

A BETTER FUTURE FOR EVERY CHILD

**FINANCIALLY FEASIBLE SCENARIOS FOR THE EQUITABLE
EXPANSION OF PRESCHOOL EDUCATION IN KYRGYZSTAN**

By: Jan van Ravens (van.ravens@yale.edu)

Commissioned by: the offices of the World Bank, UNICEF and the Aga Khan Foundation in Bishkek

This study was conducted in October 2009. A first draft was then circulated for comments among ECD stakeholders in Kyrgyzstan, followed by a Round Table conference in Bishkek on 17 March 2010. This is the final version, dated 19 April 2010, in which all comments have been taken into account.

Contents

Preface	page 2
Acknowledgements	page 3
Acronyms	page 4
Lists of Tables and Figures	page 5
Executive Summary	page 6
Introduction	page 10
Chapter 1: Enrolment in formal KG: the issue of age	page 12
Chapter 2: Enrolment in formal KG: disparities	page 19
Chapter 3: Community based KGs: main characteristics	page 25
Chapter 4: Program analysis	page 31
Chapter 5: Unit costs	page 40
Chapter 6: Scenarios	page 53
Chapter 7: Conclusions and recommendations	page 68
References	page 70
Annex: reports of site visits	page 73

Preface

Profoundly aware of the importance of quality services for children during the early years, the Government of Kyrgyzstan launched its Community-based Early Childhood Development Project under Presidential Administration in 2004. It will expire in 2010. The past six years have seen bold experimentation and innovation in preschool education, both in terms of pedagogy and in terms of organization and management. Communities have woken up to the vision of having their own kindergartens, strongly supported by parents and other local actors.

Now the time has come to take stock of this experience and to link the new kindergartens to the national policy framework but without weakening their local ownership. In fact, some of the new institutions are already brought under the aegis of the government, and others are to follow as a result of a laudable Decree of July 2009. In order to support this development, this report investigates the present state of preschool education in Kyrgyzstan and proposes financially feasible scenarios for its equitable expansion.

Name of official

Name of official

Name of official

World Bank

UNICEF

Aga Khan Foundation

Acknowledgements

This report was commissioned jointly by the offices of the World Bank and UNICEF in Kyrgyz Republic, and it has been strongly supported by the Government of the Kyrgyz Republic, more in particular the Ministry of Finance (MoF), the Ministry of Education and Science (MoES), and the Project Implementation Unit (PIU) for the Fast Track Initiative (FTI). The Kyrgyz offices of the Aga Khan Foundation and the Asian Development Bank have facilitated the work on this report, especially through their excellent organization of site-visits. I thank all representatives and staff of these organizations for having made this report possible. My special thanks are extended to Aisuluu Bedelbayeva of the World Bank and to Rajae Msefer Berrada, Chinara Kumenova and Saltanat Builasheva of UNICEF.

A first draft of this report was circulated in December 2009. Valuable comments have been received from several of the aforementioned organizations and from Deepa Grover, Regional Adviser on Early Childhood Development of the UNICEF Regional Office for Central and Eastern Europe and the Commonwealth of Independent States; from Caroline Arnold, Co-Director of Education of the Aga Khan Foundation in Geneva; and from Gerard Peart, consultant to the World Bank in Kyrgyzstan.

I wish to thank the following people for the information they provided and the views they generously shared during interviews conducted for this study:

- Chair of Budget and Education Committee of the Kyrgyz Parliament, Mr. M.K. Kunakunov
- Ministry of Education and Science: Mr. S. Asanov
- Ministry of Finance: Ms. J. Sabyrova
- FTI Project Implementation Unit: O. Bryzgalova and K. Niyazalieva
- National Agency of the Kyrgyz Republic of Local Self Governance Affairs: Mr. K.B. Shadybekov
- Legal Center: A. Djamankulova and G. Orozalieva
- Asian Development Bank: Mr. M. Mansurov and Ms. N. Kolesnikova
- Aga Khan Foundation: Ms. B. Aitikulova and Mr. S. Punjani
- Socium Consult: Ms. S. Esenalieva and Ms. S. Rysalieva
- ARIS: Mr. A. Chekirov, T. Osmonkulov
- UNICEF: Ms. G. Turusbekova

Several visits have been paid to kindergartens in various regions. The kindness and hospitality of staff and children have been overwhelming and unforgettable. It concerns kindergartens in Kenjylga and 1-May village in Alai; in Bujum village near Batken; in Hodjaev school in Aksay; in Janybak near Batken; Orukzar Kindergarten in Batken town; in Isakeev, Karasu, and Buguchu all in Kochkor; and in Lebedinkovka in Alamedin.

Finally I wish to thank all other staff of UNICEF Office for their help and warm hospitality, and last but not least translators Jodat Murataliev and Baktygul Chokchonova for their tireless efforts.

Jan van Ravens,
Consultant,
Faculty Member of Yale University,
Edward Zigler Center in Child Development and Social Policy.

Acronyms

ADB	Asian Development Bank
AKF	Aga Khan Foundation
CbK	Community based Kindergarten
CEE/CIS	Central and Eastern Europe and Commonwealth of Independent States
CGECCD	Consultative Group on Early Childhood Care and Development
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
EFA	Education for All
FAP	Feldsher-Accoucher Post
FTI	Fast Track Initiative
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GNP	Gross National Product
IMCI	Integrated Management of Childhood Illnesses
KG	Kindergarten
MICS	Multiple Indicator Cluster Survey
MoES	Ministry of Education and Science
MoH	Ministry of Health
NER	Net Enrolment Rate
NGO	Non-governmental Organization
OECD	Organization for Economic Development and Cooperation
UNDP	United Nations Development Programme
UNESCO	United Nations Education and Science Organization
UNICEF	United Nations Children's Fund

List of tables

No.	Title	Page
1	Countries' entry age in primary education by region, 2006	18
2	Enrolment and other aspects of Community-based KGs in Kyrgyzstan, 2009	25
3	Net Enrolment Rates for Formal and Community Based KGs, 0-8, 2007/2009	29
4	The costs of refurbishment and construction of CbK facilities (x 1000 soms)	42
5	Recurrent and capital unit costs, estimations	51
6	Simulation of three scenarios for universalizing enrolment at age six	54
7	Scenarios for universalizing enrolment in preschool education at age five	58
8	Summary of all scenarios for six, five and four year olds	59
9	Rayons by poverty rate and enrolment rate, 2007	66

List of figures

No.	Title	Page
1	Enrolment in formal Kindergarten in Kyrgyzstan, 1989-2007	12
2	Preschool enrolment rates for children of 3-6 years old, 1990, 1995, 2000, 2006	13
3	Age specific enrolment patterns in selected countries, 2004	15
4	Enrolment rates for 6 year olds in selected countries, 2006-2007	17
5	Enrolment of 3-5 year olds, by wealth quintile, 2006	19
6	Enrolment among 3-5 year olds by residence (urban or rural), 2005-2006	19
7	Map of Kyrgyzstan indicating enrolment by rayon among six year olds, 2007	20
8	Enrolment among 3-5 year olds, by ethnicity, 2006	21
9	Enrolment among 3-5 year olds, by mother' level of education, 2006	21
10	Poverty and formal KG enrolment (0-8), all rayons and cities, 2007	22
11	Poverty and formal KG enrolment (0-8), cities only, 2007	23
12	Poverty and formal KG enrolment (0-8), rayons only, 2007	23
13	Poverty and formal KG enrolment (0-8), all rayons and cities, 2007	24
14	Rayons with and without CbKs, by poverty and ECD enrolment, 2007	27
15	The costs of refurbishment or construction per classroom (x 1000 soms)	43
16	Total fertility rate of Kyrgyzstan, 1989-2007	56
17	Population pyramid for Kyrgyzstan, 2010	56
18	Child dependency ratio of Kyrgyzstan,	60
19	Education expenditure as % of GDP of Kyrgyzstan, 2002-2008	61
20	Differences in student achievement in science between urban and rural, 2006	64

Executive Summary

In recent years, communities and parents in Kyrgyzstan have opened hundreds of new kindergartens, experimenting with new pedagogical and organizational approaches. They are supported by the Aga Khan Foundation, the Asian Development Bank, UNICEF and the World Bank, who act under the aegis of the Community-based Early Childhood Development Project under Presidential Administration that the Government of Kyrgyzstan. This was launched in 2004 and will expire in 2010. Now the time has come to take stock of the experience with these new kindergartens, to explore financially feasible ways to scale them up, and to prepare a new national framework for preschool policy in which the formal kindergartens (KG) and the new community-based kindergartens (CbKs)¹ are brought together.

Chapter 1 analyses enrolment in formal KG, showing that even in 1989 it hardly exceeded 30% in Kyrgyzstan; that it dropped more sharply than in other countries in the region; and that recovery since the transition years has been very limited. Yet the current enrolment rate of 13.4% tends to underestimate real enrolment since it excludes most CbKs and since it is based on the broad age range of 0-8. Nevertheless, access to formal KG is the privilege of a small group that can afford the fee. The formal system thus functions as a private system, if it wasn't for the fact that it is heavily subsidized.

While few of the children of six years old are in preschool education, many of them, about 40%, are in primary school. Enrolment for another 30% could be financed from the public money that is presently spent for the small group of six year olds that are in formal KG. Hence, lowering the official entry age of primary education from 7 to 6 is an attractive option, not only for financial reasons, but also because it is pedagogically more appropriate to enroll all children at the same age and because the extra year would enhance learning achievement.

Disparities in enrolment in formal KG are highlighted in chapter 2. In the poorest quintile, only 7% of the children had access in 2006, against 47% among the richest 20%. Similar differences occur between children of mothers with less than secondary education and children of women with an academic background. Among rural children, enrolment stood at 10%, against 33% among urban children. Generally, the situation tends to best along the northern border and worst along the southern border, but pockets of exclusion occur all over the country, even within oblasts with a relatively high average enrolment. Rural areas with high poverty rates tend to have particularly low levels of enrolment.

Chapter 3 provides quantitative information about the CbKs that communities have initiated since 2004. In a few years time, 351 CbKs saw the light, and together they were welcoming 14624 children in 2009. Compared to the 465 formal KGs (in 2006) this is a significant achievement. The formal KGs enrolled 59156 children, but their average stay is also longer.

¹ The introduction of this report explains the rationale for this terminology.

The CbKs offer half-day programs against a moderate fee of about 50 to 100 soms per month, as well as full-day programs costing 200 to 300 soms per month in most cases. The number of children per group is around 20, which is quite appropriate for children this age. The introduction of CbKs has been well-targeted: nearly all find themselves in rayons where high poverty rates go hand in hand with low enrolment in formal KG. In all but one of the rayons where they are located, CbKs already enroll more children than the formal KGs. The same can be said for two oblasts: Naryn and Osh.

Paving the way for chapter 5 that addresses unit costs, chapter 4 investigates the preschool programs that are on offer today in Kyrgyzstan with a view to understand how elements and aspects of these programs influence their quality and costs. Somewhat surprisingly, the CbKs are providing many full-day programs that do not differ essentially from the formal KG program, having staff-to-child ratios as high as 1:3. Of the 14624 children enrolled in CbKs, 10085 (69%) find themselves in full-day care. If the balance does not shift very strongly to half-day programs during the further process of expansion of CbKs, the new policy will soon become unaffordable for government and it could mean the end of the CbK movement. This would be unnecessary. A short review of the literature provides compelling evidence that half-day programs are at least as effective as full-day programs. In fact, an alternation between half days spent in a center and the other half in the home environment and with the peer group is even better from a perspective of child development than full-day care.

However, this would require that the home-environment is genuinely conducive to optimal child development. This can be enhanced by parental education, and this deserves more attention in Kyrgyzstans future plans for ECD policy. In principle, Kyrgyzstan has a good infrastructure for healthcare for young children. The Feldsher-Accoucher Posts and Village Health Committees could support parents when it comes to early stimulation and early learning, prior to enrolment in a kindergarten. This can be done against limited extra costs. More in general, the cost-awareness in preschool education is still rather low. There is a tendency to adhere to old habits and regulations that make preschool education unnecessarily expensive without contributing significantly to better outcomes for children.

Chapter 5 concludes that the recurrent unit costs – i.e. the costs per child per year – of half-day programs are about 1670 soms, which is nearly four times lower than those of a full-day kindergarten program. The same was found in a similar study in Poland. The assumptions underpinning this estimation all depart from the axiom that a minimum level of quality must be guaranteed. Salaries, for instance, need to be high enough to make the job of teacher attractive and to retain people for this work. Therefore, teachers are assumed to earn 1000 soms per month for a half-day program, which they can double if they choose to run two shifts. Much lower salaries are sometimes earned in CbKs today, but replicating this practice would be unacceptable given the important work that people are doing.

Regarding training and supervision, it is the experience both in Kyrgyzstan and elsewhere in the world, that teachers can a good job based on a short and focused initial training of about ten days (assuming a basis of at least a completed secondary education), on the condition that

(i) an annual refresher training is provided of ten days as well, and (ii) supervision is frequent, e.g. monthly. This cost 75 soms per child per year. Regarding inventory, the experience of the three agencies with half-day programs is such that we estimate that 500 soms are needed per child per year. Utilities and maintenance costs are estimated to be 375 soms per year on average. All these amounts are components of the overall recurrent unit cost of 1670 soms per year. The costs of refurbishment of buildings and classrooms are incidental, not recurrent; an investment of 1250 soms will be needed for each “child-place”.

Chapter 6 multiplies the unit costs with the numbers of children that need to be enrolled. It first explores the option of lowering the official entry age of primary education to six. Annually, this would eventually cost an extra 60 million soms compared to present expenditure. This makes it not only a feasible strategy to enroll all the six year olds, but also an affordable one, partly because many six year olds are already in primary school, and partly because the six and seven year olds that are now in the expensive formal KG program would then be in the less expensive primary school.

If all six year olds are in primary school, we would need to enroll all four and five year olds in school-preparation programs. Giving priority to the five year olds, we find that enrolling the excluded children in half-day programs would cost an extra 123 million soms annually. This can be reduced to 60 million soms if the government would gradually withdraw its contribution to the full-day program, subsidizing only their half-day school-preparation component. At 510 million soms, the extra cost of enrolling all children in full-day programs are unaffordable; this option is hardly worth considering. Comparable scenarios for the four year olds lead to comparable though slightly higher outcomes. The difference between four and five year olds is caused by the fact that enrolment among the former is presently lower, so enrolling them is a somewhat bigger challenge.

