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New Horizons:

A Review of Early Childhood Care and Education in Asia and the Pacific




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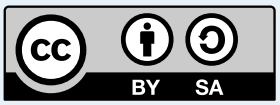

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Contents

List of Boxes, Figures and Tables

Acronyms and abbreviations

APREC	Asia-Pacific Regional Education Conference
ARNEC	Asia-Pacific Regional Network for Early Childhood
CEE/CIS	Central and Eastern Europe and the Commonwealth of Independent States
CPD	Continual Professional Development
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
CSO	Civil society organization
DHS	Demographic and Health Survey (USAID)
DIB	Development Impact Bond
DPR	Democratic People's Republic (of Korea)
DPT3	Diphtheria-tetanus-pertussis
EAP	East Asia and the Pacific region
EAP-ECDS	East Asia-Pacific Early Child Development Scales
ECCD	Early Childhood Care and Development
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECDI	Early Childhood Development Index (UNICEF MICS)
ECE	Early childhood education
ECEC	Early Childhood Education and Care
ECERSR	Early Child Environment Rating Scale
ECI	Early Childhood Interventions
EFA	Education for All
ELDS	Early Learning and Development Standards
EMIS	Education Management Information System
FAO	Food and Agricultural Organization of the United Nations
GER	Gross Enrolment Ratio
GPE	Global Partnership for Education
GPI	Gender Parity Index
GVAP	Global Vaccine Action Plan
HIV/AIDS	Human immunodeficiency virus infection and acquired immune deficiency syndrome
HKECDS	Hong Kong Early Child Development Scale
IDELA	International Development and Early Learning Assessment (Save the Children)
IDP	Internally Displaced Person

ILO	International Labour Organization
IMR	Infant mortality rate
ISCED	International Standard Classification of Education
MDG	Millennium Development Goal
MELQO	Measuring Early Learning Quality and Outcomes
MICS	Multiple Indicator Cluster Survey (UNICEF)
NER	Net Enrolment Ratio
NGO	Non-governmental organization
OECD	Organisation for Economic Cooperation and Development
OSF	Open Society Foundation
OVC	Orphans and Vulnerable Children
OWG	Open Working Group (United Nations)
PDR	People's Democratic Republic (Lao)
PISA	Programme for International Student Assessment
PTR	Pupil/teacher ratio
SDG	Sustainable Development Goal
SEAMEO	Southeast Asian Ministers of Education Organization
SEL	Social and emotional learning
SIB	Social Impact Bond
SIDS	Small Island Developing States
SIGI	Social Institutions and Gender Index (OECD)
U5MR	Under-5 infant mortality rate
UIS	UNESCO Institute for Statistics
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
USAID	United States Agency for International Development
WHO	World Health Organization
WFP	World Food Programme

Terminologies and definitions

The age group covered in this analysis is from birth to age 8.

The geographical area covered in this analysis is defined by the countries which are located in the following four regions: Central Asia, East Asia, the Pacific, and South and West Asia. See Annex 1 for the complete list of countries in each region.

Early Childhood Care and Education (ECCE) refers to care (e.g. health, nutrition, sanitation, hygiene, protection) and education (e.g. early stimulation, education, guidance, developmental activities) provided to young children aged 0-8. It takes place at home and in the community and is provided through organized services and programmes that target children directly or indirectly (i.e. targeting their parents and other primary caregivers in order to improve their care and education practices vis-à-vis their own children). This term, which is used by UNESCO, indicates a holistic vision of young children's care, development and learning. Other similar terminologies are 'Early Childhood Development (ECD)', 'Early Childhood Education and Care (ECEC)', 'Early Childhood Care and Development (ECCD)'. They are also known as 'Day Care Centre (DCC)', 'Child Care Centre (CCC)', nursery school, kindergarten school, pre-school and pre-primary school. All these terms are used interchangeably in this report.

The types of ECCE programmes available differ a great deal and can vary according to:

- Setting: Formal, informal, non-formal[1]
- Location: Home, centre (e.g. school or health facility), registered caretaker's home
- Type of institution: Public, private/community provision
- Daily duration: Half day, school day, work day
- Curriculum/programme focus on child development: Holistic (all encompassing), nutrition, physical and/or mental health, language/cognition, social-emotional development, childcare/babysitting. A variety of programme types exist and examples are listed here. Philosophical differences which influence programme implementation exist within these groups as well (e.g. Montessori, Reggio Emilia, Steiner).

The International Standard Classification of Education (ISCED) level 0 defines the first education level grouped by age categories: from birth to 2 years old for 'early childhood educational development' programmes (coded as ISCED 010) and from 3 years old to the start of primary education for 'pre-primary education' (coded as ISCED 020) (UIS, 2012). These programmes aim to develop socio-emotional skills necessary for participation in school and society. They also develop

1 Formal programmes are organized under a structured organization, with curriculum and often links to other systems (e.g. education, social, nutrition). Informal settings are often considered to be home- and neighbourhood-based settings, without the rules and regulations of a programme, such as child-friendly spaces. Non-formal settings are often described as being between formal and informal settings, as they are usually linked to the community and can include ad-hoc services to young children and their families. Most often, they tend to be more structured than in informal settings, with programme components.

some of the skills needed for academic readiness and to prepare children for entry into primary education (UIS, 2012). Programmes are usually centre-based and can be publicly or privately operated and managed. There are no duration criteria for these programmes to be considered under ISCED, but a recommended minimum equivalent of 2 hours per day and 100 days a year is suggested for classification under ISCED level 0. Data disaggregation is usually available by gender, rural/urban and public/private.

Primary school refers to the beginning of formal education in many countries, although in some cases pre-primary education can also be compulsory. Compulsory education usually begins in primary school around age 6 or 7, but can start as early as age 5 at the pre-primary level (e.g. in the Democratic People's Republic of Korea).

Parent(s) is the generic term used to represent the person(s) with primary child rearing responsibility in the household. It reflects a variety of family organizations, including guardians, other primary caregivers, single heads of household, non-biological parents, multigenerational and non-traditional family compositions.

Foreword

During their first few years of life, children develop the very foundations of emotional, social, mental and communication skills. This is the period when their brain development is at its most intense, when they are extremely receptive to a wide variety of stimuli, and when they begin to acquire skills and habits that may serve them well for the rest of their lives. However, early childhood presents not only opportunities but great risks as well, as malnutrition and 'toxic stress' factors, such as abuse, neglect, poverty and exposure to violence, can result in lifelong negative impacts. This is why children need and have the right to holistic care and education from birth.

UNESCO has been a strong global supporter of comprehensive early childhood care and education (ECCE) for decades, recognizing its critical importance for human development. Most recently, this was reflected in the new transformative Education 2030 agenda adopted in Incheon, Republic of Korea, in May 2015, and encapsulated in Sustainable Development Goal (SDG) 4 on quality education.

In recent years, countries in Asia and the Pacific have achieved significant progress in making quality ECCE programmes more widely available. However, problems still remain. The quality of ECCE itself and the inequity in access to it persists both within countries and among them. Millions of young children across this dynamic and populous region – especially those living in remote, less developed areas and in disadvantaged communities – have either limited or no access to such programmes. Girls, orphans, children with disabilities, children from poor families or ethnic and linguistic minority groups, and children living in conflict areas, have been among the hardest to reach.

To tackle these challenges, a specific target (4.2) on ECCE was set within SDG 4. It builds on Education for All (EFA) Goal 1 on comprehensive early childhood care and education, and seeks to ensure that by 2030 "all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education."

This UNESCO report intends to serve as a reference and baseline document towards this ambitious and necessary target. By analyzing how countries in the Asia-Pacific region fared as a whole in achieving EFA Goal 1 between 2000 and 2015, it identifies the region's successes and challenges in the multifaceted aspects of ECCE. The report also draws lessons from case studies to highlight successful ECCE policies and programmes, with a special focus on quality, equitable access, service delivery, financing and monitoring. Overall, it sheds light on policy directions for quality ECCE for all.

All children across the region belong to the global community of nations and deserve equal opportunities for quality care and education early in life. Moving towards SDG 4.2 will require sustained dedication and innovative approaches from all stakeholders, including investing in ECCE programmes, boosting inter-sectoral co-operation and strengthening the competences of teachers and caregivers.

Our hope is that this report will aid policy-makers and education professionals alike by providing evidence, good practices and lessons learnt for formulating policies and instituting or enhancing ECCE programmes that will benefit young children, especially those from disadvantaged backgrounds, throughout the region.

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Assistant Director-General for Education
UNESCO

Executive Summary

Holistic care and education play pivotal roles in young children's lives, lifelong learning and healthy development. This has been recognized globally since 1990, when early childhood care and education (ECCE) was introduced as an integral part of basic education at the World Conference on Education for All (EFA) in Jomtien, Thailand, whose declaration affirmed that 'learning begins at birth'. In 2015, the United Nations made ECCE an important part of its new global development agenda (the Sustainable Development Goals, SDGs) on education which aims to "ensure inclusive and equitable quality education and promote life-long learning opportunities for all" (SDG 4). SDG Target 4.2 is focused exclusively on ECCE so that "all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education". The Incheon Declaration "Education 2030" adopted at the 2015 World Education Forum further encourages countries and donors to invest in early childhood, in particular for "the provision of at least one year of free and compulsory quality pre-primary education and that all children have access to quality early childhood development, care and education", regardless of gender, ethnicity, religion or socioeconomic status.

Since Jomtien, countries in Asia and the Pacific have taken large steps towards achieving ECCE goals thanks to increasing recognition of its role as a pillar of sustainable development. More recently, in 2010, twenty-eight countries from the region committed to the 'Beijing Declaration on South-South Cooperation for Child Rights in the Asia-Pacific Region', which outlined a focused commitment to four key areas, including enhanced cooperation on child rights, improved delivery of child protection and welfare system, and better access to the advantages of economic and social development for all children. In 2013, the Asia-Pacific Regional Policy Forum on ECCE brought together high-level delegates from 31 countries in the Asia-Pacific region to identify challenges and highlight priorities for cross-country collaboration. About half the countries in the region have national ECCE policies, policy frameworks or strategic action plans.

Since 1990, Asia and the Pacific countries have also made significant progress in improving the well-being of young children and expanding the provision of ECCE services. The dramatic decline in preventable child deaths – the child mortality rate in the region fell by 67% since 1990, reaching 19 per 1,000 live births in 2013 – was achieved largely due to wide-scale and sustained vaccination campaigns as well as to improved levels of nutrition. Between 1999 and 2012, the expansion of pre-primary education in the region resulted in an additional 49 million children enrolled. Extreme poverty rates have fallen dramatically: East Asia has had the biggest success with only 6% of its population living on less than US$1.25 per day in 2011, compared to 61% in 1990. Oceania has also achieved impressive declines in extreme poverty rates from 55% in 1990 to 6.9% in 2011. However, many children and families in the region have not benefitted from the improvements in physical well-being, access to quality education and increased levels of relative prosperity. Important differences exist both across and within countries, and rising inequality is based on factors related to wealth, geographic location, ethnicity and other factors of disadvantage.

Challenges and opportunities

Birth registrations

Lasting setbacks for children in the Asia-Pacific region frequently begin at birth. A primary cause of persistent disadvantage for many children is a lack of birth registration, which often leads to a cycle of exclusion in their lives. The worse affected are children who are already deprived and underprivileged, including children with disabilities and those living in extreme poverty. They invariably end up facing further disadvantages as a result. Without proper identification documents, many children are unable to attend school or gain access to basic health services. Essentially they remain invisible to government programmes. The difference between children in poor families and those in wealthy ones can be stark. In some areas of Papua, in Indonesia, a mere 5% of the poorest children have been registered at birth as opposed to 83% of children from wealthiest families. An urban versus rural disparity is also prominent in several countries. In Afghanistan and some districts in Papua, children are half as likely to be registered if they live in rural areas. Children are also less likely to be registered if they belong to disadvantaged ethnic groups or live in remote mountainous areas in countries such as Nepal, Thailand, and Viet Nam.

South Asia has one of the world's lowest levels of birth registration with only a third of children registered in some areas. In 2012, the National Database and Registration Authority in Pakistan, one of the countries with low birth registration rates, began issuing identity cards to orphans and other children without birth certificates. Progress, however, has been slow. Some countries in the Asia-Pacific region with previously low levels, such as Bhutan and Mongolia, have made good progress in registering almost all children, regardless of their social or economic status. Several other countries have likewise sought to remedy shortcomings in birth registration rates, but more needs to be done, especially in areas that have large populations of needy children.

Disabilities

Developmental delays and disabilities frequently serve to exclude children from accessing basic services, even though it is especially these children who can often benefit most from quality ECCE programmes. Rates of disability vary across the region and are often linked to poverty levels. But many children with disabilities go uncounted and remain neglected; as a result, the prevalence of developmental delays and disabilities in early childhood often remains little known. What is not in doubt is that preventative and inclusive ECCE programmes can help mitigate the effects of disabilities and allow children to better integrate into society, to thrive and to become productive individuals.

Reaching children with disabilities before they are of primary school age is therefore vital as holistic quality ECCE programmes can help prepare them for inclusion in state schools. An inclusive ECCE programme must have the adequate specialist support as well as modifications and adaptations to promote child participation. In the slums of Mumbai in India, for example, community-based nurseries were created to accommodate children ages 3 to 6 years from extremely poor families. The nurseries included children both with and without disabilities and received support from education specialists.

Languages

Another common barrier to accessing ECCE services for many children is the language of instruction. National curricula regularly fail to take into account the linguistic and cultural

backgrounds of ethnic minority children, which often leads to their disinterest or exclusion from ECCE programmes. In one commendable example, New Zealand has incorporated the idea of 'language nests' in ECCE programmes with the goal of maintaining and promoting the use of the Māori language parallel to English. In Malaysia, where about 140 languages are spoken, ECCE can be offered in any language, but Malay and English must be taught alongside the other language in pre-primary education.

Poverty

In order for ECCE programmes to be effective, they also need to tackle inequalities in household incomes. Economic marginalization, especially in poor households where families face other factors of disadvantage, often passes from one generation to the next in a vicious cycle of poverty. In Lao PDR, for instance, a child born to a mother belonging to the Lao-Tai ethnic majority who has tertiary education and lives in a relatively wealthy household in the capital city of Vientiane is far more likely to receive proper ECCE than a child born to a young mother who never attended school and grew up in poverty in a remote ethnic minority village in the countryside. Young women from disadvantaged backgrounds need the most support since many of them are functionally illiterate and tend to have more children; yet these mothers are least likely to have access to ECCE centres for their children. Cambodia's education strategy includes a home-based education programme which operates mostly in rural and remote areas and targets children from poor families, indigenous groups and children with disabilities. Regular weekly groups provide mothers with information on the nutrition, health, well-being and education of their children (from birth to age 5).

The need for sound national policies

Having sound national ECCE policies is an important first step towards coherent and effective planning and implementation of ECCE provision. What is often still lacking is a well-developed strategic plan to follow up on policy expectations. In Kiribati, an ECCE policy document drafted in 2010 remained unimplemented several years later. In Kyrgyzstan, the development of a multisectoral early childhood development (ECD) strategy was abandoned owing to political change and a lack of motivation among relevant ministries. Papua New Guinea's ECCE policy was approved by the government in 2007, but in 2013 the Vice Minister for Education noted that 'a gap remains in services that address the developmental as well as the survival needs of children under 6 years old'. The implementation of ECCE policies can be stalled for a variety of reasons. One of them is that implementing a multisectoral ECCE policy requires strong government commitment and investment to integrate ECCE as part of the broader socio-economic development agenda.

Political commitment

A lack of political commitment to ECCE, or else an absence of proper funding, has similarly acted as a barrier in some countries. Albeit an overwhelming amount of evidence supports the view that quality ECCE programmes offer long-term benefits to both children and society, ECCE is still not a political priority for many countries that seek to improve socioeconomic conditions and developmental opportunities for children. Children from socially, politically, ethnically and culturally marginalized groups face a complex array of barriers to ECCE programmes and services. Coordinating or integrating services among various government entities responsible for different aspects of early childhood is considered, by many ECCE experts, to be one of the best guarantees that children receive quality holistic ECCE services. Fully integrated ECCE systems to coordinate,

manage or finance public services for young children remain woefully rare in the Asia-Pacific region. The Republic of Korea, for one, is currently exploring ways to integrate ECCE services to improve quality education for all children.

ECCE provision

Despite marked progress in past decades, few countries in Asia and the Pacific have succeeded in providing fully integrated and holistic ECCE services to all children, especially to marginalized and vulnerable groups. The primary challenge that many low and lower-middle-income countries face is a lack of reliable, up-to-date data compiled and accessed by governments on the status of young children beyond basic health details. Without such comprehensive data, the needs of children often remain badly understood and underrepresented in policy platforms. In the absence of comprehensive public programmes, private ECCE programmes have been instrumental in increasing the enrolment capacity for young children, both girls and boys, in many countries, but the inclusiveness and quality of programming is difficult to monitor.

Although national policy documents on ECCE highlight the need for the holistic nature of ECCE provision, few are comprehensive across all child development areas and age groups. Many policies focus primarily on health and education while paying less attention to other important aspects of early childhood development, such as child protection, sanitation and hygiene. Notably, the overall needs of children from birth to age 3 years beyond basic health aspects tend to be neglected in government policies. Several countries have had the experience of working with local communities to help expand ECCE availability, such as in Indonesia and Nepal.

Community involvement

Closer cooperation in decision making with members of local communities can also make a large difference. Several countries, including Nepal and Indonesia, have recognized the need for such collaboration to help expand ECCE availability. Community roles in these nations have proved highly effective in identifying local needs, training local facilitators and providing adequate physical space. Local communities in Nepal have helped develop ECCE programmes for children ages 2 to 3 years in community-based centres. Communities also provide the physical locations for ECCE programmes, and local women are trained to become ECCE facilitators.

The need for comprehensive ECCE programmes

Comprehensive care and education

Ad-hoc implementation is another factor that has hindered ECCE quality and accessibility. Innovative, integrated strategies that address multiple factors of disadvantage would better address the complex needs of vulnerable children and their families, but social systems are rarely set up to deliver services in that manner. This fragmented governance of ECCE services is a critical issue that often results in years of social exclusion for young children. Simple bundled interventions, like improving the nutritional status of children combined with an ECCE programme, can have beneficial effects on pre-school attendance. In an East Delhi settlement, community-based ECCE programmes provided iron supplementation and deworming to all children. This initiative increased the number of new participants and also improved the attendance of already enrolled children. Similar initiatives can also help young children transition better to primary education by equipping them with essential learning skills and tools.

Other means of enabling children to successfully transition into primary schools have included bringing schools closer together physically and developing ECCE classrooms within the primary school grounds. In countries that need to expand ECCE capacity rapidly, setting up pre-primary classrooms in existing schools can have budgetary and pedagogical benefits. This has been the case in Cambodia, where formal pre-school classrooms can operate independently or in formal primary schools. Teachers with training are fully qualified to teach at either level, which helps create the pedagogical transition from one education level to another. In Bangladesh, where two-thirds of all pre-primary classes are located in primary schools, teachers receive a six-day training course on pre-primary education.

Reaching vulnerable populations

Providing services to difficult-to-reach populations requires special targeted programmes or special interventions, which go beyond the creation of free ECCE programmes. In Mongolia, ECCE was expanded throughout the country with the introduction of the Law on Pre-school Education (2008), which promulgates a commitment for public investment in ECCE programmes. With the support of international donors, Mongolia reached out to nomadic children in remote and rural districts by providing mobile *ger* (traditional tents or yurts) kindergartens (community-based centres), which can be easily moved by the community. Many of these, however, still operate only in the summer months for a few hours at a time. In India, a similar initiative run by the non-governmental organization Mobile Crèches targets marginalized children living in the slums of large cities. Mobile Crèches organizes nutrition, education and health services for disadvantaged children; monitors their development; and encourages community engagement through networking, outreach and partnership with construction companies that informally employ their mothers. Children attending these programmes have improved nutritional status, cognitive skills and immunization records.

The need for quality

Simply having ECCE programmes available for children is in itself hardly sufficient, however. Their quality is also of vital importance to improve children's learning and developmental outcomes and not to cause harm. Standards for different ECCE programmes, whether they are offered publicly or privately, can vary both among countries and within countries. A common shortcoming results from the varying levels of teaching experience and competence that ECCE staff often possess. Some countries have done much better in this area than others. In the Republic of Korea, one of the regional leaders in ECCE quality and accessibility, public kindergarten teachers have an average of 18 years of teaching experience, compared to 8 years for private teachers and 4 years for child care workers. Other aspects of quality – such as those related to programme infrastructure, safety standards, pedagogical tools, learning materials, and physical standards – are also of utmost importance to provide safe and positive learning environments. Those developed countries in the region could share their experience with the Organisation for Economic Co-operation and Development (OECD) Early Childhood Education and Care quality framework to share the multiple facets of targeting and measuring quality indicators.

Enhancing ECCE practitioners' competence

Across the region as a whole, many countries continue to lack sufficiently trained teachers in pre-primary education. Training is not uniform in content (even within countries); standards for teacher deployment and management are not always well defined; and many trained teachers prefer to avoid teaching in remote or underprivileged areas, which disadvantages local children. The scarcity of trained teachers means that in some countries hired teachers are not meeting minimum requirements for competence. Enhancing the quality of ECCE programmes and the professionalism of their staff has received much policy focus. Some countries like Thailand have improved pre-service training curricula for teachers; others like Samoa and Uzbekistan require specific early childhood coursework as minimum qualifications for ECCE staff; yet others like Malaysia have increased the hiring of trained teachers. In-service training has also been established to improve teachers' basic training in countries like Samoa and Vanuatu.

A notable example for training early childhood professionals is Singapore. In the early 2000s, the city state established common teacher qualification standards for pre-school teachers who work in both childcare centres (catering to children ages 0-5) and pre-schools (catering to children ages 3-5). It developed a parallel accreditation system to validate the curricula of teacher training institutes so as to ensure that they were preparing teachers to work with children in an age-appropriate manner, focusing on child-centred learning and empathetic child-adult interactions. Most recently in 2013, it increased qualification requirements for pre-school teachers from certificate to diploma level.

Elsewhere, however, quality assurance mechanisms are not always in place to verify established minimum standards of programme quality. In Nepal, standards exist for teacher qualifications, infrastructure and service delivery as well as learning standards for children aged 3 to 6 years old. All ECCE facilities – public or private – are required to comply with the same standards. However, effective monitoring remains underdeveloped and weak. High teacher-to-student ratios can also negatively impact teaching quality. Thanks to increased enrolment in the early 2000s, the average pupil/teacher ratio in Nepal stood at 42:1 in 2008, with 27% of teachers having no proper training. By 2013, the pupil/teacher ratio had been reduced but was still quite high at 23:1, while 13% of teachers still had no training.

Effective curricula

Effective curricula can also make a world of difference for ECCE quality. They can serve as guides for equity and inclusiveness by inculcating various beliefs and practices. A curriculum or curriculum framework at a national level can guide policy-makers in taking into account children's learning and development needs, while it can also set the standard against which programmes can be assessed. For example, New Zealand's Te Whāriki ('the woven mat') pedagogical approach adopts a specific socio-cultural perspective on learning that acknowledges the multicultural context of New Zealand. The curriculum is built ('woven') around five strands of child development (well-being belonging, contribution, communication, and exploration) and is the basis for high-quality learning through a range of ECCE settings. In the Republic of Korea, the Nuri curriculum for children ages 3 to 5 years old in ECCE programmes focuses on a holistic perspective on child development, centred on the child and organized around play activities.

The way forward

In light of the education targets of the 2030 sustainable development agenda, countries in the Asia-Pacific region must continue to work towards making quality ECCE programmes readily accessible to all children. To do so, they will need to tackle shortcomings in provision, adopt new creative solutions, learn from successful examples and good practice across the region, boost the efficiency of existing programmes and initiate collaborative projects both within countries and among them. They must also institute robust and reliable monitoring mechanisms to assess needs and monitor progress as well as gather reliable up-to-date data on the situation and current needs of children to improve effective planning and programming decisions. Financing, both public and private, will likewise need to be increased, especially in low income countries, and funding mechanisms improved for a wide range of ECCE interventions as part of coherent long-term national and regional early education objectives.

The Asia-Pacific region has achieved significant progress in improving child survival and nutrition, as well as in providing more and more children with access to ECCE programmes and services. However, progress has been uneven in the areas of improving equitable access, quality, governance, financing and monitoring. Countries can learn from the experience of other countries in the region to roll back the challenges that continue to hold back many children, particularly marginalized and vulnerable ones, who still lack appropriate developmental opportunities for their learning and well-being. Addressing early childhood needs as a holistic, continuous period of development should be a central concern to all governments and should be set as their policy priorities accordingly.

1 Contextual background: Issues affecting ECCE in the world and in Asia and the Pacific

1.1 Introduction

The need for a holistic development of children has garnered much attention in recent decades. Emerging scientific evidence of learning processes; relationships between physical, cognitive and socio-emotional development; and outcomes of experimental programmes have resulted in a better understanding of the mechanisms that surround early childhood development and learning. When ECCE was introduced as an integral part of basic education in the 1990 World Declaration on Education for All (EFA), the evidence base to support ECCE policy-making began to emerge. Now, following 25 years of additional research and programming around early childhood care and education, the United Nations (UN) has included ECCE for the first time in its global development agenda.

As the EFA period came to a close in 2015, there is a need to assess the Asia-Pacific region's progress in providing young children with an enabling environment and support to maximize their developmental and learning potential. The scope of EFA Goal 1 set in Dakar was broad: 'Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.' It refers to providing children with holistic services that cover all child development areas, to increasing access to ECCE services, to improving the quality of existing services, and to achieving equitable access by broadening the scope of services reaching the most disadvantaged groups. Monitoring and measuring progress towards EFA Goal 1 has been difficult but improving over the past two decades.

This analysis will unpack what the current understanding of ECCE is in Asia and the Pacific and what this region has achieved towards the attainment of the ECCE goal since the EFA movement began. It will also outline the region's current strengths and challenges, with a focus on the role of ECCE in the 2030 Agenda for Sustainable Development. This review attempts to cover the diverse region that is Asia and the Pacific. The region as defined by UNESCO includes 46 countries and two territories organized into four sub-regions (Annex 1), with a mix of various income levels including some of the world's poorest and richest countries (Annex 2).

Outline of the review

This report is organized into eight sections, which altogether provide a comprehensive and thorough review with analysis, leading to a set of recommendations in the conclusion. A brief description for each section is given below:

- Section 1 briefly sets out a contextual background to describe the policy context in which ECCE operates at a global level and in Asia and the Pacific and highlights concerns for ECCE policy development.
- Section 2 is a statistical overview of how Asia and the Pacific has fared during the second EFA period (1999–2015) in terms of improving the developmental and learning opportunities for very young children in the region.
- Section 3 identifies successful ECCE policies and programmes in the region, notably in the areas of equitable access and service delivery, quality, governance, financing and monitoring.
- Section 4 identifies continuing challenges identified in the region that limit the provision of ECCE that would benefit all children.
- Section 5 focuses on six case studies of low, average and high performing countries – defined by a set of ECCE indicators – and identifies particular challenges in those countries.
- Section 6 concludes the analysis with strategic recommendations for the region.

Much of this analysis is based on the national EFA 2015 reviews (Annex 3), in which Member States undertook a comprehensive review of EFA progress, challenges and best practices within their countries. These reports provide a wealth of information critical to analysing the progress and remaining challenges of countries in Asia and the Pacific in achieving the ECCE goal. Numerous other policy documents were also consulted, including earlier reviews of ECCE and the EFA goals in the region, such as Rao and Sun (2010); UNESCO (2015); UNESCO Bangkok (2015); and UNESCO and UNICEF (2012). Data for this report were extracted from the UNESCO Institute for Statistics (UIS) or from household surveys, notably UNICEF's Multiple Indicator Cluster Survey (MICS) and USAID's Demographic and Health Surveys (DHS). An attempt has been made to provide examples from a range of different countries and sub-regions, although this was not always possible due to missing data and published information limitations (in English) in some countries.

1.2 The global context of ECCE in the SDG 4 – Education 2030 agenda

The year 2015 marked the end of a development era characterized by a set of international agendas: namely the EFA and Millennium Development Goals (MDGs). The former defined international education goals, beginning with the early childhood period; it also explored avenues of expanding access to holistic ECCE programmes. The MDGs focused on a poverty reduction agenda, and its attention to young children focused mostly on improving maternal and infant health conditions as well as living environments with the aim of reducing child mortality rates. Put together, these two international agendas set the bar high to provide universal access to quality health and education services for very young children, with an emphasis on vulnerable and marginalized populations. The next development phase (2016–2030) will be guided by the Sustainable Development Goals (SDGs), which were finalized at the UN Sustainable Development Summit in New York City in September 2015.

The global education community has been leading the development of international education goals at the World Conference on Education for All in Jomtien (Thailand) in 1990 and the World Education Forums held in Dakar (Senegal) in 2000 and Incheon (Republic of Korea) in 2015.[2] Under the leadership of UNESCO with other convening UN agencies, the international community defined the priorities for the next set of education goals to appear in the SDGs, building from a rather lengthy and relatively inclusive process. Hundreds of conferences, seminars, working groups and task forces have produced recommendations on education priorities and target goals at the national, regional and global level. The following major events and dates have defined this period leading up to the September 2015 UN Sustainable Development Summit.

- ***The Muscat Agreement, May 2014:*** The first major outcome of these consultations was the Muscat Agreement adopted at the Global EFA meeting in Oman in May 2014. The first of seven global education targets aims to improve ECCE: 'Target 1: By 2030, at least x% of girls and boys are ready for primary school through participation in quality early childhood care and education, including at least one year of free and compulsory pre-primary education, with particular attention to gender equality and the most marginalized' (UNESCO, 2014a).
- ***The Sustainable Development Goals and Targets, July 2014:*** The Open Working Group (OWG) of the UN General Assembly presented its list of targets for the broad standalone international education Goal 4: 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. One of the seven targets focused solely on ECCE: 'Target 4.2: By 2030 ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education' (United Nations, 2014a).
- ***The Incheon Declaration, May 2015:*** The global education community adopted a new 'transformative vision for education' for the next development period during the World Education Forum in Incheon, Republic of Korea, in May 2015 (UNESCO, 2015b).[3] This marked the culmination of the Dakar EFA period, and the beginning of a new development period to be defined more precisely in the September UN Summit. Regarding early childhood specifically, the Incheon Declaration, Education 2030, and its Framework for Action encouraged the provision of at least one year of free and compulsory quality pre-primary education so as to ensure that all children have access to quality early childhood development, care and education. Other key elements included the need to engage civil society to support government policy, minimum thresholds for government investment in education, and a strong commitment to exclude marginalization, disparities and inequalities in access, participation and learning achievement at all education levels (UNESCO, 2015c).

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2 The World Education Forum brings together more than 1,000 participants, including heads of state, ministers of education, organizations for finance and international cooperation, representatives of NGOs and civil society, foundations, education policy-makers, academics, donors, intergovernmental organizations, and other interested parties. The United Nations system is the convening party, with several UN agencies acting as co-convening agencies. For Incheon, these were UNESCO and UNICEF principally, with support from UNDP, UNFPA, UNHCR, UN Women and the World Bank Group.

3 Signatories to the declaration include government ministers from more than 100 countries, non-governmental organizations and youth groups. The Incheon Declaration will be implemented through the guiding principles in the forthcoming Education 2030 Framework for Action to be adopted during UNESCO's General Conference in November 2015. Documents will be made available here: http://en.unesco.org/world-education-forum-2015/resources/main-documents.

- ***The Addis Ababa outcome document, July 2015:*** The Financing for Development Conference did not focus specifically on the education targets, but identified the importance of supporting countries with specific challenges in reaching education goals 'ensuring that no child is left behind' (United Nations, 2015a).

At a regional level in Asia and the Pacific, several processes and discussions around children and education were held to define the future of ECCE in the region in preparation for the UN Summit in New York:

- In 2010, 28 countries in the region committed to the '***Beijing Declaration on South-South Cooperation for Child Rights in the Asia-Pacific Region',*** which outlined a focused commitment to four key areas: South-South cooperation on enforcing child rights; delivery of child protection and welfare systems; ensuring that economic and social development is equitable and reaches all children; and disaster risk reduction (UNICEF, 2010).[4]
- In 2013, the ***Asia-Pacific Regional Policy Forum on ECCE*** brought together high-level delegates from 31 countries in the region to engage in exchanges on various subjects, including current successes and challenges in the ECCE situation as well as innovations in improving access for marginalized populations. Countries identified priority actions and suggestions for cross-country collaboration (UNESCO Bangkok, 2013a).
- In August 2014, the ***Asia-Pacific Regional Education Conference (APREC),*** organized by UNESCO's regional office in Bangkok, brought together ministers of education and other high-level officials in the region to discuss the future SDGs in light of the emerging challenges in the region.
- At the time of the drafting of this document, the ***Fourth International Conference on Poverty Reduction and Child Development and 2015 Asia-Pacific Regional ECD Conference*** was held on 21-24 October 2015, in Beijing, China, to share experiences, inform national action plans, and develop clear targets and policies to reach every child with quality ECD.

The September 2015 UN Sustainable Development Summit marked the beginning of a new development era with an agreement reached on 17 SDGs and 169 targets to achieve them. The relevance of improving education to the achievement of the other SDGs has been a prominent discussion point among international education advocates, and the ambitious Goal 4 reflects the complex relationships across the other goals.[5] For the first time in UN history, 'early childhood' was included as an integral part of the commitment to achieving quality and equitable education for all people (SDG Goal 4).[6] Target 4.2 of SDG 4 kept the same final wording as presented by the OWG in July 2014: 'By 2030 ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education' (United Nations, 2015b).

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4 Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Democratic People's Republic of Korea, Timor-Leste, Federated States of Micronesia, Fiji, India, Indonesia, Kiribati, Lao People's Democratic Republic, Malaysia, Republic of Maldives, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Samoa, Singapore, Sri Lanka, Thailand, Vanuatu and Viet Nam.

5 The 2016 Global Education Monitoring Report (UNESCO) will address the complex interrelationships between education and other SDGs.

6 The SDG on Education aims to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'.

The international ECCE community weighed in at all stages of this process, and UNESCO and UNICEF have supported the importance of a holistic and equitable perspective for ECCE policy. The new SDG target on ECCE builds on the EFA Goal 1 with similar attention given to equity ('all girls and boys') and quality.[7] The focus has shifted away from holistic ('comprehensive') ECCE to broadening the objectives to include readiness for primary education. Target 4.2 shied away from the year of 'free and compulsory quality pre-primary education', which the education community had included as an indicative strategy in the Incheon Declaration of Education 2030 (UNESCO, 2015c, para. 6). How Target 4.2 will play out in terms of development priorities and government ECCE policies will depend on national governments' commitments to ECCE during 2016-2030, as well as the indicators chosen to measure progress against the target.

In support of and in parallel to these major global discussions, the ECCE community has been working on a critical set of issues as priorities for improving national policy-making and programme development for young children (Box 1). They reflect the past decades of progress in increasing access and garnering attention for young children's developmental needs. They aim to refine the quality and mechanisms around improved delivery of ECCE services for children and their families, and are organized into five broad areas:

- Equitable access and service delivery;
- Quality;
- Governance;
- Financing;
- Monitoring.

Some areas have gained greater focus at the international level, such as the momentum to improve the quality of data on early childhood programmes, child development outcomes and learning quality (Anderson et al., 2014).

7 The SDG on Education aims to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'.

Box 1: Critical global issues in ECCE

During the last few years, ECCE advocates have gathered to prepare for the SDG 4 – Education 2030 agenda and have discussed critical issues facing the field. The following list identifies and groups those issues that are relevant for all countries regardless of their income levels.

Equitable access and service delivery

- Paying particular attention to equity in access and progression to reduce differences within countries as well as between countries. Special focus on reaching the unreached; namely vulnerable populations and girls from those excluded groups.
- Broadening access to quality ECCE programmes for all children, including those from birth to 3 years.
- Ensuring the delivery of holistic ECCE services during emergencies, conflicts and other violent circumstances.

Quality

- Shifting the focus to improving the quality of services and programmes and child development and learning outcomes from simply increasing access.
- Improving learning attainment by focusing on comprehensive learning and development competencies (e.g. various domains of learning, including numeracy, literacy, social and emotional, physical well-being, science and culture).
- Improving pre-service and in-service professional training, including during emergencies and conflict situations.
- Supporting better transitions to primary education between all ECCE programme types (in addition to pre-primary education) and primary schools to improve retention and long-term education outcomes.
- Improving curriculum and learning materials to meet the developmental needs of children, including incorporating socio-cultural issues (e.g. cultural/parental beliefs, diversity).

Governance

- Favouring governance and policy co-ordination for holistic ECCE provision.
- Developing partnerships with parents, families, communities, the private sector and NGOs for governance and financing.

Financing

- Increasing public finance commitments to ECCE sector.
- Encouraging innovative financing mechanisms.

Monitoring

- Monitoring child development outcomes and learning indicators, especially for very young children (children from birth to age 3). Includes monitoring of socio-emotional development, motor development skills, physical well-being, as well as readiness to enter primary education.
- Measuring ECCE programme quality at scale and for national monitoring.
- Enabling knowledge management of monitoring results for advocacy purposes.

Sources: Anderson et al. (2014); Global Campaign for Education (2015); LMTF (2014); UNESCO (2015c).

1.3 The regional context

The Asia-Pacific region was one of the world's poorest in1990. A quarter century later, the region can boast of impressive gains in human development and economic growth. Poverty has been reduced, access to basic services (health, sanitation, education, social protection) has expanded, and women's rights have generally improved. The gains are impressive, yet there is still more progress to be made to ensure the healthy development of children, especially those that remain disadvantaged and mired in extreme poverty. As a result, many children are unable to participate in ECCE.

Extreme poverty and income inequality

The number of people living in extreme poverty across the world has nearly halved since 1990, dropping from 1.9 billion in 1990 to 836 million in 2015 (United Nations, 2015c). Across Asia and the Pacific, rates of extreme poverty have fallen dramatically since 1990; however, only a few countries account for a large share of that reduction.[8] East Asia has had the biggest success in reducing poverty in the region, from 61% of its population living on less than US$1.25 per day in 1990 to only 6% in 2011. Oceania has also achieved impressive declines in extreme poverty rates from 55% in 1990 to 6.9% in 2011 (United Nations, 2015d).[9]

Specifically, in China, Pakistan, Tajikistan and Viet Nam, the percentage of the population living on less than US$1.25 per day has fallen the fastest in the region.[10] Viet Nam, for example, experienced fast economic growth during the 1990s and 2000s, with the proportion of people living on less than US$1.25 per day falling from 64% in 1993 to 17% in 2008 (ADB, 2014).

However, economic success has frequently been accompanied by the challenges of rising inequality, whereby vulnerable populations have not managed to benefit from relative prosperity and may fare worse than they did before the growth period. Factors of disadvantage – such as poverty, living in remote areas or belonging to marginalized ethnic groups – can be compounded by other factors: discrimination, social intimidation or economic marginalization. Despite significant reductions in rates of extreme poverty across the region, relatively high extreme poverty rates persist in several countries: Afghanistan (31%) Bangladesh (43%), Lao People's Democratic Republic (Lao PDR, hereafter) (30%), India (33%), Nepal (24%), Timor-Leste (35%), Turkmenistan (25%) and Pakistan (21%) (United Nations, 2015e).

Conflict, natural disasters and other shocks

Achieving quality ECCE for all children is especially challenging in those countries that have been beset by armed conflicts, natural disasters or other forms of societal upheaval. Conflicts – including civil wars and political strife –impact the state of economic growth and the ability of governments to provide social services to affected populations. Many countries in the region have been affected by conflicts in recent years. At some point since 1999, Afghanistan, Bangladesh, Indonesia, Myanmar, Nepal, Pakistan, the Philippines, the Solomon Islands, Sri Lanka, Thailand and

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8 MDG Goal 1 aims to 'eradicate extreme poverty and hunger', as measured by halving the proportion of people living on US$1 a day between 1990 and 2015.

9 MDG calculations are not readily available for the UNESCO regions used in this report. See Annex 1 for the composition of MDG regions relative to the 48 countries for this report.

10 When the MDGs were created, the international 'extreme poverty' line was set at US$1, but since 2008 it has been recalibrated to US$1.25 to better reflect current prices and consumption rates in many developing countries.

Timor-Leste have all experienced some level of armed conflict. During conflicts, ECCE provision in these countries has been weakened or left underdeveloped, as have other education levels and social services. Government budgets have routinely been redirected towards conflict-related needs even as political instability has reinforced existing inequalities (UNESCO, 2011). During conflict, children with disabilities are also more likely to suffer from the consequences of violence and lack of access to medical treatment or medication (el Zein and Chehab, 2015).

In addition, Asia and the Pacific is a disaster-prone region and so natural disasters and the adverse effects of climate change are additional elements that need to be factored into policy-making for sustainable development, especially for vulnerable Small Island Developing States (SIDS).[11] SIDS and coastal territories are regularly at greater risk of falling victim to environmental calamities than are landlocked countries. Poor people whose livelihood is dependent on fishing or on the cyclical nature of agriculture are particularly exposed to the risks of environmental degradation. The frequency of natural calamities in the region – droughts, typhoons, floods, earthquakes, landslides, storms, volcanic eruptions and tsunamis – has increased in the past 15 years (ADB, 2014).

Women's status in the region

The Asia-Pacific region is characterized by comprehensive legislative frameworks enacted to protect women's rights, but their implementation and weak institutional structures continue to hold back progress for women. The Social Institutions and Gender Index (SIGI) measures five dimensions related to gender inequality (discriminatory family code; restricted physical integrity; son bias; restricted resources and assets; restricted civil liberties). Of the 48 Asia-Pacific countries, 21 are classified in the full index, and only five countries score favourably (very low and low) in terms of gender inequality (OECD, 2014a).[12]

In South Asia, gender inequality is especially marked, posing a particularly strong barrier for women to access economic opportunities, health care, education and avenues of justice. Gender inequality compounded with poverty and marginalization make human rights a distant reach for many women in the region (UN Women, 2012). In several countries in South Asia and East Asia, traditional preference for boys has created a marked gender imbalance among children. National level birth data in the Republic of Korea and Viet Nam, as well as in several regions of China and India, show increasing disparities in sex ratios.[13] The practice of gender selection has been increasing since the 1980s, with the advent of greater access to improved technologies to identify the sex of a foetus, combined with widespread cultural or socio-economic preferences for boys (WHO, 2011a). In Nepal, sex-selective abortions are legally prohibited, but have been increasingly practiced for second births since the legalization of abortion in 2002, especially among women living in urban areas, with more years of education and of higher wealth quintiles (Frost et al., 2013).

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11 In this region, the SIDS include the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Singapore, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu.

12 Very low: Mongolia. Low: Bhutan, Cambodia, Kazakhstan, Thailand. Medium: China, Indonesia, Kyrgyzstan, Lao PDR, Philippines, Sri Lanka, Tajikistan, Uzbekistan, Viet Nam. High: Afghanistan, India, Myanmar, Nepal, Pakistan, Timor-Leste. Very high: Bangladesh.

13 Female sex selection refers to the process of identifying the sex of a foetus and, when identified as a girl, choosing to abort the pregnancy (foeticide) or commit infanticide or child neglect/abuse following birth. Foeticide is identified by a skewed sex ratio at birth, which varies little biologically with no human intervention.

Improvements in access to quality health and education for women – combined with fulfilling women's rights in employment, marriage and resource ownership – will improve women's well-being and that of their children. Literacy rates for women have been particularly slow to improve, or have even worsened, in South and West Asia, where 52% of women were illiterate in 2010, compared to 47% of them in 2000 (UNESCO, 2015d).

Vulnerable populations

Despite progress in national statistical averages, participation in ECCE programmes is still not accessible to all children. Socio-economic barriers, cultural prejudices and various forms of discrimination have created pockets of vulnerable and disadvantaged populations who are not enrolling or participating in ECCE programmes. Box 2 highlights those categories of children who face difficult day-to-day living conditions due to their extreme vulnerability. In Asia and the Pacific, these children usually come from families that receive the least amount of supportive public services, including health and education.

Monitoring these groups is particularly difficult, as by definition they are usually marginalized and not included in regular survey collection methods (i.e. household surveys and national censuses). A few reports have identified vulnerabilities that are specific to the region:

- **Violence:** Violence against children remains prevalent in all Asia-Pacific countries, with higher incidence levels in low and lower-middle-income countries (UNGEI, 2014). Violence has been reported as particularly high in South Asia and identified as occurring both at home and in schools (including bullying), as well as other educational and social settings (ADB, 2014).
- **Slums:** One of the great challenges in Asia involves managing the consequences of rapid urbanization and inadequate housing conditions for young children and their families. During the 1999–2015 period, rapid urbanization in Asia and the Pacific – a trend that is expected to continue well into this century – has led to a marked increase in slum dwellings in South-East Asia (UN DESA, 2014).[14] Although the share of people living in slums among all urban inhabitants has fallen in Asia and the Pacific, a large proportion of children are growing up in these environments (UN Habitat, 2010). In India, an estimated 13% of urban children from birth to age 6 years – or around 7.6 million children – live in slums (Government of India, 2013).
- **Ethnicities and languages:** The Asia-Pacific region includes 1,000 different ethnic groups who speak over 1,600 languages (Rao and Sun, 2010).
- **Conflict with attacks on education:** Eight countries in the region were profiled for a study on countries with reports of attacks on education and military use of schools.[15] Armed attacks on teachers, students and school buildings put children and staff at risk. Although ECCE programmes are not identified specifically in this report, attackers have at times targeted pre-primary school-aged children, such as during an attack by 200 militants on an Indonesian school in East Java in 2011. In Pakistan, several teachers were abducted upon returning from a polio vaccination campaign for young school children in 2013 (GCPEA, 2014).

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14 Despite lower levels of urbanization relative to other regions, 53% of the world's urban population lives in Asia and 15 of the world's 28 megacities (population over 10 million) are in Asia. Urban areas in China and India are projected to grow by nearly 700 million people between now and 2050 (UN DESA, 2014).

15 During the period 2009–2012, Afghanistan and Pakistan were heavily affected and other affected countries include the Islamic Republic of Iran, India, Indonesia, Myanmar, the Philippines and Thailand.

Box 2: Identifying vulnerable and disadvantaged populations in Asia and the Pacific

Vulnerable children are usually defined as those groups who face particularly challenging circumstances, which make access to basic social services and day-to-day survival more difficult. Their situation is often due to or exacerbated by social exclusion. Factors of disadvantage can operate in combination, thereby creating mutually reinforcing exclusion. Examples of such groups in the Asia-Pacific region include:

- children from ethnic/language groups;
- orphans and other vulnerable children;[16]
- children from poor households;
- girls, especially from vulnerable groups;
- children living with disability;
- children affected by violence (in the home or community);
- children affected by conflicts (including refugees and internally displaced persons);
- children affected by natural or human-made emergencies;
- children living in urban slums or street children;
- children living in extreme rural/remote areas; and
- children living in pastoralist/nomadic communities.

