

Scaling up preschool in Kenya: Costs, constraints and opportunities

Increasing access to quality early childhood development and education (ECDE) is critical to achieve broader goals for education and development in Kenya. The country's 2010 Constitution declared free and compulsory basic (pre-primary, primary, and secondary) education to be a right for every child and identified ECDE as a function under the purview of the counties. Many of Kenya's 47 counties have ambitious plans to increase access to ECDE. Successful devolution will require cooperation and support between the national government and the counties as well as adequate resources and increased capacity at the county level.

Kenya has achieved relatively high ECDE enrollment over time with only modest government financial support. Net enrolment in pre-primary education increased from 33 percent in 2005 to 72 percent in 2014, one of the highest enrollment rates in Sub-Saharan Africa. Although the Constitution states that pre-primary education should be free, communities and parents have provided the majority of financing for ECDE services in recent decades, primarily in the form of fees that pay for teacher salaries.

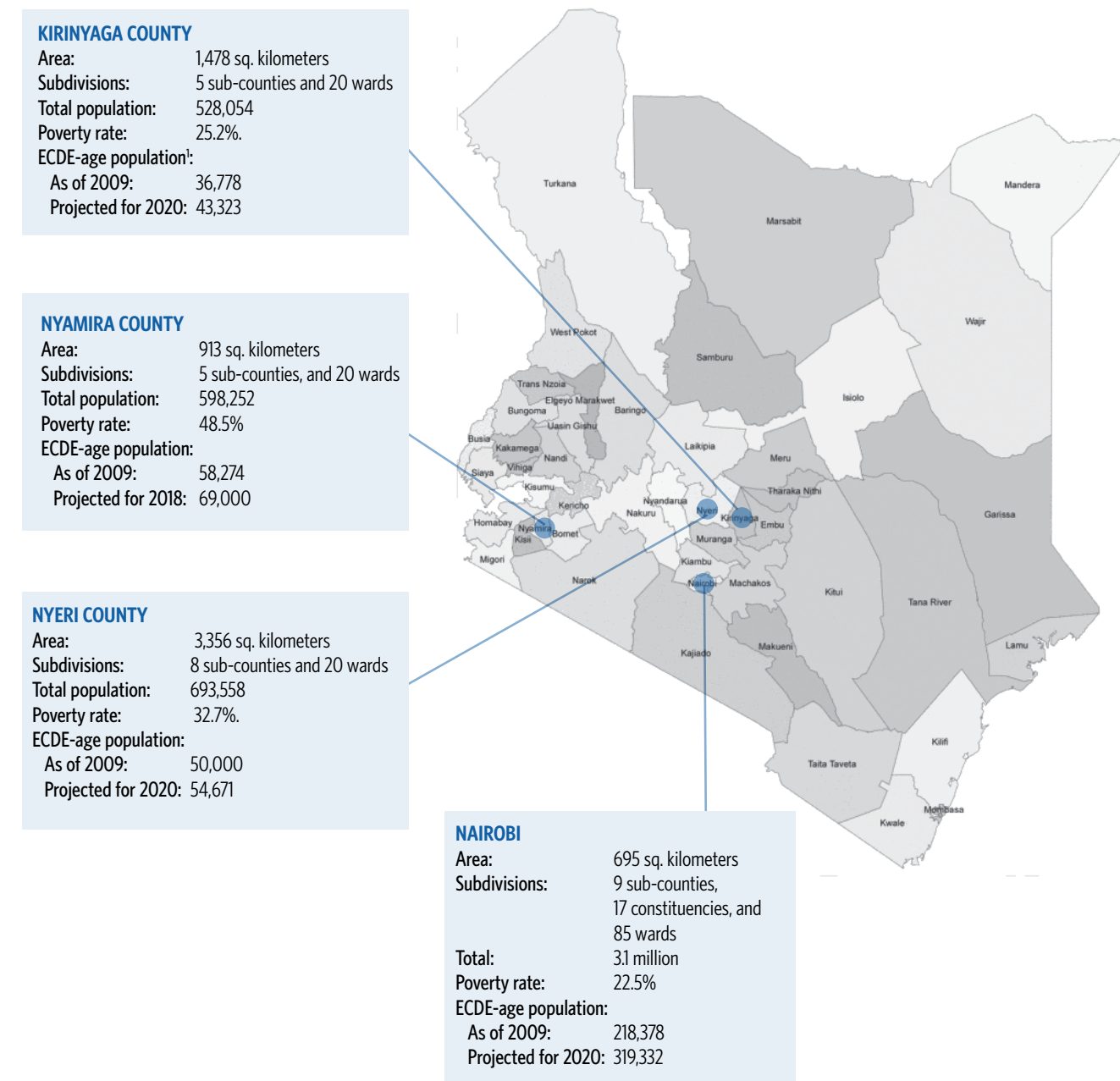
This brief summarizes the findings of a recent study of the cost of preschool in Kenya, the financing gaps that remain, and possible policy options to achieve cost savings to help Kenya's counties meet the goal of expanding quality ECDE service provision. The study was conducted by the World Bank in partnership with the Kenya School of Government, Riara University, and the county governments of Kirinyaga, Nairobi, Nyamira, and Nyeri.²