The various scenarios for the six, five and four year olds can be seen as a “menu” from which one can compose various combinations. The most recommendable combination – primary entry age lowered to six, and all four and five year olds in half-day programs - leads to an extra cost of 200 million soms per year. Just one year of 3% economic growth would be sufficient to cover these costs even if the education budget would not grow as a percentage of GDP. In practice, there will be not one year but ten years to go before 2020, and although other policy objectives will claim their part of the growth of the education (e.g. expansion at secondary and tertiary level; quality improvement), the resource requirement of 200 million soms should not be insurmountable. There is strong economic evidence for high returns on this investment.

Fees can mitigate the government’s financial burden. For example, if parents pay 50 soms per month and if that fee would be waived for the 18% poorest families, this would reduce the costs for the government by 100 million soms annually (for one age group), without jeopardizing access. Another strategy is to give priority to rural areas where no CbKs have been introduced yet, and that pair low enrolment in formal KG to high poverty rates. This high priority measure costs 71 million soms (also for one age group).

The capital investment costs of refurbishing buildings and classrooms for the four and five year olds are in the order of magnitude of 200-250 million soms. This is on the assumption that many children will be enrolled in school- and home-based programs. This could be mitigated if formal KGs would reorganize themselves by replacing full-day capacity by half-day capacity. In this manner they could easily double or triple the number of children that they serve within the same space. Financial assistance can be sought from organizations such as ARIS, Mercy Corps, the Foundation for Tolerance International (Ferghana valley project) and various bilateral donors.

Introduction

The government, communities and parents of Kyrgyzstan are innovating and expanding their system of preschool education. In recent years, they introduced many new kindergartens in a number of rayons, with the support of the World Bank, UNICEF, the Aga Khan Foundation (AKF) and the Asian Development Bank (ADB). In a short period of time, these new kindergartens succeeded in enrolling substantial numbers of children. Teachers and support staff of the kindergartens show impressive endurance in their efforts to provide good services to children, against very low salaries in some cases. Parents make great sacrifices too, both financially and in-kind. Yet, even under these circumstances, some families still have no access as they cannot afford the moderate fee that these new kindergartens often need to ask.

This report explores the possibilities for making preschool education affordable for all and expanding it further. It proposes a number of scenarios for widening access, with a focus on the two years before entry in school, and with a special high priority scenario for disadvantaged groups. The report was commissioned by the World Bank and UNICEF and it was strongly supported by the Government of Kyrgyzstan, the Aga Khan Foundation and the Asian Development Bank.

The new kindergartens: terminology and ownership

The new kindergartens that saw the light in recent years are referred to as “Community-based Kindergartens” in several policy documents. Likewise, “Community-based ECD Project” is the official name of the project launched in 2004 under Presidential Administration that constitutes the rationale for this report. This may explain the use of the term “Community-based Kindergartens” (CbKs). However, when the first draft of this report was circulated, it provoked an important and fruitful discussion about this term, with implications beyond terminology.

It was argued that while the new kindergartens in Kyrgyzstan are all initiated in dialogue and close cooperation with communities, it was not intended that they would infinitely rely on communities exclusively. Sooner rather than later, government should assume ownership as well, partly to ensure their sustainability, partly to avoid an uneasy juxtaposition between the new institutions versus the official kindergartens that have been in existence for a long time and survived the turbulent times of the transition (we shall refer to these institutions as the “formal kindergartens”, or formal KGs). In fact, some of the new kindergartens – those supported by the Aga Khan Foundation - have already been brought under the government’s regulatory framework for preschool education. And other CbKs are to follow: a government Decree of July 2009 has ordered the inclusion of all new institutions on the official list of kindergartens. This is a major step forward.

With the benefit of hindsight, one can almost speak of a dialectic process which is close to completion. If the formal kindergartens were the thesis, and if the CbKs have served for some time as an anti-thesis challenging the system to innovate, then the Decree of July 2009 marks the beginning of the synthesis: a reformed preschool sector in which the new kindergartens find their place, firmly rooted in communities, sure, but also accountable to and supported by the government. This process has been remarkably rapid in Kyrgyzstan. Any country in the world that seeks to revitalize its preschool system can learn from this experience.

In this broader time-perspective, the term “community-based kindergarten” may have but a short lifespan. The CbKs were initiated by – and for some time borne mainly by – communities, but are soon to be included in the overall system. Since this report describes precisely that intermediate period, the use of the term seems temporarily defensible even if it is not in all cases entirely adequate. A new regulatory framework must now be developed in accordance with the new reality, and with a new terminology.

Structure of this report

Chapters 1 and 2 start with analysis of the formal kindergartens. The focus of these chapters is on enrolment and disparities, respectively. Chapter 3 then looks at the CbKs, their enrolment and programmatic characteristics. It also attempts to map overall preschool enrolment in Kyrgyzstan, both in the formal KGs and in the CbKs.

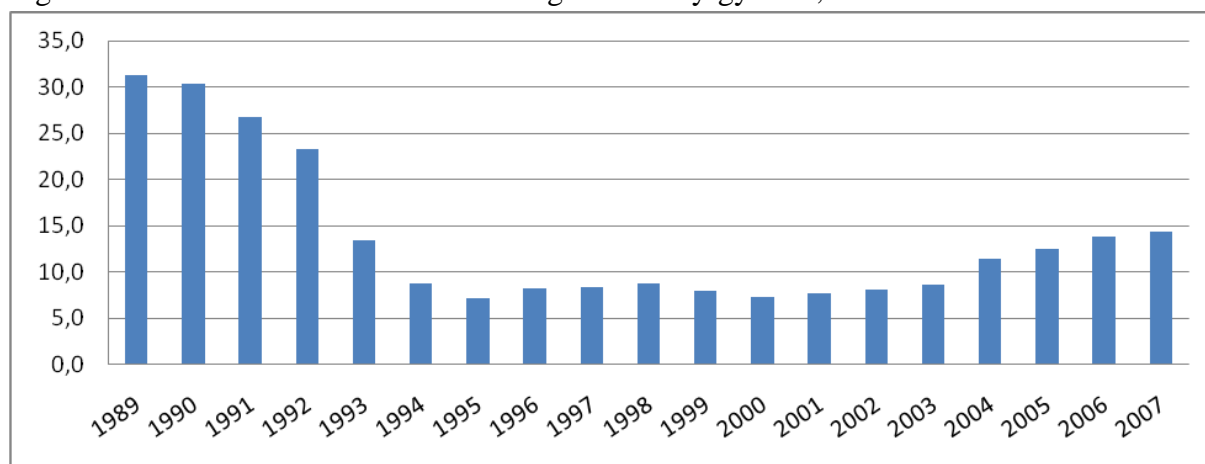
Chapter 4 is the hinge point of this report, where the empirical perspective makes way for the forward looking perspective. Based on the data gathered in the preceding chapters it analyses ongoing trends in and characteristics of the formal and non-formal system, and formulates policy principles for the development of the scenarios in chapter 6. But before that, we need to estimate the unit costs: the costs per child per year. This is the task for chapter five, a relatively long and technical chapter. Conclusion and recommendations are in chapter 7.

The general conclusion is that with the political will expressed by the President of Kyrgyzstan on 6 November 2009, in his speech on the Day of Educationalists, it will be possible to expand CbKs as needed, and to give teachers a better life and children a better future.

1. Enrolment in formal KG: the issue of age

It is a well known fact that in Kyrgyzstan both the number of formal KGs and the numbers of enrolled children has dropped dramatically as a result of the profound changes in the 1990s, and more in particular as the result of bankruptcy of factories and large farms to which many KGs were linked. This report can therefore be brief about this development. Figure 1 shows the development of the national enrolment ratio in Kyrgyzstan from 1989 to 2007.

Figure 1: Enrolment rate in formal Kindergarten in Kyrgyzstan, 1989-2007



Source: Compiled by the author, using data from the TransMONEE 2009 Database

As figure 1 shows clearly, it is a myth that attendance of KG was universal throughout the Soviet Union. In Kyrgyzstan, enrolment stood at a mere 31.3% even in 1989. The figures for 2009 are²:

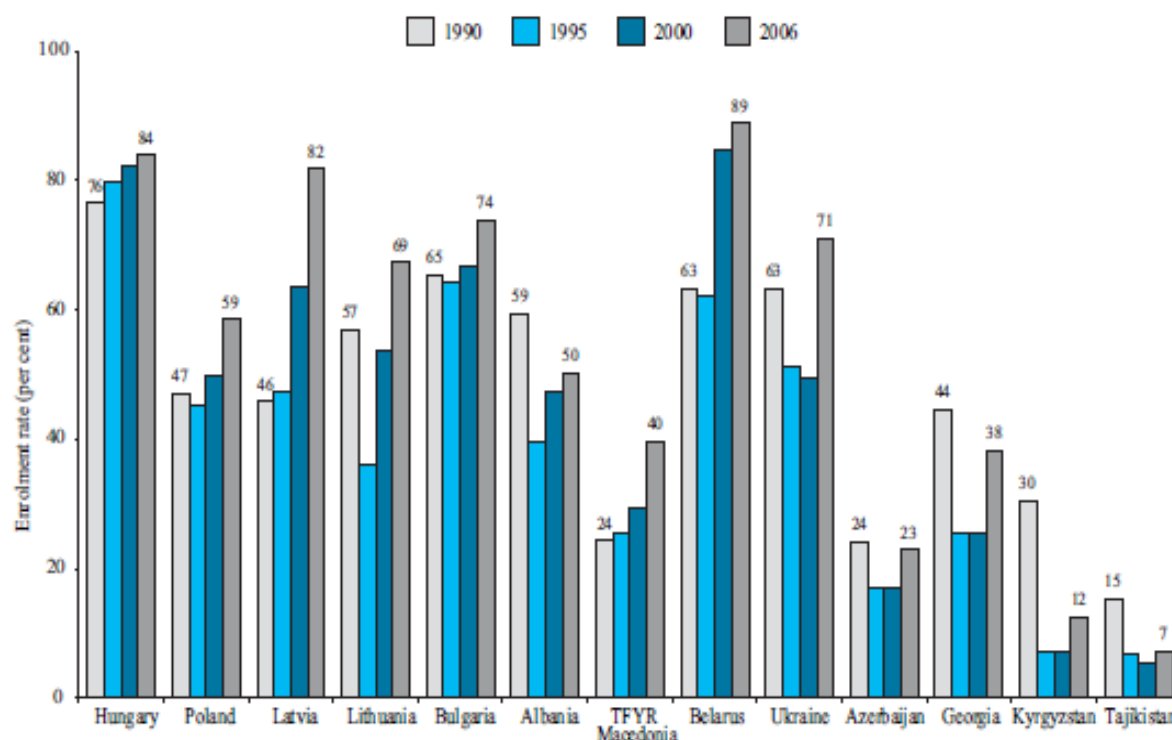
- Enrolment rate: 13.4%
- In absolute numbers: more than 60,000 children
- Number of formal KGs: 503, mostly public, some private
- Number of CbKs: 308

Kyrgyzstan was affected more than neighboring countries

Figure 2 (next page) shows that in 1990 enrolment in some countries in the region of Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS) was about twice as high as in Kyrgyzstan. Moreover, not all countries saw a significant drop in enrolment during the 1990s, and in none of the countries in figure 2 was the decrease as severe as in Kyrgyzstan. Finally, in no country except Tajikistan was the recovery from that decrease so limited as it was in Kyrgyzstan. Do note that the figure concerns children of 3-6 only; we will address the issue of age in more depth hereafter.

² The source for these figures is the speech of the President on the Day of Educationalists, 6 November 2009, except for the figure on CbKs; this comes from more recent information provided by the Ministry of Finance (see chapter 3).

Figure 2: Preschool enrolment rates for children of 3-6 years old, 1990, 1995, 2000, 2006



Source: copied from Innocenti Research Center (2009:105) and based on data from the TransMONEE 2008 Database

Figure 2 further suggests that enrolment among 3-6 year olds in Kyrgyzstan stood at about 12% in 2006. The same source – the TransMONEE database – reported more recently, in its 2009-edition, 14.3% as the figure for 2007. Given the trend of moderate growth over recent years (National Statistics Committee, 2008:42), the two figures are not inconsistent. However, a dataset from the National Statistics Committee which we will use later in this report, contains a figure of 10.8% for end of 2007, hardly more than the 10.5% of the year before. Finally, a more encouraging figure is provided by the Multiple Indicator Cluster Survey (MICS), which found that in 2006, 19% of children of 3-6 had ever attended preschool, while over 20% of children in the first grade of school attended KG in the year before.

Enrolment in preschool is not quite as low as it seems

So how do we make sense of these apparently contradicting figures? To understand the differences between indicators we need to go into detail here. It may seem a relatively technical exposé, but it will nevertheless prove to be a critical and policy relevant issue, throughout this report. An enrolment rate is the number of enrolled children divided by the total number of children. If 150 children in a village are enrolled and if there are 200 in total in that village, the rate is 75%. The figure of 150 is the numerator, and the 200 is the denominator. The use of enrolment rates stems from the more “regular” forms of education

(primary, secondary, tertiary or higher education) and has then been applied to preschool or preprimary education. However, preschool education has peculiarities that complicate the ways in which we determine the numerator and the denominator. First, while most countries have only one system of regular education (usually referred to as the national system, state system or formal system), the field of preschool education or ECD is often much more varied. In Kyrgyzstan, as in many other countries, official statistics include only formal KG. The MICS, however, does usually not discriminate between formal KG and alternative institutions such as CbKs. Although the number of CbKs was limited in 2006 (the year in which MICS was conducted), this could still be a part of the explanation for the fact that MICS reports higher attendance.

Second, there is a difference between enrolment and attendance. Enrolment refers to official registration, while attendance refers to whether the child actually goes to school or KG. One can enroll without attending, and one can attend without enrolling. While the former is more common in regular education (UNESCO, 2003:55), the latter occurs frequently in preschool education and especially in CbKs, as recent studies in Indonesia, Nepal and Bangladesh have shown³. Often, one child from a family enrolls formally and brings along a younger brother or sister every now and then. These younger siblings may not attend very regularly, but as MICS ask whether a child has *ever* attended KG, they are nevertheless picked up in the numerator.

Third, regarding the denominator, we have a choice as to which age groups it is on which we focus. Officially, children can enroll from birth onwards. And although school starts at seven in Kyrgyzstan, many seven year olds (about 2000) are found in formal KG even if their number is decreasing (National Statistics Committee, 2008:42). So if our wish is to calculate total enrolment in formal KG, including both the children of zero and those of seven no matter how few they are, we should divide this number by all of the 0-8⁴ year olds in the country in order to get the Net Enrolment Rate⁵. This is exactly what has been done, and quite correctly so, in the dataset that reported an enrolment rate of a mere 10.8%. By contrast, if we would focus on just the 3-6, which is the age bracket in which we expect – or perhaps wish – to see a higher level of enrolment, we may indeed find the 14.3% that the TransMONEE database reports. And zooming in further on the very last year before entry in school, we may actually find the 20.2% that MICS reports (although this may partly be related also to the inclusion of CbKs and of children who attend without enrolling).

