# UIS education financing indicators: methodology and data development plan

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*Technical Cooperation Group meeting*

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# SDG finance indicators

1. SDG 1:

**1.a.2** : *spending on essential services (education, health and social protection) as a percentage of total government spending.*

2. SDG 4/ Education 2030:

- o **4.5.4**.'*Education expenditure per student by level of education and source of funding*'

➢ Implies coverage of all sources of financing (government, households and international), disaggregation by level of education)
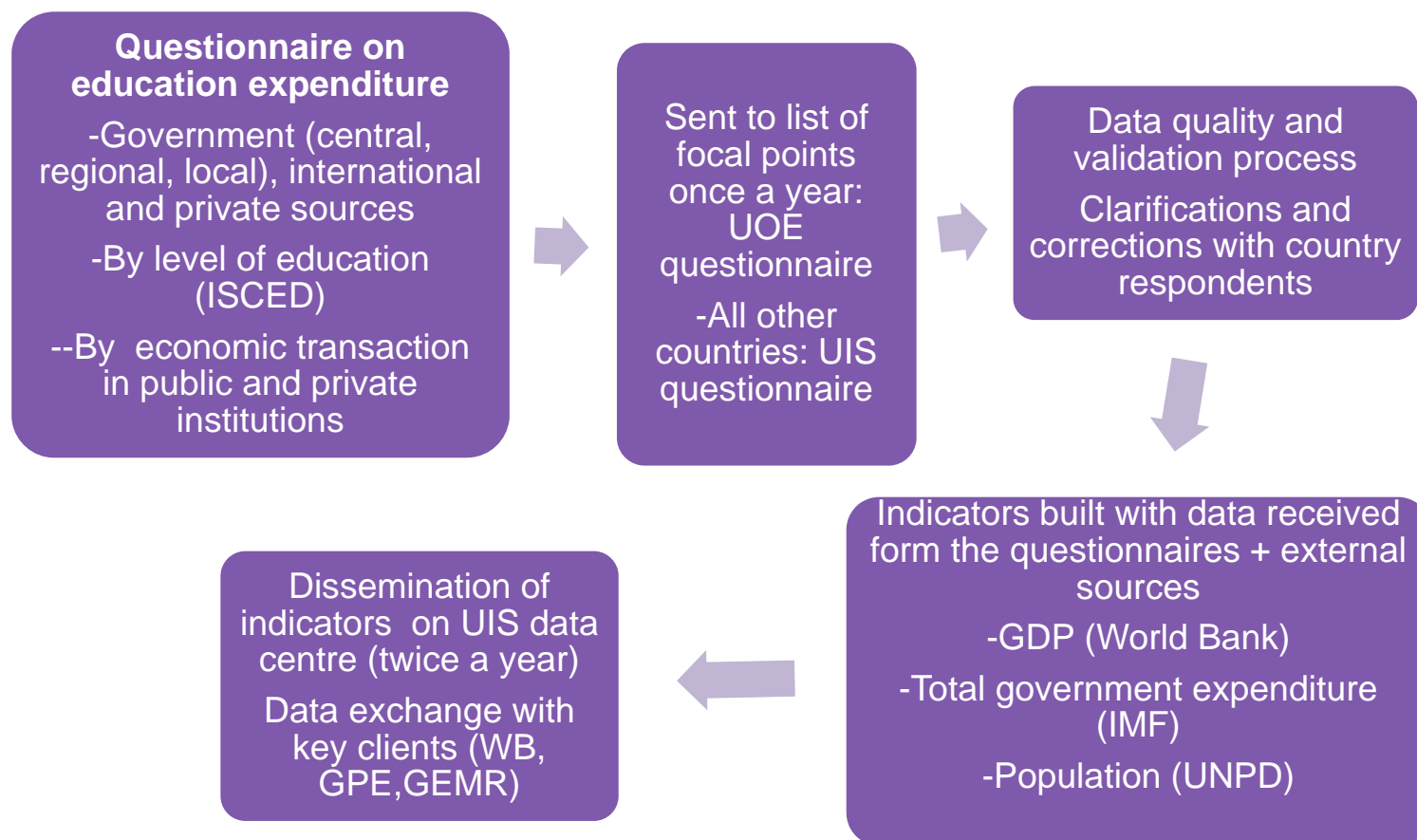
# SDG finance indicators

o *4.5.3. Extent to which explicit formula-based policies reallocate education resources to disadvantaged populations*

o **4.c.5**: *'Average teacher salary relative to other professions requiring a comparable level of education qualification'*