16 The term orphans and other vulnerable children or 'OVC' includes those children who have suffered due to the AIDS epidemic: who are infected by HIV/AIDS, who live with one or both parents who have HIV/AIDS, who have lost one or both parents from the disease, or who live away from home because of the impact of the disease on the household.

2 Review of the EFA progress in Asia and the Pacific

This Section assesses the Asia-Pacific region's progress in ECCE during the period of 1999-2015 by examining trends in the major areas of birth registration, child survival, health and nutrition, developmental delays and disabilities, access to ECCE, quality, preparation to primary education and ECCE governance and financing.[17] Important differences exist among the four subregions, and across and within countries. In many countries, improvements in children's physical well-being and access to quality education are based on factors related to wealth, geographic location, ethnicity and other factors of disadvantage. Where data availability permits, equity concerns in ECCE service delivery and child outcomes are highlighted. Annex 6 shows the variety of ECCE-related indicators available at an international or national level, a subset of which are presented in this Section. Subregional profiles for Central Asia, East Asia, the Pacific, and South and West Asia – presented in Annex 8, Annex 9, Annex 10 and Annex 11, respectively – provide additional comparative data on health, nutrition and pre-primary education. Data were collected between August and October 2015 for this Section and the Annexes.

2.1 Birth registration

Birth registration provides children and their families with the fundamental right to accessing public services in health, education and child protection.[18] Children who do not have a birth certificate are usually marginalized and considered legally invisible, while their social needs are frequently unknown. About 41% of the world's children are not registered by their first year at a global level. South Asia is one of the world's regions with the lowest levels of birth registration: only 34% of children are registered (UNICEF, 2014a). Nonetheless, some countries in the region – such as Bhutan and Mongolia – have successfully registered all children, with no observed variation among population groups (Baigalmaa et al., 2013; Bhutan NSB, 2011).

Children from poor families are least likely to be registered in countries with registration rates below 90% (Figure 8). In Papua and West Papua (Indonesia) and Nepal, the gap between children from poor families and the national average ranges from 22 to 50 percentage points. The difference compared to wealthier families can be even larger: in the districts of Merauke, Jayawijaya and Biak Numfor, in Papua (Indonesia), 5% of poor children have registered births compared to 83% of children from wealthy families.

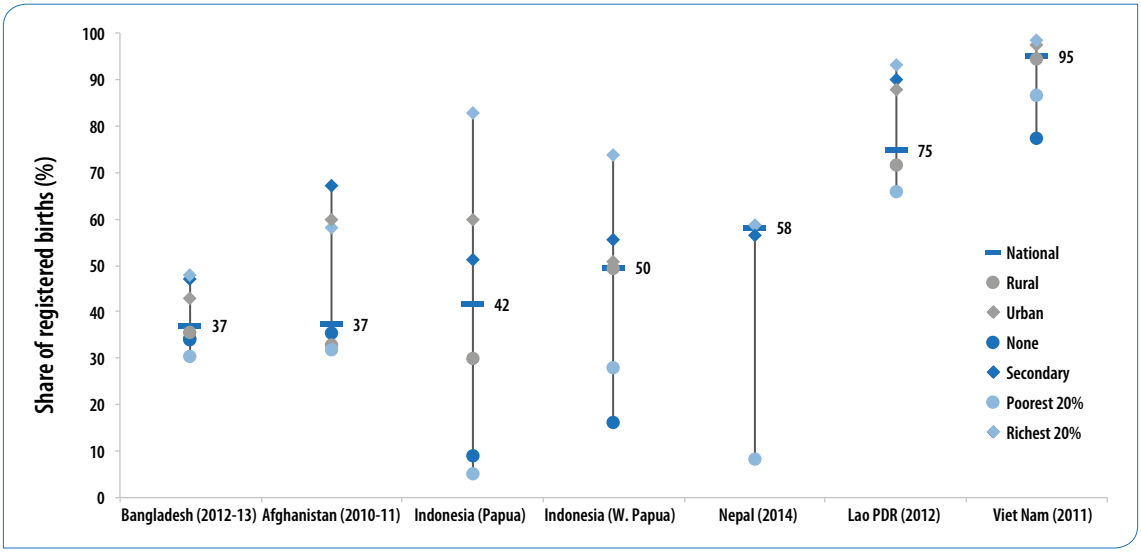
The urban/rural disparity exists in four countries and is most marked in Afghanistan and Papua (Indonesia), where children are half as likely to be registered if they live in rural areas. Children are also less likely to be registered if they belong to disadvantaged ethnic groups or live in remote

17 The latest data available are presented in this section and might not always correspond to 2015.

18 SDG Target 16.9 requires states to 'provide legal identity for all, including birth registration'.

mountainous areas in many Asia-Pacific countries (e.g. in Indonesia, Nepal, Thailand, and Viet Nam) (UNICEF, 2015a). Mothers with no education are much less likely to register their children in all countries (Figure 1.), with the exception of Nepal, where little difference has been observed. In Papua and West Papua (Indonesia), only 9% and 16%, respectively, of children are properly registered in these households. About one-third of children with mothers with no formal education are registered in Afghanistan and Bangladesh.

Figure 1: Birth registration among children, 2010–2014



Notes: Indicator definition is the percentage of children under age 5 whose birth is registered. Dates of the national or regional MICS survey are indicated after the country name. Only urban/rural disparities were available for Mongolia and Viet Nam. Only selected districts are covered in the regional Indonesian surveys. In Thailand, urban stands for municipal and rural for non-municipal. Dates for Indonesia surveys are 2011.

Source: UNICEF (various years).

2.2 Early childhood health and nutrition

Under-5 mortality rates[19]

The Millennium Development Goal 4 (MDG 4), which set out to reduce child mortality rates by two-thirds between 1990 and 2015, has been lauded for achieving a dramatic decline in preventable child deaths. At a global level, the number of preventable child deaths fell from 12.7 million to 6 million. Between 1990 and 2015, the global under-5 mortality rate declined by more than half, dropping from 90 to 43 deaths per 1000 (‰) live births, not quite reaching its target of 30‰ (Global Polio Eradication Initiative, 2015; United Nations, 2015c).[20]

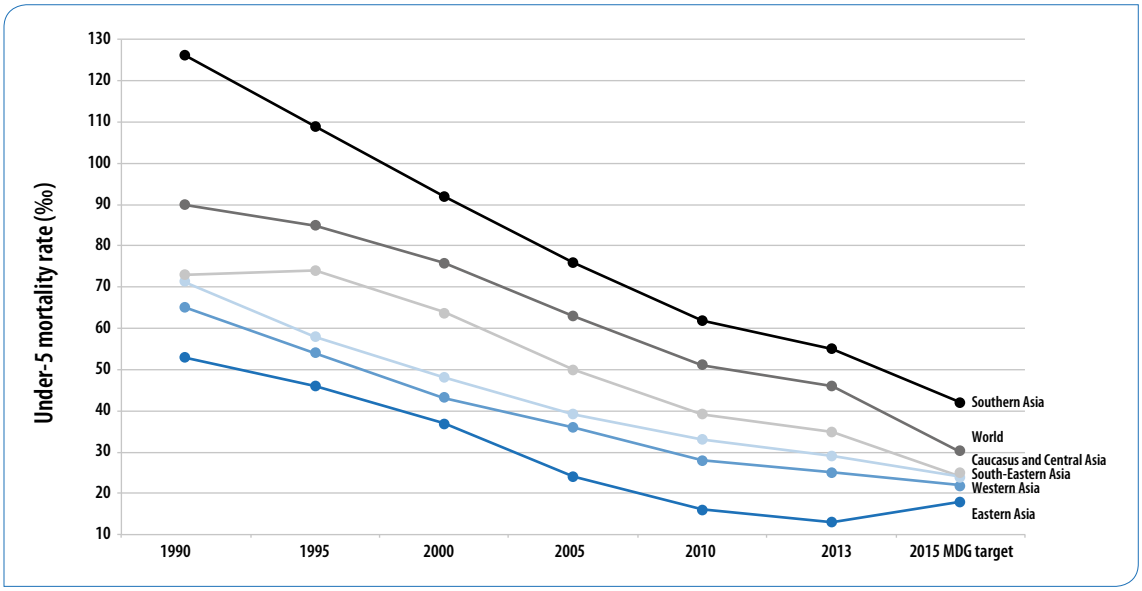
Figure 2 shows the decline in under-5 mortality rates for the Asia-Pacific region since 1990.[21] East Asia and the Pacific are the only subregions in the world to have reached this MDG goal, with a 67% fall since 1990 in the child mortality rate. Yet, very large declines were also reached in South Asia and Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS), where child mortality rates fell by 56% and 59%, respectively.

19 This section is based on United Nations (2015) and most recent data from WHO (2015a), unless otherwise noted.

20 The 2015 figure corresponds to a projection based on actual trends.

21 Estimates are not available for the UNESCO regions as defined for this report (Annex 1).

Figure 2: Under-5 mortality rates, by UNICEF regions, 1990–2015



Notes: CEE/CIS is Central and Eastern Europe and the Commonwealth of Independent States. Regions defined by UNICEF regions, see Annex 1. The 2015 value is the MDG target for Goal 4 (two-thirds reduction from 1990 rate).

Source: UNICEF (2014a).

Examining child mortality by country income level reveals that high-income and upper-middle-income countries tend to have very low child mortality rates. Of the 19 Asia-Pacific countries with data available in these income groups, 15 had child mortality rates lower than 20‰.[22] But much progress was obtained in low and lower-middle-income countries, as evidenced by the eight countries which more than halved child mortality rates between 1999 and 2013.[23]

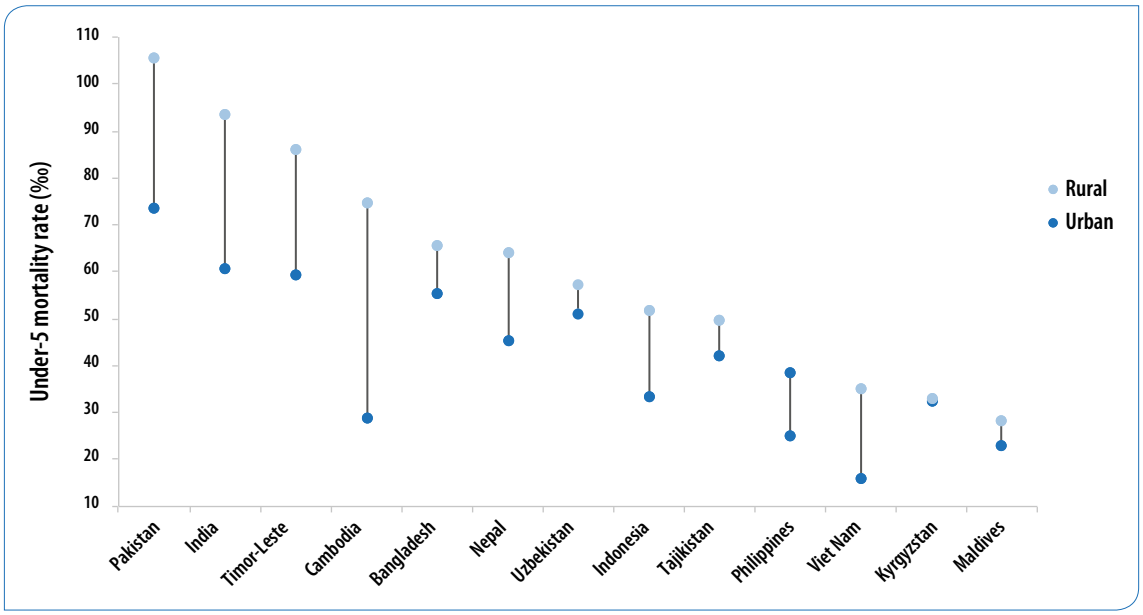
The world's highest child mortality rates have been recorded in sub-Saharan Africa, but a few countries in the Asia-Pacific region also account for a large share of under-5 deaths. This burden can be examined from two angles: the under-5 mortality rate or the absolute number of under-5 deaths. In 2013, Kiribati (58‰), Papua New Guinea (61‰), Lao PDR (71‰), Pakistan (86‰) and Afghanistan (97‰) had the region's highest child mortality rates. Sorting by the absolute number of under-5 deaths, 35% of the world's under-5 deaths occurred in the region: India accounted for 21%, Pakistan 6%, China 4%, and Bangladesh and Indonesia 2% each of the global total (UNICEF, 2014a).

Despite overall progress, large gaps in child mortality persist among rich and poor households and among urban and rural children. Under-5 mortality rates can be almost twice as high for children in poor households. As Figure 3 shows, 12 Asian countries have higher child mortality rates for children living in rural or urban areas. In Cambodia and Viet Nam, children in rural areas are more than twice as likely to die before reaching age 5 than those in urban areas. Kyrgyzstan is the only country where the rates are nearly the same regardless of place of residence.

22 In 2012, the global community pledged in the call to action "Committing to Child Survival: A Promise Renewed" that every country should reach child mortality rates lower than 20‰ by 2035.

23 Bangladesh, Bhutan, Cambodia, DPR Korea, Kyrgyzstan, Nepal, Tajikistan and Timor-Leste.

Figure 3: Under-5 mortality rates, by residence area type, most recent year available



Notes: Disaggregated data provided by DHS available only for countries shown. Latest year available is 1996 for Uzbekistan; 2002 for Viet Nam; 2005 for India; 2009 for Maldives and Timor-Leste; 2010 for Cambodia; 2011 for Bangladesh and Nepal; 2012 for Indonesia, Kyrgyzstan, Pakistan and Tajikistan; and 2013 for the Philippines.

Source: WHO (2015a).

Immunizations

Vaccination of children has played a primary role in reducing child mortality rates and can continue to do so in the near future (McGovern and Canning, forthcoming). Notable improvements in routine immunization schedules, vaccine delivery and national health systems have helped expand immunization coverage over the past few decades. Measles vaccination, for example, has helped prevent an estimated 15.6 million deaths between 2000 and 2013 (United Nations, 2015c).

In 2012, 194 countries endorsed the Global Vaccine Action Plan (GVAP), which set out six immunization targets for 2014 and 2015. The GVAP aimed to accelerate progress towards reaching MDG 4. Polio and Diphtheria-tetanus-pertussis (DPT3) vaccine coverage are examined here to assess the state of immunization progress in the region.

Polio: Following a comprehensive global effort to eradicate polio, only in three countries is polio considered to be endemic and at risk of expanding to other countries, two of which are in the Asia-Pacific region: Afghanistan and Pakistan (Global Polio Eradication Initiative, 2015).[24] Yet, until polio is fully eradicated worldwide, all children need to receive a triple dose of the vaccine, as it can be transmitted and spread rapidly among non-immunized populations.

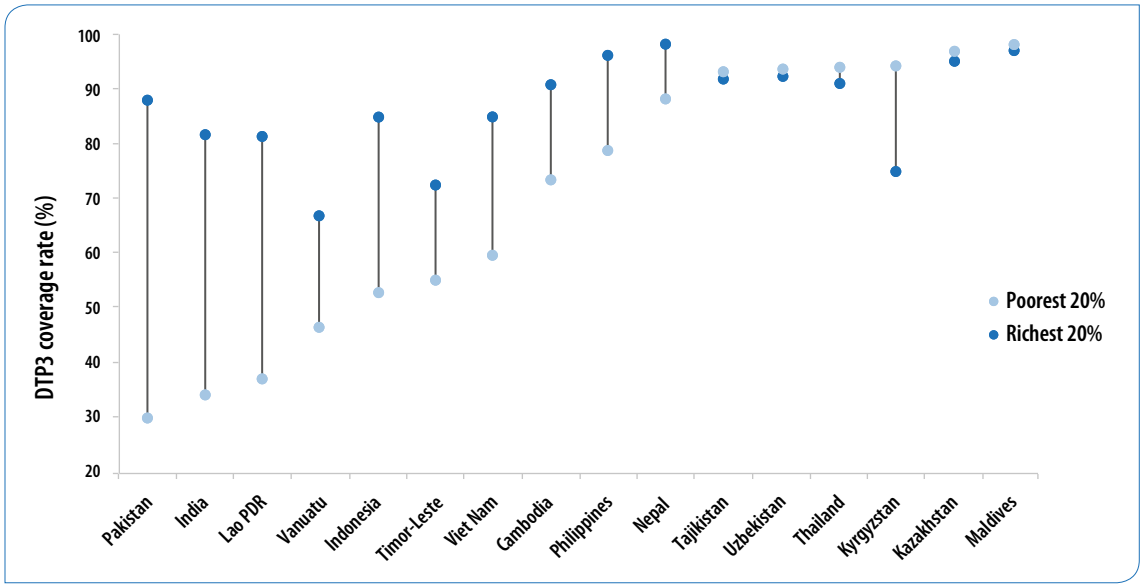
DPT3: In 2013, the coverage rate for the DPT vaccine in the region reached 89%, with some variation among countries. Although many countries have coverage rates greater than 90%, in a few it remains quite low, including the Marshall Islands (36%) and Viet Nam (59%). Between

24 Nigeria has been polio-free for one year (as of July 2015), but needs to remain polio-free for two more years in order for polio to be no longer endemic to the country. In 2013 and 2014, a few other countries in Africa and the Middle East reported cases and remained vulnerable to the international spread of polio. As a result, a Public Health Emergency of International Concern (PHEIC) was declared in May 2014 and focused actions in Afghanistan and Pakistan (WHO, 2015b).

1999 and 2013, some of the region's poorest countries achieved the most change. Afghanistan, Cambodia, DPRK, Lao PDR and Timor-Leste began the period with less than half of 1-year-olds receiving three rounds of the DPT vaccine, and increased vaccination rates by more than 50%.

Poverty is often a factor in determining access to basic health services, including vaccinations. In many countries, children from the poorest families are less likely to receive the full vaccination protocol by the end of their first year. Among the 16 countries depicted in Figure 4, those countries with the lowest immunization coverage rate for the poorest families have large gaps in immunization provision between poor and rich families. Countries in Central Asia have highly equitable coverage, with the exception of Kyrgyzstan.

Figure 4: Immunization equity, by wealth quintile, most recent year available



Notes: DTP3 coverage rate is the percentage of 1-year-olds who received three doses of the combined diphtheria, tetanus toxoid and pertussis (DPT) vaccine in a given year. Disaggregated data provided by DHS and MICS available only for countries shown. Most recent year is 2005 for India and Thailand; 2006 for Uzbekistan; 2007 for Vanuatu; 2009 for Maldives and Timor-Leste; 2010 for Cambodia, Kazakhstan and Viet Nam; 2011 for Lao PDR and Nepal; 2012 for Indonesia, Kyrgyzstan, Pakistan and Tajikistan; and 2013 for the Philippines.

Source: WHO (2015c).

Stunting during early childhood[25]

The quality of a child's early nutritional status is linked to future survival and physical health as well as cognitive development. Early childhood stunting is caused by chronic poor nutrition and repeated and prolonged bouts of diarrhoea. Despite considerable progress in the past 15 years, child malnutrition remains unacceptably high across the world, with about one in four children suffering from moderate or severe stunting (UNESCO, 2015d).[26] South Asia is among the world's regions where stunting is most prevalent (along with Eastern and Southern Africa), with 38% of

25 This section is based on Stevens et al. (2012) which are needed to assess all levels of mild to severe undernutrition. We aimed to estimate trends in the distributions of children's anthropometric status and assess progress towards the Millennium Development Goal 1 (MDG 1 and most recent data from (UNICEF et al., 2014) unless otherwise noted.

26 Moderate and severe stunting – when children are short for their age, as measured against a height-forage scale – is a robust indicator to measure the effects of cumulative child malnutrition.

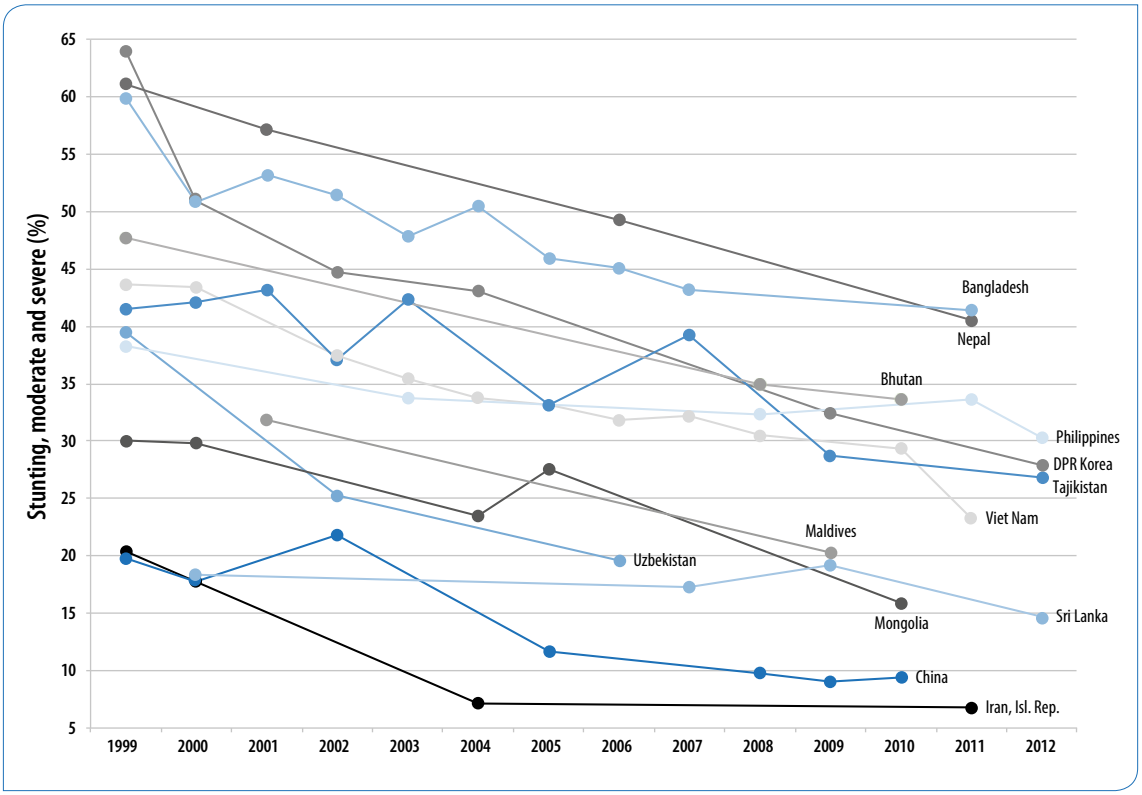
children considered stunted in 2013 (UNICEF, 2014c).[27] Rural children are more likely to be stunted than urban children (UNICEF, 2015b).

Since the mid-1980s, Asia has experienced the largest absolute reduction in the prevalence of moderate and severe stunting.[28] The region included countries with extremes in improvements and stagnation relative to the rest of the world. Panels A and B of Figure 5 show trends in stunting rates in the region since 1999. Panel A shows countries where stunting rates fell by at least 20% during the 1999-2012 period. Stunting rates declined by two-thirds in the Islamic Republic of Iran, and more than half in China, the Democratic People's Republic of Korea (DPRK, hereafter) and Uzbekistan. The large fall in China – from 38.3% in 1987 to 9.4% in 2010 – accounted for much of the region's absolute reduction.

Three of the world's countries with the highest stunting rates are in Asia: Afghanistan, Bangladesh and Timor-Leste. Although Bangladesh experienced a large decline from 70.9% in 1986, more than 40% of children experienced moderate or severe stunting in 2011. Panel B shows countries with little change or increases in stunting rates since 1999. Among those countries, at least 40% of children are stunted in Cambodia, Lao PDR, Papua New Guinea, Pakistan and Timor-Leste.

Figure 5: Stunting trends, 1999–2012

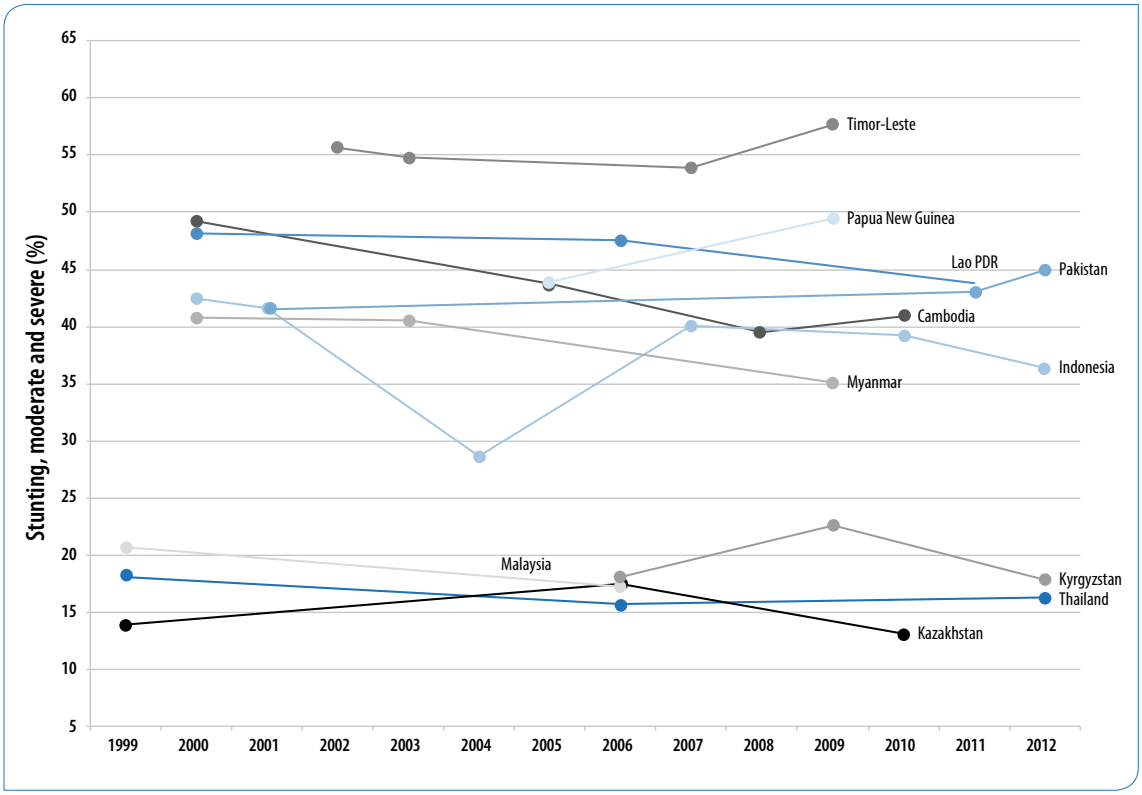
Panel A: Countries with a declining trend



27 The UNICEF South Asia region includes Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka.

28 Asia is defined as South Asia and East and South-East Asia in (Stevens et al., 2012) which are needed to assess all levels of mild to severe undernutrition. We aimed to estimate trends in the distributions of children's anthropometric status and assess progress towards the Millennium Development Goal 1 (MDG 1) (see Supplementary Appendix for countries included in each region).

Panel B: Countries with a stagnant or increasing trend



Notes: Countries selected on the basis of having at least two data points, with the most recent as of 2008, and the second during the 1999-2008 decade. In Panel A, data for 1999 was not available and the nearest year available was used: 1998 for the Islamic Republic of Iran, the DPR Korea, China and Nepal; 1997 for Uzbekistan; and 1993 for the Philippines. In Panel B, 1995 was used for Thailand.

Source: (UNICEF et al., 2014).

2.3 Developmental delays and disabilities in early childhood

Early childhood links to developmental delays and disabilities

The Convention on the Rights of the Child (CRC) and the Convention on the Rights of Persons with Disabilities (CRPD) protect children with disabilities, who have the same rights as all other children to access basic services (health care, education, social protection) and to receive adequate protection and support for positive growth and development (WHO and UNICEF, 2012). Preventative and inclusive ECCE programmes can help mitigate the effects of disabilities and reduce stigmatization in the community (Lata, 2015). Children with disabilities are more likely to survive, learn and become participatory and productive individuals if they are given the essential tools to develop to their full potential.

Poverty is both a cause and consequence of disability. Very young children living in poverty are more susceptible to poor nutrition (in utero as well), micronutrient deficiencies, debilitating illnesses and infections that can lead to developmental problems. Higher income has emerged as the only protective factor against poor cognitive development in a study in Pakistan (WHO, 2012). Disability is considered one of the least visible barriers to education for many children and exclusion is often the consequence of such invisibility. Children with disabilities are likely to have less access to essential health, education and protection services: they may end up missing

out, for example, on immunizations and basic treatments for childhood illnesses. Children with disabilities are also less likely to enrol in ECCE programmes, even though such programmes can provide important support for children and their families to improve learning and development (WHO and UNICEF, 2012). The lack of appropriate support for children with disabilities can increase the likelihood of poverty during adulthood.

Identifying children with disabilities

Although many countries are collecting data on disability using a variety of data sources (e.g. censuses, national or international household surveys, targeted surveys), there are many challenges in producing comparable and reliable cross-country data, including the lack of consistent definitions and the quality of data collection instruments. Much underreporting of disability occurs even at the individual/household level for various reasons (including the urge to avoid stigmatization). Defining the term disability for children is not straightforward and surveys for children often use questions developed to survey adults, or else feature general screening tools for children of all ages. In low- and middle-income countries, children with disabilities might not be identified through the regular medical and school screening tools available in more formal settings. These challenges, among others, renders data collection on children with disabilities complicated, thereby limiting the ability to draw valuable conclusions for policy and programming development (Cappa et al., 2015).

Given these challenges, the prevalence of developmental delays and disabilities in early childhood is not well known. At an international level, experts tended to agree on a working approximation, of 'a minimum 2.5% of children aged 0-14 years with self-evident moderate to severe levels of sensory, physical and intellectual impairment', but this low level has been questioned in recent years (UNICEF Innocenti Research Centre, 2007). The World Health Organization (WHO) estimated that an average 5.1% of children in that same age group have a moderate or severe disability (based on 2004 data) (WHO, 2011b). Disability screening during the MICS3 surveys in low and middle-income countries (2005-2006) found a median 23% of children ages 2-9 years old had a disability. Four countries in the Asia-Pacific region were included and, unlike most other estimates, these cross-country results are reliably comparable: Bangladesh (21%), Mongolia (26%), Thailand (15%) and Uzbekistan (3%) (Gottlieb et al., 2009) UNICEF has recommended that countries include the Ten Questions screen for disability in the MICS.

2.4 Access and participation in early childhood care and education

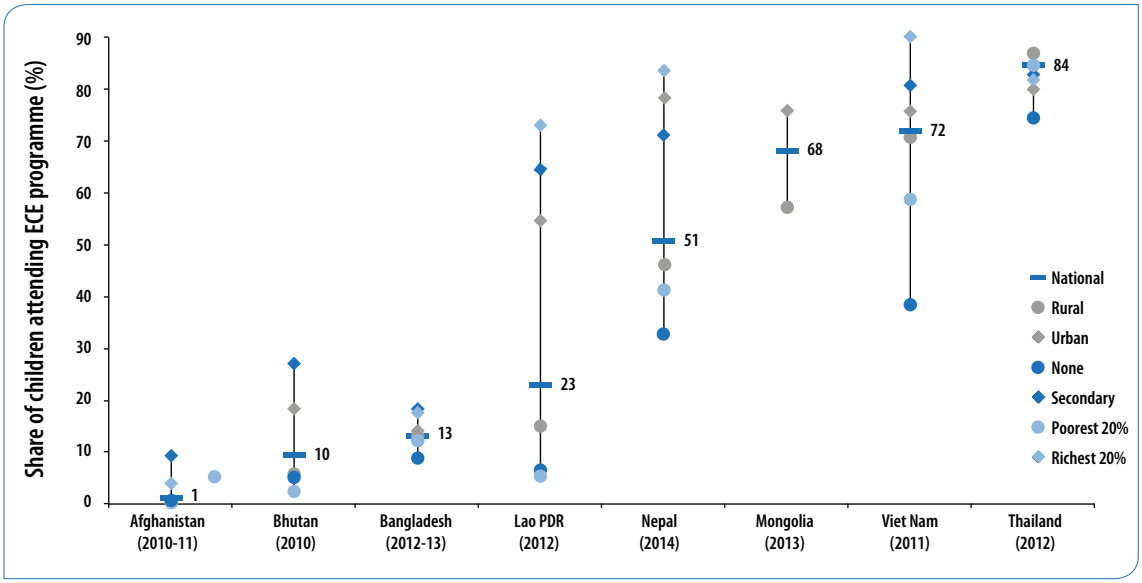
ECCE participation among various population groups

UNICEF's MICS provides cross-country data on children aged 3 and 4 years attending early childhood learning programmes.[29] Figure 6 shows the share of 3 and 4-year-olds attending early childhood education (ECE) programmes in eight Asia-Pacific countries based on their mothers' reporting. The average level of attendance in early childhood programmes varies from 1% in Afghanistan to 84% in Thailand. The level and extent of inequity in attendance varies by residence, mother's education level and household income. Mothers who have a higher level of education

29 This definition includes a broader variety of programmes which might not fall under the scope of ISCED 0 (see Section on Terminologies and definitions and following subsection).

are more likely to have their children participate in ECE in all countries. In Nepal, 33% of children with mothers who have no formal schooling attend an ECE programme, compared to 71% of children with mothers who have some secondary education. This difference is much smaller – around 8 percentage points – in most countries with very low or very high average attendance (i.e. Afghanistan, Bangladesh, and Thailand). Although Bhutan has a low national average (10%), children from the wealthiest households or with mothers who have some secondary education are nearly three times more likely to attend an ECE programme. Wealth disparities are prevalent in all countries, with children from the richest 20% of households attending more than children from the poorest families.[30] The widest disparity in ECE attendance by wealth has been documented in Lao PDR, where children from the richest families are nearly 14 times more likely to attend (73% compared to 5%).

Figure 6: Attendance in early childhood education programmes (3 to 4 years old), 2010–2014



Notes: ECE is early childhood education. None and secondary correspond to the highest level of mother's education. Share of children attending among 3 and 4-year-olds. Dates of the national MICS survey are indicated after the country name. Only urban/rural disparities were available for Mongolia and Viet Nam.

Source: UNICEF (various years).

Enrolment in pre-primary education

International comparative data on pre-primary education are collected on a regular basis from administrative data on programmes regulated or recognized by the government, based on the definition of the International Standard Classification of Education (ISCED) level 0 (see Section on Terminologies and definitions). The coverage of enrolment data is usually limited to formal pre-primary education programmes, which are privately or publically operated and managed. A variety of formal and informal education programmes are not always monitored by this administrative data, however, although national data collection efforts are improving.

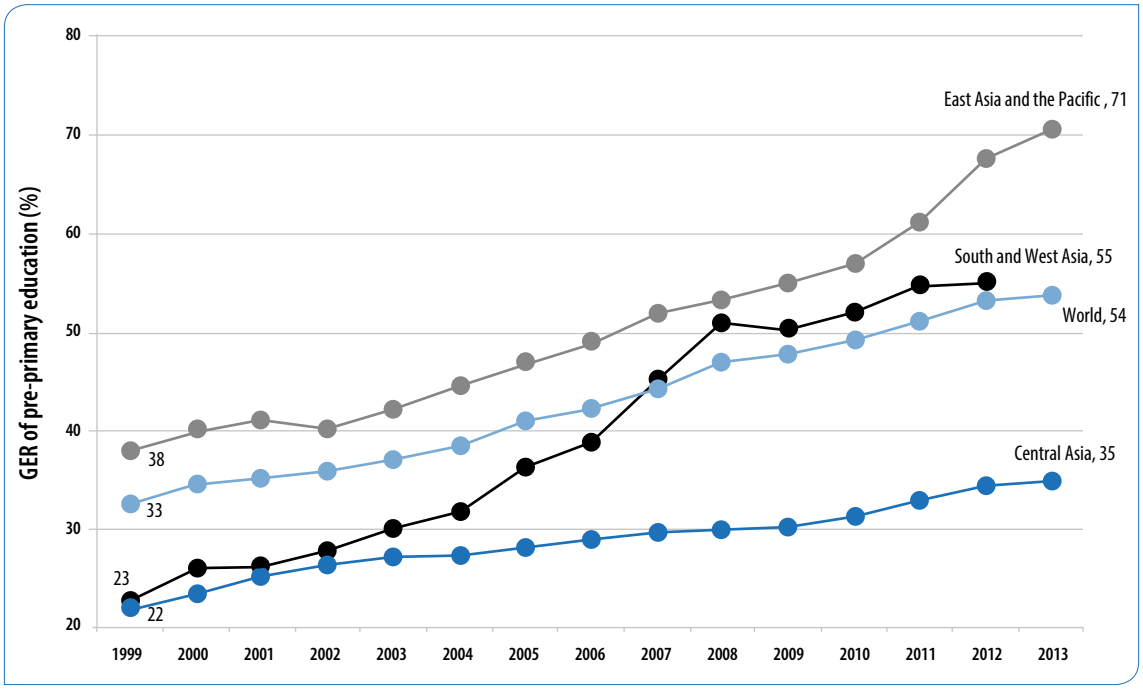
During the EFA period, an additional 69 million children were enrolled in pre-primary education around the world. The total enrolment in pre-primary education in the Asia-Pacific region increased by 83% from 59.5 million to 108.8 million between 1999 and 2012. Two-thirds of this increase

30 Thailand is an exception among these countries, as children from richer families are less likely to attend ECE programmes. However, it is not documented whether the 3% difference is statistically significant.

occurred in South and West Asia, where 32.3 million more children were enrolled relative to 1999. The remaining third of the increase occurred in East Asia and the Pacific, where 16.4 million more children were enrolled. Rates in Central Asia remained relatively constant and at a much smaller scale than in the other regions, with about a total of 1.8 million children enrolled in 2012.

The gross enrolment ratio (GER) in pre-primary education provides a more relative measure by accounting for population differences among regions. In 1999, about one in three children attended pre-primary education, and most of these were in high-income nations. During the review period, the GER increased in all Asia-Pacific regions at a relatively steady pace (Figure 7). The largest increase occurred in East Asia and the Pacific, where the GER increased from 38% in 1999 to 71% in 2013. The GER of Central Asia remained quite low in 2013: nearly 20 percentage points below the world average. The fastest period of growth in South and West Asia occurred between 2004 and 2008, while East Asia and the Pacific has been experiencing a more rapid growth period in the past four years.

Figure 7: Gross enrolment in pre-primary education, by region, 1999–2013

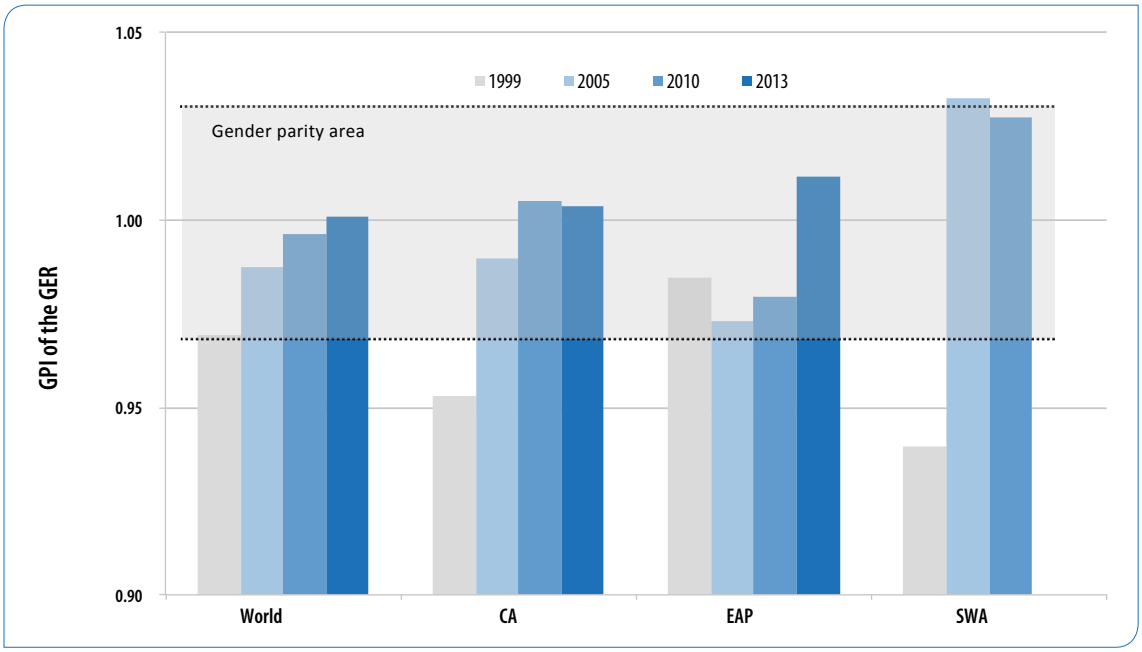


Note: GER is the gross enrolment ratio in pre-primary education.

Source: UIS (2015).

Gender parity in pre-primary enrolment has been reached in all subregions. The improvement was most notable in South and West Asia, where girls were less likely to be enrolled in 1999 (Figure 8). In 2013, this region also has the highest gender parity index (GPI), at the limit where boys would be disfavoured if the GPI grew (1.03).

Figure 8: Gender parity in pre-primary education, by region, 1999–2013



Notes: GPI is the Gender Parity Index. GER is the gross enrolment ratio in pre-primary education. Parity is considered reached when the GPI is greater than 0.97 and lower than 1.03. Data unavailable to distinguish between East Asia and the Pacific sub-regions.

Source: UIS (2015).

Private provision of ECCE

Across the world, 30% of total enrolment occurs in privately managed ECCE programmes (where public investment can still occur). The actual extent of private investment in ECCE is probably much higher, however, as privately run programmes usually are not required to report enrolment rates and can operate informally in many countries. Many programmes for children under age 3 are also not yet included in the international monitoring mechanism (ISCED, see Terminologies and Definitions).

In the Asia-Pacific region, the level of private enrolment ranged from 4% in Central Asia to 51% in East Asia and the Pacific in 2013 (as measured by the percentage of total enrolment in pre-primary education in private institutions).[31] When countries are categorized by income groups, the extent of private enrolment becomes less varied. In low-income, middle-income and upper-middle-income countries, the percentage of private enrolment was between 29% and 38% in 2013. Private enrolment in lower-middle-income countries was just under 20% of total enrolment in 2011.

The creation and expansion of private ECCE programmes has been instrumental in increasing the enrolment capacity for young children in many countries since 1999. Figure 9 shows the evolution of private enrolment in countries with low starting points (Panel A) and higher starting points (Panel B) in 1999. In 2013, at least 90% of all ECCE enrolment was in the private sector in Indonesia, the Islamic Republic of Iran, Macao (China), the Maldives, New Zealand, Samoa, Tonga and Vanuatu.

Private ECCE enrolment doubled during the 1999-2013 period in East Asia and the Pacific, but remained relatively constant in the other sub-regions. Some countries showed dramatic increases from little or no private provision (Figure 9, Panel A). In China, private provision increased from 30%

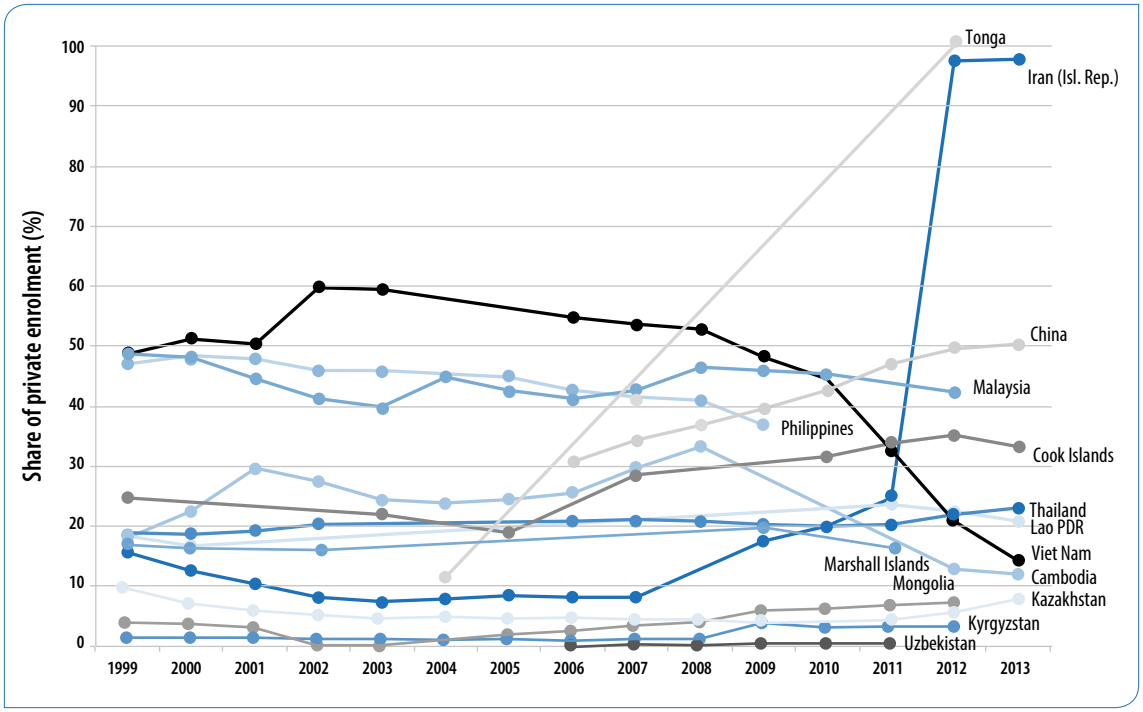
31 The latest available figure recorded for South and West Asia was 13% in 2004.

in 2006 to 50% in 2013. In Tonga, all ECCE provision was privately held in 2013, compared to 11% in 2004. The Islamic Republic of Iran – along with Tonga – experienced one of the largest increases in the Asia-Pacific region, from 16% to 98% by 2013.

