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# **Republic of Uzbekistan**

## **Improving Early Childhood Care and Education**

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## ACRONYMS AND ABBREVIATIONS

ECA	Europe and Central Asia
ECD	Early Childhood Development
ECCE	Early Childhood Care and Education (or Pre-primary Education)
EMIS	Education Management Information Systems
GDP	Gross Domestic Product
MoPE	Ministry of Public Education
NGO	Non-governmental Organization
OECD	Organization for Economic Cooperation and Development
SABER	Systems Approach for Better Education Results
UNICEF	United Nations Children's Fund

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**Data:** This report was prepared using data for 2010 provided by the Government of Uzbekistan in 2012. More recent data for 2011 became available as the report was being finalized. While we have used more recent data in some places where it was important to note differences, (for example in the rural-urban classification of schools), the main report relies on 2010 data.

## Executive Summary

**Uzbekistan is a lower middle-income country of 29.5 million<sup>1</sup> people, located in Central Asia, with an economy that has been growing by over 8 percent per annum since the mid-2000s.** Both primary and secondary education is free and compulsory and the country has now achieved nearly universal enrollment at these levels. In contrast, pre-primary education is neither free nor compulsory and is characterized by low enrollment, uncertain quality, and unevenly distributed resources.

**Early Childhood Development (ECD) is increasingly a priority area for The Government of Uzbekistan.** While Uzbekistan has nearly universal coverage of essential health and nutrition interventions for young children, the national enrollment rate in Early Childhood Education and Care (ECCE), at 20%, is low by international standards. This report analyses ECCE sector, identifies key issues, and presents options for the way forward.

**Demand for available ECCE services is low in Uzbekistan.** The current number of available seats in pre-schools exceeds enrollment levels by approximately 25 percent – and the trend has been consistent for the last decade. In addition to a low national rate of enrollment in ECCE, significant disparities in enrollment exist between urban and rural areas, different regions, and across the income strata. Children from rich urban households are more likely to access ECCE than those from poor rural ones. By contrast, high levels of parental support for early learning (measured by parenting activities in the home) exist across all regions, in urban and rural areas, and among families of different socioeconomic status. This contrast indicates that low enrollment is not related to a lack of parental support for early learning but rather to the difficulties involved in accessing available ECCE options. This report presents evidence that several factors affect low enrollment, including: the cost of enrolling children in pre-schools, the quality (and perceptions of quality) of the facilities on offer, the location and convenience of services, and the predominant model of offering pre-school on a full-day basis only (which accounts for 97% of all ECCE enrolment). The report argues that ECCE can be expanded more equitably and have a greater impact if funds allocated to this initiative were distributed progressively by targeting low-enrollment regions and poor households.

**Comprehensive mechanisms to promote the quality of ECCE in Uzbekistan exist, but these mechanisms are not adequate to ensure quality or convince parents of the benefits of enrolling their children in ECCE.** The most highly qualified teachers are more likely to be employed in urban areas and specific regions. Despite clearly established infrastructure standards for pre-school facilities, just 34 percent of facilities nationwide are rated as “fully equipped” and 39 percent of facilities are in need of repair<sup>2</sup>. Both the physical status of facilities and teachers’ qualifications can be visible signals of quality to parents, which can in turn affect perceptions of the quality of ECCE. High positive correlations exist between enrollment rates and well-maintained physical facilities and schools with more highly trained teachers. Policy options to improve quality and perceptions of quality include: offering incentives to highly qualified teachers to work in underserved in areas of greatest need, improving the quality of the country’s pre-service and in-service teacher training programs to

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<sup>1</sup> As of January 1, 2012

<sup>2</sup> This based on data from 2010-11. According to the latest data from 2012, the figures have changed somewhat so that 40.5 percent of facilities nationwide are rated as “fully equipped” and 44 percent of facilities are in need of repair. This doesn’t change the analysis presented below.

produce more teachers with higher qualifications, upgrading the infrastructure of ECCE facilities, starting with the areas that are in the greatest need of repairs and considering regular school and classroom level surveys to assess children's school readiness and the quality of teaching in classrooms.

**It is clear that while 15 percent of enrolled students are theoretically exempted from fees, only 5 percent of poorest households have children enrolled in pre-schools.** Many pre-schools are known to charge "fees" per child that are equal to 100 percent of the minimum wage, which means that for many poor families fees are a major constraint preventing them from enrolling children in pre-school. The "makhalla" structures which uses communities to identify needy households which can benefit the fee exemption have traditionally been very effective mechanism for targeting support to poor households. But this mechanism has lately been overburdened with additional responsibilities, and they may not be as effective as they have been in the past. There is an urgent need to improve targeting of poor households to expand access.

**Finally, it is noted that Uzbekistan currently spends, as a share of GDP, more than twice as much as the OECD average and other comparator countries at similar levels of development, but has less than half the enrolment rates in ECCE.** Uzbekistan's current model of full-time ECCE delivery may be prohibitively expensive, making it difficult to expand and sustain. An expansion in coverage of ECCE will involve taking measures to reduce delivery costs by exploring alternatives. More efficient ways to deliver ECCE could be considered, for example, by adjusting the actual student-teacher ratio from 9.3:1 to 15:1 (in accordance with state standards)<sup>3</sup> and by providing ECCE not only in full-time centers but also in half-time pre-schools, home or community-based centers, and subsidized private provision.

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<sup>3</sup> Some progress has already been made since initial data for writing the report was provided by the MoPE, and the student teacher ratio has improved to 13.7 already, as of March, 2013.

## I. Introduction

1. **Uzbekistan is a lower middle-income country of 29.5 million people, located in Central Asia, with an economy that has been growing by over 8 percent per annum since the mid-2000s.** Given the country's growing young population – 28.5 percent is under the age of 15 – the Government of Uzbekistan (GoU) is keen to improve the quality of, increase equity in, and increase access to basic public services, including education, to promote a smooth and gradual transition to a market-oriented economy across the entire country.

2. **In Uzbekistan, the Law on Education, N-464-I, proclaims education as a priority of the state and guarantees equal rights to education for all.** Both primary and secondary education is free and compulsory. To comply with the law, the GoU increased public expenditure on education from 5.6 percent of GDP in the mid-1990s to 10 percent of GDP in 2010, focusing mostly on primary and secondary education where the country has now achieved nearly universal enrollment. In contrast, pre-primary education is neither free nor compulsory and is characterized by low enrollment, uncertain quality, and unevenly distributed resources. Recently, the pre-primary sub-sector has been attracting high level interest from policymakers in Uzbekistan.

3. **Given international evidence about the high returns that can be realized from investing in pre-primary education ranging from promoting children's school readiness to equalizing opportunities across the income distribution, policymakers are keen to explore ways to expand access and promote the provision of high-quality early childhood education.** The GoU has clearly selected the expansion and improvement of pre-primary education as a priority area. This report presents a brief analysis of the status of early childhood development (ECD) policies and programs in Uzbekistan and offers a detailed analysis of the status of early childhood care and education (ECCE) policies and programs.<sup>4</sup>

4. **This report is divided into four sections.** Section II presents an analytical framework for analyzing early childhood interventions. Section III conducts an in-depth analysis of ECCE in Uzbekistan, with a focus on increasing access and equity, promoting quality, and ensuring adequate and effective financing. Section IV makes some recommendations for expanding access to high-quality ECCE in Uzbekistan.

## II. Analytical Framework for Early Childhood Interventions

5. **This section outlines the case for early childhood interventions and introduces a framework for analyzing ECD policies.** Four aspects of development are critical to children's development during their early years and have a lasting influence on outcomes later on in their lives: (i) physical growth and well-being, (ii) cognitive development, (iii) linguistic development, and (iv) socio-emotional development. ECD policies and programs can directly affect these processes to the benefit of both individuals and societies.

6. **Before continuing, it is important to distinguish ECD programs from ECD policies.** "Programs" are specific interventions that vary according to their primary objectives (for example, increasing children's physical growth and improving their well-being or fostering their cognitive or socio-emotional development), coverage (small-scale or universal), and other characteristics. In contrast, "policies" refer to the regulatory framework and institutional

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<sup>4</sup> In this report, ECD programs refer to interventions aimed at children between 0 to 7 years old, while ECCE programs refer to a subset of ECD interventions designed to educate children aged between 2 to 7 years old.

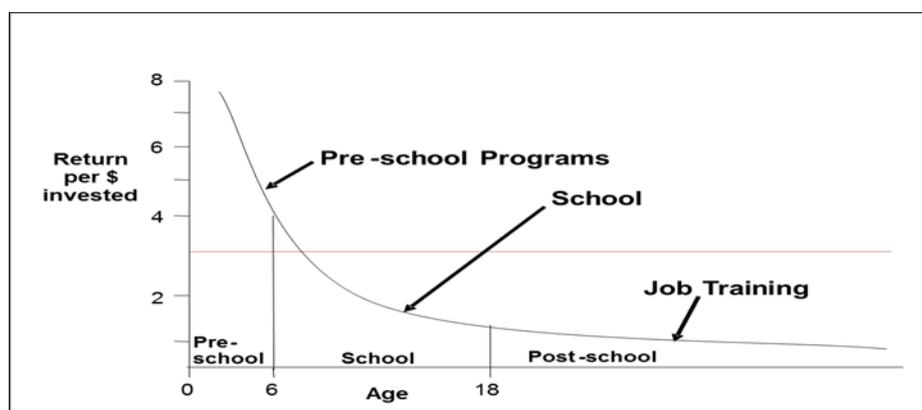
arrangements for delivering ECD services at the national and/or state levels, and their goal is to ensure that the nation’s children have access to quality ECD services.

## The Case for Early Childhood Interventions

7. **Key human development indicators in the areas of health and education can best be influenced very early in a person’s life.** The main causes of child mortality are infections, neonatal disorders, and under-nutrition. Therefore, policies aimed at ensuring that children have adequate nutrition, health, and hygiene as well as those that promote early cognitive stimulation are crucial for increasing child survival rates and promoting optimal child health and development.<sup>5</sup> In education, maximizing academic achievement and school completion rates depends, in part, on children’s ability to learn and to relate to others.<sup>6</sup> These non-cognitive skills such as the ability to work in groups, exercise self-control, and communicate effectively are developed very early in life and play a significant role in influencing a child’s school readiness<sup>7</sup> and the degree to which he or she has been prepared to learn and succeed in school.<sup>8</sup> Moreover, because genetic influences can account for only half of the variation in cognitive abilities among children,<sup>9</sup> ECD programs have considerable scope to affect children’s cognitive development as well. ECD interventions from around the world have demonstrated time and again that they can yield significant benefits in terms of later educational achievement.<sup>10</sup>

8. **There are several arguments that can be made in favor of investing fiscal and administrative resources in ECD.** One key argument is that they have been proven to be more economically efficient than investments made at later stages of the lifecycle. Proper nutrition, cognitive stimulation, and nurturing care during children’s early years have lasting positive consequences for their subsequent educational attainment, health, fertility, and earnings.<sup>11</sup> Conversely, the lack of these inputs can irreversibly damage a child’s potential life trajectory.<sup>12</sup> Although remedial interventions are sometimes possible after early childhood, investments in early childhood have better cost-benefit ratios and higher rates of return than those made later in life Figure 1.

**Figure 1: Returns on Education Investments**



Source: Carneiro and Heckman (2003)

<sup>5</sup> Nadeau et al (2011)

<sup>6</sup> Hair et al (2006)

<sup>7</sup> See Naudeau et al (2011:35) for further evidence and detailed development of the school readiness argument.

<sup>8</sup> Ackerman and Barnett (2005)

<sup>9</sup> Fernald et al (2009)

<sup>10</sup> For Bangladesh, see Aboud (2006), for Colombia, see Young (1995), for Argentina, see Berlinski et al (2009), for Turkey, see Kagitcibasi et al (2001), and for the United States, see Schweinhart et al (2005).

<sup>11</sup> Shonkoff and Phillips (2000), Cunha and Heckman (2007), Heckman (2006), Cunha et al (2005), and Carneiro and Heckman (2003)

<sup>12</sup> Heckman and Masterov (2007)

9. **Investments in ECD can also enhance equity in society.** The family environment is crucial to any child's development of skills and abilities, but poor children frequently do not have access to the resources enjoyed by their wealthier peers. This disparity leads to the early emergence of performance gaps between children from different socioeconomic backgrounds and the widening of these gaps as the children grow older.<sup>13</sup> By using public resources to create a supportive environment for the most disadvantaged children, ECD programs can make up for some early family differences. Research has convincingly shown that early childhood interventions can equalize opportunities for children and reduce the intergenerational transmission of poverty and inequality.<sup>14</sup>

10. **Finally, early childhood programs can generate positive externalities in terms of older female siblings' education and mothers' labor force participation.** ECD interventions that also provide childcare can free household members to participate in other productive activities such as education or employment. For example, the expansion of Argentina's pre-school programs increased maternal employment by about 7 to 14 percent.<sup>15</sup> In this way, ECD can create win-win situations whereby there is an immediate payoff in the form of an increase in female labor force participation and a longer-term return in the form of a healthier, more educated, and more productive workforce.

### **Strengthening ECD Policies in Uzbekistan**

11. **Given the imperative for investing in ECD, the World Bank has developed an analytical framework for assessing ECD policies and the extent to which policies achieve the intended developmental outcomes.** The framework is part of the Bank's Systems Approach for Better Education Results (SABER). SABER-ECD collects, synthesizes, and disseminates comprehensive information on ECD policies around the world. This information enables policymakers and World Bank staff to learn how countries address the same policy challenges related to ECD. SABER-ECD presents three core ECD policy goals that all education systems should strive to achieve.<sup>16</sup>

- a) *Establishing an Enabling Environment:* This goal refers to the existence of an adequate legal and regulatory framework to support ECD, the availability of adequate fiscal resources, and sufficient coordination within sectors and among institutions to ensure that services can be delivered effectively.
- b) *Implementing Widely:* This goal refers to the extent of coverage (as a share of the eligible population) and gaps in coverage, as well as the spectrum of programs offered. A robust ECD policy should include programs in all of the essential sectors (health, nutrition, education, and social protection), ensure inter-sectoral coordination, and have wide coverage.
- c) *Monitoring and Assuring Quality:* This goal refers to the development of standards for ECD services, the existence of systems to monitor compliance with those standards, and the implementation of systems to monitor ECD outcomes in all children.

12. **Based on evidence from impact evaluations, institutional analyses, and a benchmarking exercise of top-performing education systems, SABER-ECD identified a set of actions or policy levers for each policy goal that decision-makers can take to strengthen ECD.** Taken together, the three policy goals and the nine policy levers comprise a coherent ECD

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<sup>13</sup> Paxson and Schedy (2007)

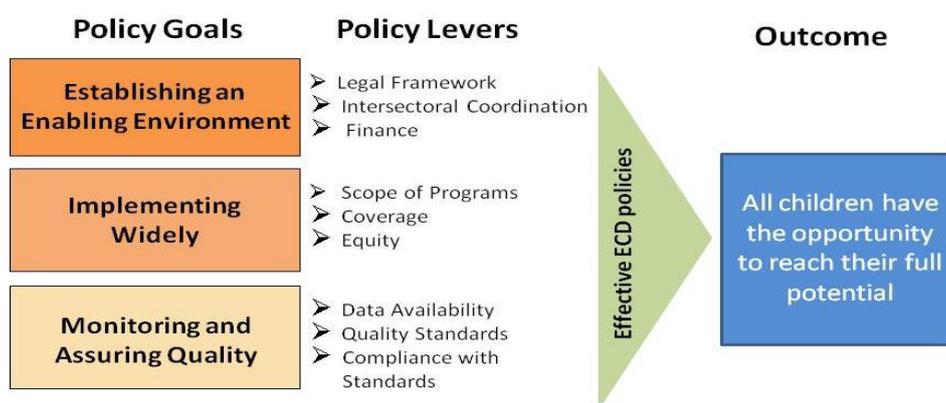
<sup>14</sup> Heckman (2006)

<sup>15</sup> Berlinski and Galiani (2007)

<sup>16</sup> For more information, see: <http://www.worldbank.org/education/saber>.

policy system, which should lead to the desired outcome of ensuring that all children have the opportunity to reach their full potential (see Figure 2). For each policy goal and lever, SABER-ECD classifies systems by four levels of development, ranging from less developed (or “latent”) to emerging, established, and fully developed (or “advanced”). ECD policies in any given country would be classified as “advanced” for all three policy goals if it had in place the following: (i) a solid legal framework for ECD, sustained financing for attaining ECD goals, and a high degree of inter-institutional coordination; (ii) coordinated interventions in all essential ECD sectors and universal coverage of key ECD services such as maternal and child health and pre-school education, resulting in integrated services for all young children (with some services universally provided and others tailored to meet young children's unique needs); and (iii) a database of up-to-date information on ECD outcomes at the individual, national, regional, and local levels and well-defined quality standards and mechanisms to monitor the compliance of service providers with established standards. An “established” level of ECD policy development is attainable for most countries in the medium term, which would indicate that they have reached an adequate level of policy development.

**Figure 2: Three ECD Policy Goals: From Policy Action to Outcome**



Source: SABER-ECD

13. **Table 1 presents the preliminary findings from the SABER-ECD assessment of ECD policy in Uzbekistan.** As the analysis suggests, with respect to the first ECD policy goal (Establishing an Enabling Environment), Uzbekistan has established an adequate legal framework for ECD, although some challenges related to inter-sectoral coordination and finance remain. In terms of the second goal of Implementing Widely, Uzbekistan has achieved a comprehensive policy focus on ECD in the health and nutrition sectors, but coverage of ECCE is low as can be seen in Table 2, which summarizes the coverage of the ECD programs that are currently operating in Uzbekistan. Finally, in the goal of Monitoring and Assuring Quality, Uzbekistan has a number of well-developed quality assurance mechanisms and a highly detailed information system, though despite this high level of development, there is a question over how effectively the current system is used by policymakers.

**Table 1: ECD Programs and Coverage Levels in Uzbekistan, 2010**

ECD Intervention	Scale				
	No services	Pilot programs	At scale in some regions	Scaling Nationally	Universal coverage
<b>Health</b>					
Prenatal healthcare					X
Comprehensive immunizations for infants					X
Childhood wellness and growth monitoring					X
<b>Education</b>					
Publicly provided early childhood care and education	X				
Publicly subsidized early childhood care and education			X		
Privately provided early childhood education			X		
Community-based early childhood care and education		X			
Partial-day early childhood care and education		X			
<b>Nutrition</b>					
Micronutrient support for pregnant women					X
Food supplements for pregnant women	X				
Micronutrient support for young children					X
Food supplements for young children	X				
Food fortification				X	
Breastfeeding promotion programs				X	
Anti-obesity programs encouraging healthy eating/exercise					X
Feeding programs in preprimary schools					X
<b>Parenting</b>					
Parenting integrated into health/community programs			X		
Home visiting programs to provide parenting messages		X			
<b>Anti-poverty</b>					
Cash transfers conditional on the use of ECD services or [pre-school?] enrollment					X
Cash transfers targeting families with young children					X
<b>Special Needs</b>					
Programs for OVCs					X
Programs for children with special needs (developmental or emotional)			X		
Programs for children with special needs (physical)			X		
<b>Comprehensive</b>					
A comprehensive system that tracks individual children's needs and intervenes as necessary	X				

**Table 2: Benchmarking Early Childhood Development Policy in Uzbekistan**

ECD Policy Goal	Policy Lever	Level of Development				
		Armenia	Australia	Sweden	Turkey	Uzbekistan
Establishing an Enabling Environment	Legal Framework	●●●○	●●●●	●●●●	●●●○	●●●○
	Coordination	●●○○	●●●●	●●●●	●●○○	●●○○
	Financing	●●○○	●●●●	●●●●	●●○○	●●○○
Implementing Widely	Scope of Programs	●●●○	●●●○	●●●●	●●●○	●●○○
	Coverage	●●○○	●●●●	●●●●	●●○○	●●○○
	Equity	●●○○	●●●○	●●●●	●●○○	●●○○
Monitoring and Assuring Quality	Data Availability	●●○○	●●●○	●●●●	●●○○	●●●○
	Quality Standards	●●●○	●●●○	●●●●	●●●○	●●●○
	Compliance with Standards	●●○○	●●●○	●●●●	●●○○	●●●○

Legend      ●○○○      ●●○○      ●●●○      ●●●●

### Enabling Environment

14. *Legal Framework* – The legal framework for ECD is well-established in Uzbekistan. The challenge now is to implement and enforce existing policies and laws.

15. *Intersectoral Coordination* – Intersectoral coordination is an area in which steps should be taken to increase the effectiveness and improve the quality of ECD service delivery. Establishing a strong multi-sectoral institution to lead ECD at the national level and to coordinate intersectoral efforts at the local level could improve service delivery and lead to more efficient use of resources.

16. *Finance* – Financing for ECD has increased dramatically in the last decade but is still insufficient to provide comprehensive care and opportunities for all young children in Uzbekistan. Policymakers should consider some innovative programs that are cost-effective for both the government and the public such as conditional cash transfers (CCTs) targeted to the poorest families and regions and community-based programs as well as integrating services and introducing more flexible service delivery such as partial-day ECCE.

### Implementing Widely

17. *Coverage and Programs* – Now that Uzbekistan has nearly universal coverage of health and nutrition interventions, the most pressing challenge facing the GoU is increasing enrollment in preprimary school, particularly the disparities among regions and between urban and rural areas. In addition, one of biggest challenges facing any government is ensuring that essential ECD services reach all young children. Because many of these children are not yet enrolled in preprimary education, reaching them will require a range of different strategies but mainly those that focus on persuading parents of the benefits of enrollment. As the GoU works towards expanding preprimary enrollments nationwide, this will also require a range of different service delivery options.