o *+ indicators related to scholarships*

# Other finance indicators produced by the UIS

o Indicators requested by data users (such as GEMR, World Bank, many others): % of GDP on specific levels, indicators on nature of spending (ex. % on teachers salaries, text books, etc.) and others.
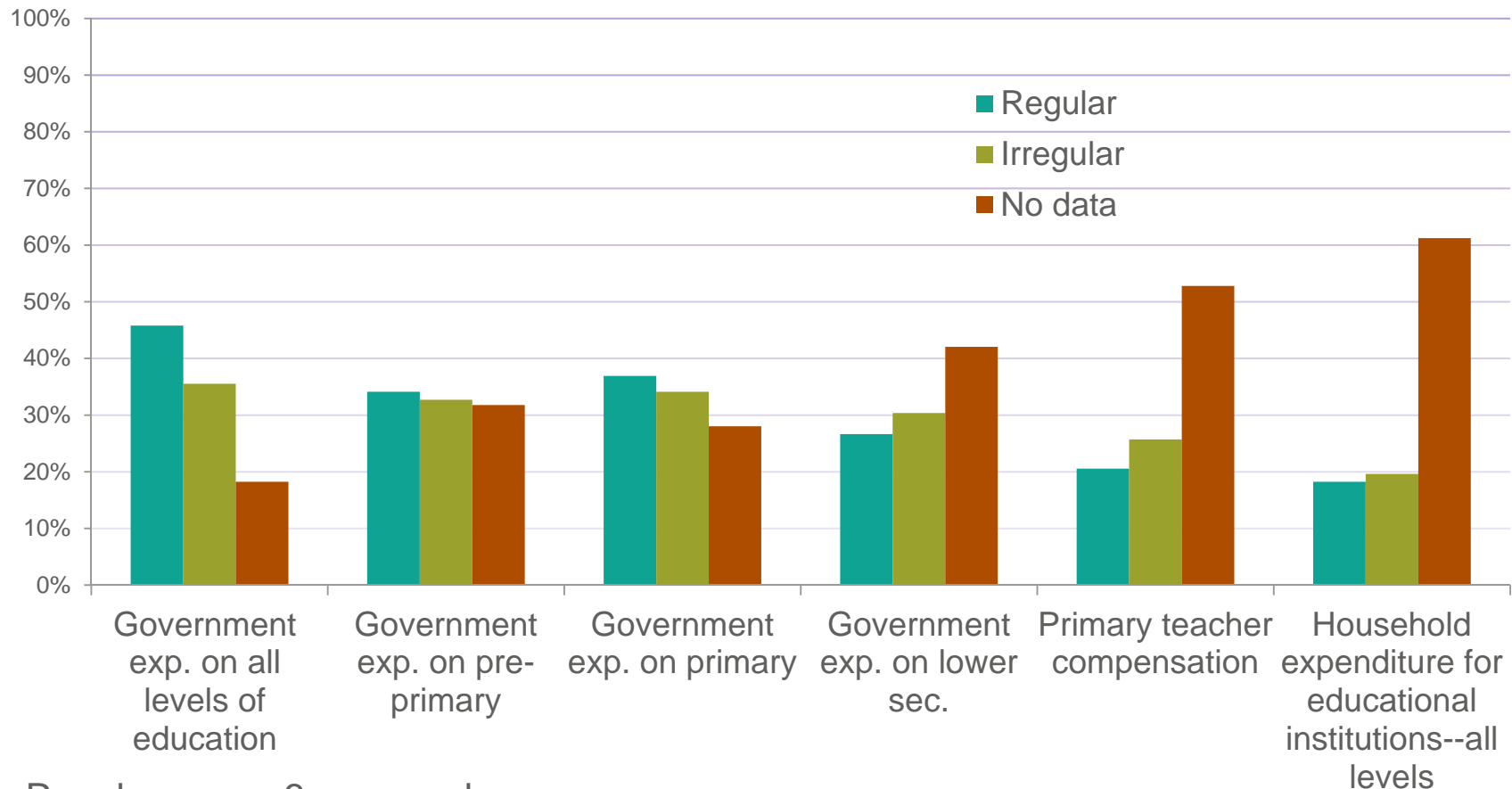
# Education financing data: from countries to UIS database

**Questionnaire on education expenditure**

-Government (central, regional, local), international and private sources

-By level of education (ISCED)

--By economic transaction in public and private institutions

Sent to list of focal points once a year: UOE questionnaire

-All other countries: UIS questionnaire

Data quality and validation process

Clarifications and corrections with country respondents

Indicators built with data received form the questionnaires + external sources

-GDP (World Bank)

-Total government expenditure (IMF)

-Population (UNPD)

Dissemination of indicators on UIS data centre (twice a year)

Data exchange with key clients (WB, GPE,GEMR)

# How UIS works: the official submission of a questionnaire (Excel tables)

| Advantages | Disadvantages |
|---|---|
| Weight and credibility of official data | Data may not exist or not be easily accessible to country respondent |
| Higher data quality (potentially)— national statisticians know their system | Complexity of data, estimations and disaggregation required vs respondents with weak capacity |
| Integration with national statistical processes, capacity building | Bureaucratic delays |
| Relatively 'cheap' approach in the long-run after investments are made in training respondents | Focus on actual expenditure implies 2+ years lag |

# Availability of education financing data in the UIS database, as % of all (211) countries



Legend:
- Regular
- Irregular
- No data

Categories:
- Government exp. on all levels of education
- Government exp. on pre-primary
- Government exp. on primary
- Government exp. on lower sec.
- Primary teacher compensation
- Household expenditure for educational institutions--all levels

Regular=every 3 years or less
Irregular=at least one data point in past 10 years

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UIS is happy and thanks you

Country's data published in international publications

Other organisations also asking for data

Must obtain official permission before submitting data

Data not in the right format, estimations and reclassification required
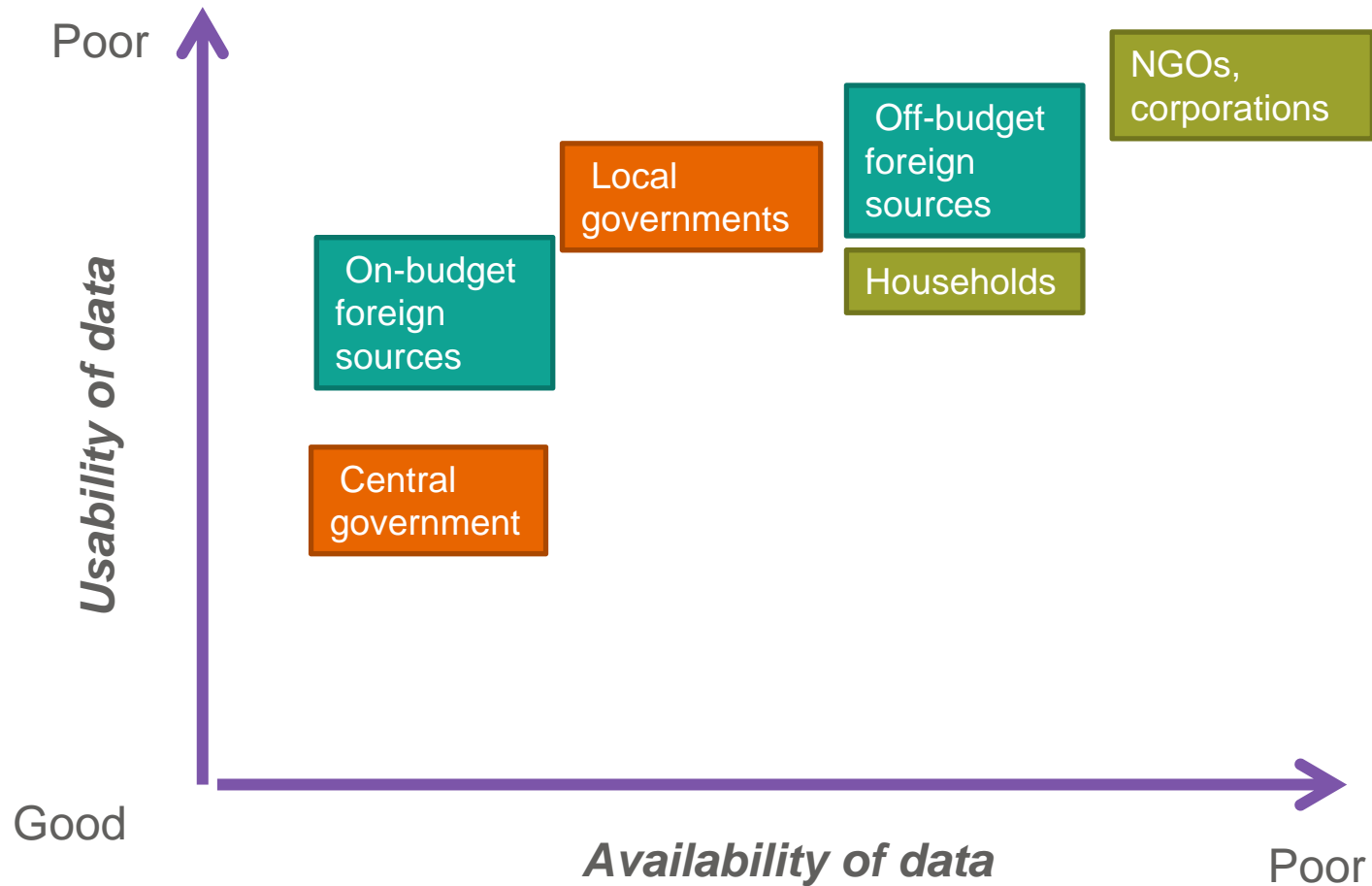
No data