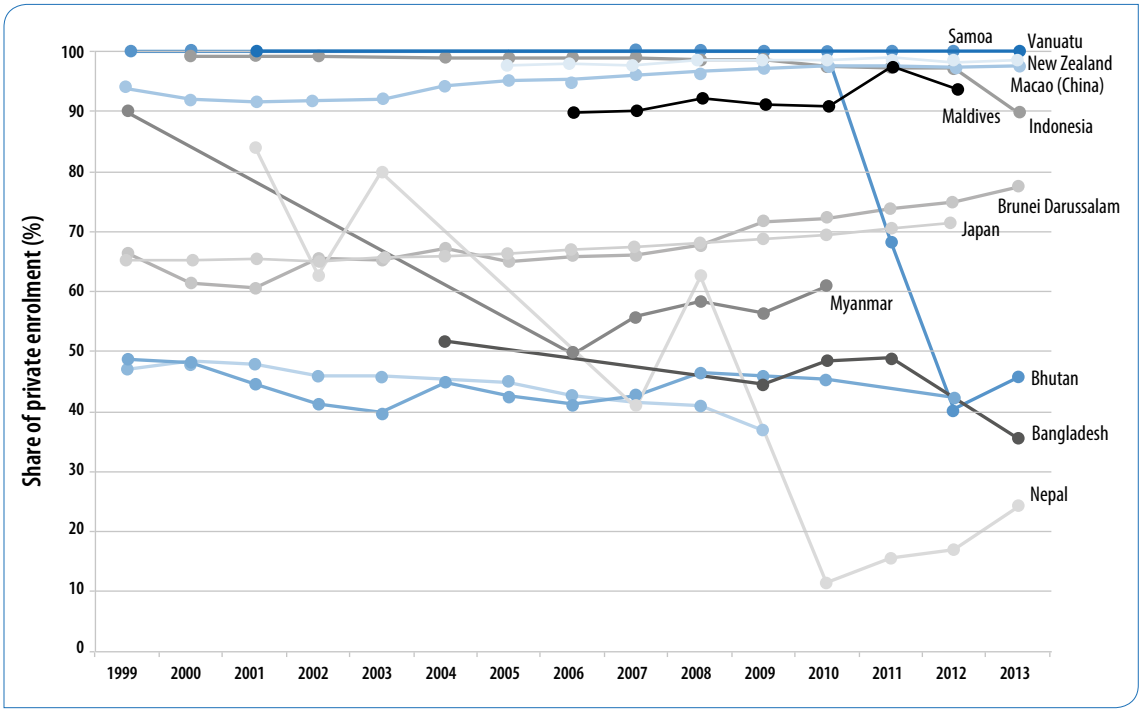
Many countries also reduced the relative importance of private provision, as the public sector increased investment in state-owned ECCE centres (Figure 9, Panel B). In Nepal, for example, 84% of enrolment was in private ECCE centres in 2001, compared to only 26% in 2013. Bhutan and Myanmar also experienced large declines, 54% and 32% respectively, in the share of private enrolment.

Figure 9: Changes in private enrolment in Asia and the Pacific, 1999–2013

Panel A: Countries with low private enrolment, 1999–2013



Panel B: Countries with high private enrolment, 1999–2013



Notes: Countries selected on the basis of having at least two data points, with the most recent as of 2008, and the second during the 1999–2008 decade. Twenty-nine countries of the 48 had data available for this analysis. Low private enrolment refers to less than 50% total enrolment in the private sector in 1999. The year 2014 was used instead of 2013 for Palau (Panel A) and Nepal (Panel B).

Source: UIS (2015).

2.5 ECCE programme quality

Monitoring ECCE programme factors which impact quality – including curriculum, pedagogical practices, in-service training, and work conditions for ECCE staff – can provide important information on how to improve quality in ECCE programmes with the objective of increasing child development outcomes (OECD, 2012). Many measures of quality are linked to systems inspections, self-evaluations and monitoring adherence to regulatory frameworks, and these functions are often underdeveloped in many low-income countries or countries with emerging ECCE systems (OECD, 2015). Moreover, measuring critical quality features – child development outcomes and staff-child interactions – is often linked to individual observations in the classroom.

Most indicators of ECCE quality are not yet reliably available for cross-country comparisons at a population level. The pupil/teacher ratio and the share of trained teachers are currently used as proxies for measuring quality at an international comparative level (for example in the UNESCO EFA Global Monitoring Reports), even though few countries report this data systematically (see Section 2.1 on progress being made in this area).

- Pupil/teacher ratios intend to approximate process quality around caregiver-child interactions. In theory, teachers with large classrooms are considered less able to focus on effective learning techniques and follow individual student needs. In smaller class sizes, children have more opportunities to speak up during one-on-one or small-group interactions with other children and ECCE staff so as to understand the rules, establish limits and make plans for play, for example. In practice, however, the importance of the staff-child ratio or group size may not be very indicative of process quality depending on the cultural traditions and beliefs

(Tobin et al., 2009). Children's learning outcomes vary depending on other quality criteria, such as staff competencies to establish meaningful interactions with children, the ability to propose smaller group activities and the skills to facilitate meaningful child-child interactions (Montie et al., 2006).

- The share of trained teachers is indicative of the quality of interaction, experience and support provided in the classroom. Initial education and training in areas such as early child development and early education increase the likelihood that practitioners are effective in promoting the educational, socio-emotional and healthy development of children. More specialized staff education and training on ECCE as well as other elements of staff quality include staff's content (curriculum) knowledge and their ability to create a multidisciplinary learning environment (Shonkoff and Phillips, 2000).

ECD outcomes have only recently begun to emerge as a cross-country measure of the status of children at a population level. The most widespread indicator currently available is the Early Childhood Development Index (ECDI), which is administered through UNICEF's MICS in the Questionnaire for Children under Five in the ECD Module. The ECDI was first introduced in 2009 during the MICS round 4 and has been available in subsequent survey rounds, with nearly 90 countries incorporating this measure into their national or subnational MICS.[32] It is composed of 10 items in four early developmental domains – language/cognitive, physical, social-emotional and approaches to learning. The ECDI is one of the first international population-based measures of early childhood development that can be applied in low- and middle-income countries.

The Hong Kong Early Child Development Scale and the East Asia-Pacific Early Child Development Scales (EAP-ECDS) are new measures of child development being validated and implemented in the region. They are described in more detail in Section 4.5.

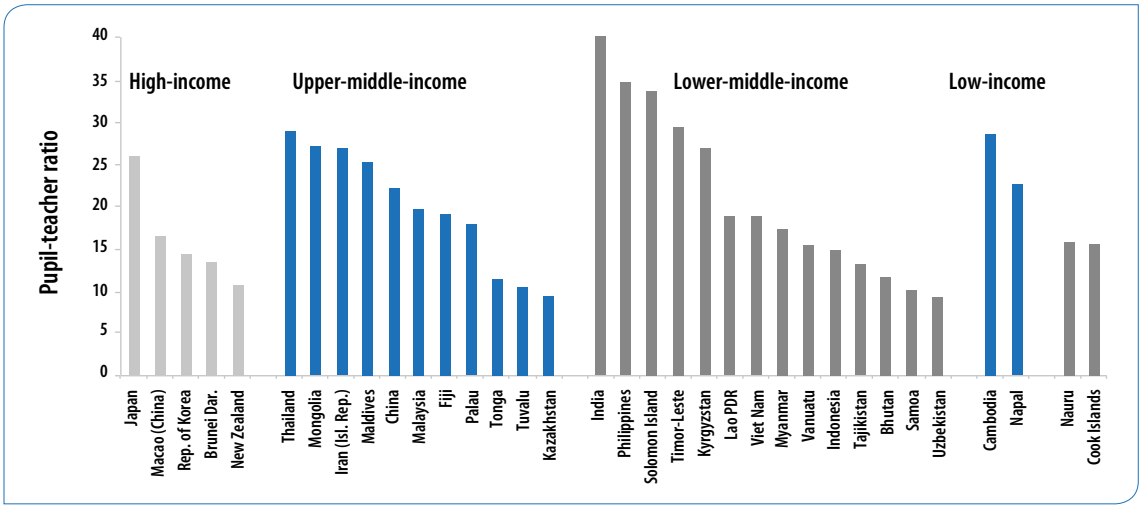
Pupil/teacher ratios

The pupil/teacher ratios (PTR) in pre-primary education vary across and among the Asia-Pacific subregions. Central Asia boasts the lowest ratio at around 10 pupils per teacher. The EAP ratio dropped from 26:1 in 1999 to 21:1 in 2013, while the ratio in South and West Asia increased from 32:1 in 1999 to 37:1 in 2005 (more recent data are not available).

Pupil/teacher ratios vary across the region and also within income groups (Figure 10). The five countries in the higher income group have lower overall median PTR (14.3) as opposed to the other income groups, compared to 19.6 in the upper-middle-income group and 18 in the lower-middle-income group. The two poor countries with relevant data – Cambodia and Nepal – have PTRs greater than 20.

32 MICS Round 4 was rolled out between 2009 and 2012 and MICS Round 5 began in 2012. MICS Round 6 is currently being prepared.

Figure 10: Pupil/teacher ratio, by income group, most recent year available



Notes: Only countries with data as of 2006 are included. World Bank income groups are from July 2015. Nauru and Cook Islands are not classified by the World Bank.

Source: UIS (2015).

Trained teachers

Twenty-one of the 48 countries in the Asia-Pacific region report data on the share of trained teachers among all ECCE teachers (UIS, 2015).[33] Cambodia, the Marshall Islands, Tonga, Tuvalu, Uzbekistan and Viet Nam report that more than 95% of all ECCE teachers are trained. Only a few reporting countries have rates around or lower than 50%, such as Kyrgyzstan (46%), the Solomon Islands (51%) and Vanuatu (48%).

In most countries, there is a paucity of data regarding the qualifications and training quality of ECCE staff (Kim and Umayahara, 2010). Some countries collect more detailed information on teacher training – such as differentiating between pre-service and in-service training and staff hierarchy levels – to better monitor trends in teacher training. Nepal's Department of Education reported in 2011 that all pre-school teachers had completed pre-service training and completed regular in-service training (World Bank, 2013a). In Samoa, the government identified teacher pre-service training and qualifications, as well as the unqualified status of assistant staff (World Bank, 2013b). Qualifications for different ECCE programmes can vary within a country and ECCE staff often have varying levels of teaching experience. In the Republic of Korea, public kindergarten teachers have an average of 18 years of teaching experience, compared to 8 years for private teachers and 4 years for child care workers (Park et al., forthcoming).[34]

In the Asia-Pacific region, many countries lack sufficiently trained teachers in pre-primary education. Training is not uniform in content (even within countries), standards for teacher deployment and management are not always well-defined and trained teachers do not necessarily want to teach in the most remote or underdeveloped areas (UNESCO and UNICEF, 2012). The paucity of trained teachers means that in some countries teachers are hired without meeting minimum requirements. This is the case in Vanuatu, where some teachers have not received ECCE training before working with children (World Bank, 2012a). Rural pre-schools in China are unable to hire

33 Since countries have different standards, this indicator reports against national standards and limits comparability across countries.

34 See also Section 6.2.

teachers with qualifications that meet government requirements. In some countries, the private sector remains unregulated and can hire freely, such as in India (Rao and Sun, 2010).

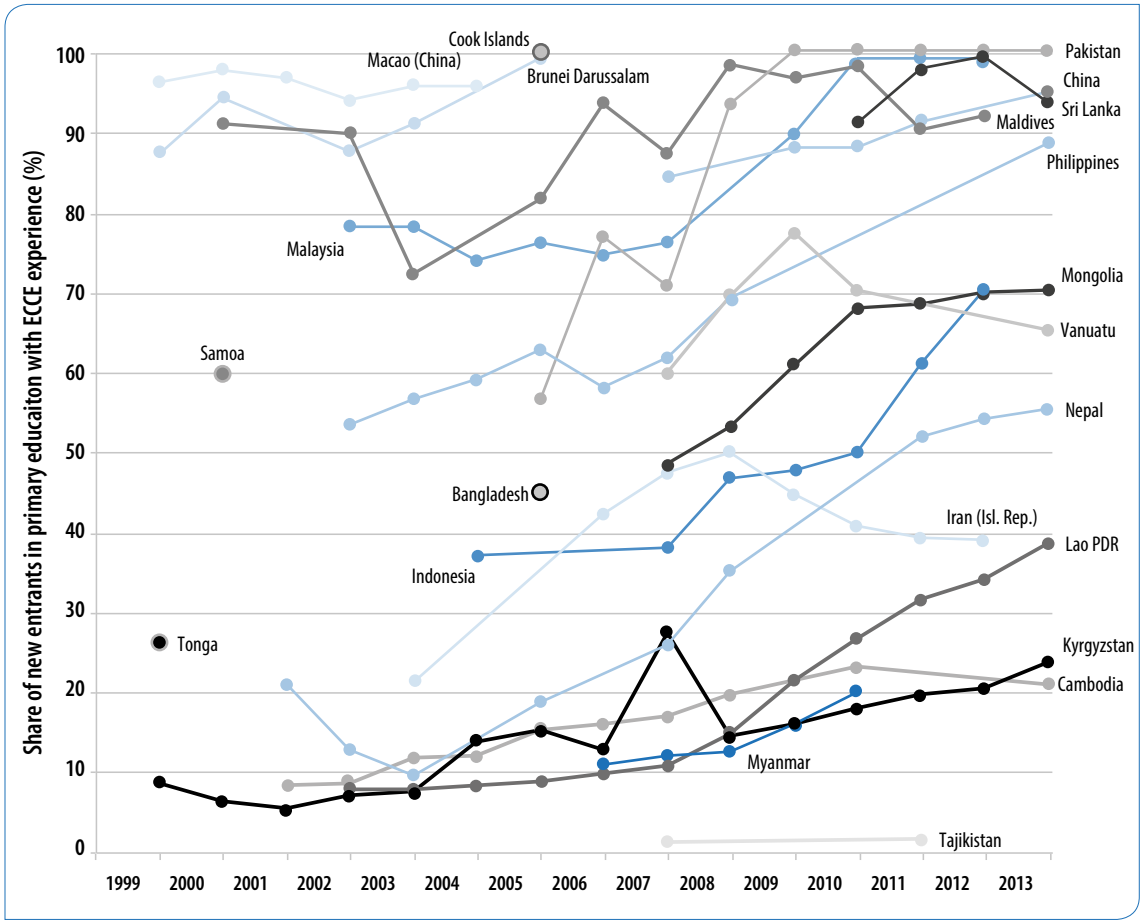
2.6 Preparation and transition to primary education

New entrants in grade 1 with ECCE programme experience

The role of ECCE programmes in preparing children for entry and completion into primary education is a broad concern for the education system. 'School readiness' is a term which embodies three aspects that work together to improve the transition from ECCE to primary education: preparing children ('ready children'), preparing families ('ready families') and preparing primary schools ('ready schools'). By considering the interactions of these three dimensions, children are better prepared to learn in school and more likely to succeed in completing primary education. An essential factor for preparing 'ready children' is the holistic development of the child during the early childhood years, which can be supported by high-quality ECCE programmes (Britto and Limlingan, 2012).

An approximate measure of school readiness at the international level is the share of new students in the first grade of primary education who have attended an ECCE programme. In the Asia-Pacific region, several countries have increased the share of children with previous ECCE experience during the 1999–2013 period (Figure 11). Cambodia, the Islamic Republic of Iran, Kyrgyzstan, Lao PDR, Myanmar, Nepal and Tajikistan started the period with less than one quarter of children entering the first grade with some prior ECCE programme attendance. By 2014, 11 countries in the region had more than half of all children entering the first grade with some ECCE experience, three more than in 1999.

Figure 11: ECCE experience in Grade 1 students, 1999–2013



Source: UIS (2015).

2.7 National ECCE governance and policies

About half the countries in the Asia-Pacific region have established national ECCE policies, policy frameworks or strategic action plans (examples available in Annex 4).[35] These documents usually encompass various sectors working with children, including education, health, nutrition, social welfare, sanitation and child protection. Although most national policy documents highlight the holistic nature of ECCE, few are comprehensive across all child development areas and age groups. Many focus primarily on health and education, leaving less attention to the other aspects of early childhood development, such as sanitation and hygiene (Vargas-Barón, 2015a). Children from birth to age 3 years are notably included mostly under the health aspects of these national policy documents (Rao and Sun, 2010; UNESCO Bangkok, 2013b). Reaching out to marginalized populations has been central to many plans, although implementation has been slower to show progress and inclusive education remains a primary challenge for ECCE policy (Vargas-Barón, 2015a).

Having a national ECCE policy document is a first step towards coherent and effective planning and implementation of ECCE provision, but it requires a well-developed strategic plan to follow up on the policy expectations. Specifically, implementation of the national policy document and

35 This report identified ECCE plans as available in secondary sources, including national EFA reviews, UNESCO, UNICEF and World Bank documents. See sources in Annex 4 for more detail.

investment in the delivery of expected services are requisites to enabling ECCE policy development. The Philippines legislated a national ECCE system, which covers health, nutrition, early education and social protection for children from birth to age 4 years (Government of the Philippines, 2014). Pakistan supported its clear national ECCE policy by establishing national standards for ECCE centres, curricula and teacher training, which are more commonly available in ECCE systems in high-income countries (Government of Pakistan, Ministry of Education, Trainings and Standards in Higher Education and Academy of Educational Planning and Management, 2014).

The implementation of ECCE policy documents can be stalled for a variety of reasons, as in Kiribati, where a 2010 ECCE Policy document was still not implemented in 2014 (Kiribati EFA 2015 Review Report, 2014). In Kyrgyzstan, the development of a multisectoral ECD strategy was abandoned owing to political change and a lack of motivation among relevant ministries (World Bank, 2013c). Papua New Guinea's ECCE policy was approved by the government in 2007, but in 2013 the Vice Minister for Education noted that 'a gap remains in services that address the developmental as well as the survival needs of children under 6 years old' (Siniwin, 2013, p. 2). Implementing a multisectoral ECCE policy requires a strong government commitment to integrating ECCE as part of the broader socio-economic development agenda (Kim, 2013).

Most countries are organized in a fragmented sector-based approach to provide services to families and children, usually according to women (alternatively also under family and youth), health or education sectors. In many countries, ministries have different goals and targeted outcomes, resulting in the dispersion of services for children and gaps in provision. Innovative, integrated strategies that address multiple factors of disadvantage would better address the complex needs of vulnerable children and their families, but social systems are rarely set up to deliver services in that manner (Leseman, 2015). This fragmented governance of ECCE services is a critical issue that can perpetuate years of social exclusion (Bennett, 2012; Vargas-Barón, 2015a). Fully integrated ECCE systems to coordinate, manage or finance public services for young children are rare in the Asia-Pacific region (Shaeffer, 2015; Vargas-Barón, 2015a). New Zealand and Viet Nam opted to integrate all childcare and early education services within the education sector; and the Republic of Korea is currently exploring ways to integrate ECCE services to improve quality for all children (see Section 6.2) (Kaga et al., 2010; Park et al., forthcoming; UNESCO Bangkok, 2013b).

The introduction of compulsory pre-primary education aims to increase ECCE participation and children's readiness for primary education, as well as adjust for equity issues. For example, the introduction of a compulsory education law in 1999 in Kazakhstan was linked to an increase in pre-primary enrolment and a reduction of the gap in participation between the richest and poorest families (UNESCO, 2015d). Only seven countries in the region have established such policies or legislation, although the information is difficult to access for many countries and the extent of implementation is not always known (Table 1).

Table 1: Compulsory pre-primary education laws, 2015

Country	Year law was enacted	Age at which compulsory education begins	Number of years of compulsory pre-primary education
Central Asia			
Kazakhstan	1999	5	1
Tajikistan	2004	5	2
East Asia			
Brunei Darussalam	1979	5	1
DPRK	2012	5	1
Macao, China	1995	5	1
Philippines	2012	5	1
Pacific			
(no country)			
South and West Asia			
Sri Lanka	1997	5	…

Notes: … : not available;

DPR Korea: 'In the 6th session of the 12th Supreme People's Assembly held on September 25, 2012, the DPRK Supreme People's Assembly adopted the law 'On the Introduction of the 12-year Compulsory Education System' as an important measure which embodies the Party's lofty outlook on the rising generations and future' (Education Commission, DPRK, 2014, p. 15). Compulsory pre-primary education being part of the 12-year Compulsory Education System, 2012 is therefore indicated in the table above as the year the law was enacted.

Tajikistan: Reports differ on the compulsory nature of pre-school education, as there is low coverage and 90% of children enter primary school without any pre-school experience (Government of the Republic of Tajikistan, 2012; UNICEF, 2013). The SABER report indicates that it is free for children from low-income families (World Bank, 2013d).

The EFA Global Monitoring Report 2015 further lists the Islamic Republic of Iran and Myanmar as having compulsory pre-primary education law, however this is not confirmed by those countries' Education for All 2015 National Reviews.

Islamic Republic of Iran: 'It is worth noting that pre-primary education is not mandatory and thus not all children undergo this mode of education.' (Islamic Republic of Iran, 2014, p. 15).

Myanmar: A 2014 official report (Comprehensive Education Sector Review – phase 2) included 'introduce fee-free compulsory quality kindergarten for all 5-year-old children' (The Government of the Republic of the Union of Myanmar, Ministry of Education, 2014, p. 63) among its recommendations. Then the 'Early Childhood Care and Development (ECCD) Bill' was enacted in February 2014. The law is mainly concerned with systematic provision of ECCE services for children aged 0–8 years old, and bylaws are being drafted' (The Government of the Republic of the Union of Myanmar, Ministry of Education, 2014, p. 9). Systematic provision does not imply compulsory pre-primary education.

Sources: Education Commission, DPRK (2014); Islamic Republic of Iran (2014); National Report Education for All in the Republic of Tajikistan Mid-Term Review (2000 – 2005) (2007); The Government of the Republic of the Union of Myanmar, Ministry of Education (2014); UNESCO (2015c).

2.8 ECCE Financing

Monitoring total investment in ECCE is a difficult task owing to the myriad of programmes, services, structures and sectors which can be included under the ECCE umbrella. This proxy is complicated by the fact that the duration, intensity and quality of programmes as well as the size of the target population vary from country to country.

Another question – namely, who pays for ECCE? – is an important and complex point to be determined within each country. Usually, ECCE is financed through a combination of public and private sources, which can include households, community groups, NGOs, private providers and corporations. The share of household expenditures among total expenditures varies from

country to country. Parents' fees can contribute to operations, teacher salaries and infrastructure development, as well as meals, uniforms, textbooks and other supplies (Denboba et al., 2015). Public expenditures (local, state, national) are difficult to identify as budget lines in other sectors (e.g. health, women, and economic development) are not always earmarked as ECCE-related expenditures. International donors also provide support to ECCE through general or programme-based support.

International comparative figures rely on public financing of pre-primary education which grossly underestimate total expenditures in ECCE. Twenty-six countries have data available on the level of public expenditure on pre-primary education as a percentage of GDP and as a share of government expenditure on education. The median of the share of GDP spent on pre-primary education is 0.11%, with values ranging from 0.02% in Fiji with highs of 1.1% in Palau and 1.3% in Mongolia (UIS, 2015).The median spending in pre-primary education as part of all education spending is, for the most part, extremely low with a median value of 2.7% among the 27 countries with data available.[36] Only three countries have shares greater than 10%: Palau (15%), Mongolia (24%) and Turkmenistan (28%).

Recently, several proposals for a minimum investment in early childhood have gained ground in the SDG 4 – Education 2030 agenda debate. UNESCO has recommended that 10% of total public education expenditure be dedicated to pre-primary education and that 6% of GNP be spent on all public expenditures on education (UNESCO, EFA GMR, 2013). Since the UNESCO proposal also suggests that 20% of total government expenditure should be on public expenditure on education, it has led to the baseline proposal that 2% (or 10% of the 20%) of total government expenditure be spent on pre-primary education.[37]

36 Includes Cook Islands in addition to the previous 26.

37 Based on the Addis Ababa Action Agenda, Education 2030 recommends 4%-6% of GDP and/or 15%-20% of total public expenditure on education (UNESCO, 2015c). In 1995, the European Commission on Childcare recommended spending 1% of GDP (Bennett, 2004).

3 Successful ECCE policies and programmes in Asia and the Pacific

The Asia-Pacific region spans a wide panoply of ECCE programmes and policies, and examples of good practices abound. This Section identifies those policies and programmes operating across or within countries which have addressed the main challenges of ECCE; namely, improving access and equity, quality, governance, financing or monitoring. The Section is based on strategies identified in the national EFA reviews (Annex 3), but also from a variety of policy documents highlighting innovative schemes to improve ECCE policy and programming. While the policies and programmes highlighted have been identified as producing a good impact, most have not been evaluated or studied with a rigorous experimental framework. There is a dearth of robust evidence and evaluations on ECCE programme efficacy in developing Asia-Pacific countries. This Section intends to be indicative rather than comprehensive and prescriptive, as many other valuable examples abound in the region.

3.1 Improving equitable access and participation to ECCE programmes

Expanding birth registration

The 2004 Birth and Death Registration Act in Bangladesh establishes a legal basis for mandatory birth registration, which has to be facilitated by service providers in the health and education sectors. It has been implemented comprehensively across the country, with annual campaigns and registration drives organized jointly by the education and health sectors, civil society, NGOs, and local government (Government of Bangladesh, Ministry of Primary and Mass Education, 2014). The rate of birth registration for children under age five increased from 9.8% in 2006 to 31% in 2011, with 101 million births recorded in the new system (UNICEF, 2014d).

In 2012, a Pakistani national technical agency responsible for identification (the National Database and Registration Authority) began issuing identity cards to orphans. This move was created to break the cycle of exclusion for children without birth certificates or other documentation reporting nationality status (Gelb and Clark, 2012). Before the new policy began to be implemented, orphans without proper national documentation would not be allowed to sit national school examinations, own a bank account, work in the formal sector or be allowed to vote. However, implementation of the policy has been slow (Gillani, 2014).

Improving parental support

National policies in the Asia-Pacific region have supported the inclusion of family- and home-based ECCE programmes to reach pregnant women, infants and toddlers in vulnerable environments (e.g. Australia, Bangladesh, Cambodia, Indonesia, Kazakhstan, the Maldives, New Zealand,

the Philippines, and Turkmenistan) (UNESCO and UNICEF, 2012). As an example, Cambodia's education strategy prioritized the expansion of ECCE for children from birth to age five (inclusive). The Early Childhood Home-based education programme operates mostly in rural and remote areas and targets children from poor families, indigenous groups and children with disabilities. It provides mothers with information on the nutrition, health, well-being and education of their children (from birth to age 5) in mother groups, which usually meet weekly, although this can vary. Although the quality of provision is still low, regular training, monitoring and evaluation aim to increase the capabilities of homecare givers. The programme involves joint planning with the Ministry of Health to increase access to and uptake of health services for children under age 6 years. Operating costs have remained low, but so have enrolment levels (Royal Government of Cambodia, 2014). Nonetheless, children whose mothers participated in the early childhood programmes performed better in developmental assessments than those who did not participate in any programme (Rao et al., 2012).

In Kyrgyzstan and Tajikistan, as in many other Central Asian countries, the dramatic reduction of ECCE programmes and closures of state kindergarten facilities has led to a vacuum of parental support services. Since the state was traditionally responsible for childrearing (especially during the Soviet era), parents do not have the competencies or confidence to support child development and provide early learning opportunities. In both countries, solutions involved bringing ECD information into the home. In Kyrgyzstan, a television cartoon called Magic Journey was locally produced to teach young children about school readiness skills and basic life experiences. Parents can also watch the daily 5-minute programme to obtain ideas of ECD activities and learn about how much children can learn in their own homes. The show is funded by the national government and external donors, including the Soros Foundation, the Aga Khan Foundation and UNICEF (Rao and Sun, 2010).

The Getting Ready for School Programme in Tajikistan provides parenting education in the home and fills the gap of learning provided in traditional ECCE programmes. Families with 6-year-olds not attending school are identified and approached to participate in the programme. Trained facilitators impart knowledge on ECD to support their child's literacy and numeracy skills, socio-emotional development and general parenting skills. The programme modules are organized to last nine months, although the frequency and delivery of the programme depend on the local facilitator.

At a regional level, UNESCO Asia-Pacific Regional Bureau for Education in Bangkok developed the Parenting Education Guidebook and the Facilitators' Handbook for Parenting Education, which have been adapted and translated in nine different countries (Bangladesh, India, Indonesia, Kazakhstan, Mongolia, Myanmar, Pakistan, Samoa and Viet Nam). The documents are adapted locally following a set of guidelines and contain simple and informative materials on ECCE. The resource set of guidelines and documents aim to support the development of community-based parenting education programmes with quality and effective programming.[38]

Parenting support can also occur in conflict and postconflict environments. Save the Children's ECCE programmes in four provinces in Afghanistan impart health and education services to children and their families. One activity focuses on teaching mothers how to care for themselves and their children with regards to hygiene, nutrition and common childhood illnesses. Meanwhile, their children attend play groups where they develop ECD skills (Rao and Sun, 2010).

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38 See resources available at http://www.unescobkk.org/education/ecce/what-we-do/community-based-parenting-education/.

Removing language barriers to improve inclusiveness

Language of instruction can act as a barrier to accessing ECCE services. Developing the curricula to be aligned with the parents' practices and incorporating local languages are important factors to consider for attracting excluded communities. Evidence suggests that flexibility in hiring teachers locally for remote, underserved and otherwise difficult areas will help improve learning (UNESCO, 2014b). The promotion of mother tongue languages in multilingual ECCE programmes has occurred in several countries in Asia and the Pacific, including Kazakhstan, Malaysia, Myanmar, New Zealand and Viet Nam. In New Zealand, 'language nests' in ECCE programmes have an explicit goal of maintaining and promoting the use of the Māori language parallel to English, New Zealand's other main language (Shaeffer, 2015). In Malaysia, where about 140 languages are spoken, ECCE can be offered in any language, but Malay and English must be taught alongside the other language in pre-primary education (Kosonen and Young, 2009).

In Lao PDR, a school preparation programme targets children ages 5 and 6 years old the summer before they enter the first grade of primary education. The programme is an intensive course which prepares children for school. Most children have not otherwise attended an ECCE programme and are not speakers of the national language of instruction. The programme runs a set of activities developing their social, language, preliteracy and prenumeracy skills for a total of 250 hours distributed over an intensive schedule of 5 hours a day for 10 weeks. The programme focuses on building local capacity by training teachers, furnishing classrooms with ECCE materials and developing bilingual pedagogies (Hanoz, 2016).

Expanding access to difficult-to-reach populations

Providing services to difficult-to-reach populations requires special targeted programmes or interventions, which go beyond the creation of fee-free ECCE. In Mongolia, ECCE expanded throughout the country with the introduction of the Law on Pre-school Education (2008), which promulgates a commitment for public investment in ECCE programmes. With the support of international donors, including the Global Partnership for Education (GPE), Mongolia reached out to nomadic children in remote and rural districts by providing mobile *ger* (traditional tents or yurts) kindergartens (community-based centres), which can be easily moved by the community. These operate typically in the summer months for a few hours at a time, so an expansion of this initiative would be needed to be further beneficial to the children (see Section 6.4).

To expand enrolment in ECCE programmes, the Republic of Korea introduced a series of targeted measures (see case study in Section 6.2). It created free pre-primary care and education in public centres, first targeting those families in need (e.g. children from rural areas, in low-income families or with special needs). Fee support was also initiated so that the poorest 70% of families with children ages 2 to 5 years old could attend private institutions (Kim et al., 2014).

Mobile Crèches, a non-governmental organization which has been in operation in India since 1969, has targeted its programmes at mothers working informally in the construction sector. Although government-sponsored childcare centres are available through the Anganwadi network, seasonal migrants do not usually benefit from those services. The Mobile Crèche integrated programme runs and organizes nutrition, education and health services; it monitors child development; and it encourages community engagement through networking, outreach and partnership with construction companies. Children attending Mobile Crèches programmes have improved nutritional status, cognitive skills and immunization records (Bajaj and Gupta, 2013). Mobile Crèche also operates programmes in urban slums, where the organization runs community crèches and

works with young families, pregnant women and young children to improve child development practices.

Simple interventions – such as improving the nutritional status of children – can have beneficial effects on pre-school attendance. In an East Delhi settlement, community-based ECCE programmes provided iron supplementation and deworming to all children. This initiative increased the number of new participants as well as improved the attendance of already enrolled children (Jukes, 2007).

Reaching children with disabilities before they are of primary school age can help prepare them for inclusion in state schools. An inclusive ECCE programme must have the adequate specialist supports as well as modifications and adaptations to promote child participation. Community-based nurseries were created in slums in Mumbai, India, to accommodate children ages 3 to 6 years from extremely poor families. The nurseries included children with and without disabilities, and received support from education specialists (Betts and Lata, 2009).

Incorporating pre-primary classes in primary schools

One means for enabling successful transitions into primary schools has been to bring the schools closer together physically and to develop ECCE classrooms within the primary school grounds. In countries that need to rapidly expand ECCE capacity (i.e. in response to new compulsory pre-primary education policies), inserting pre-primary classrooms in existing school infrastructures can have budgetary and pedagogical benefits. This is the case in Cambodia, where formal pre-school classrooms can operate independently or in formal primary schools. Teachers with training are fully qualified to teach at either level, which helps create the pedagogical transition from one education level to another (Royal Government of Cambodia, 2014). In Bangladesh, where two-thirds of all pre-primary classes are located in primary schools, primary teachers have received a six-day training course on pre-primary education (Government of Bangladesh, Ministry of Primary and Mass Education, 2014).

In India, the number of pre-school classrooms attached to primary schools nearly doubled between 2002–2003 and 2012–2013. An additional 4.1 million children were enrolled in pre-primary education (measured between 2005–2006 and 2012–2013) (National University of Educational Planning and Administration, 2014). India plans to expand quality ECCE services for children ages 4 to 6 years by following this approach and synchronizing activities between proximate Anganwadi centres (village 'courtyard' ECCE centres) and primary schools (National University of Educational Planning and Administration, 2014).

Child readiness for school – what children should know and be able to do in order to enter school ready and eager to learn – can enable a successful transition to a primary school environment. A growing body of evidence has found that including academic-like teaching approaches which are performance-based is important to develop child readiness for primary education, especially for children from disadvantaged backgrounds (Bus et al., 2012).

But ECD research indicates a strong preference for pedagogies and associated curricula which emphasize learning through play in child-centred activities. This pedagogical approach best meets children's developmental potential in a capabilities framework and can be adapted for each child's individual developmental stage. Children from poor households fared better when engaged in individual learning activities (e.g. fine motor skills, individual play) than in any other form of learning (e.g. group activities, scaffolding interactions with teachers) (Chien et al., 2010).

ECD experts are concerned about the implications of pre-primary classrooms in primary school buildings, as there has been a tendency for the 'schoolification' of pre-primary education; that is, the tendency to water down curriculum and pedagogies of primary education to produce school-oriented results at the ECCE level (Hirst et al., 2011).

3.2 Quality improvements

Improving the professionalization of the ECCE workforce

In 2013, the International Labour Organization (ILO) convened a meeting of experts in the ECCE workforce (including government representatives, trade unions, civil society and relevant NGOs) to develop policy guidelines for the improvement of the professionalization and recognition of the ECCE workforce (ILO, 2014). UNESCO Bangkok, in collaboration with the Southeast Asian Ministers of Education Organization (SEAMEO), supported the development of the Southeast Asian Guidelines for Early Childhood Teacher Development and Management (SEAMEO Secretariat and UNESCO Bangkok, 2016) to assist Education Ministries and other relevant agencies in professionalizing early-childhood teachers and promoting better working conditions for them.

Enhancing staff quality in ECCE programmes has received much policy focus: the aim is to improve programme quality and professionalism of the ECCE workforce in Asia and the Pacific. Countries have improved pre-service training curricula (e.g. Thailand), require specific early childhood coursework as minimum qualifications for ECCE staff (e.g. Samoa and Uzbekistan), and increased the hiring of trained teachers (e.g. Malaysia). In-service training has also been established to improve teachers' basic training (e.g. Samoa and Vanuatu) (Rao and Sun, 2010; Thai National Commission for UNESCO and Ministry of Education, 2014; UNESCO, 2014c; World Bank, 2013b, 2012b).

Singapore is considered a regional leader in training early childhood professionals, which it has been doing since 2001. In the early 2000s, Singapore established common teacher qualification standards for pre-school teachers who work in both childcare centres (catering to children ages 0-5) and pre-schools (catering to children ages 3–5). It developed in parallel an accreditation system to validate the curricula of teacher training institutes so as to ensure that they were preparing teachers to work with children in an age-appropriate manner, focusing on child-centred learning and empathetic child-adult interactions. Most recently in 2013, it increased qualification requirements for pre-school teachers from certificate to diploma level (UNESCO, 2015e).

New Zealand developed a comprehensive approach to improving teacher competencies as part of a national 12-year reform initiative (2000–2012). Teacher qualification rates increased from 49% to 71% between 2002 and 2012. Even though ECCE provision is privately operated entirely, the government set standards for teacher education and course accreditation as part of several workforce development efforts, all of which were underscored by a political commitment to improve ECCE workforce competencies and skills. For example, in-service teacher training is fully funded by the Ministry of Education and ECCE centres are required to provide professional development for teaching staff (Le Quesne, 2013).

Establishing ECCE quality standards

Many high-income countries with developed ECCE systems have established teacher training institutes for ECCE teachers and other pedagogical staff, and instituted legislative or regulatory standards to increase ECCE quality. The development of these quality frameworks – as well as the

monitoring and assessment of their implementation – varies significantly among poorer countries (UNESCO and UNICEF, 2012). For example, India developed a national ECCE curriculum as well as a national quality standards framework as a followup to the 2013 National Policy on ECCE.

Quality assurance mechanisms are not always in place to verify established minimum standards of programme quality. In Nepal, standards exist for teacher qualifications, infrastructure and service delivery as well as learning standards for children aged 3 to 6 years old. All ECCE facilities – public or private – are required to comply with the same standards. Yet, effective monitoring remains underdeveloped and weak (World Bank, 2013e).

With the support of UNICEF, the Early Learning and Development Standards (ELDS) have been developed in numerous countries in the Asia-Pacific region.[39] The process enables stakeholders in each country to define their own developmental objectives for children based on the common framework for ECD (e.g. language/cognitive, social, emotional, physical) complemented by national perspectives and cultural expectations for children. The process of developing the ELDS can help build consensus around ECCE policy goals, engage various key stakeholders as well as partners, and develop a sense of shared responsibility for improving ECCE quality (Miyahara and Myers, 2008).

Reforming ECCE curriculum

A curriculum can serve as a guiding principle for equity and inclusiveness by introducing various beliefs and practices to be used by ECCE staff. A curriculum or curriculum framework at a national level guides policymakers in taking into account children's learning and development needs, while it also sets the standard against which programmes can be assessed. For example, New Zealand's Te Whāriki ('the woven mat') pedagogical approach adopts a specific sociocultural perspective on learning that acknowledges the multicultural context of New Zealand. The curriculum is built ('woven') around five strands of child development (well-being, belonging, contribution, communication, exploration) and is the basis for high quality learning through a range of ECCE settings (Kaga et al., 2010; New Zealand Ministry of Education, 2014). In the Republic of Korea, the Nuri curriculum for children ages 3 to 5 years old in ECCE programmes focuses on a holistic perspective on child development, centred on the child and organized around play activities (Kim et al., 2014). Myanmar also created a new curriculum for pre-schools and day-care centres as well as teachers' manual and guidelines for children under age 3 (UNESCO and UNICEF, 2012).

Other examples of quality improvement

Research evidence on small-scale interventions suggests that more effective professional development might rely on in-service training. In-service training can also be relevant in increasing quality in ECCE programmes and improving the capacity of teachers to impart learning and implement activities. In rural Bangladesh, teachers and their supervisors attended a five-day training session on how to improve reading instruction to children through the use of dialogic techniques. Follow-up supervision in the ECCE centre ensured that teachers were supported in the first stages of implementing the new reading techniques with children. Within four weeks, significant improvements in children's vocabulary scores were observed (Opel et al., 2009).

39 Bangladesh, Cambodia, China, DPR Korea, Fiji, Lao PDR, Mongolia, Nepal, Pakistan , the Philippines, Sri Lanka , Thailand, Uzbekistan, Vanuatu and Viet Nam.

A multi-stage intervention in Viet Nam combined early nutrition supplementation (ages 0–3) and followed up several years later by providing the same children at ages 4 and 5 years with access to enhanced pre-schools. Compared to other community pre-schools, these enhanced centre received additional materials, teachers were trained on child-centred pedagogies and methods, and parents attended a 1-day training on areas of child development and care.[40] Children who had access to both interventions had significantly higher cognitive outcomes, and stunted children at the onset had even higher scores, indicating they benefitted disproportionately from the addition of the ECD intervention.[41] Severe stunting was also decreased for children benefitting from both interventions (Naudeau et al., 2011; Walker et al., 2007; Watanabe et al., 2005).

In Thailand, several initiatives were undertaken to raise the quality of kindergartens, including the development of high-quality model ECCE centres in every district to serve as training centres for ECCE staff (see case study, Section 6.3). Teachers and teacher assistants can participate in programmes that provide them with ECD knowledge, while obtaining hands-on experience during in-service training (Thai National Commission for UNESCO and Ministry of Education, 2014).

3.3 Governance

Enabling interministerial coordination and integration

Coordinating or integrating services among various government entities responsible for different aspects of early childhood is considered, by many ECCE experts, to be one of the best guarantees that children receive quality and holistic ECCE services (Kaga et al., 2010; Vargas-Barón, 2015a). There are many variations in how multisectoral coordination and integration can occur, and several countries in Asia and the Pacific have followed this path. New Zealand offers a case that is well known throughout the world for its integration of early care and education services within the education sector.[42]

The first step towards integrated services is through the coordination of all ECCE activities. Several countries have developed multisectoral laws, including Cambodia, India, Malaysia, Mongolia, Myanmar, the Philippines and Turkmenistan (Annex 4) to provide guidance for how to establish a continuous and comprehensive set of services from children of a specific age group. Bangladesh and the Philippines are considered successful examples of interministerial coordination. Bangladesh set up an umbrella ministry (Ministry of Women and Children Affairs) and the Philippines established inter-ministerial coordination bodies attached to the Office of the President; the National ECCD Council was established in 2009 (Department of Education). The Philippines also used ECCE legislation to motivate the expansion of ECCE services based on multisectoral initiatives. Some countries like Viet Nam established a lead line ministry as a strategy to coordinate ECCE activities (Kim, 2013; Kim and Umayahara, 2010).

When ECCE is decentralized or organized at the local level, community and local government systems are responsible for organizing the integration of ECCE services locally. National governments must be wary of providing equitable funding mechanisms across the decentralized areas so as to protect vulnerable communities from increased marginalization. If national governments have no financial leverage, ECCE frequently becomes marginalized (Rao and Sun, 2010).

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40 The programme also established a local library and promoted the creation of dedicated play spaces in the home.

41 Another study also found that children who were stunted at the beginning of the experiment also benefitted more than non-stunted children (Raine et al., 2003).

42 For example, see discussion in Kaga et al. (2010).

Funding public community partnerships

Several countries have had the experience of working with local communities to help expand ECCE availability, and various community roles are possible, including helping to identify community needs, training local facilitators and providing physical space. The examples of Nepal and Indonesia are provided here.

Supported by aid donors, international organizations and international and national NGOs, local communities in Nepal develop ECCE programmes for children age 2 to 3 years in community-based centres. Communities provide the physical location, and local women are trained to become ECCE facilitators (see case study in Section 6.5).

In 2007, Indonesia began to address the inequity in ECCE service delivery and quality across the country. Formal kindergartens existed in wealthier and urban areas for 5 and 6-year-olds, and other non-formal programmes for children of pre-school age. Based on a community approach, the Early Childhood Education and Development Project was funded by a US$67.5 million loan from the World Bank to improve the condition and school readiness of poor children nationwide in 3,000 targeted communities. The Project operated as a package of interventions delivered to communities, including community facilitation, block grants to communities (see Section 4.4), and provision of local teacher training (Sayre et al., 2015).

3.4 Financing

Many communities and families face significant financial constraints when determining whether to invest in ECCE for the development of children. Several financing options are promising to improve accessibility and affordability of ECCE interventions. National governments can boost supply by offering communities and non-governmental organizations with the financial means (supported by donors or other external funders) to expand the availability and quality of ECCE programming. Governments can also support parents directly by targeting financial assistance to needy families, using vouchers and cash transfers (conditional or unconditional). Several examples of such financing strategies in the Asia-Pacific region are presented in this section.

Providing block grants to communities to expand ECCE

In Indonesia, public financing supports the development of community-based ECCE programmes through a set of competitive block grants awarded to communities and issued by the Ministry of National Education. These community block grants, in principle, aim to expand early childhood services using a local approach to meet local needs and goals important to the community. They also aim to be more efficient, with fewer middlemen and lower spending on intermediary overheads. Villages conducted social mapping exercises to identify unmet needs and existing quality in ECCE services, participated in discussion groups, and decided with teachers and health workers how to best spend the funds locally, as per a proposed array of ECCE services (J-PAL Policy Briefcase, 2014; Sayre et al., 2015).

Since 2002, private institutions, including not-for-profit organizations, have competed to obtain funding to expand and operate ECCE services or to develop integrated services with local and district governments. Outcomes suggest that the block grants in Indonesia have been responsible for increasing the participation rate by 8 percentage points in targeted districts and reduce the access gap between rich and poor children by 9% (Rao and Sun, 2010). Some block grants included a portion of financing delivered according to performance results on targeted health

and education indicators. These performance incentives have aimed to encourage communities to focus on child development activities validated by international research. An evaluation found that with incentives, communities performed better on health indicators after 1.5 years, especially in the most disadvantaged areas. The Government of Indonesia shifted to using only incentivized block grants – which essentially accelerated the observation of positive results – and increased block grant funding (J-PAL Policy Briefcase, 2014).

Financing non-governmental expansion of ECCE

In India, the government has provided grant-in-aid schemes as financial assistance to NGOs. Voluntary and non-governmental organizations have opened small pre-school education programmes, funded by government grants and international aid agencies. These ECCE programmes are more likely to target children from vulnerable families, including tribal people, migrant workers, slum dwellers and rural children. The private sector has also invested in developing unaided ECCE programmes, but the quality is uneven due to a lack of regulatory policy and evaluation structure (National University of Educational Planning and Administration, 2014).

Private capital can also increase resources available for the development of ECCE interventions. Social Impact Bonds (SIBs) and Development Impact Bonds (DIBs) are emerging as innovative financing mechanisms and unique opportunities for public-private investment in ECD when governments lack sufficient resources for ECCE expansion. In SIBs or DIBs, private investors fund a social service intervention and receive a financial return on their investment if pre-determined social or education outcomes are reached.[43] In Australia, two separate SIBs were set up to support parents so that their children could live at home in a safe environment and avoid out-of-home care. Challenges observed in setting up such funds include the need for the appropriate legal and political environments and complications in achieving scale (Gustafsson-Wright et al., 2015).

Targeting financial support to families

Vouchers can relieve families of the financial pressures to enrol children in ECD programmes by providing them with a stipend to use in public or private sector programmes, parent mentoring or home-visiting programmes. The Pre-primary Education Voucher scheme in Hong Kong (China) benefitted families with children between ages 3 and 6 years. They could be used in non-profit organizations with a cap on the annual tuition fee. Programmes in turn were only allowed to accept vouchers if they complied with conditions to improve quality and teacher training (Li et al., 2010).