18. *Area of Focus* – Uzbekistan has established policies, programs, and interventions that cover almost all essential aspects of ECD. The challenge now is to scale up existing programs to reach universal coverage at all levels of education, with a particular need to focus on increasing low preprimary enrollment rates. In addition, policymakers may wish to aim for comprehensive ECD programming that would consist of universal coverage of ECD with inclusive strategies across sectors, integrated services for all children with some being universally provided and others tailored to young children's unique needs, and a system capable of assessing and meeting the needs of each individual child.

### **Strengthening Monitoring and Assuring Quality in Uzbekistan**

19. *ECD Information* – The capacity exists in Uzbekistan to collect accurate information on access to ECD services and on ECD outcomes in most essential sectors and interventions at both the national and subnational levels. While Uzbekistan has fairly advanced systems for collecting ECD information, there is anecdotal evidence that in some cases reporting may inflate compliance with regulations and levels of access for some ECD services.

20. *Quality Standards* – The GoU has established standards for infrastructure, service provision, and learning/health outcomes in all essential ECD sectors. The introduction of clear developmental standards for young children in Uzbekistan is a first step in the Monitoring and Assuring Quality category. Public preprimary schools regularly monitor children's physical and cognitive development. Ensuring that all lesson plans, materials, and curricula are commensurate with learning and developmental standards will help to improve ECD outcomes.

21. *Compliance with Standards* – While Uzbekistan's system for providing ongoing training to pre-school teachers is fairly well-developed, policymakers should consider increasing the capacity to provide high-quality training to teachers at both the national and regional level. Table 3 summarizes some policy options for strengthening Uzbekistan's ECD system.

**Table 3: Some Preliminary Policy Options for Strengthening ECD in Uzbekistan**

ECD Policy Goals	Policy Options for Consideration
Establishing an Enabling Environment	<ul style="list-style-type: none"> <li>• Identify a strong institution with adequate capacity and support to lead and coordinate ECD efforts across sectors and at varying levels of government</li> <li>• Develop a national comprehensive and cross-sectoral ECD strategy</li> <li>• Develop cost-effective financing strategies to expand coverage, particularly for disadvantaged children and underserved areas</li> </ul>
Implementing Widely	<ul style="list-style-type: none"> <li>• Improve interventions to reach children aged 0-4 years old and their parents at the local level</li> <li>• Increase the variety and flexibility of the ECCE options that are available to parents beyond the traditional full-day institutional care, which currently dominates the system</li> <li>• Expand private sector and community partnerships for providing ECD</li> <li>• Consider targeting regions with low levels of pre-school enrollment and/or poor households to ensure equity in access</li> <li>• Continue to promote exclusive breast-feeding during children's first six months</li> <li>• Enhance advocacy and outreach to increase parental demand for pre-school</li> </ul>
Monitoring and Assuring Quality	<ul style="list-style-type: none"> <li>• Create effective mechanisms for monitoring compliance with state requirements for ECD services and quality (either within a newly created lead institution or by building capacity within sector institutions)</li> <li>• Develop appropriate standards and monitoring tools for alternative ECCE options</li> <li>• Upgrade pre-school facilities' infrastructure and the provision of teaching and learning support</li> </ul>

### III. An Analysis of Early Childhood Care and Education in Uzbekistan

22. **Now that Uzbekistan has nearly universal coverage of health and nutrition interventions, the most pressing challenge facing the country is the need to increase access to quality ECCE, especially the need to reduce regional and urban-rural disparities.** Therefore, the rest of this report focuses on three key areas on which the Government of Uzbekistan should focus to expand ECCE coverage. The first is the need to expand access to ECCE and ensure equity. The second is the need to improve both the quality of ECCE and the perceptions of its quality by strengthening the country's monitoring and evaluation (M&E) system. The third is the need to ensure adequate financing for the expanded provision of ECCE in Uzbekistan. This section explores each of these three policy areas in detail and identifies the challenges that policymakers will need to address to meet these goals.

23. **As noted earlier, there are good arguments for prioritizing ECCE among the many different types of early childhood interventions in Uzbekistan.** There is evidence that ECCE helps to bridge the gap that separates disadvantaged students from students from better-off families at the time when they enter primary school. In addition, ECCE is the most important tool that governments have at their disposal to promote school readiness. Therefore, high-quality ECCE goes a long way towards creating a more equitable education system. As was already discussed in Section II, every dollar invested in ECCE has a much higher return than a dollar invested at any other stage of the education system. These returns include better learning throughout the educational cycle, higher lifetime earnings, lower long-term social assistance costs, increased probability of school graduation, and several externalities such as increasing women's participation in the labor force. These benefits are especially high when ECCE is provided to children from poor families. There is a significant and positive correlation between high enrollment rates in pre-primary education and higher levels of per capita GDP across the world. Given international evidence that investments in pre-primary education yield high returns by promoting school readiness and by equalizing opportunities for children across the income spectrum, policymakers in Uzbekistan are keen to explore ways to expand access and promote the provision of high-quality early childhood learning.

#### Access and Equity<sup>17</sup>

24. **Uzbekistan's national ECCE enrollment rate of 20 percent (for children aged 2 to 7) is low by international standards.** Also, regional enrollment is uneven, ranging from a high of 50 percent in Tashkent City to a low of 11 percent in Kashkadarya. A significantly higher proportion of national enrollment is accounted for by children in urban areas (64 percent) than by those in rural areas (36 percent), and resources for ECCE (classroom seats and teachers) are distributed according to this pattern. This is nearly opposite to the overall trend in the population, as 63 percent of Uzbekistan's population lives in rural areas and 37 percent lives in urban areas. The current number of available seats in pre-schools exceeds enrollment levels by 25 percent. For the last 10 years, this surplus has been constant and has even reached a peak of 29 percent, even though the government closed 14 percent of all pre-schools in 2009 in an attempt to control costs.

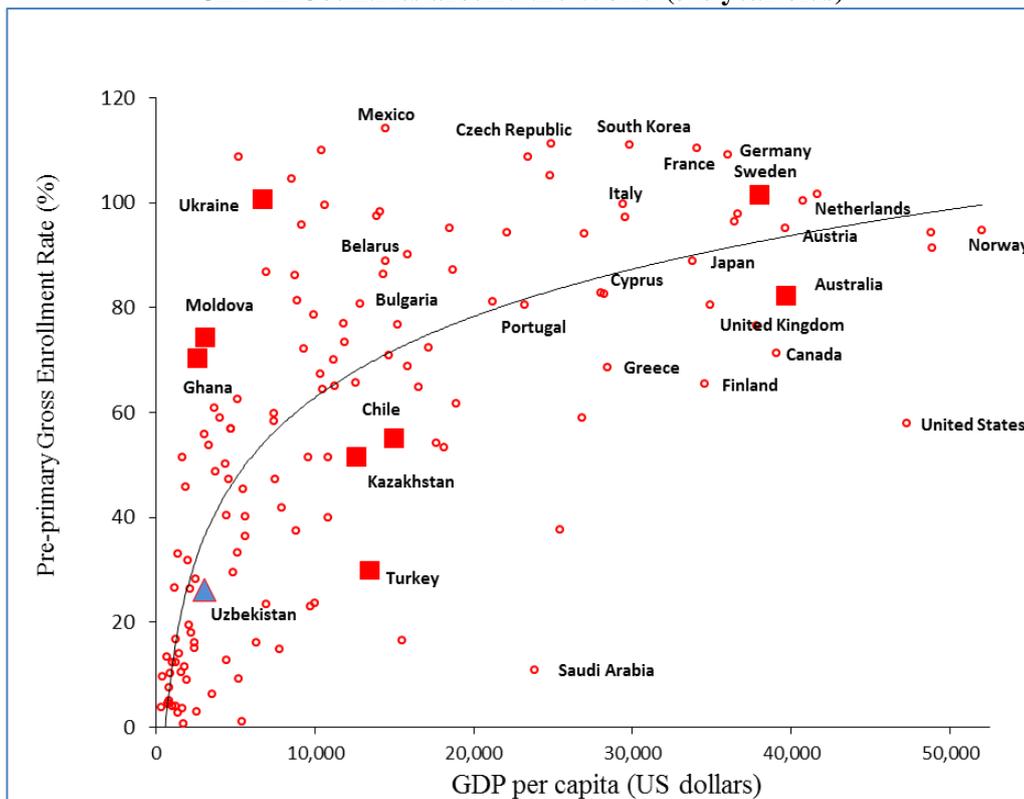
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<sup>17</sup> This paper was prepared using data for 2010 provided by the Government of Uzbekistan in for 2012. More recent data for 2011 became available as the report was being finalized, but this data was only slightly different from the 2010 data and did not materially change the analysis or recommendations of the report. While we have used more recent data in some places where it was important to note differences, (for example in the rural-urban classification of schools), the main report relies on 2010 data.

25. **There is clearly a problem of low demand for available ECCE services.** One plausible explanation for this is a lack of parental support for early learning. However, household survey data from 2006 show that more than 71 percent of all households with young children regularly engage in activities to promote their school readiness and early learning. If this can be taken as a proxy for parental commitment to early learning, then high levels of parental support for early learning is evident across regions, between urban and rural areas, and among families with different socioeconomic status. This contrasts with the significant variation in enrollment in formal ECCE across regions, between urban and rural areas, and among socioeconomic levels. This indicates that low enrollment is not related to a lack of parental support for early learning but rather to the difficulties involved in accessing the few early learning facilities that are available. These might include the cost of enrolling children in pre-schools, the quality (and perceptions of quality) of the facilities on offer, the location and convenience of services, and the fact that pre-schools are currently offered only on a full-day basis. The potential causes of low enrollment will be explored throughout this section.

26. **Uzbekistan's ECCE enrollment rate is low compared with the rates in countries with similar levels of per capita GDP.** Figure 3 presents the gross pre-primary enrollment rates for children aged 3 to 6 and per capita GDP by country. As can be seen, just 26 percent of 3 to 6 year-olds in Uzbekistan are enrolled in pre-school. This places Uzbekistan among the lowest achieving countries worldwide in terms of ECCE. As Figure 3 shows, Uzbekistan's enrollment rate falls below the level that would be expected given its per capita GDP. Other countries with similar levels of per capita GDP including Moldova, Ukraine, and Chile have achieved higher enrollment levels.<sup>18</sup>

**Figure 3: Pre-primary Enrollment Rates and Per Capita GDP in Countries around the World (3-6 year olds)**

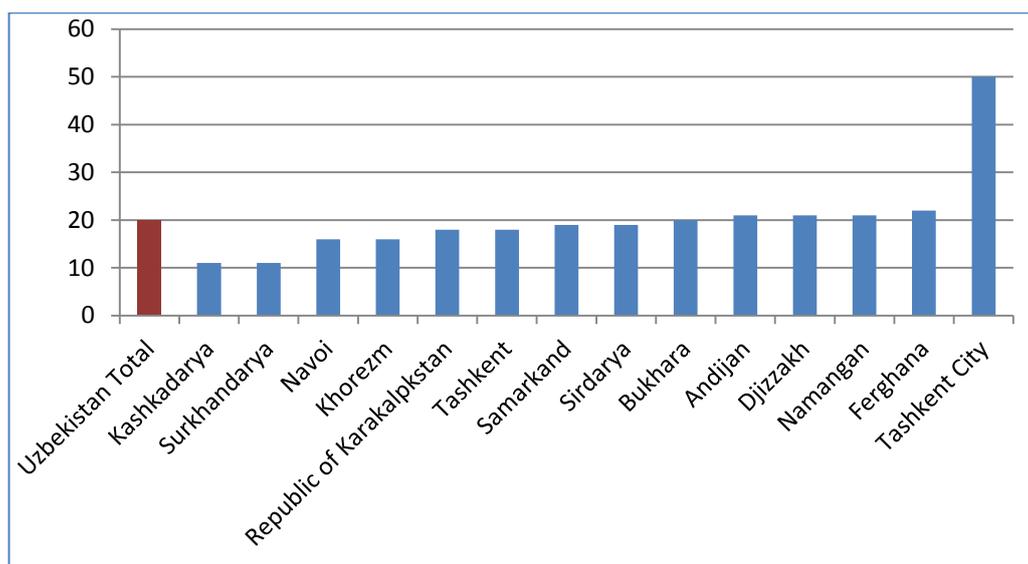


<sup>18</sup> In Annex 2, we present some information on the ECD systems in four countries with higher levels of enrollment – Australia, Chile, New Zealand, and Sweden.

Source: Adapted from World Bank (2011a ) and using GDP per capita (PPP) from the IMF’s World Economic Outlook and pre-primary enrollment rates for 3-6 years olds from UNESCO’s Institute for Statistics.

27. **The low level of participation in formal early learning in Uzbekistan is in stark contrast with its near-universal enrollment in primary and secondary education.** Pre-primary education in Uzbekistan is subsidized by the state, but it is neither free nor compulsory (as is the case with primary and secondary education). As of the end of 2010, a total of 522,945 children were enrolled in ECCE centers, with an overall enrollment level of 20 percent for all children aged between 2 and 7 years old. There is considerable variation between – and within – regions. Figure 4 shows the wide variation of pre-primary enrollment rates across the various regions of Uzbekistan, from a low of 11 percent in Kashkadarya region to a high of 50 percent in Tashkent city<sup>19</sup>.

**Figure 4: Regional Rates of Enrollment in ECCE (2-7 Year olds)**



28. **There are wide disparities in enrollment and in the distribution of ECCE resources between urban and rural areas.** Sixty-three percent of Uzbekistan’s population lives in rural areas, and 37 percent lives in urban areas. As Table 4 shows, the distribution of enrollment between rural and urban areas is almost the exact opposite of the population trend, with 64 percent of enrollments coming from children living in urban areas and 36 percent coming from children living in rural areas. The distribution of ECCE facilities does not follow population trends, with 52 percent of facilities being located in urban areas and 48 percent being located in rural areas.

<sup>19</sup> As of January 2013, enrollment in Tashkent had reached as high as 58.8 percent, indicating an even larger gap in regional enrollment rates.

**Table 4: Distribution of ECCE Facilities and Enrollment between Urban and Rural Areas<sup>20</sup>**

	January 2011		December 2011	
	Urban	Rural	Urban	Rural
Distribution of enrollment	64%	36%	57%	43%
Distribution of ECCE facilities	52%	48%	56%	44%
Distribution of ECCE “seats”	61%	39%	66%	34%
Distribution of ECCE teachers	62%	38%	67%	33%
Total Population	37%	63%	51%	49%

**Table 5: Regional Variations in ECCE Enrollment in Uzbekistan**

Region	Total Number of Children aged 2-7	Number of ECCE Facilities	Number of Children Enrolled	Enrollment Rate	Ratio of ECCE Facilities to Children aged 2-7	Ratio of Enrolled Children to ECCE Facilities
Republic of Uzbekistan	2,689,656	5,375	522,945	19%	1:500	1:97
Republic of Karakalpakstan	162,821	332	30,377	19%	1:490	1:92
Andijan	236,160	461	40,670	17%	1:512	1:88
Bukhara	147,150	358	24,719	17%	1:411	1:69
Djizzakh	116,125	168	24,625	21%	1:691	1:147
Kashkadarya	271,964	355	27,908	10%	1:766	1:79
Navoi	78,452	157	19,728	25%	1:500	1:126
Namangan	215,647	504	42,663	20%	1:428	1:85
Samarkand	317,972	574	45,298	14%	1:554	1:79
Surkhandarya	211,084	365	23,078	11%	1:578	1:63
Syrdarya	71,796	163	13,745	19%	1:441	1:84
Tashkent	232,185	459	50,502	22%	1:506	1:110
Fergana	295,595	694	63,220	21%	1:426	1:91
Khorezm	158,051	281	22,505	14%	1:563	1:80
Tashkent city	174,654	504	93,907	54%	1:347	1:186

Source: Ministry of Primary Education (2010)

29. **There are significant differences in the provision of ECCE facilities between regions.** Table 5 presents data on the number of ECCE facilities, enrollment rates, and ratios of the number of all eligible children per center and of enrolled children per center. In Tashkent, Bukhara, Fergana, and Namangan, the number of ECCE centers per eligible child ranges from 1:347 to 1:428. In contrast, in Djizzakh and Kashkadarya, the ratio ranges from 1:660 to 1:766. Table 5 also shows the variation in the average number of children served in ECCE centers, ranging from

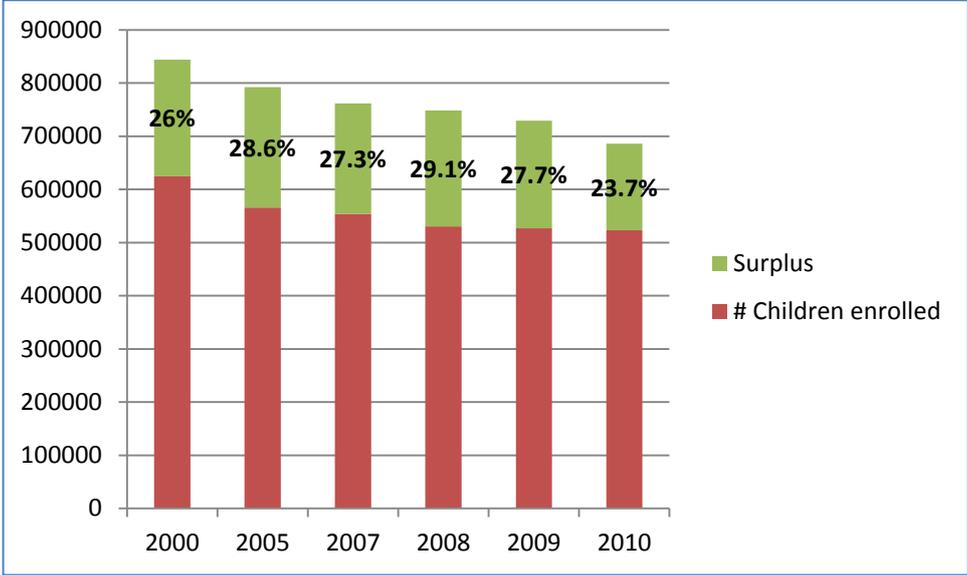
<sup>20</sup> The figures as of January 2011 reflect the data available at the time this report was written, The national classifications for urban and rural have now changed and some previously urban schools are now classified as rural. In this table, we provide the data as of December 2011, which reflect the new classifications. We show this data here for comparison purposes; in the rest of the report, however, we use the data available at time of writing, which reflect the previous urban-rural classification system.

a high of 186 students per center in Tashkent city to a low of 63 children per center in Surkhandarya.

30. **The number of available places in pre-schools exceeds current enrollment levels by nearly 25 percent.** The 5,375 ECCE centers that are currently operating have a total capacity of 686,033 places. With 522,945 children enrolled, current demand fills only 76 percent of current capacity, leaving a surplus of 163,088 places. As Figure 6 shows, during the years between 2000 and 2010, there has been a steady surplus of unfilled places in ECCE centers, ranging from the current low of 23.8 percent to a high of 29.1 percent in 2008.

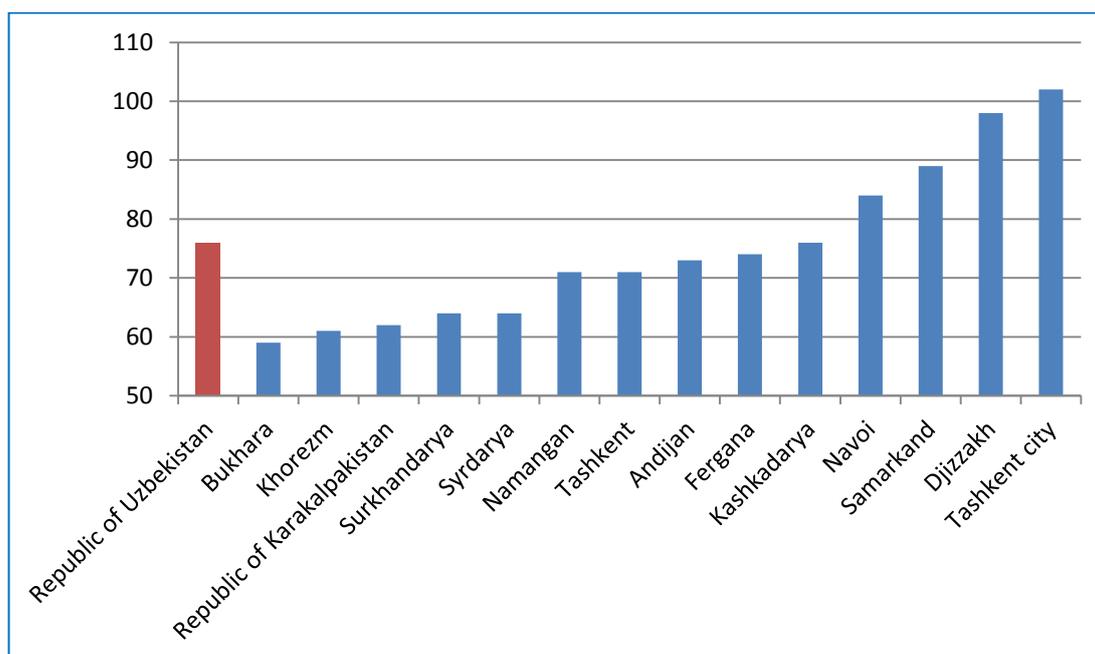
31. **Anecdotal evidence suggests that excess supply at the national level co-exists with excess demand in some urban areas, most notably in Tashkent city, resulting in long waiting lists, high fees, and heavy over-subscription in well-regarded pre-schools.** Nationwide, as of the end of 2010, the surplus was slightly less in urban areas (where 80 percent of available places are being used) than in rural areas (where 70 percent of available places are being used). In general, maternal employment patterns are higher in urban as compared to rural areas, accounting for greater demand for ECCE services. As Uzbekistan pursues middle income status, greater participation of women in the work force will be needed, which in turn will necessitate an expansion of flexible and high-quality ECCE across the entire country.