So, by varying the age group, we can find various outcomes for the enrolment rate. It all depends on what we want: expanding access from birth to school entry, or a focus on some age groups. This is where the technical becomes suddenly political: which targets do we set, for which age groups? What is our underlying vision for ECD, for the near future and

³ This concerns studies similar to this report commissioned by UNICEF and UNESCO offices in these countries.

⁴ Including the seven year olds, but excluding the eight year olds, to be entirely clear.

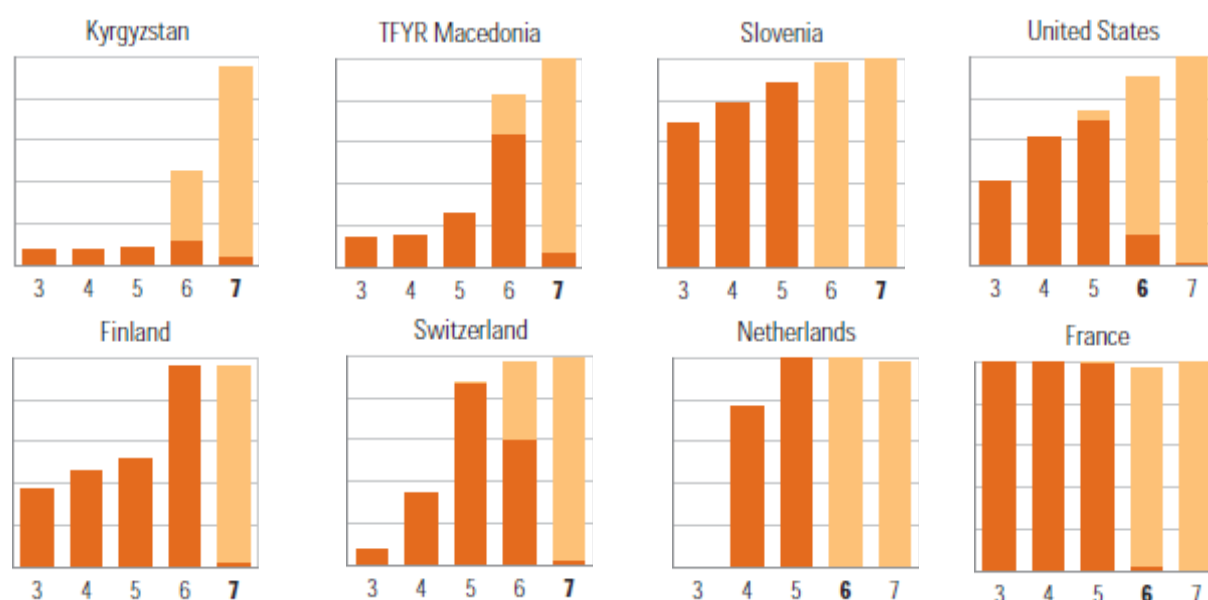
⁵ The Net Enrolment Rate (NER) concerns all children of the “right” age, i.e. the age group for which that particular form of education is meant, divided by the total number of children of that age. The Gross Enrolment Rate includes also children that are too young or too old and is therefore always higher than the NER.

beyond? Leaving these normative questions for chapter 4 of this report, we now look at enrolment patterns by age in an empirical sense.

Only a small elite has access to formal KG

Figure 3 shows enrolment patterns by age (3-7) for eight countries including Kyrgyzstan. The dark bars represent enrolment in preschool education, the light ones concern primary education. These eight profiles are copied from the 2006-edition of the Education for All Global Monitoring Report which focused on ECD. On pages 140-141 of that report one can find such profiles of 60 countries from all regions of the world, giving a good overview of enrolment patterns.

Figure 3: Age specific enrolment patterns in selected countries, 2004



Source: copied from UNESCO, 2006:140-141

The profile of Finland illustrates well how enrolment in preschool education usually “builds up with age”. Some families enroll their children in ECD at age three, and then another group of families let their children join at four, another group at five, and finally enrolment becomes universal at age six. At seven, all children go to primary school except for a very small number of children remaining in preschool education at that age. The pattern for the US is similar, except that children in most states go to primary school at age six and some even at five. We see the same “build up” effect in CEE/CIS countries such as Macedonia and Slovenia, albeit at different levels, which may reflect differences in wealth between the two countries. Even in a rich country as Switzerland, enrolment at ages three and four is very modest. The Netherlands has no formal provision of preschool education at all at age three. France, together with Italy, Belgium and to some extent Spain, is one of the very few countries in the world today that provide universal access as early as age three. This illustrates that the old Soviet concept of universal KG from the earliest ages is indeed “not sustainable

under market conditions” as it is often phrased, except in a very small group of countries that pair a high standard of living to a strong social democratic tradition.

Another commonality among most of the countries in figure 3 is that after the “build up” of enrolment during ages three, four and five, there is (nearly) universal enrolment at age six, *regardless* whether it is in preschool education or in primary school. As a result of policy choices, the age of entry may differ between countries (and even within countries with decentralized policies such as the USA and Switzerland), but at six nearly all children are either in preschool education or in school.

Seen against this international backdrop, the most remarkable characteristic of Kyrgyzstan is perhaps not the low level of enrolment in general. This is very likely to be a result of economic hardship; Macedonia, for instance, is not doing much better. Most remarkable in Kyrgyzstan is the absence of the build-up effect. Enrolment is more or less the same for all ages. It appears that there is a certain sociological group in Kyrgyzstan – predominantly urban and better-off, as the next chapter will show – who enroll their children at age three, and these children are not joined by others as the years go by. It is one and the same group that benefits from all of the government’s expenditure on KGs. This is confirmed by national data (National Statistics Committee, 2008:42), which show, interestingly, that until 2003 this was not the case. Until 2003 the number of six year olds was about 50% of the number of children of three, four and five together, while in 2006, this figure had dropped to about 33%. This proves that there *was* actually a certain build-up effect, but this has vanished. In other words, the formal KGs have become more elitist, even in recent years.

Figure 3 also shows that the 2415 seven year olds that are still in ECD are on the one hand a small group in absolute numbers, but on the other hand a more substantial group compared to the numbers of children of earlier ages. These 2415 seven year olds stand against 11115 six year olds, which is a ratio of 1 to 4.6. So quite a few families are using ECD capacity – and indeed public resources – even beyond the official age limit⁶. This capacity could be used much better for children that now remain excluded. For the money spent on the 2415 seven year olds enrolled in 2006, we could enroll many thousands of extra children in half-day programs, as we will see later in this report.

Lowering the entry age of primary education from 7 to 6

Finally, the enrolment pattern for Kyrgyzstan shows another remarkable phenomenon: massive early entry in primary education. Whereas education starts officially at age seven, about 40% enter at age six. In fact, this seems to be a deliberate policy (Government of Kyrgyz Republic, 2009c:99). Possibly this has to do with the lower costs of primary education compared to formal KG, and perhaps also with the fact that primary education does not have

⁶ Moreover, the number of enrolled children per 100 places has risen from 86 in 2002 to 97 in 2006. In five oblasts it equals or exceeds 100. This disappearance of “unused capacity” also indicates growing demand.

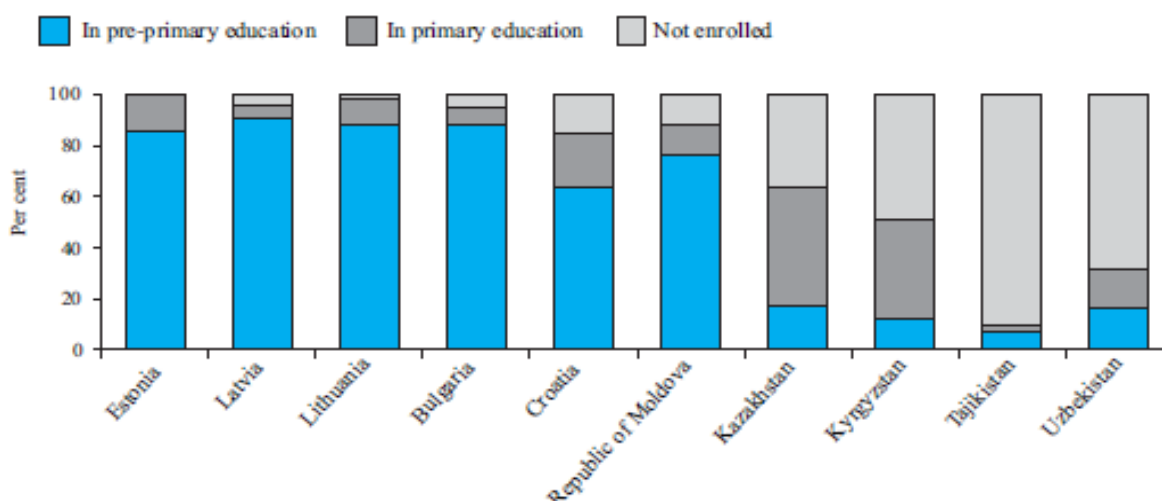
the same scarcity of places as formal KG. Parents of six year old children who cannot afford the fee of KG seem to use primary education as a cheaper option of enrolling their children. However, there is an important argument against this practice. Given the fact that seven is the official school entry age, the curriculum and pedagogies in primary education will also be tuned to that age group. This means that children that enter one year early are not receiving an education that is age-appropriate. For this reason alone, this should be ended urgently.

However, there is also an alternative direction of thinking. This concerns the idea of *officially* lowering the entry age for primary education from seven to six, adjusting of course the curriculum and the pedagogies to this new entry age. The arguments are the following.

- The unit cost of primary education stood at 2220 soms in 2007, while the unit cost for formal KG stood at 6010 soms (World Bank, 2008:2). Both figures may have changed, but their ratio has probably remained roughly the same: formal KG is almost three times more costly per child than primary education.
- So for the money spent on the 12% of the six year olds that were in KG in 2006-2007 (UNICEF Innocenti Research Center, 2009:106), we could enroll about 30% of the six year olds in primary education.
- About 40% of all six year olds are already in primary education, so on the same budget it would be possible to reach a 70% enrolment rate among six year olds.
- The money needed to enroll the remaining 30% in primary school would be much less than what is needed to universalize preschool education for this age group.

Figure 4 underpins the proposal to lower the entry age. This figure is comparable to figure 3, but it zooms in on the composition of enrolment of the just the 6 year olds and it concerns CEE/CIS countries only.

Figure 4: Enrolment rates for 6 year olds in selected countries, 2006-2007



Source: copied from Innocenti Research Center (2009:107) and based on data from the TransMONEE 2008 Database

Figure 4 underscores the case for lowering the entry age in primary education. Unlike Tajikistan and Uzbekistan, and like Kazakhstan, Kyrgyzstan already has more six year olds in primary education than in preschool education. Entering at six is already a reality for many

children, and making this the rule for all will be much easier and less costly than trying to emulate the other six countries in figure 4 where the majority of six year olds are in preschool.

Lowering the entry age in primary education would be in keeping with a global trend. More and more countries make this step, and nowadays only 22% of all countries in the world have children enter at seven, against 78% entering at five or six. It is only in the CEE/CIS region that entering at seven is still the norm, as table 1 shows.

Table 1: Countries' entry age in primary education, by region, 2006

Entry age	Arab States	Central & East Europe	Central Asia	East Asia & Pacific	Latin Am. & Caribb.	North Am. & West Europe	South West Asia	Sub-Saharan Africa	Total
5	-	-	-	8	20 ⁷	4	3	1	36
6	20	8	2	16	18	18	6	28	116
7	-	11	7	3	3	4	-	15	43

Source: compiled by the author based on UNESCO, 2008:292-298

An entry age of seven puts countries at a disadvantage in the global PISA competition compared to those countries where children have been attending school for one or even two years more when the PISA test is taken⁸. This is especially worrisome where few children attend preschool before entering school at age seven. The option of lowering the entry age to six will be taken into account in this report as one of the variables that make up the scenarios for expanding preschool education. It is a measure that is not costly, has a strong impact of learning achievement later at school, and reduces the burden on the preschool education system, making it more feasible to raise enrolment for children younger than six.

A last comment on figure 3 is that international indicators on ECD tend to focus on formal provision only. So if the figure suggests that for instance in Finland – where female labor participation is known to be very high - less than 40% of the three year olds are enrolled, this does not mean that there is no capacity for the other 60%. For children who are not in the formal system, most countries in figure 3 have elaborate systems of private provision. In many cases this is costly, but often social arrangements are in place that make it possible for less wealthy citizens to obtain access. In Kyrgyzstan, as in many other countries in the region, the situation is the opposite. Here, it is the upper class that uses the public system; only 3.7% of the children enrolled in KG were in a private institution in 2007/8, down from 4.9% in 2005/6 (TransMONEE 2009 database, indicator 7.3). This brings us to the next chapter.

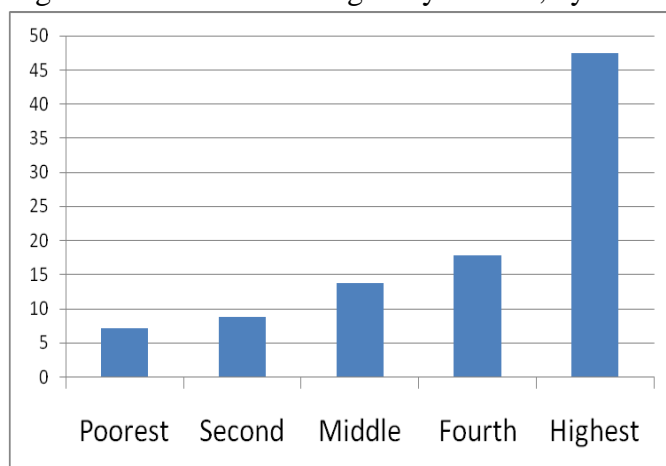
⁷ In one of these 20 countries, primary school starts at age 4, not 5.

⁸ The PISA test are taken at age 15 in all participating countries, regardless entry age. This differs from other international surveys that are based on grade, and it partly explains why certain countries do less well in PISA than they do in other surveys.

2. Enrolment in formal KG: disparities

Kyrgyzstan faces serious disparities with regards to enrolment in KG. Figure 5 shows how 47% of the children of the wealthiest groups have access, against 7% of the poorest.