In China, a combined voucher and conditional cash transfer intervention targeted children from poor rural households. However, while the children were more likely to attend pre-school, both the quality of the pre-schools' environment and teaching quality were so low that children did not benefit in terms of improving development (e.g. language, communication skills and fine motor skills) (Wong et al., 2013).

Up to 2012, the Republic of Korea supported free or low-cost ECCE to target various groups, including children in rural areas, children from low-income households and children with special needs. The amount of support depended on the child's age and family income level, and was eligible for both childcare (often privately operated) and early childhood education (kindergarten).

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43 The difference between SIBs and DIBs is on the receiving end of the loan. Investors are repaid by government in SIBs, and by third parties (e.g. aid agencies and private foundations) in DIBs. More information on DIBs is available in Development Impact Bond Working Group (2013).

With the introduction of free ECCE for all children ages 3 to 5 in 2013, financial support has come in the form of a voucher of same value for all parents. Parents from lower-income groups will most likely have to decide as to whether to top up for more expensive programmes perceived as providing higher quality services (Kim et al., 2014; Park et al., forthcoming).

Including private providers in voucher schemes also might have the benefit of facilitating the expansion of ECCE services through a market-based approach (Grunewald and Rolnick, 2007).

Incentivizing families with conditional cash transfers

Mongolia's Law of Social Welfare provided financial incentives under the form of conditional cash transfers to help parents enrol children from marginalized groups and children with disabilities into kindergarten programmes (UNESCO and UNICEF, 2012). Malaysia and the Philippines also developed income-support programmes to poor families which provided them with cash transfers on the condition that their children enrol and attend ECCE programmes (Shaeffer, 2015). Parents can also be incentivized to participate in parenting programmes, learn nutritional information for pregnant women and young children, or give birth in public health facilities as in India and Nepal (Sayre et al., 2015; WHO and UNICEF, 2014).

In Bangladesh, bimonthly cash transfers to very poor families with children under the age of 3 were linked to several conditions, including attending monthly growth monitoring sessions to weigh and measure the children. Information sessions on health and nutrition were offered to mothers and other family members, but they were not mandatory. The pilot programme significantly decreased the incidence of wasting (low weigh-for-height) and increased knowledge about the importance of exclusive breastfeeding (Ferré and Sharif, 2014).

Creating innovative partnerships in a conflict-affected environment

Due to decades of war and political instability in Afghanistan, the country's ability to provide ECCE services has been adversely affected. The number of ECCE centres was small during the 1980s, increased until the mid-1990s and fell again with renewed and continued instability later. The country includes many remote communities and, in 2010, 17 provinces were deemed 'insecure'. Despite the security situation, the combination of investments from international aid agencies and technical support from local and international NGOs, ECCE centres have been expanding throughout the country (Rao and Sun, 2010). According to one estimate, in 2013, NGOs and private providers invested the equivalent of 0.3% of total education expenditure in the country on pre-primary programmes (Islamic Republic of Afghanistan, Ministry of Education, 2014a). The government continues to 'encourage development partners and private sector to participate in implementing early childhood education' (Islamic Republic of Afghanistan, Ministry of Education, 2014b, p. 25). Nonetheless, enrolment remains very low (see Section 3.3).

The extensive national education planning system – built to improve information flows, structure planning and identify areas of need for other education levels – should eventually incorporate ECCE. For now, the Ministry of Education envisages sharing its expertise with the Ministry of Labour, Social Affairs, Martyrs and Disabled (which is responsible for ECCE) for ECCE teacher training and curriculum development (Islamic Republic of Afghanistan, Ministry of Education, 2014b).

3.5 Monitoring

Improving population-based data collection

Monitoring progress in ECCE under EFA Goal 1 at a national and international scale has often been constrained by data collection limits. Since 1999, EFA Goal 1 monitoring has been set around child well-being and pre-primary education indicators. While there exists a panoply of ECCE indicators (see Annex 6), their uptake has been slow in certain low-resource contexts. The development of Education Management Information Systems (EMIS) has been slow in many countries, so there are no reports of monitoring innovations that affect ECCE particularly at a national level. With the onset of the new ISCED definitions on early childhood, data collection are expected to improve in the next few years.

In some Asia-Pacific countries, data collection efforts targeting young children have improved, which is a first step towards better monitoring policy outcomes. In Lao PDR, the Ministry of Education and Sports developed an interactive programme to retrieve more in-depth statistics and respective indicators. It connects data from the modified EMIS, the Personnel Management Information System and the Financial Management Information System. Data on ECCE includes enrolment in private programmes, which account for 21% of total enrolment, and pre-primary teacher training by education levels. Yet, data monitoring improvements are still needed, especially on measuring quality and equity (EFA 2015 Review Group and Secretariat Group, 2014).

Recognizing the importance of birth certificates for access to social services and education, Kazakhstan aimed to make birth registration universal. This was part of an initiative to improve data collection on infant and child health and deaths, based on moving from a paper-and-pen collection method to digitizing data collection and analysis. Using realtime data, the government is able to analyse information on the community's health and shares this information with communities, which in turn can fed back information on early childhood health services (UNICEF, 2014a).

In India, the government has launched several practices aimed at improving the supervision and monitoring of ECCE programmes. Although extensive detail of these monitoring efforts is not provided in the EFA review, the diversity of collection efforts listed supposes that the efforts are relatively comprehensive (National University of Educational Planning and Administration, 2014).

There are numerous observation-based measures of individual achievements and capabilities of children at various ages and stages of their development.[44] The Guide for Monitoring Child Development is a relatively new quantitative tool for early identification of developmental difficulties. The guide was developed by the Developmental-Behavioral Pediatrics Unit at the Department of Pediatrics of Ankara University School of Medicine, Turkey, using the health care system. The guide is now being piloted in the Asia-Pacific region.

44 See for example Tinajero and Loizillon (2012), UNICEF (2012) and Zill and Ziv (2007).

Developing new measurement tools

An international consortium led by UNESCO, UNICEF, the World Bank and the Brookings Institution are working to fill the data gap on child development and learning outcomes. The Measuring Early Learning Quality and Outcomes (MELQO) instruments aim to cover child development (i.e. socio-emotional, early literacy and maths, executive functioning) and quality of settings. The project also aims to create an instrument that can be adapted for use in low- and middle-income countries and produce internationally comparative data. The health sector has served as a model for the education sector in terms of setting up global mechanisms for tracking mortality and child development using survey data. In Asia and the Pacific, Lao PDR has been a pilot country for this emerging effort (Devercelli et al., 2015).

Save the Children is working on an International Development and Early Learning Assessment (IDELA) to measure a reliable child development instrument to be used across low-resource countries. IDELA is a direct child assessment with 20 items based on the holistic development of children, measuring child performance in four development domains (motor development, emergent language and literacy, emergent math and numeracy and socio-emotional development). Several countries in Asia and the Pacific have served as testing pilot grounds or have completed the assessment, including Bangladesh, Bhutan, India, Indonesia, Pakistan the Philippines and Thailand; and the effort is planned in Afghanistan, China, Mongolia, Papua New Guinea and Viet Nam (Borisova, 2015). Initial results show that the assessment is rigorous and simpletouse, and that it fills the existing information gap on child development (Pisani, 2014).

At a regional level, the East-Asia Pacific-Early Child Development Scales emerged from items based on the Early Learning and Development Standards (ELDS) from seven countries in the region.[45] The EAP-ECDS provides a holistic measure of child development outcomes by directly observing and assessing children ages 3 to 5 years and their parents. The questionnaires include 85 items organized in 7 ECD domains (approaches to learning; cognitive development; cultural knowledge and participation; language and emergent literacy; motor development; health, hygiene, and safety; socio-emotional development). The scale is being validated in representative samples in Cambodia, China, Mongolia, Papua New Guinea, Timor-Leste and Vanuatu. Although it aims to be a common measurement tool across the region, with translated versions and country adaptations as needed, the EAP-ECDS faces many challenges associated with ensuring cross-cultural equivalence among items. Countries plan to analyse data generated from this survey to help motivate policy change and target programmes where the need is identified.

A similar effort in Hong Kong culminated in the construction and validation of the Hong Kong Early Child Development Scale (HKECDS). Although it has a similar name as the regional scale, the HKECDS was designed to meet values and expectations of the ECD curriculum in Hong Kong and items are based on an already culturally validated set of items from Western surveys. It is a direct assessment of children ages 3 to 6 years and includes 95 items across 8 developmental domains (personal, social and self-care; language development; pre-academic learning; cognitive development; gross motor; fine motor; physical fitness, health and safety; self and society) (Rao et al., 2013).

45 The project is developed by the University of Hong Kong and overseen by ARNEC, with support from UNICEF and the Open Society Foundation (OSF). The ELDS countries are Cambodia, Lao PDR, Mongolia, the Philippines, Thailand, Vanuatu and Viet Nam.

4 ECCE challenges in Asia and the Pacific

This Section identifies the principal challenges faced by national governments in improving equitable access, quality, governance, financing and monitoring of the ECCE sector. Like the previous Section of this report, this Section reports on challenges that were raised in the documents reviewed for this report (e.g. national EFA reviews and policy documents).

4.1 Equitable access and service delivery

Few countries succeed in providing integrated or holistic ECCE services to all children, despite the intentions outlined in national ECCE plans or education sector documents. Reaching out to marginalized and vulnerable populations for the delivery of ECCE services is particularly complex owing to a variety of contextual reasons that are demographic, economic and political in nature. These challenges to equitable access and participation in ECCE are presented briefly below. They are organized by their impact on the supply or the demand (by parents, communities) of ECCE services. Governments who wish to fully expand ECCE services for all children in the targeted age group must seek to understand and address the influences of these factors at a national and subnational level.

Supply-side challenges

Lack of political commitment to or investment in ECCE can act as an impediment in some Asia-Pacific countries. Despite decades of international advocacy efforts to include ECCE as an essential part of the development agenda, ECCE is still not a political priority for all countries seeking to improve socio-economic conditions and developmental opportunities for children, even though an overwhelming amount of evidence supports investment in ECCE with long-term benefits to children and society. Aiming for multisectoral governance or addressing the holistic nature of ECCE can be overwhelming for nascent ECCE systems, where other priorities might appear more urgent. As stated in the Afghanistan National EFA review, 'ECCE has never attracted any meaningful attention in the overall Afghan context' (Islamic Republic of Afghanistan, Ministry of Education, 2014a).

Ensuring the availability and geographical distribution of public ECCE programmes accessible to all children remains a challenge in many countries. Financial and budgetary constraints are often the biggest limiting factors to adequate ECCE provision. Low and middle-income countries can rely on external financing to supplement national coffers to some extent. Since the global economic crisis of 2008, followed by a budgetary crisis in many European countries in 2011, however, donors have been reducing their investment levels in ECCE and other development lines, as they were too difficult to maintain (ILO, 2012).

ECCE attendance is higher in dense urban areas than in remote rural areas, mostly as a result of the lack of provision in the latter (see Figure 9). Papua New Guinea is one of the world's most rural countries, with 13% of the population living in urban areas. Combined with many remote locations, the supply of ECCE services in the country is very poor and unequal (see case study in Section 6.7). Despite the expansion of ECCE provision in Mongolia since the mid-2000s, children from poor nomadic communities living in remote areas with very low population density often do not have access to ECCE programmes (see case study in Section 6.4). Differences in access within countries can also result from high levels of decentralization, which can create access gaps between richer and poorer regions if there is no balancing mechanism.

Reaching out to vulnerable groups is often the last step to making ECCE equitable within a country. As discussed previously in Section 4.2, principles of equitable participation can be included in national ECCE standards and curricula documents to ensure inclusion of all vulnerable population groups. But, in New Zealand, which has an internationally respected ECCE system, 7% and 10% of Māori and Pasifika children, respectively, are not enrolled in ECCE before starting school (New Zealand Ministry of Education, 2014).

Private provision can fill the gap where ECCE services are not provided by government. Often, privately operated ECCE programmes are concentrated in urban areas and do not fully address the equitable distribution of ECCE services nationwide. In rural areas of Andhra Pradesh, in India, about 30% of children from the wealthiest families (top 20%) are enrolled in private pre-schools, compared to less than 5% of children from the poorest quintile. In urban areas, where there exists a greater supply of private provision, the division between wealthy and poor families is much more pronounced: 80% compared to about 30%, respectively, are enrolled in private pre-schools. In some countries, low-cost private ECCE programmes exist, but very poor families cannot necessarily afford their fees and other associated costs of participation. Unless the private sector is regulated and supervised, the quality of services provided is generally low, especially in terms of the workforce, pedagogical practices, learning environment and infrastructure (ILO, 2012).

Demand-side challenges

Demographic changes are quite varied across the region and can impact the demand for ECCE services. Some countries face shrinking youth populations, while others have a burgeoning number of migrants (accompanied by children) and many face increased income inequality.

Central Asia is a case in point. As social systems collapsed in the former Soviet Bloc countries, care giving for older and younger generations was increasingly deinstitutionalized and made the family's responsibility. Multigenerational households are common in Central Asia and the closing of public ECCE programmes in the 1990s led to more intergenerational solutions for childrearing. With smaller school-age populations, the situation did not lead to more flexible capacity within private ECCE systems. Indeed, it requires financial efficiency to maintain or improve education quality and provision of services while adapting for smaller cohorts (Chawla et al., 2007).

Large emigration flows to wealthier countries explain in part the declining population trend in Central Asia. Some of these countries rely heavily on migration remittances, but saw these flows fall by 21% in 2009 as a result of the ongoing economic crisis. In some countries, remittances are an important capital source, reaching 47% of GDP in Tajikistan in 2012 and 32% in Kyrgyzstan in 2013 (World Bank, 2015a). Children of immigrants and seasonal workers are less likely to attend ECCE programmes for a variety of reasons, including discrimination and fear of deportation (for illegal immigrants). While parents might not ask for supportive services, their need is often heightened by their isolated condition.

Increasing income inequality and social inequity among families in the region has increased the vulnerability of disadvantaged children. Children from vulnerable groups that are marginalized based on ethnicity as well as cultural or linguistic backgrounds face a complex array of barriers to access ECCE programmes and services. Factors of disadvantage – such as poverty, living in remote areas or belonging to nomadic groups – can be compounded by other aspects related to discrimination, social intimidation or economic marginalization. Cultural factors can restrict ECCE participation and lead to further marginalization in education. Discrimination in education participation exists for lower castes in several countries in the region, notably India and Nepal (Government of Nepal, Ministry of Education, 2015). Those children who are most likely to benefit from ECCE programmes and services are also those least likely to be attending. Moreover, the performance gap between those attending and not attending pre-primary education – as observed when children are 15 years old – has also widened over time (OECD, 2014b).[46]

Other economic factors, such as the persistence of weak economic and labour conditions, including the growth of non-traditional employment, has increased the demand for accessible and affordable ECCE services for working parents. Reforms in parental leave policies in some countries have led to increased labour force participation of parents (albeit mostly women, who are the traditional caregiver) and therefore to a higher demand from parents for reliable, high-quality ECCE services. Meeting the childcare and health needs of informal workers is a specific challenge in the region, especially in the low and middle-income countries of East Asia and the Pacific (World Bank, 2014a).

4.2 Quality

Establishing legislative standards and regulations can ensure ECCE quality even in different ECCE settings and programmes across a country. Yet, without sufficient investment in monitoring and supervisory systems, these standards are difficult to uphold, as was observed in Nepal (see Section 6.5) (Government of Nepal, Ministry of Education, 2015). Similarly, in Lao PDR, the quality of the emerging ECCE system is not monitored and appears uneven throughout the country (see case study in Section 6.6).

The supply of high quality trained staff in ECCE centres remains a distant goal for many countries in the region. For those that have established standards, the actual share of employed educators who are trained to those standards varies. Monitoring is poor in this area, so data are not available for many countries (see Section 2.5 and also regional profiles in Annex 8 to Annex 11). In Central Asia, for example, the share of trained teachers ranges from 46% in Kyrgyzstan to 100% in Uzbekistan (UIS, 2015).[47] In some countries, the pressure of enrolment surges that can occur with the introduction of compulsory education has lowered training and hiring standards. Hiring a sufficient number of qualified teachers to serve in the most vulnerable or hardest-to-reach communities is a challenge for many countries trying to develop or expand ECCE services. Also recruiting staff from ethnic minorities is enforced in many countries, but often they lack the required training to meet the standards.

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46 The point difference in mathematics performance between those attending and not attending pre-primary education increased between 2003 and 2012 for Australia, Indonesia, Japan, Macao (China), New Zealand, the Republic of Korea and Thailand.

47 As training standards differ in each country, the value is representative according to the country standards, but has less meaning as a comparative value across countries.

Many countries have yet to establish specific national standards or regulations on ECCE teacher training, to differentiate them from other education levels. Required competencies for ECCE pedagogical staff – such as specific coursework on ECCE development, leadership skills or specific support on how to include children from marginalised groups – are not identified, even though the benefits of such training have been demonstrated. For example, improving interactions with vulnerable families in particular is critical for social inclusion and removing family's hesitation with ECCE participation (European Commission, 2014). One survey of ECCE teachers found that additional training and support from administrators, therapists and other staff was essential for improving the inclusion of children with special needs in the child care centre. Staff were highly supportive of inclusive environments, but required additional support to remain effective and training to adapt and enhance the existing curriculum (Villines, 2011).

4.3 Governance

The main challenges raised by government reviews of their ECCE efforts are linked to a combination of disparate planning of holistic ECCE services and weak governance. Political, social and economic conditions need to support governments in developing strong policies for children. Strong ECCE networks such as ARNEC support national ECCE policy development in various ways, including by helping governments share experiences to support knowledge building around policy development. Competing policy priorities will remain a constant struggle, especially in low-resource countries which might have more immediate, tangible emergencies or socio-economic concerns. The current debate in many donor organizations is how to fund education in the new development era: as universal primary education has been reached by many countries (even though much remains to be done), the question is whether to support education by focusing on developing holistic ECCE systems or on improving lower secondary education.

ECCE governance which often occurs in silos – by sector, by department, by ministry – requires joining alliances in order to mobilize political interest in ECCE. As long as public programming and investment for young children is distributed across these various entities, a mechanism needs to be established to work together to raise the level of domestic prioritization of ECCE among other political interests.

Coordinating and integrated mechanisms of governance facilitate these efforts tremendously and sector planning documents can support the mechanisms (Kaga et al., 2010). Bangladesh and the Philippines, for example, found that interministerial coordination works best with a mandated collaboration as outlined in a formal official document, such as a policy or guiding framework (UNESCO and UNICEF, 2012).

4.4 Financing

Spending usually reflects the domestic prioritization of ECCE among other competing groups in the health, education or social programmes. National interests may also be reflecting those established by international donors or NGOs. ECCE suffers from the fate that the well-being of children was branded for many decades as a health only concern, and then also as an education (pre-school) concern, thereby maintaining the limited sector-based vision of ECD interventions. As vaccination campaigns are successful and child mortality rates fall, national ECCE advocates might be able to shift the emphasis and garner more attention and resources towards a holistic vision of early childhood and lifelong learning.

As noted in Section 2.8, it is difficult to assess how ECCE is funded given the various budget lines and private sources. Notwithstanding this lack of information, it is evident that most governments invest far too little in ECCE to have universal access or, at a minimum, reach the most vulnerable populations (Palau, Mongolia and Turkmenistan are exceptions). Reliance on external financing – usually from private sector and donors – appears to be linked to stronger ECCE sectors, although the evidence is sparse in the reviewed documents. General development aid trends, as highlighted in the Addis Ababa Financing for Development Conference, are leaning towards increased domestic resource mobilization, private sector mobilization and national financial responsibility for development.

Few donors (bilateral donors or multilateral agencies) have established ECCE as a priority programming area despite the overwhelming evidence of the future cost-savings that could be incurred (Cunha et al., 2006). A 2006 study found that 19 out of 22 donors allocated less than 10% of the total primary education support to pre-primary education (UNESCO, 2006). In addition, low-income countries tend to receive less funding for ECCE than middle-income countries. The European Union (EU), whose programming is focused on those countries furthest behind, is investing in ECCE, but in only 5 out of 40 countries (Cambodia and Nepal in the region).[48] Other education subsectors, notably basic education and technical and vocational training/skills development, receive the majority of EU aid. Donors also usually limit their support to systems for children older than age 3 and often the support remains compartmentalized according to a health or education focus (UNESCO, 2006).

4.5 Monitoring

The need for better data on early childhood for planning and programming purposes has been affirmed by many ECCE advocacy and technical groups. The lack of systematic information on ECCE is a problem in many countries throughout the region. As summarized by the EFA regional review:

> The lack of adequate monitoring system for ECCE and pre-primary education hinders tracking the progress in many countries in the region. In most of the countries, ECCE and pre-primary education are not part of compulsory education and do not have a regular data collection mechanism. Collecting data on ECCE programmes is also often complicated by involvement of different ministries and agencies and the existence of the different types of ECCE programmes such as home-based, community-based and centre-based programmes. A systematic data collection and monitoring mechanism should be established at the national level to effectively monitor the progress in ECCE and pre-primary education to improve the management of the subsector (UNESCO Bangkok, 2015).

Monitoring efforts were not addressed in much detail in the documents reviewed for this regional analysis, but several specific challenges emerged nonetheless. The primary challenge faced in many low and lower-middle-income countries is that governments obtain little information on the status of young children beyond basic health and pre-primary enrolment data. Moreover, available data from other sectors (health, nutrition, child welfare and child protection) are not integrated with data from the education sector. As an example, the EFA review of Papua New Guinea noted that it cannot adequately monitor ECCE as it is not included in the education sector, and most

48 This does not include sector-wide support.

ECCE programmes are privately managed. The Departments of Community Development and of Health are responsible for providing care for children up to primary school age (Papua New Guinea Department of Education, 2014).

Evaluating equity in ECCE data monitoring also is often limited, especially for those countries which have not regularly conducted international household surveys, such as the MICS and DHS (Annex 5). Given the importance of ECCE, especially for vulnerable populations, particular attention is needed to address how national administrative systems can be strengthened to support reliable ECCE monitoring with an equity facet. Paying attention to marginalized and disadvantaged groups requires better data on their needs and difficulties. Specifically, all relevant data must be disaggregated as much as possible by age, sex, income, disability, religion, race, ethnicity, geographical location and other possible factors of disadvantage.[49] The marginal role of ECCE in education policy-making is often problematic: for example, gender-responsive budgeting in education usually neglects to include ECCE.

Many national systems that gather administrative data are relatively weak, are understaffed and lack the technical capacity for analysing and disseminating the data. Administering household surveys such as the MICS and the DHS – or joining in new monitoring initiatives on learning and quality – helps develop national technical capacity, as the surveys are run nationally under supervision of the international experts.

49 One of the draft working documents for the SDGs suggests that data must be disaggregated for all SDG targets (SDSN Leadership Council, 2014).

5 Lessons learned in six Asia-Pacific countries

Six countries were selected among the 48 in the Asia-Pacific region to illustrate the diversity of policy and programme experience, ranging from the persistence of mass deprivation among young children to some of the most advanced ECCE systems in the world. Countries were first ranked according to latest available levels (usually 2013 or 2014) and trends (since 1999) in indicators of child development outcomes and of the state of pre-primary school systems:

- *Health:* Under-5 mortality and immunization with DTP3 and polio vaccines;
- *Nutrition:* Incidence of stunting, underweight, wasting;
- *Participation in pre-primary education:* Gross enrolment ratios, school life expectancy, share of entrants into primary education who received pre-primary education, share of female pupils;
- *ECCE staff:* Pupil/teacher ratios, share of trained teachers, share of female teachers;
- *Finance:* Share of public expenditure on pre-primary education in GDP and in total public education expenditure.

These rankings enabled the identification of countries with high, average and low performance. Two countries were then selected in each category so as to include one country at least from each of the four subregions (Central Asia, East Asia, the Pacific and South and West Asia) and of the four income groups (low, lower-middle, upper-middle and high-income countries).

5.1 Overview of six countries

High performers

Republic of Korea (East Asia, high-income) has among the best indicators of early childhood development outcomes in the Asia-Pacific region, on par with other high-income countries. Immunization is universal among young children, malnutrition affects extremely few of them, and under-5 mortality is lower than in any other country in the region except Singapore and Japan (Figure 12). Participation in pre-primary education is nearly universal, with most young children attending for three years, usually in small groups. Most pre-primary schools are private, although the government has increased its expenditure in recent years (Table 2).

Thailand (South-East Asia, upper-middle-income) has made dramatic progress in the field of early childhood care and education in recent decades. Participation in pre-primary education increased rapidly during the late 2000s and is now universal; young children attend for 3.5 years on average (Figure 13). Enrolment ratios are the highest in the Asia-Pacific region, approached only by high-income countries such as New Zealand or the Republic of Korea. Most young children attend public institutions. Although public expenditure on pre-primary education is relatively

high, resources are strained, as illustrated by particularly high pupil/teacher ratios (Table 2). On the other hand, health and nutrition indicators are close to the average for upper-middle countries in the region, and a small but significant share of young children are still affected by malnutrition.

Average performers

Mongolia (Central Asia, upper-middle-income) devotes a higher share of either its GDP or its education budget to pre-primary education than any other country with data in the Asia-Pacific region. As a result, participation in pre-primary education has increased steadily since 1999, with about two-thirds of young children attending for two and a half years on average, mostly in public institutions (Figure 13). Health and nutrition indicators have also improved, although unevenly so. Few countries in the region have a lower incidence of young child malnutrition than Mongolia, but the country lags behind other upper-middle-income countries as far as under-5 mortality is concerned.

Nepal (South and West Asia, low-income) started with particularly high levels of early childhood deprivation in 1999, but made significant progress over the next 15 years. Under-5 mortality was halved, and immunization has been nearly universal since the early 2010s (Figure 12). The pre-primary education system was transformed. By 1999, it comprised mostly private schools and reached only one-tenth of young children. By 2014, more than half of children entering primary education had received some pre-primary education and three-quarters of pupils attended public (community-based) centres (Table 2). However, even before the April 2015 earthquake hit the country, this success remained fragile. Nepal still is a low-income country with a high incidence of child malnutrition typical of most of South and West Asia – contrasting with most countries in other subregions of Asia and the Pacific. Community-based centres operate with very limited resources, illustrated by high pupil/teacher ratios and low levels of public expenditure.

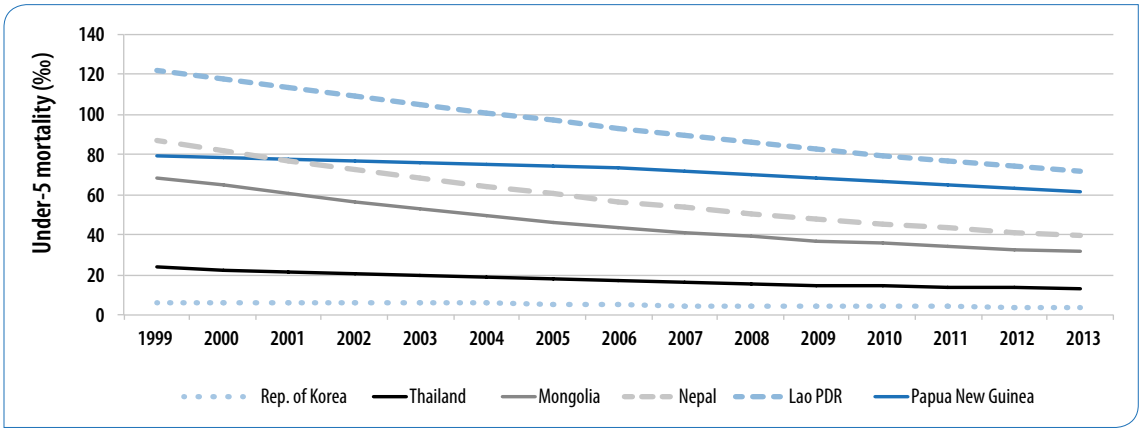
Low performers

Lao PDR (South-East Asia, lower-middle-income) has made slower progress than many countries in the region, and lags behind as far as early childhood development outcomes are concerned. Child mortality is the third highest in the region, malnutrition is at similar levels as in the worst-affected countries of South and West Asia and in Papua New Guinea, and immunization is not yet universal (Figure 12). Furthermore, the country's pre-primary education system stagnated until the late 2000s, and although expanding rapidly in recent years, still reaches no more than one-quarter of young children (Figure 13).

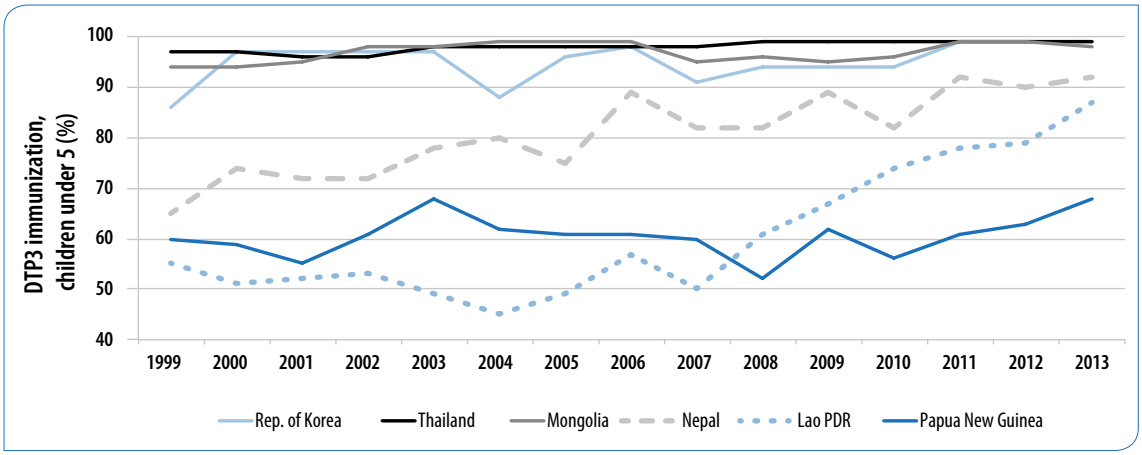
Papua New Guinea (Pacific, lower-middle-income) has some of the weakest indicators of early childhood development outcomes in the Asia-Pacific region. Nearly one-third of young children are not immunized against diphtheria, tetanus, pertussis nor against polio, and malnutrition is higher than in any country outside of South Asia (except Timor-Leste). This may explain why child mortality has declined more slowly since 1999 than in any other country in the region (except Kiribati) with a high initial rate (above 50‰). Meanwhile the country has no public pre-primary schools – only a few private, NGO or church-based centres exist, which are not covered by available statistics.

Figure 12: Health and nutrition indicators for the six countries, 1999–2013

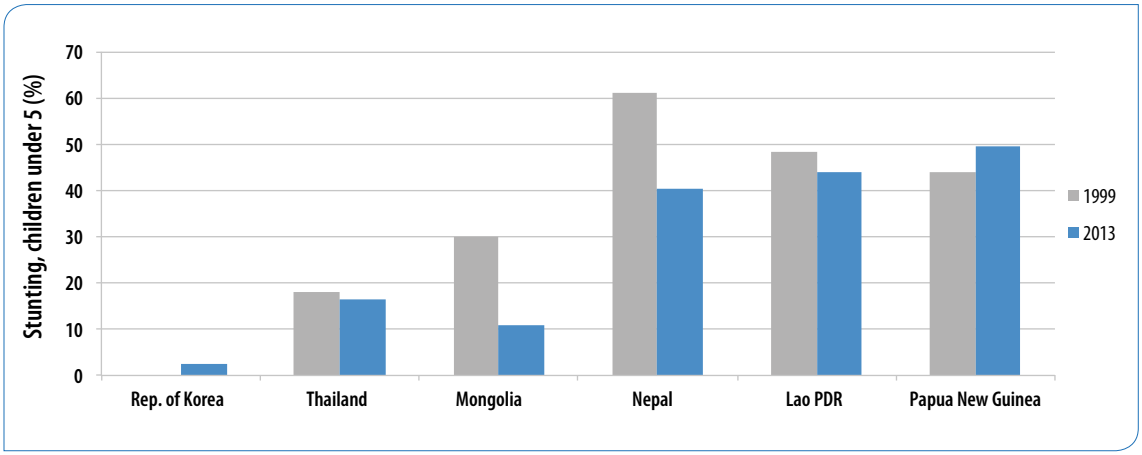
Under-5 mortality



DTP3 Immunization



Stunting

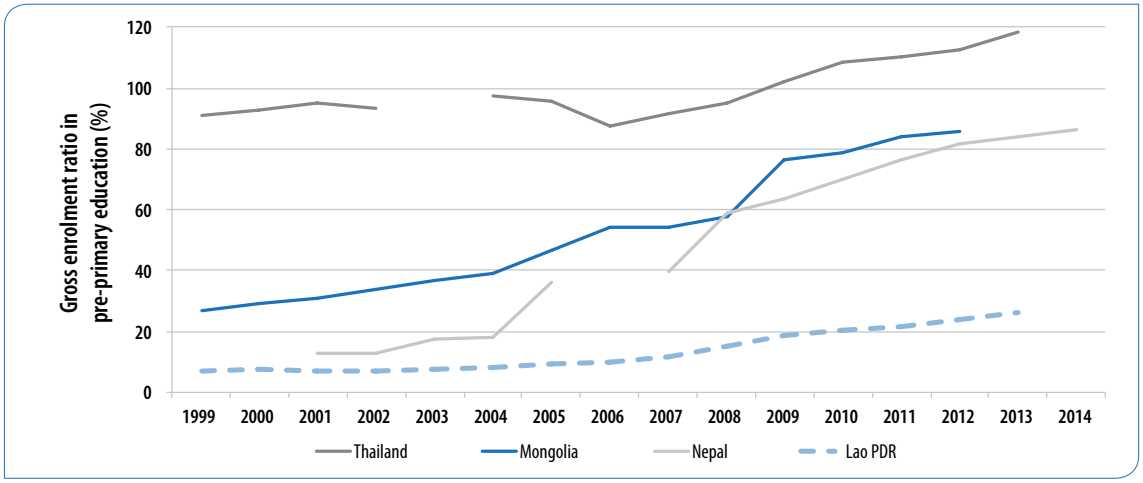


Notes: For stunting, nearest years available to 1999 and 2013: Rep. of Korea: not available and 2010; Thailand: 1995 and 2012, Nepal: 1998 and 2011, Lao PDR: 2000 and 2011, Papua New Guinea: 2005 and 2009.

Source: UNICEF (2015c).

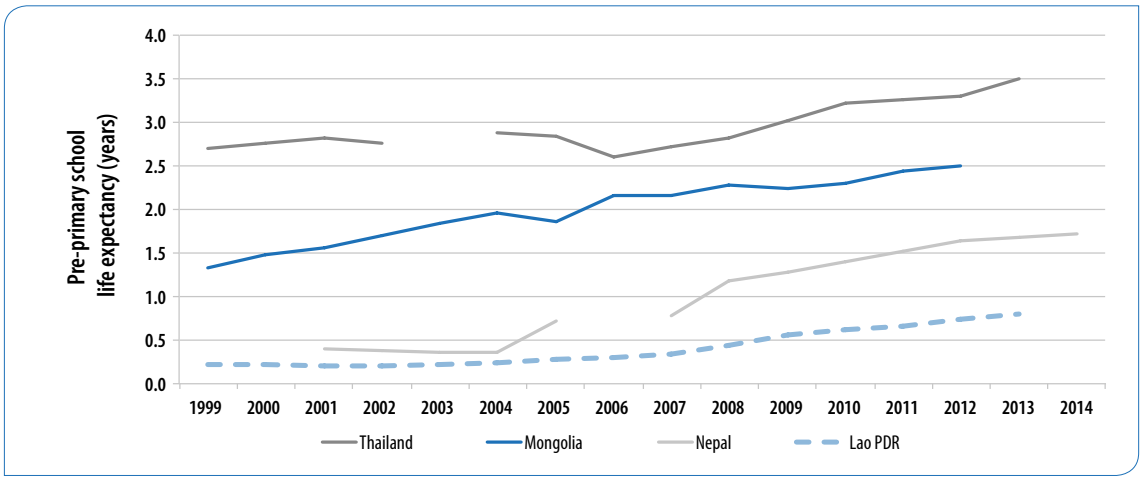
Figure 13: ECCE indicators for the six countries, 1999–2014

a. GER in pre-primary education



Note: Rep. of Korea: 93% in 2014; Papua New Guinea: no data.

b. Pre-primary school life expectancy



Note: Republic of Korea: 2.8 years in 2014; Papua New Guinea: no data.

Source: UIS (2015).

Table 2: Pre-primary education system statistics in five countries, 1999–2014

	Pupil/teacher ratio		Share of enrolment in private institutions (%) Public expenditure on education		Public expenditure on pre-primary education as % of			
					GDP			
	1999	2014	1999	2014	1999	2013	1999	2013
Republic of Korea	…	14	…	81	0.8	3.1	0.03	0.18
Thailand	25	29	19	23	10.9	6.6	0.59	0.32
Mongolia	25	27	4	7	14.1	23.8	1.02	1.30
Nepal	22	23	84	26	…	1.5	…	0.07
Lao PDR	18	19	18	21	1.9	…	0.05	…

Notes: 1999 and 2014 or nearest years available. Pupil/teacher ratio: Nepal: 2001, Papua New Guinea: 2002; Thailand, Mongolia and Lao PDR: 2012. Share of enrolment in private institutions: Nepal: 2001; Thailand and Lao PDR: 2013. Public expenditure: Thailand: 2000 and 2012, Mongolia: 2002 and 2011, Nepal: 2009 and Lao PDR: 2002. … : not available. Papua New Guinea: no data.

Source: UIS (2015).

5.2 Republic of Korea: Universal pre-primary education has been achieved in recent years as public investment has complemented a strong private sector[50]

The remarkable economic growth and social development the Republic of Korea has achieved since the 1960s were based on public investment in education. Primary, lower secondary and upper secondary education were made universal during the 1960s, 1970s and 1980s, respectively. Today, achievement levels as measured by Programme for International Student Assessment (PISA) are among the highest in the world, and participation in tertiary education is massive. Yet until the 1980s, pre-primary education was entirely left to the private sector, and government investment at that level of education has taken place mostly since 2000. The country has now reached nearly universal participation, but with fragmented provision: several types of private and public institutions coexist, offering different services. A strategy of integrating provision into a single system was initiated in 2013 and should be complete by 2017.

The first private kindergartens in the Republic of Korea opened in the early 20th century. In the decades following the Second World War, pre-primary education consisted of private institutions concentrated in urban areas. The first public kindergarten opened in 1976, followed with rapid expansion of the public sector after 1980, targeting rural areas. Over the last 15 years, pre-primary education has become a policy priority, and a number of measures have been taken to ensure universal access. A first series of measures created public provision for targeted populations. In 1999, free care and education was introduced for 5-year-old children living in low-income families in rural areas, a measure extended to low-income families in urban areas in 2000, and complemented in 2003 with free care and education for children with special needs. A second series of measures offered fee support for children attending private institutions: In 2003 for children aged 5 from the poorest 70% of families, in 2004 for children aged 3 and 4, and in 2007 for children aged up to 2. Finally, free care and education for all were introduced in recent years: For children aged up to 2 (with child rearing allowances for parents keeping their children at home) or aged 5 in 2012, and for children aged 3 and 4 in 2013. By 2014, the net enrolment ratio (NER) in pre-primary education reached 94%. Public expenditure on pre-primary education, which represented only 0.03% of GDP in 1999, increased to 0.10% in 2007 and 0.18% in 2013. Its share in total public expenditure on education nearly quadrupled, from 0.84% 1999 to 3.1% in 2012.

However, the provision of pre-primary education remains mostly private and split between two institutional systems. Child care centres, coordinated at the national level by the Ministry of Health and Welfare under the 1991 Child Care Act, accommodate young children from birth to age 6. Kindergartens, under the Ministry of Education and the 2004 Early Childhood Education Act, provide for children aged 3 to 5. The two systems provide different services, require distinct teacher qualifications and training, and have separate governance and quality assurance mechanisms. Until 2012/13, they were following different curricula for children aged 3 to 5. Furthermore, public institutions may be managed by the national or local governments, and a great diversity of private child care centres exist, whether run by corporations, non-profit organizations, families, parents or employers. By 2012, more than 1.3 million young children were enrolled in child care centres (95% in private institutions) and more than 600,000 in kindergartens (79% in private institutions).

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50 Case study based on Education Bureau (2014); Park (2014); Park et al. (forthcoming); Republic of Korea (2014); UIS (2015); United Nations (2015f).

Fragmentation of the pre-primary school system raises issues of quality and equity:

- The quality of pre-primary education varies across institutions, and parents lack the information necessary to identify the best institutions. For instance, qualification requirements are lower in child care centres (two years of tertiary education or one year of vocational training after completion of upper secondary education) than in kindergartens (four years of training at university or two years of training at a college plus a national teacher examination, with a further 240 hours of on-the-job training in the first three years of teaching). In practice, in 2012, 68% of teachers in child care centres had completed a short cycle of tertiary education, and a further 14% had completed upper secondary education only. By contrast, half the teachers in kindergartens had completed a short cycle of tertiary education, and the other half a long cycle (usually a bachelor's degree, or less frequently a master's degree).
- Parents have to pay significant tuition fees to private institutions, as public subsidies do not cover 'afterschool programmes' – child care centres and kindergartens operate from the early morning to late night or even midnight. This is particularly the case in kindergartens, as there is a legal cap to fees child care centres are allowed to levy.
- Differences in regulations between child care centres and kindergartens coupled with government subsidies have had adverse side effects. About half of all private kindergartens closed during the last decade and reopened as child care centres, for which regulations are laxer. Government subsidies allowed many new private providers to enter the market in the search for profit – given real estate prices, many child care centres sacrifice teacher salaries and meal quality.

Improving the quality of care and education across all types of providers therefore appears as the current policy priority, with recent measures in the areas of curriculum design, teacher training, quality assurance, regulations, governance, data collection and research. For instance:

- The separate curricula once used by child care centres (Standard Childcare Curriculum, 2007) and kindergartens (National Kindergarten Curriculum, 1969) have been replaced since 2012 and 2013 with the common Nuri curriculum, which emphasizes a holistic approach to child development, with five broad areas: physical activity and health; communication; experience in art; social relationships; nature and discovery. The curriculum is child-centred and play-based, and covers 3 to 5 hours a day, or 15 to 25 hours a week. Child care centres and kindergartens may use it flexibly as a basis to develop their own curriculum.
- The teacher training system has been strengthened with the creation of the Office for Childcare Teachers Certification Management in the Ministry of Education in 2007, which provides subsidies and allowances for public and private sector teachers to train and qualify. The training and certification system is being reorganized. In the future, a bachelor's degree in early childhood education should become a requirement for all teachers implementing the Nuri curriculum in either child care centres or kindergartens.
- Quality assurance procedures have been introduced. Since 2006, under the Childcare Centre Accreditation System, all centres are evaluated based on a self-report and an inspection before being accredited. Since 2007, under the Kindergarten Evaluation System, kindergartens are evaluated every three years in areas such as curriculum, educational environment, health and safety and management. In both cases, evaluation results are made public.

A first five-year strategic plan for pre-primary education began in 2013, and the government is integrating provisions under a single system for children aged 3 to 5. In addition to the common Nuri curriculum and bachelor's degree for pre-primary teachers mentioned above, this will entail

offering the same services and operating hours, under a single monitoring and evaluation system, with the same funding levels. The process should be completed in 2017 with the passing of a new ECCE law.

After decades of development in which early childhood care and education were not prioritized by policy makers, over the last 15 years the Republic of Korea has become a high-performing country at that level of education as well. Facilitated by the high per capita income level achieved by the country, this move also responds to urgent needs of Korean society. Population is ageing rapidly as life expectancy is one of the highest and fertility one of the lowest in the world. At 1.26 child per woman over 2010–15, population replacement is far from being ensured. ECCE policies are expected to support an increase in fertility, by reducing the child care costs borne by parents and facilitating the labour force participation of women with children, which remains low relative to other high-income countries. Another challenge for Korean society is to shift the emphasis of pre-primary education from cognitive development and primary school readiness to a holistic understanding of child development.

5.3 Thailand: Initiatives to improve the quality of pre-primary education[51]

Thailand has gone through rapid economic growth and social development since the 1980s, and has been classified as an upper-middle-income economy since 2011. The country has completed its demographic transition, with a total fertility rate of 1.5 children per woman and a life expectancy of 74 years over 2010–2015. Under a policy of providing 15 years of free education of good quality, the school system has expanded to cover the overwhelming majority of the population, with GERs of 96% at primary level and 86% at secondary level, and even 51% at tertiary level in 2013. Quality is relatively high, with PISA 2012 results below the OECD average, but on par with other emerging countries such as Chile or Malaysia, and improving. These achievements have been based on relatively high levels of public expenditure on education, representing 20.7% of government expenditure and 4.9% of GDP in 2012. Despite slower growth in recent years, marked by the largescale flood of 2011 and prolonged political tension, the country context is favourable to the implementation of early childhood policies: The number of young children is decreasing, most parents are literate, and health and education infrastructures exist.

The 2012 survey figures confirm that indicators of early childhood development are high, with limited disparities within the country (Table 3).

51 Case study based on Thailand (2014, 2013); UIS (2015); United Nations (2015f), and comments received from UNESCO Bangkok on a first draft of this report.

Table 3: Disparities in key ECCE indicators in Thailand

	All vaccinations	Stunting	Early childhood education attendance	First graders with pre-school experience	Literate young women	Total fertility
	age 12–23 months, %	severe or moderate, %	age 3–5 years, %	%	ages 15–24, %	
Gender						
Female	80.7	16.3	85.1	100.0		
Male	81.7	16.4	83.6	100.0		
Region						
Lowest value	63.3	13.6	66.3	99.9	97.0	1.2
Highest value	87.5	18.9	91.0	100.0	99.1	2.2
Residence						
Rural	85.0	18.1	87.0	100.0	98.6	2.1
Urban	74.8	13.3	80.1	100.0	97.2	1.5
Wealth quintile						
Poorest	88.6	23.1	84.7	99.9	96.7	2.2
Second	84.5	19.9	85.9	100.0	96.3	2.2
Richest	70.1	10.6	81.9	100.0	99.6	1.3
Mother's education						
None	83.5	34.1	74.7	99.8	1.1	1.1
Primary	85.3	16.5	85.7	100.0	83.5	2.9
Higher	71.9	12.6	87.2	100.0	100.0	1.2
Ethnicity						
Non-Thai	85.0	24.0	54.8	…	48.2	1.9
Thai	81.1	16.2	85.0	100.0	98.9	1.8

Notes: No figures for under-5 mortality in the MICS report. 'All vaccinations' refers to BCG, polio, DTP, HepB and measles vaccines. Most children receive first shots of polio, DTP and HepB vaccines, but fewer children of advantaged background receive second and third shorts, which explains why the 'all vaccination' rate declines with wealth or mother's education, and is lower in urban areas. For literacy and total fertility, the education level refers to women's own level, not their mother's. … : too few observations; : not applicable.