**Figure 5: Trend in Surplus Places in ECCE Facilities, 2000-2010**



32. **The level of surplus places varies considerably from region to region.** Nationwide, for each available 100 places, an average of 76 children are enrolled. As Figure 7 shows, in Tashkent City and Djizzakh, nearly all available pre-school places are filled. In contrast, in Bukhara and Khorezm, just 59 and 61 of every 100 available places are filled respectively.

**Figure 6: Regional Variation in Uptake of Available Public Pre-school Places, 2010  
(per 100 places)**



33. **Within most regions, demand for available places is higher in urban areas than in rural areas, but there are some exceptions.** In seven regions, the number of children enrolled in available places is higher in urban than in rural areas. In four regions, however, enrollment per 100 children is roughly equal between urban and rural areas. In Djizzakh alone, there seems to be a significant shortage of rural places compared to demand, with 126 children enrolled for every 100 available places (compared to 84 children in urban areas).

34. **In response to consistent surpluses and a steady decline in the absolute number of children enrolled (a decline of 19 percent between 2000 and 2010), the government embarked on systematic and widespread closures of ECCE facilities in 2009.** As Table 7 shows, the number of ECCE facilities was reduced by nearly 14 percent between 2009 and 2010. While enrollment levels did decline in some regions by 2 to 4 percent, the national enrollment rate declined by only 0.7 percent. The supply of teachers was reduced by 6.8 percent during this time period and, as might be expected, the national average student-teacher ratio was increased from 8.7:1 to 9.3:1. As Table 7 shows, there was substantial variation in terms of teaching staff reductions, school closures, and changes in enrollment rates among regions.

**Table 6: Regional Demand for Pre-school Places**

Region	Total Places Available at Pre-schools		Including			
	Total number	Children per 100 places	Urban		Rural	
			Total number	Children per 100 places	Total number	Children per 100 places
<b>Republic of Uzbekistan</b>	686,033	76	418,380	80	267,653	70
Republic of Karakalpakistan	49,218	62	30,453	66	18,765	55
Andijan	55,681	73	31,024	73	24,657	72
Bukhara	41,820	59	24,299	66	17,521	49
Djizzakh	25,120	98	16,935	84	8,185	126
Kashkadarya	36,690	76	25,265	80	11,425	67
Navoi	23,609	84	18,708	91	4,901	57
Namangan	59,910	71	29,945	70	29,965	72
Samarkand	51,004	89	21,486	89	29,518	89
Surkhandarya	36,093	64	17,703	68	18,390	60
Syrdarya	21,315	64	13,506	67	7,809	59
Tashkent	71,181	71	44,529	74	26,652	65
Fergana	85,084	74	37,319	73	47,765	75
Khorezm	37,080	61	14,980	69	22,100	55
Tashkent city	92,228	102	92,228	102	0	0

**Table 7: Impact of Pre-school Closings, 2009-2010**

	Decline in schools	Change in no. of teachers	Change in enrollment	Student-teacher ratio 2010	Student-teacher ratio 2009
<b>Republic of Uzbekistan</b>	-13.8%	-6.8%	-0.7%	9.3	8.7
Republic of Karakalpakistan	-16.4%	-3.7%	-3.3%	9.1	9.0
Andijan	-16.8%	-1.5%	-1.0%	8.8	8.8
Bukhara	-15.8%	-4.0%	-3.6%	7.7	7.7
Djizzakh	-11.1%	-2.6%	-3.6%	16.6	16.8
Kashkadarya	-8.3%	-4.6%	-3.7%	8.7	8.6
Navoi	-16.9%	2.0%	4.3%	7.9	7.7
Namangan	-17.6%	-7.4%	-2.3%	8.0	7.6
Samarkand	-12.9%	-24.0%	-0.5%	8.9	6.8
Surkhandarya	-5.2%	-5.8%	-4.6%	9.5	9.4
Syrdarya	-14.2%	-14.4%	-4.1%	10.3	9.2
Tashkent	-8.4%	1.4%	2.3%	9.8	9.7
Fergana	-19.8%	-7.1%	-2.9%	8.2	7.9
Khorezm	-24.3%	-1.6%	1.8%	8.2	8.0
Tashkent city	-2.1%	-7.3%	3.3%	11.3	10.1

35. **The vast majority of children enrolled in ECCE in Uzbekistan are enrolled in full-day ECCE programs provided by the state.** There are full and partial day ECCE programs in Uzbekistan run by either the state or non-state providers. In addition to the state-run ECCE centers operated by the Ministry of Public Education (MoPE), individual government ministries operate ECCE centers for the children of their employees. Military personnel, for example, can send their children to pre-schools operated by the Ministry of Defense. These types of ECCE centers are required to meet the same standards and follow the same curriculum as schools managed by the MoPE but often offer slightly more tailored services (for example, extended hours or specifically convenient locations) to the employees of each ministry.

36. **Children enrolled in State ECCE facilities benefit from comprehensive services, in addition to standard care and education.** Each facility includes staff and mechanisms to reach children with health and nutrition services, as well as psycho-social support, as appropriate. ECCE centers serve as entry points to reach children with multi-sectoral services to promote healthy development. However, since enrolment in ECCE is low, the impact of these comprehensive services is restricted. The majority of the young children, especially those not enrolled in ECCE, access healthcare and nutritional support through primary health centers.

37. **Private pre-schools account for less than 1 percent of total enrollment in the sector.** As of 2010, there were just 77 private ECCE facilities operating in Uzbekistan. This is somewhat puzzling, given that as far back as 1999 the government has encouraged the private sector to provide pre-primary education by offering tax incentives and the option to lease former state pre-schools rent-free for up to three years, with an option to purchase in the future. Those centers that do exist are concentrated heavily in urban areas, and 80 percent of all private centers are located in just three regions: Tashkent (31 percent), Fergana (29 percent), and Khorezm (21 percent). By and large private preschools cater to the rich, and charge fees that are 10-15 times higher than public-preschools<sup>21</sup>. Annex 1 presents a detailed comparison of a comparison of public and private preschools in Tashkent city, and Box 1 below summarizes key findings.

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<sup>21</sup> The International Finance Corporation (IFC) of the World Bank group and Government of Uzbekistan have done some initial work to examine the potential for increased private sector involvement in the provision of ECCE, without arriving at a workable model. Private sector participation has been identified clearly an area for further study.

### Box 1: A Case study of Private Pre-schools in Tashkent

As part of this analysis, we have conducted a case study comparing two preschools in Tashkent (one managed by the State and one non-State preschool). In the Annex 1 , the full case study is available (9 pages). Here we summarize key points:

- **Neither preschool provides free enrollment for low income families**, but the public school does offer a discount to families with more than one child enrolled.
- **The public preschool is larger than the private preschool and is over-enrolled** (265 children for 220 spaces), as compared to the private preschool (124 children enrolled for 124 spaces). The distribution of children by age is similar in both schools, with children age 5 accounting for the highest percentage of enrollment
- **Public preschool has higher student teacher ratio** (8) than the private pre-school (4.5).
- **The private pre-schools budget is entirely financed through fees and the monthly fee per child is 1,050,000 UZS**. In the public preschool fees only account for 28% of the total budget while 72% of the budget is provided via public subsidies. In public pre-schools all fees are used to pay for food. Parents with one child enrolled in the **public preschool school pay a fee of 62,920 UZS per child**, while parents with two or more children enrolled in the school pay a discounted fee of 47,700.
- **When asked to describe the most important features of quality, parents ranked teachers' qualifications (38%) and facility infrastructure the highest (20%), followed by school meals (16%)**. In addition, 34% of parents indicated that they would be willing to pay more to improve school quality. **This was uniform across both public and private preschools.**

	Public School	Private School
Enrolment Capacity	220	124
Actual Enrolment	265	124
Teachers	34	27
Students Teacher Ratio	8	4.5
Average Salary of Teacher	332,912 UZS	657,174 UZS
<b>Fee</b>	<b>62,920 UZS</b>	<b>1,050,000 UZS</b>
Per student Budget	156,000 UZS	1,050,000 UZS
% age of school budget covered public subsidies	72%	0%

38. **In addition to full-day ECCE, the state provides some part-time and partial-day options, but students enrolled in partial day options represent just 3 percent of total ECCE enrollment nationwide.** A total of 15,624 students are enrolled in these partial-day options in 497 ECCE centers. The options for partial-day ECCE include:

- “Development classes” – generally serve children aged 3 to 7 years old. These classes include a total of 20 to 24 children and focus on the comprehensive development of children and their socialization with peers and adults. These classes are typically play-based and child-centered, and do not reflect the traditional classroom experience that children will encounter once they enter primary school.
- “Future first grader classes” – generally serve children aged 5 to 6 years old. These classes include a total of 20 to 25 students and focus on preparing them for basic education and for entering primary school.
- Non-native language instruction classes – generally serve children aged 3 to 7 years old who are in need of language support to enter primary school. Class sizes are mandated at 20 to 25 children.

- D. “Integrated groups” – generally serve children aged 2 to 7 years old, with a total number of 15 to 20 children per class. In these classes, up to three children diagnosed with physical disabilities are integrated into classrooms with children who would otherwise be enrolled in a standard pre-school setting. This promotes the mainstreaming of children with disabilities and their socialization with other children, while still ensuring that the necessary additional psycho-social, medical, physical, and pedagogical support is available for these children as needed. These groups are also meant to foster parental participation and to provide parents with methodological guidance to support children with disabilities.
- E. “Special child groups” – generally serve children aged 4 to 7 years old, with a total number of 15 to 20 children per class. In these classes, up to three children with developmental delays and mental disabilities are integrated into classrooms with children who would otherwise be enrolled in a standard pre-school setting. This promotes the mainstreaming of children with disabilities and their socialization with other children, while still ensuring that the necessary additional psycho-social, medical, physical, and pedagogical support is available to these children as needed. These groups are also designed to provide parents with guidance on how best to educate and care for their children.

39. **The “development classes” and “future first grader program” are relatively new programs, designed to promote school readiness and offer a “catching-up” option for children before they enter primary school.** Children enrolled in the “future first grader program” account for 90 percent of all enrollments in partial-day options. This enrollment is heavily concentrated in several provinces, with the 7,937 children enrolled in Djizzakh accounting for 53 percent of enrollment nationwide and the 2,587 children enrolled in Samarkand accounting for 17 percent of enrollment nationwide<sup>22</sup>.

40. **Cost, location, and convenience, and a feeling among parents that children do not need to attend pre-school are all factors in Uzbekistan’s low enrollment levels in ECCE.** In a 2009 sociological survey conducted by UNICEF, respondents listed high cost, their distance from the school, and a lack of conviction about the benefits of pre-primary education as the top three reasons for not enrolling their children in pre-school. A summary of their responses is presented in Table 8, showing differences in responses based on the age of the child, the families’ urban or rural location, and the household’s wealth.

41. **Parents’ reluctance to enroll their children seems to be a significant barrier to increasing enrollment rates.** Among all households that responded to the UNICEF survey, “no need to attend” was the most frequent reason given as to why the respondents had not enrolled their children in ECCE (with the exception of children aged between 0 and 2 years old, for whom the answer “the child is too small” was more common). There were few variations between urban and rural households, with the exception that more rural households listed the distance from the pre-school as a significant concern. As might be expected, 26 percent of households that were classified as poor mentioned cost as an important factor in their decision compared with 15 percent of wealthier families. Cost was the only response in which there was significant variation between households of different socioeconomic levels, indicating that, for some households, cost is the most relevant constraint. In a typical public pre-school, the state subsidizes 70 percent of the costs involved in the child’s attendance. This leaves a fee for parents to pay a fee equivalent to

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<sup>22</sup> According to 2011 data, children enrolled in the “future first grader program” account for 90.3 percent of all enrollments in partial-day options. This enrollment is heavily concentrated in several provinces, with the 8,413 children enrolled in Djizzakh accounting for 51.1 percent of enrollment nationwide and the 5,238 children enrolled in Samarkand accounting for 31.8 percent of enrollment nationwide.

around US \$20 per month per child, which is usually used to cover the cost of school feeding. Pre-schools are allowed to provide optional additional services to children and parents (such as language classes, technology training, or special sports or arts lessons) and to charge additional fees for these services as long as these services do not include basic education activities. Up to 15 percent of registered students at each facility can be exempted from this fee if they are able to present a “poor family certificate/notice.” Despite this regulation, anecdotal evidence suggests that not all pre-schools make places available to poor children. Families with more than one child enrolled in pre-school receive a discounted price for the second child, typically a discount of around 30 percent. More details on the cost of pre-schools and the burden of these costs for families, particularly low-income families, will be discussed below in the finance section.

**Table 8: Parental Reasons for Not Enrolling Their Children in ECCE**

Reason	Total	Age of Child		Location		Household Wealth	
		0-2	3-6	Urban	Rural	Poor	Wealthy
No need to attend	34%	25%	42%	34%	34%	30%	36%
Child is too small	27%	55%	3%	32%	25%	26%	28%
Too expensive	19%	10%	26%	23%	17%	26%	15%
Pre-school is too far away	13%	7%	18%	3%	17%	12%	14%
Improper child care	3%	1%	4%	3%	3%	2%	3%
Inconvenient time of work	0.5%	0.50%	0.50%	0.60%	0.50%	0.60%	0.50%
Due to health status	1%	0.60%	2%	0.60%	1%	1%	1%
Child attends primary school	3%	0%	6%	4%	3%	3%	3%

Source: UNICEF (2009)

### Uncovering the Reasons for Low Participation in Formal ECCE

42. **There are several factors that might be influencing parents’ decisions to not enroll their children in ECCE.** There are two hypotheses that seem the most likely explanations: (i) parents do not recognize the value of early stimulation and learning for young children or (ii) low enrollment is caused by limitations in the current system of provision (for example, the current range of available pre-schools is not appealing or is not widely accessible).

43. **Regarding the first hypothesis, parental support for early learning appears high when measures of the home learning environment are examined.** The Multiple Indicator Cluster Survey (MICS3), conducted in 2006 in Uzbekistan, collected information on the learning environment within households and parents’ understanding of, and commitment to, early learning for young children. Table 9 compares data on the home learning environment and enrollment in formal ECCE. As Table 9 shows, 71.3 percent of all households nationwide regularly engage their young children in early learning activities with only slight variation by region, location of residence, and socioeconomic status.

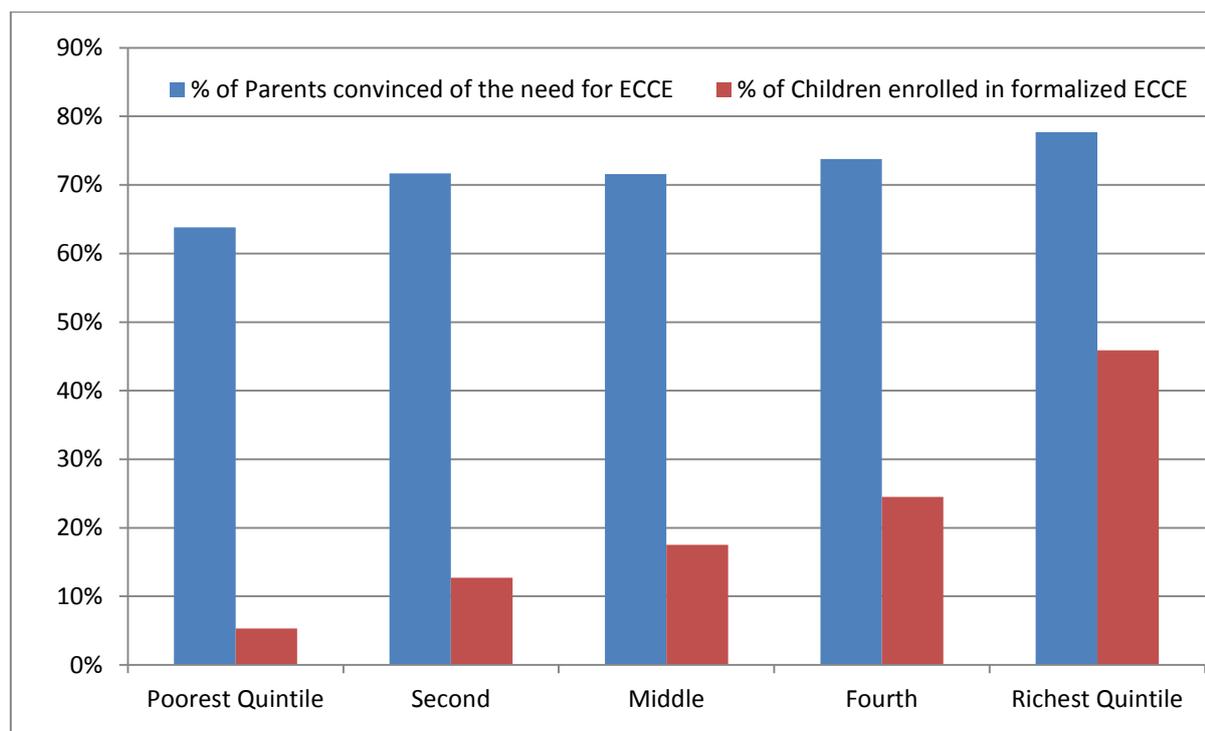
**Table 9: Household Engagement in Early Learning Activities for Young Children**

Population	Parental Commitment to ECCE	Enrollment in Formal ECCE
	<i>Children aged 0-59 months whom household members engaged in four or more activities that promoted learning and school readiness</i>	<i>Children aged 36-59 months currently attending early childhood education</i>
<b>Region</b>		
Western (Khorezm, Republic of Karakalpakstan)	64%	16.2%
Central (Bukhara, Navoi, Samarkand)	59%	20.4%
Southern (Kashkadarya, Sukhandarya)	63%	6.7%
Central-Eastern (Jizzakh, Syrdarya, Tashkent)	78%	22.8%
Eastern (Andijan, Fergana, Namangan)	85%	23.5%
Tashkent City	80%	52.6%
<b>Residence</b>		
Urban	75%	35.2%
Rural	69%	13.5%
<b>Age</b>		
0-23 months	46%	NA
24-59 months	89%	NA
<b>Wealth index quintiles</b>		
Poorest	63.8%	5.3%
Second	71.7%	12.7%
Middle	71.6%	17.5%
Fourth	73.8%	24.5%
Richest	77.7%	45.9%
<b>NATIONAL AVERAGE</b>	<b>71.3%</b>	<b>19.7%</b>

Source: MICS3, 2006

44. **However, in contrast to these high levels of parental support for early learning, just 19.7 percent of all children are enrolled in formal ECCE.** There is a variation in enrolment rates across regions, rural/urban settings, and socioeconomic status. Though the variation in enrollment between regions is substantial, across all regions there is a considerable difference between the commitment to early learning in the home and the enrollment of children in formal ECCE. The biggest difference was recorded in the Eastern region at 61.5 percent, and while the difference is smallest in Tashkent city, it still amounts to 27.4 percent. Strikingly, however while there is relatively high household commitment to learning (75 percent of urban households and 69 percent of rural households regularly engage young children in early learning activities), this is accompanied by low enrolment rates in formal ECCE institutions (35.2 percent of urban households and 13.5 percent of rural households have children enrolled.)

**Figure 7: Enrollment in Pre-School Education System by Income**



45. **The variation by socioeconomic status is the most striking: while 63.8 percent of the poorest households take the time to engage their children in early learning activities in the home, just 5.3 percent of the poorest children are enrolled in formal ECCE** (see figure 9). In fact over two-thirds of all households regardless of their income status are convinced of the importance of ECCE, but richer households have much higher enrollment rates. Clearly cost is a factor that discourages poorer households from accessing ECCE, but even within the richest quintile, over one-third of households who value ECCE do not or cannot send their children to pre-school. This suggests that even the wealthiest households face significant constraints to enrolling children in formal ECCE and that cost is clearly not the only factor contributing to low enrollment and is probably not even the most important factor.

46. **These data suggest that parents who listed “no need to attend” as the reason why their children are not enrolled in school do not, in fact, reject the importance of early learning.** Across the entire population, parents value early learning for young children as reflected in their practices in the home. Nevertheless, less than one-fifth of all parents choose to enroll their children in formal ECCE and 24 percent of pre-school places go unfilled. Therefore, it is pertinent to examine whether the state actually provides the kind of services that are actually in demand.