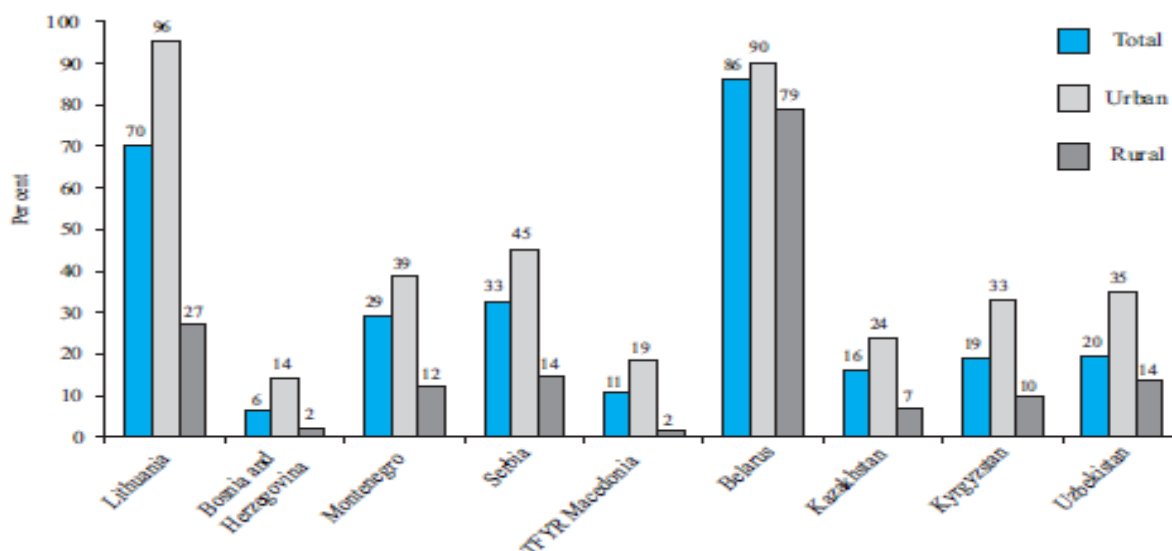
Figure 5: Enrolment among 3-5 year olds, by wealth quintile, 2006



Source: National Statistics Committee and UNICEF (MICS), 2007:56

It should be added, however, that a pattern as the one in figure 5 is not exceptional. In fact, with 7% enrolment in the poorest quintile, Kyrgyzstan is doing better than some other countries in the region that have the same or even higher levels of enrolment in the richest quintile (Innocenti Research Center, 2009:108). Equally common for countries in the region is a gap between urban and rural children. Figure 6 shows that Belarus has managed to close it in the process of expanding preschool education overall, while in Lithuania the gap persists despite universal enrolment in the cities. The case for prioritizing rural areas is strong indeed.

Figure 6: Enrolment among 3-5 year olds by residence (urban or rural), 2005-2006

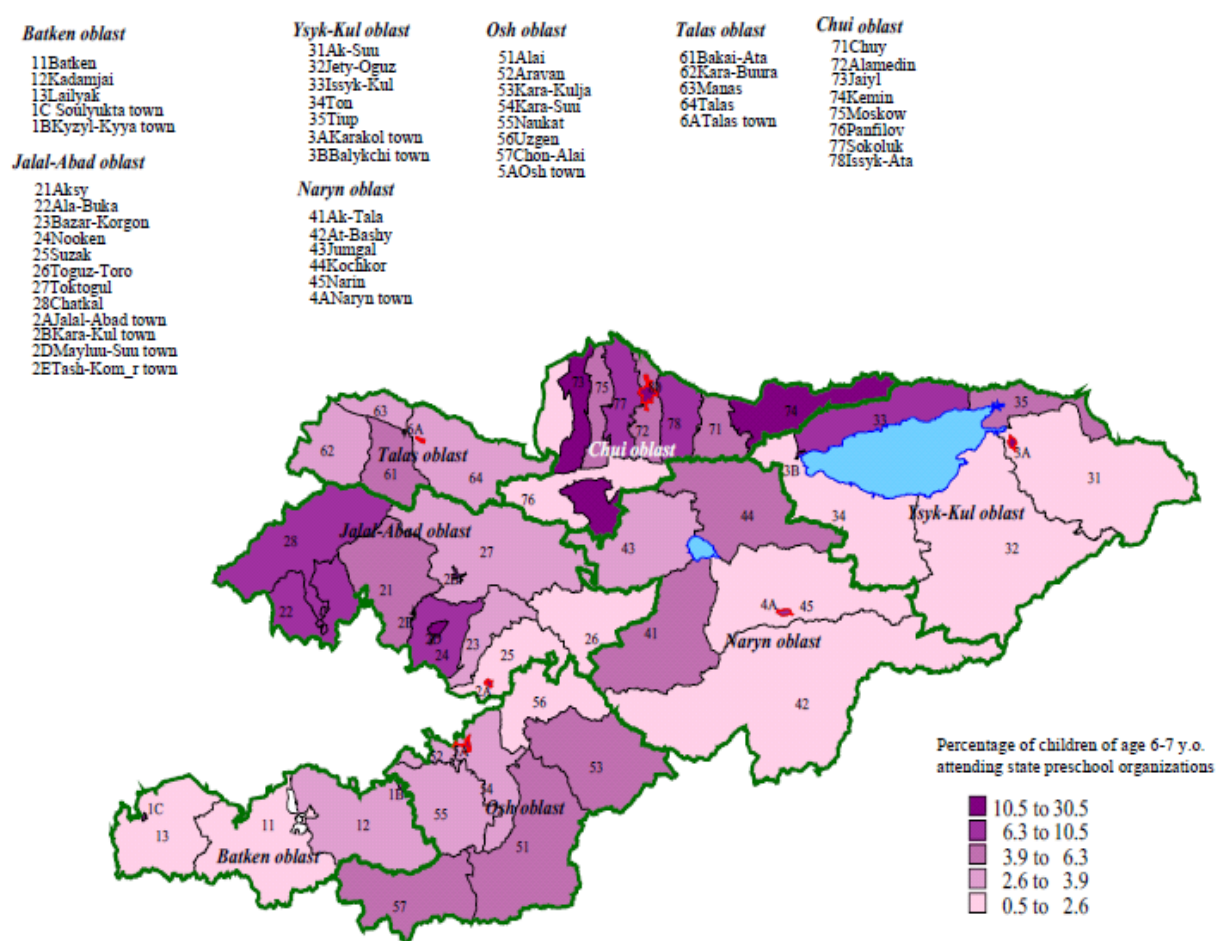


Source: copied from Innocenti Research Center (2009:107) and based national MICS reports

Geographical, ethnic, and family background disparities

In addition to social and urban/rural disparities, there are also geographical differences. Figure 7 shows that the highest enrolment levels are found along the northern border - both east and west of the capital – and in the north-west. The lowest levels are generally found along the southern border - Ysyk-Kul, Naryn, and Batken - but also in pockets near the center of the country. As we shall see in the next chapter, international agencies are doing an excellent job in precisely these regions supporting the creation of CbKs. Note that figure 7 concerns children of six years old only.

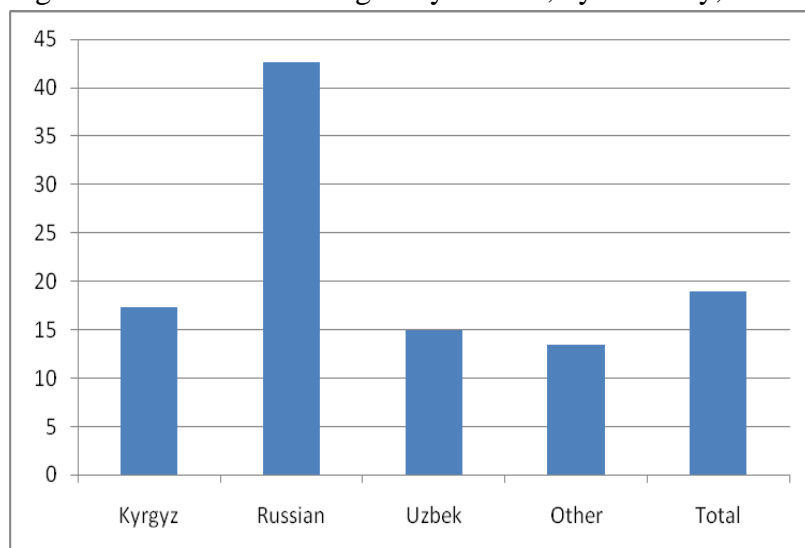
Figure 7: Map of Kyrgyzstan indicating enrolment by rayon among six year olds, 2007



Source: copied from Ministry of Education (2009:7) and based on data from the National Statistical Committee

In many countries, enrolment disparities are associated with ethnic diversity. In Kyrgyzstan such differences occur as well as figure 8 shows, but this is most probably compounded by variation in wealth and residence (urban/rural). If we would control for these two factors, the ethnic disparities would probably appear to be less pronounced.

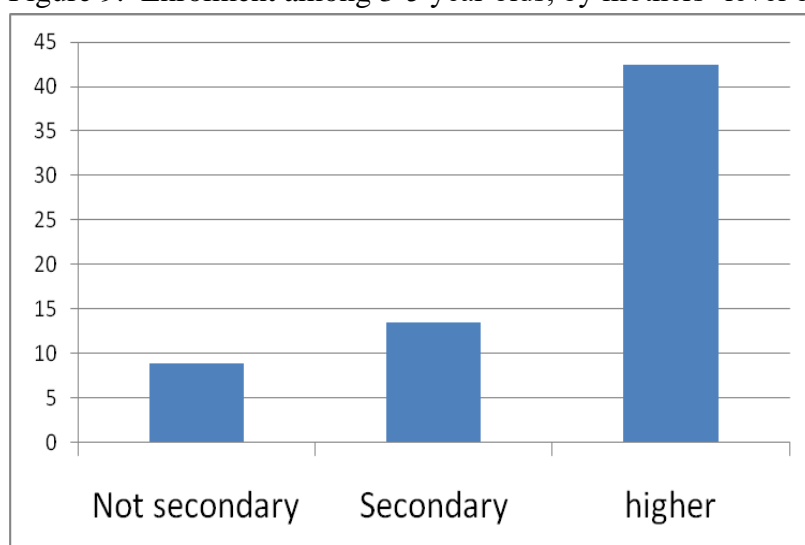
Figure 8: Enrolment among 3-5 year olds, by ethnicity, 2006



Source: Compiled by the author based on National Statistics Committee and UNICEF (MICS), 2007:112

Figure 9 shows how enrolment in preschool education is associated with the education level of the mother. Again the picture for Kyrgyzstan is not unique. Globally, children of mothers with higher levels of education are more likely to be enrolled. Admittedly, this association is also compounded by income. Well-educated mothers are usually found in the higher strata of society, can afford the fees, and are more likely to have a career of their own which creates a need for daycare. However, there is certainly also an autonomous effect, in that better educated mothers, have a better understanding of the beneficial impact of preschool education on their children in general, and on their learning achievement later in school. Even young women from impoverished backgrounds will make a bigger effort to support the education of their children if only they manage to receive some years of education (UNESCO, 2003). This is critical in breaking the cycle of poverty. The next chapter addresses encouraging initiatives.

Figure 9: Enrolment among 3-5 year olds, by mothers' level of education, 2006



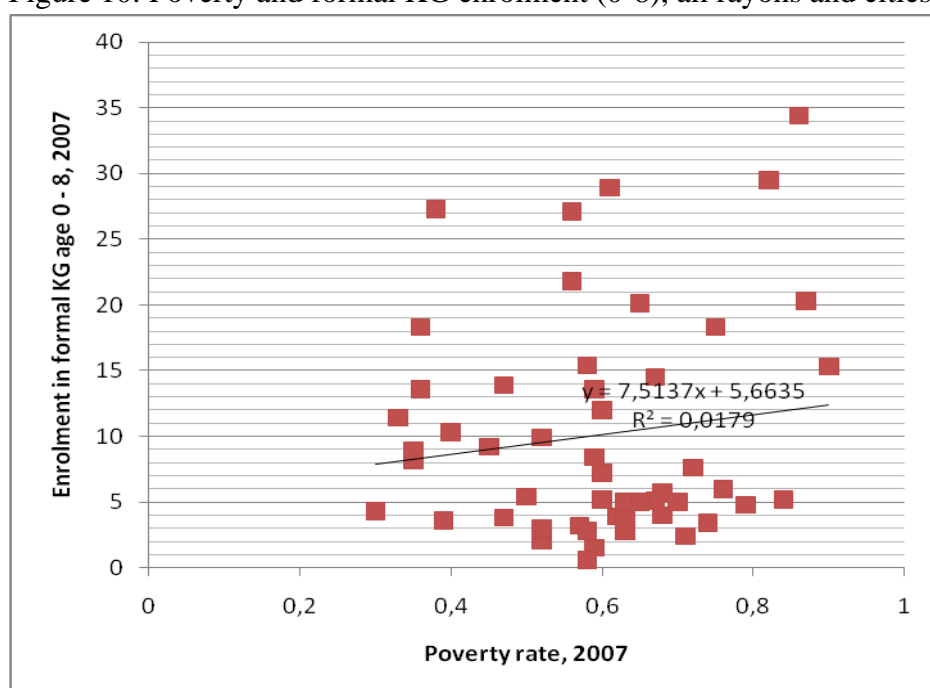
Source: based on National Statistics Committee and UNICEF (MICS), 2007:112

The relation between enrolment and poverty

The previous section highlighted disparities by wealth, locality (urban/rural), geographical area, ethnicity, and family background. Since poverty is likely to play a role in all of these disparities, we conclude this chapter with a deeper analysis of the relation between poverty and enrolment in preschool education. Anticipating that scenarios for the expansion of preschool education be based on the targeting of disadvantaged areas, we investigate how poverty influences enrolment and we try to identify areas where high poverty rates and low enrolment go hand in hand.

Data for such analysis are available at oblast level and at rayon level. The problem with oblast level analysis is that important disparities exist between rayons within the same oblast, as figure 7 (the map) shows. Targeting certain oblasts would lead to providing benefits to some relatively rich rayons within that oblast, and it would lead to the exclusion of poor rayons within richer oblasts. Admittedly, the same problem may occur in an analysis at rayon level, since poor rayons may incorporate some relatively rich Aiyl Okmotu's and vice versa. However, at a low governance level such as the Aiyl Okmotu, other problems occur in the event of targeted policies. Aiyl Okmotu's are relatively small units, and differentiated policies within a rayon can easily lead to adverse effects. For example, if one Aiyl Okmotu is targeted in one way or another and the neighboring one is not, families living in the latter may enroll their children in the former Aiyl Okmotu. At rayon level, this risk is less important. Moreover, the total number of rayons is in the order of 50, which is more manageable than the much higher number of Aiyl Okmotu. Figure 10 provides a first impression regarding the link between enrolment and poverty.