Source: Thailand (2013).

Expanding access to pre-primary education and improving the quality of teaching have been policy priorities in recent years. In 2008 an important policy change took place, with the formation of a National Committee on Early Childhood Development chaired by the Prime Minister. The aim was to improve coordination of the nine ministries and 30 agencies and organizations involved in the provision of early childhood care and education services. A Long-Term Policy and Strategy for Early Childhood Care and Development until 2016 had been defined in 2007, and was followed by a National Strategic Plan for Early Childhood Development 2012–2016. Enrolment ratios, which had stagnated at relatively high levels since 1999 (above 90% for the GER and above 80% for the NER), started increasing rapidly (to 119% in 2013 and 100% in 2011, respectively).

Several initiatives were taken to raise the quality of kindergartens:

- National Standards for Early Childhood Care Centres were adopted in 2011, after an extensive research and consultation process started in 2009 by the Ministry of Social Development and Human Security and Suan Dusit Rajabhat University. The standards cover centre management and administration, teaching/learning processes, and learner quality. They are used both by each centre for internal assessment and by the Office of National Education Standards and Quality Assessment for external assessment.

- About 950 Model Early Childhood Centres, distributed over the country's 183 administrative districts, were established as examples of high quality facilities and services. They also serve at training centres for teachers and teacher assistants. Model Centres were evaluated every second year between 2007 and 2013, in the areas of management, use and improvement of curriculum, effectiveness in organizing the learning environment and facilities, and quality of services. Most centres were up to the standards in 2007, but the following rounds of evaluation showed a consistent trend towards lower quality.
- An instrument was designed to evaluate the development of young children in Kindergarten 2 with respect to the norms of the 2003 Curriculum for Early Childhood, in terms of cognitive, physical, emotional and social outcomes, as well as school readiness. Tests conducted in 2005, 2008, 2010 and 2012 found that the development of pupils in kindergarten improved over the years. In 2012, close to 75% of young children tested had 'good' cognitive and physical development, 96% good emotional and 99% good social development. An ongoing project with UNICEF aims to assess the behavioural competencies of children aged 0 to 3 and 3 to 5, collecting hundreds of indicators. A pilot study has been conducted in 12 schools.

5.4 Mongolia: Early childhood care and education policies need to address disparities that persist despite dramatic progress in recent years[52]

Mongolia has recovered from the hardship it went through during the transition of the 1990s. Deep economic recession was followed by slow economic growth until 2000. The education system suffered, and even as fertility dropped (from 3.3 children per women in the early 1990s to 2.1 in the early 2000s), enrolment ratios declined at all levels. The 2000s saw a reversal of those trends. Rapid economic growth in recent years accompanied a rebound of fertility (to 2.7 in the early 2010s), and the education system recovered. By 2010, primary education was universal again, and the GER in secondary education was above 90%.The country still faces specific challenges for early childhood care and education policy-making. Due to the recent rebound in fertility, the total population is growing rapidly (projected to reach to 3.5 million in 2030 and 4.0 million in 2050), and is relatively young (children aged 0–14 represent 28% of the total). Demand for care and education services is thus high, yet many young children are hard to reach. While more than 60% of the population are concentrated in the capital city, Ulaanbaatar, the remainder is dispersed over 1.6 million square kilometres, making Mongolia the second least densely populated country in the world, after Greenland. Among the decentralized population are nomadic communities and the Kazakh linguistic and religious minority. The rapid growth of the urban ger districts around the capital city leaves thousands of children without access to basic services of health, hygiene and education.

Data from the 2010 and 2013 rounds of the MICS show that health and nutrition outcomes of young children in Mongolia are relatively strong, and tend to be improving (see Table 4). Yet, despite high levels of female literacy in most categories, dramatic disparities in children outcomes persist between rural and urban areas and across regions, wealth quintiles and levels of mother's education. In both 2010 and 2013, young children were more than twice as likely to die before the age of 5 if they lived in rural rather than in urban areas. More than one-quarter of young children

52 Case study based on Mongolia (2014, 2013); Tsenduren (2010); UIS (2015); United Nations (2015f, 2014b).

growing up in the poorest 20% of families were malnourished in 2010, as were almost one fifth of those living in the Western region in 2013.

Looking at enrolment and finance figures at the national level, Mongolia's performance in pre-primary education is particularly impressive. Public expenditure on pre-primary education has been exceptionally high. It increased from 1.0% to 1.3% of a rapidly growing GDP between 1999 and 2013, and represented 24% of the total public education budget in 2013. Enrolment, almost entirely in the public sector, has increased dramatically for 115 years. The NER was, as low as 24% in 1999, and reached 65% by 2012. Consistent with the NER based on administrative data, MICS data based on household surveys confirm the increase in recent years: The attendance rate went up from 58% to 68% between 2010 and 2013. Yet Mongolia needs to address wide inequalities. For instance, in 2010 the attendance rate ranged from less than 25% of young children from the poorest quintile to more than 80% of those from the richest quintile. In 2013, nearly 43% of young children living in either rural areas or the Western province were still not attending (see Table 4).

Pre-primary education is framed by the Integrated Early Childhood Development Policy (2004), the Education Sector Master Plan (2006–2015) and the Comprehensive National Development Strategy (2008). The Law on Pre-school Education (2008) provides for universal access for young children aged 2 to 6. In practice, formal kindergartens (which account for more than two-thirds of enrolment) are open to children aged 1.5 to 5, and operate for 9 to 10 hours per day, 36 weeks a year. Besides the expansion of the kindergarten infrastructure, a key policy initiative, supported by the GPE, has been the introduction of alternative programmes that target rural areas and nomadic communities. Ger kindergartens enrol 3 to 5-year-old children for 6 to 7 hours a day, but only about 14 weeks a year (during warm months). Visiting teachers organize learning activities for children, using visual aids, toys, etc. These programmes may contribute to reducing disparities in access to pre-primary education – which appears as a policy priority for the future.

Table 4: Disparities in key ECCE indicators in Mongolia

2010	Under-5 mortality	All vaccines	Stunting	Pre-school attendance	School readiness	Literate women	Total fertility
	‰	%	%	ages 3–5, %	%	ages 15–24, %	
Gender							
Female	39	77.1	13.5	59.8	91.0		
Male	51	77.7	17.1	55.9	90.2		
Region							
Lowest value	21	67.1	10.8	49.5	82.9	94.1	2.7
Highest value	72	84.5	24.5	65.3	97.2	99.7	3.8
Residence							
Rural	62	73.5	19.9	44.5	89.9	94.2	3.6
Urban	29	79.9	11.9	67.8	91.0	99.5	2.9
Wealth quintile							
Poorest	67	76.5	25.2	24.5	86.0	89.9	3.9
Second	48	72.1	18.4	51.4	88.0	96.9	3.4
Richest	25	80.8	6.5	80.3	92.4	100.0	3.0
Mother's education							
None	95	78.7	28.2	28.0	88.1	33.5	2.7
Primary	77	82.8	21.1	27.6	85.1	94.6	3.9
Tertiary	26	76.1	9.1	76.4	96.2	100.0	3.0

2010	Under-5 mortality	All vaccines	Stunting	Pre-school attendance	School readiness	Literate women	Total fertility
	‰	%	%	ages 3–5, %	%	ages 15–24, %	
Ethnicity							
Kazakh	…	…	30.4	50.5	…	95.8	3.4
Khalkh	42	77.6	14.1	59.0	91.4	98.2	3.0

2013	Under-5 mortality	Stunting	Pre-school attendance	School readiness	Literate women	Total fertility
	‰	%	ages 35, %	%	ages 15–24, %	
Region						
Lowest value	10.6	7.1	57.3	54.3	94.2	2.9
Highest value	40.1	19.5	76.2	86.6	99.5	3.6
Residence						
Rural	37.5	14.5	57.3	67.9	92.9	3.6
Urban	15.9	8.4	75.9	86.4	99.2	2.9

Notes: Results of the 2013 are preliminary findings and are not available for all population categories listed for 2010. 'All vaccines' implies that the child (aged 12–23 months) received BCG, polio, DTP, HepB and MMR1 vaccines; 'stunting' refers to moderate or severe stunting; 'school readiness' is the share of pupils in grade 1 of primary education who attended pre-primary education the year before. For literacy and total fertility, the education level refers to women's own level, not their mother's. …: not available : not applicable.

Sources: Mongolia (2014, 2013).

5.5 Nepal: Low-cost community and school-based centres have dramatically expanded access to care and education, but the system needs consolidation[53]

Young children in Nepal have long faced difficult living conditions. In 1999, more than one in 12 died before reaching the age of 5; one-third were not immunized against diphtheria, tetanus and pertussis; and three-fifths were stunted as a consequence of chronic malnutrition. The ability of many families to take care of their young children and educate them was hampered by poverty as well as social or cultural marginalization. The ability of the State to deliver ECCE services was limited owing to weak governance and to armed conflict that lasted from 1996 to 2006. The geography of the country, with a mostly rural population scattered across the Terai plain, hills and the Himalaya mountains, and divided in 125 castes or ethnic groups and speaking 123 languages, compounded the challenge. By the early 2010s, the situation had improved: under-5 mortality was down to 40‰; 92% of young children had been immunized by DTP3; and stunting now affected a minority of them (41%).

Progress had been particularly dramatic in the area of pre-primary education. By 1999, that level of education comprised mostly private schools concentrated in urban areas, which had the capacity to enrol no more than 11% of young children. Under the Tenth National Development Plan (2002–2007), the GER increased rapidly, to 39%. The Interim Constitution of Nepal, adopted in 2007, listed education among fundamental rights and made it a government responsibility

53 Case study based on ARNEC (2014); Nepal (2014); UIS (2015); UNICEF (2015c); World Bank (2013f).

to provide free quality basic education to all. Under the three-year interim plans (2007–2010 and 2010–2013) and the School Sector Reform Programme (2009–2015), pre-primary education received a decisive boost, the ratio jumping to 59% in 2008 and to 87% in 2014. Data for 2012–13 suggest that disparities between regions of the country were limited (the ratio ranges from 67% in the Far Western province to 83% in the Western province), and that gender parity had been achieved. Enrolment numbers are striking: 1,047,117 young children were enrolled in 2012–13 compared with 38,000 in 2000.

What lies behind these extraordinary figures is not the construction of formal government schools throughout the country to provide three years of pre-primary education. Instead, the aim was to accommodate young children from the age of 2 or 3 in community-based centres, and to enrol 4-year-olds in school-based centres, before they entered primary school at age 5. Local communities were relied upon to require the opening of centres and to provide a place where community-based centres could operate. Facilitators were recruited among local women, especially belonging to disadvantaged social groups. The Department of Education of the Government of Nepal provided technical and financial support. Aid donors and international organizations, including UNESCO and UNICEF, as well as international and national NGOs, provided further support, especially in the areas of curriculum design and facilitator training.

Questions arise regarding the quality, equity and sustainability of the pre-primary education system thus far created:

- Community and school-based centres offer day care, early education and parental education. Yet the quality of services is recognized as poor in most centres. Facilitators often have low qualifications, and they receive only a limited amount of pre-service and in-service training. A system for monitoring quality and giving facilitators feedback and support is lacking.
- Facilitator recruitment and training are an issue. This was particularly the case in the mid-2000s as enrolment exploded. The average pupil/teacher ratio jumped to 42:1 and, in 2008, 27% of teachers had received no training. By 2013, the pupil/teacher ratio was still quite high (23:1) and 13% of teachers still had no training.
- Public expenditure on pre-primary education remains minimal, and represented only 0.07% of GDP, or 1.5% of total public expenditure in 2009 (the only year for which data are available). The School Sector Reform Programme (2009–2015) aimed to provide for central government funding of school-based centres for all 4-year-olds, but services for younger children were still to be financed by local communities.
- There remain disparities in access and resources between the plain, hill and mountain areas, as many remote areas in the hills and mountains in particular still have no centres. Besides, private schools with better resource levels are concentrated in urban areas, especially in Kathmandu Valley. The 2014 MICS found that 78% of children aged 3 and 4 in urban areas were enrolled, compared with 47% in rural areas; whereas 84% of children from the richest quintile were enrolled, compared with 41% of those from the poorest quintile (Figure 9).
- Sustainability is dependent on a continued mobilization of all stakeholders, including parents, facilitators, village, municipality and district development committees, NGOs, the national government and international partners. For one thing, low facilitator remuneration may have an impact on their motivation and contribute to attrition.

To conclude, by the early 2010s, Nepal was building a fairly comprehensive early childhood care and education system. A 2013 World Bank benchmarking report evaluated it as 'emerging' (the second of four levels, from 'latent' to 'advanced') in terms of legal framework, intersectoral coordination,

finance, scope of programmes, equity, data availability and compliance with quality standards; the report deemed it 'latent' (the first level) as far as coverage was concerned and 'established' (the third level) in terms of defining quality standards. Indicators of health, nutrition and education were improving rapidly, providing a possible source of inspiration for other low-income countries. Yet the system is still fragile. The April 2015 earthquake that devastated the Kathmandu Valley and other parts of the country and its consequences on socio-economic development and political stability put Nepal's recent achievements at risk.

5.6 Lao PDR: Pre-primary education is starting to expand in a context of low and unequal early childhood outcomes[54]

The Lao PDR lags behind most other countries in the Asia-Pacific region in terms of early childhood care and education. At 122 deaths per 1000 (‰) live births, the under-5 mortality rate was the second highest in the region in 1999, after Afghanistan. By 2013, the rate was down to 71‰, but was still the third highest, after Afghanistan and Pakistan. In contrast with many other low- or lower-middle-income countries, other indicators including immunization rates and pre-primary enrolment ratios stagnated during the early 2000s and started improving significantly only after 2007. Lao PDR has a small population by East Asian standards (6.8 million), but this population is extremely young (children under age 15 years comprise 35% of the population) and growing rapidly (total fertility stood at 3.1 children per woman over 2010–15). Needs for ECCE are thus immense, as current child outcomes are poor on average, and very unevenly distributed, with patterns of disadvantage that reinforce each other in space and time (Table 5).

54 Case study based on Lao PDR (2014, 2012); UIS (2015); United Nations (2015f), and comments received from UNESCO Bangkok on a first draft of this report.

Table 5: Disparities in key ECCE indicators in Lao PDR

	Under-5 mortality	No vaccination	Stunting	Early childhood education attendance	Young women literacy	Total fertility
	‰	%	severe or moderate, %	ages 3–5, %	ages 15–24, %	
Gender						
Female	83	14.0	42.6	25.3		
Male	95	17.3	45.7	20.9		
Province						
Lowest value	32	3.0	19.3	4.3	38.6	2.0
Highest value	151	36.7	62.7	69.6	92.9	4.5
Residence						
Rural without roads	136	25.4	53.8	6.0	41.4	4.8
Rural with road	94	16.0	47.8	16.4	61.5	3.4
Urban	45	11.1	27.4	54.7	90.6	2.2
Wealth quintile						
Poorest	120	23.8	60.6	5.3	28.7	5.3
Second	109	20.8	50.2	9.4	48.9	3.8
Richest	33	4.0	19.7	73.0	95.7	1.9
Mother's education						
None	116	27.7	57.9	6.7	0.4	4.8
Primary	91	14.0	43.2	18.2	45.6	3.3
Upper secondary	48	3.7	23.1	64.4	100.0	2.6
Ethnicity						
Most disadvantaged	160	35.1	60.9	7.2	30.1	5.5
Lao-Tai	76	10.4	33.4	35.9	81.6	2.6

Notes: 'No vaccination' implies that the child received neither BCG nor polio, DTP, HepB or measles vaccines. The most advantaged province is usually Vientiane, the capital city; Lao-Tai have better outcomes than the other ethnolinguistic groups listed in the survey: Mon-Khmer, Hmong-Mien, Chinese-Tibetan, and Others. For literacy and total fertility, the education level refers to women's own level, not their mother's. : not applicable.

Source: Lao PDR (2012).

Contrast can be extreme, for instance, between a child born to a mother with tertiary education living in a wealthy household of the Lao-Tai ethnic majority in the capital city, Vientiane, and a young child born to a mother who never attended school and grew up in poverty in a remote ethnic minority village. Young women from disadvantaged backgrounds need the most support, as many of them are illiterate and they tend to have more children; yet they are least likely to have access to ECCE centres. Marginalization is thus reinforced as disadvantage is transmitted from one generation to the next. The persistence of early childhood deprivation hampers progress in primary education, as many entrants are not ready for schooling. The primary NER went beyond 80% in 2007 and has reached 95% and above since 2011. Yet dropout rates are high and only 73% of pupils reach the last grade of primary education.

Pre-primary education policy is still at an initial stage. Until 2007, enrolment stagnated, with the GER merely increasing from 7% in 1999 to 11% in 2007. The 2007 Education Law defined priorities for early childhood care and education, including the cognitive, physical and social stimulation of young children, as well as school readiness. In 2008, the Ministry of Education and Sports was reorganized and a Department for Primary and Pre-primary education was created. A National Education System Reform Strategy was implemented over 2006–2015, and an Educational Sector

Development Plan over 2011–2015. Funding was received from the Catalytic Fund of the FastTrack Initiative for a school construction programme, which covered both pre-primary and primary education. By 2013, the GER had more than doubled, to 26%, but was still low by international comparison.

Throughout the period, priority was given to enrolling 5-year-olds to make them ready for primary education. Targets set by the EFA National Plan of Action 2003–2015 included enrolment ratios of 11% for 3 and 4-year-olds and 55% for 5-year-olds by 2015. The number of pre-primary classes increased from 2,557 in 2007 to 6,837 in 2014, including public centres (either separate pre-primary schools or classes added to primary schools), community centres and private centres. Community centres are a low-cost alternative which target villages with incomplete primary schools (offering only grades 1 to 2 or 3) and no pre-primary class. The community is required to provide a space for the class (either a private home or a community space). Caregivers (almost all of whom are women) are recruited locally among persons with at least five years of education and receive a small compensation. They use a simplified version of the pre-primary curriculum. This policy has allowed some of the targets of the Plan to be met: By 2014, 27% of 3 and 4-year-olds were enrolled and 61% of 5-year-olds. But only 45% of entrants into primary education had pre-primary experience, against a target of 50%.

The system thus created does not have the capacity to enrol all young children in the country and will need to be further expanded. Access remains unequal, as illustrated in Table 5. And the distribution of centres is uneven throughout the country. Community centres are mostly found in rural areas, while formal public centres are concentrated in urban areas. In 2014, 60% of private centres were found in the capital province of Vientiane, while Saravan and Phonsaly provinces had none. Indeed the private sector had been expected to make a greater contribution and to enrol 30% of young children by 2015, yet its share in total enrolment declined from 28% in 2007 to 21% in 2014.

Recent years have seen efforts to strengthen teacher training. Teachers used to receive two months of training per year for three years to earn a teaching certificate/diploma, followed with a total amount of in-service training of 30 weeks. In 2013, a first four-year degree programme was created at one of the teacher training colleges and two additional teacher training colleges started such programmes in 2015. Scholarships have also been introduced conditional on recipients committing to teach in a public or community centre for at least three years.

Pre-primary education in Lao PDR remains fragile:

- Teacher recruitment was affected in 2010 and 2011 by a government decision to allow teachers recruited for pre-primary centres to transfer to primary schools. The number of teachers fell by nearly 1,000, to about 5,500, before increasing again to about 7,000 in 2014. The average pupil/teacher ratio jumped from 13:1 in 2011 to 18:1 in 2012, and was still at that level in 2014, which may translate into a larger actual class size;
- Teacher deployment is unequal, with average pupil/teacher ratios ranging from 16:1 to 23:1 across provinces, with larger variations at the local level;
- Most public expenditure on pre-primary education is spent on teacher salaries and very limited funds are available for investment and quality improvement;
- Data collection is still insufficient; in particular, there is a paucity of data on finance, and on community centres and the private sector. The functioning and quality of pre-primary centres are poorly monitored.

5.7 Papua New Guinea: Early childhood care and education policy is at an initial stage[55]

With 7.6 million inhabitants, Papua New Guinea has the second largest population in the Pacific, after Australia; it accounts for 18% of the subregional total. The country context is particularly challenging for care and education policies. The population is extremely young (children aged 0–14 comprised 37% of the population in 2015), growing rapidly (the total fertility rate was 3.8 over 2010–2015), characterized by extreme ethnolinguistic diversity, and overwhelmingly rural, with many remote settlements scattered across islands, flood plains and highlands. With 13% of the population in urban areas, the country was the third least urbanized in the world in 2014. The economy is reliant on natural resource extraction, and governance is weak.

Health and nutrition indicators are among the poorest in the Asia-Pacific region (see figures and tables in Section 2). Under-5 mortality declined only slowly between 1999 and 2013, as immunization coverage remained insufficient and malnutrition widespread. The prevalence of stunting in fact increased from 44% to 50% between 2005 and 2009, the only two years with data (Figure 12).

Pre-primary education policy is still at an initial stage at best, as priority has been given to providing nine years of basic education. Under the National Education Plan (2005–14) and Universal Basic Education Plan (2010–19), school fees were abolished, and a national basic education curriculum is being designed after a first proposal was rejected as inadequate by school principals, teachers and parents. A latent demand for pre-primary education probably exists. For instance, many parents enrol their children in primary school before they reach the age of 6. Young children aged 5 and under accounted for 18% of pupils in grade 1 in 2013, up to 37% in Enga province. However, there is almost no supply answering to this demand:

- There are no public pre-primary schools. Over 300 private centres exist in the country, concentrated in urban areas, and levying fees which only wealthier parents can afford. NGOs and churches run a few centres accommodating disadvantaged children in peri-urban and remote rural areas. These are neither licensed nor monitored.
- No curriculum, teaching standards or teacher training courses have been developed at the national level. The University of Goroka runs a learning centre for children aged 3 to 6 and has defined its own learning standards. It also offers a course leading to an early childhood teacher qualification, but this has not been accredited by the National Department of Education. New courses have opened with support from the government of Australia leading to bachelor's and master's degrees in early childhood education, but graduates end up teaching in primary schools.
- At the national level, there is no pre-primary education division in the National Department of Education. Responsibilities for early childhood care and education are shared between the Department of Health and the Department of Community Development. An ECCE technical committee and an ECCE networking groups bring the three departments together with national and international NGOs.

The situation may improve in the near future. A consensus between politicians, professionals and academics has been building up about the need to create a pre-primary education system. A 2013 Task Force recommended transferring responsibility to a restructured Department of Education,

55 Case study based on Papua New Guinea (2014); United Nations (2014b, 2015f).

along with adequate resources, developing a national strategy, with an implementation policy and plan, and giving local authorities responsibility for creating pre-primary schools.

5.8 Lessons learnt from the country cases

As country contexts are varied and early childhood care and education policies are at diverse stages of development, lessons emerge from the six country case studies above that may be relevant for all other countries in the Asia-Pacific region.

Equitable access

Rapid expansion of pre-primary education is possible even in challenging country contexts. Countries with the lowest enrolment ratios in Asia-Pacific typically face challenges such as rapid young child population growth, poverty, ethnolinguistic diversity, low urbanization rates or large remote, rural populations – as illustrated by Nepal, Lao PDR or Papua New Guinea. Without government intervention, provision risks remaining limited to private centres concentrated in urban areas and enrolling a minor share of young children, as in Papua New Guinea. Yet the experience of Lao PDR and, particularly, Nepal, shows that given political commitment and adequate technical and financial support from official development assistance partners, it is possible to rapidly create community centres that can provide one year of pre-primary education to 5-year-olds to facilitate their entry into primary education. Such low-cost provision might be thought of as a first step towards the creation of a proper pre-primary education infrastructure.

Middle-income countries that have achieved large-scale access to pre-primary education may face difficulties reaching the most deprived children, as revealed by disparities within Thailand and Mongolia. These disparities are linked to structural features of societies (e.g. the rural/urban gap in sparsely populated Mongolia) and may require adapting the supply of pre-primary education to the living conditions of disadvantaged or hard-to-reach children (e.g. *ger* kindergartens following nomadic communities in the same country).

Governments need to define a strategy early on regarding the coexistence of public and private, formal, non-formal and informal provision of child care and pre-primary education, to avoid a fragmented and inequitable system. The Republic of Korea achieved high participation levels while relying mostly on private provision and funding until the 2000s, but is faced with disparities in the quality of child care centres and kindergartens and high tuition fees in many private institutions. The recent increase in government funding has facilitated access for young children from disadvantaged social background. The ongoing integration of all pre-primary education providers into a unified system should further help solve issues of access and equity. Other countries in the region might want to take similar measures at an earlier stage of educational and economic development.

Quality

Countries that are at the initial stage of expanding pre-primary education need to define the quality of education they aim to achieve given resources available. As illustrated by Nepal and Lao PDR, there are limitations to what low-cost community centres run by inexperienced local persons who received only basic education and a few weeks of training can achieve. It is therefore crucial to develop teacher training as well as a monitoring system that can provide critical feedback and support.

In the longer term, a move needs to be made towards requiring teaching degrees in pre-primary education. The first step is to create such degrees and to provide student scholarships conditional on a commitment to teach at pre-primary level, as established recently in Lao PDR. Universities can play a crucial part in designing teacher training programmes and curricula, as in the case of one university in Papua New Guinea.

Countries with more advanced pre-primary education systems have more leeway for reflecting on the type of pre-primary education they want to deliver – ideally emphasizing young children's holistic development over a narrower vision of school readiness measured by cognitive skills. Gaining parents' approval is crucial in that respect, as illustrated by the Republic of Korea, where social pressure emphasizes early academic performance.

Finally, countries can draw lessons from one other; for example, by learning from the experience of Thailand with quality standards in pre-primary education and model centres.

Governance

Political commitment and a sound legal and managerial framework are indispensable. In Thailand, the creation of a high-level national committee supervising the many ministries and other public agencies involved in pre-primary education in 2008 facilitated improvements in access and quality. In Nepal, pre-primary education really took off after the adoption of an interim constitution in 2007 which made education a fundamental right and was followed by an education sector reform and several triennial plans. In Lao PDR, a less radical reform, with the adoption of an education law in 2007 and the creation of a Department for Primary and Pre-primary Education in 2008 initiated the expansion of the sector. In Papua New Guinea, a 2013 official report recommended the clarification of responsibilities and their transfer to the Ministry of Education as a first step towards creating a public sector.

The coexistence of different types of public and private providers requires adequate regulations, as shown by the case of the Republic of Korea. Public subsidies to private institutions may generate adverse side effects, with profits taking precedence over the quality of teaching. Enforcing quality standards throughout the system is thus a central concern.

Financing

Expanding access to pre-primary education of quality requires high levels of funding, as illustrated by Mongolia, the Republic of Korea and Thailand. Countries relying on low-cost alternatives, such as Lao PDR and Nepal, will need to expand funding levels in the long term to ensure the quality and sustainability of community centres. Insufficient salaries risk leading to severe teacher attrition over the years, and funding is further needed for teaching/learning materials and ensuring safe, child friendly learning environments.

Monitoring

Monitoring and evaluating pre-primary education is a challenge for countries which are just beginning to expand the sector. Papua New Guinea has few relevant statistics and community centres and private centres are not covered by monitoring mechanisms in Lao PDR. Nepal, while having an 'emerging' system for data collection, faces difficulties monitoring the quality of teaching-learning activities in its community centres.

Making information on pre-primary schools publicly available is essential, especially in countries where a pre-primary education market is managed by a diversity of providers. Monitoring systems recently introduced in the Republic of Korea aim to inform parents about the different child care centres or kindergartens among which they can choose.

Here as well, countries may learn from each other. Thailand is particularly advanced, having defined quality standards and initiated a national assessment of learning in its pre-primary schools.

6 Conclusions: ECCE in the SDG 4 – 2030 era in Asia and the Pacific

This analysis set out to map the main trends and challenges in ECCE throughout the large Asia-Pacific region. As the previous sections have demonstrated, the region has progressed in many ways, but the advances are uneven across and within countries. The focus on five thematic areas –equitable access, quality, governance, finance and monitoring – provides a framework for identifying the success and challenges specific to the region's effort to provide children with strong development and learning opportunities. This Section provides a critical reflection of the findings in the previous Sections, and includes concrete recommendations on strategic priorities for governments, policymakers and ECCE advocates to improve the equitable provision of quality of ECCE in the region for the next development period (2015–2030). Recommendations are provided as checklists for governments wishing to strengthen their ECCE systems and the delivery of quality ECCE interventions. Donors, ECCE advocates and ECCE service providers can provide supportive technical assistance to finance and assist in the rapid deployment of systemic reforms. Building partnerships among the diverse group of stakeholders (e.g. government, community, parents, teachers) can boost results in each of these five areas.

Equitable access

ECCE participation in the region was presented in Section 3 and the adjoining regional profiles. Subregions are at varying levels of ECCE enrolment and the 1999–2015 period had periods of slower and faster growth. Much expansion of enrolment has occurred recently, and the new momentum for the SDG period should build on those recent successes.

The analysis reveals that – even 15 years after the international commitment to EFA Goal 1 – many countries have still not fully developed an overall vision of the panoply of services directed to children, or even identified targeted populations by their vulnerable characteristics. There must be renewed efforts in defining ECCE as a holistic set of services and measuring up to that definition so as to meet the overall vision of the SDGs. Research evidence shows that compared to programmes that focus only on a specific area of child development and do not provide integrated services, holistic programmes yield significantly higher scores on child development outcomes (Walker et al., 2007).

The SDG focus on equity aims to direct governments and donors to increase their attention to those who are being left behind. Many children are still not participating in ECCE for a variety of reasons described in Section 4.1. From a development perspective, waiting until the onset of primary education to address the needs of children is simply too late of an investment to address equity concerns. Research shows that children who are most vulnerable are those that require more attention and family support before birth and in their first years of life. Improving

nutrition and health practices – along with learning-based interventions – for young children increase their cognitive capacity and overall well-being (Nores and Barnett, 2010). Designing and supporting intensive and individualized early childhood intervention (ECI) services for children with development delays, disabilities and atypical behaviours are essential for inclusion and participation. Lessons learnt from developing countries suggest the need for intersectoral agreements and a legal basis for effective development of national ECI strategies which are child centred and family focused (Vargas-Barón, 2015a, 2015b). In most low- and middle-income countries, the health care system is the only system which could be likely to reach all needy pregnant women, children and families (WHO, 2012).

Increasing equitable access means reaching out to vulnerable populations and including parenting programmes and home based strategies in the panoply of ECCE services offered to families – as was identified in several countries throughout this report. Involving parents and communities in ECCE development and management is a successful strategy to build across lines of disadvantage. Improving the quality of the home environment and parent child interactions and providing families with information about ECD (supported by low cost or home made materials) provide children with elements critical for their development and learning (Nonoyama-Tarumi and Ota, 2010). A combined home and centre based programme in the Philippines, which provided holistic and integrated services to vulnerable families, significantly improved children's cognitive, social, motor and language development. The longer their participation or the younger the age of entry, the higher the beneficial impact of the programme (Armecin et al., 2006a, 2006b).

Given the wealth and diversity of experiences and ECCE policies in the region, countries that are in the process of developing their ECCE policies can benefit from lessons learnt in other countries. For example, in Indonesia and Sri Lanka, the existing health sector delivery mechanisms for families is used as an entry point for providing holistic ECCE services to young children from vulnerable families (UNESCO and UNICEF, 2012). The case study on the Republic of Korea underscored the need for the government to define a strategy regarding the coexistence of various forms of provision of child care and pre-primary education (that is, public, private, formal, non-formal and informal provision).

Those countries with relatively high enrolment rates are aiming to meet ambitious targets for ECCE enrolment. New Zealand's current strategy for Māori Education (Ka Hikitia) aims to reach 98% total enrolment in quality ECCE by 2017 (New Zealand Ministry of Education, 2014). These high goals should not be limited to countries with strong ECCE provision. In 2000, Nepal had established an 80% GER target for 2015, when it was only at 13% in 2001. That target will most likely be achieved given its policy of growth and its current GER level (74% in 2012) (Government of Nepal, Ministry of Education, 2015). With political will and policy strategies, strong ambitions can be reached.

Broadening access recommendations

- Develop intersectoral early childhood interventions to identify children with vulnerable conditions, including developmental delays and disabilities, reduce the impact and provide developmental support.
- Provide at least one year of free pre-primary education for all children using a play-based, child-centred approach.
- Implement quality ECCE programmes targeted at children below three years of age.
- Identify and measure vulnerable populations in need of ECCE services, and create a strategic plan to address their specific barriers to participation.
- Consider lessons and innovative strategies from other countries in the region to develop policy solutions to reach the most vulnerable populations, including those which explore intersectoral policy coordination.
- Focus on parents and children as an entity, rather than separate components of a family unit. Involve parents in all aspects of ECCE service delivery, including governance and quality concerns of ECCE programmes.
- Create a regulatory framework which includes the public, private, formal, non-formal provision of ECCE services, especially with regards to their inclusion of vulnerable populations.

Quality matters

This analysis examined various aspects related to the provision of quality ECCE. Increasing access has been a priority in most countries, and developing a high quality environment has been a secondary concern. Most visibly, many countries do not yet appear engaged in focusing on the quality of the ECCE workforce. The development of ECCE specific standards, qualifications, training programmes and accreditation programmes is only emerging in some Asia-Pacific countries, with the exception of the high-income countries and examples provided in Section 3.2, including Singapore and Thailand.

Research-based evidence shows that concern over larger class sizes is less relevant than the capacity of the ECCE staff to deliver quality interactions with children and families. The benefits of in-service training to improve the capacity of hired staff has been underscored in earlier Sections. The need to professionalize the ECCE workforce in the region will accrue long-term benefits to ECCE quality. International policy guidelines suggest that education authorities should consider dedicating up to 1% of overall staff payroll to finance continued professional development in all geographic regions, including most remote areas or areas with lower resources (ILO, 2014).

Other aspects of quality such as those related to programme infrastructure, safety standards, pedagogical tools, learning materials, and physical standards, were discussed in few EFA reviews or other documents reviewed in this work, but they are also of utmost importance to provide safe and positive learning environments. Those developed countries in the region could share their experience with the OECD Early Childhood Education and Care quality framework (OECD, 2012); for example, to share the multiple facets of targeting and measuring quality indicators.

Improving quality recommendations

- Implement integrated ECCE programmes that foster children's all-round development that include personality, mental and physical abilities to their fullest potential, and lay a firm foundation for school education.
- Integrate social and emotional learning (SEL) skills in ECCE curriculum so that it will promote among children the attributes required for peace building such as appreciation of diversity and inclusiveness, managing interpersonal conflicts, and learning to care for others.
- Engage country statistical offices with national or international researchers to identify and implement measurement tools and learning assessments to evaluate the quality of ECCE programming with the objective of building national technical capacity.
- As needed, develop national standards, qualifications and accreditation systems to define and increase the quality of the workforce, and attract better candidates to the sector. Provide monitoring mechanisms to monitor and reinforce the objectives.
- Ensure sustained public investment in in-service ECCE workforce development (continual professional development) and access to CPD for ECCE staff living in disadvantaged areas or working with vulnerable populations.
- Identify national priorities for enhancing quality of ECCE provision to improve policy implementation and programme effectiveness. Build on emerging international efforts to meet cultural and national aspirations.

Governance

The importance of governance in the development of ECCE is highlighted throughout the national reviews. Generally, it appears that those countries with weak political and administrative engagement for ECCE have either no or limited provision of holistic ECCE services. Good governance appears to rest on three main elements: administrative organization, decentralization and the role of private actors.

Yet, the underlying priority for any organization is the creation of an intersectoral and intergovernmental coordinating mechanism. The selection of the education ministry as the lead agency of the mechanism provides a focus on children's learning and transition to primary education (UNESCO, 2006). The mechanism must include all administrative levels of provision, as well as private and non-governmental providers, so as to ensure adequate representation. Several examples exist in the region of governments that have established either coordinating councils or lead ministries to manage ECCE policy development.

Section 4 raised the concern about governance of ECCE services in the region. Although countries have progressed at varying speeds and levels in terms of improving ECCE access, getting to the next phase of universal ECCE requires planning documents, outlining targets and phases for all ECCE services. For countries in the ECCE policy development stage, coordination mechanisms require more attention in planning documents. For countries with established ECCE policies, the focus should be on expanding involvement with non-governmental organizations, communities and other groups working with marginalized and difficult-to-reach populations (UNESCO and UNICEF, 2012).

Strengthening governance recommendations

- Assign a lead agency or create a strong agency with decision-making powers to lead inter-sectoral efforts. Develop strategic guidelines to implement ECCE plans.
- Involve stakeholders from a range of sectors to participate in the coordinating mechanism, created under the auspices of a formal administrative (non-political) arrangement. Include emergency cluster organizations, child protection, social welfare and women's rights agencies.
- Build and strengthen holistic networks for the delivery of integrated services, especially for vulnerable and marginalized children, and during emergencies, with the participation of relevant providers and agencies.
- Have civil society and NGO programming model multisectoral programmatic approaches and provide evidence to work towards national collaborative programming with government entities.
- Developing technical and institutional capacities in education planning and management through frequent training of ministerial and local government staff.
- In fragile or weak governments, NGOs and other providers of ECCE services should create the coordinating mechanism to improve the delivery of their services.

Financing

Many countries struggle to increase domestic resources to finance ECCE activities. The focus in education is often around primary education and, more recently, expanding upwards into lower secondary and tertiary subsectors as demands increase. Budget constraints limit a country's ability to develop or implement ECCE strategies, and problems of accountability and monitoring can also cause inefficiency in development. Many countries in the region have a budget shortfall for ECCE, especially in the Pacific islands and South Asia, and much of South-East Asia face funding constraints for ECCE (UNESCO Bangkok, 2015). Countries in conflict, such as Afghanistan, have moved the EFA deadline forward by five years to 2020 in an attempt to meet the EFA goals, partly because of insufficient funds.

The MDGs and EFA goals provided an important framework for financing education initiatives in developing countries. Similarly, the new SDG targets on early childhood should help governments mobilize new resources and financial partners for the development of ECCE programmes, increasing quality or improving equity across the existing system. Moreover, governments could examine partnerships across other SDGs to improve financing opportunities and aid effectiveness.

Innovative financing mechanisms can also provide unique opportunities for public-private partnerships in ECCE programming and service delivery, whereby the recipient (i.e. government, donors, private foundations) can increase their capital. SIBs or DIBs (Section 3.4) could help increase investment in early childhood interventions in the region by harnessing private capital to fund small-scale or large-scale ECCE interventions.

Better quality financing data is needed in the ECCE field. Regardless of the level of ECCE implementation, governments are not always able to easily identify the overall investment in ECCE. Budget lines for service provision to young children and their families are located across various ministries, agencies and local governments. Financing ECCE should include a budget for

the development, technical support and training of local specialists to establish and manage a strong monitoring system.

Strengthening financing recommendations

- Earmark a minimum of 2% of total government expenditure for public investment in ECCE.
- Improve coordination with other sectors working with young children and families in terms of financing and explore funding opportunities across other SDGs.
- Initially target children from most vulnerable families if the provision of universal services is unaffordable.
- Make special financing provision for ECCE in disadvantaged areas and poverty pockets, where the needs are critical.
- Generate financial resources at the local level for the sustainability of the programme.
- Attract overseas development assistance and explore new sources of funding – including SIBs and DIBs – building on those donors already heavily invested in ECCE.
- Finance a monitoring and assessment system to improve ECCE programme planning and efficiency.

Monitoring

In light of the SDG 4 – Education 2030 agenda discussions, improving monitoring mechanisms needs to be part of national priorities in developing an ECCE strategy. Better and more reliable data are central to measuring progress towards international goals, but they also enable governments to self assess and increase system efficiency and effectiveness. In short, without robust and reliable monitoring systems, policymakers will not have the proper information to make effective planning and programming decisions. Monitoring ECCE interventions need to consider measures of equity and quality to understand potential disparities across different populations and service provision types. Monitoring the delivery of ECCE also needs to be sensitive to governance issues, especially information sharing between various levels of government and across government responsibilities (Vitiello and Kools, 2010).

Reliable data collected on a regular basis can assist in assessing progress and providing evidence to support ECCE advocacy at a national level and increase fundraising capacity at an international level. Measuring ECCE progress is fraught with complexity given the various components, the various age groups and reporting systems involved. But trying to meet the reporting needs of donors is critical to maintaining investments for aid dependent countries. Addressing the complex reality of ECCE monitoring should be a concern for all national governments. Efforts will have to be focused on developing or improving a reliable EMIS in low-income countries that includes ECCE in its own right.

Indicators should reflect national objectives that capture the wide range of ECCE interventions. The current movement among education specialists is supporting countries to move beyond the basic selection of education indicators available at an international level. Indicators included as measures for monitoring the EFA goals and MDGs were selected based on the indicators available at the time to measure or proxy those education targets. The unintended consequence of these decisions was that they directed national ECCE action and strategies towards meeting those

measurable outcomes (Fukuda-Parr, 2013; Unterhalter, 2013). For example, the emphasis on increasing enrolment in centre-based ECCE and in primary schools reflects the focus on targets. But home-based ECCE programmes have proven their value in terms of supporting families and children's developmental outcomes.

With the new SDG target for early childhood, current SDG 4 – Education 2030 discussions recognize that measurable and actionable targets need to be built into the future global education goals and agenda. Targets need to be defined appropriately and clearly, so that they can be included in national measurement systems for monitoring change over time (Post-2015 Education Indicators Technical Advisory Group of the EFA Steering Committee, 2014).[56] But many questions still surround, for example, the way in which ECCE quality should be measured. What aspects of quality should be included? Do child outcomes need to be individually measured or aggregated into an index? Can international child-based assessments take into consideration the unique timing of each child's development process? An international consortium of ECCE technical advisors is sorting through these and other questions on how to develop tools to measure child development/learning and quality of pre-primary learning environments (see Section 3.5).

Monitoring recommendations

- Develop strong national system housed in EMIS or in another systematic information system to monitor holistic ECCE provision in all types of ECCE settings, whether public or private.
- Create a comprehensive data base at all units of the government (central, regional, district and local) for the projection and monitoring of ECCE programmes.
- Adapt national monitoring plans to include the new expectations on ECCE monitoring as derived from the SDGs.
- Establish a set of national ECCE indicators that reflect national priorities above and beyond international SDG targets.
- Strengthen monitoring of child outcomes, quality, process and structural characteristics of both public and non-public ECCE programmes.

Countries in the Asia-Pacific region have emerged from the EFA period having achieved significant progress in improving child survival and nutrition, and providing children with access to ECCE programmes and services. In the areas of improving equitable access, quality, governance, financing and monitoring, there is much to be learnt from the experience of other countries in the region, as Sections 3 and 5 display.

There is still much work to be achieved, and progress has been uneven across the sub-regions and within countries. Challenges continue to hold back the possibility of giving children the developmental opportunities they require for future learning and well-being. Addressing early childhood as a holistic, continuous period of development should be a central concern to governments, and should influence policy-making priorities for children. We hope that the recommendations in this document can provide the beginning of a discussion on national and regional priorities for the next development period.

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56 For an analysis of a proposed list of global ECD monitoring indicators (i.e. availability, quality, reliability), see Post-2015 Education Indicators Technical Advisory Group of the EFA Steering Committee (2014).

References

ADB, 2014. *Key Indicators for Asia and the Pacific 2014,* 45th Edition, Special chapter, Poverty in Asia: A Deeper Look. Manila, Philippines, Asian Development Bank.

Anderson, K., Raikes, A., Atinc, T.M., 2014. *Global Momentum for Measuring Early Learning Outcomes and Program Quality.* Brookings Institution, Center for Universal Education, Education Plus Development.

Armecin, G., Behrman, J.R., Duazo, P., Ghuman, S., Gultiano, S., King, E.M., Lee, N., 2006a. *Early Childhood Development through Integrated Programs: Evidence from the Philippines,* Notes on Incorporating Duration of Exposure Data into Estimation of Impact.

Armecin, G., Behrman, J.R., Duazo, P., Ghuman, S., Gultiano, S., King, E.M., Lee, N., 2006b. *Early Childhood Development through Integrated Programs: Evidence from the Philippines* (World Bank Policy Research Working Paper No. 3922), Impact Evaluation Series No. 2. World Bank.

ARNEC, 2014. *Convergence and mainstreaming of services for effective ECD: Learning from Nepal.*

Baigalmaa, O., Todgerel, S., Amarbayasgalan, N., Munkhzul, Z., NSO, O.B., Statistician, PSSD, 2013. Mongolia "Child Development-2010" survey Multiple Indicator Cluster Survey – 4 Final Report. National Statistics Office of Mongolia, Ulaanbaatar, Mongolia.

Bajaj, M., Gupta, M., 2013. Meeting migrant families' needs through on-site crèches. *Early Childhood Matters* 35–38.

Bennett, J., 2004. *Early Education Financing: What is Useful to Know?* (UNESCO Policy Brief on Early Childhood No. 23). UNESCO, Paris.

Bennett, J., 2012. *Roma Early Childhood Inclusion: The RECI Overview Report.* Open Society Foundations, the Roma Education Fund and UNICEF, Hungary.

Betts, J., Lata, D., 2009. *Inclusion of Children with Disabilities: The Early Childhood Imperative* (UNESCO Policy Brief on Early Childhood No. 46). UNESCO, Paris.

Bhutan NSB, 2011. Monitoring the situation of children and women Bhutan Multiple Indicator Survey 2010. Bhutan National Statistics Bureau, Thimphu, Bhutan.

Borisova, I., 2015. *Measuring Development and Early Learning Globally: The International Development and Early Learning Assessment* (IDELA).

Britto, P.R., Limlingan, M.C., 2012. *School Readiness and Transitions: A companion to the Child Friendly Schools Manual.* UNICEF, New York.

Bus, A.G., Leseman, P.P.M., Neuman, S.B., 2012. Methods for preventing early academic difficulties, in: Harris, K.R., Graham, Steve, Urdan, T., Bus, A.G., Major, S., Swanson, H.L. (Eds.), *APA Educational Psychology Handbook, Vol 3: Application to Learning and Teaching.* American Psychological Association, Washington, DC, pp. 527–550.

Cappa, C., Petrowski, N., Njelesani, J., 2015. Navigating the landscape of child disability measurement: A review of available data collection instruments. ALTER, *European Journal of Disability Research* 9, 317–330.

Chawla, M., Betcherman, G., Banerji, A., 2007. *From Red to Gray: The "Third Transition" of Aging Populations in Eastern Europe and the former Soviet Union.* World Bank, Washington, DC.