Data hard to access

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# Availability of finance data at country level

# UIS recent projects to improve data

- Training of national statisticians
- Development of data compilation and consolidation tools (Excel templates)
- UNESCO just developed and published an international guide on National Education Accounts (NEA) methodology (jointly UIS and UNESCO/IIEP-with funding from Global Partnership for Education)

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# Origins of NEA

**System of National Accounts (SNA)**

- International (UN) standards to measure the whole economy of a country (ex. to measure GDP)

- Produced/agreed by IMF, EU, OECD, UN and World Bank

**Sector/Satellite Accounts**

**National Health Accounts**

**National Education Accounts**

**National Education Accounts**

- National initiatives: France since the 1970s, Portugal, the Philippines, Thailand

- UNESCO IIEP: Benin, Dominican Republic, Mauritania, Madagascar in the 1990s, Kenya in 2012
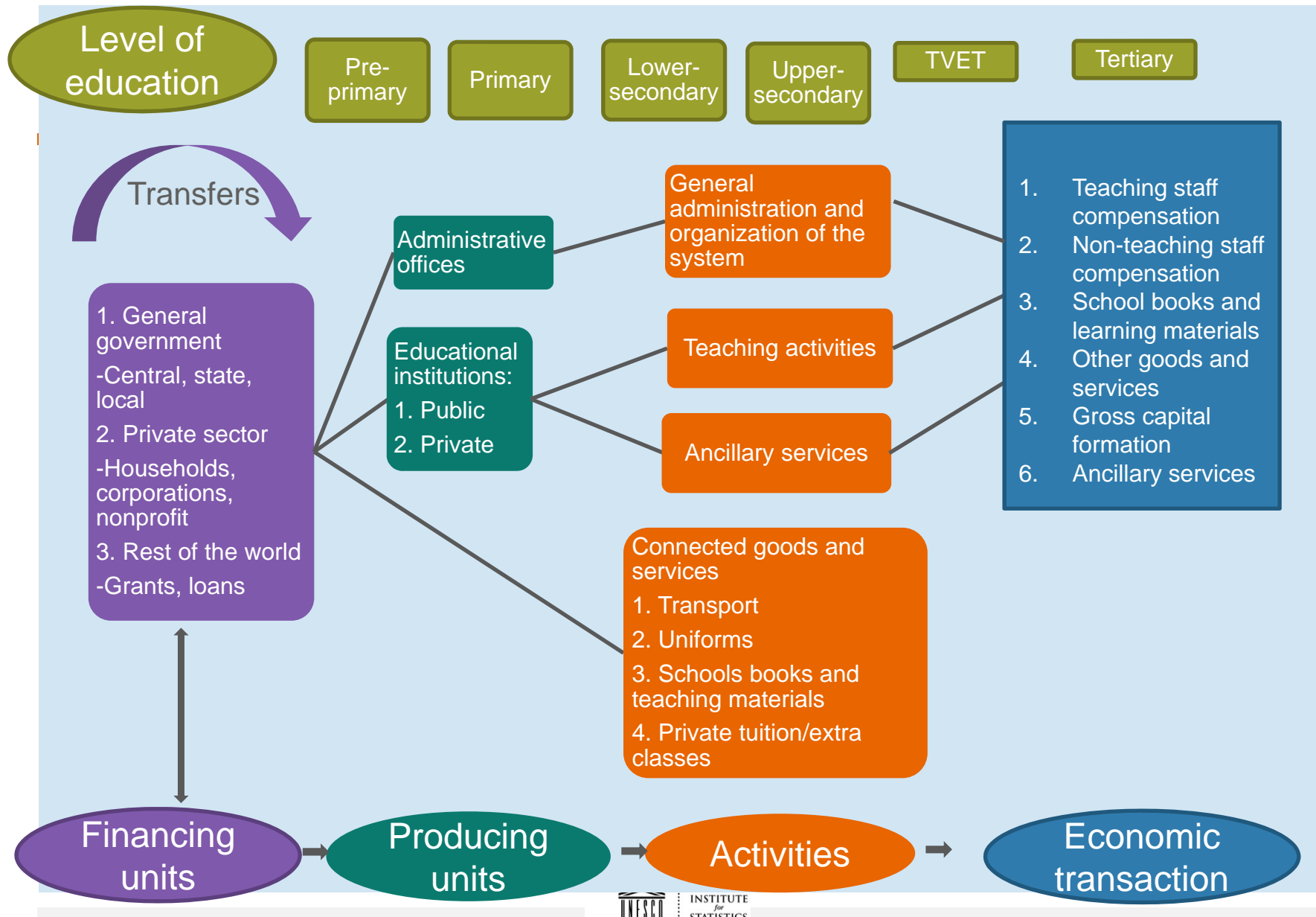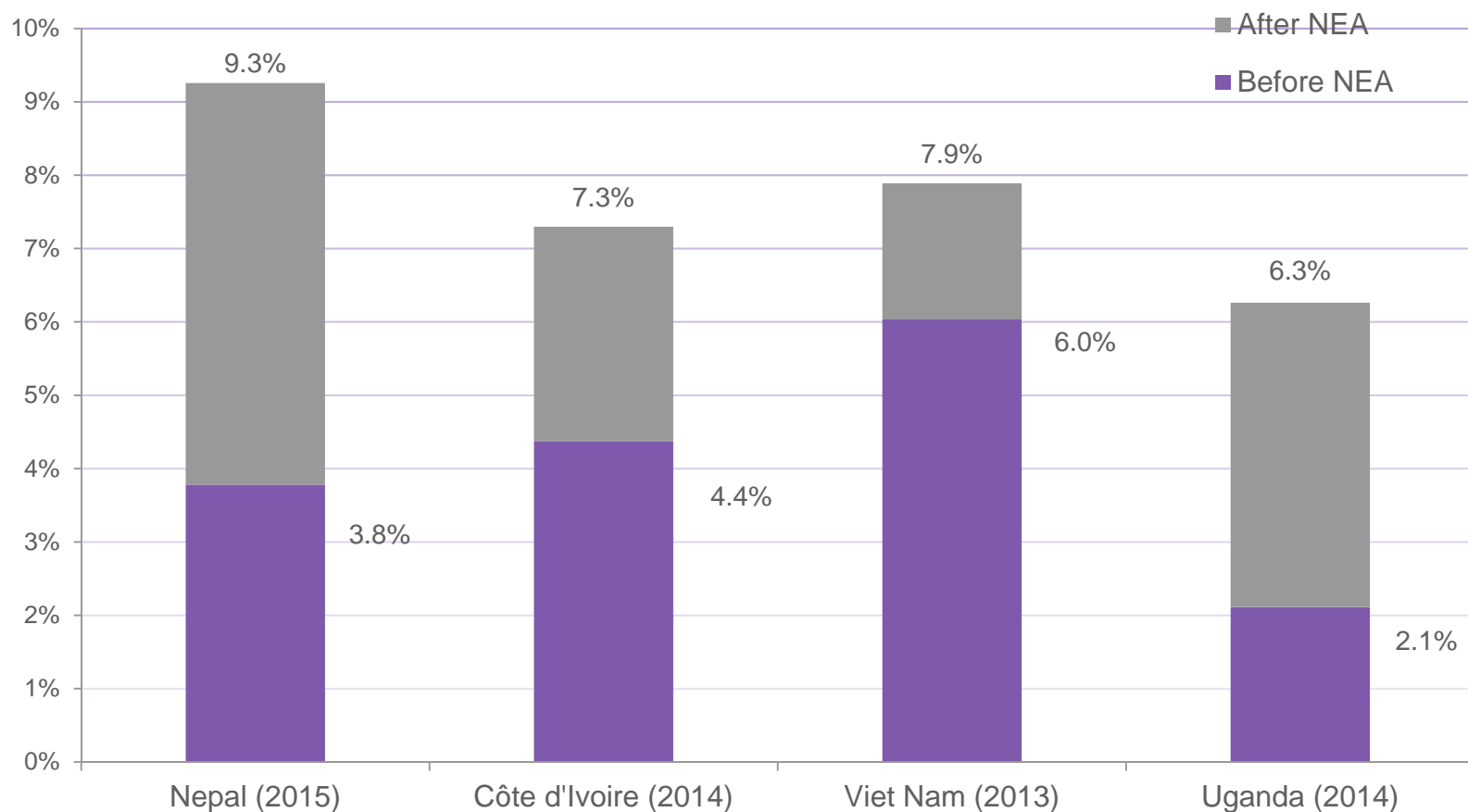
- USAID
  - Creative Associates: 4 states in Nigeria, Morocco
  - RTI International: El Salvador
- World Bank: Turkey