47. **To answer this question, in the next two sections we will examine the quality and the cost of the current range of ECCE provision.** It may be that parents do not feel that the quality of formal ECCE is high enough to benefit their young children. This could be an issue of actual quality and/or of the perception of the quality of pre-schools. Another constraint might be the cost of ECCE, especially for low-income households. Currently, each public pre-school is supposed to provide up to 15 percent of all of its places free to poor families. However, anecdotal evidence suggests that in practice poor families cannot always find free places in schools. The families who can benefit from these fee waivers are currently selected through the Makhalla

system.<sup>23</sup> Given that between 16-20 percent of the population lives below the poverty line, allocating only 15 percent of all places free to poor families may not be enough. It is also possible that the main constraint to increasing enrollment in ECCE is the predominance of full-day preschool. While this kind of provision may suit some families (particularly those with two working parents and those in urban areas who may not have any extended family nearby to help with childcare). However, for some parents, this full-day provision may not meet their needs. There are a number of more flexible options that policymakers might consider, including:

- i. Partial day center-based programs, which can be highly effective in delivering early learning programs.
- ii. Home visiting programs, which can show parents of young children methods of child development, stimulation, and early learning in the home.
- iii. Community-based provision in which existing community structures deliver ECCE and associated support to young children and their parents.

48. These options will be discussed further in the recommendations in Section IV.

### **Promoting Quality**

49. **Uzbekistan’s quality assurance framework for ECCE is reasonably well-developed and compliance is reported regularly.** There are established and enforced registration and accreditation procedures for ECCE facilities. While there is a clear culture in of collecting data in Uzbekistan, the analysis presented in this section will demonstrate that the current monitoring framework may not be effectively using this framework to improve policy decisions. And some key aspects of the quality of ECCE provision may not get sufficient attention, resulting in service delivery falling short of parental expectations.

50. **Standards for child development are supposed to be monitored regularly and 75 percent of all children nationwide meet these standards according to MoPE.** However, we will show that there is no correlation between children’s attainment of established standards and enrollment across the regions. This may mean that despite this level of compliance, it is difficult to assess the quality of ECCE programs and of teaching in classrooms purely on the basis of reported compliance. Clearly the current quality assurance framework and the indicators of quality that are being tracked are not adequately persuading parents of the value of enrolling their children in ECCE.

51. **The requirements for entering into the ECCE teaching profession are clear and compliance is universal. However, the most highly qualified teachers tend to be employed in urban areas and specific regions.** We will show that there is a strong positive correlation between highly qualified staff as a proportion of staff and enrollment rates. Service delivery standards are clear and student-teacher ratios average just 9.3:1 (in comparison to established international standards of 15 or 20:1).

52. **Despite clearly established infrastructure standards for ECCE facilities, just 34 percent of facilities nationwide are rated as “fully equipped” and 39 percent of facilities are**

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<sup>23</sup> Makhalla is a community set-up that consists of an entire system of relations between the inhabitants. This system has that has existed in Uzbekistan for centuries. These days each Makhalla is a self-governing administrative unit.

**in need of repair.** The comparison between facilities in urban and rural areas is particularly stark, with 80 percent of urban facilities being fully equipped compared with only 13 percent of rural facilities.

53. **The rest of the section analyzes the quality of ECCE in Uzbekistan and discusses options to improve and more effectively measure and demonstrate quality.** Both the physical status of facilities and teachers' qualifications can be visible signals of quality to parents, which can in turn alter their perceptions of the quality of ECCE. This can be seen in the high positive correlations that we found between enrollment rates and both well-maintained physical facilities and high teacher qualifications.

54. **How does the provision of ECCE services in Uzbekistan compare with the provision in OECD countries?** In 2008, UNICEF produced "The Child Care Transition - A League Table of Early Childhood Education and Care in Economically Advanced Countries" (UNICEF, 2008). Presented as a report card, the study discussed the opportunities and risks faced by the increasing number of children placed in childcare during their early years throughout the OECD countries. The report proposed a series of 10 internationally applicable benchmarks for the provision of ECCE and presents data on those benchmarks from 25 OECD countries. Five out of the 10 benchmarks are related to quality and are presented in Table 10 with the addition of Turkey and Uzbekistan for comparative purposes. These benchmarks represent minimum standards for ECCE facilities rather than a guarantee of quality and, for the most part, they relate to out-of-home institutional care rather than informal home-based or community-care. The benchmarks do not include home visiting programs, programs targeting at-risk children, or measures of parent involvement. Despite these caveats, these 10 benchmarks offer countries such as Uzbekistan useful targets and measures to increase access to and the quality of ECCE services.

*Source:* Adapted from UNICEF (2008)

55. **Uzbekistan meets two out of five of the benchmarks related to quality, which puts it in the group of countries with the lowest levels of compliance.** The two benchmarks that Uzbekistan meets pertain to the level of training of ECCE educators. It should also be noted that Uzbekistan is on its way to meeting the other benchmarks. Uzbekistan's provision of ECCE is highly regulated and subsidized by the government and all facilities are accredited, but the country is missing the benchmark because of low levels of quality. The international benchmark for the staff-child ratio is 1:15; in practice, nearly all ECCE centers in Uzbekistan do meet this ratio, though the standard by law is 1:15 to 20 or 1:20 to 25 depending upon the children's age.

56. **With regard to the quality of ECCE services, it is important to consider both structural quality and process quality.**<sup>24</sup> Structural quality refers to such variables as the child-adult ratio, class size, the teachers' education level and experience, and staff wages. Process quality refers to the variables that shape a child's experience within the program, such as the types of activities in which the child is engaged, his or her interactions with teachers, and the program's structure. For the most part, the structural and caregiver variables are established and reasonably well-enforced in Uzbekistan. The program and process variables, however, are harder to measure, and less is known about the extent to which these variables are being fully addressed within the current quality framework.

57. Specifically, the following aspects of quality that are monitored in Uzbekistan:

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<sup>24</sup> Naudeau et al (2011)

- i. The registration and accreditation of ECCE facilities
- ii. The tracking of child development
- iii. Information systems
- iv. Staff qualifications
- v. Service delivery standards
- vi. Infrastructure standards.

**Table 10: Benchmark Indicators of ECCE Quality in Uzbekistan and OECD Countries**

	Slovenia	Japan	Uzbekistan	Turkey	Mexico	Italy	Republic of Korea	Portugal	Spain	Germany	Austria	Belgium	Finland	Norway	France	Denmark	Hungary	Netherlands	United Kingdom	New Zealand	Iceland	Sweden
Subsidized and regulated child care services for 25% of children under the age of 3												x	x	X	X	x		x	X	x	x	X
Subsidized and accredited early education services for 80% of 4 year olds		x				x		X	X	x	x	x		X	X	x	x		X	x	x	X
80% of all childcare staff trained		x	x	x	x	x	x	X	X		x		x		X		x	x	X	x	x	X
50% of staff in accredited early education services holding relevant qualification			x	x	x		x	X	X	x		x			X	x	x	x	X	x	x	X
Minimum staff-children ratio of 1:15 in pre-school education										x	x		x	X		x	x	x		x	x	X
<b>Total Number of Benchmarks Met</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>5</b>						

### *Registration and Accreditation*

58. **There are well established registration and accreditation processes for pre-schools in Uzbekistan, and all pre-schools are inspected on a regular schedule according to consistent and clear guidelines.** Licenses for non-state pre-schools are issued by the Cabinet of the Ministers' Commission for the Licensing of the Activities of Non-state Educational Institutions. All pre-schools (state, non-state, and those operated by individual government ministries) are inspected for accreditation every five years. Each pre-school is evaluated on a 600 point scale presented in Table 11. In each region, a schedule is prepared (currently for the years 2010 to 2015) that lists the pre-schools in each rayon and year in which they will be inspected. According to the current schedule, a total of 5,031 pre-schools will be inspected between 2010 and 2015, with approximately 1,000 pre-schools being visited every year. The State Testing Center, which is an agency of the Cabinet of Ministers in the President's Office, oversees the accreditation process for all pre-schools. Table 11 presents information on the components of the accreditation process.

**Table 11: Pre-school Accreditation Guidelines**

<b>Components of Accreditation</b>		<b>Maximum Points</b>
Management/administration/documentation		100
	This component looks at the procedures of the pre-school and reviews records to verify that appropriate documentation guidelines are being followed and that the management and administration processes of the pre-school comply with established standards.	
Knowledge and development of students		300
	This component tests students within four developmental areas (physical development/self-care/hygiene; socio-emotional development; speech/preparation for reading and writing; and cognitive development/knowledge and understanding of the world). Assessments in these areas are regularly conducted at schools and compared with the established developmental standards. Each child must score at least 55% to receive a passing grade, and, within each pre-school, 80% of all students must receive a passing grade.	
Teacher qualifications		100
	This component looks only at teachers' and specialists' qualifications to ensure that they comply with minimum established standards. It does not include any observation or monitoring of teachers' or specialists' efficacy, ability, or interaction with children.	
Infrastructure and supplies		100
	This component evaluates all of the toys, books, sports equipment, and furniture of the pre-school to ensure that they are in compliance with established standards. It also looks at the overall sanitation and hygiene of the facilities, including the kitchen and foods served, as well as the overall infrastructure and buildings of each pre-school.	
<b>Total Points</b>		<b>600</b>

### *Tracking Child Development*

59. **The development of young children enrolled in pre-school institutions is supposed to be continuously tracked by the Ministry of Education, which routinely collects indicators of their development.** Standards are established in four key areas:

- i. Physical development, self-care and hygiene
- ii. Socio-emotional development
- iii. Speech, reading and writing
- iv. Cognitive development and knowledge and understanding of the world.

60. **The progress of all children enrolled in center-based ECCE in Uzbekistan in each area is regularly monitored.** Within each of these four areas, sub-areas have been created with very specific indicators to measure children's progress. These indicators are specific to children's age and present a trajectory on which children can progress. For each standard and series of indicators, there are training activities for caregivers and teachers and also safety requirements. These standards are applicable to both state and non-state ECCE facilities, as well as regulatory bodies overseeing pre-schools and higher education institutions that train pre-school staff. At the school level, children's adherence to these standards is monitored on a daily, weekly, and monthly basis. This information is aggregated at the school level every month and is reported to most oblasts every quarter. Aggregated information for each region is collected twice annually by MoPE. In addition, during the re-accreditation process for schools (which occurs every five years), individual students are tested.

61. **An average of 75 percent of children enrolled in pre-schools meet these state-established developmental standards.** Table 12 presents the results for the first half of the academic year 2011-2012 for children aged 6 to 7. The provinces of Karakalpakstan, Andijan, and Tashkent had the highest average scores, while the provinces of Kashkadarya, Namangan, and

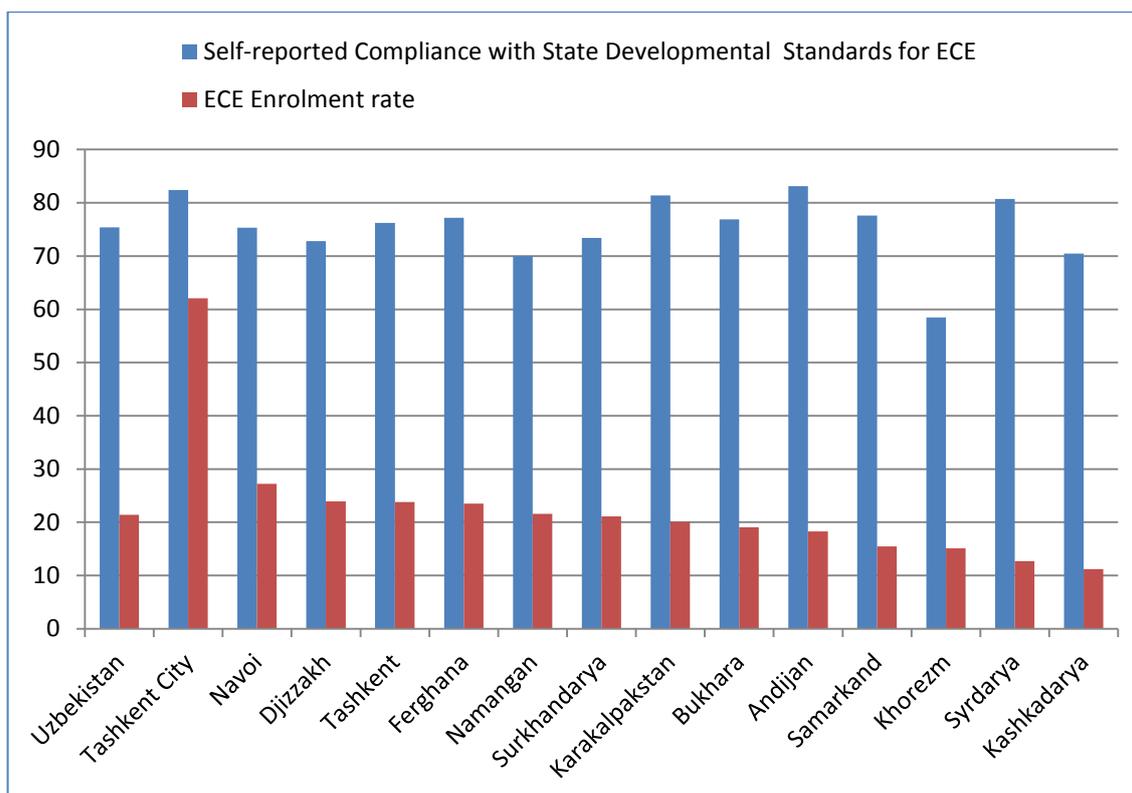
Khorezm had the lowest. While there is a substantial range between the region with the lowest average score (Khorezm at 58.5 percent) and the region with the highest score (Andijan at 83.1 percent), most regions are clustered relatively close to the national average of 75.4 percent. Khorezm appears to be an outlier, with the province with the next lowest score being Namangan at 70 percent. We have examined the available data for these indicators from 2008 to 2011. Scores for all regions were relatively stable during this period, with small fluctuations of one-half to two percentage points up and down from between years, but with no clear trend in either direction.

**Table 12: Tracking Children's Development, 2010-2011**

Regions	Compliance with State Requirements, 2011				
	Physical development, self-care, and hygiene	Socio-emotional development	Speech, preparation for reading and writing	Cognitive development, knowledge and understanding of the world	Average for all four categories
Karakalpakstan	80.9	80.7	83.4	80.4	81.4
Andijan	86.6	N/A	80.7	82.0	83.1
Bukhara	78.0	N/A	75.8	77.0	76.9
Djizzakh	72.8	73.0	71.8	73.5	72.8
Kashkadarya	70.0	69.0	71.0	72.0	70.5
Navoi	N/A	N/A	N/A	N/A	75.3
Namangan	73.8	69.3	64.9	72.1	70.0
Samarkand	77.5	77.6	78.0	77.3	77.6
Syrdarya	81.6	81.3	80.9	79.1	80.7
Surkhandarya	74.4	73.8	72.8	72.4	73.4
Tashkent	75.8	76.4	75.9	76.7	76.2
Ferghana	N/A	N/A	N/A	N/A	77.2
Khorezm	55.0	58.0	60.0	61.0	58.5
Tashkent City	83.1	83.5	81.0	81.8	82.4
<b>National Average</b>	<b>75.8</b>	<b>74.3</b>	<b>74.7</b>	<b>75.4</b>	<b>75.4</b>

62. Interestingly, there is no correlation between compliance with state developmental standards and enrollment levels in different regions as can be seen in Figure 10. It might be expected that regions with better compliance outcomes would also have higher enrollment rates (the logic being that the benefits of ECCE would be clear to parents in those regions who would then be encouraged to enroll their children in ECCE). However, as Figure 10 shows, this does not seem to be the case. For example, in Tashkent City, Karakalpakstan, Andijan, and Syrdarya, over 80 percent of all children are reported to comply with the state-established developmental standards, but enrollment in ECCE in these regions varies greatly. Tashkent has an enrollment rate of 60 percent, whereas the other three regions have enrollment levels of 20 percent, 17 percent, and 13 percent respectively.

**Figure 8: Enrollment Rates and Developmental Outcomes by Region**



### *Information Systems*

63. **Parents’ perceptions of the quality of available public ECCE facilities may be a factor in Uzbekistan’s low enrollment levels.** It seems that the state’s standards for children’s development are not sufficiently high to persuade parents of the quality of the ECCE provided in the country’s pre-schools. Data on indicators of program and process quality are not collected. Later in this section, we explore some other indicators that might help to persuade parents of the quality of the state’s pre-school education.

### *Staff Qualifications*

64. **Most studies of ECCE in both developed and developing countries have found that there is a strong correlation between staff qualifications and outcomes for young children.**<sup>25</sup> The main elements of staff quality that have been found to be important are the staff’s educational attainment, specialized training in ECCE, and commitment to childcare work. The level of financial compensation received by ECCE staff also appears to be strongly correlated with the quality of care that they provide. For example, a study in the US found that teachers’ wages were more strongly associated with classroom quality than any other structural indicators such as the child-teacher ratio or the teacher’s education level.<sup>26</sup>

<sup>25</sup> Nadeau et al (2011)

<sup>26</sup> Phillips et al (2000)

65. **There are established and enforced requirements for pre-service and in-service training for pre-school teachers in Uzbekistan.** All citizens of Uzbekistan are required to complete nine years of basic education. Following this basic education, students either follow a vocational track for three additional years of schooling or go on to higher education in lyceums, which leads to the university track. Pre-school teachers are required to have completed a minimum of three years of vocational training. Table 13 presents the qualifications of the nearly 61,000 pre-school teachers who were employed in Uzbekistan in 2011.

**Table 13: Qualifications of Pre-school Teachers, 2011**

Qualifications of Pre-school Teachers	Teachers	
	Absolute Number	Percentage
Specialized vocational training	46,313	77%
<i>(of these, those who have a pedagogical specialization)</i>	<i>44,098</i>	<i>73%</i>
Higher education (university graduates)	13,353	22%
In process of attaining higher education (enrolled in university)	910	1%
<b>Total</b>	<b>60,559</b>	<b>100%</b>

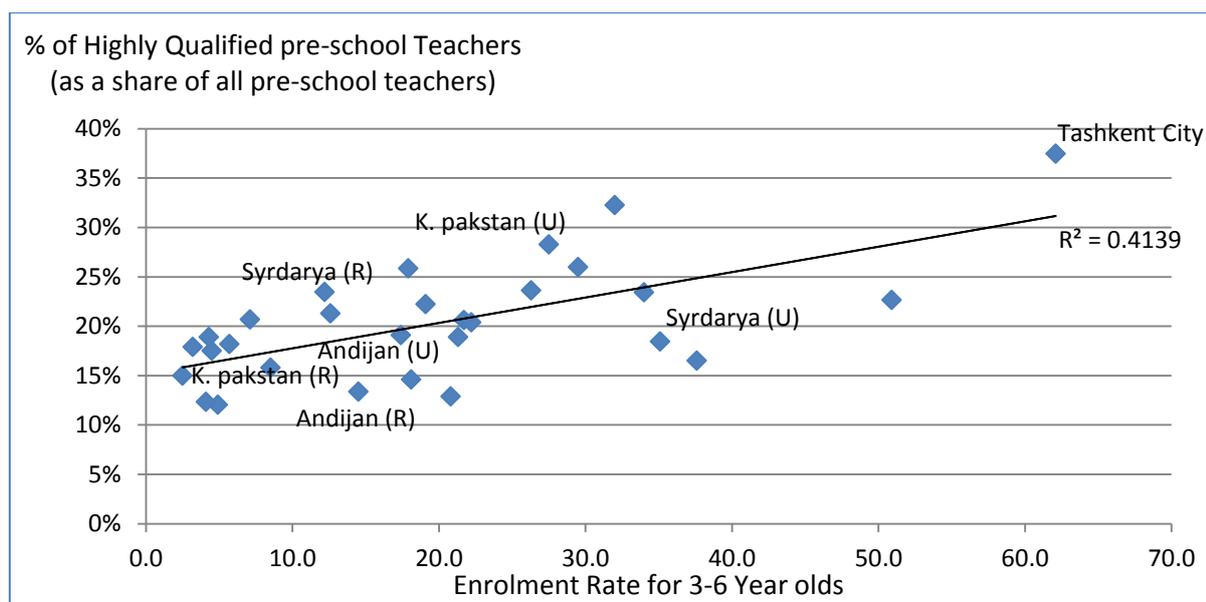
66. **Approximately 77 percent of pre-school teachers in Uzbekistan have completed only the minimum three years of vocational training.** Nearly all of these teachers specialized in pedagogy during their vocational studies. Students enrolled in the vocational schools can choose from several different pedagogical specialties, including one that focuses on the pre-primary years (as opposed to the primary or secondary years). There are 1,368 vocational colleges and 104 pedagogical vocational colleges in Uzbekistan that prepare pre-school teachers.

67. **Pre-school directors and specialists as well as some teachers hold degrees in higher education.** Pre-school directors in Uzbekistan are required to hold a degree in higher education. Most pre-schools employ specialists such as school nurses, psychologists, or music teachers who must also have specialized university degrees. There are 11 higher education universities in Uzbekistan that provide bachelors and advanced degrees to pre-school educators, directors, or specialists. The Ministry of Higher Education oversees these universities. Students interested in early learning typically complete a specialty in Pre-school Education and Children’s Sport. The degree takes four years to complete and includes theory, practicum, a thesis, and state accreditation. In 2010, a total of 1,704 students graduated from universities in Uzbekistan with bachelor’s degrees in Pre-school Education. Those who earn a bachelor’s degree are entitled to continue their studies for a Master’s degree in one of five relevant fields: pre-school education, family education, psychology, pedagogies, and education system management.

68. **All pre-school teachers and directors are required to attend in-service training periodically and continually throughout their careers.** Every three years, all pre-school teachers are required to attend refresher training. This training is provided free of charge at regional and national training centers and covers a broad range of subjects, including child development, health, and pedagogy. It involves 144 credit hours, lasting four weeks in duration.