This brief was written by Amanda Devercelli and Rebecca Sayre and reflects the work of a team which also included John Anderson, Jan Van Ravens, Carlos Aggio, Eldah Onsomu and Anita Gurgel. For more information or to be added to the ELP mailing list, please write to earlylearningpartnership@worldbank.org

¹ Ministry of Education, Science and Technology (MOEST) Education Statistics, 2014

² Detailed reports have been prepared for county officials and are available upon request.

Facts at a Glance for the Four Counties Studied³



STATUS OF ECDE IN FOUR KENYAN COUNTIES⁴

Table 1 presents an overview of ECDE in the four counties studied: Kirinyaga, Nairobi, Nyamira, and Nyeri counties. As discussed throughout this report, there are some commonalities among the counties but also some important differences. For example, Nairobi County, which includes the nation's capital, has the lowest poverty rate, the largest ECDE-aged population, and the lowest enrolment rate of the four counties.

³Note that unless otherwise indicated, official populations statistics are from 2009 census. ECDE-age population defined as ages 3 through 5.
⁴These four counties were selected based on county officials' interest in participation; this should not be considered a representative sample of all 47 counties in Kenya.

In all four counties, enrolment rates have been growing in recent years, but quality remains a serious concern. As displayed in Table 1, the majority of ECDE teachers have some formal qualifications, such as a diploma or certificate. However, in all four counties, classroom quality could still be significantly improved. A large number of teachers are not receiving adequate in-service training, many ECDE classrooms lack adequate teaching and learning resources, and often the ECDE infrastructure is in poor condition.

TABLE 1 Overview of ECDE in Four Kenyan Counties

	KIRINYAGA	NAIROBI	NYAMIRA	NYERI
Number of ECDE-age children (3-5 years) in 2009 census	36,778	218,378	58,274	49,500
Gross enrollment rate	61% (2014)	43% (2014)	78% (2015)	58% (2014)
Child-to-teacher ratio, public centers	41:1	30:1	39:1	23:1
ECDE teachers with formal qualifications	90%	not available	80%	87%

Table 2 presents a summary of key figures for each county, and shows difference between public and private centers, by county. In Kirinyaga, Nyamira, and Nyeri counties, the majority of ECDE learners are enrolled in public centers. In Nairobi, on the other hand, most preschool is provided by the private sector, which boasts four times as many centers than the public sector (185 public and 836 registered private centers in 2014). In Kirinyaga and Nyamira, public ECDE centers tend to be larger and more crowded than in the other two counties.