Chien, N.C., Howes, C., Burchinal, M., Pianta, R.C., Ritchie, S., Bryant, D.M., Clifford, R.M., Early, D.M., Barbarin, O.A., 2010. Children's Classroom Engagement and School Readiness Gains in Prekindergarten. Child Development 81, 1534–1549. doi:10.1111/j.1467-8624.2010.01490.x

Cunha, F., Heckman, J.J., Lochner, L., Masterov, D.V., 2006. *Interpreting the Evidence on Life Cycle Skill Formation, in: Handbook of the Economics of Education.* Elsevier, Philadelphia, PA.

Denboba, A., Hasan, A., Wodon, Q. (Eds.), 2015. *Early Childhood Education and Development in Indonesia: an Assessment of Policies using SABER* (SABER Country Report), Systems Approach for Better Education Results (SABER). World Bank, Washington, DC.

Development Impact Bond Working Group, 2013. Investing in Social Outcomes: *Development Impact Bonds,The Report of the Development Impact Bond Working Group.* Center for Global Development and Social Finance, Washington, DC.

Devercelli, A., Raikes, A., Anderson, K., 2015. *Measuring Development and Early Learning Globally: The International Development and Early Learning Assessment* (IDELA).

Education Bureau, 2014. Sharing Session on Kindergarten Visits to Seoul, Korea, for Kindergarten Principals and Teachers.

Education Commission, DPRK, 2014. Democratic People's Republic of Korea. UNESCO, Paris.

EFA 2015 Review Group and Secretariat Group, 2014. Country Report of Lao PDR.

el Zein, H.L., Chehab, M., 2015. Chapter 6: Young children on the frontline: ECCE in emergency and conflict situations, in: *Investing against Evidence The Global State of Early Childhood Care and Education,* P. T. M. Marope and Y. Kaga (eds), Education on the Move. UNESCO, Paris, pp. 119–135.

European Commission, 2014. Proposal for key principles of a Quality Framework for Early Childhood Education and Care. European Commission, EC Working Group on Early Childhood Education and Care, Brussels.

Ferré, C., Sharif, I., 2014. *Can Conditional Cash Transfers Improve Education and Nutrition Outcomes for Poor Children in Bangladesh?* Evidence from a Pilot Project Social Protection and Labor Global Practice Group (Policy Research Working Paper No. 7077). World Bank, Washington, DC.

Frost, M.D., Puri, M., Hinde, P.R.A., 2013. Falling sex ratios and emerging evidence of sex-selective abortion in Nepal: evidence from nationally representative survey data. BMJ Open 3. doi:10.1136/bmjopen-2013- 002612

Fukuda-Parr, S., 2013. *Global Development Goal Setting as a Policy Tool for Global Governance: Intended and Unintended Consequences* (Working Paper No. 108). International Policy Centre for Inclusive Growth, UNDP, Brasilia.

GCPEA, 2014. Education *Under Attack 2014.* Global Coalition to Protect Education from Attack, New York, NY.

Gelb, A., Clark, J., 2012. *Pakistan's "Pocket of Productivity": Empowerment through Identification.* Center for Global Development: View from the Center.

Gillani, W., 2014. What's in a surname? *The News on Sunday.*

Global Campaign for Education, 2015. Final Declaration of the Incheon World Education Forum 2015: GCE response [WWW Document]. World Education Forum Declaration: civil society celebrates "historically progressive" vision for education 2016 - 2030. URL http://campaignforeducation.org/en/news/global/view/651-world-education-forum-declaration-civil-society-celebrates-historically-progressive-vision-for-education-2016-2030

Global Polio Eradication Initiative, 2015. Infected countries [WWW Document]. Global Polio Eradication Initiative. URL http://www.polioeradication.org/infectedcountries.aspx (accessed 8.9.15).

Gottlieb, C.A., Maenner, M.J., Cappa, C., Durkin, M.S., 2009. Child disability screening, nutrition, and early learning in 18 countries with low and middle incomes: data from the third round of UNICEF's Multiple Indicator Cluster Survey (2005–06). The Lancet 374, 1831–1839. doi:10.1016/S0140-6736(09)61871-7

Government of Bangladesh, Ministry of Primary and Mass Education, 2014. EFA 2015 National Review Bangladesh. UNESCO, Paris.

Government of India, 2013. *Slums in India: A Statistical Compendium 2013.* Government of India, Ministry of Housing and Urban Poverty Alleviation, National Buildings Organisation.

Government of Malaysia, 2014. *Malaysia National Education for All Report End of Decade Review.* UNESCO, Paris.

Government of Nepal, Ministry of Education, 2015. *Education for All National Review Report 2001-2015.* UNESCO, Paris.

Government of Pakistan, Ministry of Education, Trainings and Standards in Higher Education, Academy of Educational Planning and Management, 2014. *Pakistan: Education for All 2015 National Review.* UNESCO, Paris.

Government of Tajikistan, 2007. *National Report Education for All in the Republic of Tajikistan Mid-Term Review* (2000 – 2005). Dushanbe.

Government of the Philippines, 2014. *Philippines Education for All 2015: Review Report.* UNESCO, Paris.

Government of the Republic of Tajikistan, 2012. *National Strategy of Education Development of the Republic of Tajikistan till 2020.* Government of the Republic of Tajikistan, Dushanbe, Tajikistan.

Grunewald, R., Rolnick, A., 2007. A Productive Investment: Early Child Development, in: Young, M.E., Richardson, L.M. (Eds.), *Early Child Development from Measurement to Action: A Priority for Growth*. World Bank, Washington D.C., pp. 205–214.

Gustafsson-Wright, E., Gardiner, S., Putcha, V., 2015. *The Potential and Limitations of Impact Bonds: Lessons from the First Five Years of Experience Worldwide*. Brookings Institution, Washington, DC.

Hanoz, S., 2016. Intensive short-course ECE programme in Laos.

Hirst, M., Jervis, N., Visagie, K., Sojo, V., Cavanagh, S., 2011. *Transition to Primary School: A Review of the Literature.* Commonwealth of Australia, Canberra.

ILO, 2012. *Right beginnings: Early childhood education and educators* (Report for discussion at the Global Dialogue Forum on Conditions of Personnel in Early Childhood Education (22–23 February 2012)). International Labour Office, Geneva.

ILO, 2014. *ILO Policy Guidelines on the promotion of decent work for early childhood education personnel* (Meeting of Experts on Policy Guidelines on the Promotion of Decent Work for Early Childhood Education Personnel, Geneva, 12–15 November 2013, Final Report). International Labour Office, Geneva.

Islamic Republic of Afghanistan, Ministry of Education, 2014a. *Afghanistan National Education for All (EFA) Review 2015* Report. UNESCO, Paris.

Islamic Republic of Afghanistan, Ministry of Education, 2014b. *National Education Strategic Plan III (2015-2020)* Draft. Ministry of Education, Kabul.

Islamic Republic of Iran, 2014. Islamic Republic of Iran: *Education for All 2015 National Review*. UNESCO, Paris.

J-PAL Policy Briefcase, 2014. Community grants for the next generation. Abdul Latif Jameel Poverty Action Lab, Cambridge, MA.

Jukes, M., 2007. Impact of early childhood health and nutrition on access to education in developing countries. Paediatrics and Child Health 17, 485–491. doi:10.1016/j.paed.2007.09.006

Kaga, Y., Bennett, J., Moss, P., 2010. *Caring and Learning Together: A Cross-national Study of Integration of Early Childhood Care and Education within Education*. UNESCO.

Kim, G.-J., 2013. Regional Perspective"State of ECCE in Asia and the Pacific: Challenges and Prospects". Presented at the Asia-Pacific Regional Policy Forum on ECCE, Seoul, Republic of Korea.

Kim, G.-J., Umayahara, M., 2010. E*arly Childhood Care and Education: Building the Foundation for Lifelong Learning and the Future of the Nations of Asia and the Pacific*. International Journal of Child Care and Education Policy 4, 1–13.

Kim, J., Cho, W., Moon, M., Park, H., Cho, J.M., Park, J.-H., Choi, Y., Song, J., 2014. *EFA National Report Republic of Korea.* UNESCO, Paris.

Kiribati EFA 2015 Review Report, 2014. UNESCO, Paris.

Kosonen, K., Young, C., 2009. *Mother tongue as bridge language of instruction: Policies and experiences in Southeast Asia.* Southeast Asian Ministers of Education Organization and the World Bank, Thailand.

Lao People's Democratic Republic, 2012. *Lao Social Indicator Survey 2011-12* (Multiple Indicator Cluster Survey/ Demographic and Health Survey). Ministry of Health and Lao Statistics Bureau, Vientiane.

Lao People's Democratic Republic, 2014. *Education for All 2015 National Review*. UNESCO, Paris.

Lata, D., 2015. Chapter 7 Reducing disparities, enhancing capabilities, embracing diversity: harnessing the power of early childhood care and education to advance disability rights, in: *Investing against Evidence The Global State of Early Childhood Care and Education,* P. T. M. Marope and Y. Kaga (eds), Education on the Move. UNESCO, Paris, pp. 137–154.

Le Quesne, K., 2013. *New Zealand: Competencies of ECE Teachers*.

Li, H., Wong, J.M.S., Wang, X.C., 2010. Affordability, accessibility, and accountability: Perceived impacts of the Pre-primary Education Vouchers in Hong Kong. *Early Childhood Research Quarterly* 25, 125–138. doi:10.1016/j.ecresq.2009.09.004

LMTF, 2014. T*oward Universal Learning: Implementing Assessment to Improve Learning* (No. Report No. 3 of 3). UNESCO Institute for Statistics and Center for Universal Education at the Brookings Institution, Montréal and Washington, D. C.

McGovern, M.E., Canning, D., forthcoming. *Vaccination and All Cause Child Mortality 1985–2011: Global Evidence from the Demographic and Health Surveys. American Journal of Epidemiology.*

Miyahara, J., Myers, C., 2008. *Early Learning and Development Standards in East Asia and the Pacific: Experiences from Eight Countries. International Journal of Early Childhood* 40, 17–31.

Mongolia, 2013. *Child Development 2010 Survey. Multiple Indicator Cluster Survey 4. Final Report.* National Statistical Office, Ulaanbaatar.

Mongolia, 2014. Social Indicator Sample Survey 2013, Key Findings. National Statistical Office, Ulaanbaatar.

Montie, J.E., Xiang, Z., Schweinhart, L.J., 2006. Pre-school experience in 10 countries: Cognitive and language performance at age 7. Early Childhood Research Quarterly 21, 313–331. doi:10.1016/j.ecresq.2006.07.007

National University of Educational Planning and Administration, 2014. *Education for All: Towards Quality with Equity - India.* UNESCO, Paris.

Naudeau, S., Kataoka, N., Valerio, A., Neuman, M., Elder, L.K., 2011. *Investing in Young Children: An Early Childhood Development Guide for Policy Dialogue and Project Preparation.* World Bank, Washington D.C.

Nepal, 2014. *Education for All 2015 National Review.* UNESCO, Paris.

Nepal Ministry of Education and Sports, Department of Education, 2004. *Strategy Paper for Early Childhood Development in Nepal.* Ministry of Education and Sports, Department of Education, Kathmandu, Nepal.

Neuman, M.J., Elder, L.K., Naudeau, S., Kataoka, N., Valerio, A., 2011. *Investing in young children : an early childhood development guide for policy dialogue and project preparation* (No. 57876). The World Bank.

New Zealand Ministry of Education, 2014. *New Zealand Report on the National Education For All 2015 Review.* UNESCO, Paris.

Nonoyama-Tarumi, Y., Ota, Y., 2010. *Early Childhood Development in Developing Countries: Pre-primary Education, Parenting, and Health Care,* Background paper prepared for the *Education for All Global Monitoring Report 2011 The hidden crisis: Armed conflict and education.*

Nores, M., Barnett, W.S., 2010. *Benefits of early childhood interventions across the world: (under) investing in the very young.*

OECD, 2012. *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care.* OECD, Paris.

OECD, 2014a. Social Institutions and Gender Index [WWW Document]. URL http://www.genderindex.org/ranking

OECD, 2014b. Does pre-primary education reach those who need it most? (No. 40), PISA in Focus. OECD, Paris.

OECD, 2015. *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care.* OECD, Paris.

Opel, A., Ameer, S.S., Aboud, F.E., 2009. The effect of pre-school dialogic reading on vocabulary among rural Bangladeshi children. *International Journal of Educational Research* 48, 12–20. doi:10.1016/j.ijer.2009.02.008

Papua New Guinea, 2014. Education for All 2015 National Review. UNESCO, Paris.

Park, E., 2014. *Issues and Challenges for Early Childhood Education and Care Workforces: Lessons Learned from Korea.*

Park, E., Jang, M., Park, S., forthcoming. Early Childhood Education Policies in Korea: Advances in Theory and Practice, in: *Early Childhood Education Policies in Asia Pacific: Advances in Theory and Practice.* Springer.

Pisani, L., 2014. *Growing Evidence for Educating Growing Children Earlier: Building the foundations for early childhood development.* Global Partnership for Education.

PNG Dept. of Education, 2014. *Papua New Guinea EFA 2015 Review.* UNESCO, Paris.

Post-2015 Education Indicators Technical Advisory Group of the EFA Steering Committee, 2014. Towards indicators for a post-2015 education framework (No. Version 2). UIS, Montréal, Canada.

Raine, A., Mellingen, K., Liu, J., Venables, P., Mednick, S.A., 2003. Effects of Environmental Enrichment at Ages 3–5 Years on Schizotypal Personality and Antisocial Behavior at Ages 17 and 23 Years. *American Journal of Psychiatry* 160, 1627–1635.

Rao, N., Sun, J., 2010. *Early Childhood Care and Education in the Asia Pacific Region: Moving towards Goal 1* (No. 2010/ED/BAS/ECCE/RP/2), Early childhood care and education regional report: Asia and the Pacific. World Conference on Early Childhood Care and Education (WCECCE). UNESCO, Paris.

Rao, N., Sun, J., Ng, S.S.N., Ma, K., Becher, Y., Lee, D., Lau, C., Zhang, L., Chow, C.B., Ip, P., 2013. *The Hong Kong Early Child Development Scale: A Validation Study*. Child Indicators Research 6, 115–135. doi:10.1007/s12187-012-9161-7

Rao, N., Sun, J., Pearson, V., Pearson, E., Liu, H., Constas, M.A., 2012. Is something better than nothing? An evaluation of early childhood programs in Cambodia. *Child Development* 83, 864–876. doi:10.1111/j.1467-8624.2012.01746.x

Republic of Korea, 2014. *Education for All 2015 National Review*. UNESCO, Paris.

Royal Government of Cambodia, 2010. *National Policy on Early Childhood Care and Development*. Royal Government of Cambodia, Phnom Penh, Cambodia.

Royal Government of Cambodia, 2014. *National Education For All Committee The National Education For All 2015 Review Report.* UNESCO, Paris.

Sayre, R., Devercelli, A., Neuman, M., Wodon, Q.T., 2015. *Investing in Early Childhood Development : Review of the World Bank's Recent Experience* (World Bank Studies).

SEAMEO Secretariat and UNESCO Bangkok, 2016. S*outheast Asian Guidelines for Early Childhood Teacher Development and Management. SEAMEO and UNESCO, Bangkok*.

Shaeffer, S., 2015. *The Demand for and the Provision of Early Childhood Services since 2000: Policies and Strategies,* Background paper prepared for the *Education for All Global Monitoring Report 2015 Education for All 2000–2015:* achievements and challenges. UNESCO, Paris.

Shonkoff, J.P., Phillips, D.A., 2000. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. National Academies Press.

Siniwin, G.M., 2013. Statement by Head of Delegation from the Government of Papua New Guinea Hon. Gisuwat Managere Siniwin, Vice Minister for Education. Presented at the Second High Level Meeting on South-South Cooperation for Child Rights in Asia and the Pacific, New Delhi, India.

Stevens, G.A., Finucane, M.M., Paciorek, C.J., Flaxman, S.R., White, R.A., Donner, A.J., Ezzati, M., on behalf of Nutrition Impact Model Study Group (Child Growth), 2012. Trends in mild, moderate, and severe stunting and underweight, and progress towards MDG 1 in 141 developing countries: a systematic analysis of population representative data. Lancet 380, 824–834. doi:10.1016/S0140-6736(12)60647-3

Thailand, 2013. *Monitoring the Situation of Children and Women: Multiple Indicator Cluster Survey 2012*. National Statistical Office, Bangkok.

Thailand, 2014. *Education for All 2015 National Review*. UNESCO, Paris.

Thai National Commission for UNESCO, Ministry of Education, 2014. Thailand EFA 2015 Review. UNESCO, Paris.

The Government of the Republic of the Union of Myanmar, Ministry of Education, 2014. *Myanmar Education for All 2015 National Review.* UNESCO, Paris.

Tinajero, A., Loizillon, A., 2012. Review of care, education and child development indicators in ECCE: Desk review prepared for UNESCO on existing indices and indicators. UNESCO.

Tobin, J., Hsueh, Y., Karasawa, M., 2009. *Pre-school in Three Cultures Revisited: China, Japan, and the United States*. The University of Chicago Press, Chicago and London.

Tsendsuren, T., 2010. *Strengthening Early Childhood Education Services for Nomadic Children in Mongolia*.

UIS, 2009. *Education Indicators: Technical guidelines*. UNESCO Institute for Statistics, Montréal, Canada.

UIS, 2012. *International Standard Classification of Education ISCED 2011*. UNESCO Institute for Statistics, Montréal.

UIS, 2015. Education dataset [WWW Document]. UNESCO Institute for Statistics data centre. URL http://data.uis.unesco.org/ (accessed 8.17.15).

UN DESA, 2014. *World Urbanization Prospects: 2014 Revision, Highlights*. United Nations, Department of Economic and Social Affairs, Population Division, New York, NY.

UNESCO, 2006. *Education for All Global Monitoring Report 2007.* Strong Foundations: Early Childhood Care and Education.

UNESCO, 2011. *UNESCO Education for All Global Monitoring Report 2011: The hidden crisis: Armed conflict and education*. UNESCO, Paris.

UNESCO, 2014a. 2014 GEM Final Statement The Muscat Agreement (No. ED-14/EFA/ME/3). UNESCO, Muscat, Oman.

UNESCO, 2014b. *Education for All Global Monitoring Report, 2013/2014 Teaching and Learning: Achieving Quality for All*. UNESCO.

UNESCO, 2014c. *National Review of the Republic of Uzbekistan on Achievements of the Education for All Goals 2015*. UNESCO, Tashkent.

UNESCO, 2015a. *Regional Overview: East Asia and the Pacific*. UNESCO, Paris.

UNESCO, 2015b. *World Education Forum adopts Declaration on the Future of Education* [WWW Document]. Media Services. URL http://www.unesco.org/new/en/media-services/single-view/news/world_education_forum_adopts_declaration_on_the_future_of_education/#.VWHbkfnzr4Z (accessed 5.24.15).

UNESCO, 2015c. *Education 2030 Incheon Declaration and Framework for Action Towards inclusive and equitable quality education and lifelong learning for all* (No. ED-2016/WS/2). UNESCO, Paris.

UNESCO, 2015d. EFA Global Monitoring Report 2015. *Education for All 2000–2015: Achievements and Challenges*. UNESCO, Paris.

UNESCO, 2015e. *Small Island Developing States Overview*. UNESCO, Paris.

UNESCO Bangkok, 2013a. *Asia-Pacific Regional Policy Forum on Early Childhood Care and Education, 10–12 September 2013, Seoul, Korea: Final Report*. UNESCO Asia and Pacific Regional Office for Education, Bangkok, Thailand.

UNESCO Bangkok, 2013b. *Are Children Ready for Schools? Are Schools Ready for Children: Final Report, Asia-Pacific Regional Policy Forum on Early Childhood Care and Education,* 10–12 September 2013, Seoul, Rep. of Korea. UNESCO Asia and Pacific Regional Office for Education, Bangkok, Thailand.

UNESCO Bangkok, 2015. *Asia-Pacific Regional Education for All Report: A Synthesis of the National EFA Reports* (No. TH/APL/15/009-300). UNESCO and UNESCO Office Bangkok and Regional Bureau for Education in Asia and the Pacific, Paris.

UNESCO, EFA GMR, 2013. Proposed post-2015 education goals: Emphasizing equity, measurability and finance. UNESCO, *Education for All Global Monitoring Report*, Paris.

UNESCO, UNICEF, 2012. *Asia-Pacific End of Decade Notes on Education for All: EFA Goal 1 Early Childhood Care and Education*. UNESCO Bangkok, UNICEF EAPRO and UNICEF ROSA.

UNGEI, 2014. *Violence against Children in East Asia and the Pacific: A Regional Review and Synthesis of Findings* (Evidence - Strengthening Child Protection Systems No. 4). UNICEF EAPRO, Bangkok.

UN Habitat, 2010. Chapter 1: Development Context and the Millennium Agenda, in: *The Challenge of Slums: Global Report on Human Settlements 2003 Revised and Updated Version*.

UNICEF, 2010. *The Beijing Declaration on South-South Cooperation for Child Rights in the Asia Pacific Region*.

UNICEF, 2012. *Measuring and Monitoring Child Protection Systems: Proposed Regional Core Indicators for East Asia and the Pacific*, Strengthening Child Protection Series No. 3. UNICEF East Asia and Pacific Regional Office (EAPRO), Bangkok.

UNICEF, 2013. *Global Initiative on Out-of-School Children Tajikistan Country Study, All Children in School by 2015*. UNICEF Tajikistan, Dushanbe, Tajikistan.

UNICEF, 2014a. *Committing to Child Survival: A Promise Renewed Progress Report 2014*. UNICEF, New York, NY.

UNICEF, 2014b. *Levels & Trends in Child Mortality Report 2014 Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation*. UNICEF, New York, NY.

UNICEF, 2014c. 25 *Years of the Convention on the Rights of the Child. Is the world a better place for children?* A statistical analysis of progress since the adoption of the Convention on the Rights of the Child. UNICEF, New York, NY.

UNICEF, 2014d. *Birth Registration Factsheet*. UNICEF, Bangladesh Country Office, Child Protection Section.

UNICEF, 2015a. *Multiple Indicator Cluster Surveys*. UNICEF, New York, NY.

UNICEF, 2015b. *Progress for Children. Beyond averages: learning from the MDGs* (No. 11). UNICEF, New York, NY.

UNICEF, 2015c. *Core Indicators in Depth*. UNICEF, New York, NY.

UNICEF Innocenti Research Centre, 2007. *Promoting the Rights of Children with Disabilities* (Innocenti Digest No. 13). UNICEF Innocenti Research Centre, Florence, Italy.

UNICEF, WHO, World Bank, 2014. Global Database on Child Growth and Malnutrition 2013 Joint child malnutrition estimates - Levels and trends [WWW Document]. Child malnutrition estimates. URL http://www.who.int/nutgrowthdb/estimates2013/en/

United Nations, 2014a. *Open Working Group Proposal for Sustainable Development Goals. Department of Economic and Social Affairs*. Division for Sustainable Development., New York.

United Nations, 2014b. *World Urbanization Prospects*. 2014 Revision. United Nations, Department of Economic and Social Affairs, New York, NY.

United Nations, 2015a. Draft resolution submitted by the Chair of the Main Committee Outcome document of the Third International Conference on Financing for Development: Addis Ababa Action Agenda (Third International Conference on Financing for Development Addis Ababa, 13–16 July 2015 No. A/CONF.227/L.1). United Nations, New York.

United Nations, 2015b. Transforming our world: the 2030 Agenda for Sustainable Development (Seventieth session Agenda items 15 and 116 15-16301 (E) *1516301* Please recycle Resolution adopted by the General Assembly on 25 September 2015 No. A/RES/70/1). UN, New York, NY.

United Nations, 2015c. *The Millennium Development Goals Report 2015*. UN, New York, NY.

United Nations, 2015d. *Statistical Annex: Millennium Development Goals, Targets and Indicators, 2015*. United Nations, New York, NY.

United Nations, 2015e. *Millennium Development Goals Indicators* [wwwdocument]. URL http://millenniumindicators.un.org/unsd/mdg/Data.aspx

United Nations, 2015f. *World Population Prospects: The 2015 Revision: Key Findings and Advance Tables*. United Nations, Department of Economic and Social Affairs, New York, NY.

United Nations, 2015g. United Nations Treaty Collection. United Nations, New York, NY.

Unterhalter, E., 2013. Education targets, indicators and a post-2015 development agenda: Education for All, the MDGs, and human development (FXB Working Paper), *The Power of Numbers: A Critical Review of MDG Targets for Human Development and Human Rights*. François-Xavier Bagnoud Center for Health and Human Rights, Harvard University, Boston, MA.

UN Women, 2012. Every Woman Counts: Transforming women's lives in South Asia. UN Women RO for Asia and the Pacific, Bangkok.

USAID, 2015. *The Demographic and Health Surveys* (DHS) Program [wwwdocument]. URL http://dhsprogram.com/ (accessed 10.19.15).

Vargas-Barón, E., 2015a. *Policies on Early Childhood Care and Education: Their Evolution and Some Impacts* (No. ED/EFA/MRT/2015/PI/31), Background paper prepared for the *Education for All Global Monitoring Report 2015 Education for All 2000–2015: achievements and challenges.* UNESCO, Paris.

Vargas-Barón, E., 2015b. Interview with Emily Vargas-Barón on the subject of ECD in CEE, CIS and Central Asia.

Villines, M., 2011. *Early Childhood Inclusion: Teacher Perception of the Supports Needed to Fully Include Children with Special Needs* (Dissertation paper 425). Portland State University.

Vitiello, V.E., Kools, M., 2010. *Good Governance of Early Childhood Development Programmes in Developing Countries: The Need for a Comprehensive Monitoring System* (UNICEF IRC Discussion Paper No. IDP 2010–02). UNICEF Innocenti Research Centre, Florence, Italy.

Walker, S.P., Wachs, T.D., Meeks Gardner, J., Lozoff, B., Wasserman, G.A., Pollitt, E., Carter, J.A., 2007. Child development: risk factors for adverse outcomes in developing countries. Lancet 369, 145–157.

Watanabe, K., Flores, R., Fujiwara, J., Tran, L.T.H., 2005. Early childhood development interventions and cognitive development of young children in rural Vietnam. *The Journal of Nutrition* 135, 1918–1925.

WHO, 2011a. Preventing gender-biased sex selection An interagency statement OHCHR, UNFPA, UNICEF, UN Women and WHO. World Health Organization, Geneva.

WHO, 2011b. *World Report on Disability*. World Health Organization, Geneva.

WHO, 2012. Developmental difficulties in early childhood: prevention, early identification, assessment and intervention in low- and middle-income countries: a review. World Health Organization, Geneva.

WHO, 2015a. Under-five mortality rate (per 1000 live births) [wwwdocument]. World Health Organization, Global Health Observatory Data Repository. URL http://apps.who.int/gho/athena/data/GHO/nmr, imr, u5mr?filter=COUNTRY:*; RESIDENCEAREATYPE:*&format=xml&profile=excel

WHO, 2015b. Statement on the 5th IHR Emergency Committee meeting regarding the international spread of wild poliovirus [wwwdocument]. URL http://who.int/mediacentre/news/statements/2015/polio-5th-statement/en/ (accessed 8.9.15).

WHO, 2015c. Health Equity Monitor [wwwdocument]. URL http://apps.who.int/gho/athena/data/GHO/bcgv,mslv, poliov,dptv,fullv?filter=COUNTRY:*;WEALTHQUINTILE:*&format=xml&profile=excel

WHO and UNICEF, 2012. *Early Childhood Development and Disability: A discussion paper.* World Health Organization, Geneva.

WHO, UNICEF, 2014. System Performance Indicator Data.

Wong, H.L., Luo, R., Zhang, L., Rozelle, S., 2013. The impact of vouchers on pre-school attendance and elementary school readiness: A randomized controlled trial in rural China. Economics of *Education Review* 35, 53–65. doi:10.1016/j.econedurev.2013.03.004

World Bank, 2012a. (SABER) *Vanuatu - Early Childhood Development* (SABER Country Report), Systems Approach For Better Education Results. World Bank.

World Bank, 2012b. *Vanuatu Early Childhood Development* (SABER Country Report), Systems Approach for Better Education Results (SABER). World Bank, Washington, DC.

World Bank, 2013a. *Nepal - Early Childhood Development* (SABER Country Report), Systems Approach for Better Education Results (SABER). World Bank, Washington, DC.

World Bank, 2013b. *Samoa - Early Childhood Development* (SABER Country Report), Systems Approach for Better Education Results (SABER). World Bank, Washington, DC.

World Bank, 2013c. *Kyrgyz Republic Early Childhood Development* (SABER Country Report), Systems Approach for Better Education Results (SABER). World Bank, Washington, DC.

World Bank, 2013d. (SABER) *Tajikistan - Early Childhood Development* (SABER Country Report), Systems Approach For Better Education Results. World Bank.

World Bank, 2013e. (SABER) *Nepal - Early Childhood Development* (SABER Country Report), Systems Approach For Better Education Results. World Bank.

World Bank, 2013f. *Nepal - Early Childhood Development.* SABER Country Report. World Bank, Washington, DC.

World Bank, 2014a. *East Asia Pacific at Work: Employment, Enterprise, and Well-being.* World Bank, Washington, DC.

World Bank, 2014b. *Tuvalu - Early Childhood Development* (SABER Country Report), Systems Approach for Better Education Results (SABER). World Bank, Washington, DC.

World Bank, 2014c. *Lao People's Democratic Republic - Early Childhood Education Project* (No. 82624-LA). World Bank, Human Development Sector, East Asia and Pacific Region, Washington, DC.

World Bank, 2015a. World Bank Development Indicators [WWW Document]. URL http://databank.worldbank.org/data/home.aspx

World Bank, 2015b. Country and Lending Groups [WWW Document]. URL http://data.worldbank.org/about/country-and-lending-groups

Zill, N., Ziv, Y., 2007. Toward A Global Indicator of Early Child Development: Final Report. Prepared for UNICEF ECD Unit. UNICEF, ECD Unit, New York, NY.

Annex 1. Asia-Pacific region: 4 subregions and 48 countries

The 48 countries analysed in this report belong to the Asia-Pacific region, which can be divided into 4 subregions. The subregional classification of countries follows the one used by UNESCO Asia and Pacific Regional Bureau for Education, as follows:

Central Asia (6)

Kazakhstan	Tajikistan
Kyrgyzstan	Turkmenistan
Mongolia	Uzbekistan

East Asia (16)

Brunei Darussalam	Malaysia
Cambodia	Myanmar
China	Philippines
Democratic People's Republic of Korea	Republic of Korea
Indonesia	Singapore
Japan	Thailand
Lao People's Democratic Republic	Timor-Leste
Macao (China)	Viet Nam

Pacific (17)

Australia	Palau
Cook Islands	Papua New Guinea
Fiji	Samoa
Kiribati	Solomon Islands
Marshall Islands	Tokelau
Micronesia (Federated States of)	Tonga
Nauru	Tuvalu
New Zealand	Vanuatu
Niue	

South and West Asia (9)

Afghanistan	Maldives
Bangladesh	Nepal
Bhutan	Pakistan
India	Sri Lanka
Islamic Republic of Iran	

This classification differs somewhat from the Asia-Pacific classification used by UNICEF's Asia-Pacific region. The following table compares the classification of these 48 countries in the UNESCO and UNICEF regions.

Country	UNESCO Asia and the Pacific region				UNICEF Asia and the Pacific region	
	Central Asia	East Asia	Pacific	South and West Asia	South Asia	East Asia and the Pacific
Afghanistan				X	X	
Australia			X			
Bangladesh				X	X	
Bhutan				X	X	
Brunei Darussalam		X				
Cambodia		X				X
China		X				X
Cook Islands			X			X
DPR Korea		X				X
Fiji			X			X
India				X	X	
Indonesia		X				X
Islamic Republic of Iran				X		
Japan		X				
Kazakhstan	X					
Kiribati			X			X
Kyrgyzstan	X					
Lao PDR		X				X
Macao (China)		X				
Malaysia		X				X
Maldives				X	X	
Marshall Islands			X			X
Micronesia (Federated States of)			X			X
Mongolia	X					X
Myanmar		X				X
Nauru			X			X
Nepal				X	X	
New Zealand			X			
Niue			X			X
Pakistan				X	X	
Palau			X			X
Papua New Guinea			X			X

Country	UNESCO Asia and the Pacific region				UNICEF Asia and the Pacific region	
	Central Asia	East Asia	Pacific	South and West Asia	South Asia	East Asia and the Pacific
Philippines		X				X
Republic of Korea		X				
Samoa			X			X
Singapore		X				
Solomon Islands			X			X
Sri Lanka				X	X	
Tajikistan	X					
Thailand		X				X
Timor-Leste		X				X
Tokelau			X			X
Tonga			X			X
Turkmenistan	X					
Tuvalu			X			X
Uzbekistan	X					
Vanuatu			X			X
Viet Nam		X				X

Notes: Brunei Darussalam, Macao and Singapore are not included among UNICEF countries. The Islamic Republic of Iran is included in the Middle East and North Africa region; Japan, New Zealand and the Republic of Korea are included among Industrialized Countries; Kyrgyzstan and Tajikistan are included in the Central and Eastern Europe and the Commonwealth of Independent States region.

Source: UNESCO (2015).

The MDG regions also differ in their composition. They are listed below, with non-Asia-Pacific countries in blue. Developed countries (Australia, Japan, New Zealand) are in a separate MDG regional grouping for developed countries.

Caucasus and Central Asia (8)

Armenia	Kyrgyzstan
Azerbaijan	Tajikistan
Georgia	Turkmenistan
Kazakhstan	Uzbekistan

Eastern Asia (6)

China	Macao (China)
Democratic People's Republic of Korea	Mongolia
Hong Kong (China)	Republic of Korea

Southern Asia (9)

Afghanistan	Maldives
Bangladesh	Nepal
Bhutan	Pakistan
India	Sri Lanka
Islamic Republic of Iran	

South Eastern Asia (11)

Brunei Darussalam	Philippines
Cambodia	Singapore
Indonesia	Thailand
Lao People's Democratic Republic	Timor-Leste
Malaysia	Viet Nam
Myanmar	

Oceania (20)

American Samoa	New Caledonia
Cook Islands	Northern Mariana Island
Fiji	Palau
French Polynesia	Papua New Guinea
Guam	Samoa
Kiribati	Solomon Islands
Marshall Islands	Tokelau
Micronesia (Federated States of)	Tonga
Nauru	Tuvalu
Niue	Vanuatu

Annex 2. Countries in the Asia-Pacific region, by income groups

Low-income (4)

Afghanistan	Democratic People's Republic of Korea
Cambodia	Nepal

Lower-middle-income (20)

Bangladesh	Papua New Guinea
Bhutan	Philippines
India	Samoa
Indonesia	Solomon Islands
Kiribati	Sri Lanka
Kyrgyzstan	Tajikistan
Lao People's Democratic Republic	Timor-Leste
Micronesia (Federated States of)	Uzbekistan
Myanmar	Vanuatu
Pakistan	Viet Nam

Upper-middle-income (13)

China	Mongolia
Fiji	Palau
Islamic Republic of Iran	Thailand
Kazakhstan	Tonga
Malaysia	Turkmenistan
Maldives	Tuvalu
Marshall Islands	

High-income (7)

Australia	New Zealand
Brunei Darussalam	Republic of Korea
Japan	Singapore
Macao (China)	

Not classified (4)

Cook Islands	Niue
Nauru	Tokelau

Source: World Bank (2015).

Annex 3. National EFA reviews

This list identifies the 32 National EFA reviews available for countries in the Asia-Pacific region:

Central Asia (2)

Kazakhstan
Uzbekistan

East Asia (13)

Brunei Darussalam	Myanmar
Cambodia	Philippines
China	Republic of Korea
Democratic People's Republic of Korea	Thailand
Japan	Timor-Leste
Lao People's Democratic Republic	Viet Nam
Malaysia	

Pacific (11)

Australia	New Zealand
Cook Islands	Papua New Guinea
Fiji	Samoa
Kiribati	Tuvalu
Marshall Islands	Vanuatu
Nauru	

South and West Asia (6)

Afghanistan	Islamic Republic of Iran
Bangladesh	Nepal
India	Pakistan

Annex 4. Multisectoral ECCE policies, plans and laws

The table below provides examples of multisectoral ECCE policies, plans and laws enacted in the region, but does not intend to be exhaustive. Other examples of multisectoral ECCE policies might exist but were not clearly identified as such from the documents reviewed (mostly national EFA reviews, see sources listed below). National education policies or plans of actions which include pre-primary education are not considered multisectoral ECCE policies due to their restriction to the education sector. National development plans which include a focus on ECCE are not included.

Country	Year policy or law was enacted	Document name	Targeted groups
		Central Asia	
Kyrgyzstan	2009	Law on pre-school education	
Mongolia	2004/2005	Integrated Early Childhood Development Policy	
Turkmenistan	…	National Plan of Action for Early Childhood Development	…
		East Asia	
Cambodia	2010	National Policy on ECCD National Plan of Action with a National Committee for ECCD (NCECCD), an interministerial coordination mechanism	Health monitoring for ages 0–3, especially vulnerable populations (e.g., malnutrition, disabilities)
Indonesia	2013	Holistic Integrated ECD policy	
Lao PDR	2010 (draft)	National Policy on Holistic Early Child Development	Disadvantaged communities
Malaysia	2008	Early Childhood Care and Development Policy for providing holistic services to children ages 0 to 4 years	
Myanmar	2013	Multisectoral ECCD Policy for children ages 0 to 8 years, developed with highly participatory development including academics, NGOs and civil society. Two ministries (Social Welfare; Education) coordinating through focal departments under Plan.	Children with disabilities.
Philippines	2012	Multisectoral and interagency collaboration under coordination of ECCD Council responsible for the development of children age 0–4 years. Department of Education shall be responsible for children ages 5–8 years to eight years old.	Includes specific provisions for children with disabilities, and for respecting cultural and linguistic diversity.
Thailand	2007/2012	Long-term Policy and Strategy for ECCD; National Strategic Plan for Early Childhood Development 2012–2016	
Timor-Leste	2012	Policy	Indigenous languages

Country	Year policy or law was enacted	Document name	Targeted groups
		Pacific	
Australia	2009	National ECD Strategy	Indigenous groups
Kiribati	2010	ECCE Policy (not acted on or operationalized)	
New Zealand	2002	10year ECCE strategic plan	
Palau	2007		
Papua New Guinea	2007	National ECCD Policy	
Tuvalu	2007	ECCE Policy	
Vanuatu	2010	ECCE Policy (2010) and ECCE National Framework (2013)	
		South and West Asia	
Bangladesh	2013	Comprehensive ECCD Policy	
Bhutan	2011	National Policy on ECCD	
India	2013	National ECCE Policy for comprehensive approach to promote healthy development and learning for children under age 6 years	Inclusive
Nepal	2004	EFA National Plan of Action; ECD Strategy Paper	Disadvantaged communities and ethnic groups
Pakistan	…	(Reported but not identified)	
Sri Lanka	2004	National Policy on ECCD	

Notes: … =Not available or not identified. Research for this table based on national EFA reviews and national policies as mentioned in Rao and Sun (2010) and Vargas-Barón (2015).

Sources: Denboba et al. (2015); Government of Bangladesh, Ministry of Primary and Mass Education (2014); Government of Malaysia (2014); Government of Tajikistan (2007); Government of the Philippines (2014); Kiribati EFA 2015 Review Report (2014); National University of Educational Planning and Administration (2014); Nepal Ministry of Education and Sports, Department of Education (2004); Rao and Sun (2010); Royal Government of Cambodia (2010, 2014); Vargas-Barón (2015); World Bank (2012, 2013, 2014a, 2014b)

Annex 5. List of MICS and DHS surveys conducted since 1999

Country	MICS	DHS
Afghanistan	2000 (2)*; 2003 (2)*; 2010–2011 (4)	2010; 2015
Bangladesh	2006 (3); 20122013 (5)	1999–2000; 2001; 2004; 2007; 2011; 2014
Bhutan	2010 (4)	
Cambodia		2000; 2005; 2010; 2014
DPR Korea	2000 (2); 2009 (4)	
India	2000 (2)	19981999; 2005–2006; 2014–2015
Indonesia	2000 (2); 2011 (4)*	20022003; 2007; 2012;
Islamic Republic of Iran	2000 (2)	
Kazakhstan	2006 (3); 2010–2011 (4); 2015 (5)	1999
Kyrgyzstan	2005–2006 (3); 2014 (5)	2012
Lao PDR	2000 (2); 2006 (3); 2011–2012 (4)	2011–2012
Maldives	2001 (2)	2009; 2015
Mongolia	2000 (2); 2005 (3); 2010 (4); 2012 (4)*; 2013–2014 (5)	
Myanmar	2000 (2); 2009–2010 (3)	2015
Nepal	2010 (4)*; 2014 (5)	2001; 2006; 2011; 2015
Pakistan	2010 (4)*; 2011 (4)*; 2014 (5)*; 2015 (5)*	2006–2007; 2012–2013
Philippines		2003; 2008; 2013
Samoa		2009
Sri Lanka		2006–2007
Tajikistan	2000 (2); 2005 (3)	2012
Thailand	2005–2006 (3); 2012–2013 (4); 2015 (5)*; 2015 (5)	
Timor-Leste		2009–2010
Turkmenistan	2006 (3); 2015 (5)	
Uzbekistan	2000 (2); 2006 (3)	2002
Vanuatu	2007–2008 (3)	
Viet Nam	2000 (2); 2006 (3); 2010–2011 (4); 2013–2014 (5)	2002; 2005

Notes: In MICS column, number in parentheses indicates the MICS round. DHS list includes special surveys such as on maternal mortality, mortality, maternal and child health, HIV/AID. An asterisk in the MICS column indicates that the survey was conducted in selected districts and regions. See sources for more information on specific surveys.

Sources: UNICEF (2015b); USAID (2015).

Annex 6. ECCE indicators and definitions

The variety of indicators available to monitor ECCE systems is quite broad. The table below presents the principal indicators for education, quality financing and health and well-being available in administrative datasets (international, national, subnational) or household surveys. Socioeconomic and demographic indicators can be relevant to child development outcomes.

The table below does not include:

- Measures of child outcomes (beyond health and well-being indicators). There exist various measures of child development outcomes, including indices, such as UNICEF's 10-item Early Childhood Development Index (ECDI).
- Instruments to measure quality (structural and process indicators) of the ECCE environment. These mostly use observational techniques and are not usually used at a comparative level by researchers. In some countries, these instruments can temporarily replace the existing monitoring gap in the measurement of ECCE programme quality and even postpone the need to develop national standards. As an example, the Early Childhood Environment Rating Scale – Revised (ECERSR) measures structural and process indicators, including space and furnishings, language reasoning, types of activities and interactions with others.

INDICATOR	INDICATOR DEFINITION	DATA SOURCES[57]
EDUCATION INDICATORS		
Gross enrolment ratio in pre-primary education/ECCE programmes	Total enrolment in pre-primary education/ECCE programmes, regardless of age, as a percentage of the total population in the relevant official school age group in a given school year. Can be disaggregated by public/private enrolment.	Administrative
Adjusted net enrolment ratio in pre-primary education/ ECCE programmes	Enrolment of the official age group for pre-primary education/ ECCE programmes, expressed as a percentage of the corresponding population	Administrative
Percent of new entrants in grade 1 with ECCE programme experience	Number of new entrants to primary grade 1 who have attended some form of organized ECCE program for the equivalent of at least 200 hours, expressed as a percentage of total number of new entrants to primary grade 1	Administrative
Gross intake ratio at grade 1	Number of new entrants to primary grade 1, regardless of age, expressed as a percentage of the population at the official age for primary school entrance	Administrative
Proportion entering grade 1 on time	Number of new entrants to primary grade 1 who are of official eligible school age, total population in the relevant official school age group in a given school year	Administrative

57 The data sources are indicated as a general rule, although the specific source might change in some countries. Not all indicators are available in all countries and definitions and calculations might also vary.

INDICATOR	INDICATOR DEFINITION	DATA SOURCES[57]
EDUCATION INDICATORS		
Gross enrolment ratio in grade 1	Total enrolment in grade 1, regardless of age, expressed as a percentage of official eligible schoolage population corresponding to the same level of education in a given school year	Administrative
Net enrolment rate in grade 1	Enrolment of the official age group for grade 1, expressed as a percentage of the corresponding population	Administrative
Repetition rates in grades 1 and 2	Percent of pupils from a cohort enrolled in a given grade at a given school year who study in the same grade in the following school year	Administrative
Dropout rates in grades 1 and 2	Percent of pupils from a cohort enrolled in a given grade at a given school year who are no longer enrolled in the following school year	Administrative
School wastage (absenteeism)	Average number of days children were absent from school in the last month	Administrative
Primary completion rate	Ratio of the total number of students successfully completing (or graduating from) the last year of primary school in a given year to the total number of children of official graduation age in the population	Administrative
QUALITY		
Pupil/teacher ratio	Average number of students (pupils) relative to total teachers per year	Administrative
Pupil/trained teacher ratio	Average number of students (pupils) relative to number teachers who have received the minimum required qualifications per year	Administrative
Percentage of trained teachers	Number of teachers who have received the minimum required qualifications per year, as a percentage of all teachers	Administrative
FINANCING		
Public current expenditure on pre-primary education	Public expenditure for a given education level expressed as a percentage of total public expenditure on education. This can be expressed as a percentage of public current expenditure on education, as a unit cost (per pupil), as a percentage of GNP per capita, or per pupil as a percentage of GNP per capita.	Administrative
HEALTH AND WELL-BEING INDICATORS		
Mother's age at birth of first child	Median age of mother at birth of first child	Household or other survey
Mother's use of focused prenatal care	Percent of pregnant women who used prenatal care provided by skilled health personnel at least four times during pregnancy	Household or other survey
Exclusive breastfeeding rate	Percent of infants birth through 5 months who were given only breast milk in the last 24 hours	Household or other survey
Incidence of low birth weight (2500 g)	Percent of births of weight less than 2500 g out of the total number of live births in the same time period	Household or other survey
Prevalence of stunting (too short) in children	Percent of children of a specific age (for example under age 2) with height or lengthforage less than –2 Zscore	Household or other survey
Prevalence of underweight (too small) in children	Percent of children of a specific age with weightforage less than –2 Zscore	Household or other survey
Prevalence of wasting (too thin) in children	Percent of children of a specific age with weightforheight less than –2 Zscore	Household or other survey
Body mass index (BMI)	Estimate of body fat. Calculated by using an individual's weight in kg/height in meters	Household or other survey
Prevalence of overweight/obese (too heavy)	Percent of children of a specific age with BMI forage at 85th percentile (overweight) or at or above 95th percentile (obese)	Household or other survey

INDICATOR	INDICATOR DEFINITION	DATA SOURCES[57]
EDUCATION INDICATORS		
Infant mortality rate (IMR)	Probability of a child born in a specific year or period dying before reaching age 1 year, subject to ages-pecific mortality rates of that period, expressed per 1,000 live births	Household or other survey
Under-5 mortality rate (U5MR)	Probability of a child born in a specific year or period dying before reaching age 5 years, subject to agespecific mortality rates of that period, expressed per 1,000 live births	Household or other survey
Prevalence of anaemia in young children	Percent of children age 6–59 months with haemoglobin less than 11 g/dL	Household or other survey
Consumption of iodized salt to prevent iodine deficiency disorders	Percent of children age 0–23 months living in a household with adequately iodized salt (15 ppm or more)	Household or other survey
Immunization rate: coverage of children with DTP3 (combined diphtheriatetanus toxoid and pertussis vaccine)	Percent of children age 1 year who have received three doses of DTP3 in a given time period	Household or other survey
Access to safe drinking water	Percent of population using an improved drinking water source	Household or other survey
Access to hygienic latrines	Percent of population using an improved sanitation facility	Household or other survey
SOCIO-ECONOMIC AND DEMOGRAPHIC INDICATORS		
Absolute size of early childhood population	Total children under age 8	National data
Relative size of early childhood population	Percent of total population under age 8	National data
Young child poverty rate	Percent under age 8 in households with less than 50% of median income	National data
Parental education	Highest education level completed by each parent	Household or other survey
Parental literacy	Percent of population age 15 years and older who can both read and write (understand short, simple, everydaylife sentences). Generally, 'literacy' also encompasses 'numeracy,' the ability to make simple arithmetic calculations.	Household or other survey
Parent employment rates	Percent of adults who have children under age 8 and participate in the labour force	Household or other survey
Prevalence of orphans	Percent of children under age 6 who have lost one or both parents	Household or other survey
Prevalence of singleparent households	Percent of households led by one parent	National data, household or other survey
Prevalence of teenparent households	Percent of households led by a parent under age 20	National data, household or other survey
Birth registration	Percent of children under age 8 with a birth certificate	National data, household or other survey

Sources: Neuman et al. (2011); UIS (2009).