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UNESCO-GPE-project

# A coherent accounting framework around 5 dimensions

**Level of education**

Pre-primary | Primary | Lower-secondary | Upper-secondary | TVET | Tertiary

**Transfers**

**1. General government**
-Central, state, local

**2. Private sector**
-Households, corporations, nonprofit

**3. Rest of the world**
-Grants, loans

Administrative offices

Educational institutions:
1. Public
2. Private

General administration and organization of the system

Teaching activities

Ancillary services

Connected goods and services
1. Transport
2. Uniforms
3. Schools books and teaching materials
4. Private tuition/extra classes

1. Teaching staff compensation
2. Non-teaching staff compensation
3. School books and learning materials
4. Other goods and services
5. Gross capital formation
6. Ancillary services

**Financing units** → **Producing units** → **Activities** → **Economic transaction**

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Total expenditure on education as a share of GDP, before and after a NEA

# But NEA is a quite extensive and costly exercise

- Therefore could not be the only strategy to improve data coverage in the short term

➢ NEA methodology always the base for a comprehensive data collection and analysis and would continue using it in countries interested and where funding is available to support them

# Potential solutions to improve data coverage: revision of questionnaire

➢ Different versions of questionnaire for country with low capacity:

• Government expenditure only  or Simplified table for key data points

➢ Line for *budget* (for current year) in addition to *actual* expenditure (for previous year)

➢ Special modules every 3 years (ex. household and international expenditure)

# Potential solutions:using external data

Officially published data (Min. of Finance, NSO) and credible international sources (CSR,PER, BOOST)

- ➢ Quicker and relatively efficient
- ❖ Key data points only (ex. total exp. on all education levels)
- ❖ Bad incentive? Loss of capacity building and relationship with country
- ➢ Should still have it validated by countries
- ➢ Only as a back-up when countries have not responded