TABLE 2 Public and Private ECDE Provision in Four Kenyan Counties

		Number of centers	Percent of total	Enrollment	Percent of total	Number of teachers	Percent of total	Average children per center	Child-to-teacher ratio
KIRINYAGA (2014)	Public	195	36%	16,167	66%	396	33%	83	41
	Private	350	64%	8,452	34%	820	67%	24	10
	Total	545		24,619		1,216		45	20
NAIROBI (2014)	Public	185	18%	13,797	13%	458	-	75	30
	Private	836	82%	95,600	87%	-	-	114	-
	Total	1,021		109,397		-		107	-
NYAMIRA (2015)	Public	397	56%	37,517	74%	963	64%	95	39
	Private	315	44%	13,016	26%	533	36%	41	24
	Total	712		50,533		1,496		71	34
NYERI (2014)	Public	384	68%	19,672	65%	853	-	51	23
	Private	178	32%	10,799	35%	-	-	61	-
	Total	562		30,471		853		54	-

THE DEVOLUTION OF ECDE TO THE COUNTIES

- **The devolution of authority for ECDE provision to the counties has brought opportunities, as well as challenges.** Throughout Kenya, ECDE enrolment increased after the 2010 devolution process. The decentralized function has created a space for counties to allocate more resources to ECDE and explore innovative ideas, such as engaging with private providers and establishing model ECDE centers. At the same time, there is less central responsibility for ECDE, creating the possibility of inequitable outcomes among regions, since counties with smaller tax bases have fewer resources of their own to scale up ECDE provision.
- **Responsibility for ECDE provision was devolved without adequate financial resources.** The central government sets aside 15 percent of its revenue for distribution to the 47 counties according to a set of predefined criteria established by Kenya's Commission on Revenue Allocation (CRA). This "equitable share" allocation to counties is intended to assist counties in fulfilling a range of responsibilities that have been devolved, including agriculture, roads and transport, and health. The Kenya CRA's allocation formula is based on each county's population, basic equitable share, poverty index, land area, and fiscal responsibility.
- **No specific budget allocation from the central government is given to counties to provide ECDE services.** The resource requirements for these different services may vary substantially between counties. Counties may use local tax revenue for ECDE, but local revenue sources tend to be limited. Furthermore, anecdotal evidence indicates that the constitutional declaration of free pre-primary education has made many parents less willing to pay for ECDE.
- **Governance arrangements between the central government and the counties are not clear.** The central government retains authority for ECDE in terms of policy, standards, curriculum, and assessment. Counties are responsible for implementing policies, developing programs, training personnel, and providing infrastructure. In some cases, however, the legal lines of authority are unclear. For example, the authority to hire ECDE teachers has been a source of dispute. The national Teacher Services Commission (TSC) is constitutionally mandated to hire and oversee all teachers, including at the pre-primary level. This inability to manage teacher hiring weakens counties' authority over ECE services. It is unclear whether TSC's budget for hiring pre-primary teachers should come from the central or the county governments. Several legal and legislative efforts are underway to attempt to clarify these issues,² but they have yet to resolve the inconsistencies.
- **Quality assurance for ECDE is weak in counties.** The quality of ECDE services varies significantly across centers (both public and private) and can be very low. The central government previously provided quality assurance officers at District Centers for Early Childhood Education (DICECEs), but under the devolved system many officers are being given a chance to either be employed by the TSC to work as classroom teachers or join the county payroll to continue ECD quality assurance work but without TSC salary and benefits. Counties risk losing a well-trained workforce that has supported ECDE and quality assurance given the very difficult choice DICECE officers now face between keeping guaranteed remuneration and staying with their professional specialization.
- **ECDE data are limited and inconsistent.** Obtaining basic data on the ECDE-age population and the large number of centers currently serving children is critically important but currently far from being achieved. Very little is yet known about the children excluded from ECDE, including where they live, what their background characteristics are, and why they are not enrolled. The function of collecting, storing, and publishing ECDE data has remained with the national government, specifically with the Ministry of Education, Science, and Technology Education Management Information System (EMIS). Some counties have found the EMIS data inadequate for their planning needs, so they have conducted their own surveys. These local surveys have yielded detailed information, for example about the status of buildings and furniture in ECDE centers, but their data also may overlap with, and are often inconsistent with, the data generated by EMIS. Many non-state ECDE centers (which may be faith-based or NGO-run and include low-cost private centers) are not covered by official data collection but are captured by the local surveys. Such discrepancies impede local planning and policy making and make coordination between the counties and the national government difficult.

