

Orientation on the East Asia-Pacific Early Child Development Scales (EAP-ECDS)

**ARNEC Conference 2017
Siem Reap, Cambodia**

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March 2, 2017

Overview

1. Brief history of the EAP-ECDS phases
2. Demonstration of EAP-ECDS items
3. Introduction of more items
4. Summary of EAP-ECSD Sort Form Advantages
5. Q & A

Rationale for developing the EAP-ECDS

- Early Childhood is a very important period of development
 - Arguments from Neuroscience
 - The Economic Argument
 - The Rights-based Argument
- In LAMIC, children face threats to development
 - Health, nutrition, psychosocial and protection risks

Rationale for developing the EAP-ECDS

- Participation in early childhood programmes has positive effects on children's
 - cognitive development,
 - school achievement
 - health and well-being

...but millions of children in the East-Asia-Pacific region still do not benefit from early childhood services.

Rationale for developing the EAP-ECDS

- Measurement is assumed to be the first step that leads to eventual improvement
- International development community has recognised the need for valid and reliable data on child development and on the quality of early learning environments.

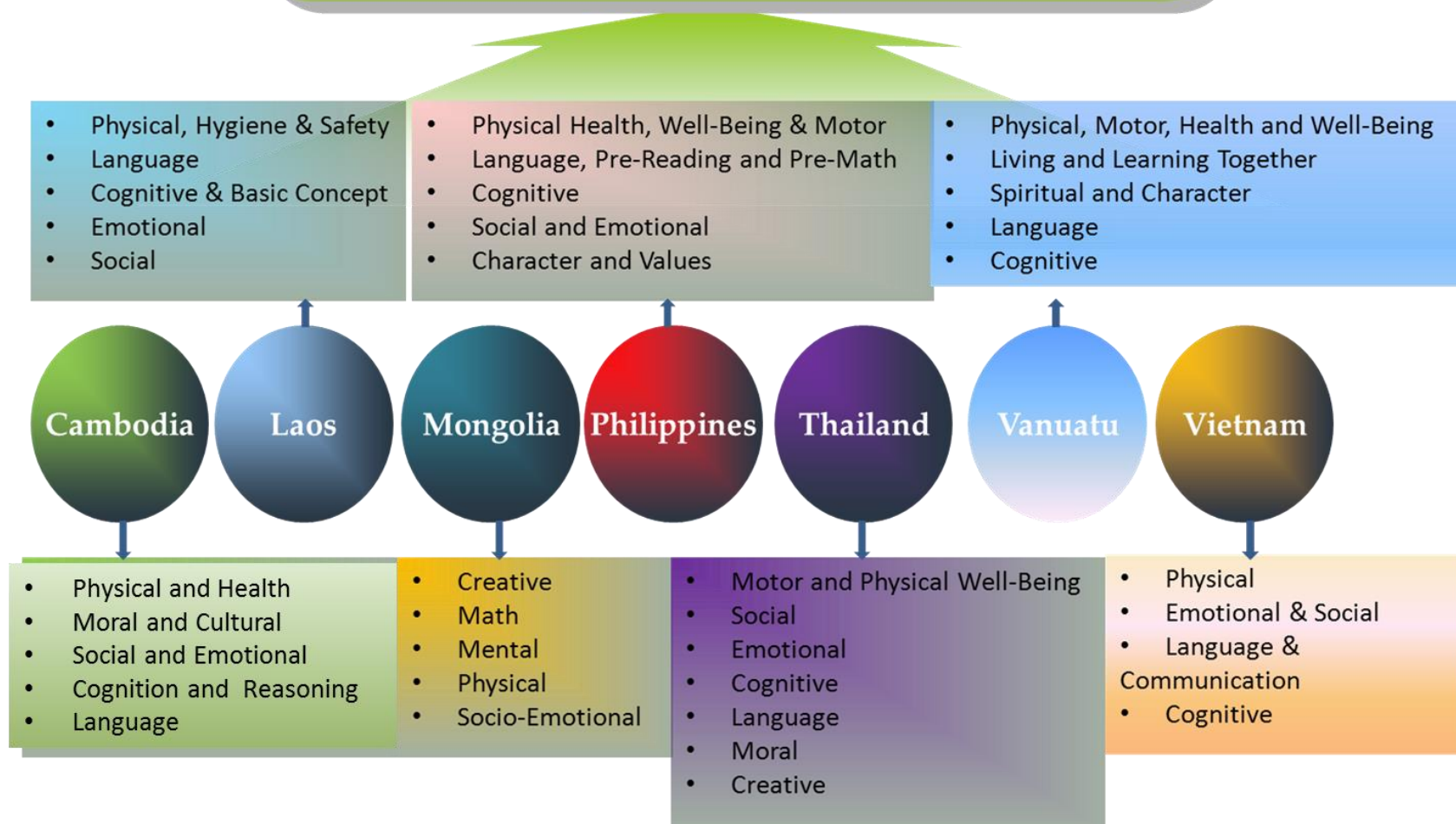
Rationale for developing the EAP-ECDS

- There were no culturally and contextually appropriate assessment of ECD to:
 - monitor child development in the context of poor school readiness and learning outcomes
 - track the development of vulnerable and at-risk children
 - analyse the impact of early childhood policies and programmes on children

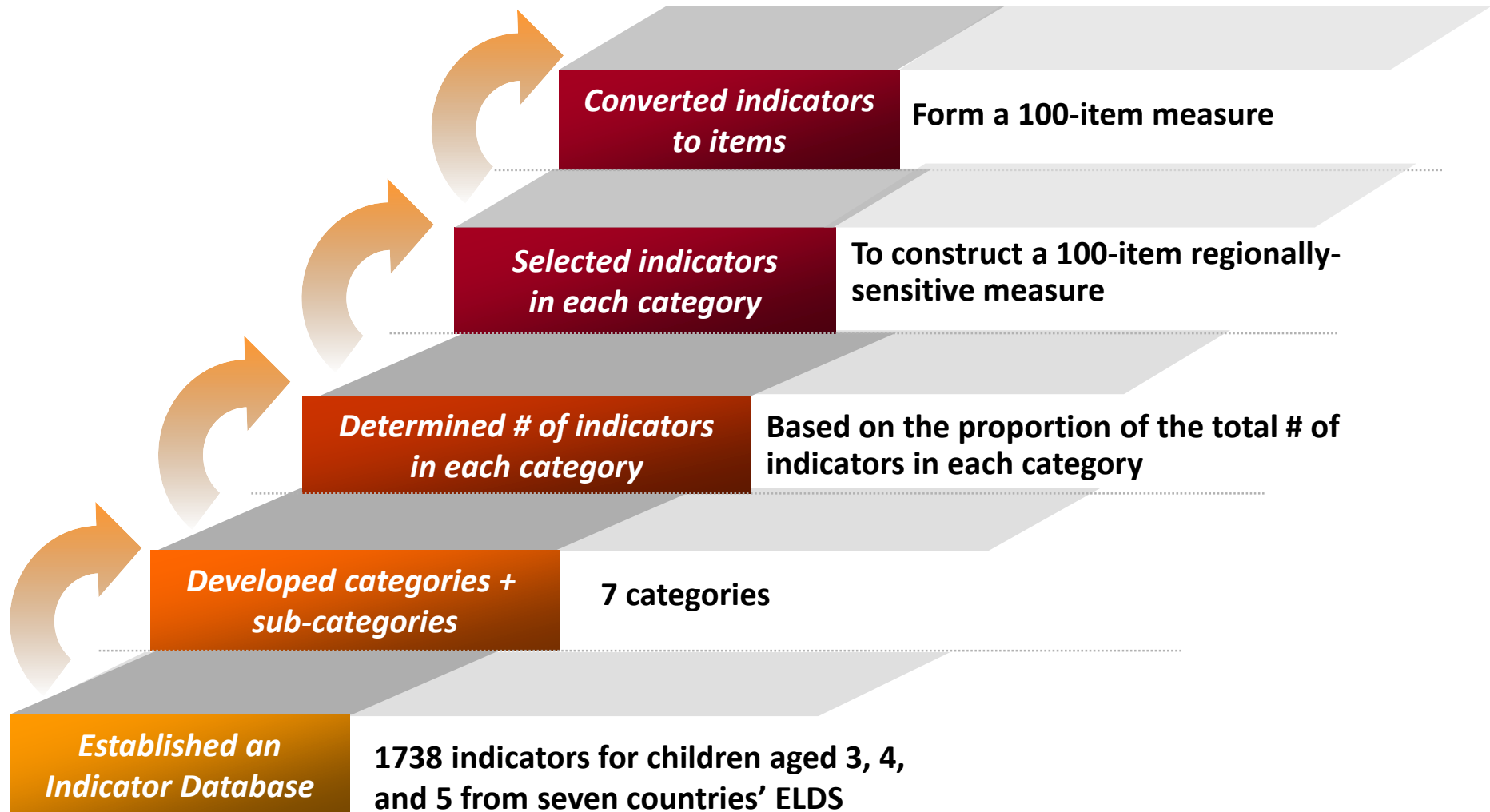
Process of development Phase I

Select items based on the Early Learning and Development Standards (ELDS) of countries in the region.