69. **Teachers with the highest qualifications are highly concentrated in urban areas and in those regions with the highest levels of enrollment.** Figure 11 compares urban and rural enrollment rates for each region with the distribution of the most highly qualified teachers. A clear trend line is apparent. Regions with higher enrollment rates are also those with the most highly qualified teachers. Also, within regions, highly qualified teachers are less likely to be employed in rural areas and that this lower level of staff qualifications is associated with lower enrollment levels in rural areas.

**Figure 9: Qualified Pre-school Teachers as a Percentage of All Pre-school Teachers and Regional Enrollment Rates**



### *Service Delivery Standards*

70. **Clear service delivery standards exist for pre-schools in Uzbekistan.** The Ministry of Public Education is responsible for coordinating the adherence of pre-schools to education-related standards, while the Ministry of Health is responsible for ensuring that pre-schools meet health standards.

71. **While there is mixed evidence from a range of interventions, international evidence tends to suggest that children can experience cognitive gains from participating in center-based ECCE services for 15 to 30 hours a week (or 3 to 6 hours per day) for at least nine months of the year.** Children from disadvantaged families may benefit even more from a longer period. Fifteen hours is the minimum number of hours per week provided by pre-schools around the world (Naudeau et al, 2011). ECCE facilities in Uzbekistan greatly exceed this minimum requirement by enrolling children for 5 or 6 days a week for 8 to 10 hours per day.

72. **The best curriculum for young children is one that focuses on their comprehensive development.** This is achieved by nurturing not only their cognitive and linguistic skills but also their socio-emotional skills, including their motivation and capacity to self-regulate. In the United States, the National Association for the Education of Young Children (NAEYC) has developed a framework of principles and guidelines for best practices in ECCE called Developmentally Appropriate Practices (DAP). Although DAP was developed in the US, cross-cultural studies have found that its core principles are relevant in other settings around the world.<sup>27</sup> DAP lists the following indicators of an effective curriculum:

- i. Children are active and engaged.
- ii. Curriculum goals are clear and shared by all stakeholders.

<sup>27</sup> Hoot et al (1996) and McMullen et al (2005)

- iii. The curriculum is evidence-based.
- iv. Valued content is learned through investigation, play, and focused, intentional teaching.
- v. The curriculum and activities build on the child’s prior learning and experience.
- vi. The curriculum is comprehensive in that it encompasses physical, socio-emotional, and cognitive development.

73. **In 2009, the Republican Pre-school Center in Uzbekistan, in coordination with UNICEF, designed a new national program and curriculum for ECCE called Bolajon, the use of which is mandatory.** Bolajon is a child-centered program with a focus on the social development of children. The new curriculum includes highly detailed instructions for teachers to follow every day. All pre-schools nationwide received a copy of the new curriculum starting in the school year 2011-2012. The materials distributed to centers to promote the use of Bolajon are both descriptive and prescriptive. As part of the Bolajon Program, all schools will receive new learning materials and DVD players to promote multimedia education. While this is a welcome initiative, it is too early say how effectively Bolajon has impacted classroom practice in ECCE centers.

74. **Standards for Child-teacher ratios have been established for ECCE facilities, while separate child- teacher ratios have been set for specialized schools, including those for children with health concerns and those for children with physical or mental disabilities. In mainstream schools, the established ratios are as follows:**

- For children aged 2 to 3 years old: 15 to 20 children per teacher and one assistant
- For children over the age of 3: 20 to 25 children per teacher and one assistant.

**Table 14: Child to Teacher Ratios in ECCE Centers, 2011**

<b>Region</b>	<b>Children per ECCE teacher</b>
<i>Republic of Uzbekistan</i>	<b>9.3</b>
Republic of Karakalpakistan	9.1
Andijan	8.8
Bukhara	7.7
Djizzakh	16.6
Kashkadarya	8.7
Navoi	7.9
Namangan	8.0
Samarkand	8.9
Surkhandarya	9.5
Syrdarya	10.3
Tashkent	9.8
Fergana	8.2
Khorezm	8.2
Tashkent city	11.3

75. **In practice, child-teacher ratios not only conform to these guidelines but in many centers are significantly lower.** As Table 14 shows, the national child to teacher ratio is just 9.3:1. Note that this is the ratio of classroom teachers to students. In addition to classroom teachers, most schools have a director, a school nurse or health specialist, and specialist teachers for specific areas such as music and for children with special needs. Most regions are clustered around the national average in the range of 8 to 10 children per teacher.

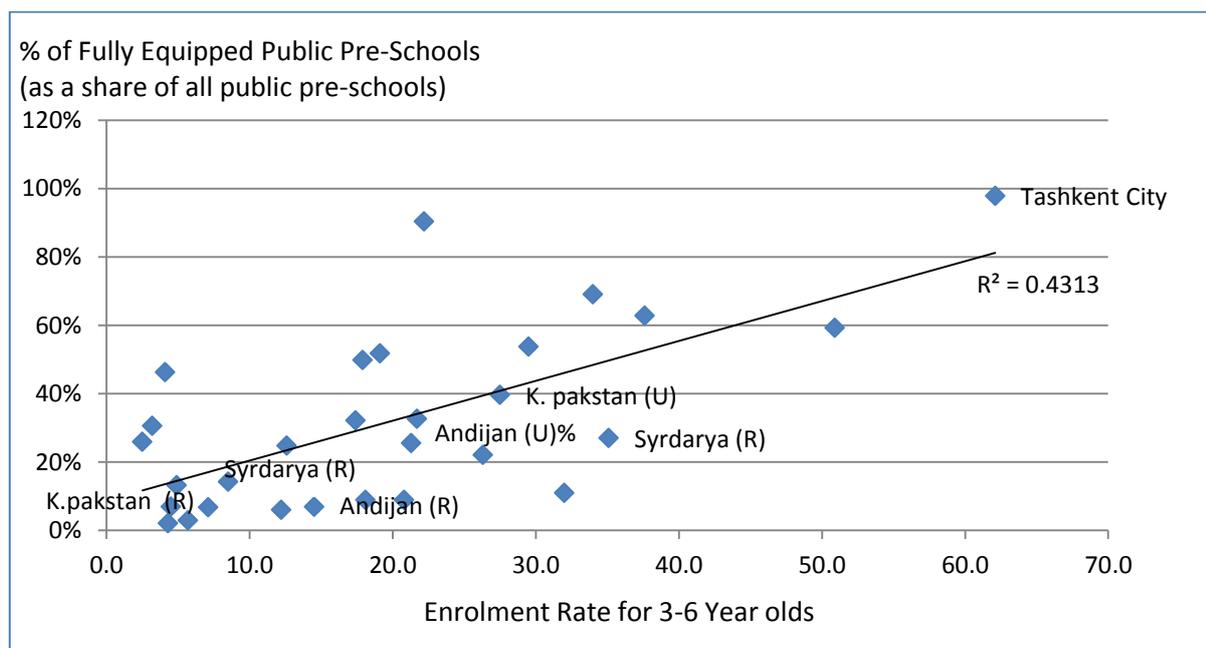
### Infrastructure Standards

76. **The Ministry of Education clearly specifies infrastructure requirements for all ECCE facilities.** These include guidelines on the sanitary and hygiene requirements for ECCE facilities as well as for the materials within the facilities. The specific rooms and amenities that each ECCE facility must have and their sizes (including toilets, pantries, sleeping areas, eating areas, and play areas) are all specified in the standards. Infrastructure lines (such as electricity or water and sewage pipes) are not permitted to cross the boundaries of any ECCE facility.

77. **Despite these clear and detailed standards, just 35 percent of all public ECCE facilities in Uzbekistan are classified by MOPE as “fully equipped.”** In fact, 39 percent of all ECCE centers currently require capital repairs (2,111 facilities) and 2 percent require emergency repairs (129 facilities). There are stark differences between urban and rural areas; while roughly 13 percent of all urban facilities are in need of capital repairs, a full 80 percent of ECCE facilities located in rural facilities are in need of repairs.

78. **There is a clear association between the physical state of ECCE facilities and enrollment levels.** Figure 12 compares regional enrollment rates with the percentage of schools that are rated as fully equipped. The regions with the lowest enrollment levels are also those with the lowest percentage of fully equipped schools. Urban areas have higher enrollments and a higher percentage of fully equipped facilities than rural areas.

**Figure 10: School Infrastructure Status and Regional Enrollment Rates**



Note: Percentage of fully equipped public pre-schools as a share of all public pre-schools

79. **The dilapidated physical state of many pre-school buildings may be a key factor that is deterring parents from enrolling their children in formal ECCE.** Anecdotal evidence from

the case studies that our team conducted in Tashkent suggests that the state of physical infrastructure ranks high as an indicator of quality with parents. For many parents who might be hesitant to send their young children out of the home, the physical appearance, amenities, and safety of pre-school facilities no doubt affects their decision whether or not to enroll their children in ECCE.

80. **When the prevalence of highly qualified teachers and the physical state of ECCE facilities are taken as proxy measures of quality, a clear disparity between urban and rural areas becomes clear (See Table 15).** The state of the infrastructure of Uzbekistan’s pre-schools is readily apparent to parents considering enrolling their children. Similarly, the quality of classroom teachers is another observable element of quality. These two indicators of quality can be influenced by government policy and the allocation of resources. For example, the government could consider introducing incentives to encourage highly qualified teachers to teach in rural areas of the country.

**Table 15: Disparities in Access to Highly Skilled Professionals and Fully Equipped Facilities between Urban and Rural Areas**

	Nationwide	Urban	Rural
Enrollment rate for 3-6 year olds	21%	30%	9%
% of public pre-schools that are fully equipped	35%	54%	14%
% of highly qualified public pre-school teachers	22%	26%	16%

81. **While the current quality assurance framework in Uzbekistan is extensive, it may benefit from some revisions.** The GoU is already collecting a significant amount of information on access to ECD services and outcomes and it has standards in place service delivery and information and monitoring systems in place to track compliance. However, it is not clear if the current system is tracking children’s development outcomes accurately or if it is adequately measuring the quality of the pre-primary education that children receive. Policymakers need to consider ways to evaluate teaching practices at the classroom level to assess the extent to which pre-schools promote school readiness.

### **Ensuring Adequate Financing of ECCE**

82. **Countries around the world vary in terms of the level, composition, and methods of their financing for ECCE.** In OECD countries, the average amount spent by both the public and private sectors on pre-primary education is 0.49 percent of GDP, of which 0.43 percent comes from the public sector. Most of the countries that are comparable to Uzbekistan spend about 0.3 to 0.5 percent of their GDP (and between 5 and 10 percent of their education budgets) on ECCE, whereas Uzbekistan spends around 1.2 percent of GDP, of which 0.8 percent is public (around 10 percent of all public education spending). It is clear that the Government of Uzbekistan is exceeding the fiscal efforts of comparator countries. However, as Table 16 shows, most countries at or around Uzbekistan’s level of development have much higher enrollment rates even though they spend less than half as much as a percentage of GDP on ECCE. Clearly Uzbekistan’s current model of full-time ECCE is prohibitively expensive and therefore, it will be difficult to expand and sustain the pre-school system without taking measures to reduce delivery costs by exploring alternatives such as half-day pre-schools, home-based ECCE delivery, and subsidized private provision.

**Table 16: Enrollment, Per Capita Income, and Expenditure on Early Childhood Care and Education in Uzbekistan**

	GDP Per Capita	Enrollment rate for 3-6 year olds	Public Expenditure on ECCE ( percent of GDP)
Average of all 18 countries with per capita income less than 10,000 USD	4,832	45.9	0.3
<b>Uzbekistan</b>	<b>3,039</b>	<b>21</b>	<b>0.8</b>

Sources: GDP per capita (purchasing power parity) from the IMF’s World Economic Outlook. Pre-primary enrollment rates for 3-6 years olds from UNESCO’s Institute for Statistics. Expenditure on ECCE from OECD (2006).

83. **The government budget provides approximately 70 percent of the total cost of delivering pre-primary education (see Table 17), with the rest coming from fees.** Around 15 percent of all students in any school are theoretically exempt from fees, and the families to benefit from this waiver are chosen by local communities or “Makhallas”. Despite this initiative, the poor have much lower access to ECCE than the rich. Figure 13 shows that children from the poorest quintile have an enrollment rate of only 5.3 percent, while those from the richest quintile have an enrollment rate of 46 percent. It follows that the targeting of the poor students needs to be improved. With Uzbekistan’s low-income population accounting for around 16 percent of the population, it appears that the existence of monthly fees (which are often equivalent to the minimum monthly wage) continues to present a barrier that is preventing poor families from sending their children to publicly subsidized ECCE facilities. Previous evidence suggests that the “Makhallah” structure has traditionally been a successful mechanism for targeting and identifying poor families in communities. But this mechanism has lately been overburdened with additional responsibilities, and may not be as effective as they have been in the past.

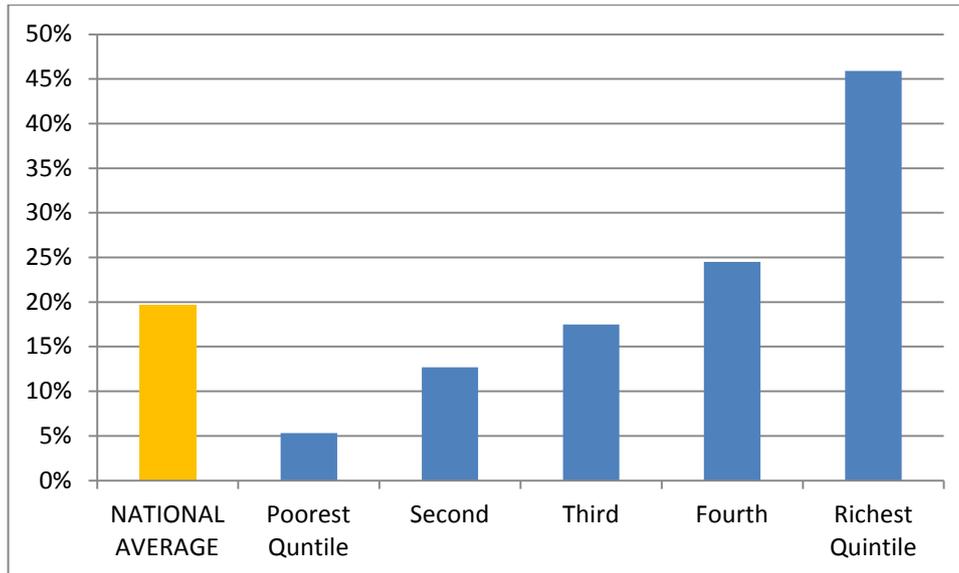
**Table 17: The Size of the Public Subsidy to ECCE**

Indicator	Sums	USD
No. of Students	522,945	522,945
Government Budget (Million)	491,485	259
Estimated Fees* (Million)	208,394	110
Total Cost (Million)	688,542	362
Govt. Subsidy (% of Total Cost)	70%	
Fees (% of Total Cost)	30%	

Source: Government Statistics and Fee structures. Total Fees are estimated.

Notes: \* We assumed that 85 percent of students pay fees. Two-thirds of students pay full fees, while one-third of students have a sibling at school and pay a subsidized fee. We applied the rural/urban share of enrollment at 36 percent and 64 percent to the respective fees.

**Figure 11: ECCE Enrollment Rates by Income Quintile**



Source: MICS3, 2006

84. It is important to estimate the cost of the current model of pre-primary education in Uzbekistan and to simulate how expanding this might affect the future funding of the sector. Important questions remain to be answered. For example, is it possible that the current model for delivering pre-primary education is prohibitively expensive? Do policymakers need to consider other, more cost effective models? This will be done in the next section.

#### **IV. From Analysis to Action: A Preliminary Strategy for Expanding Quality Early Childhood Care and Education in Uzbekistan**

85. For each of the three challenging policy areas **discussed in this report**, this section will **outline** a menu of possible policy responses, and cost them out to fully understand the fiscal implication for public policy.

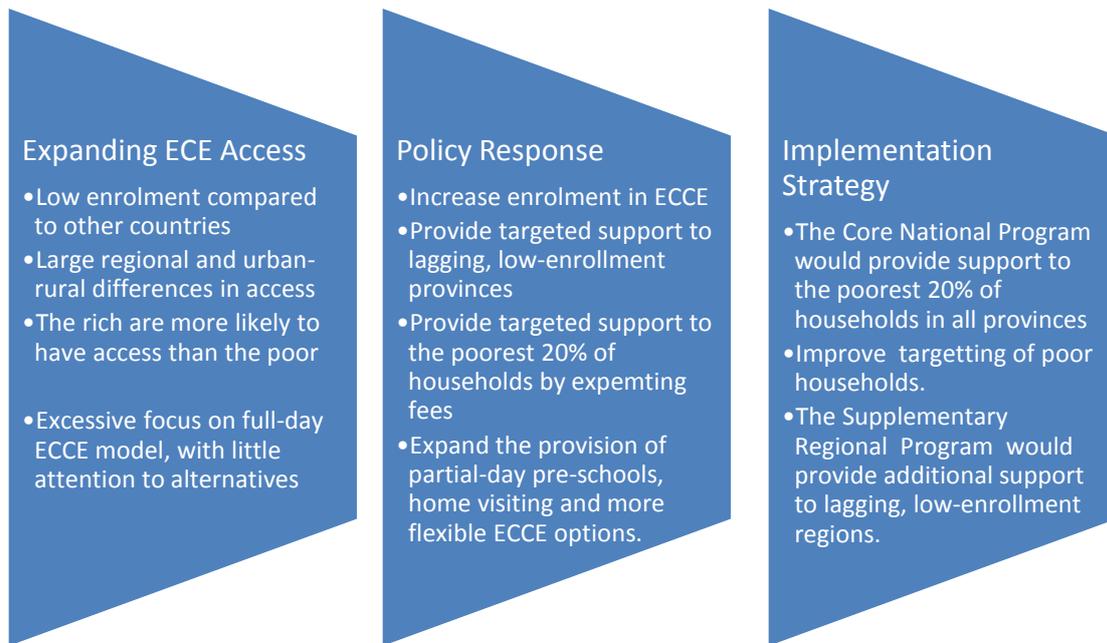
##### **Policies and Implementation Strategies for Expanding Access**

86. **Access to ECCE is low nationwide, with enrollment rates varying significantly between regions, between families of different socioeconomic status, and between urban and rural areas.** Enrollment varies by income in all provinces, with the rich being more likely to have enrolled their children in ECCE than the poor. Access also varies significantly between regions, with some regions having much lower enrollment rates than others. ECCE expansion could be expanded more equitably and have a greater impact if funds allocated to this initiative were distributed *progressively*. This could be done in two ways:

- Targeting low-enrollment provinces
- Targeting poor households to ensure equity in access.

87. **The current predominant model of full-day institutional care may not be a model that suits all segments of the population.** It would make sense to explore the provision of more flexible, partial-day pre-schools, of home-visiting programs (particularly to reach the parents of very young children to persuade them of the benefits of ECCE), and of community-based ECCE programs.

**Figure 12: Expanding Access to ECE**

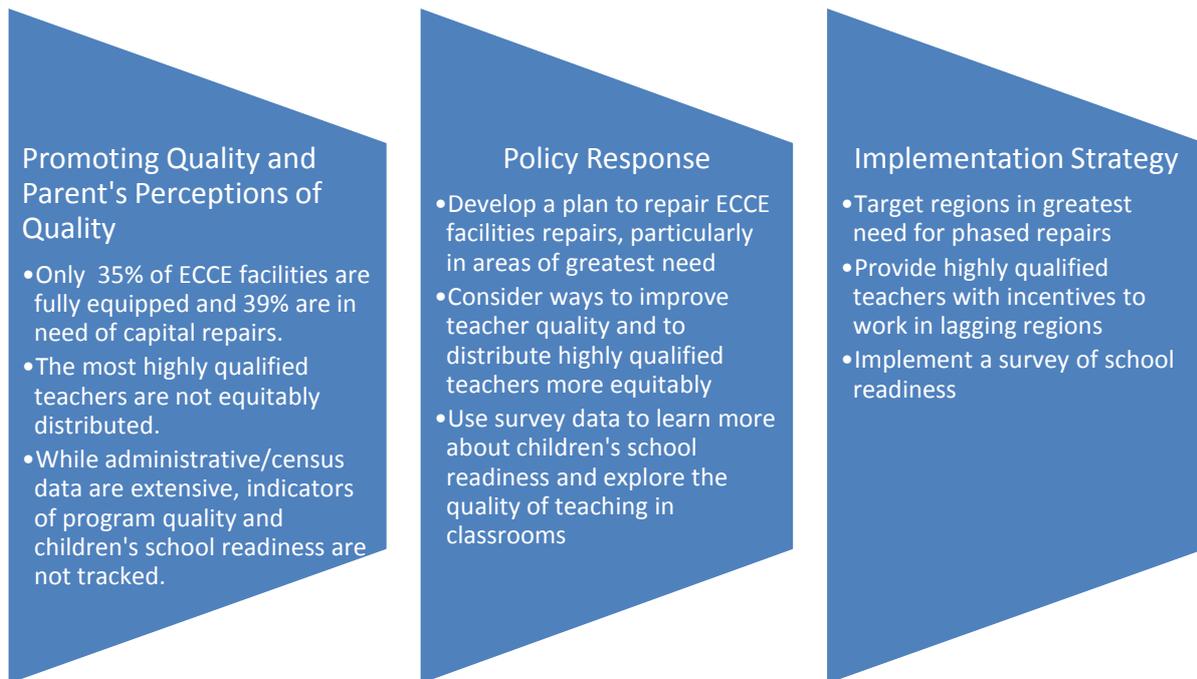


### **Policies and Implementation Strategies to Promote Quality and Improve Parents' Perception of Quality**

88. **The two quality issues that seem to have the greatest effect on enrollment levels and parents' perceptions of the quality of pre-school education are the state of the school's infrastructure and the qualifications of its teachers.** It is clear that the teachers with the highest qualifications are concentrated in specific regions and urban areas. Therefore, policymakers might wish to give these teachers an incentive to work in areas of greatest need as well as improving the quality of the country's pre-service and in-service teacher training programs to produce more teachers with higher qualifications. Also, policymakers must upgrade the infrastructure of ECCE facilities, starting with the areas that are in the greatest need of repairs.