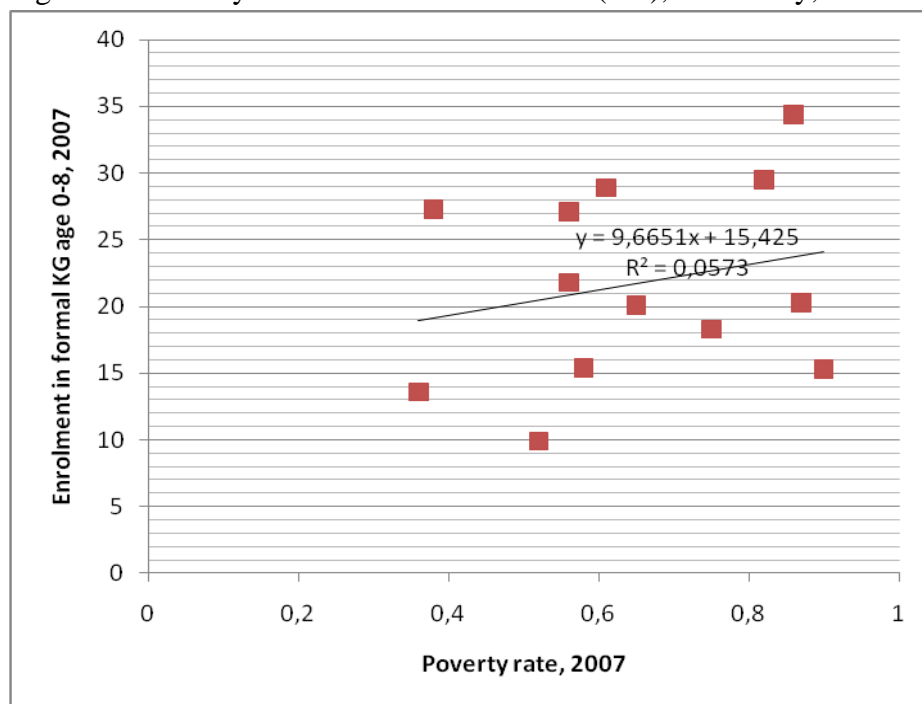
Figure 10: Poverty and formal KG enrolment (0-8), all rayons and cities, 2007



Source: compiled by the author based on enrolment data from National Statistical Committee and poverty data from (Kyrgyz Republic: the Geographical Distribution of Poverty, pp 18-23)

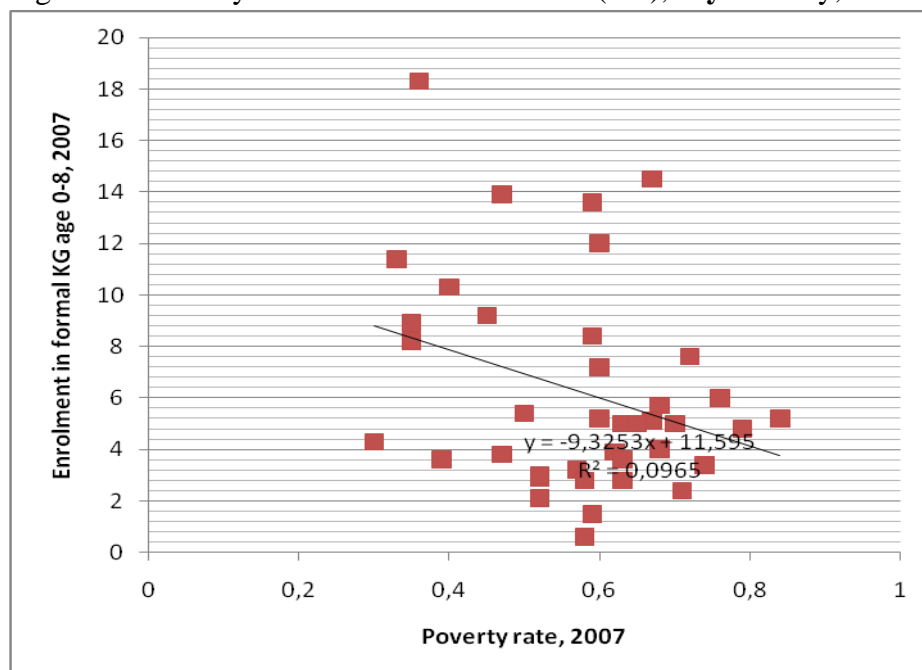
The message of figure 10 is counterintuitive. Although very weak, the correlation is positive rather than negative: the poorer the rayon or city, the higher the level of enrolment. If we separate rayons from cities, however, the positive correlation appears to be on account of the cities only, as figures 11 and 12 show.

Figure 11: Poverty and formal KG enrolment (0-8), **cities** only, 2007



Source: compiled by the author based on enrolment data from National Statistical Committee and poverty data from (Kyrgyz Republic: the Geographical Distribution of Poverty, pp 18-23)

Figure 12: Poverty and formal KG enrolment (0-8), **rayons** only, 2007



Source: compiled by the author based on enrolment data from National Statistical Committee and poverty data from (Kyrgyz Republic: the Geographical Distribution of Poverty, pp 18-23)

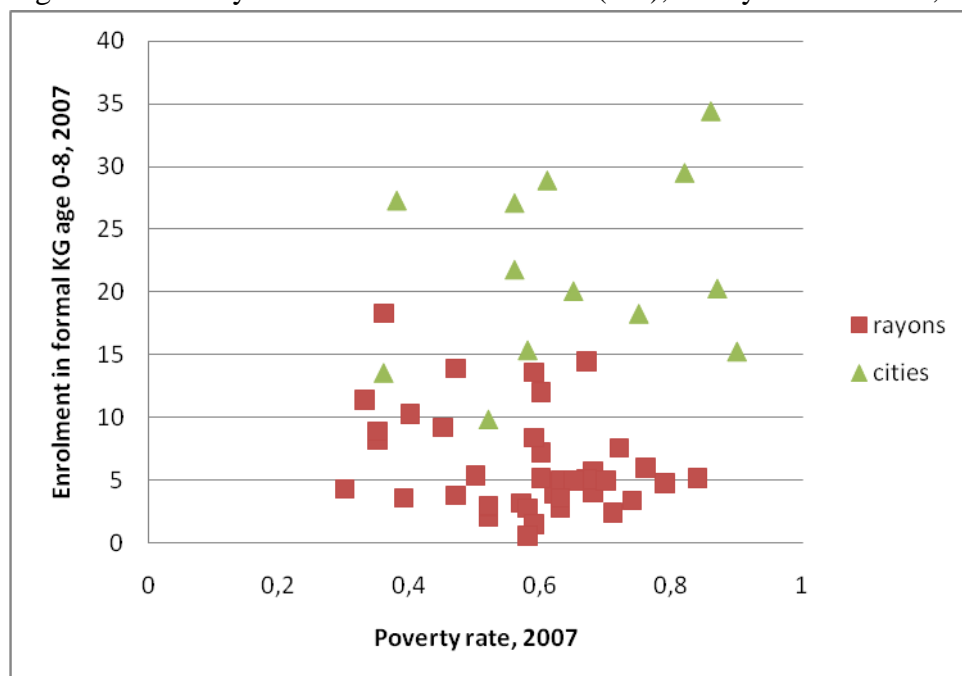
While figure 11 shows a (weak) positive correlation between poverty and enrolment in cities, figure 12 reveals a somewhat stronger negative correlation for the rural areas. The latter is more in accordance with what one would expect: the poorer the rayons, the lower its enrolment.

The explanation for the reverse correlation in cities is not directly clear. In some countries, the level of private provision is higher in cities, resulting in a lower level of enrolment in formal KG. However, this cannot be the explanation for Kyrgyzstan, where the share of private providers is very small. Another possibility is that parents in the richer cities have more alternative daycare options (such as home personnel and family members who can afford not to work) than parents in the poorer cities. However, this is pure speculation.

An important phenomenon in figure 12 is that while the correlation is less strong near the upper-left end of the regression line (where the dots are dispersed), there is a stronger clustering near the lower-right end of the line. In other words, there is a group of rayons in Kyrgyzstan that pair high levels of poverty to low levels of enrolment in preschool education. Clusters such as these make it possible to identify areas (in this case rayons) for targeting, and to defend such choices politically.

Figure 13, finally, shows the two very distinct patterns (rayons versus cities) in one scatter plot, underscoring once more the urban/rural disparity.

Figure 13: Poverty and formal KG enrolment (0-8), all rayons and cities, 2007



Source: compiled by the author based on enrolment data from National Statistical Committee and poverty data from (Kyrgyz Republic: the Geographical Distribution of Poverty, pp 18-23)

3. Community-based KGs: main characteristics

In 2004, the Government of Kyrgyzstan launched the Community-based ECD project under Presidential Administration. Within this policy framework, many communities in Kyrgyzstan introduced CbKs with the support of the Asian Development Bank (ADB), the Aga Khan Foundation (AKF), and UNICEF. These CbKs are nowadays supplementing the existing capacity of formal KGs. This chapter focuses on numerical aspects of the CbKs, leaving other aspects for later chapters. Table 2 is compiled on the basis of excellent data material that was produced in late 2009 by the three aforementioned agencies and generously made available by the Ministry of Finance. The table is explained and discussed on the following pages.

Table 2: Enrolment and other aspects of Community-based KGs in Kyrgyzstan, 2009

Agency	Rayon	CbKs	Groups	Grp/CbK	Children	Child/Grp	Hours	Shifts	Salary/yr.	Sal/Child	Fee
ADB	Nookat	48	107	2.23	2555	23.9	9	1	9203600	3602.192	250
	Alai	13	23	1.77	561	24.4	8>10	1	3235800	5767.914	150
	Chon-Alai	6	14	2.33	350	25.0	9	1	2762400	7892.571	200
	Kara Kul	20	39	1.95	888	22.8	6	2	1642200	1849.324	
	Narynskei	19	29	1.53	730	25.2	5>10	1.16			100-300
	At-Bashy	17	28	1.65	642	22.9	4>7	1.17			100-200
	At-Talaa	13	21	1.62	440	21.0	3>10	1			100-200
	Jumgal	13	16	1.23	375	23.4	4>9	1			0-200
	Kochkor	8	10	1.25	215	21.5	4>9	1			0-300
	Toktogul	43	66	1.53	1418	21.5	4>6	1.05	3649800	2573.907	200
	Chatkal	35	47	1.34	1111	23.6	3, 4, 8	1	1360082	1224.196	100
	Toguz-T.	20	36	1.80	640	17.8	3>8	1.3	7805513	12196.11	130
	Total	255	436	1.71	9925	22.8		1.14	29659395		
AKF	Alai	31	71	2.29	1268	17.9	3 or 8	1.73	3137705	2474.531	50-130
	Chon-Alai	34	64	1.88	1094	17.1	3 or 8	2	3810036	3482.665	50-200
	Naryn	13	53	4.08	1055	19.9	3 or 8	1.67	3198416	3031.674	50-500
	Total	78	188	2.41	3417	18.2		1.8	10146157	2969.317	
UNICEF	Batken	11	33	3.00	706	21.4	3 or 7	1.3	923200	1307.649	60 / 200
	Leileik	7	23	3.29	576	25.0	3 or 8	2	584000	1013.889	250-300
	Total	18	56	3.11	1282	22.9		1.65	1507200	1175.663	
TOTAL		351	680	1.94	14624	21.5					

Comments on table 2 must begin with a word of caution. It is possible that there is double counting, in that five CbKs were reported both by ADB and AKF. However, the indicators for these five CbKs did not entirely match, so possibly it concerns different programs – e.g. full-day versus half-day – within one CbK. It should also be noted that some CbKs are also on the official list of formal KGs.

The first column of table 2 reports the number of CbKs: 255, 78 and 18 for ADB, AKF and UNICEF respectively. The total number of CbKs is no less than 351, compared to 465 formal KGs (in 2006). The second column reports the number of groups within these 351 CbKs, which totals 680. This number is divided by the number of CbKs in the third column, which gives us the average number of groups per CbK. Here we see variation, with 1.71 groups per CbK for the ADB supported institutions, 2.41 for AKF, and 3.11 for UNICEF. It should be added that in the figure for AKF the so-called “satellites” are counted as separate institutions. These satellites are small scale KGs that are either home- or school-based, and that operate under the aegis of one central CbK which supports the satellites by providing supervision as well as didactical and other forms of support. The enormous advantage of this concept is that it makes small scale provision possible in villages and hamlets that would be too small to have their own full-size CbK.

The total number of enrolled children is 9925 for ADB, 3417 for AKF, and 1282 for UNICEF, i.e. 14624 in total. The total for formal KG is 59156 (in 2006). This means that within just a few years, the new sector has become a substantial contribution to preschool education in Kyrgyzstan. Strictly speaking it enrolls only one fourth of the number of children in formal KGs, but - as we saw in the first chapter – children in formal KG typically enroll at age three (or even earlier) and stay on board during four years. CbKs, by contrast, tend to enroll children for a shorter stay on average. By implication, formal KGs serve a smaller number of unique children than the figure of 59156 suggests, making the gap with the 14624 children in CbKs smaller than it seems.

The average number of children per CbK is 47.5 (this figure is not included in table 2) against 127.2 in the formal KGs. This is partly explained by the fact that children spend more years in formal KG than in CbK, but partly also a result of the different philosophies behind the two types of institutions: CbKs are conceived to be close to the people and embedded in small local communities, while KGs tend to be larger and predominantly urban institutions⁹.

The fifth column in table 2 reports the average number of children per group. The CbKs supported by ADB and UNICEF tend to have about 23 children per group, which is slightly above the fairly broad accepted standard of 20, while AKF is just below this standard.

⁹ This does not mean, however, that CbKs do not “work” for towns and cities. Within towns and cities, one can find local communities (neighborhoods) as well, and the experience in several countries is that these can also be the bases for institutions comparable to the Kyrgyz CbKs.

Column six reports the number of hours of the programs. Since one CbK can offer various programs of different length, there is variation in this column. The CbKs supported by UNICEF provide programs of three hours and/or programs of seven (Batken) or eight (Leileik) hours, but in practice, about two thirds of the 1282 are in the three hour programs¹⁰. For ADB, half-day programs are dominant in Jalalabad oblast, while elsewhere they are more exceptional. The AKF has campaigned very strongly for half-day programs of three hours. Within the satellite model, the home- and school-based satellites are exclusively half-day, while the central kindergartens have a full-day program of eight hours side by side with half-day provision.

Column eight reports the total amount of money spent on salaries per year, and in column nine these figures are divided by the number of enrolled children. The outcomes can be seen as a first indication of unit costs: the costs per child per year, albeit only for the salary component. Later in this report we will bring other cost components into the equation. This indicator – salary component of unit cost – reveals considerable variation. For UNICEF's CbKs it varies between 1000 and 1300 soms, while for AKF it varies between 2500 and 3500 soms; obviously this is related to the differences in group size. Even stronger variation is found among the CbKs supported by ADB, though some high values are possibly errors, which is why the average has not been calculated.