# UIS strategy for improving data on household expenditure

1. Map availability and reliability of education expenditure  data from surveys, working closely with the IHSN and WB

2. Develop a data processing protocol to extract data from existing household surveys in a comparable way

3. Prepare guidelines for the design of *future* surveys so that they can produce data which are more comparable

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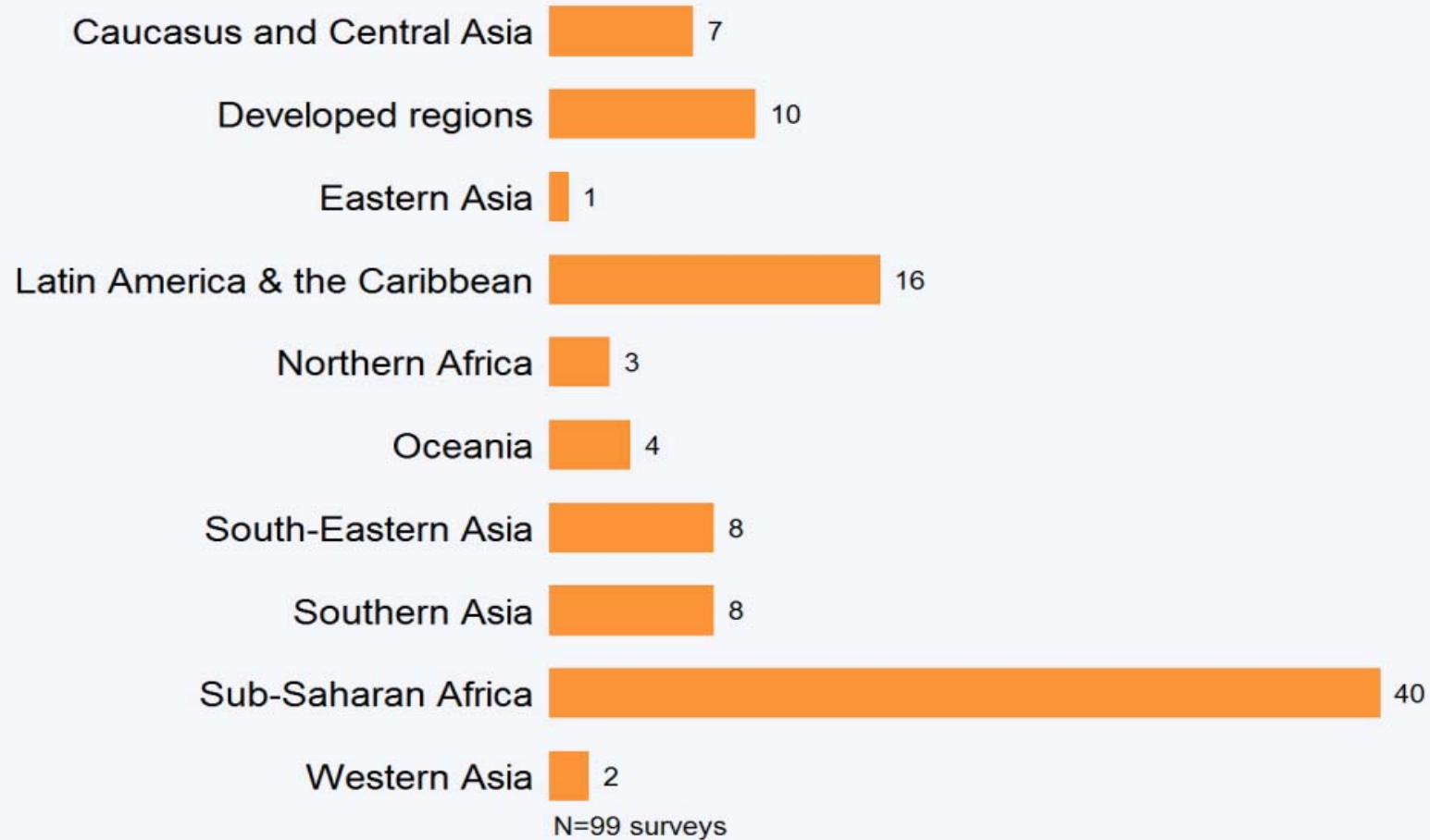Cultural Organization

# UIS strategy for improving data on household expenditure

4. Develop a household expenditure module which would be sent to selected countries every 3 years or so, based on known data availability and working through national statistical offices.
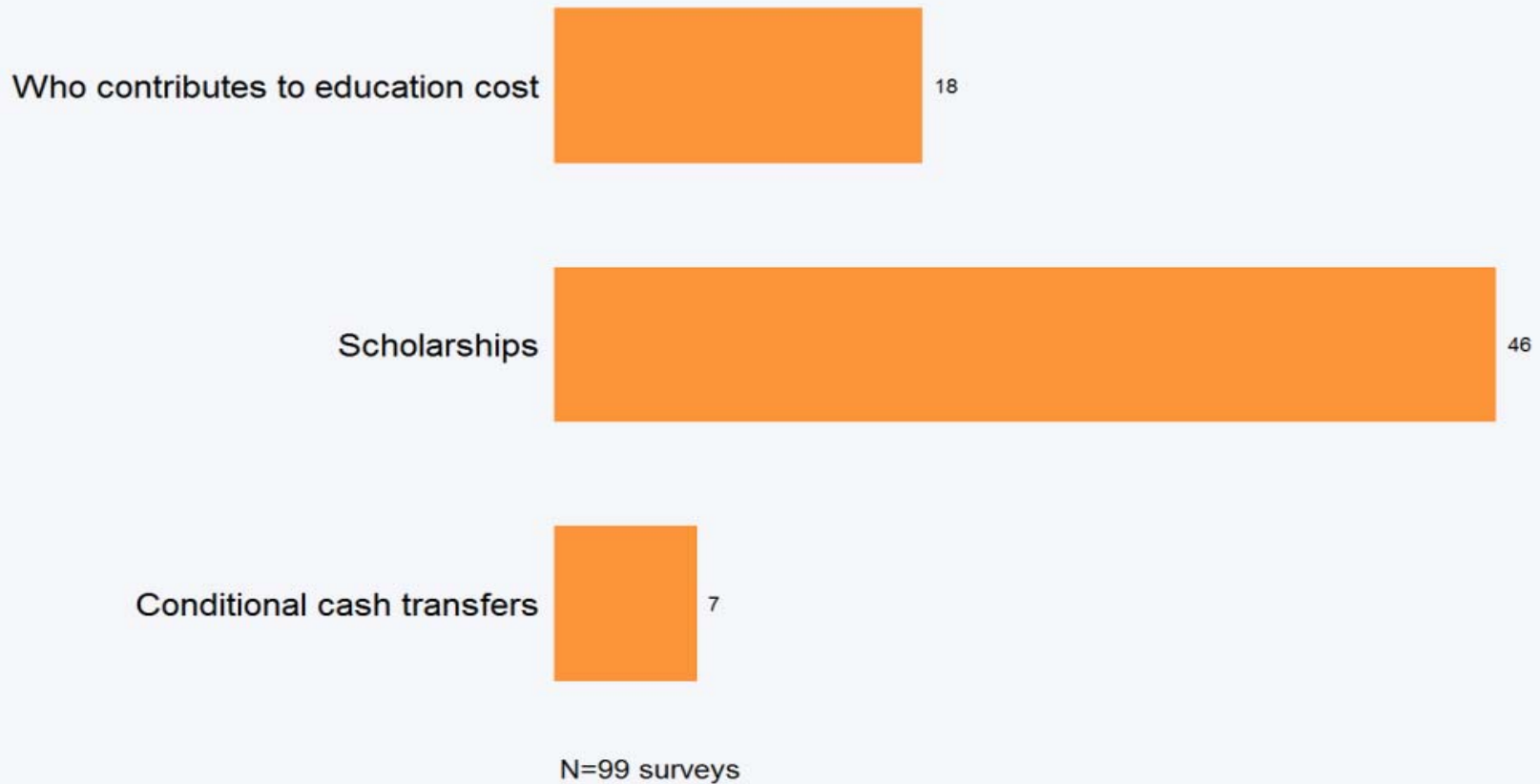
# First results of a mapping of HH expenditure data availability