² These include a court case regarding TSC authority over pre-primary teachers and a draft ECDE bill being considered in the national senate, both of which were pending finalization as of mid-2015.

WHAT DOES ECDE COST?

In each of the four counties, the World Bank Early Learning Partnership (ELP) Team met with county officials and county-level ECDE stakeholders to understand the local ECDE landscape and specific county goals for the provision of ECDE services. Information was gathered on the cost of ECDE school infrastructure, ECDE teaching and learning materials, employing and training ECDE teachers and managers, and providing feeding programs. In addition, a financing analysis was conducted to identify existing budgets and resources available at the county level, gaps between available and needed resources, and possible strategies to fill these gaps. Box 1 offers a list of cost categories provided by county governments. The cost estimates in the analysis below are derived from costs provided by each county (note that because specific cost categories varied, costs are not entirely comparable).

BOX 1 WHAT IS INCLUDED IN ECDE COSTS?

Investment/Capital Costs

- Renovation and maintenance of existing building and infrastructure
- ECDE center construction
- Learning and play equipment (indoor and outdoor)
- Information and communications technology (ICT)
- Furniture and equipment
- Toilet construction and renovation

Recurrent Costs

- Salaries for teachers and teacher assistants
- In-service training
- Teaching and learning materials (curriculum materials, stationery, pens, books, chalk, plasticine/clay, teaching aids and tools, etc.)
- Supervision and quality assurance staff
- Support staff (e.g., cooks, security)
- Meals for feeding program
- Utilities and operations

The analysis indicated that the annual cost to send a child to preschool ranges from 5,535 Kenyan shillings (Ksh) (equivalent to about US\$55) in Nyamira County to Ksh 11,800 (~US\$116 USD) in Nairobi County. Table 3 summarizes the unit costs for ECDE and indicates the current financing gaps.

TABLE 3 What does it cost to send one child to public preschool^a and how much are county governments contributing?

	Unit cost to send one child to public preschool	Average per child county government expenditure ^b	Funding gap per child (some of which is covered by families)
KIRINYAGA COUNTY	10,300 Ksh (-US\$102)	4,500 Ksh (-US\$45)	5,800 Ksh (-US\$57)
NAIROBI COUNTY	11,800 Ksh (-US\$117)	1,344 Ksh (-US\$13)	10,456 Ksh (US\$104)
NYAMIRA COUNTY	5,500 Ksh (-US\$54)	2,520 Ksh (-US\$25)	2,980 Ksh (-US\$29)
NYERI COUNTY	7,300 Ksh (-US\$72)	211 Ksh (-US\$2)	7,089 Ksh (-US\$69)

^a Includes cost of school feeding, which is typically covered by families.

^b Costs covered by county government calculated as total government contribution divided by number of children enrolled (county governments do not explicitly provide per-capita funding).

The government contributions in each county do not come close to covering total recurrent costs, as Figure 1 illustrates. This leaves large unfunded gaps, most of which seem to be covered by families. Current ECDE financing is inadequate to cover the full cost of ECDE services, which, according to the Constitution, are supposed to be free. Parents' contributions vary by county, and in many cases the exact amounts contributed are unreported. It should also be noted that the unit costs in Table 3 and Figure 1 include school meals, but school meals (which average Ksh 2,500 or US\$25 annually) are typically covered by families.

FIGURE 1 Recurrent Per-child ECDE Costs in Four Kenyan Counties (in Ksh)