Early Learning and Development Standards (ELDS)



Development of the Items



➤ Focus on rationale and process

Process of development

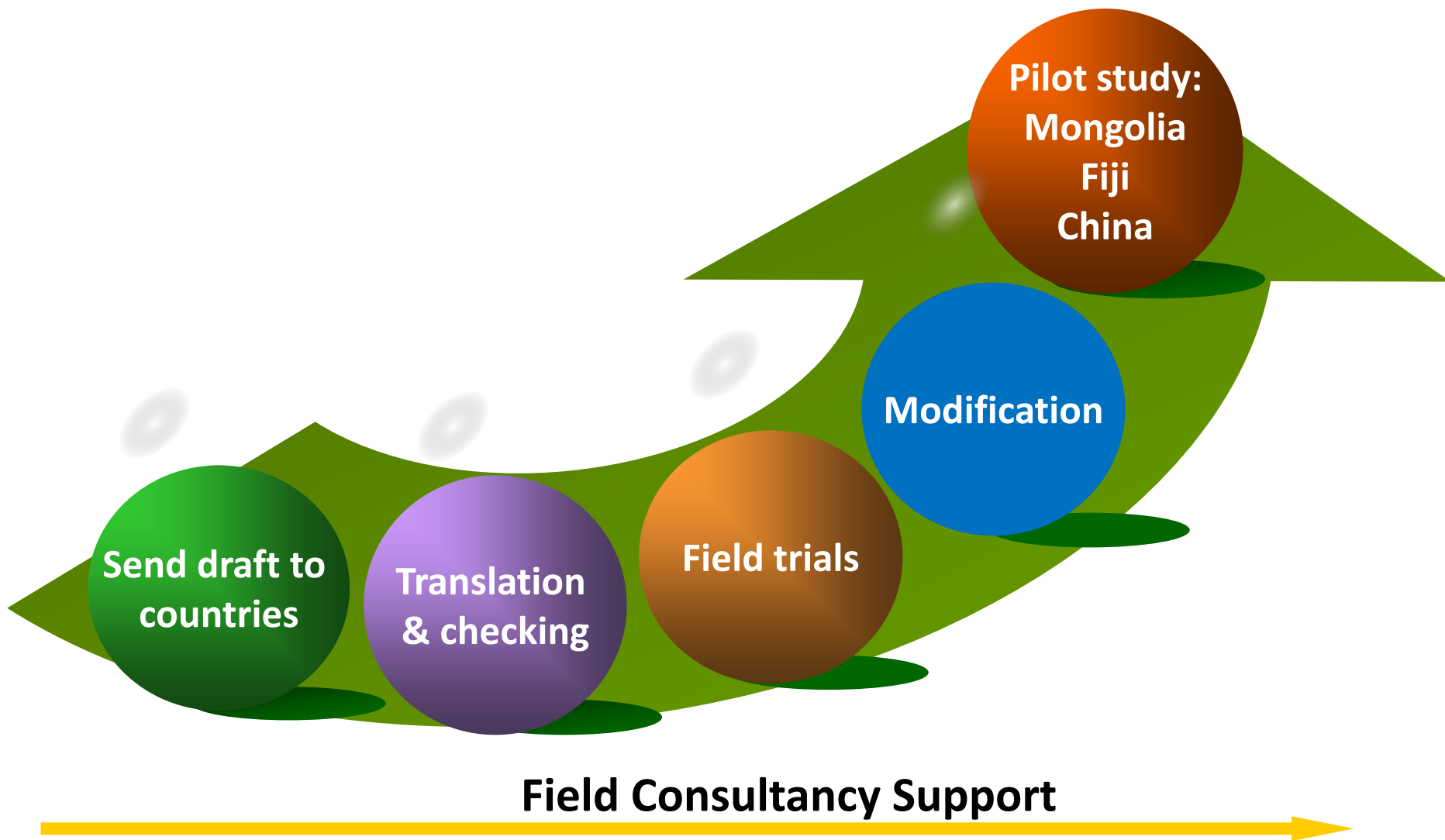
Converting indicators to items

Code	Sub-category	Indicator selected	Countries	Ages
LA16	Draws/writes without an example	Draws a human figure (head, eyes, mouth, trunk, arms, legs, etc.) without prompts	Philippines(4); Cambodia(5); Thailand(4;5);	4, 5