- We analyzed a sample of 100 HH survey provided by the World Bank and IHSN
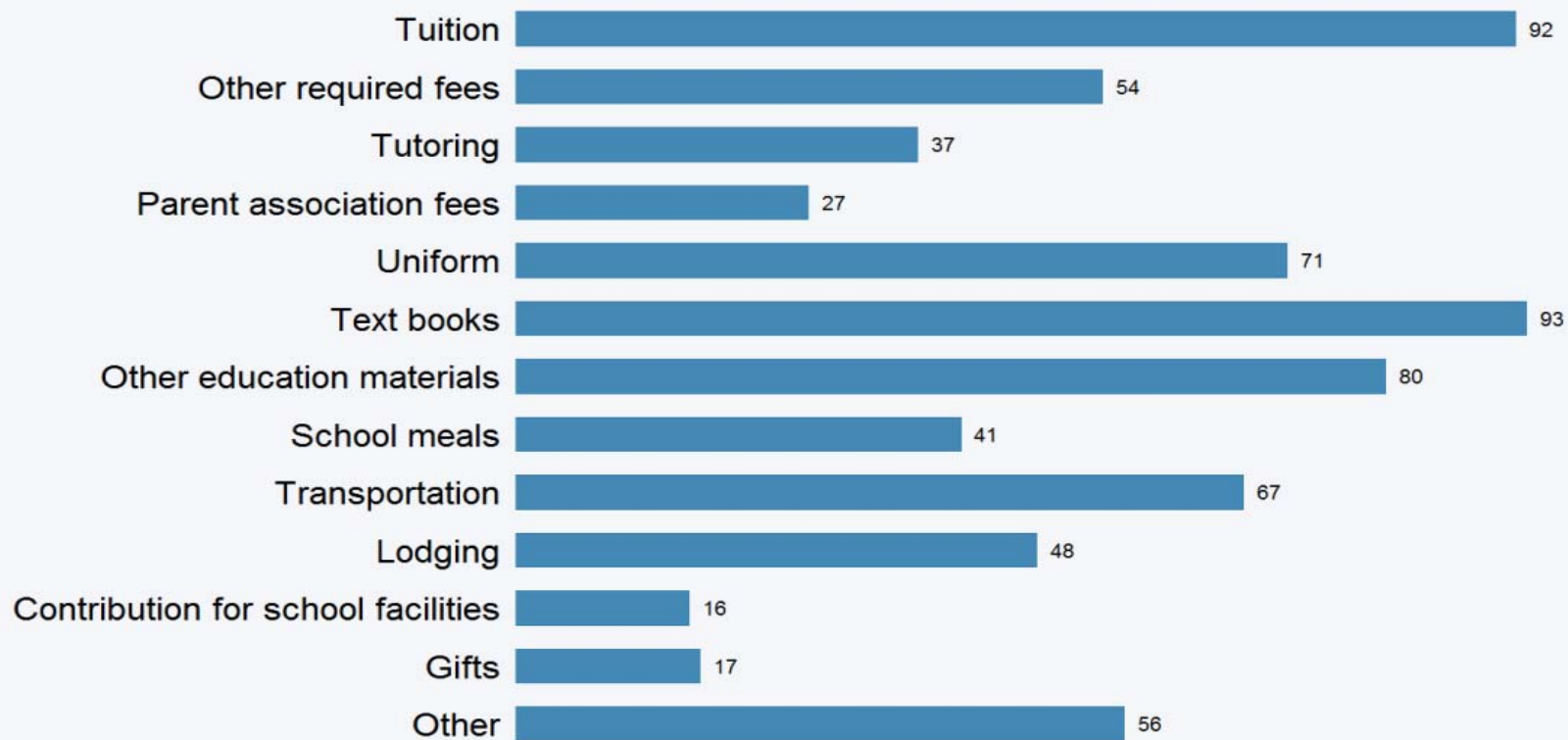
- We are assessing data availability and quality

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# Regional distribution of countries



| Region | Count |
|---|---|
| Caucasus and Central Asia | 7 |
| Developed regions | 10 |
| Eastern Asia | 1 |
| Latin America & the Caribbean | 16 |
| Northern Africa | 3 |
| Oceania | 4 |
| South-Eastern Asia | 8 |
| Southern Asia | 8 |
| Sub-Saharan Africa | 40 |
| Western Asia | 2 |

N=99 surveys

# Availability of data on education funding sources in household surveys



Who contributes to education cost — 18

Scholarships — 46

Conditional cash transfers — 7

N=99 surveys

# Expenditure items collected in household surveys



| Item | Value |
|------|-------|
| Tuition | 92 |
| Other required fees | 54 |
| Tutoring | 37 |
| Parent association fees | 27 |
| Uniform | 71 |
| Text books | 93 |
| Other education materials | 80 |
| School meals | 41 |
| Transportation | 67 |
| Lodging | 48 |
| Contribution for school facilities | 16 |
| Gifts | 17 |
| Other | 56 |

