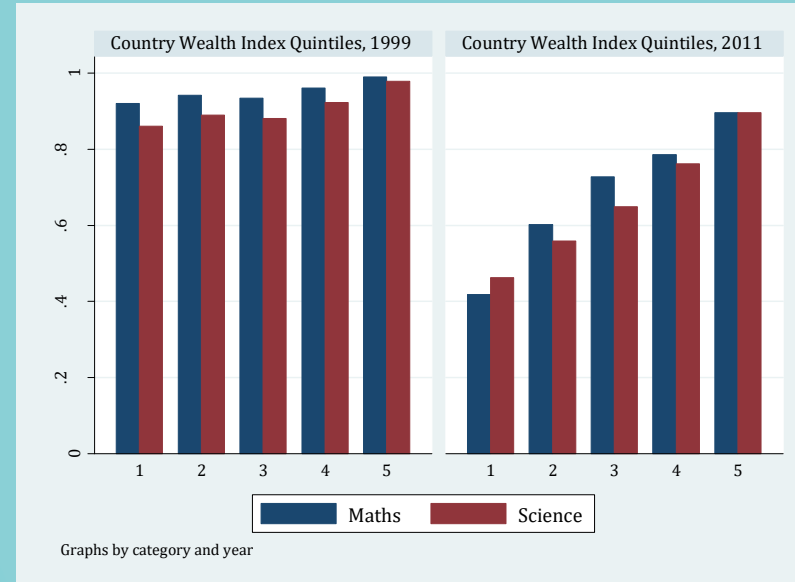
# Trends in learning outcomes

- ▶ Impressive start in TIMSS (1999)
- ▶ Average score declined but showing clear signs of improvement in both TIMSS and PISA
- ▶ Consistent with student performance in national assessments



# Trends in wealth-learning profiles

- ▶ However a widening of wealth gap because of declining performance of the poorer wealth group
- ▶ Mixed trend in higher order skills
  - ▶ TIMSS
  - ▶ PISA



# Determinants of student achievement (PISA 2012)

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- ▶ Household-specific factors
  - ▶ Family wealth effect
- ▶ Child-specific factors
  - ▶ Pre-school attendance matters
    - ▶ Also true for poor households
  - ▶ Female advantage in science and language (no gender gap in mathematics)
- ▶ School-specific factors
  - ▶ Significant: private school advantage (nearly 30 points gain in PISA); STR (negative and though small in size); Average disciplinary climate in the school is positively and significantly correlated with student achievement.
  - ▶ Insignificant: School size, teacher shortage and proportion of certified teachers; Parental engagement not significant

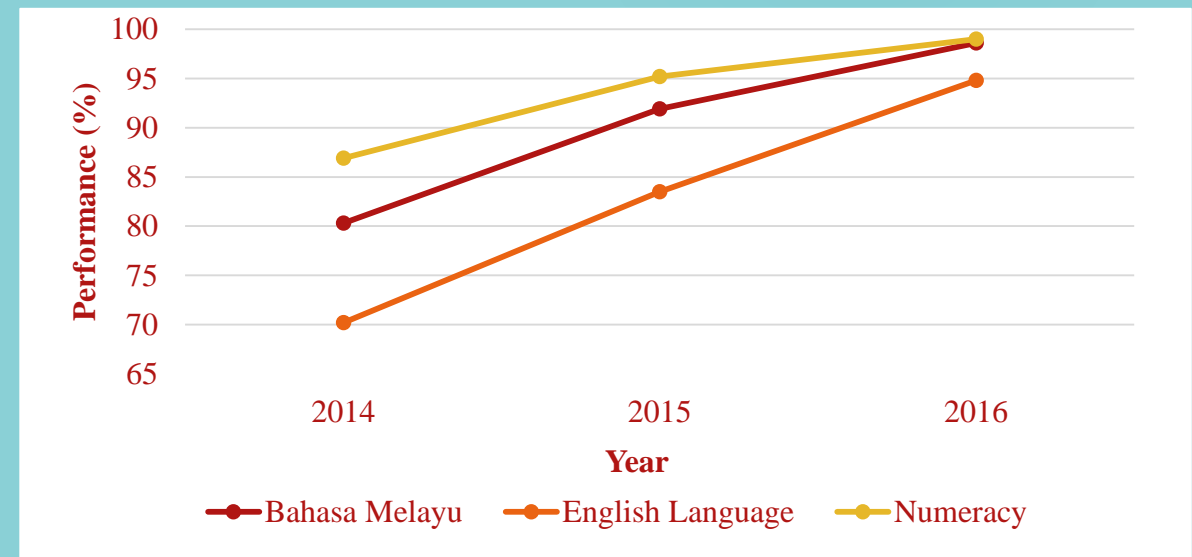
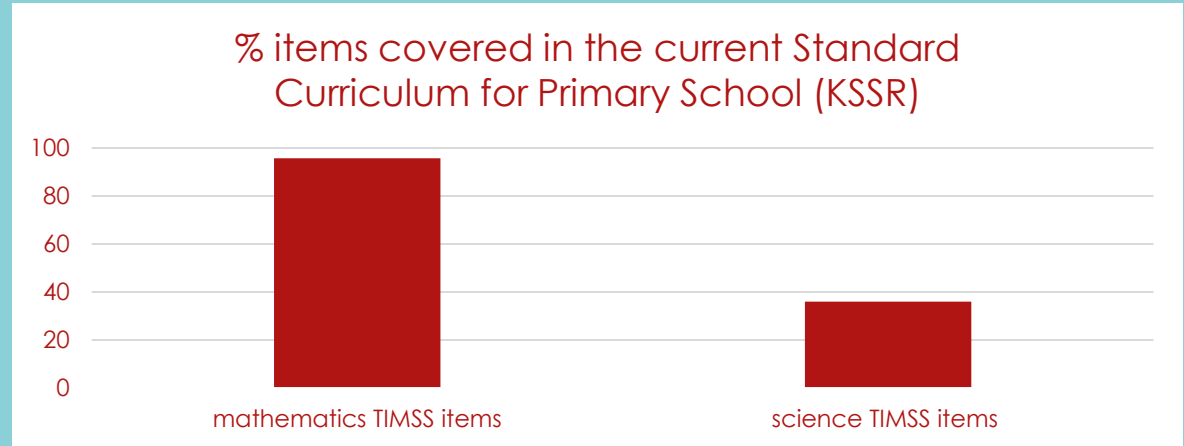
# Country specific challenges, barriers to quality education & stakeholder perceptions