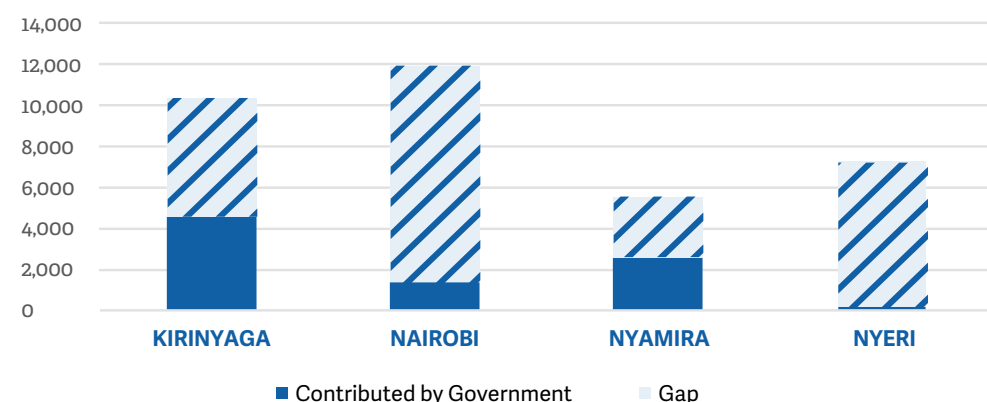


Table 4 displays total, educational, and ECDE expenditures in the four counties. All four counties contribute a relatively low budgetary share of their total county budgets toward ECDE. More financing toward ECDE is needed for countries to meet their goals. Box 2 displays current county sources of finance for ECDE.

TABLE 4 ECDE, Education, and Countywide Public Expenditures (in Ksh)

	KIRINYAGA 2015/2016	NAIROBI 2015/2016	NYAMIRA 2015/2016	NYERI 2015/2016
Total county budget	4,118,000,000	29,075,801,461	4,678,000,000	6,284,000,000
Education budget ^a	309,100,000	1,954,000,000	279,827,445	157,360,000
ECDE	130,500,000	226,480,000	94,560,000	22,260,000
ECDE as % of education budget	42.2%	11.6%	33.8%	14.1%
ECDE as % of county budget	3.2%	0.8%	2.0%	0.4%

^a Exact education expenditures are categorized differently by county; for example, in Nyamira, they fall under the Education & ICT Department, while in Nairobi they fall under the Education, Youth Affairs, and Social Development Department.

With hundreds of thousands of children not accessing pre-primary education in the four counties, there is a need for increased public support of the ECDE sector. The children who are currently out of school are likely the ones most in need and unable to pay. The following section discusses some possible solutions to expand quality ECDE.

OPTIONS MOVING FORWARD

While there has been progress, 28 percent of children are not accessing ECDE in Kenya. Fees are formally abolished, but families continue to contribute the bulk of funding. If counties are to achieve the goal of 100 percent ECDE enrolment by 2020, they will need to adopt a variety of strategies. Options for consideration include:

1. Increase county financing to ECDE

While costs and financing for ECDE vary by county, in each of the four counties significant financing gaps exist. Counties could consider allocating a greater portion of county budgets to ECDE. In Nairobi, the county currently uses less than 1 percent of its budget on ECDE, and Nyeri

allocates 0.3 percent, whereas Kirinyaga allocates approximately 3 percent and Nyamira 2 percent. In each county, a larger budgetary share is required to expand and improve the quality of ECDE in a meaningful way. For example, in Nairobi, annual public expenditures would need to be two to three times higher than current levels to reach universal access to ECDE by 2020. In Nyeri, annual public expenditures would need to increase over current levels 15- to 18-fold.

2. Expand access with commensurate focus on promoting quality

A focus on access at the expense of quality would jeopardize the very benefits that counties hope children will gain since low-quality programs can have little and sometimes detrimental impact. Well-defined and enforced monitoring and quality assurance systems are critical to ensure that the standards for programs and service delivery are met. Counties should focus on quality improvements, including reducing child-to-teacher ratios, better equipping centers with teaching and learning materials, and ensuring that teachers are qualified and supported.

3. Engage the private sector

The non-state sector, including private ECDE centers, provides a significant proportion of ECDE services. However, many are unregistered and operate informally, and anecdotal evidence suggests that quality at private centers varies. In addition to public sector expansion, the central and county governments could consider ways to incentivize quality low-cost private sector provision that is affordable. The important government function of overseeing and engaging with the non-state sector needs to be strengthened. Counties could consider engaging with this sector to ensure access to quality ECDE services for all children, with clarity about the divide of legal responsibility between counties and central government. The scale of the private ECDE sector provides opportunities for counties to establish public-private partnerships to use limited public resources to leverage private providers to increase access. Following are a few specific options for leveraging the private sector:

- **Regulatory and communication shifts:** For relatively low cost, the central government—or the counties—could consider making private ECDE provision more attractive, which could induce capable providers to enter the market. For example, the existing regulations covering the establishment of a private ECDE center could be revised to minimize elements that are unnecessarily prohibitive. Standards that are untenable or that take a punitive approach may discourage non-state providers from entering the market, limit innovation, or decrease the breadth of services provided. In primary education, a best practice for engaging with non-state providers is to require that schools meet learning outcome standards while allowing schools to make decisions about specific programming, including teachers, class size, and school infrastructure. In addition, information could be publicized about how to open new centers, targeting those likely to have the necessary competencies.
- **Soft loans and tax facilities:** Providing public support for up-front investment, such as through the purchase or refurbishment of premises or the procurement of initial inventory, could stimulate increased private-sector investment in ECDE centers.
- **Partial subsidies or vouchers for low-income families:** The government could also consider providing a partial subsidy or voucher for every child enrolled in programs that meet minimum quality standards and charge an affordable fee. This could increase parent options and incentivize new providers to offer quality services. The government would need to identify the right level of the voucher (costing analysis in four counties suggests this could be around 2,000 Ksh) to increase access for families in need while simultaneously ensuring overall lower government costs than if those families enrolled their children in the public sector. To ensure that vouchers remain adequate to low-income families the government would need to set a ceiling on centers' fees.

4. Consider cost-savings options through the public sector

Counties could also consider one or more of the following options for public-sector provision:

- **Prioritize program expenses.** Certain items may have a limited impact on learning. Candidates for closer scrutiny include ICT, extensive new playground equipment,³ optional teaching/learning materials, and building features that go beyond what is required for a clean and safe learning environment. Counties could consider focusing on the most essential and proven inputs

BOX 2 SOURCES OF ECDE FINANCE IN KENYAN COUNTIES

- Local county tax revenue (counties may impose property rate taxes and entertainment taxes)
- Equitable share of 15% of national government revenue
- Conditional grants from national government (often county governments are asked to provide matching funds in order to receive conditional grants)
- Loans from external sources or private lenders
- Donor funding
- Parent contributions (school fees, meal fees)

to deliver quality ECDE, such as capable teachers, basic infrastructure, and learning materials. Costing analysis in the four counties indicated that reducing certain program expenses, such as playground costs or ICT costs, could reduce costs by 1 to 9 percent.

- **Use schedule shifts.** Hosting different groups of children in alternate shifts in the same classroom, using the same materials, and sometimes being instructed by the same teachers could be a cost-effective policy.⁴ Most ECDE centers operate half-days, except in some urban areas where children are in school until early afternoon. Costs for buildings, furniture, teaching and learning materials, and management personnel could be reduced approximately by half if the county were to implement double shifts. While this possibly could have implications for working parents' schedules and transport, estimates from four counties indicate that using shifts could bring total savings of 25 to 35 percent in reduced annual costs.
- **Consider more flexible HR policies.** Counties could consider teacher assistants from teacher training colleges to co-teach certain classes. Assistant teachers could receive a portion of the salary of a certified teacher until they completed formal training. Costing less to the county than a regular teacher, teacher assistants could help reduce child-teacher ratios, provide practical training for student teachers, and ensure that those working with young children are becoming qualified professionals. Counties could also explore remuneration according to the number of hours taught. Implementing this approach would require that counties have jurisdiction for teacher remuneration and that a temporary contract teacher scheme be set up.
- **Gradually phase out families' contributions to ECDE.** Counties could also consider gradually eliminating fees currently paid by families for public ECDE. A comprehensive plan in each county to gradually reduce family's contributions and completely eliminate them by the year 2020 would facilitate expansion as well as cost reductions until 2020. The plans could also include scholarships awarded to the most disadvantaged children.

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³Play is very important for ECDE and must be a central feature of programming. However, play can be achieved within classrooms and outdoor spaces without expensive playground equipment.

⁴For regions of the county that are more sparsely populated, this double shift strategy might not be as appropriate.