N=99 surveys

# Availability of tuition data by region



N=99 surveys
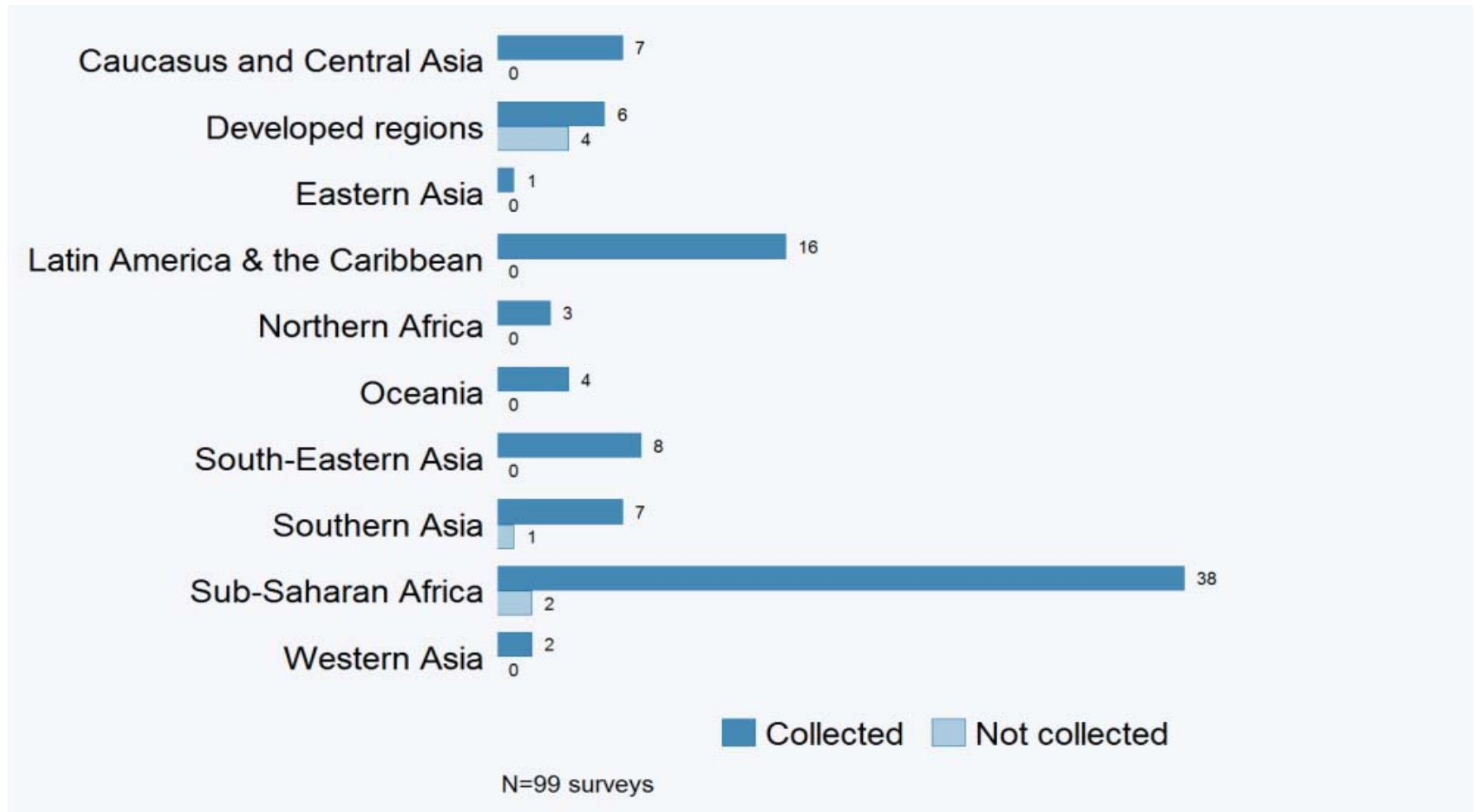
# Availability of text books data by region



| Region | Collected | Not collected |
|---|---|---|
| Caucasus and Central Asia | 6 | 1 |
| Developed regions | 6 | 4 |
| Eastern Asia | 1 | 0 |
| Latin America & the Caribbean | 16 | 0 |
| Northern Africa | 3 | 0 |
| Oceania | 4 | 0 |
| South-Eastern Asia | 8 | 0 |
| Southern Asia | 8 | 0 |
| Sub-Saharan Africa | 39 | 1 |
| Western Asia | 2 | 0 |

N=99 surveys
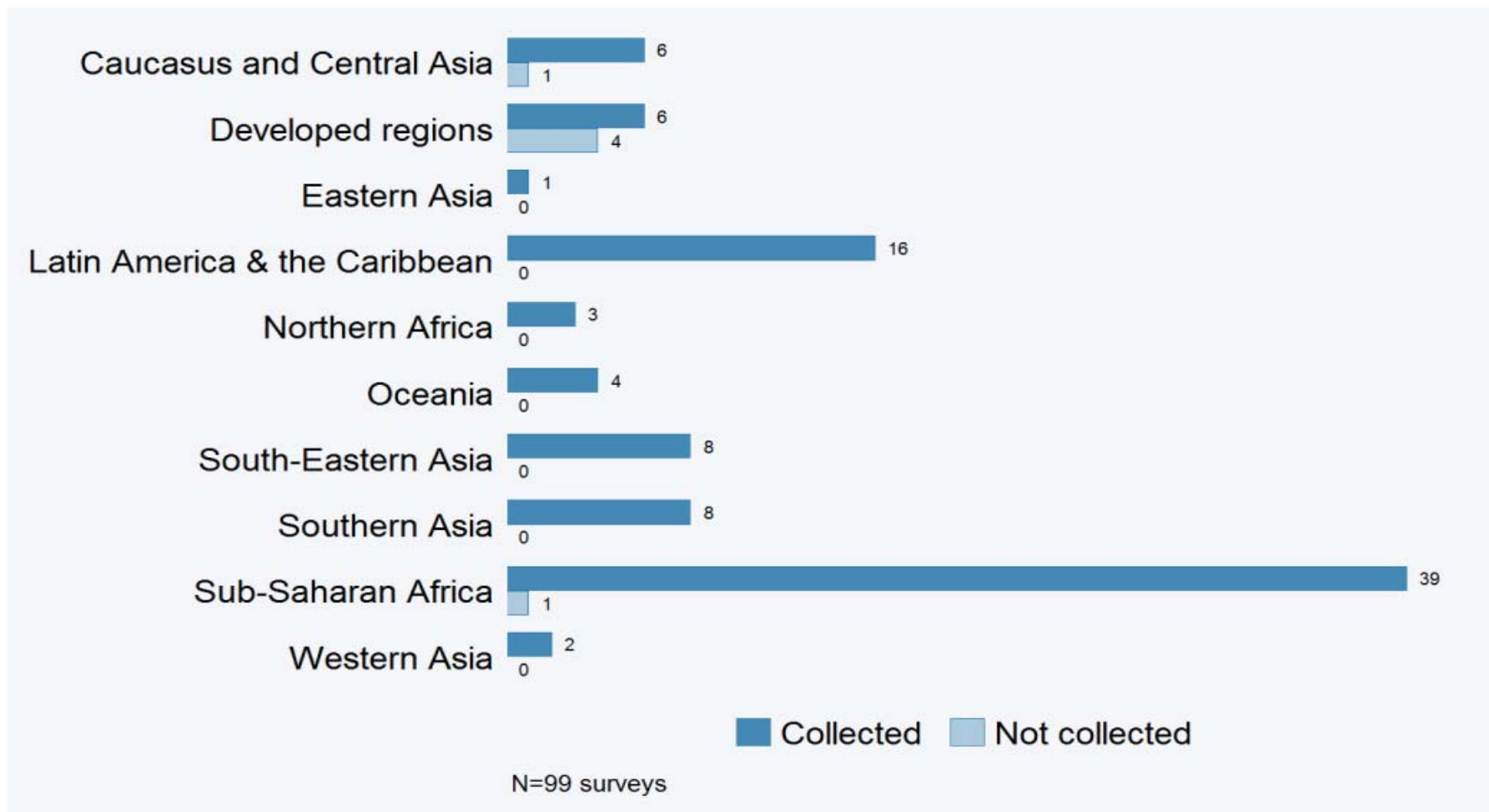
# Potential solutions: International/foreign expenditure