89. **Monitoring is already engrained in the ECCE system of Uzbekistan but at present, there is no system in place to measure the quality of programs or of teaching in the classroom or to measure how well the ECCE system delivers outcomes such as school readiness.** A culture of monitoring and evaluation (M&E) is already well-developed in Uzbekistan, which is a significant advantage as this is not the case in many countries around the world. At the pre-school level, children are frequently evaluated in four areas of development. The challenge is how to ensure that the right aspects of learning are being monitored so that the M&E yields useful information.

**Figure 13: Promoting Quality in ECCE**

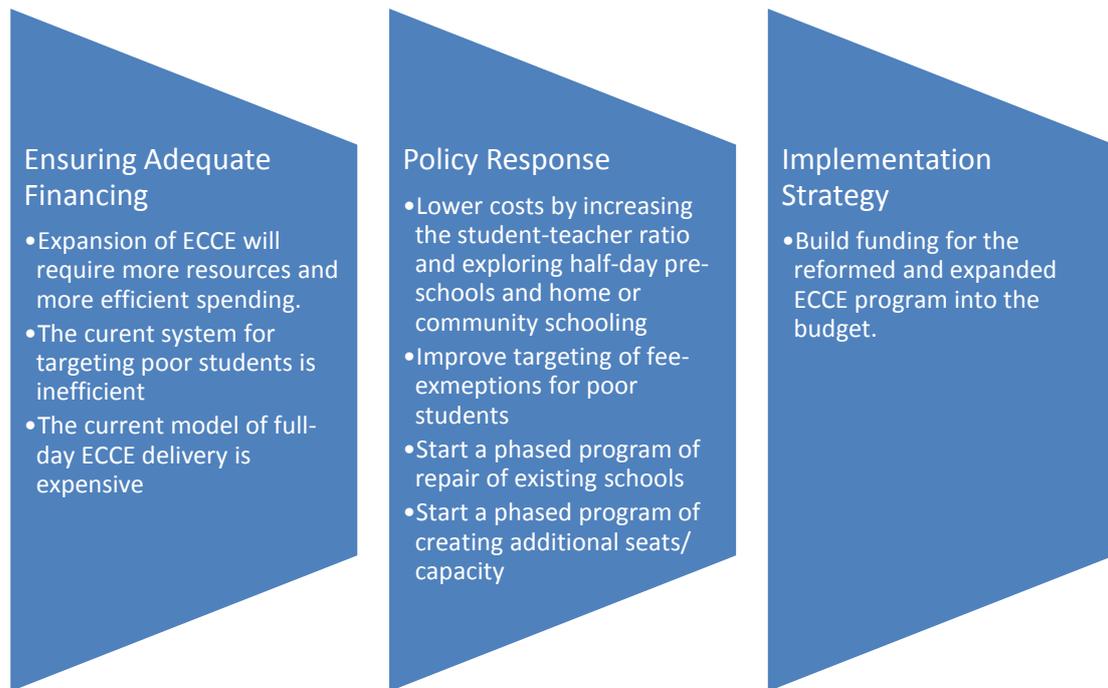


### **Policies Implementation Strategies for Ensuring Adequate Financing**

90. **As discussed above, spending on ECCE in Uzbekistan is equal to 0.8 percent of GDP or around 10 percent of the education budget and yet only 21 percent of 3 to 6 year olds are enrolled in pre-school.** In contrast, most countries that are comparable to Uzbekistan spend about 0.3 to 0.5 percent of their GDP (and between 5 and 10 percent of their education budgets) on ECCE and have much higher enrollment rates of around 50 percent. Clearly the Uzbekistan model of ECCE delivery is expensive, but there are more efficient ways to deliver ECCE, for example, by lowering the student-teacher ratio from 9.3:1 to 15:1 (in accordance with state standards) and by providing ECCE not only in full-time centers but also in half-time pre-schools, home or community-based models, and subsidized private provision.

91. **In addition it is clear that while 15 percent of enrolled students are theoretically exempted from fees, only 5 percent of poorest households have children enrolled in pre-schools.** Many pre-schools are known to charge “fees” per child that are equal to 100 percent of the minimum wage, which means that for many poor families fees are a major constraint preventing them from enrolling their children in pre-school. Therefore, the current way in which the poor are being subsidized needs to be improved. Even with these cost-saving measures, if Uzbekistan is reach its target of 50 percent enrollment of 3 to 6 year olds as is warranted by its level of development, it will have to increase its recurrent spending on ECCE from 0.8 percent of GDP to around 1.2 percent of GDP annually as well as funding a phased repairs of existing schools and the expansion of both center-based and other alternative models of ECCE delivery.

**Figure 14: Ensuring Adequate Financing for ECE**



### **Defining an Strategy for Expanding ECCE in Uzbekistan: Lessons from International Experience**

92. **This section presents a strategy for expanding ECCE in Uzbekistan that draws on lessons learned from international experience.** A detailed analysis of the experiences of a range of other countries in delivering ECCE is presented in Annex 1, but there are **three** key lessons that can be learned from these examples.

93. **ECCE expansion can be achieved by taking either a comprehensive approach or a targeted approach, but the public financing implications are dramatically different for each of these options.** The case of Sweden illustrates how a country can achieve universal coverage of pre-primary education by increasing the amount of resources that it allocates to ECCE. The key advantage of taking this kind of comprehensive approach is that it expands coverage quickly. On the other hand, New Zealand took a more targeted approach to ECCE in which one goal was to increase the coverage of a minority (Māori) population. The most relevant example for Uzbekistan, however, may be Chile's program, *Chile Crece Contigo* (CCC), which takes both approaches simultaneously. The CCC provides a comprehensive set of services aimed at all Chilean children but also encompasses specific interventions that target children from vulnerable families.

94. **Encouraging a range of different ways to deliver ECCE can facilitate a rapid expansion of ECCE.** Sweden has a sound system of quality standards at the national level but has built in a high degree of flexibility in how ECCE services can actually be delivered to beneficiaries at the local level. In the Swedish system, municipalities are the main providers of ECCE and related services in addition to a network of independent schools and early childhood centers. The New Zealand model goes further by combining financing and regulation by the public sector with service provision by the public and private sectors. ECCE services are provided by a wide range of government agencies, not-for-profit organizations, communities, parent groups, and public-private partnerships that vary in their size and coverage. These models of

decentralized service delivery are good examples of how to design an ECCE system that provides the right balance of quality, innovation, and accountability.

95. **To ensure quality and equity, inter-institutional coordination is essential.** All four of the countries mentioned above rely on some degree of coordination among the various actors in their ECCE systems. Australia's strategy is noted for fostering effective coordination between national government and regional and local governments. This element combined with an emphasis on partnerships with local communities and families may be a useful model for Uzbekistan to follow. The decentralized New Zealand model also requires a high degree of coordination between the public, private, and not-for-profit sectors from which Uzbekistan can learn lessons when expanding its own ECCE system. The country can also learn valuable lessons from Chile's management of its CCC program, the way in which it coordinates between different ministries and agencies, and its integrated system of monitoring and evaluation, as well as from how Sweden's national government sets standards and carries out evaluations while the municipalities deliver the actual services.

### **Putting It All Together: A Proposed Strategy for Expanding Quality Early Childhood Education in Uzbekistan**

96. Stemming from the foregoing analysis, we propose a strategy for expanding ECCE in Uzbekistan to reach an enrollment rate of 50 percent. The suggested strategy (which is costed in Table 18) has two components: (i) a Core National Program that would be led and financed by the central government and implemented in all regions of Uzbekistan and (ii) a Supplemental Provincial Program that would provide additional support to lagging regions and that would be implemented by the regional governments. The key challenges facing the ECCE sub-sector that have been identified in this report can be addressed in these components in the following way:

#### **Core National Program**

- *Intervention A:* Increasing the student-teacher ratio and encouraging and expanding the provision of alternative models of ECCE provision (half-day pre-schools, community or /home-based models, and subsidized private provision). This intervention would cost an average of around 1 percent of GDP in recurrent expenditures annually.
- *Intervention B:* Funding quality and accountability initiatives all across Uzbekistan. Systematic random testing of students for school readiness, additional training for parents and communities in ECCE, and the development of television and media campaigns to promote ECCE could cost around 0.05 percent of GDP annually and would improve the quality and increase the accountability of ECCE service delivery.
- *Intervention C:* Targeting support to poor households by exempting 20 percent of the poorest households from fees. Recipients could be targeted using a proxy means test or by improving the current targeting mechanism that operates through Makhallas. It is clear that the current targeting mechanism is only ensuring an enrollment rate of 5 percent of among the poorest quintile of households, even though theoretically 15 percent of all of these students can be exempted from fees. If targeting could be improved, then only an additional 0.06 percent of GDP would be needed annually to fund this intervention.
- *Intervention D:* Phased repairs of existing schools. If cost-saving measures for repairs were applied, then a total of 1.7 percent of GDP would be needed to repair all existing schools. If the cost were spread over five years, an additional 0.35 percent of GDP would be needed annually.

- *Intervention E*: Phased expansion of ECCE capacity. If capacity were expanded beyond existing facilities by the implementation of the proposals in Intervention A, the total capital cost of expansion would be around 3.7 percent of GDP. The total cost of training additional teachers would be 0.5 percent of GDP, but if the cost were spread over 5 years, the annual cost would be less than 0.85 percent of GDP.

### **Supplemental Regional Program**

- *Intervention F*: Funding for targeting low-enrollment regions. These regions would be able to select from a range of demand-side and supply-side interventions to meet their enrollment targets. This range of options would cost around 0.1 percent of GDP to implement and might include: (i) creating information campaigns to persuade families of the benefits of ECCE; (ii) hiring extra staff to deliver expansion targets; (iii) giving performance grants to schools when they reach their targets for increasing enrollments; and (iv) giving performance grants to sub-provinces if they succeed in increasing their pre-school enrollments.

97. **The government could adopt any combination of the interventions that make up the Core National Program depending on the level of targeting that it required and the amount of funding that was available.** Funding for the Supplementary Regional Program Intervention F could be provided by the MoPE at the national level, but the national government might also choose to give regional governments an incentive to allocate additional resources to this program by, for example, offering matching grants from the center. The ECCE services themselves could be delivered by a mix of public and private providers.

### **Options for an ECCE Expansion Strategy**

98. In this section, we explore some of the combinations of options available to the Government of Uzbekistan to reach the goal of 50 percent enrollment in ECCE. (See Annex 5 for the assumptions used in the costing exercise.)

#### Option 1 (4.7 percent of GDP annually)

99. Under this option, we simulated an expansion without changing the existing model of ECCE delivery—in other words, retaining the existing student-teacher ratio and the full-time pre-school model. Under these conditions, the annual cost over the next five years would be around 4.7 percent of GDP. After the capital expenditures were completed, annual recurrent costs of around 2 percent of GDP would be incurred.

#### Option 2 (3.9 percent of GDP annually)

100. If the student-teacher ratio were increased from 9.3 to 15 but all other factors remained the same, the annual cost over the following five years would be around 3.9 percent of GDP. After the capital expenditures are completed, annual recurrent costs of around 1.3 percent of GDP would be incurred.

#### Option 3 (2.4 percent of GDP)

101. If the full Core National Program and a Supplementary Provincial Program consisting of interventions A to E were to be implemented, the annual cost over the following five years would

be 2.4 percent of GDP. After the capital expenditures were completed, annual recurrent costs of around 1 percent of GDP would be incurred.

**Table 18: Costing the Strategy for ECE Expansion: Coverage for Children Aged 2-7 Years Old**

Indicator	Bln Sums	as % of GDP	With Enrollment Increased to 50% of 2-7 Year Olds (as % of GDP)		
			2010	2010	Option 1
Enrollment Rate	20%	20%	50%	50%	50%
% of Vacant Seats in Existing schools	24%	24%	0%	0%	0%
Student-Teacher Ratio	9.3	9.3	9.3	15	15
Total Teachers	56,476	56,476	148,174	113,084	75,389
Total Students	522,945	522,945	1,372,066	1,372,066	1,372,066
<b>Costing the Interventions</b>					
<b>Baseline Annual Recurrent Cost</b>	<b>491.49</b>	<b>0.79</b>	<b>0.79</b>	<b>0.79</b>	<b>0.79</b>
Changing Student-Teacher Ratio and Duration of Daily Schooling			1.29	0.67	0.18
School Readiness Tests, Localized Training			0.10	0.10	0.05
Exempting 20% of the Poorest Children from Fees			0.19	0.19	0.06
Support to Lagging Regions			0.10	0.10	0.10
<b>Projected Annual Total Recurrent Cost</b>			<b>2.48</b>	<b>1.85</b>	<b>1.19</b>
Capital Costs of Repairing Existing Schools			2.54	2.54	1.70
Capital Costs of New Schools			6.93	6.93	3.70
<b>Projected Total Additional Capital Costs</b>			<b>9.48</b>	<b>9.48</b>	<b>5.39</b>
<b>Total Additional Pre-service Teacher Training Costs of New Teachers</b>			<b>2.01</b>	<b>0.77</b>	<b>0.51</b>
<b>If Total Additional Capital and Pre-Service Training Costs of New Teachers were Spread over 5 years</b>					
<b>Annual Additional Capital Costs</b>			<b>1.90</b>	<b>1.90</b>	<b>1.08</b>
<b>Annual Additional Pre-service Teacher Training Costs</b>			<b>0.40</b>	<b>0.15</b>	<b>0.10</b>
<b>Projected Annual Budget (Baseline = 0.79% of GDP)</b>			<b>4.77</b>	<b>3.90</b>	<b>2.37</b>

Notes: Option 1= Baseline S/T ratio, full-time pre-schools, Option 2 = Higher S/T ratio, full-time pre-school, Option 3 = Higher S/T ratio, half-time pre-schools (and other options), 20% lower capital costs, better targeting of poor children

**Table 19: Proposed Implementation Matrix**

	Core National Program	Supplementary Provincial Program
<i>Objective</i>	To provide essential ECCE services to children aged 2 to 7 years old	To provide additional targeted support and resources to the regions with the lowest ECCE enrollment rates
<i>Response Strategy Component</i>		
<b>Ensuring Equity in Access</b>	<p><b><i>To Ensure Equity in Access for Children of All Income Levels:</i></b></p> <p><i>Within 12-18 months:</i></p> <ul style="list-style-type: none"> <li>- Develop the ability to identify and target vulnerable populations within communities</li> </ul> <p><i>Within 18-36 months:</i></p> <ul style="list-style-type: none"> <li>- Encourage vulnerable families to use ECCE services by targeting the poorest 20% of families through CCTs, information campaigns, and parental education.</li> <li>- Phased program of expansion of ECCE capacity by               <ul style="list-style-type: none"> <li>o Direct provision by the MoPE of half-day programs</li> <li>o Subsidized private provision</li> <li>o Community or home-based initiatives</li> <li>o Training of additional teachers/ communities/ parents</li> </ul> </li> </ul>	<p><b><i>To Ensure Equity in Access for All Regions:</i></b></p> <p>Each province can choose from among the following initiatives to increase ECE enrollment:</p> <ul style="list-style-type: none"> <li>- CCTs to communities/Makhallas</li> <li>- Information campaigns/outreach to families</li> <li>- Hiring additional staff</li> <li>- Giving performance grants to schools</li> <li>- Giving performance grants to sub-provinces</li> </ul>
<b>Improving Quality and Increasing Accountability</b>	<p><i>Within 12-18 months:</i></p> <ul style="list-style-type: none"> <li>- Develop a phased plan to ensure that the best teachers are incentivized to go to rural schools.</li> <li>- Develop a phased plan to repair existing schools.</li> </ul>	

	<b>Core National Program</b>	<b>Supplementary Provincial Program</b>
	<ul style="list-style-type: none"> <li>- Use television and other media to deliver ECE content</li> </ul> <p><i>Within 18-36 months</i></p> <ul style="list-style-type: none"> <li>- Implement three-yearly external evaluations of pre-schools (carried out randomly on one-third of schools annually, with a built-in, stratified sub-sample of students assessed for their school readiness)</li> </ul>	
<b>Providing Adequate Financing</b>	<ul style="list-style-type: none"> <li>- Dedicate 1% of GDP annually for five years for repairing existing schools(0.34%) and constructing new schools (0.66%).</li> <li>- Increase ECCE Recurrent Budget gradually from the current 0.79% to 1.2 % over five years to accommodate increased enrolments in ECCE.</li> </ul>	<ul style="list-style-type: none"> <li>- Incentivize regions to increase their contribution for ECCE expansion</li> </ul>

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## Annex 1: Case Study Comparing a Private and a Public Pre-school

The objective of this study was to compare the main characteristics of a private pre-school and a public pre-school and to examine the background and views of the parents who enrolled their children in each facility. Both pre-schools are located in Tashkent City.

### Pre-School Facilities, Enrollment, and Financial Information

The study team gathered information on pre-school characteristics in face-to-face discussions with the relevant bodies within the pre-school administration.

### Summary of Facilities, Working Hours and Basic School Policies

As Annex Table 1.1 below summarizes, there are differences between the schools in terms of the size of their land plot and the number and size of their buildings. Neither school offers free enrollment to low-income families, but the public school does offer a discount to families who have more than one child enrolled in the school. Both schools offer instruction in Russian, but the private school also offers instruction in English and the public schools also offers instruction in Uzbek.

**Annex Table 1.1: Characteristics of the Two Pre-schools**

	Private Pre-school	Public Pre-school
<b>Size of land plot</b>	10,249 m <sup>2</sup>	5,910 m <sup>2</sup>
<b>Number of buildings</b>	6 (plus 2 storage buildings)	1 (plus 2 storage buildings)
<b>Size of buildings</b>	7,456 m <sup>2</sup>	9,380 m <sup>2</sup>
<b>Working days and hours</b>	Monday-Saturday, from 09:00 to 18:00 (17:00 on Sat.)	Monday-Friday from 08:00 to 18:30
<b>Free enrollment for low-income families?</b>	No	No but second child receives a discount of 29%
<b>Language of instruction</b>	Russian and English	Russian and Uzbek

### Summary of Enrollment and Ages of Children

As Annex Table 1.2 shows, the public pre-school is over-subscribed. In both schools, children aged 5 years old account for the greatest percentage of enrollment followed by children aged 6.

**Annex Table 1.2: Enrollment and Ages of Students**

	Private Pre-school	Public Pre-school
<b>Capacity</b>	124 children	220 children
<b>Actual Enrollment</b>	124 children	265 officially registered, but average attendance is 230
<b>7 year olds</b>	0	3
<b>6 year olds</b>	29	58
<b>5 year olds</b>	41	72
<b>4 year olds</b>	25	45
<b>3 year olds</b>	17	57
<b>2 year olds</b>	12	30

## Number of Staff, Their Functions and Net Salaries per Month

Despite having a capacity that is only 55 percent of the public pre-school, the private pre-school's monthly budget is double the monthly budget for the public pre-school. There are also significant differences in the number and characteristics of their employees. There are more management and specialist teachers employed in the private pre-school. The medical staff in the private pre-school includes doctors as opposed to just nurses in the public pre-school. The combined number of teachers and teaching assistants is the same in each school, despite significantly different enrollment levels. This results in a student-teacher ratio of 5.6:1 in the private pre-school and 10:1 in the public pre-school (based on capacity).