Fees range from zero to a rare maximum of 500 soms per month, but for 90% of the CbKs the fees are in a much narrower bracket: between 100 and 300 soms. Half-day programs tend to be significantly cheaper than full-day programs as one would expect, and there are generally no significant differences between the three organizations.

CbKs have been well-targetted

The information in table 2 – as well as the original data material – will be used to inform the development of future scenarios of the expansion of preschool education, later in this report. Here we pay attention to the location of the CbKs. Figure 14 is essentially the same as figure 12 – it maps the rayons of Kyrgyzstan in terms of poverty rates and enrolment in formal KG – but those rayons where CbKs are located are now green (note that this does not mean that CbK-enrolment is taken into account in the enrolment rates; it merely indicates that there are CbKs in these regions).

¹⁰ This was concluded from observation of the original data material, not from table 2.

The scatter plot displays the relationship between poverty rates (X-axis, 0 to 1) and enrolment in formal KG for age 0-8 in 2007 (Y-axis, 0 to 20). The legend indicates two categories: 'No CbKs present' (red squares) and 'CbKs present' (green triangles). The plot shows a general downward trend, where higher poverty rates are associated with lower enrolment. The 'No CbKs present' series shows higher enrolment at lower poverty rates, while the 'CbKs present' series shows lower enrolment at higher poverty rates.

Poverty rates, 2007	Enrolment in formal KG age 0-8, 2007 (No CbKs present)	Enrolment in formal KG age 0-8, 2007 (CbKs present)
0.32	4.5	
0.35	11.5	
0.36	18.5	
0.37	9.0	
0.38	8.2	
0.40	10.5	3.8
0.45	9.2	
0.48	3.8	
0.49	14.0	
0.50	5.5	
0.52	2.0	
0.53	3.0	
0.55	1.5	2.8
0.56	13.8	8.5
0.58	7.2	3.2
0.60	12.0	0.5
0.61	5.2	3.5
0.62	4.0	2.8
0.63	5.0	5.0
0.65	14.5	4.2
0.66	5.8	5.2
0.68	5.0	2.2
0.70	7.8	
0.75	3.5	
0.78	6.0	4.8
0.85		5.2

Figure 14 shows that the selection of rayons for the introduction of CbKs has been excellent. All but one of the rayons where CbKs are located are found in the lower-right corner, where rayons have high poverty rates and low enrolment rates. The figure also indicates that it will not be difficult to select rayons for a second wave of introduction of CbKs, if this were considered¹¹, because even if we ignore the green triangles in figure 14, the red squares still form a clear cluster in the lower-right corner. All other rayons are at a clear distance. A case of doubt is the red square left of that cluster, with a poverty rate of about 0.3 and an enrolment level of 4.3. This concerns Panfilov rayon. Its enrolment level is low but it has the lowest poverty rate, so one could argue that this rayon should be able to increase enrolment without external assistance.

On the next and last page of this chapter, table 3 brings Net Enrolment Rates for both formal KGs (for 2007) and CbKs (for 2009) together for oblasts, rayons, and, separately, for cities. The data for CbK are derived from the recent data material produced by the three organizations. The absolute numbers of children reported by the three organizations have been

28

divided by (estimations of) the numbers of children of zero to (but not including) eight years old in the respective rayons. This was done to match the data with the available enrolment data for formal KG, which were also based on ages 0-8. Given the risk of double counting, the figures were not added up.

Table 3: Net Enrolment Rates for Formal and Community Based KGs, 0-8, 2007/2009

FOR RAYONS: NET ENROLMENT RATES FOR AGE GROUP 0-8					
FOR OBLASTS: UNWEIGHTED AVERAGES OF THESE RATES					
Oblast / rayon	Formal KG	CbK	Oblast / rayon	Formal KG	CbK
Naryn oblast	3.5	8.0	Osh oblast	4.8	9.1
Ak-Talaa	5.2	6.7	Alai	7.6	12.8
At-Bashy	2.4	6.2	Aravan	5.0	0.0
Jumgal	4.0	4.2	Chon-Alai	5.7	24.5
Kochkor	5.1	1.8	Kara-Kuldja	2.8	21.0
Naryn	0.6	21.0	Kara-Suu	5.2	0.0
			Nookat	3.6	5.6
Issykkul oblast	4.5	0.0	Uzgen	3.4	0.0
Ak-Suu	1.5	0.0			
Jeti-Oguz	2.1	0.0	Talas oblast	4.1	0.0
Ton	3.8	0.0	Bakai-Ata	5.0	0.0
Tup	2.9	0.0	Kara-Buura	4.8	0.0
Issyk-Kul	12.0	0.0	Manas	3.6	0.0
			Talas	3.0	0.0
Chui oblast	9.5	0.0			
Alamudun	8.2	0.0			
Chui	5.4	0.0			
Jayil	18.3	0.0			
Kemin	9.2	0.0			
Moskva	11.4	0.0			
Panfilov	4.3	0.0			
Sokuluk	8.9	0.0			
Issyk-Ata	10.3	0.0			
			Cities	Formal KG	CbK
Batken oblast	3.9	2.0	Average cities	21.7	0.0
Batken	3.2	3.6	Naryn c.	15.3	0.0
Kadamjay	5.7	0.0	Karakol c.	29.5	0.0
Leilek	2.8	2.5	Balykchy c.	20.3	0.0
			Tokmok c.	15.4	0.0
Jalalabad oblast	9.0	5.8	Kyzyl-Kiya c.	20.1	0.0
Aksy	6.0	0.0	Sulukta c.	18.3	0.0
Ala-Buka	14.5	0.0	Jalalabad c.	28.9	0.0
Bazar-Korgon	7.2	0.0	Karakul c.	13.6	0.0
Chatkal	13.9	25.9	Mailu-Suu c.	21.8	0.0
Nooken	13.6	0.0	Tash-Kumyr c.	9.9	0.0
Suzak	3.9	0.0	Talas c.	34.4	0.0
Toguz-Toro	8.4	12.7			
Toktogul	4.8	7.8	Bishkek	27.3	0.0
			Osh	27.1	288 children

Source: Compiled by author based on NSC and recent overviews of ADB, AKF, and UNICEF

Table 3 shows how CbKs have rapidly become a major factor in preschool education in Kyrgyzstan. In all but one of the rayons where they have been introduced, they already enroll more children than the formal KGs. The same can be said for two oblasts: Naryn and Osh.

4. Program analysis

In previous chapters we looked at the existing provision of preschool education – formal KG and CbKs - and we identified challenges: gaps to be bridged, disparities to be resolved. We now make a side step. Before we can calculate the “unit costs” in the next chapter, we need to analyze the various ECD programs that exist in Kyrgyzstan. The objective is to find out which elements and aspects of these programs lead us to a sound balance between costs and quality. In the ideal world, we would choose whatever is best for children. In the reality of 2009, we need to make the best use of scarce financial resources.

A key issue in the discourse on ECD in Kyrgyzstan is the need to develop programs that are less costly than the formal KG and better suit the needs of local communities. An impressive series of political and legal statements as well as policy documents have underscored the need for such reform, underpinning this chapter and constituting the rationale for this report:

- The speech of President Bakiev on 6 October 2009, the Day of Educationalists, declaring that preschool education is now a priority at government level;
- The Law on Preschool Education signed by the President on June 29, 2009, stating as the first major principle: (the need for) “affordable, high quality services provided by the preschool education system that can be sustainably developed” (Government of Kyrgyz Republic, 2009a);
- Decree/Resolution 478 signed by the Prime Minister on 28 July 2009, ordering the inclusion of new types of preschool institutions in the official system, with important implications for their financing (Government of Kyrgyz Republic, 2009b);
- The Country Development Strategy 2009-2011, calling for expanding access to school readiness programmes (Government of Kyrgyz Republic, 2009c);
- State Standard on Early Childhood Care and Education, Approved by the Government in January 2007;
- An elaborate sector analysis by the ADB of November 2007 (ADB, 2007);
- An imaginative report about the UNICEF pilots by McLean and Orozova (2007);
- A thorough evaluation of the AKF’s Mountain Societies Development Support Programme by John Evans (2008);
- The guidebook on “how to establish and run different models of early childhood education and care in Kyrgyzstan”; this was produced by various ECD partners in Kyrgyzstan and is now being revised (Nizovskaya and Teleshaliyev, 2009);
- Finally, the Terms of Reference for this report clearly call for the investigation of possibilities to expand new forms of ECD.

Not included in this tabulation but worth mentioning is the Education Development Strategy of the Kyrgyz Republic for 2011-2020, which calls for the expansion of “alternative models” and sets clear targets for the number of “community-based” kindergartens: from 250 in 2008, to 530 in 2015 and 550 in 2020 (Agriconsulting Europe Consortium, 2009). This document has not yet been endorsed by the Government.

Making the case for half-day programs

As said, the statements and documents provide guidance for this chapter, and for this report more broadly. In this light, it is an important finding, both from the twelve site visits and from the data material provided by ADB, AKF and UNICEF (see previous chapter), that many of the CbKs do not differ substantially from the formal kindergartens, and may eventually become as costly as those formal kindergartens¹². The column “hours” in table 2 underpins this finding. Of the 14624 children enrolled in CbKs, 10085¹³ find themselves in programs of six or more hours per day, i.e. 69%. At present, these full-day programs are still cheap, partly because teachers work against very low wages; partly because parents and benevolent organizations make substantial contributions; and partly because they are simply underfunded. But once these community-based full-day programs are state-funded – as Decree 478 promises – they will be as expensive as formal KG, with their kitchens and cooks, dormitories and laundry ladies.

Not only will this pose serious funding problems for the government, it will also hinder the further expansion of CbKs. Against this cost, stakeholders may be at a risk of losing their faith in the new ECD movement. We can also phrase this issue in a more positive tense: for one child enrolled in a formal kindergarten during one year, we can enroll four children in a half-day program during one year, as the next chapter will show. Therefore there is a need for this report to address the issue of half-day versus full-day programs, even if several reports have touched upon the issue before.

Both McLean and Orozova (2007:47-48) and Evans (2008:20-21) raise the issue of half-day versus full-day programs in their aforementioned reports. McLean and Orozova refer to Engle *et al* (2007) and Sammons *et al* (2007) when arguing that duration (i.e. the number of years of attending an ECD program) is more important than intensity (i.e. the number of hours per day). Both references have been checked. Engle *et al* do not really substantiate the point; in fact, they argue that duration and intensity are both critical (page 229). However, Engle *et al* have probably a broader definition of intensity, understanding it as the combination of hours per day *and* days per week. Moreover, their advice may be inspired by the fact that some programs in developing countries have an extremely low intensity, e.g. two hours per session and one or two sessions per week. In Kyrgyzstan, half-day programs offer usually three hours per day, five days per week; this would most probably exceed the threshold as seen by Engle *et al*.

Sammons *et al* (2007) have investigated the impact of several types of ECD programs on achievement in language and mathematics, later in school. The focus of their study (also

¹² Initially, the support from the Fast Track Initiative was also targeted at the traditional Kindergarten rather than innovative models, which has been criticized by McLean and Orozova (2007:15). But the proposal for the second allocation is strongly focused on expansion of new models (Ministry of Education and Science, 2009)

¹³ The figure of 10085 was deducted from the information material on which table 2 is based. The figure cannot be deducted from table 2 directly.

known as the EPPE-study) was on the United Kingdom. And indeed, this group of researchers found that programs of different intensity do *not* lead to significantly different impacts. What mattered most was whether children attended preschool or not as well as the number of years, while quality also makes a difference. The strengths of these effects depend also on a number of other variables such as a family background (see Section 4, pp 34-55).

The same message comes from Evans (2008:21) who based his finding on opinions of Kyrgyz parents of schoolchildren: whether or not children attended an ECD program prior to entry in school makes a significant difference, but whether this program is half-day or full-day makes no difference. Exactly the same was found during the site-visits that were undertaken for this report. Whenever the question was relevant (i.e. in CbKs where both a half-day and a full-day program was provided) we asked whether anybody (Heads, teachers, parents) saw a difference between the two programs in terms of child development. The answer was always negative. Admittedly, these findings cannot pass for “scientific”. However, this cannot be said for research done by AKF (2009) where learning achievement in primary grade 1 was investigated. As usual, children that participated in ECD program – as well as those who benefited from “mini-libraries” – performed significantly better than others, and in as far as there was a difference between program types, it was slightly to the *advantage* of children attending the so-called satellites. These are half-day, one-group programs delivered within a school or in the teacher’s home. We will discuss this at the end of this chapter.

A broad evaluation conducted in Poland in 2006 is in accordance with the findings of the AKF study. A project called “Where there are no pre-schools” provided preschool activities during nine hours per week – i.e. less than 2 hours per working day on average - for groups of maximum 15 children. These children developed just as well as children that attended longer programs (Comenius Foundation for Child Development, 2009:52).

Reynolds and Temple (2008) reviewed a large range of studies concerning the impact of different ECD programs in the United States and found that “relative to half-day kindergarten, the positive effects of full-day kindergarten have been found to be relatively small and generally do not last for more than a year” (page 109). They add that they expect that the additional economic return on investment of a full-day over a half-day program is close to zero, while, in contrast, the positive effects of a good program versus no program at all range from returns of a factor four to returns of a factor ten.

Finally, Evans (2008:21) offers a surprisingly simple yet strong argument for half-day programs. He presents the daily program of a full-day program, showing that the only structured learning time (lessons) is between 10:00 and 12:30. After this follow the lunch, the sleeping time, play outside, and the afternoon meal. Admittedly, children learn informally during these activities as well – even during sleep, as recent brain research indicates – but these activities can be undertaken outside the KG just as well. Or perhaps better. Evans suggests that *variation* of learning environment could be more conducive to child development than staying in the same place all day. This is supported by countless studies on

school effectiveness – including Sammons *et al* - highlighting the importance of learning from peers and of learning in the so-called home learning environment.

Parental education: a critical supplement to preschool education

However, the quality of this home learning environment varies, and is usually low for the children who are most in need of a good home learning environment. This is the rationale for parenting programs or, as this report will call it, parental education. These are programs to improve the child-rearing skills of parents. Judith Evans (2006) underscored the beneficial impact of these programs and Engle *et al* (2007:238) advise to provide such programs from birth (or from conception) until age three, and to “add group learning experiences from 3 to 6 years, particularly for disadvantaged children”. The Consultative Group on ECCD (2008) - a coalition of multi-lateral organizations, UN agencies, international NGOs and Foundations, academic institutions and regional and national organizations - calls for both attention to the 0-3 group through parenting initiatives and for children’s enrolment in centre-based learning opportunities during the two years before entry in primary education, preceded by parental education. For Kyrgyzstan, where children go to school at seven, this would mean that children attend kindergarten at ages four and five at the least. Should the school entry age be lowered to age six – as this report proposes – then children should attend kindergarten at least at ages four and five.