Process of development

Phase II: Pilot studies

1. To field-test items in three countries
2. To modify the Scales based on the results and feedback
3. To develop a revised version of the Scales which can be used in many countries in Phase III



Process of development

Phase III

- EAP-ECDS with 85 items across 7 domains + Parent Questionnaire (85 questions)
- June - December 2013, EAP-ECDS assessments in six countries (Cambodia, China, Mongolia, Papua New Guinea, Timor-Leste, Vanuatu)
- Number of children assessed in each country : 900 to 1803
- Samples included **boys and girls** between **ages 3 to 6** residing in **urban and rural** settings, attending **preschool** programmes or not

Process of development

Phase III

- Total of over 8,000 children and their parents
- Sampling in all countries was stratified by child's Age, Gender and Urbanicity



Process of development

Country adaptations

- Translated versions of the EAP-ECDS Instruction Manual, Scoring Form and Parent Questionnaire

Country	Translated versions in the country's native language(s)
Cambodia	Khmer
China	Chinese
Mongolia	Mongolian
Papua New Guinea	Tok Pisin
Timor-Leste	Tetum
Vanuatu	Bislama

Process of development

Country adaptations

Item 52: Letters, characters / symbols

Cambodia	ក គ ខ ង ឃ ច ត ឆ ជ ញ ល ដ ថ
China	大, 小, 人, 山, 水, 日, 月, 木, 树, 手, 牛, 羊。
Mongolia	A, H, O, M, Б, У, С, Э, Т, И, Р, Л;

Process of development

Country adaptations

Item 61: Child in bathroom with a sink

Cambodia



Timor-Leste



China



PNG



Mongolia



Vanuatu



Findings

Easiest and most difficult Items in Motor development Domain across countries

Motor Development

Easiest items

43.1

Strung large bead (6 countries)

37.1

Walked forward on a straight line (6 countries)

Hardest items

40

Hit the target on 3 out of 3 attempts (6 countries)

42.2

Following instructions to fold a piece of paper (3 countries)

End of Phase III

- First regional tool
- Bottom-up approach to development of assessment tool
- Ensuring context-sensitivity of items, and developing a psychometrically robust tool

Process of development

Phase IV

- Develop a shorter version but maintain the test robustness
- Maintain reliability and validity
- Developmentally appropriate
- Culturally appropriate for the region



EAP-ECDS SHORT VERSION

Phase V (Current)

- Have started to implement EAP-ECDS Short Form (33 items across 7 domains)
- Revised Parent Questionnaire (70 questions)
- Shorter assessment time
- Flexibility:
 - ✓ Adapted items
 - ✓ Optional items

Phase V (Current)

- Maintain quality assurance:
 - ✓ Translations and back-translations
 - ✓ In-country training
 - ✓ Inter-coder reliability
 - ✓ Technical support on test administration
(e.g., feedback on country's pilot test videos by child psychologist)
- Next steps:
 - ✓ Training video
 - ✓ Digital scoring?

Tool Kit

EAP-ECDS Short Form Test kit

1. Picture Book
2. Test materials

Assessment protocols

1. Instruction Manual (33 items)
2. EAP-ECDS Short Form Scoring Form
3. Parent Questionnaire (70 items)
4. OCR Forms/ iPad?
5. Future: Training video

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Summary

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Advantages - Background

- Based on regional educational standards and goals
- Country-adapted, cultural items (song, written script, environment, ways to show gratitude)
- Flexibility which allows for extra items (Assessment + Parent Questionnaire)

Advantages – Short vs Long Form

- More suitable to young children and their attention spans
- Less time spent to collect data
- Less costly
- Easier to transport (less manpower and resources)

Advantages - Application

- Comprehensive data – developmental levels + family backgrounds + child's early home learning, health and habits
- Robust (good reliability/ validity) due to sound **training** (face-to-face or DVD/ + sampling of pilot test video) and **interrater reliability** checks
- Training allows inclusion of more complex items (e.g. Approaches to Learning items)

Advantages Technical Support

- Training
- Ongoing feedback on country-adapted items
- Feedback pilot study (Sample video)

If needed:

- Data Analysis
- Report Writing
- Recommendations on policies



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Q & A

Thank you !