**Annex Table 1.3: Title?**

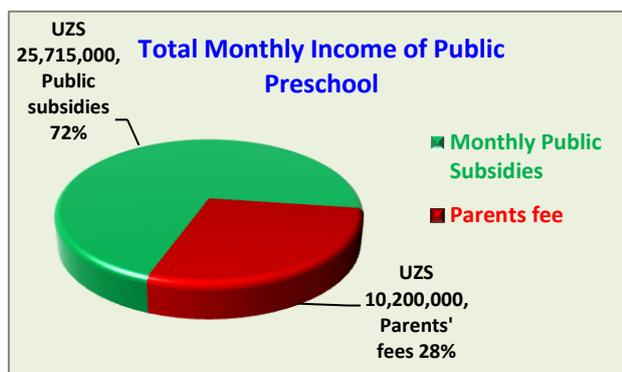
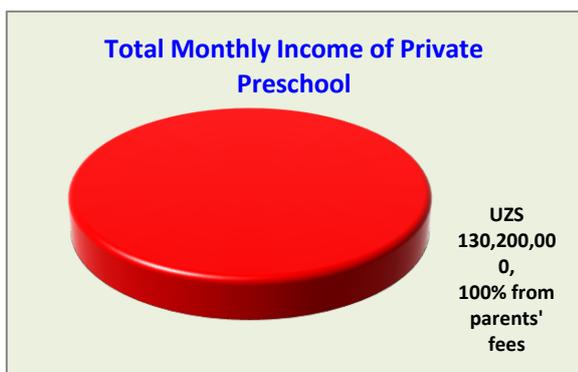
Private Pre-school			Public Pre-school		
Position	Number of staff	Salary	Position	Number of staff	Salary
Management	4	685,449 UZS	Principal	1	328,709 UZS
Methodologist	1	685,449 UZS	Methodologist	1	244,135 UZS
Psychologist	1	685,449 UZS	Psychologist	1	244,135 UZS
Music Teacher	1	685,449 UZS	Music teacher	1	404,000 UZS
Physical Teacher	1	685,449 UZS	Physical Teacher	1	207,496 UZS
Speech Pathologist	1	685,449 UZS	Speech Pathologist	1	240,025 UZS
Speech Therapist	1	685,449 UZS	Classroom Teachers	11	332,912 UZS
Dance Teacher	1	685,449 UZS	Assistant Teachers	11	197,176 UZS
Foreign Language Teacher	5	645,864 UZS	Electrician/Carpenter	1	188,634 UZS
Classroom Teachers	14	657,174 UZS	Logistics Manager	1	188,634 UZS
Teacher Assistant	8	600,624 UZS	Accountant	1	337,377 UZS
Medical Staff (Doctors and nurses)	5	645,864 UZS	Medical Staff (nurse)	2	263,788 UZS
IT Specialist	1	600,624 UZS	Cook staff	2	288,267 UZS
Cook Staff	5	645,864 UZS	Cook assistant	1	171,448 UZS
Laundress	1	600,624 UZS	Laundress	2	188,634 UZS
Cleaning Ladies	3	544,074 UZS	Cleaning Ladies	3	197,176 UZS
Territory Cleaner	1	645,864 UZS	Plumbing Specialist	1	188,634 UZS
Security Guards	4	657,174 UZS	Security Guards	3	170,627 UZS
<b>TOTAL</b>	<b>58</b>	<b>32,296,117 UZS</b>	<b>TOTAL</b>	<b>45</b>	<b>16,450,000 UZS</b>

## Monthly Income of the Pre-schools

The total monthly income of the private pre-school is 1,30,200,000 UZS, which consists entirely of parents' fees. The monthly fee per child is 1,050,000 UZS.

The total monthly income of the public pre-school is 35,915,000 UZS, with 72 percent of this income being provided via public subsidies (25,715,000 UZS) and 28 percent via parents' fees (10,200,000 UZS). All money provided via parents' fees is used to pay for food. Parents with one child enrolled in the school pay a fee of 62,920 UZS per child, while parents with two or more children enrolled in the school pay a discounted fee of 47,700. In this pre-school, 71 percent of all children are from families with two or more children enrolled who are thus eligible for the discounted fee.

**Annex Figure 1.1: Monthly Income**



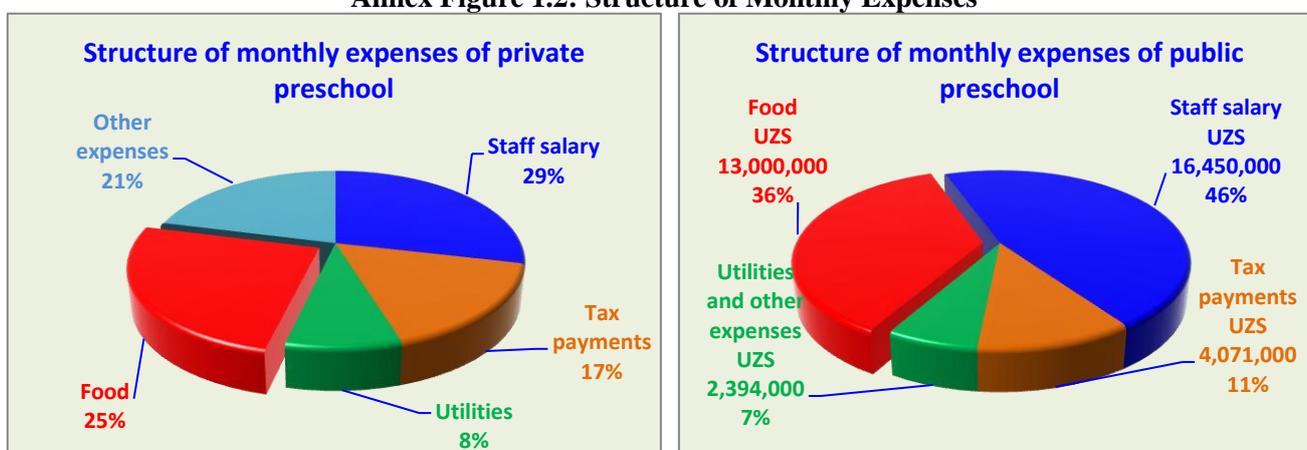
### Monthly Expenditures of the Pre-schools

As indicated in Annex Table 1.4 below, the monthly expenditures of the two schools vary, with the public pre-school spending more on staff salaries and food. The private pre-school has a higher tax burden and miscellaneous expenses.

**Annex Table 1.4: Monthly Expenditures**

Name of Expenditure	Private Pre-school		State Pre-school	
	Amount	Percentage of expenses	Amount	Percentage of expenses
Staff salaries	37,296,117	29%	16,450,000	46%
Tax payments	21,610,525	17%	4,071,000	11%
Utilities	10,912,000	8%	2,394,000	7%
Food	32,984,000	25%	13,000,000	36%
Other expenses: • Household goods • Stationery • Different services (internet, bank, etc.) • Furniture • Repairs	27,397,358	21%		
<b>TOTAL</b>	<b>130,200,000 UZS</b>	<b>100%</b>	<b>35,915,000 UZS</b>	<b>100%</b>

**Annex Figure 1.2: Structure of Monthly Expenses**

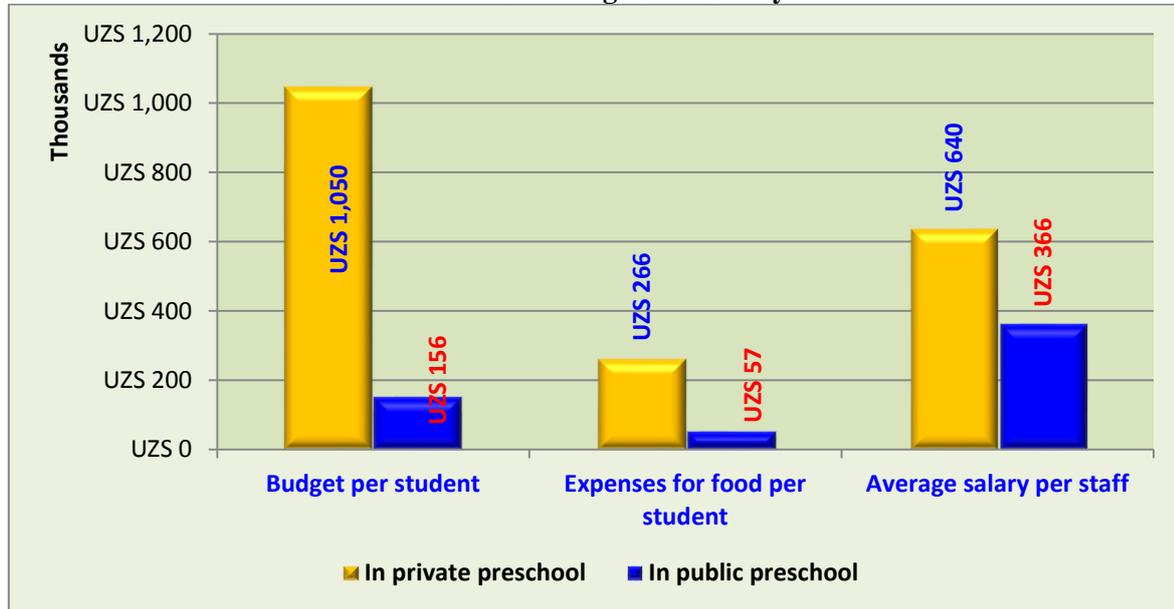


**Annex Table 1.5: Pre-schools Budgets per Student**

No	Items	Private Pre-school	Public Pre-school
1	Number of students	124	230 *
2	Total budget	130,200,000	35,915,000
3	Budget per student	1,050,000	156,152
4	Expenses for food per student	266,000	56,521
5	State subsidies per student	0	111,804

Notes: The public pre-school holds classes for 5 days per week and the private pre-school holds classes for 6 days per week. \* The number of actual registered students is 265, but the average attendance is 230.

**Annex Figure 1.3: Comparison of Budget and Food Expenses per Student and Average Staff Salary**



## II. Characteristics of Parents and their Perceptions of ECCE

The study team gathered information from a sample of parents at each pre-school on their characteristics and on their perceptions of the role played by ECCE in the lives of their children. The parents were each given a brief multiple-choice questionnaire to fill in. Replies were received from a total of 192 parents of 96 children (46 children from the private pre-school and 50 children from the public pre-school).

### Information about Education and Employment of Parents

Annex Table 1.6 presents information that the parents gave about their own education level.

**Annex Table 1.6: Education of the Parents**

	With Higher Education		With Vocational Education		With Secondary Education		Employed		Unemployed	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Fathers	34	41	14	2	2	3	49	45	1	1
Mothers	29	36	17	9	4	1	32	15	18	31
Subtotal	63	77	31	11	6	4	81	60	19	32
TOTAL	140		42		10		141		51	

The parents were asked what their main reason was for enrolling their children in pre-school. A large majority of the respondents indicated the “importance of pre-school education” was the main reason for enrolling their children. Annex Table 1.7 presents the most common answers given in the multiple-choice questionnaire.

**Annex Table 1.7: Reasons Given by Parents for Enrolling their Children in Pre-school**

	Answers	Private pre-school	Public pre-school	Total
1	Both parents working	3	15	18
2	Importance of pre-school education	43	35	78
3	Good meals are supplied in pre-schools	6	7	13
4	Because it is free (for socially vulnerable families)	0	4	4

Some respondents added some extra reasons, including:

- Because of the knowledge provided here and also the pre-school’s child health care activities
- Improving thinking and communication skills
- Good conditions and food
- Child learns environment and communication
- For easy adaptation to the society and communication with children of the same age.

The parents were also asked why they had chosen that particular pre-school, and the responses of the public pre-school parents and the private pre-school parents were noticeably different for this question. As can be seen in Annex Table 1.8, most private pre-school parents answered “following others’ recommendations,” while most public school parents answered “convenient location.”

**Annex Table 1.8: Reasons Why Parents Chose This Particular Pre-school**

	Answers	Private pre-school	Public pre-school	Total
1	Convenient location	6	27	33
2	Affordable fees	3	17	20
3	Good reputation of pre-school	13	11	24
4	Following others’ recommendation	19	3	22

Some additional responses are shown in Annex Table 1.9.

**Annex Table 1.9: Additional Reasons Why Parents Chose This Particular Pre-school**

Private	Public
<ul style="list-style-type: none"> <li>• We just like this pre-school</li> <li>• All the reasons mentioned are applicable</li> <li>• Good education, conditions, and food</li> <li>• Teachers have very good communication skills</li> <li>• I have confidence in this pre-school and it is thoroughly convenient</li> <li>• Highly educated teachers and highly competent in working with children</li> <li>• Adequate ration of food and good education</li> <li>• Competent teachers, good food, high standard conditions</li> </ul>	<ul style="list-style-type: none"> <li>• According to the result of teachers work</li> <li>• We appreciate and are satisfied with the results achieved by the children</li> <li>• We like the teaching staff very much</li> </ul>

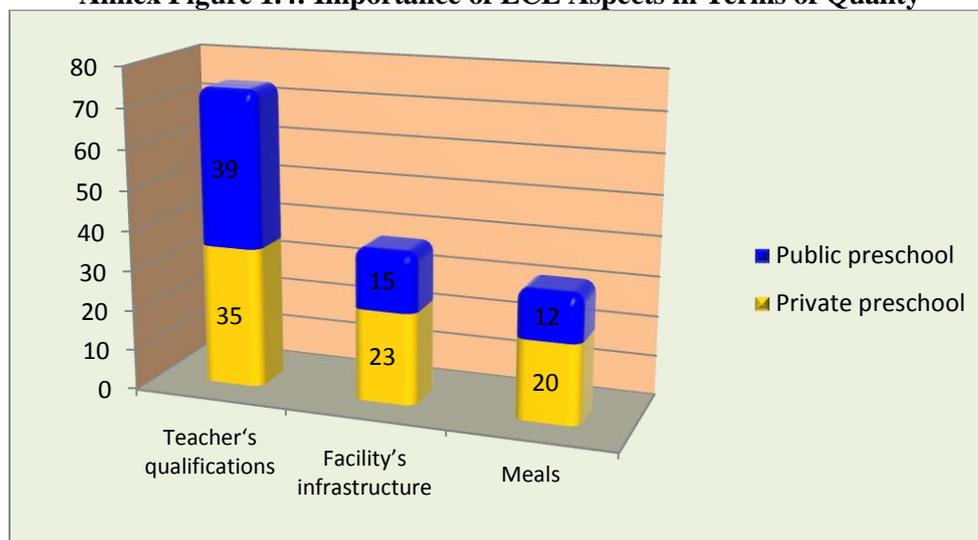
The parents were then asked if they were aware of other childcare options for their young children and if so why they chose to enroll their child in pre-school as opposed to other options. Their answers are presented in Annex Table 1.10.

**Annex Table 1.10: Why Parents Chose Pre-School Instead of Other Childcare Options**

Private	Public
<ul style="list-style-type: none"> <li>• We liked this option</li> <li>• Excellent conditions for care and education, highly skilled team of teachers</li> <li>• We like this pre-school</li> <li>• I am satisfied with its schedule</li> <li>• This pre-school provides a good education and we like the way in which the teachers communicate</li> <li>• The quality of education is good here</li> <li>• Convenient combination of learning-food-contingent</li> <li>• Because this pre-school suits our child</li> <li>• Because everybody knows this pre-school</li> <li>• This is a prestigious pre-school</li> <li>• My child likes it very much</li> <li>• Strong knowledge, proper contingent and care</li> </ul>	<ul style="list-style-type: none"> <li>• Trust</li> <li>• Because of the health and interests of my child</li> <li>• Because the working schedule of this pre-school is convenient</li> <li>• This pre-school is convenient for me in various ways</li> <li>• Good conditions and convenience</li> <li>• I choose this pre-school in order to ensure my child's health was taken care of</li> <li>• The pre-school is located close to my workplace</li> <li>• Good teachers</li> <li>• To increase my child's sense of responsibility</li> <li>• For additional development of my child's logical thinking</li> <li>• The conditions, fees, and education are suitable</li> <li>• I believe that the education in pre-school is better than in other childcare options [<b>check</b>]</li> </ul>

The parents were then asked “Which aspect [of the pre-school] is the most important for you in terms of quality?” The majority of respondents in both pre-schools said that the quality of the teacher’s qualifications was the most important aspect. They also gave a high rank to infrastructure quality.

**Annex Figure 1.4: Importance of ECE Aspects in Terms of Quality**



The questionnaire went on to ask the parents what they valued most about their child’s attendance in ECE. Annex Table 1.11 presents their responses.

<b>Annex Table 1.11: What Parents Value Most about Their Child's Enrollment in ECE</b>	Private	Public
<ul style="list-style-type: none"> <li>• Adapts to society and encourages social development</li> <li>• Education in early ages is important</li> <li>• Preparation for school, and for being part of a team</li> <li>• Development of communication skills</li> <li>• Children should start ECE at least from the age of 4</li> <li>• Child should have all-round education and develop communication skills with the same age children</li> <li>• Development of mentality</li> <li>• It makes the child aware of everything</li> <li>• The child should develop alongside same age children</li> <li>• The child learns kindness</li> <li>• For general development</li> </ul>		<ul style="list-style-type: none"> <li>• For successful development and school preparation</li> <li>• Learns how to act under different circumstances</li> <li>• Receives special education and care</li> <li>• Will make primary school easier and will strengthen the child's education</li> <li>• I think it provides an important foundation before primary school</li> <li>• Makes the child more independent Mental and physical development</li> <li>• Adequate education</li> <li>• Learning in a healthy and clean environment</li> <li>• Mental-psychological development and understanding of the child's environment</li> <li>• Learns how to behave in a group and how to make friends</li> <li>• Improves world outlook</li> <li>• Receiving a professional education from specialists</li> <li>• Early age education is important</li> <li>• Learning with the help of highly educated teachers</li> </ul>

The questionnaire asked the respondents' opinion about the best ways to persuade other parents whose children are not yet enrolled in pre-school of its benefits. The respondents made the following suggestions: the internet, Makhallas, polyclinics, television, texting (SMS service), newspapers, through doctors, psychologists, or teachers, through communication with parents, radio, through talking with neighbors, friends, and relatives, or through seminars and training.

Parents were also asked if they incurred any extra pre-school expenses in addition to the monthly fee and if so how much and on what? Annex Table 1.12 presents their replies.

**Annex Table 1.12: Any Extra Pre-school Expenses**

Private	Public
<ul style="list-style-type: none"> <li>• Exercise therapy, massage</li> <li>• Massage and speech pathologist</li> <li>• For additional classes/exercises</li> <li>• Additional massage</li> </ul>	No

They were then asked for what improvements they might be prepared to pay extra, and their answers are given in Annex Table 1.13.

**Annex Table 1.13: The Improvements for which Parents Might Pay Extra**

	Private	Public	Total
▪ Improving the quality of pre-school education	23	21	44
▪ Improving infrastructure	4	4	8
▪ Improving the quality of meals	6	8	14
▪ Others: music, sport, foreign language, gymnastics, dancing, Wu-shu, Taekwondo classes			

## **Annex 2: Early Childhood Interventions in Four OECD Countries**

This annex presents case studies of early childhood interventions in four OECD countries: Australia, Chile, New Zealand, and Sweden.

### **Australia: A National ECD Strategy and a National Quality Standard**

1. Australia's total population is estimated at 21.5 million people, of whom 1.37 million are children aged 0 to 4 years old. Australia performs comparatively well on some indicators of child health and well-being, such as school achievement at 15 years of age and material well-being. Nevertheless, significant areas of concern persist, particularly in relation to the outcomes of indigenous children. In nearly every reported category of child health and well-being, indigenous children score markedly worse than their non-indigenous counterparts, and in many instances, they are among the least successful performers in OECD rankings. Australia has developed a comprehensive model of ECD interventions that are national, state, and regional in scale and aim to provide each child with the best possible start in life. It is important to note that Australia has great diversity of interventions; some programs have very wide coverage, whereas others are micro-programs with a specific intervention aimed at a precisely targeted population.

In 2009 the national, state, and territory governments of Australia jointly developed *Investing in the Early Years: A National Early Childhood Development Strategy*. The aim of this strategy is "to ensure that by 2020 all children have the best start in life to create a better future for them and for the nation." The strategy is a comprehensive approach to ECD that focuses on the whole child from the antenatal period to 8 years old in many different dimensions and acknowledges the various vital roles that families, communities, organizations, the workplace, and the government all play in shaping development in early childhood.

The strategy identifies seven target outcomes for realizing the strategy's vision: (i) children are born and remain healthy; (ii) children's environments are nurturing, culturally appropriate, and safe; (iii) children have the knowledge and skills needed for life and learning; (iv) children benefit from social inclusion and are not disadvantaged, especially indigenous children; (v) children are engaged in and benefitting from educational opportunities; (vi) families are confident and have the capabilities to support their children's development; and (vii) quality ECD services that support the choices made by families regarding their participation in the workforce are provided. The strategy also outlines seven elements needed to deliver a comprehensive ECD system with the child placed at the nexus of need including: (i) support for children, parents, caregivers, and communities; (ii) responsive ECD services; (iii) quality and regulation; (iv) knowledge management and innovation; (v) workforce and leadership development; (vi) infrastructure; and (vii) governance and funding. Associated with each element are a number of immediate actions, reforms, and future commitments made by the Commonwealth of Australia, state, and territory governments and other stakeholders.

The strategy calls for streamlined governance mechanisms (including payment and administration) at the national, state, and local level, clarified roles and responsibilities, greater accountability, and the continuity needed to foster effective decision-making and joint planning. The strategy also aims to improve the quality of early childhood education (ECE) and care by adopting a National Quality Standard. The standard encompasses seven quality areas, which "capture aspects critical to the provision of quality early childhood education and care and outside school hours care [OSHC] services, including educational concept and practice, structural quality, interactions between educators and children, and targeting services to meet the needs of families and local communities" (Council of Australian Governments, 2009). The

seven quality areas are: (i) educational program and practice; (ii) children's health and safety; (iii) physical environment; (iv) staffing arrangements, including staff-to-child ratios and qualifications; (v) relationships with children; (vi) collaborative partnerships with families and communities; and (vii) leadership and service management.

The quality standard is accompanied by an updated legal framework and a system for assessing and rating ECE service providers. The rating system "combines the seven quality areas with a five-point rating scale that describes the quality of early childhood education and care and OSHC that all families, services, and the broader community should expect to find in the diverse childhood education and care settings available across Australia" (Council of Australian Governments, 2009). The system is designed to yield information about the quality of service provision by means of independent evaluations and to foster accountability through partnerships with families and local communities.

Australia has a strong track record of ECD and has an early childhood infrastructure that already includes numerous services, interventions, and an effective social safety net. The strategy aims to improve the coordination of existing efforts, rethink some of the current approaches, and fill gaps to provide a framework that ensures that all children are given the best possible opportunity to excel in life. To this end, the strategy emphasizes the most marginalized children, especially those in rural, indigenous communities.