Parenting programs are particularly relevant in CEE/CIS countries, where we can speak of a “lost culture of parenting” (UNICEF Regional Office for CEE/CIS, 2007), meaning that entire generations of children have been raised in preschool institutions so that the traditions, knowledge and skills of parenting are practically forgotten. Even many grandparents have never raised their own children so that, to put it in basic terms, many people do not remember how to educate children anymore. Within a few years, many CEE/CIS countries will enter a situation in which most parents have not attended kindergarten either¹⁴, so even the strategy of replicating the good practice of one’s own teachers will no longer work. And while the need for parental education is strong, its unit costs are relatively low compared to programs for children, because one facilitator can reach many parents, and through them an even larger number of children (Van Ravens and Aggio, 2008).

From the site visits, however, it appeared that although most CbKs undertake activities that qualify as parental education (as well as more formal parents board meetings, for decision making), these activities are generally only meant for parents of children who are enrolled at that moment in time. In other words, there is little out-reach to parents of children who are *not yet* enrolled (e.g. because the children are too young), and there is also little out-reach to parents of children who *never* enrol (e.g. because parents are too poor to afford the fee). This

¹⁴ The sharp decline in KG enrolment in the CEE/CIS region started in the early 1990s (see table 1 for Kyrgyzstan). Many children born in these years missed out on KG, and they will soon enter the age at which they will have children of their own.

problem is observed in many countries: kindergartens only “see” and engage with the parents of enrolled children, usually not with parents of excluded children. One could call this the “double or nothing” problem: families either receive both services at the same time (children in KG / parents in parental education), or they receive neither of the two.

Yet, there are exceptions worth noting. AKF’s Reading for Children initiative deliberately aims to expand the reach of its ECD programmes by providing mini-libraries of Kyrgyz language story books for young children, most specially developed by the project due to the dearth of such). These mini-libraries are housed in ayyl okmotus, libraries, schools, homes, and Kindergartens, and they also offer workshops for parents to build their confidence in their ability to support their children’s overall development, including the use of enjoyable ways of reading with young children.

The ADB and UNICEF have provided parental education in the recent past. For the ADB it was foreseen as a one-time activity, intended to mobilize the population in the areas where the roll-out of CbKs was planned. About 50,000 parents received a ten day training. UNICEF had the intention to develop parental education as a permanent service but had to discontinue for lack of policy support. Again, this is by no means uncommon. In many countries, ministries of health have the primary responsibility for children from zero (or conception) to three, and ministries of education “take over” from age three onwards. By consequence, early childhood services for the zero-to-three are health-dominated, and the services from age three onwards tend to be education dominated. What is lost between the cracks, is early learning and early stimulation.

Kyrgyzstan has, in principle, a good architecture for health services for the zero-to-three, with the Care for Development module of Integrated Management of Childhood Illnesses (IMCI) Programme of the Ministry of Health through Feldsher-Accoucher Posts (FAP) and Village Health Committees. Many FAPs are in a bad condition and in need of new equipment and refurbishment (Asian Development Bank, 2007:annex 11), but assuming that this problem will be addressed in the coming years (Asian Development Bank, 2007:60) there will be a good structure in place. Several site visit reports (see Annex) testify of close cooperation of CbKs with FAP and Village Health Committee.

Given the fact that the Village Health Committees already go home to home to support families and sometimes organize group-wise training for parents, it seems by far the most feasible option to facilitate these Village Health Committees to include early stimulation in their package. It is one of the core lessons of development that it is better to use existing structures if at all possible, rather than create new ones. This idea will be part of the recommendations of this report, but will not be part of the cost estimations simply because the extra costs will be limited. Members of Village Health Committees are volunteers and they already have their means and modes of working, so all it takes to integrate early stimulation in their package is the development of content (meaning: guidebooks and materials for training parents how to play with children, to read to them, to influence their behavior), and some additional training to convey this content. A good example of the integration of cognitive and psychosocial components in an existing IMCI program is found in Kibaha district in Tanzania

(MediaNet Limited, 2008). A successful approach to integrating parental support in a health program has been implemented in Talas oblast in Kyrgyzstan. Here, Village Health Committees and providers of primary health care are distributing micro-nutrients (named “Gulazyk” after a traditional Kyrgyz dish known for the energy and strength it provides) to families, while counseling and educating mothers during home visits.

Differences between half- and full-day programs and their cost-implications

Having argued that half-day programs are as good for child development as full-day programs – especially when flanked by parental education – we now discuss a number of differences between the two modalities that influence costs.

The unit cost (cost per child per year) for preschool stands at 6010 soms, which is almost three times as much as the unit costs for primary and secondary education at 2220 (World Bank, 2008:2). The high preschool unit costs are caused by facilities that are not directly related to learning, especially sleeping and meals. This has been argued many times before, but given the fact that even CbKs tend to adhere to the traditional KG concept, we do go into detail to some extent.

According to formal regulations (Resolution 404, 30 September 1995), every KG, regardless the size, has a manager. If the KG has one or two groups, this Head is required to perform as a teacher for 50% of a full-time equivalent, but with three groups or more, the Head is a fulltime manager. Further, there is always a fulltime cook, even with one group. There will be 1.5 cooks with two or three groups, and two cooks with four or more groups. A halftime launderer is present even when there is one group, and this capacity also grows with the number of groups. Administrators, accountants, service and repair assistants and cleaners are added when four or five groups are present. These regulations can easily result in an overall staff-to-child ratio of 1:3, as was observed during one of the site visits (in this CbK there were two groups, but both were relatively small).

The extra space per child that is needed for dormitories is immense, as McLean already demonstrated (2007:47-48), and the same goes for the extra costs of beds, linen, and kitchen gear, as was frequently noted during site visits. A dormitory was even present in a CbK that enrolled only six year olds. Initially, the Head did not find it necessary to have a dormitory, but it was demanded by the parents, who argued that a KG without a dormitory is not a serious KG. All these examples indicate that even today, in the face of massive exclusion of children who are strongly in need of enrolment in an ECD program, cost-consciousness is not yet well developed. An illustration is the rule that school-based CbKs can operate only if there is an entrance for the children that is separate from the main entrance used by the students in primary school (Nizovskaya and Teleshaliyev, 2009:16). Clearly there is some advantage in having separate entrances, but the costs of creating such an extra entrance in an existing building can be substantial, and are not unlikely to be prohibitive for starting a school-based

CbK in many cases. This is sad because school-based CbKs are relatively cost-effective as the next chapter shows.

For comparison it may be interesting to look briefly at the Netherlands, which leads the ranking of child-wellbeing (UNICEF Innocenti Research Center, 2007:2). Here, the entrance age is four. Several decades ago, *all* of the preschools became school-based for both financial and pedagogical reasons. In none of these preschools one can find one single bed. The service-hours are from 08:30 to 15:30, with a lunch-break of one hour and a half. All of the time spent in the preschool is dedicated to developmental activities. Children usually go home during lunch-break, and if both parents work they make informal lunch-break arrangements with other parents, neighbors, grandparents; some children stay over at school. There is one teacher for about 20 to 25 children. Kitchens and cooks are absent, as are launderers and nurses. Such facilities are generally not considered affordable in OECD countries, with the exception of a very select group of countries, as we saw in chapter one (see figure 3 and the comments following it).

Closely linked to cost-consciousness is the idea of cost sharing and facility sharing. Playgrounds can serve as an example. The costs of a playground with fence are in the order of magnitude of 100,000 to 150,000 soms. To put this into perspective: many teachers earn no more than about 1000 soms per month, so for the same amount of money one could double these teachers' salaries for many years. The playground will only be used during the one hour of outdoor play in the afternoon (Evans, 2008:21), and only by children enrolled in the KG. The costs per child per hour are immense, and if a commercial playground would charge an entrance fee equal to those costs, no family would make use of it. However, it is the force of habit that prescribes that a KG have a playground. In resource constrained areas it would make much more sense to build a community playground; to finance it from the community budget and from in-kind contributions from all community members; to make it available to the KG during one hour per day, perhaps against a small rent; and to open it up for all other children in the community during all other hours of the day.

Similar stories can be told for other KG-facilities, such as the distribution of meals. True, children need three good meals per day, and if some children do not receive it at home, it is good that the KG offer it. But the problem is, obviously, that children most in need of nutritious meals are not enrolled since their parents tend to be poor and unable to pay the fee – which is even the case for some CbKs, as the Annex shows. Under these circumstances it is not possible to combat malnutrition via the KGs. If a community decides to make an investment to reduce malnutrition, it would be much more cost-effective to make that a common facility, such as a kitchen in a community center or someone's home. In fact, that common facility could even be a KG's kitchen, as long as it operates for disadvantaged children of the whole community, and not just for the relatively select group of enrollees. In this case, the KG could receive a financial compensation for the outreach of meals, making it an income generating activity and strengthening the economic basis for its kitchen. In fact, it could use a part of the profit from the kitchen to pay the rent of the common playground. This

type of managerial creativity is frustrated by government standards regarding staffing and inventory of KGs.

The resistance against half-day programs

Having discussed the equivalence of half-day and full-day programs in terms of child outcomes, and having addressed the substantially higher costs of the full-day programs, we conclude this chapter with investigating parents' fierce resistance against half-day programs. Evans (2008:21) reports that when AKF promoted half-day programs, parents "vociferously insisted on full-day attendance"¹⁵. The same message was heard during the site visits undertaken for this report. In all cases it were the parents who opposed against half-day programs.

A frequently mentioned argument was that in many families both parents work. Sometimes this concerns relatively wealthy families with a good double income, but in remote rural areas it concerns more often people who earn very low salaries or derive a low income from agricultural work. We could refer to this group as the working poor. This group exists in many countries and it complicates preschool policy: as two-job families they are in need of full daycare for their children, but unlike richer urban workers they do not earn enough money to afford daycare on a commercial basis. And while in many countries the public preschool system caters for the working poor and the private system caters for the working rich, the situation in Kyrgyzstan is different as we saw at the end of chapter one: a private system hardly exists, and the working rich make use of the heavily subsidized public system. The working poor are at risk of remaining unreached.

Seen from this perspective, it may seem a good idea at first sight that an alternative preschool system is now developing to meet the daycare needs of the working poor. But if that alternative system tends to copy the formal system (with kitchens, dormitories, high staff-to-child ratios), it will soon become impossible for the government and parents to finance its further expansion, and the CbK movement will stop in its tracks. Moreover, a few years ago, there were no CbKs at all, and in large parts of the country they are still absent. So it must be assumed that there were and are informal arrangements by means of which working couples somehow manage(d) to find daytime carers for their children. For instance, many couples work abroad in Russia and Kazakhstan on a permanent basis, unable to care for their children even in the evening. In most of these cases, grandparents or other family members take care of the children of these migrant workers, and such are quite normal solutions in countries all over the world, rich and poor.

Finally, there are indications that there is an emotional component in the drive to full-day programs. It was noted before: people feel that a KG without meals and dormitory is not a

¹⁵ Eventually, AKF reached agreement with communities that every new kindergarten would have at least two half-day programmes, alongside a full-day programme.

serious KG. Even unemployed parents – who are not in need for day-care – were said to have protested against half-day programs because they did not want a second hand option for their children. And we should not forget the experienced KG-staff, who have dedicated their lives to child development and have often made great sacrifices to reopen - or keep open - a KG in very difficult times. Within this group there is a very understandable adherence to the KG concept as they have always known it and was perhaps the best resourced concept in the world. But the reality of today is that countless children are excluded and that for some even the fee of the CbKs appears too high. It is for this reason that this chapter has once again made the case for half-day programs: equivalent to full-day programs in terms of cognitive outcomes, probably even better in terms of holistic child development, yet affordable for all.

5. Unit Costs

This chapter focuses on “unit costs”. This is a central concept in the development of financial scenarios for public services such as preschool. The unit cost is the cost per beneficiary – in this case the child – per year (or other unit of time). If we know the unit cost, we can multiply it by the numbers of children that we wish to be enrolled in preschool, and the outcome of this multiplication will be the overall cost requirement, on an annual basis. This tells us how affordable a scenario is. Sharing these costs among stakeholders – government, parents, communities, others – is the next step.

Based on the argumentation in the previous chapter, it is proposed that we focus on the unit cost of half-day programs. This does not imply that full-day programs will belong to the past. Hundreds of full-day programs exist today in Kyrgyzstan, both within formal KGs and CbKs, and they are “home” to hundreds of children and dedicated staff for whom the KG is an important part of their daily lives. Closing KGs – or existing full-day programs in CbKs – would not be understood. What this report does propose, as a core policy principle, is that in the further expansion of ECD in Kyrgyzstan, from this moment onwards, half-day programs will be the norm until the last child in the country is included. Once that has been accomplished, we may address the question whether there is a need for the expansion of full-day programs, and to what extent this would be a government responsibility.

This policy principle does not imply, of course, that it would be undesirable let alone forbidden to continue to offer full daycare for some groups in society. But within the full-day programs, we should make a distinction between those parts of that full-day program that can be seen as essential from a child development perspective, and those parts that cannot. The essential part can then be defined as the core public service, to be subsidized from the public purse. Additional services that some parents may wish to receive (meals, sleeping, et cetera) should then be covered by those parents, their employers, or other private actors. In this chapter, we work on the basis of the claim – underpinned in the preceding chapter - that the half-day program can be seen as the essential package, or the core public service. Thus the question for this chapter becomes: what are the unit costs of the half-day program?

Some basic principles

In any service process, we distinguish recurrent costs from start-up costs. Salaries, food, stationary, energy and maintenance are typical examples of recurrent costs: they occur very predictably on a continuous basis. By contrast, the cost of physical space (capital investment) is part of the start-up costs. To construct a CbK-building or to refurbish an existing building to make it suitable for use, is only done once in the lifecycle of a CbK, in principle. Start-up costs can also be of a non-material nature. An example is the process of community

mobilization that is required to prepare the start of a CbK together with the local community; this requires time investment of professionals and money for the organization of meetings.

There are also cases of doubt. Inventory such as furniture and toys – often donated at the start of a CbK - usually last longer than a year and should theoretically be part of the start-up costs. However, it is possible to divide their investment value by the number of years in which they can be used (the lifecycle). In this manner, we convert the costs of inventory into recurrent costs, or, in other words: we annualize these costs. This is important because CbKs should eventually be able to finance the regular replacement of inventory by themselves. CbKs can and should not rely forever on incidental donations, so replacement costs should become part of the ongoing bookkeeping of the CbK¹⁶. Teacher training is also a case of doubt. The initial education to prepare for the profession can be seen as start-up costs, while ongoing professional development or refresher training is a recurrent cost. Here too we will annualize start-up costs.