Will explore possibilities to use external foreign expenditure on education data sources such as the International Aid Transparency Initiative (IATI) to integrate into the UIS database

# Initial vs final financing
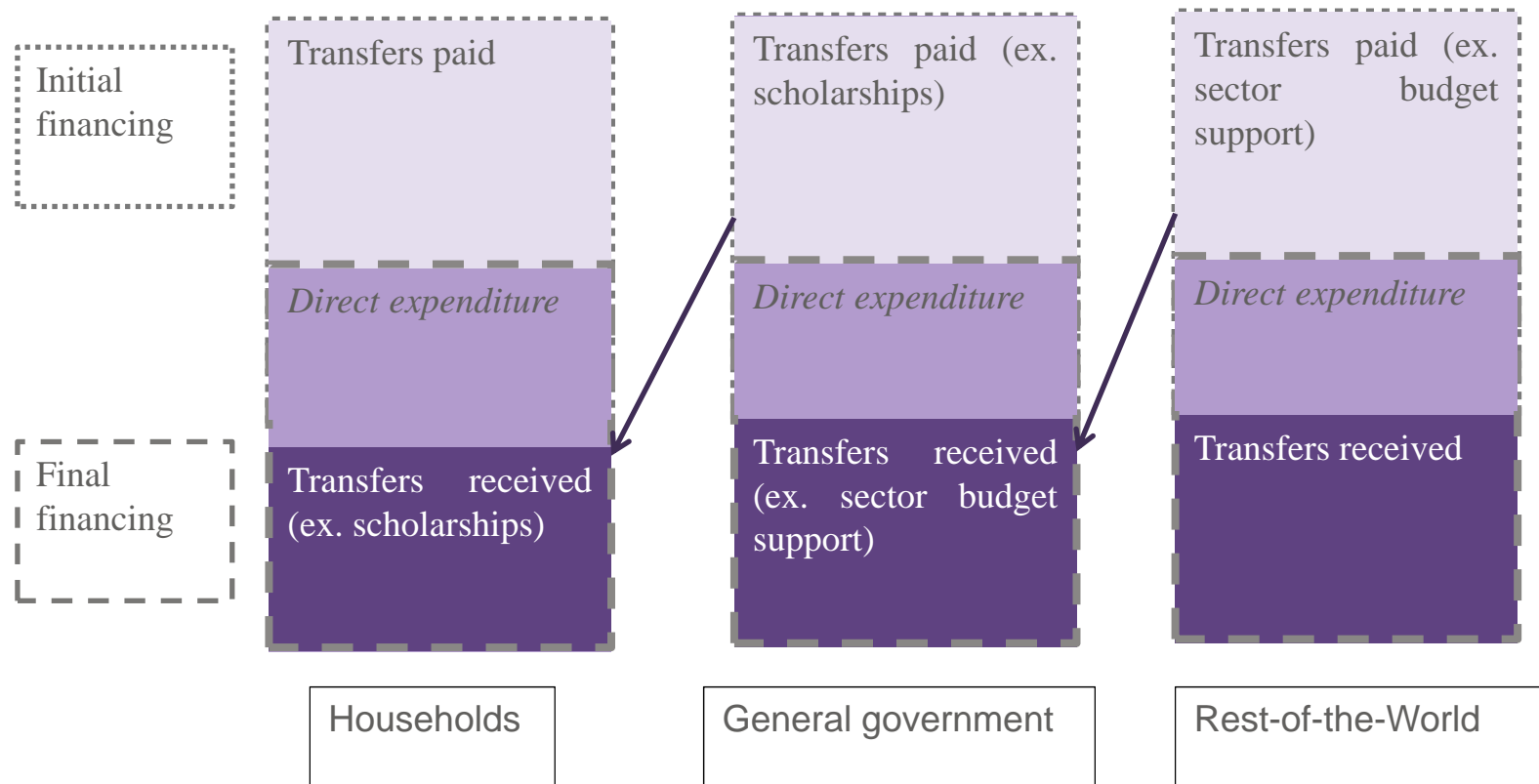
# 4.5.4: .'*Education expenditure per student by level of education and source of funding*'

| | Option 1 | Option 2 | Option 3 |
|---|---|---|---|
| Numerator | **Currently:** Total government expenditure on education, including transfers paid (ex. scholarships) AND transfers received (ex. on-budget aid) By level of education | **Initial financing** Total government expenditure on education, including transfers paid but EXCLUDING transfers received By level of education | **Final financing**: Total government expenditure on education, including transfers received but EXCLUDING transfers paid By level of education |
| Denominator | Per student, as % of GDP per capita | Per student, in US$ | Per student, in PPP$ |

# Initial vs final financing

- Does not matter so much when you are only interested in one source of funding (ex. government)

- If the spirit of the indicator is 'who funds education' then using initial financing is more logic. Would allow for clearer separation of governments' and donor funding. Would be in-line with NEA methodology.

- However, requires data on transfers, not always available. Could use 'as best as possible' methodology.

➢ Implication for other indicators, including indicator **1.a.2** *Expenditure on education as % of total government expenditure'*

# Discussions

The TCG members are INVITED to comment on:

- UIS strategy to improve data coverage and quality;

➢ Use existing external data for public expenditure for non-reporting countries

➢ Use HH survey data to extract data for non-reporting countries

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# Discussions

➢ Use external data sources such as International Aid Transparency Initiative (IATI) for external/foreign expenditure

- Calculate SDG indicators on initial or final ?