Annex 7. Ratification of the Convention on the Rights of the Child, 2015

Country	Signature of the Convention on the Rights of the Child	Ratification with declarations and reservations upon accession (a)
	Central Asia	
Kazakhstan	16 Feb 1994	12 Aug 1994
Kyrgyzstan		7 Oct 1994[a]
Mongolia	26 Jan 1990	5 Jul 1990
Tajikistan		26 Oct 1993[a]
Turkmenistan		20 Sept 1993[a]
Uzbekistan		29 Jun 1994[a]
	East Asia	
Brunei Darussalam		27 Dec 1995[a]
Cambodia		15 Oct 1992[a]
China	29 Aug 1990	2 Mar 1992
Democratic People's Republic of Korea	23 Aug 1990	21 Sept 1990
Indonesia	26 Jan 1990	5 Sept 1990
Japan	21 Sept 1990	22 Apr 1994
Lao People's Democratic Republic		8 May 1991[a]
Malaysia		17 Feb 1995[a]
Myanmar		15 Jul 1991[a]
Philippines	26 Jan 1990	21 Aug 1990
Republic of Korea	25 Sept 1990	20 Nov 1991
Singapore		5 Oct 1995[a]
Thailand		27 Mar 1992[a]
Timor-Leste		16 Apr 2003[a]
Viet Nam	26 Jan 1990	28 Feb 1990
	South and West Asia	
Afghanistan	27 Sept 1990	28 Mar 1994
Bangladesh	26 Jan 1990	3 Aug 1990
Bhutan	4 Jun 1990	1 Aug 1990
India		11 Dec 1992[a]
Iran, Islamic Republic of	5 Sept 1991	13 Jul 1994
Maldives	21 Aug 1990	11 Feb 1991
Nepal	26 Jan 1990	14 Sept 1990
Pakistan	20 Sept 1990	12 Nov 1990
Sri Lanka	26 Jan 1990	12 Jul 1991

Country	Signature of the Convention on the Rights of the Child	Ratification with declarations and reservations upon accession (a)
	Pacific	
Australia	22 Aug 1990	17 Dec 1990
Cook Islands		6 Jun 1997[a]
Fiji	2 Jul 1993	13 Aug 1993
Kiribati		11 Dec 1995[a]
Marshall Islands	14 Apr 1993	4 Oct 1993
Micronesia (Federated States of)		5 May 1993[a]
Nauru		27 Jul 1994[a]
New Zealand	1 Oct 1990	6 Apr 1993
Niue		20 Dec 1995[a]
Palau		4 Aug 1995[a]
Papua New Guinea	30 Sept 1990	2 Mar 1993
Samoa	30 Sept 1990	29 Nov 1994
Solomon Islands		10 Apr 1995[a]
Tonga		6 Nov 1995[a]
Tuvalu		22 Sept 1995[a]
Vanuatu	30 Sept 1990	7 Jul 1993

Note: Macao (China) and Tokelau are not listed as having signed the Convention.

Source: United Nations (2015g).

Annex 8. Central Asia ECCE profile, 1999–2015

Health and nutrition

	Under-5 mortality rate (‰)		Immunization (%)				Malnutrition (%)							
			DTP3		polio		stunting		wasting		underweight		overweight	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Kazakhstan	46	16	98	98	99	98	14	13	3	4	4	4	5	13
Kyrgyzstan	52	24	99	97	99	97	36	13	3	3	10	3	8	7
Mongolia	69	32	94	98	94	98	30	11	4	1	11	2	7	11
Tajikistan	100	48	82	96	84	97	42	27	11	10	…	13	…	7
Turkmenistan	84	55	98	98	98	98	28	…	7	…	11	…	…	…
Uzbekistan	66	43	99	99	99	99	25	…	9	…	7	…	11	…
median	67	37	98	98	99	98	29	13	6	3	10	3	8	9
Asia-Pacific														
median	43	28	86	95	88	96	42	27	10	6	23	13	5	7
worst	138	97	27	36	27	36	64	45	22	21	56	35	11	17
best	4	3	99	99	99	99	4	3	1	1	2	1	0	1

Notes: … = Not available. Malnutrition figures are for 1999 or the earliest year available over 1997–2002 and for 2013 or the latest year available over 2010–2014. All figures pertain to young children aged 0–5. Figures in green represent the best value of each indicator within the sub region (i.e. lowest value of under 5 mortality rate and malnutrition rates, highest value of immunization rates); figures in red represent the worst values (i.e. highest value of under 5 mortality rate and malnutrition rates, lowest value of immunization rates).

Sources: UIS (2015); UNICEF (2015c).

Pre-primary education

	Gross enrolment ratio		Gender parity index		School life expectancy		Enrolment in public institutions		Trained teachers		Government expenditure on pre-primary education			
	(%)				(years)		(%)		(%)		as % of GDP		as % of exp. on education	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Kazakhstan	15	58	0.96	1.00	0.6	2.3	90	92	…	…	0.11	…	3.6	…
Kyrgyzstan	10	25	0.80	1.02	0.4	1.0	99	97	32	46	0.27	0.58	6.7	8.5
Mongolia	27	86	1.18	1.01	1.3	2.5	96	93	100	94	1.02	1.30	14.1	23.8
Tajikistan	8	9	0.77	0.83	0.3	0.3	…	…	91	87	…	0.21	…	5.2
Turkmenistan	…	63	…	0.97	…	1.9	…	…	…	…	…	0.86	…	28.1

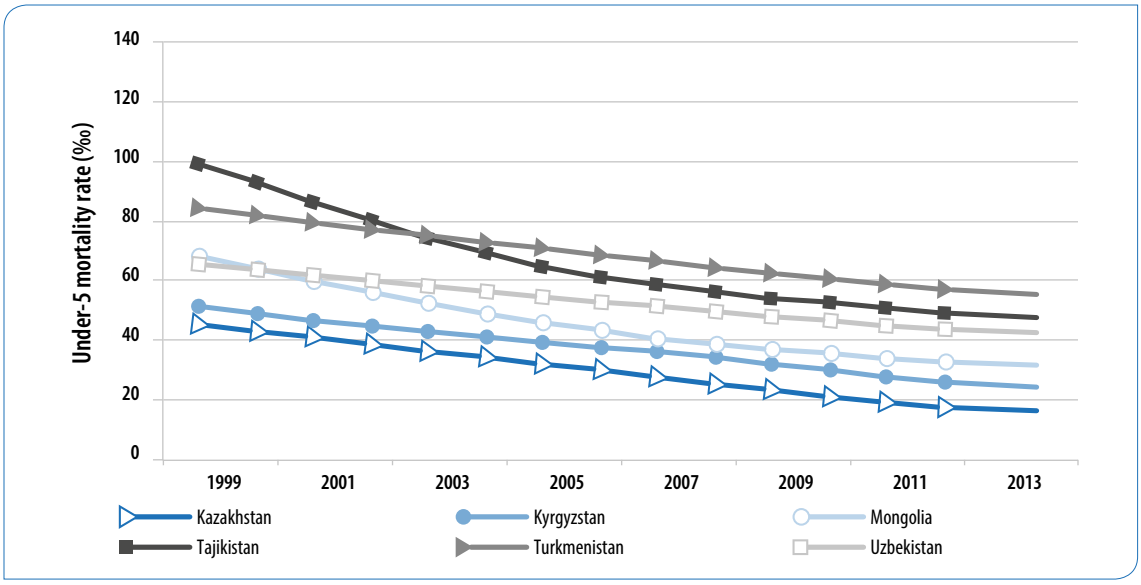
	Gross enrolment ratio		Gender parity index		School life expectancy		Enrolment in public institutions		Trained teachers		Government expenditure on pre-primary education			
	(%)				(years)		(%)		(%)		as % of GDP		as % of exp. on education	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Uzbekistan	24	25	0.93	1.00	0.9	1.0	…	99	…	100	…	…	…	…
median	15	42	0.93	1.00	0.6	1.4	96	95	91	90	0.27	0.72	6.7	16.1
Asia-Pacific														
median	36	63	1.01	1.00	1.0	1.7	52	54	91	90	0.07	0.15	2.4	2.9
lowest	1	9	0.71	0.83	0.0	0.2	0	0	32	46	0.01	0.02	0.1	0.1
highest	154	119	1.28	1.14	2.9	3.5	99	99	100	100	1.06	1.30	14.6	28.1

Note: … = Not available. All figures are for 1999 or the earliest year available over 1997–2002 and for 2013 or the latest year available over 2010–2014. Figures in green represent the highest value of each indicator within the subregion, and figures in red the lowest value.

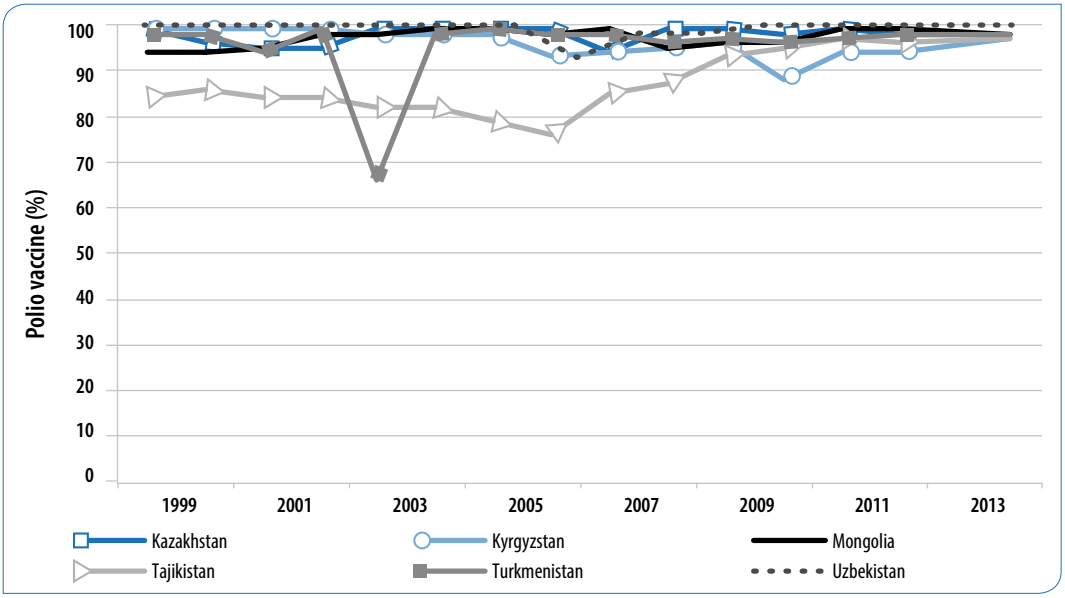
Sources: UIS (2015); UNICEF (2015c).

Health and nutrition

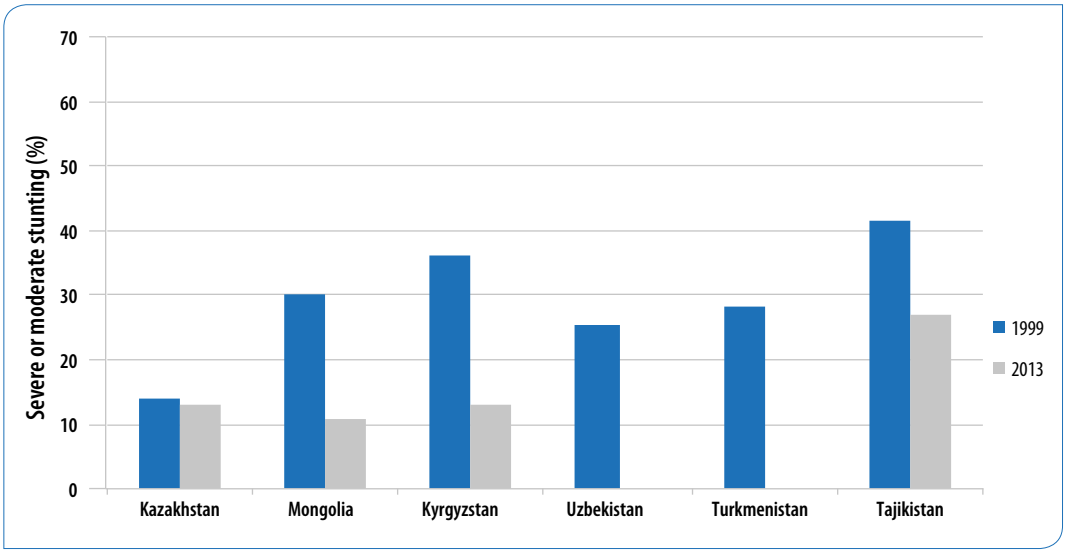
Child mortality



Immunization

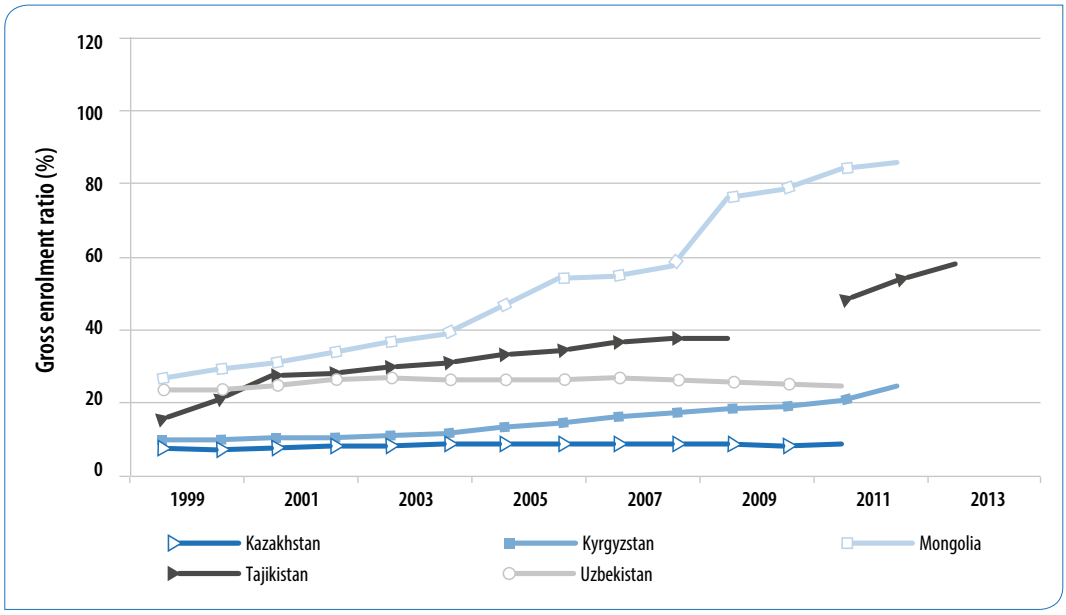


Malnutrition

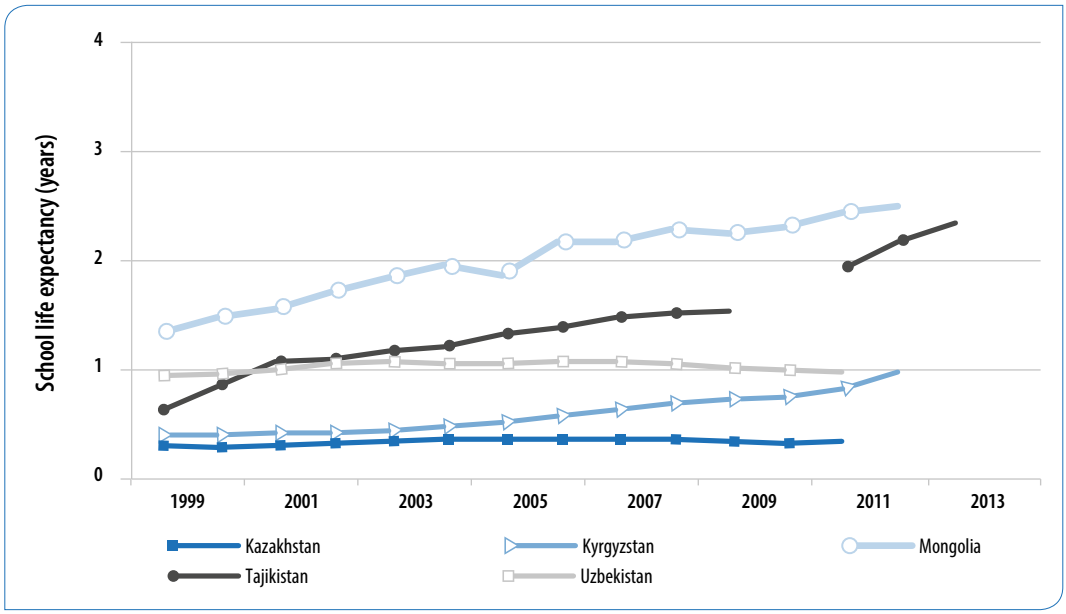


Pre-primary education

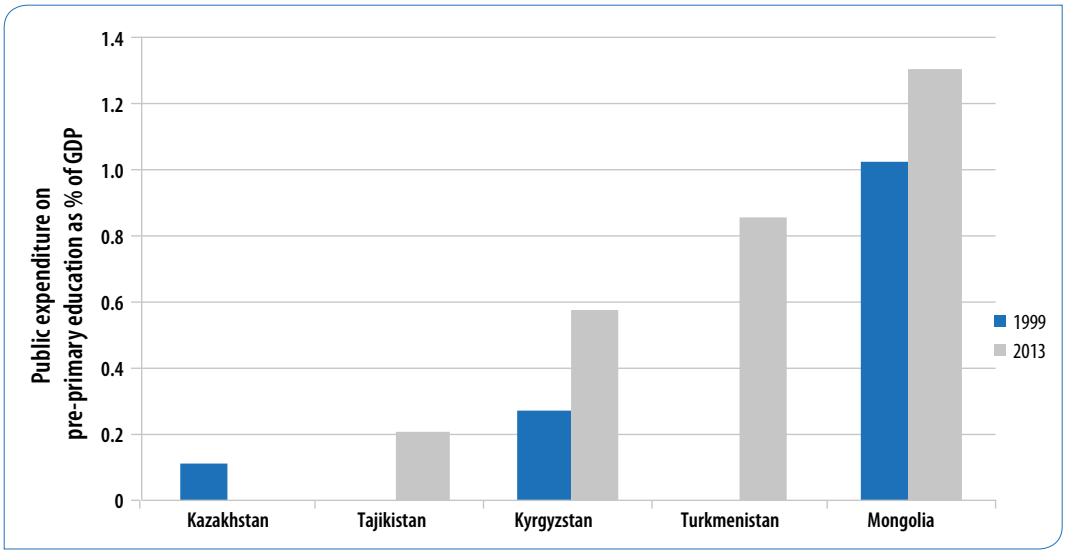
Participation



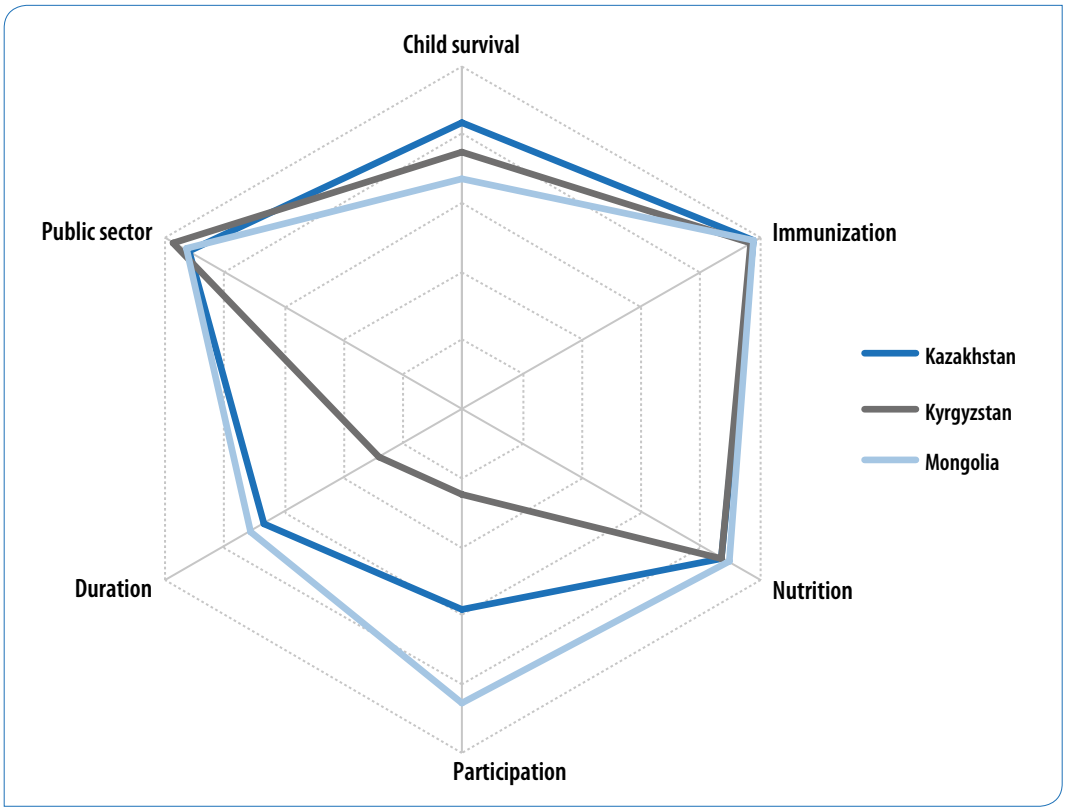
Duration



Public expenditure



Cross-country comparison of multiple indicators



Notes: The following indicators are used:

- Child survival: under-5 mortality rate, normalized with respect to the highest value in the Asia-Pacific region, so that 0% is that value, and 100% implies 0 child mortality: (1 country value / highest value in the Asia-Pacific region)*100 (%);
- Immunization: Polio vaccine immunization rate (%);
- Nutrition: Share of young children who are not stunted (100 rate of severe or moderate stunting) (%);
- Participation: GER in pre-primary education (%);

- Duration: School life expectancy, normalized as % of highest value in the Asia-Pacific region (%);
- Public sector: Share of pupils not attending private institutions (100 share of pupils in private institutions) (%).

Only countries with data for all indicators are included. Axes range from 0% (centre of the graph) to 100%, with lines every 20 percentage points.

Annex 9. East Asia ECCE profile, 1999–2015

Health and nutrition

	Under-5 mortality rate (‰)		Immunization (%)				Malnutrition (%)							
			DTP3		polio		stunting		wasting		underweight		overweight	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Brunei Darussalam	10	10	92	90	97	90	…	…	…	…	…	…	…	…
Cambodia	118	38	53	92	65	77	49	32	17	10	40	24	4	2
China	39	13	85	99	86	99	20	9	2	2	7	3	6	7
DPR Korea	67	27	50	93	87	99	64	28	21	4	56	15	1	…
Indonesia	55	29	75	85	86	86	42	36	6	14	23	20	2	12
Japan	5	3	80	98	98	99	…	…	…	…	…	…	…	…
Lao PDR	122	71	55	87	64	86	48	44	18	6	36	27	3	2
Macao, China	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Malaysia	11	9	97	97	97	97	21	…	15	…	17	…	6	…
Myanmar	82	51	75	75	88	76	55		10	…	28	…	10	…
Philippines	41	30	80	94	79	88	38	30	8	8	28	20	2	5
Rep. of Korea	6	4	86	99	85	99	…	3	…	1	…	1	…	7
Singapore	4	3	97	97	97	97	4	…	4	…	3	…	3	…
Thailand	24	13	97	99	97	99	…	16	…	7	…	9	…	11
Timor-Leste	112	55	54	82	38	82	…	…	14	…	…	…	6	…
Viet Nam	36	24	93	59	93	93	44	19	11	6	31	12	2	5
median	39	24	80	93	87	93	43	28	11	6	28	15	3	7
Asia-Pacific														
median	43	28	86	95	88	96	42	27	10	6	23	13	5	7
worst	138	97	27	36	27	36	64	45	22	21	56	35	11	17
best	4	3	99	99	99	99	4	3	1	1	2	1	0	1

Note: … = Not available. Malnutrition figures are for 1999 or the earliest year available over 1997–2002 and for 2013 or the latest year available over 2010–2014. For Timor-Leste 2002 figures only available for 1999. All figures pertain to young children aged 0–5. Figures in green represent the best value of each indicator within the subregion (i.e. lowest value of under-5 mortality rate and malnutrition rates, highest value of immunization rates); figures in red represent the worst values (i.e. highest value of under-5 mortality rate and malnutrition rates, lowest value of immunization rates).

Sources: UIS (2015); UNICEF (2015c).

Pre-primary education

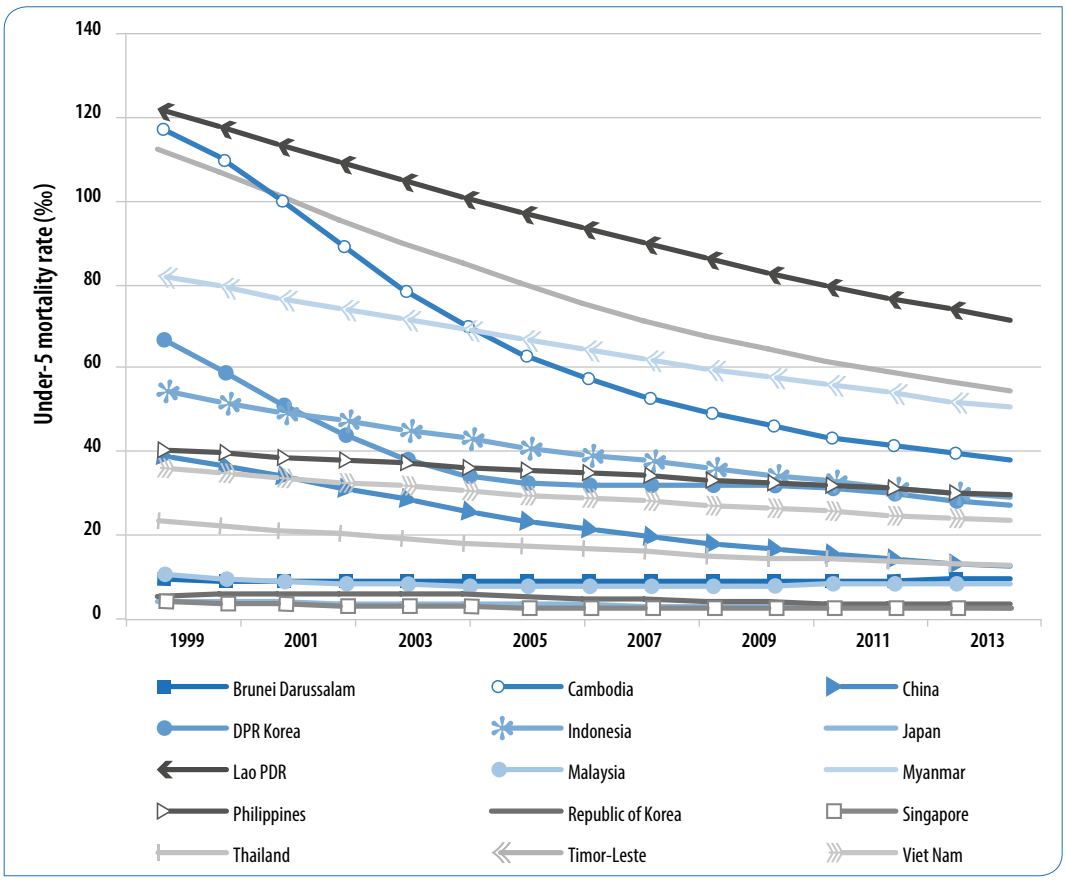
	Gross enrolment ratio		Gender parity index		School life expectancy		Enrolment in public institutions		Trained teachers		Government expenditure on pre-primary education			
	(%)				(years)		(%)		(%)		as % of GDP		as % of exp. on education	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Brunei Darussalam	53	64	1.03	1.02	1.6	1.9	34	23	…	63	…	…	…	…
Cambodia	5	15	1.02	1.05	0.2	0.5	82	88	98	100	0.04	0.06	2.6	2.2
China	36	74	0.97	1.01	1.1	2.2	…	50	…	…	0.03	…	1.4	…
DPR Korea	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Indonesia	23	51	1.01	1.14	0.5	1.0	1	10	…	…	…	0.08	…	2.2
Japan	83	88	1.02	…	2.5	2.6	35	29	…	…	0.09	0.10	2.5	2.7
Lao PDR	7	26	1.11	1.04	0.2	0.8	82	79	86	91	0.05	…	1.9	…
Macao, China	90	…	0.95	…	2.7	…	6	3	93	94	0.28	…	7.6	…
Malaysia	54	84	1.04	0.93	1.1	1.7	51	58	…	…	0.06	0.10	1.0	1.7
Myanmar	2	9	…	1.05	0.0	0.2	10	39	…	59	…	…	…	…
Philippines	30	…	1.06		0.3		53	…	…	…	…	…	0.1	…
Rep. of Korea	…	93	…	1.00		2.8	…	19	…	…	0.03	0.18	0.8	3.1
Singapore	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Thailand	91	119	1.00	0.98	2.7	3.5	81	77	…	…	0.59	0.32	10.9	6.6
Timor-Leste	6	…	…	…	0.1	…	…	…	…	…	…	…	…	…
Viet Nam	40	82	0.96	0.93	1.2	2.5	51	86	44	97	…	0.62	…	9.9
median	36	74	1.02	1.02	1.1	1.9	51	44	89	93	0.06	0.10	1.9	2.7
Asia-Pacific														
median	36	63	1.01	1.00	1.0	1.7	52	54	91	90	0.07	0.15	2.4	2.9
lowest	1	9	0.71	0.83	0.0	0.2	0	0	32	46	0.01	0.02	0.1	0.1
highest	154	119	1.28	1.14	2.9	3.5	99	99	100	100	1.06	1.30	14.6	28.1

Note: … = Not available. All figures are for 1999 or the earliest year available over 1997–2002 and for 2013 or the latest year available over 2010–2014. All figures pertain to young children aged 0–5. Figures in green represent the highest value of each indicator within the subregion, and figures in red the lowest value.

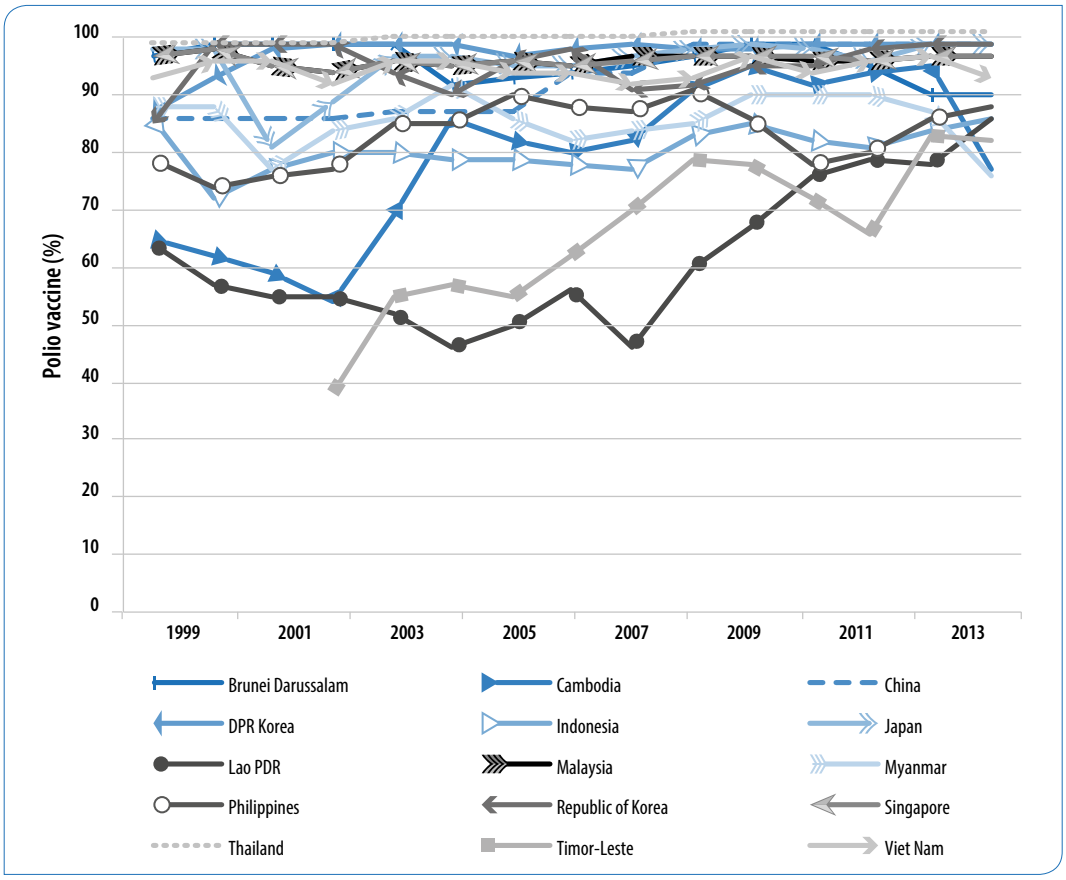
Sources: UIS (2015); UNICEF (2015c).

Health and nutrition

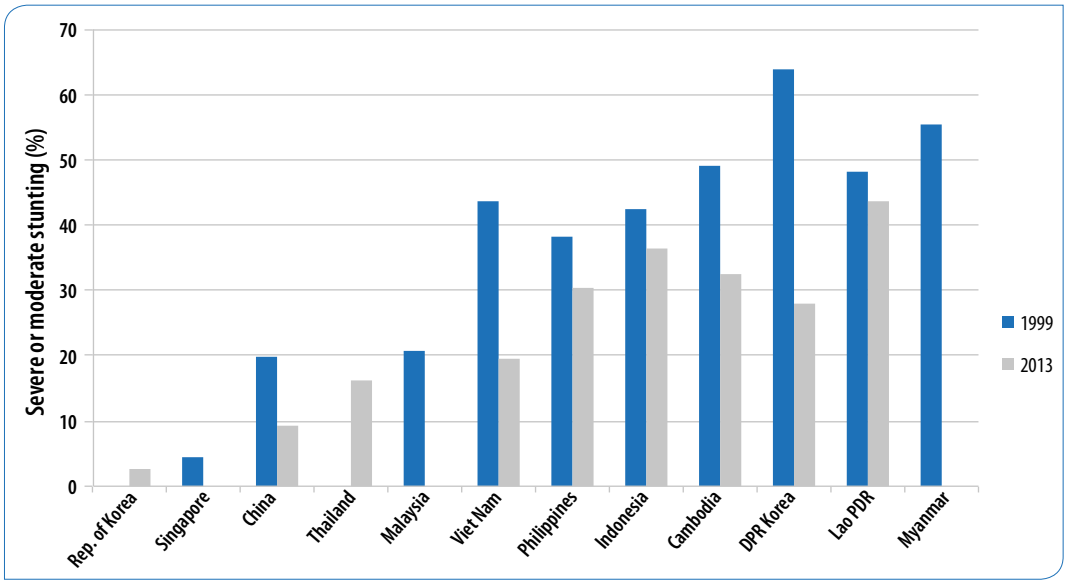
Child mortality



Immunization

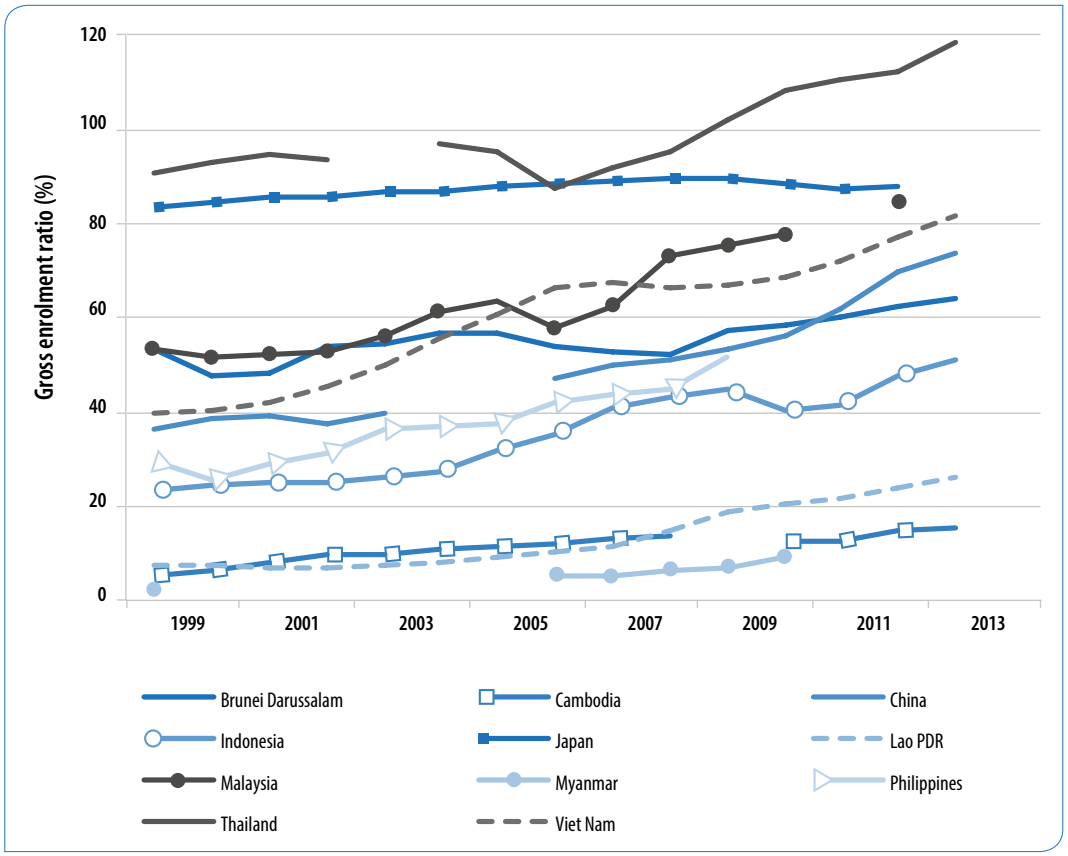


Malnutrition

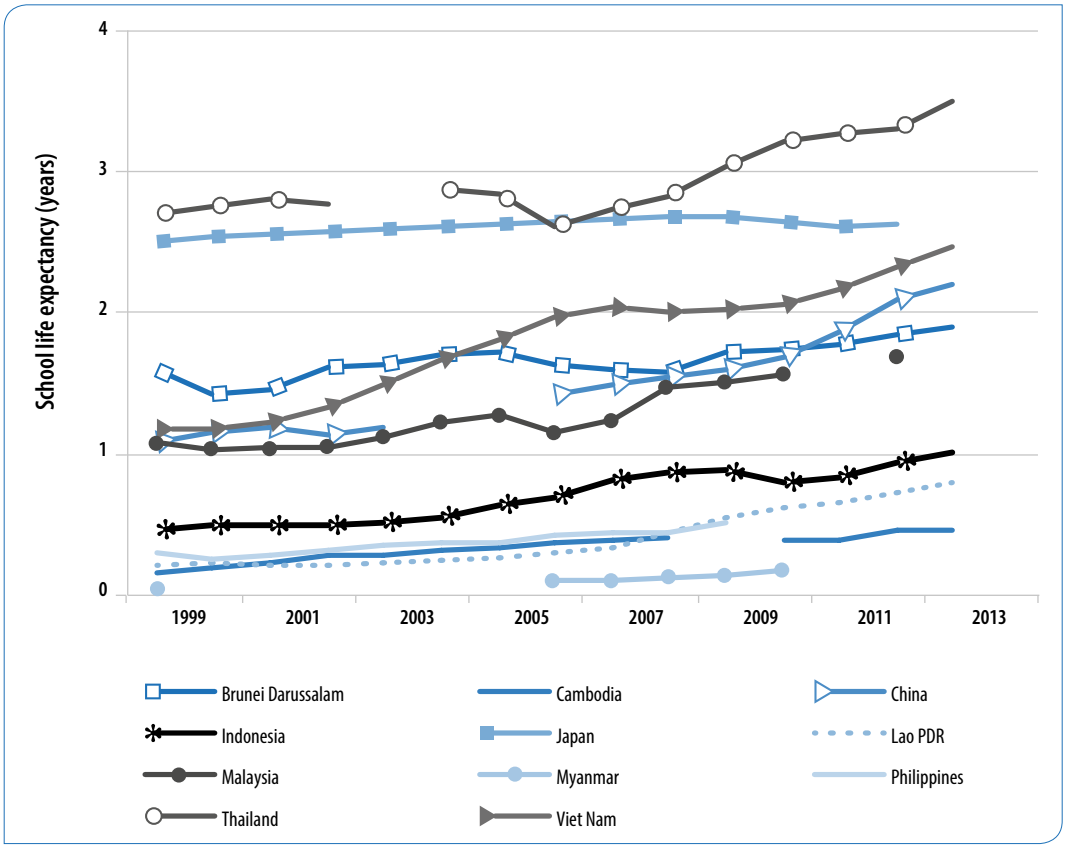


Pre-primary education

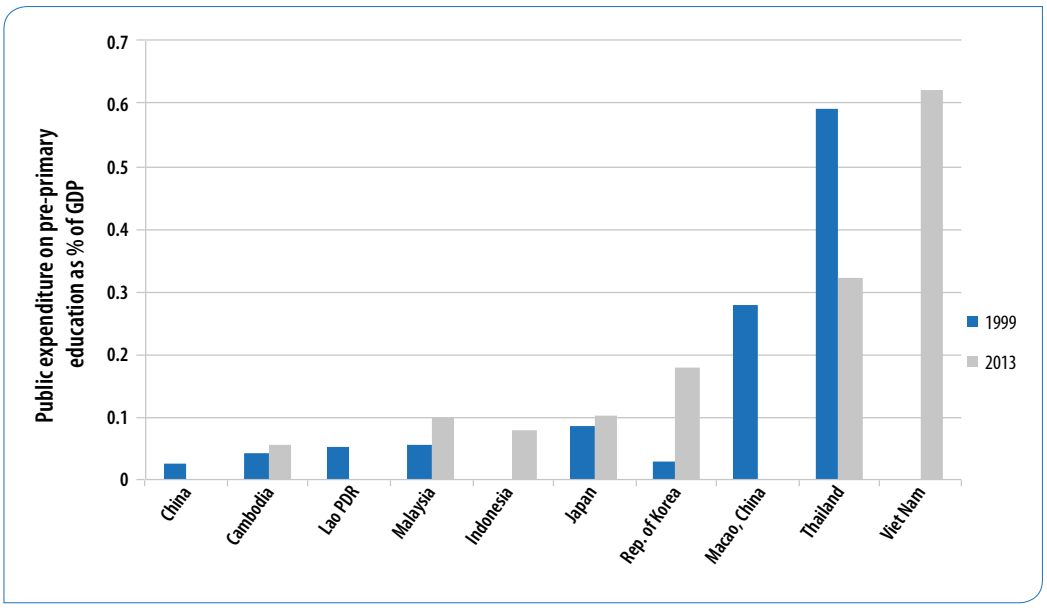
Participation



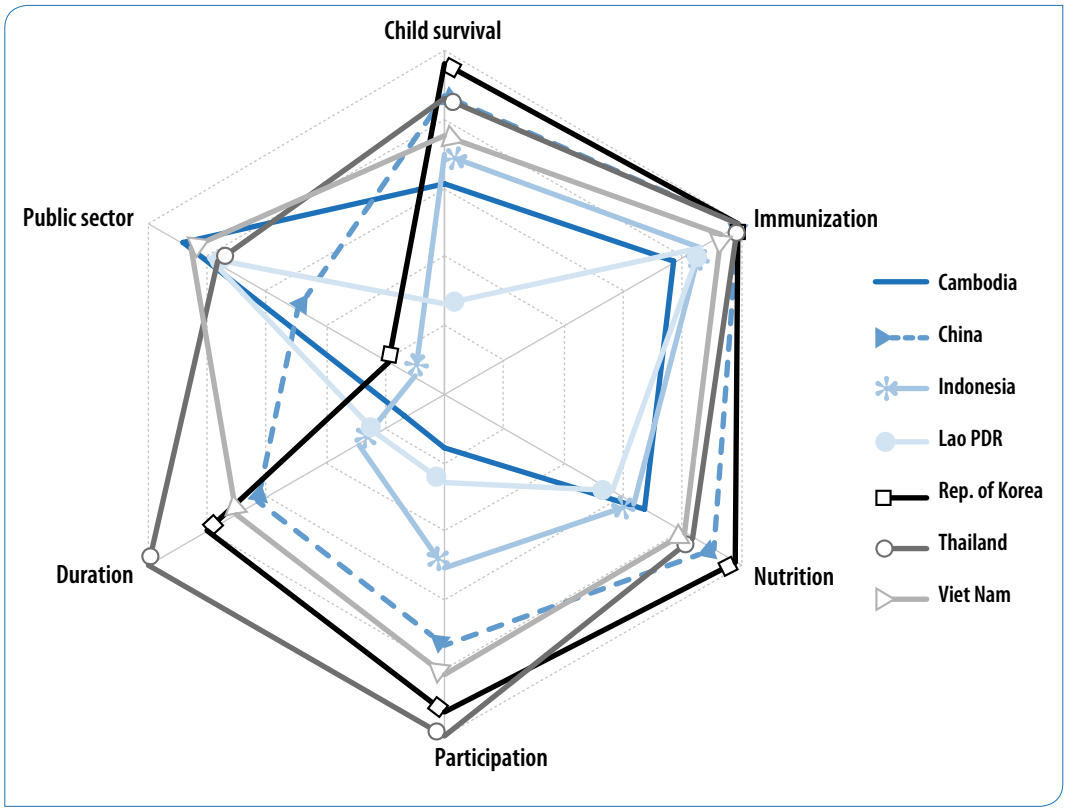
Duration



Public expenditure



Cross-country comparison of multiple indicators



Note: The following indicators are used:

- Child survival: Under-5 mortality rate, normalized with respect to the highest value in the Asia-Pacific region, so that 0% is that value, and 100% implies 0 child mortality: (1 country value/highest value in the Asia-Pacific region)*100 (%);
- Immunization: Polio vaccine immunization rate (%);
- Nutrition: Share of young children who are not stunted (100 rate of severe or moderate stunting) (%);
- Participation: GER in pre-primary education (capped at 100% in the case of Thailand, instead of 119%) (%);
- Duration: School life expectancy, normalized as % of highest value in the Asia-Pacific region (%);
- Public sector: share of pupils not attending private institutions (100 share of pupils in private institutions) (%).