### **Chile: The Dual Comprehensive and Targeted Approach**

Chile has a population of 17 million people, of whom some 1.24 million are under 5 years old. In the last several decades, successive governments have implemented a number of important policies that have positively affected young children, for example, by increasing the access of the poorest families to quality health care, pre-schools, and social protection. Despite this significant progress, geographical and socioeconomic inequalities persist. While poverty in 2009 affected 15.1 percent of the population, it affected 24.6 percent of children under the age of 4 (rising to 39.1 percent in rural indigenous areas), which implies that Chile's youngest people are among its poorest. Pre-school enrollment has increased dramatically in recent years, with 66.4 percent of children aged 4 and 5 years old attending pre-school in 2008. The policy aimed at early childhood – *Chile Crece Contigo* ("Chile Grows with You") – is composed of a diverse set of programs, including sectoral, cross-sectoral, multi-sectoral, and comprehensive interventions.

When Chile's former President, Michelle Bachelet, was inaugurated in 2006, she announced that her administration would prioritize early childhood protection and equalize developmental opportunities for all Chilean children. Accordingly, a Presidential Commission conducted technical work and extensive consultations to lay the foundation under the CCC for the design and implementation of an integrated system of social protection for children up to 4 years of age with benefits, interventions, and social services to ensure that all children reach their full potential in life.

The CCC coordinates the many sectoral initiatives and programs at each stage of a child's life. The exact levels of support and services provided are determined by each child's specific needs. Services provided through the CCC include prenatal and birth services, daycare and pre-school centers, subsidies for children in the poorest 40 percent of families, and monitoring of children's ECD trajectory. The Ministry of Planning (MIDEPLAN, *Ministerio de Planificación y Cooperación*), specifically the Executive Secretariat for Social Protection, is responsible for overseeing the CCC. Several other institutions are important strategic partners, including the Ministries of Health, Education, and Labor. The health sector plays a central role in the CCC,

providing most of the services and screening. MIDEPLAN and the World Bank are working together to design an integrated system of monitoring and evaluation for the CCC.

One of the key aspects of the CCC is its dual structure, which brings together a comprehensive support for all children in the country with targeted support to the most vulnerable. The following universal interventions of the CCC provide support to all of Chile's children:

- Mass education programs (including awareness campaigns, libraries, and other educational resources).
- Interactive information channels (including a dedicated phone line, website, and monthly e-newsletter).
- Legislative proposals (including improved adoption laws and changes in maternity and paternity leave).

Additionally, a bio-psychosocial development support program follows the development path of all children who are covered by the public health system (75 percent of Chile's children).

The targeted intervention component then provides differentiated support to the most vulnerable children (Silva, 2010). It includes the following services:

- Home visits
- Automatic access to family allowance
- Access to free ECE services through nurseries and kindergartens
- Preferential access to public programs
- Comprehensive care for children with development delays
- Technical aids for disabled children.

Thus, Chile's CCC system is designed to be both comprehensive (to improve the outcomes for all children) and targeted (to provide additional support to the most vulnerable). While the implementation of the CCC in Chile is still very much in its early stages, it will undoubtedly provide many lessons for countries considering similar policies.

### **New Zealand: Serving a Diverse Population through Targeted Interventions and Public-Private Partnerships**

New Zealand is a small nation with approximately 4.2 million people. According to the 2001 census, approximately 8 percent of the population is Māori and 4.5 percent Pacific Islander. New Zealand boasts near universal rates of literacy and performs well in important human development indicators, such as the infant mortality rate and life expectancy at birth. It has a collection of interventions that aim to provide children and their families with the services and tools necessary to excel in life.

When the Labor Party returned to government in New Zealand in 1999, ECD became a top priority, with an emphasis on ECE. In particular, reducing disparities between Māori and non-Māori and between Pacific Islander and non-Pacific Islander children was given a high priority.

Today New Zealand has an extensive social protection system that uses a targeted support model to reach individuals and families in need of ECD. An important component of this system is the Working for Families package introduced in 2004. This package includes a Family Tax Credit, In-work Tax Credit, a Minimum Family Tax Credit, and a Parental Tax Credit, with the latter two components tailored to support lower-income families.

The Ministry of Social Development (MoSD) oversees child protection in New Zealand, with a particular focus on at-risk families. Child, Youth, and Family is one of the most extensive MoSD services and employs more than 1,300 social workers and approximately 4,500 caregivers. Child, Youth, and Family also deals with instances of child abuse or neglect, helping more than 5,000 children living with caregivers and networking with agencies and communities to coordinate support for children and their families.

The New Zealand model of financing is a public-private partnership that couples public funding and regulation with a private delivery system. This approach has been successful in establishing a diverse set of services that meet the varying needs of families with young children.

Establishing an institutional anchor (or anchors) is essential for coordinating the different sectors engaged in ECD. In New Zealand, the Ministry of Education, the Ministry of Health, and the MoSD all contribute to the design and management of ECD policies and interventions while collectively working to ensure continuity between the early childhood and primary years. There is a high level of inter-institutional coordination within New Zealand's ECD system. The Early Years Service Hubs developed by the MoSD provide families with a single point of access to information and a range of integrated services offered by the Ministries of Education, Health, and Social Development (among other ministries and organizations) prior to a child's birth and up to school entry.

ECD interventions in New Zealand are operated directly by government ministries and agencies, not-for-profit organizations, communities, parent groups, or some combination of public-private partnerships. These interventions can be as small in coverage and design as the Young Parents' Breastfeeding Group (which underscores the impact a grassroots group can have on improving ECD in a specified area with very little funding) or as large, comprehensive, and complex as Well Child Services.

Since the early 1990s, participation in ECE has increased dramatically to reach near-universal levels. Although some indigenous populations (specifically the Māori) have lower enrollment rates than the national average, this gap has been significantly reduced and is now close to parity. The Ministry of Education also provides an extensive early intervention system for children with special education needs from the time they are born until they enter primary school. More than 95 percent of eligible children use these services prior to attending primary school.

*Ngā Huarahi Arataki: A 10-Year Strategic Plan for Early Childhood Education* aims to provide quality ECE to all children regardless of their circumstances by increasing participation, enhancing the quality of ECE services, and promoting collaborative relationships. The ECE curriculum model, *Te Whāriki*, provides a theoretical basis, goals, and philosophies for practice, promotes shared understanding and language, and provides a framework for assessing early childhood education in New Zealand.

### **Sweden: National Standards and Local Flexibility**

Sweden's population of 9 million people enjoys one of the highest standards of living in the world, and as a result, young children in Sweden have access to a wide range of quality services to support their growth and development. Sweden consistently ranks in a number of international indexes as one of the top countries in which to live as a mother, woman, or a child. It has implemented a dynamic collection of varied, thorough ECD interventions that are supported by public policy and constitute one of the world's most extensive social protection systems.

Sweden is only one of three countries in the world that has made ECE and care for young children a legal right. ECD policy development—for childcare and pre-school in particular—has been a priority in Sweden for many years and is regularly discussed in the political arena. Not surprisingly, Sweden sets the international standard for high-level ECD policy development and has achieved near-universal attendance in early childhood education and care.

Sweden’s pre-school system has three specific and differentiated interventions – pre-school services, family daycare homes, and open pre-schools. Most children are enrolled in pre-school services, which operate year round and accommodate between 15 and 20 students per class. Family daycare homes are more common in rural areas, complementing pre-school services by offering smaller class sizes for students with unique needs. Open pre-schools, an alternative to conventional pre-schools, target the children of stay-at-home parents who wish to accompany their children to school. In the 2007 school year, slightly more than 85 percent of all children from 1 to 5 years were enrolled in the pre-school system in Sweden.

Since 1998, pre-schools have had their own curriculum, national goals, and guidelines defined by the Ministry of Education and Science. The health sector works closely with pre-school interventions to deliver selected health services. The pedagogical principles of the curriculum are based on the idea that pre-school is to be fun, secure, and instructive for all enrolled children. Within these frameworks, municipalities decide how activities are to operate, subject to the inspections and approval of the Swedish Schools Inspectorate (SSI).

The SSI is a national agency established in 2008 with three areas of responsibility:

- Educational inspection
- Investigation of complaints
- Approval of independent schools.

The SSI ensures that independent, municipally operated pre-schools are subject to regular supervision and thematic quality evaluation. Municipalities are allowed to charge a reasonable fee for each intervention in the pre-school system. This fee is usually nominal and in most areas is related to the family’s income and the child’s attendance. In return, each “municipality must draw up a quality report at municipal level with regard to all municipally-run pre-school activities, school-age child care, and school activities. Every school must draw up a quality report at operational level.”<sup>28</sup> In this way, the Swedish pre-school system is able to combine the enforcement of national standards with a high degree of local flexibility.

## **Lessons Learned from International Experience**

Several lessons can be learned from these international experiences that are relevant for Uzbekistan’s ECCE program.

### ***Lesson 1: Comprehensive versus Targeted Approaches***

The case of *Sweden* illustrates a country’s ability to expand the amount of resources devoted to early childhood interventions to achieve universal coverage. This comprehensive approach has the advantage of quickly scaling up coverage. On the other hand, the case of *New Zealand* offers a more targeted intervention, in which one goal was to increase ECCE coverage of a minority

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<sup>28</sup> Swedish Schools Inspectorate (2009)

(Māori) population. The most relevant example may be the dual comprehensive and targeted support offered by *Chile's Chile Crece Contigo* (CCC) program. This dual structure ought to be studied closely to see how the goal of universal coverage may need to be paired with a set of targeting mechanisms to reach the most vulnerable.

### ***Lesson 2: National Standards and Assessments***

The cases of *Australia* and *Sweden* both offer valuable lessons for instituting sound quality standards in ECCE. Australia's National Quality Standard and the Swedish Schools Inspectorate are examples of policies and institutions put in place by the respective governments to ensure that the services provided in ECCE meet the established quality benchmarks.

### ***Lesson 3: Flexibility in Service Delivery***

While a sound system of quality standards must be set at the national level, *Sweden* allows for a high degree of local flexibility in how ECCE services are actually delivered to beneficiaries. In the Swedish system, municipalities are the primary providers of ECCE and related services in addition to a network of independent schools and early childhood centers. The *New Zealand* model goes further by combining public financing and regulation with private service provision. Early childhood services are delivered by an extensive network of government agencies, not-for-profit organizations, communities, parent groups, and public-private partnerships that vary in their size and coverage. Policymakers in *Uzbekistan* should study these models of decentralized service delivery to design a system that provides the right balance of quality, innovation, and accountability in ECCE.

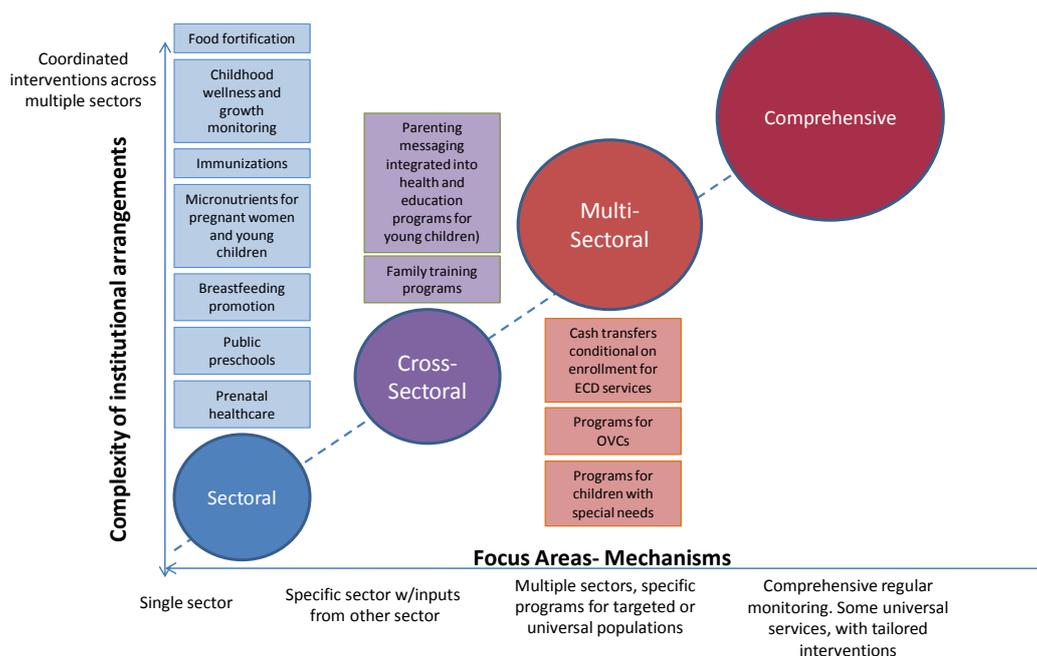
### ***Lesson 4: Inter-institutional Coordination***

All four national systems described above rely on some degree of coordination among various actors. *Australia's* strategy is noted for fostering effective coordination between national government and regional and local government. This strength, along with an emphasis on partnerships with local communities and families, can serve as a model. The decentralized *New Zealand* model also requires a high degree of coordination between the public, private, and not-for-profit sectors from which lessons can be drawn. The management of the *Chilean* CCC program, the mechanisms for coordinating the initiatives of different ministries and agencies, and CCC's integrated system of monitoring and evaluation all contain valuable lessons for *Uzbekistan*, as does the *Swedish* example of having the central government set standards and conduct evaluations while the municipalities deliver the services.

### Annex 3: A Snapshot of Early Childhood Development Interventions in Uzbekistan

Uzbekistan presently has numerous ECD programs at the national, state, and municipal levels, including sectoral, cross-sectoral, and multi-sectoral interventions. Annex Figure 3.1 groups selected ECD programs by type of intervention using the SABER-ECD program typology. It is important to note that these figures offer only a snapshot of the numerous interventions that are operating in the country. These interventions were selected on the basis of their relevance and on the availability of information on them.

**Annex Figure 3.1: Selected ECD Interventions in Uzbekistan**



## Annex 4: Expenditures on Education and Early Childhood Education and Progress in Pre-primary Enrollment Around the World

**Annex Table 4.1: Public and Private Expenditures on Pre-primary Education  
for Children aged 3 to 6 in 2005 (percentage of GDP)**

Country	Public	Private	Total
Australia	0.07	0.03	0.1
Austria	0.42	0.13	0.55
Belgium	0.58	0.01	0.59
Canada	0.2	n.a.	0.2
Czech Republic	0.43	0.03	0.46
Denmark	0.65	0.15	0.81
Finland	0.34	0.03	0.38
France	0.65	0.03	0.67
Germany	0.4	0.14	0.53
Hungary	0.73	0.07	0.79
Ireland	0.39	n.a.	0.39
Italy	0.39	0.05	0.44
Korea, Rep. of	0.05	0.11	0.16
Mexico	0.52	0.08	0.61
Netherlands	0.37	0.01	0.38
Norway	0.84	0.18	1.02
Portugal	0.3	n.a.	0.35
Sweden	0.52	0	0.52
United Kingdom	0.45	0.02	0.47
United States	0.38	0.11	0.49
<b>Average</b>	<b>0.434</b>	<b>0.07</b>	<b>0.495</b>

*Source:* OECD (2006) p. 247, Table 5.4, quoted in Naudeau et al (2011) p. 180, Table 4.2 A-2

**Annex Table 4.2: Total Public Expenditure on Education and Pre-school Education in 2004  
(percentage of GDP)**

Country	Total Education Expenditure	Pre-primary Education Expenditure	Pre-primary as % of Total Education Expenditure
			Spending 10% and above
Moldova	4.2	0.8	19
Mongolia	5.7	1.0	17.5
Belarus	5.8	1.0	17.2
Bulgaria	4.4	0.6	13.6
Hungary	6.3	0.8	12.7
Slovak Republic	4.1	0.5	12.2
Guyana	5.8	0.6	10.3
France	6.0	0.6	10
			Spending 5-10%
Slovenia	6.1	0.6	9.8
Chile	4.1	0.4	9.8
Israel	7.5	0.7	9.3
Kuwait	7.6	0.7	9.2
Seychelles	5.7	0.5	8.8
Croatia	4.6	0.4	8.7
Spain	4.6	0.4	8.7
Mexico	5.9	0.5	8.5
Czech Republic	4.8	0.4	8.3
Germany	4.8	0.4	8.3
Argentina	3.6	0.3	8.3
Italy	4.9	0.4	8.2
Romania	3.7	0.3	8.1
Azerbaijan	3.7	0.3	8.1
Costa Rica	5.1	0.5	7.8
Poland	6.6	0.5	7.6
Paraguay	4.3	0.3	7
El Salvador	2.9	0.2	6.9
Barbados	7.6	0.5	6.6
Kyrgyz Republic	4.6	0.3	6.5
Peru	3.1	0.2	6.5
Iceland	8.2	0.5	6.1
Jamaica	5.3	0.3	5.7
Netherlands	5.5	0.3	5.5
Estonia	6	0.3	5
Portugal	6	0.3	5

continued

Country	Total Education Expenditure	Pre-primary Education Expenditure	Pre-primary as % of Total Education Expenditure
			Spending 1-5% and above
Greece	4.3	0.2	4.7
Finland	6.6	0.3	4.5
Norway	7.6	0.3	3.9
Switzerland	5.1	0.2	3.9
Canada	5.4	0.2	3.7
Tajikistan	2.9	0.1	3.4
Bolivia	6.7	0.2	3
Nepal	3.4	0.1	2.9
New Zealand	7.3	0.2	2.7
Korea, Rep. of	4.6	0.1	2.2
Mauritius	4.7	0.1	2.1
Australia	4.9	0.1	2
Lao PDR	2.5	0.05	2
Colombia	5.1	0.1	2
Kenya	7.1	0.1	1.4
Benin	3.3	0.04	1.2
Malaysia	8.5	0.1	1.2
			Spending less than 1%
Congo, Rep.	4.4	0.03	0.7
Nicaragua	3.2	0.02	0.6
South Africa	5.5	0.02	0.4
Senegal	4.1	0.01	0.2
Jordan	5.0	0.01	0.2

Source: Naudeau et al (2011)

## **Annex 5: Assumptions on Costing the Expansion in Uzbekistan's ECCE Program**

- i. Cost of building a school with 240 places =1.1 billion Uzbek Sums
- ii. Cost of equipping a school with 240 places = 0.4 billion Uzbek Sums
- iii. Cost of repair is around 30 percent of the cost of a new building
- iv. Cost of building/repair would be 20 percent cheaper if alternative options were considered and only two-thirds of new schools would need to be built.
- v. Number of students per teacher ranging from 9.3 to 15 (in different options)
- vi. Cost of subsidizing children from the poorest 20 percent of households - equal to fee (or minimum wage – see Annex 6) per child. Assumptions in different options range from 5 to 15 percent of poorest children already getting this subsidy.

## Annex 6: Size of Parental Fee for Public Pre-school and Public Boarding Schools

APPENDIX N 29  
To the President's Resolution  
from 12.12.2007. N IIII-744

**Annex Table 6.1: Size of Parental Fees for Public Pre-school and Public Boarding Schools**

N	Location of educational institution and how long children stay there in a day	In % of minimum monthly wage (62920 UZS from 01.12.11)	
		If one child attends from one family	For each child if there are more than 2 child attends pre-school from one family
<b>I</b>	<b>In Pre-schools</b>		
	<b>Pre-schools that operate for 5 working days per week</b>		
<b>1.</b>	<b>Tashkent city, oblast centers, cities under oblast subordination</b>		
	Duration of stay:		
1.1	4-5 hours	43% (27055 UZS)	31% (19505 UZS)
1.2	9-10.5 hours	100% (62920 UZS)	71% (44673 UZS)
1.3	12 hours	117% (73616 UZS)	84% (52852 UZS)
1.4	24 hours	130% (81796 UZS)	93% (58515 UZS)
<b>2.</b>	<b>Rayon centers and other locality</b>		
	Duration of stay:		
2.1	4-5 hours	31% (19505 UZS)	28% (17617 UZS)
2.2	9-10.5 hours	70% (44044 UZS)	64% (40268 UZS)
2.3	12 hours	83% (52223 UZS)	75% (47190 UZS)
2.4	24 hours	92% (57886 UZS)	83% (52223 UZS)
	Pre-schools that operate for 6 working days per week		
<b>1.</b>	<b>Tashkent city, oblast centers, cities under oblast subordination</b>		
	Duration of stay:		
1.1	4-5 hours	53% (33347 UZS)	37% (23280 UZS)
1.2	9-10.5 hours	121% (76133 UZS)	85% (53482 UZS)
1.3	12 hours	141% (88717 UZS)	101% (63549 UZS)
1.4	24 hours	159% (100042 UZS)	113% (71099 UZS)
<b>2.</b>	<b>Rayon centers and other locality</b>		
	Duration of stay:		
2.1	4-5 hours	37% (23280 UZS)	33% (20763 UZS)
2.2	9-10.5 hours	85% (53482 UZS)	77% (48448 UZS)
2.3	12 hours	100% (62920 UZS)	90% (56628 UZS)
2.4	24 hours	111% (69841 UZS)	101% (63549 UZS)
<b>II</b>	<b>In Boarding Schools*</b>		
1.	Regardless of location and duration of stay	100% (62920 UZS)	

Note: \* With the exception of boarding schools for the children with different diseases; boarding schools for children from low-income families; and boarding schools for orphan children.