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- ▶ *Challenges: ethnic & linguistic diversity; indigenous population*
- ▶ *Barriers to quality education: lack of effective school leadership & motivated teachers; lack of qualified teachers*
  - ▶ *Attributes of a good school: effective school head-teacher; high learning outcomes; supportive learning environment*
  - ▶ *Attributes of a good teacher: motivated; focused on improving teaching and learning practices; good at communication; supportive of weaker students*
  - ▶ *Finance: primary and secondary govt. schools not adequately funded*
- ▶ *Overcoming the barriers: scholarship targeting children from poor families, ICT facilities for rural schools, additional funding for under-performing rural schools*

## ▶ Education Blueprint 2013-2025 & Eleventh Malaysia Plan 2016-2020

- ▶ **The District Transformation Programme (DTP)** to narrow the gap R-U achievement gap.
- ▶ **Dual language proficiency (DLP)** scheme
- ▶ **Pro-ELT:** Targeted 14,000 teachers across all the 13 states and 3 federal territories
- ▶ **HOTS:** Innovative programs include "Higher Order Thinking Skills" introduced across the curriculum
- ▶ **LINUS:** the "literacy and numeracy" programme focusing on mastering literacy (vernacular and English) and numeracy skills in early phase of primary education
- ▶ **PADU:** "Performance & delivery unit" – a laboratory model



- ▶ A case of positive deviance
  - ▶ Equitable access to schooling
  - ▶ High literacy rate
  - ▶ Good physical infrastructure
  - ▶ National examination performance data show improvement over the years
- ▶ Still faces some challenges relating to the level of student learning
- ▶ Significant inequality in access to “quality education”
  - ▶ Gender, income & location
- ▶ But performance in international assessments is improving
- ▶ Reforms seem to be paying off
- ▶ An important model for the OIC

# Recommendations

- ▶ Equalize access to quality preschool education
- ▶ Close the (reverse) gender gap
- ▶ Reduce influence of household wealth
  - ▶ Needs-based targeting of funds
    - ▶ Target location, underperforming schools and students (particularly B40)
    - ▶ Extra homework support, remedial classes
- ▶ Improve training and governance
  - ▶ leadership training for senior management team and school teachers
  - ▶ teacher motivation
- ▶ Formulate a data dissemination policy to facilitate research & diagnostics
  - ▶ RCTs evaluation of competing schemes

# OVERALL CONCLUSION

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- ▶ Increasing OIC participation in international assessments
  - ▶ Performance improving in some
- ▶ Enormous diversity within the OIC
  - ▶ The barriers to delivering quality education vary across member states - no magic bullet
- ▶ Low level of learning in both low & high-income OIC countries
  - ▶ High spending & poverty reduction per se not sufficient
  - ▶ But important to keep children in school
  - ▶ Equity-quality trade-off in low-income member states
- ▶ Weak influence of schooling and better physical provisions suggests the presence of structural barriers to education quality
- ▶ There is also a great deal of variation in political will and fiscal capacity.
- ▶ Each country faces a unique combination of problems which need to be diagnosed and solved in the local context.
- ▶ At the same time, a number of shared challenges have been highlighted alongside the some country-specific good practices

- ▶ **Deficit in early-life foundational cognitive skills**
  - ▶ Access to pre-primary education
- ▶ **Equity in learning outcomes**
  - ▶ Allocate public resources to achieve 'progressive universalism'
    - ▶ Develop pro-poor education models (madrasah reforms; affordable private schools; non-formal schools)
    - ▶ Poverty, gender & regional targeting
    - ▶ School meals and remedial education
- ▶ **Quality of government schools**
  - ▶ Ensure accountability
  - ▶ Re-orient curricula and teacher training programs
- ▶ **Focus on core competencies and higher-order skills**
  - ▶ Improve quality and credibility of high-stake national examinations
- ▶ **Measuring learning, access to data & evidence-driven policy making**
  - ▶ Measure "learning for all", at all stages & over time (SDGs 4 by 2030)
  - ▶ Participation in international assessments -- PISA for Development (PISA-D)
  - ▶ Independent assessments and carefully designed pilot & RCTs & the culture of 'deliverology' for results

# THANK YOU

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