Only countries with data for all indicators are included. Axes range from 0% (centre of the graph) to 100%, with lines every 20 percentage points.

Annex 10. Pacific ECCE profile, 1999–2015

Health and nutrition

	Under-5 mortality rate (‰)		Immunization (%)				Malnutrition (%)							
			DTP3		polio		underweight stunting		wasting		underweight		overweight	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Australia	6	4	88	91	88	91	…	…	…	…	…	…	…	…
Cook Islands	18	9	92	98	92	98	…	…	…	…	…	…	…	…
Fiji	25	24	89	99	90	99	…	…	…	…	…	…	…	…
Kiribati	73	58	78	95	76	91	…	…	…	…	…	…	…	…
Marshall Islands	42	38	66	36	86	36	…	…	…	…	…	…	…	…
Micronesia (Fed. States)	54	36	76	81	76	81	…	…	…	…	…	…	…	…
Nauru	43	37	64	79	64	79	…	…	…	…	…	…	…	…
New Zealand	8	6	88	92	85	92	…	…	…	…	…	…	…	…
Niue	22	25	99	99	99	99	…	…	…	…	…	…	…	…
Palau	28	18	96	99	96	99	…	…	…	…	…	…	…	…
Papua New Guinea	79	61	60	68	48	69	…	…	…	…	…	…	…	…
Samoa	23	18	98	95	98	95	6	…	1	…	2	…	6	…
Solomon Islands	34	30	86	83	84	85	…	…	…	…	…	…	…	…
Tokelau	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Tonga	18	12	94	99	94	99	…	8	…	5	…	2	…	17
Tuvalu	44	29	83	90	84	90	…	…	…	…	…	…	…	…
Vanuatu	24	17	71	68	67	67	…	…	…	…	…	…	…	…
median	26	24	87	92	86	91	…	…	…	…	…	…	…	…
Asia-Pacific														
median	43	28	86	95	88	96	42	27	10	6	23	13	5	7
worst	138	97	27	36	27	36	64	45	22	21	56	35	11	17
best	4	3	99	99	99	99	4	3	1	1	2	1	0	1

Notes: … = Not available. Malnutrition figures are for 1999 or the earliest year available over 1997–2002 and for 2013 or the latest year available over 2010–2014. All figures pertain to young children aged 0–5. Figures in green represent the best value of each indicator within the subregion (i.e. lowest value of under-5 mortality rate and malnutrition rates, highest value of immunization rates); figures in red represent the worst values (i.e. highest value of under-5 mortality rate and malnutrition rates, lowest value of immunization rates).

Sources: UIS (2015); UNICEF (2015c).

Pre-primary education

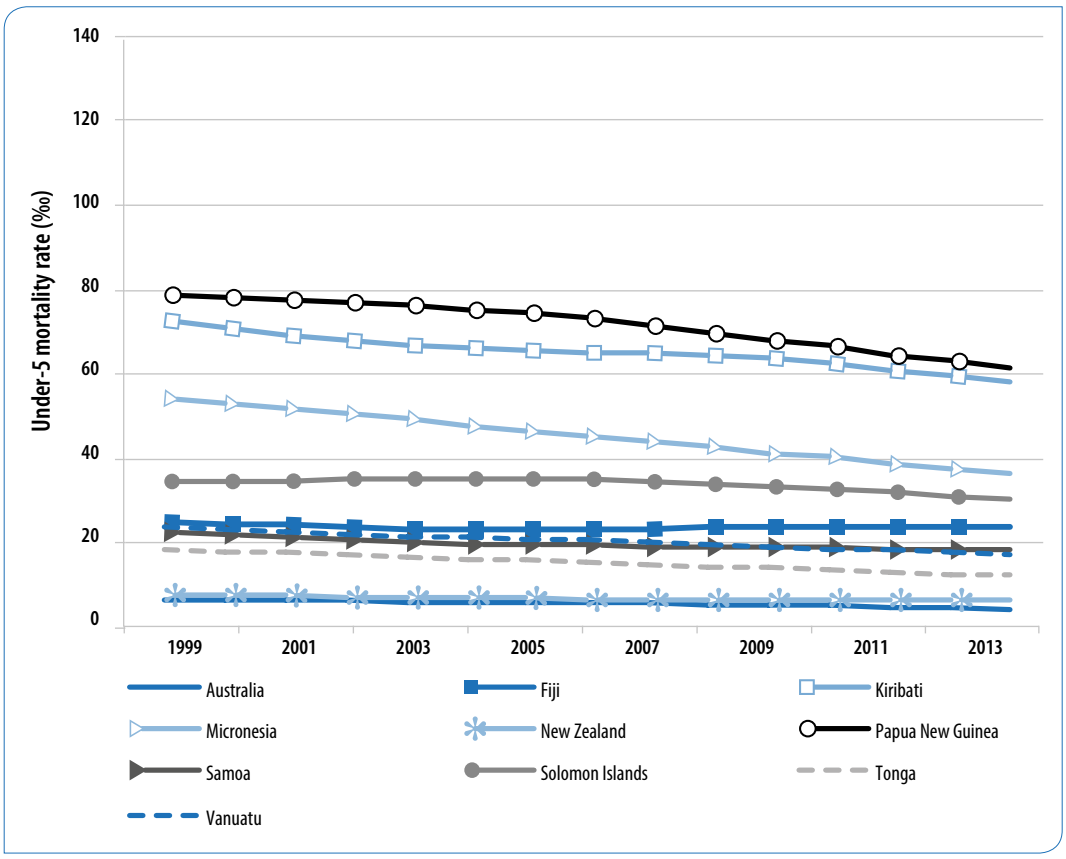
	Gross enrolment ratio		Gender parity index		School life expectancy		Enrolment in public institutions		Trained teachers		Government expenditure on pre-primary education			
	(%)				(years)		(%)		(%)		as % of GDP		as % of exp. on education	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Australia	103	109	1.00	0.97	1.0	1.1	37	37	…	…	0.06	0.12	1.2	2.5
Cook Islands	43	87	0.98	0.96	0.9	1.7	75	67	…	76	…	…	7.0	…
Fiji	15	…	1.01	…	0.5	…	…	…	…	…	…	0.02	…	0.4
Kiribati	55	…	…	…	…	…	…	…	…	…	…	…	…	…
Marshall Islands	57	48	1.05	1.06	1.1	1.0	81	82	100	…	…	…	…	…
Micronesia (Fed. States)	36	29	…	0.98	1.1	0.9	…	96	…	…	…	…	…	…
Nauru	74	68	0.88	0.85	2.2	2.1	83	…	…	…	…	…	…	…
New Zealand	85	96	1.01	1.02	1.7	1.9	…	2	…	…	0.22	0.51	3.3	6.9
Niue	154	…	0.93	…	1.5	…	…	…	…	…		…	…	…
Palau	63	74	1.23	1.09	1.9	2.2	76	78	…	…	1.06	…	14.6	…
Papua New Guinea	61	…	0.95	…	0.6	…	…	…	…	…	…	…	…	…
Samoa	50	34	1.28	1.10	1.0	0.7	0	0	…	…	0.08	…	2.3	…
Solomon Islands	…	93	…	1.01	…	2.9	…	77	…	51	…	…	…	…
Tokelau	99	…	0.84	…	2.0	…	…	…	…	…	…	…	…	…
Tonga	29	35	1.22	0.99	0.6	0.7	…	0	…	100	…	…	…	…
Tuvalu	96	82	1.09	1.02	2.9	2.4	…		…	100	…	…	…	…
Vanuatu	51	63	1.08	0.99	1.5	2.0	0	0	42	48	0.01	…	0.1	…
median	59	71	1.01	1.00	1.1	1.8	75	52	…	76	0.08	0.12	2.8	2.5
Asia-Pacific														
median	36	63	1.01	1.00	1.0	1.7	52	54	91	90	0.07	0.15	2.4	2.9
lowest	1	9	0.71	0.83	0.0	0.2	0	0	32	46	0.01	0.02	0.1	0.1
highest	154	119	1.28	1.14	2.9	3.5	99	99	100	100	1.06	1.30	14.6	28.1

Note: … = Not available. All figures are for 1999 or the earliest year available over 1997–2002 and for 2013 or the latest year available over 2010–2014. Figures in green represent the highest value of each indicator within the subregion, and figures in red the lowest value.

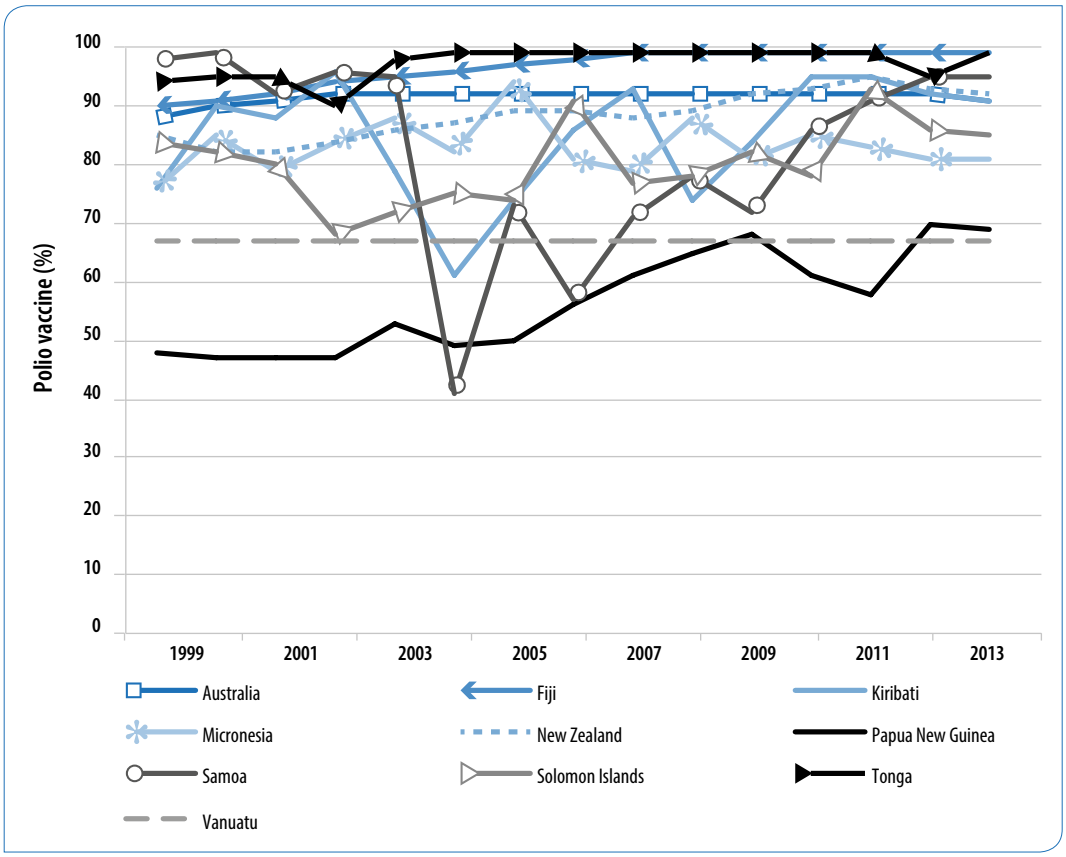
Sources: UIS (2015); UNICEF (2015c).

Health and nutrition

Child mortality



Immunization



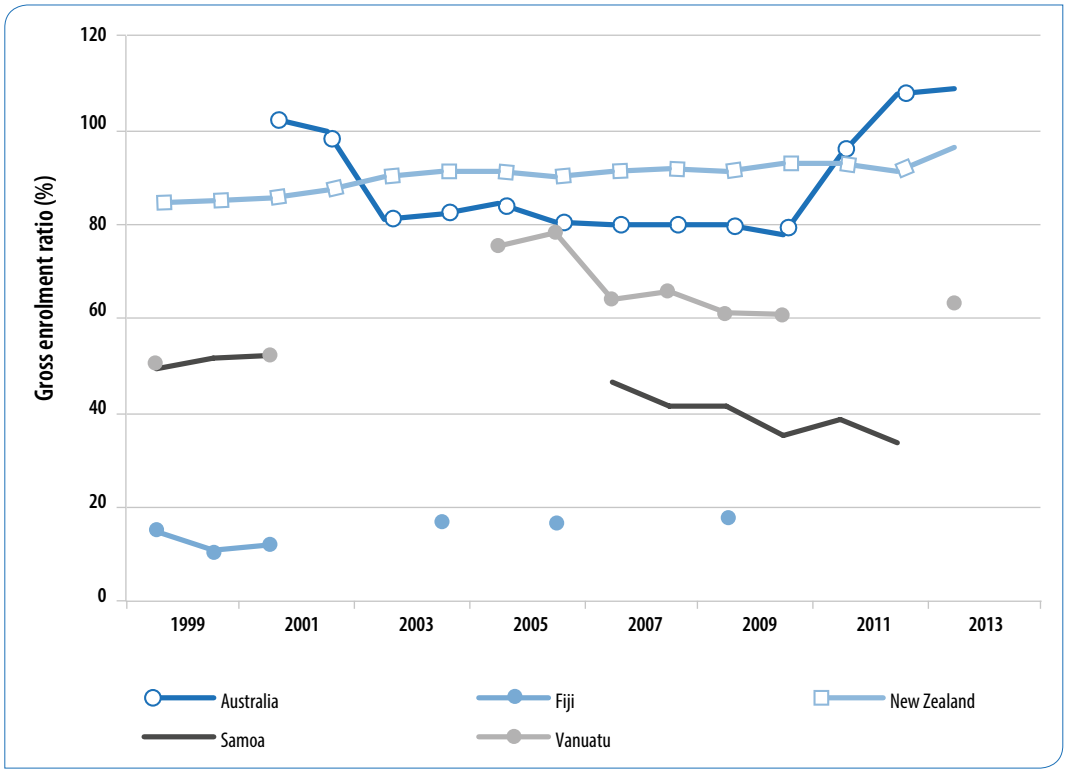
Malnutrition

Not enough data are available to produce a figure on malnutrition in the Pacific subregion.

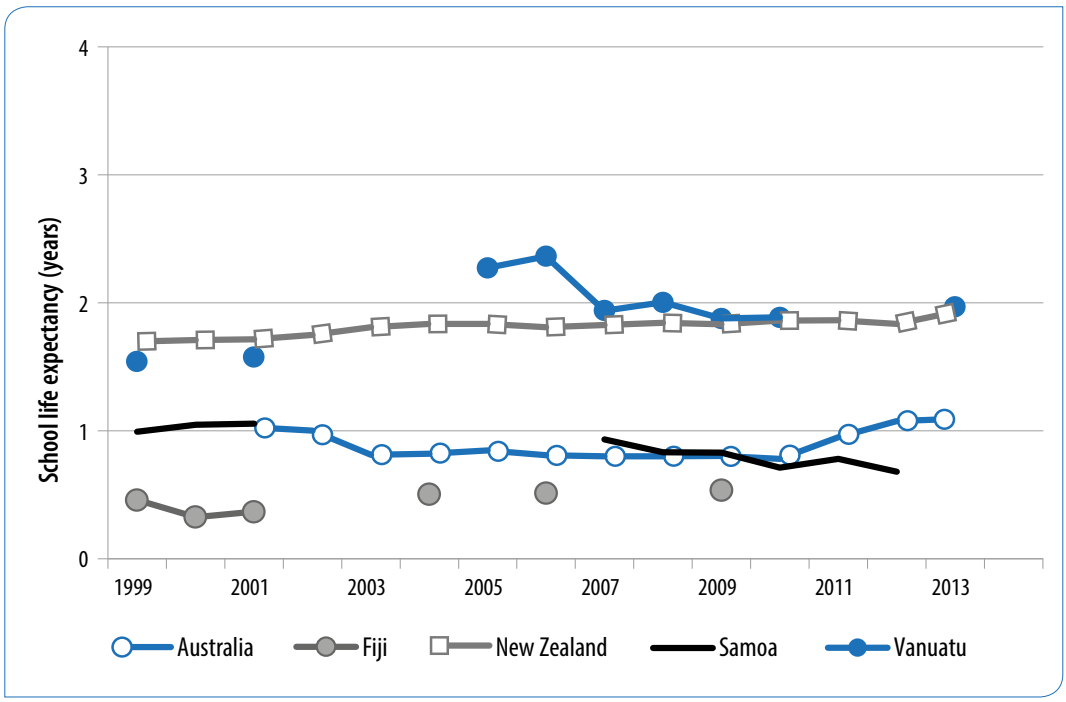
Note: Only countries with a total population above 100,000 in 2015 are included.

Pre-primary education

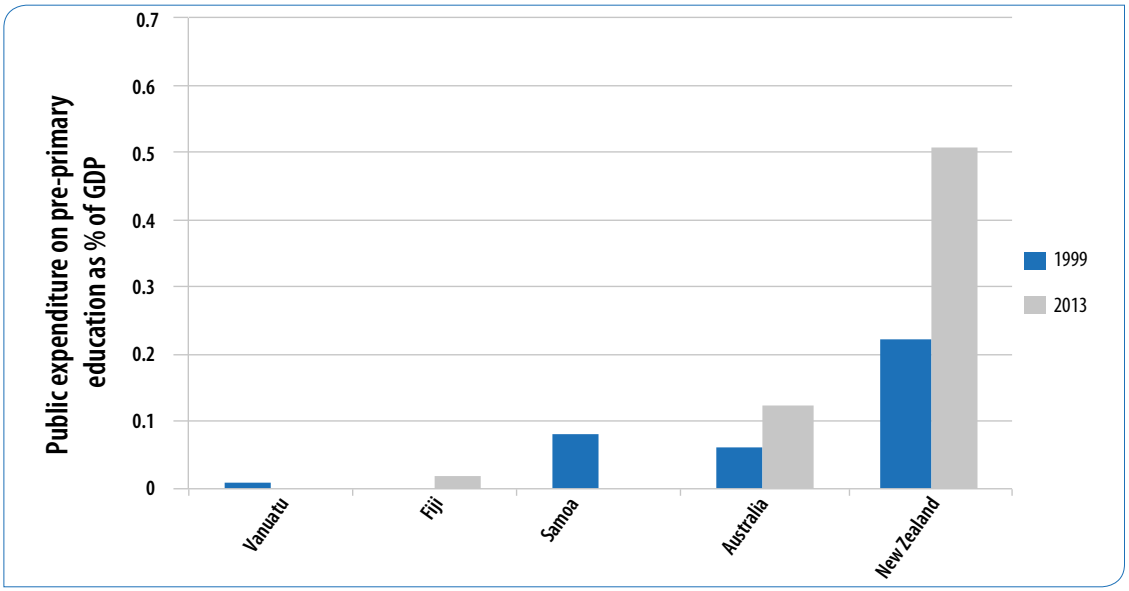
Participation in pre-primary education



Duration of pre-primary education

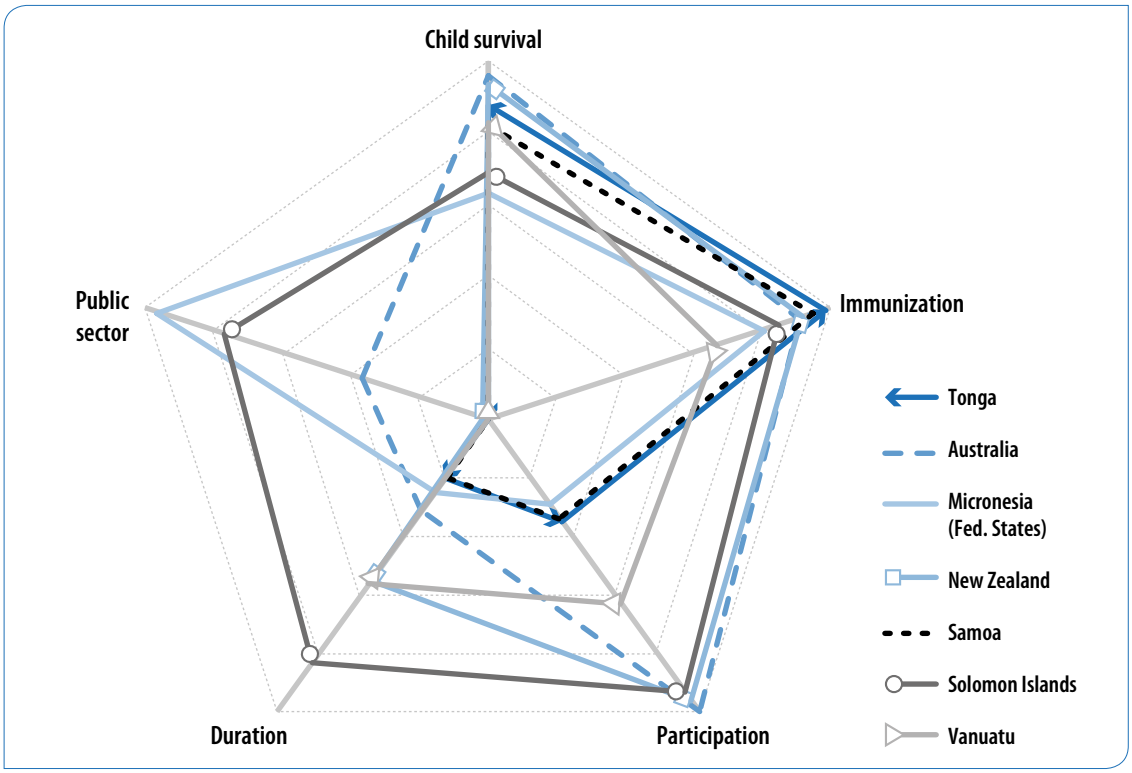


Public expenditure on pre-primary education



Note: Only countries with a total population above 100,000 in 2015 are included.

Cross-country comparison of multiple indicators



Notes: The following indicators are used:

- Child survival: Under-5 mortality rate, normalized with respect to the highest value in the Asia-Pacific region, so that 0% is that value, and 100% implies 0 child mortality: (1 country value/highest value in the Asia-Pacific region)*100 (%);
- Immunization: Polio vaccine immunization rate (%);
- Nutrition: Share of young children who are not stunted (100 rate of severe or moderate stunting) (%);

- Participation: GER in pre-primary education (%) (capped at 100% in the case of Australia);
- Duration: School life expectancy, normalized as % of highest value in the Asia-Pacific region (%);
- Public sector: Share of pupils not attending private institutions (100 share of pupils in private institutions) (%).

Only countries with a total population above 100,000 in 2015 and with data for all indicators are included. Nutrition is not covered due to lack of data. Axes range from 0% (centre of the graph) to 100%, with lines every 20 percentage points.

Annex 11. South and West Asia ECCE profile, 1999–2015

Health and nutrition

	Under-5 mortality rate (‰)		Immunization (%)				Malnutrition (%)							
			DTP3		polio		stunting		wasting		underweight		overweight	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Afghanistan	138	97	27	71	27	71	53	41	18	10	45	25	7	5
Bangladesh	93	41	80	97	81	97	60	39	14	18	50	35	1	3
Bhutan	84	36	90	97	89	97	48	34	3	6	14	13	4	8
India	95	53	60	72	61	70	54	…	17	…	46	…	3	…
Iran, Isl. Rep.	37	17	99	98	99	98	20	7	6	4	10	4	7	…
Maldives	49	10	97	99	98	99	47	…	22	…	42	…	7	…
Nepal	87	40	65	92	76	92	61	41	8	11	38	29	0	2
Pakistan	115	86	58	72	61	72	42	45	14	11	…	32	5	5
Sri Lanka	17	10	99	99	99	99	18	15	16	21	23	26	1	1
median	87	40	80	97	81	97	48	39	14	11	40	26	4	4
Asia-Pacific														
median	43	28	86	95	88	96	42	27	10	6	23	13	5	7
worst	138	97	27	36	27	36	64	45	22	21	56	35	11	17
best	4	3	99	99	99	99	4	3	1	1	2	1	0	1

Notes: … =Not available. Malnutrition figures are for 1999 or the earliest year available over 1997–2002 and for 2013 or the latest year available over 2010–2014. All figures pertain to young children aged 0–5. Figures in green represent the best value of each indicator within the subregion (i.e. lowest value of under-5 mortality rate and malnutrition rates, highest value of immunization rates); figures in red represent the worst values (i.e. highest value of under-5 mortality rate and malnutrition rates, lowest value of immunization rates).

Sources: UIS (2015); UNICEF (2015c).

Pre-primary education

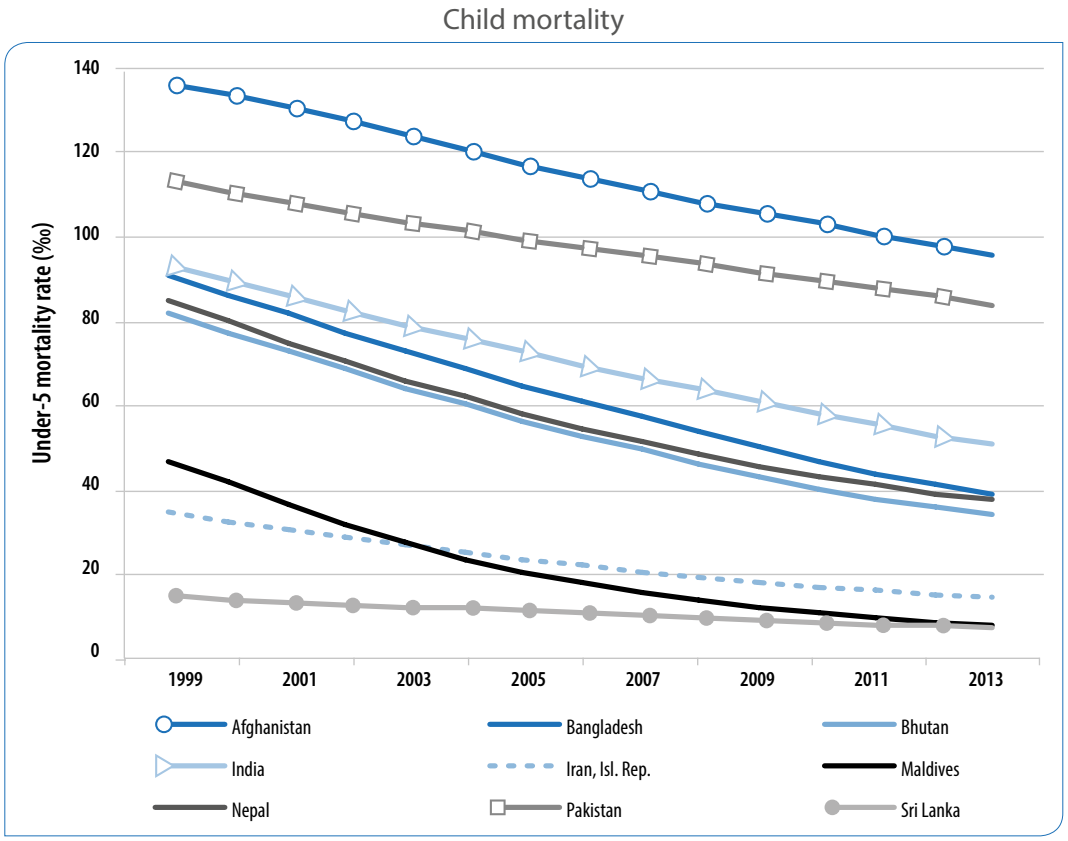
	Gross enrolment ratio (%)		Gender parity index		School life expectancy (years)		Enrolment in public institutions (%)		Trained teachers (%)		Government expenditure on pre-primary education			
											as % of GDP		as % of exp. on education	
Country	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013	1999	2013
Afghanistan	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Bangladesh	18	33	1.04	1.00	0.5	1.0	…	64	…	…	…	…	…	…
Bhutan	1	14	0.92	0.99	0.0	0.3	0	54	100	…	…	…	…	…
India	19	58	1.02	1.05	0.6	1.7	97	…	…	…	0.04	0.05	1.0	1.2
Iran, Isl. Rep.	15	38	1.03	1.01	0.1	0.4	84	2	…	…	0.04	0.04	0.9	0.1

	Gross enrolment ratio (%)		Gender parity index		School life expectancy (years)		Enrolment in public institutions (%)		Trained teachers (%)		Government expenditure on pre-primary education			
											as % of GDP		as % of exp. on education	
Country	**1999**	**2013**	**1999**	**2013**	**1999**	**2013**	**1999**	**2013**	**1999**	**2013**	**1999**	**2013**	**1999**	**2013**
Maldives	56	…	1.01	…	1.7	…	…	6	47	89	…	…	…	…
Nepal	11	87	0.77	0.96	0.3	1.7	16	74	…	87	…	…	…	…
Pakistan	63	82	0.71	0.89	1.3	1.7	…	…	…	…	…	…	…	…
Sri Lanka	…	90	…	1.00	…	0.9	…	20	…	…	…	…	…	…
median	18	58	1.01	1.00	0.5	1.0	50	37	…	…	…	…	…	…
Asia-Pacific														
median	36	63	1.01	1.00	1.0	1.7	52	54	91	90	0.07	0.15	2.4	2.9
lowest	1	9	0.71	0.83	0.0	0.2	0	0	32	46	0.01	0.02	0.1	0.1
highest	154	119	1.28	1.14	2.9	3.5	99	99	100	100	1.06	1.30	14.6	28.1

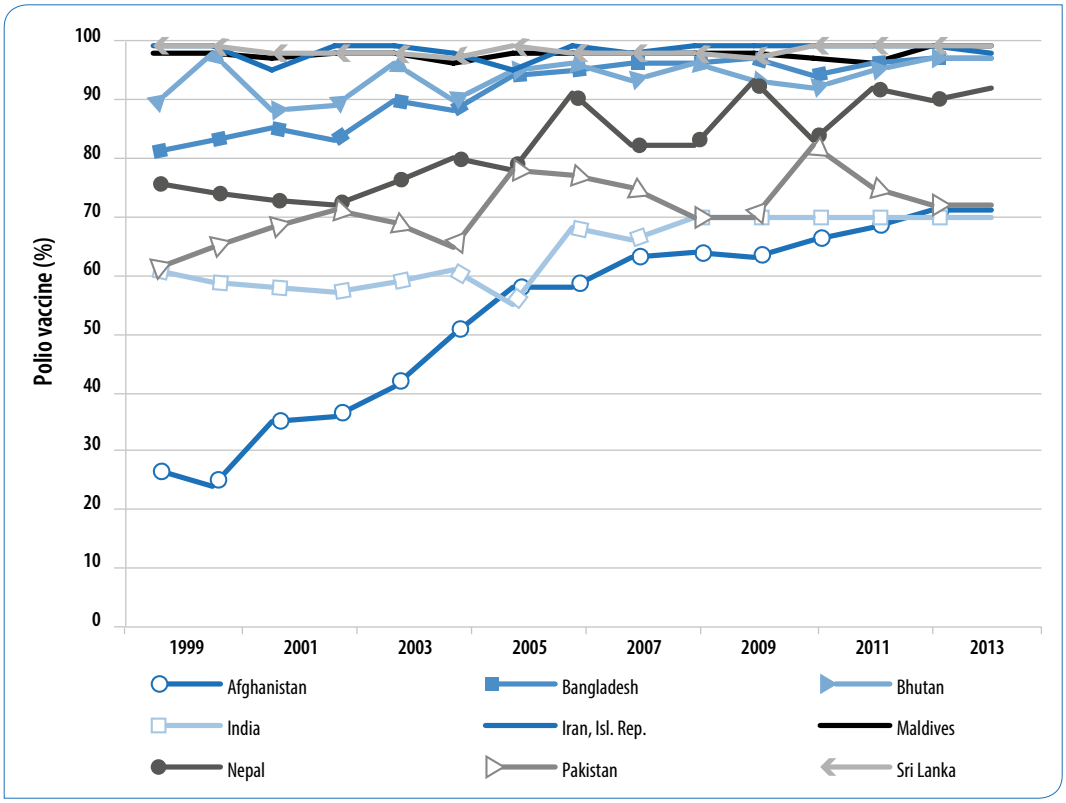
Notes: … =Not available. All figures are for 1999 or the earliest year available over 1997–2002 and for 2013 or the latest year available over 2010–2014. Figures in green represent the highest value of each indicator within the subregion, and figures in red the lowest value.

Sources: UIS (2015); UNICEF (2015c).

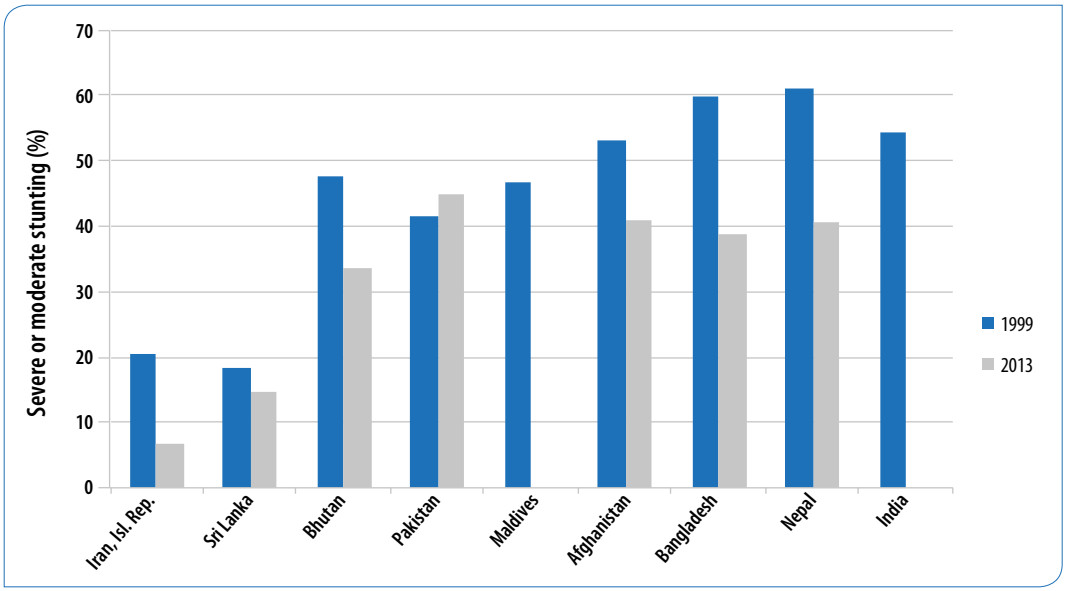
Health and nutrition



Immunization

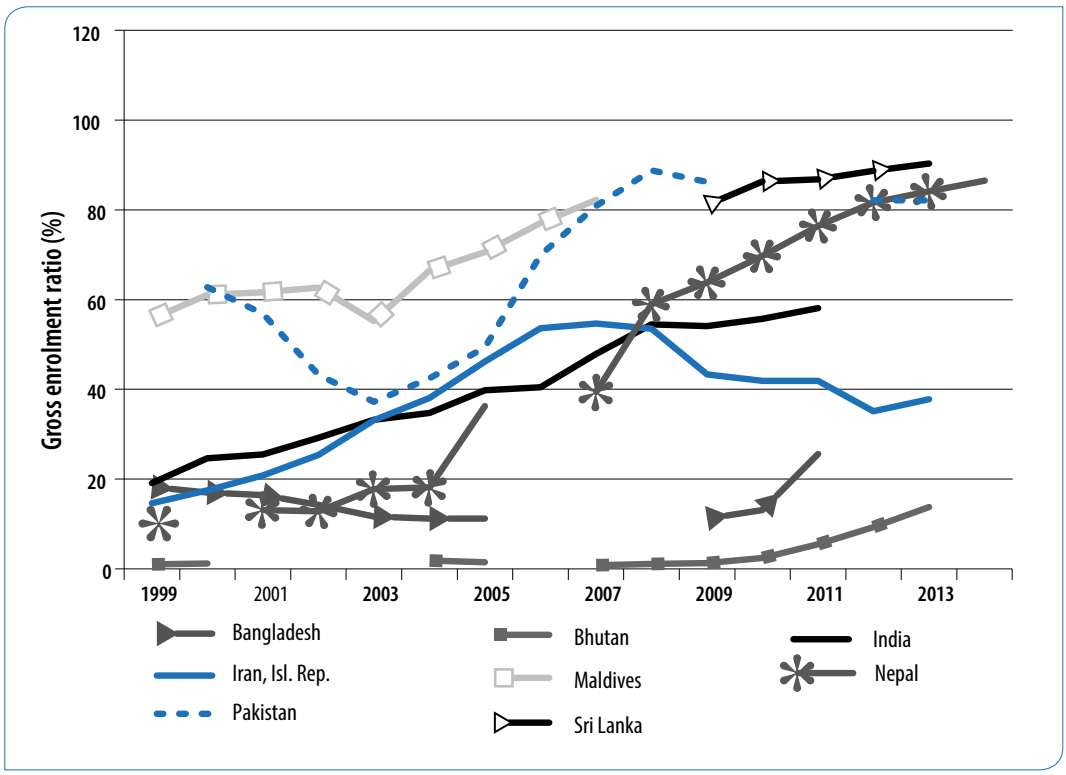


Malnutrition

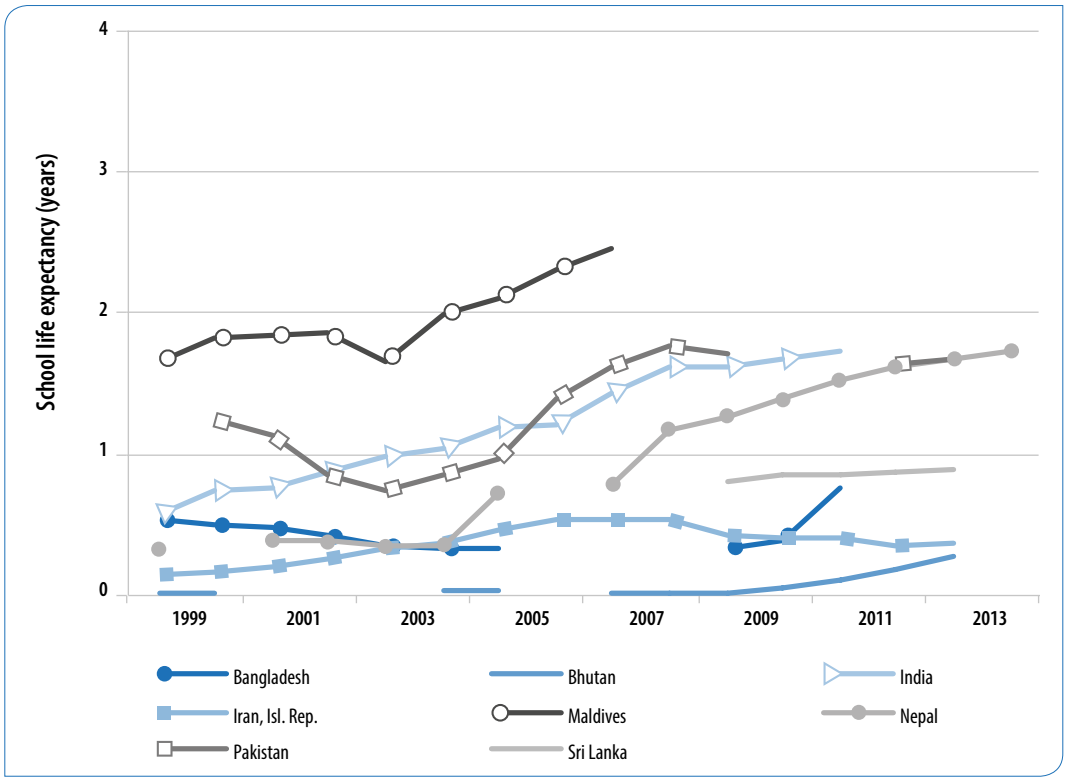


Pre-primary education

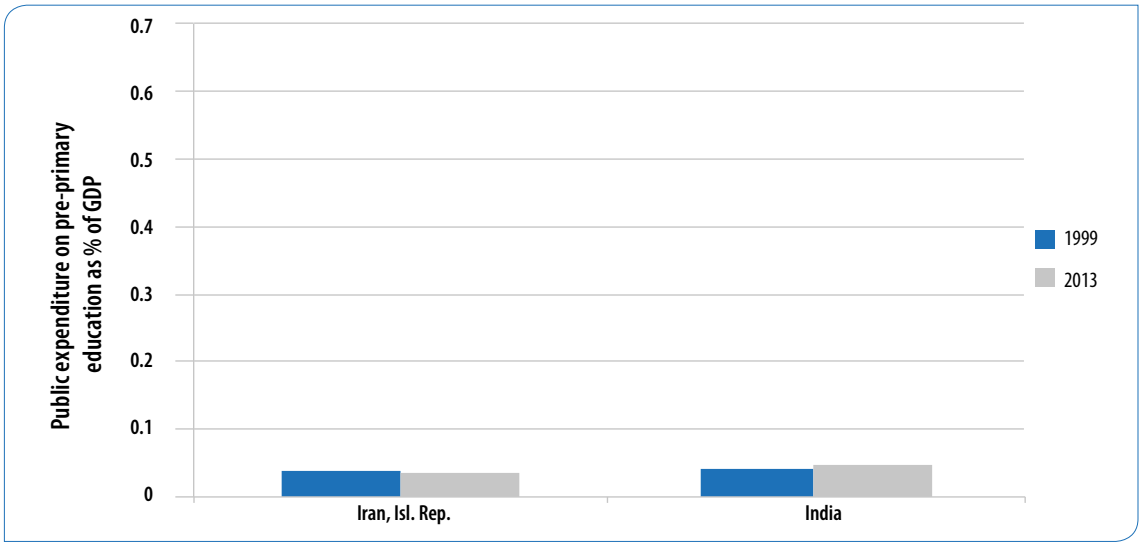
Participation



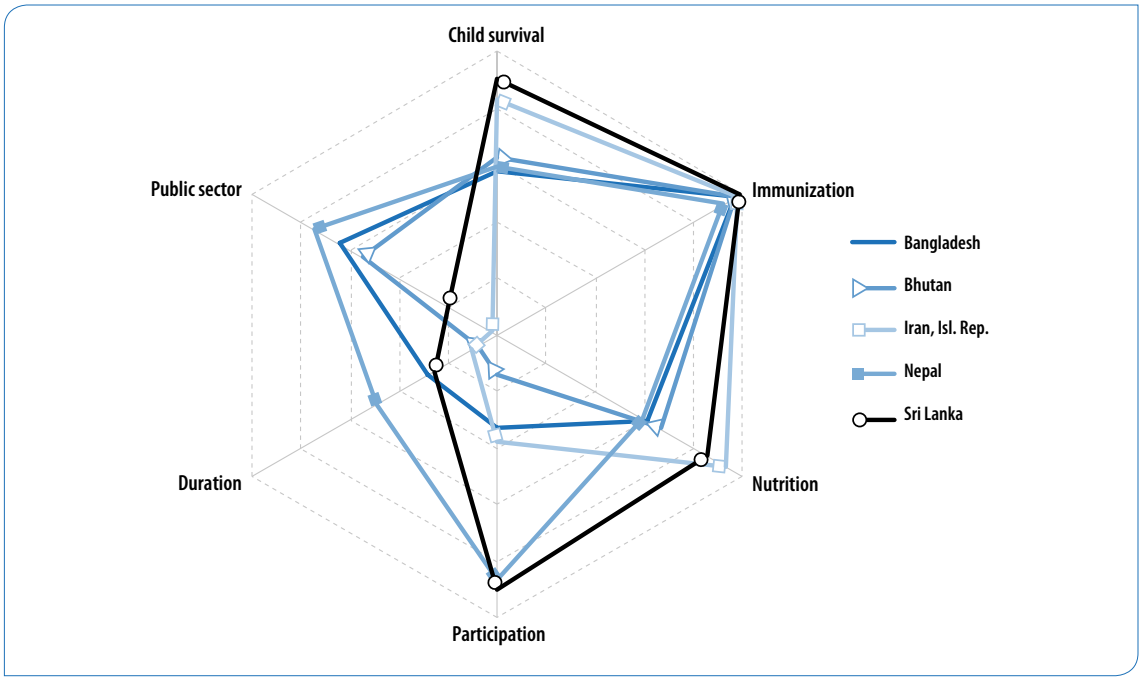
Duration



Public expenditure



Cross-country comparison of multiple indicators



Notes: The following indicators are used:

- Child survival: Under-5 mortality rate, normalized with respect to the highest value in the Asia-Pacific region, so that 0% is that value, and 100% implies 0 child mortality: (1 country value/highest value in the Asia-Pacific region)*100 (%);
- Immunization: Polio vaccine immunization rate (%);
- Nutrition: Share of young children who are not stunted (100 rate of severe or moderate stunting) (%);
- Participation: GER in pre-primary education (%);
- Duration: School life expectancy, normalized as % of highest value in the Asia-Pacific region (%);
- Public sector: Share of pupils not attending private institutions (100 share of pupils in private institutions) (%).

Only countries with data for all indicators are included. Axes range from 0% (centre of the graph) to 100%, with lines every 20 percentage points.

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