This chapter addresses respectively: buildings and classrooms; teacher salaries; teacher training; inventory; utilities; and overall unit costs. In all cases, in fact throughout this report, we will think in terms of current prices. This means that we investigate the costs of services as they are today, in 2009/2010, and that we confront them – in chapter 6 - with current budgets. Obviously, costs will change as a result of inflation. So in nominal terms, the costs will be much higher by the year 2020 than our estimations suggest. But the same goes for the budgets. Therefore it is defensible to limit this report to current prices, for the sake of clarity.

Buildings and classrooms

For the capital investment of refurbishing or constructing a building, CbKs in Kyrgyzstan have received external assistance from a variety of organizations, on the condition that the community itself made a contribution too. This could partly be in-kind. Many parents have assisted hands on, and one CbK had even started a structured labor pool making excellent use of the craftsmanship of parents. Table 4 summarizes the findings from the site visits. In the column “type” we distinguish regular CbKs, school-based satellites, home-based satellites, and newly constructed buildings. Do note that the first of the two new buildings is a theoretical estimation made with the help of the local people; the second is an empirical finding. Both concern centers. Note also that one of the school-based and the home-based facilities did not report significant refurbishment costs; yet we have entered a small amount of money (10,000 soms) assuming that normally some expenses need to be made. The second

¹⁶ Some will argue that the amortization of buildings should also be accounted for by CbKs. However, CbKs are not private companies but public organizations; their buildings are usually property of the Aiy1 Okmotu; and their lifecycle is very long. These are arguments to focus just on the initial investment in medium term planning.

column presents the numbers of classrooms, and the third the number of children. In the fourth and fifth columns, the costs per room and the costs per “child-place”¹⁷ were calculated.

Table 4: The costs of refurbishment and construction of CbK facilities (x 1000 soms)

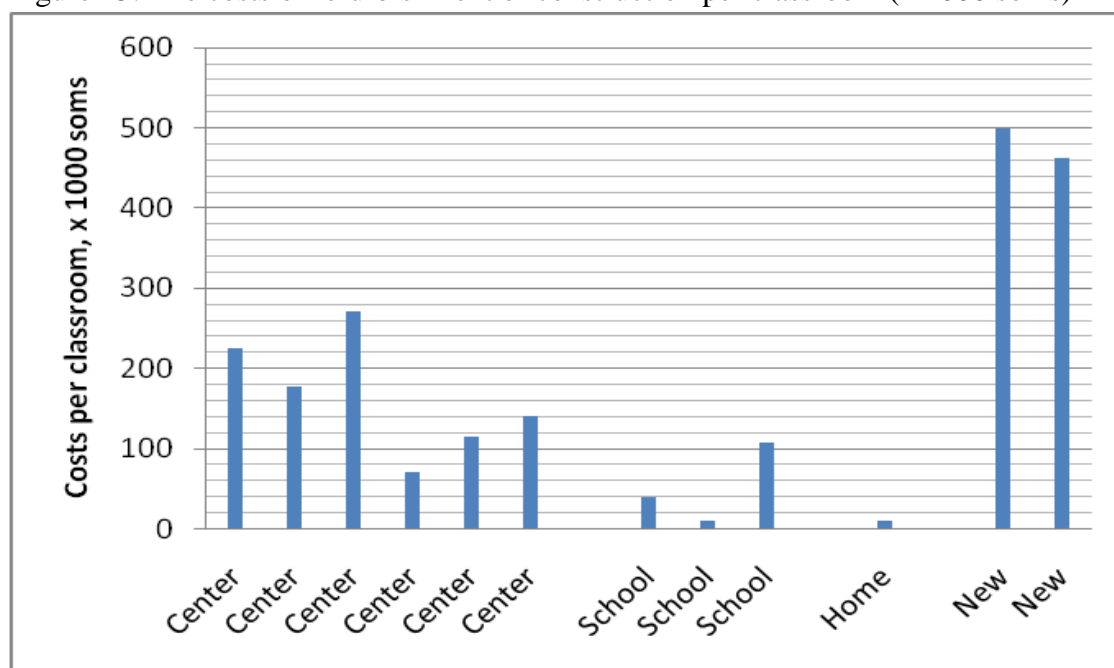
Type	costs	rooms	places	costs/room	costs/place
Center	675	3	75	225	9.0
Center	355	2	80	178	4.4
Center	813	3	43	271	18.9
Center	500	7	220	71	2.3
Center	230	2	35	115	6.6
Center	140	1	30	140	4.7
School	40	1	27	40	1.5
School	10	1	20	10	0.5
School	215	2	25	108	8.6
Home	10	1	20	10	0.5
New	500	1	19	500	26.3
New	462	1	20	462	23.1

Source: findings from site visits (see Annex of this report)

In figure 15, the findings under “costs/room” are presented in a graph. It would also have been possible to focus on costs/place, but this indicator appeared to be more volatile.

¹⁷ By child-place we mean the physical space for one child, regardless whether it concerns a one-shift full-day program or a two-shift half-day program. Of course, when it concerns a two-shift program, two unique children can use one place, but this is brought into the equation later.

Figure 15: The costs of refurbishment or construction per classroom (x 1000 soms)



Source: findings from site visits (see Annex of this report)

Not surprisingly, new buildings are significantly more expensive than refurbishment. The costs of labor are low in Kyrgyzstan, so fixing up a building tends to be cheaper than new construction involving the purchasing of building materials. The costs of refurbishing an existing building for use as a CbK are in the order of 150,000 soms, when ignoring the highest and lowest outliers. This is fairly consistent with the standard amount of money that the ADB donates for refurbishment: 10,000 US\$ (of which the community co-finances 20%: 10% in money and 10% in-kind). The 10,000 US\$ equals about 450,000 soms, which makes 150,000 soms per group in a three-classroom building.

The question is whether Aiyl Okmotu's still have a sufficient stock of buildings available for a significant expansion of the number of CbKs. Where this is not the case, it becomes even more interesting to look at school- and home-based options, the more so because of the fact that refurbishment costs are low: both the schools and the homes are normally in full use, which means that refurbishment is relatively cheap (the high costs of 108,000 soms per classroom of the third of the three schools in table 4 is not representative; this concerned an abandoned building on the premises of a school, not a regular school classroom). During the site visits we asked on several occasions whether schools were generally able to spare a classroom. The answer differed according to region; in some regions the number of pupils was falling, but in others it was on the rise so that schools worked with two or even three shifts. In these regions, home-based provision is an interesting option, the more so because the costs per room in home-based CbKs are even lower than for school-based CbKs.

Thus, there are strong arguments for this report to adopt the aforementioned satellite concept piloted by the AKF (Evans, 2008:9-10):

- the capital investment costs are low because of the school- and home-based outlets;

- the concept has the potential of reaching children in small and/or remote communities;
- the use of overhead staff (head, nurse, et cetera) is efficient;
- quality is safeguarded by the fact that the home- and school-based satellites operate under the aegis of the central CbK, providing supervision, healthcare, and the opportunity to participate in festive events for which the satellites would be too small to organize on their own.

More specifically, we assume (i) that for each central CbK there is one school-based and one home-based outlet¹⁸; (ii) that the capital investment costs per room for the central CbK is 160,000 soms¹⁹; (iii) that the costs per room in the school-based satellite are 30,000 soms; (iv) that the costs per room in the home-based satellite are 10,000 soms; and (v) that the central CbK has two rooms and runs four groups of 20 children (two-shift), and the school- and home-based have both one room, also running two shifts each. This means that the total capacity of this constellation is as follows:

$$(2 + 1 + 1) \text{ rooms} \times 2 \text{ shifts} \times 20 \text{ children} = 160 \text{ children}$$

The total capital investment costs are $160,000 + 30,000 + 10,000 = 200,000$ soms. This makes an average investment of 1250 soms for each child that is enrolled at a given moment in time.

A last remark on buildings and classrooms concerns their lifecycle. In the previous section we assumed that “in principle” CbKs need to invest only once in refurbishment or construction. However, even if we also assume that buildings will be well maintained, they may one day need to be replaced (or refurbished once again). Carter et al (2008), for instance, assume a lifecycle for community-based ECD centers of 50 years. So strictly speaking, we could annualize the costs of refurbishment or construction by dividing the start-up costs by the lifecycle. However, the reality is that (i) CbKs do not have good possibilities for lending money, and (ii) that the rapid expansion of preschool education will require a wave of investment within a relatively short period of time. This means that a well-coordinated funding arrangement will be needed for refurbishment and construction and that we cannot simply rely on regular amortization. Considering that 50 years from now the financial situation of Kyrgyzstan will be different, this report concentrates on the upfront investment that is needed today. In time, the new kindergartens should be brought under the regular state system of financial management, but it seems defensible to leave this issue for later.

Teacher salaries

In Kyrgyzstan, teachers in formal KG are treated equally to teachers in primary education. This is a major accomplishment which puts Kyrgyzstan ahead of many countries where ECD

¹⁸ In practice, CbKs supported by AKF can have more than one home-based and one school-based satellite.

However, since the satellite concept is new for the Government and the other agencies it is good to be cautious.

¹⁹ See figure 15. The 160,000 soms is a bit higher than the average for “center” because central services (management, health) also work for the satellites.

workers are volunteers receiving just a compensation for transport costs or a quarter of the salary of primary teachers, supplemented by what parents can spare. Moreover, the Decree 478 of the Government will extend the right to equal pay to all teachers in CbKs, putting an end to the situation that CbK staff work for very low salaries and cannot accumulate years of experience. Likewise, it will end the inequality *within* some of the CbKs, where some teachers receive the state salary and others do not.

If we look at the present salaries as they were observed during the site visits, we see strong variation both between the state-salaries and the non-state salaries. In the first category, a starting teacher receives 1200 soms per month, while this can grow to 2400 soms for a more experienced teacher²⁰. The second category - those CbK teachers who are paid from parents' fees - earned usually less than state-paid teachers (in one case as little as 600 soms per month, in another case nothing at all) though occasionally they actually made more money, up to 3000 soms per month. One teacher earned 2000 soms from fees by running a half-day school-based program in the morning, plus a regular salary of 1800 soms per month by teaching regular classes in school in the afternoon. However, we should also take into account that non-state teachers are not paid during vacations. They either continue work in vacation time, or they are without income in that period.

However, although it is a major step forward that Decree 478 will include all CbK teachers in the regular salary system, the picture becomes less bright when we take into account that even the official wages in the education sector are rather low compared to wages in other sectors of the economy. In the Country Development Strategy 2009-2011, teacher remuneration was mentioned as the first of a number of core problems facing the education sector (Government of Kyrgyz Republic, 2009c:98). Teachers in general earn 59.8% of the average wage in Kyrgyzstan, while primary teachers (hence teachers in formal KG) earn only 43.2% of the average (National Statistics Committee, 2008:23). The only sector where wages are even lower is agriculture, hunting and forestry (38.5%); lowly qualified work in the services sector pays better (68.6%) than work in education. In his speech on the Day of Educationalists (6 October 2009), the President of Kyrgyzstan did note that consecutive increases in teacher salaries in recent years enabled them to catch up with the minimum consumption budget in 2008. However, further measures to increase teacher salaries were not announced.

An additional problem will be that if the preschool sector be expanded substantially, it will have to be by attracting people with no or few years of experience in education, because a large share of the pre-1990 workforce will no longer be available to return to the preschool sector. Given their low number of accumulated years of experience, these new teachers will earn at a salary well below the average, and well below the average consumption basket. This means that despite the *de jure* equality between pre-primary and primary education, there will be a *de facto* difference. Finally, Kyrgyzstan is already struggling with a teacher shortage in

²⁰ This is broadly consistent with the fact that the average salary in pre-primary and primary education stood at 1377 soms per month in 2006 (National Statistics Committee, 2008:22). The trend from 2002 to 2006 shows steady increases between consecutive years, probably due to a combination of inflation and real improvement of salaries. Extrapolating the trend would lead to an average wage of about 2000 soms in 2009.

general, making recruitment for the preschool sector even harder. Fortunately, the Young Teacher Deposit Programme – an incentive scheme to encourage young school teachers to work in remote areas – will be extended to the preschool sector. But more such initiatives, preferably with a national coverage, may be needed to resolve the problem.

Relatively low teacher salaries are a characteristic of the CEE/CIS region. The share of salaries as a proportion of total spending on primary education is in the order of 50% in this region, against 65% in North-America and West-Europe and even higher levels in Asia, Africa and Latin America (UNESCO, 2008:364-371). For Kyrgyzstan this source only gives an outdated figure (47%, in 1999); the current figure is 40-45%. However, a low value for this indicator – teacher salary as share of total spending – is not only caused by low teacher salaries, but also by a high level of spending on all the other cost components such as non-teaching staff, meals, and – as a result of the harsh climate - energy costs. This is illustrated by financial data obtained from Aiyl Okmotu Bujum in Batken oblast:

- Salary costs 78000 soms per year
- Social fund 14800 soms per year (19% of salary costs)
- Meals 77000 soms per year
- Transport 2000 soms per year
- Miscellaneous 5000 soms per year

This overview shows that salary costs hardly exceed the costs of meals, and make up only 44% of the costs shown here²¹. This is observed in many other countries as well; the rise of food prices relative to wages is a global process. And if the recurrent costs of utilities and the depreciation of inventory and learning materials would have been included in this overview, the share of salary costs as a percentage of total costs would drop even further, probably well below the level of 40%. The positive side of all this is that by no longer spending money on meals, cooks, dormitories, et cetera (as the previous chapter has advocated) the unit costs in preschool education drop significantly.

Another strategy to keep education affordable while paying teachers a better salary is the approach that is pursued by the Legal Center in Bishkek. They are working for an inter-sectoral working group (chaired by the Prime Minister) on the revision on financial standards for preschool education. Their core principle is the proportionality of teacher salaries vis-à-vis the workload. It is deemed reasonable to pay half a salary to teachers who only teach one half-day shift per day, since the half working day allows teachers to undertake other activities during the rest of the day. The Legal Center assumes that service hours of half-day programs are three hours per day and five days per week. This makes 15 hours per week, which is raised by a co-efficient of 10% for additional activities (preparation, cleaning, contacts with parents and community). Given that the normative fulltime working week has 36 hours, it

²¹ Do note that at state level, 51.3% concerns salaries and social fund, and only 27.5% is for meals (2008). The difference between these figures and the ones in the text is explained by the fact that the state pays only half of the costs of food, and parents the other half. So at the level of the Aiyl Okmotu, where the two come together, the figures work out differently.

follows that the teaching salary for a half-day program is 45% of the full-time normative salary.

This report follows the approach pursued by the Legal Center, with just one small difference. One could argue that CbK teachers typically spend a lot of time speaking with parents, negotiating with the community, keeping contacts with stakeholders, et cetera. Therefore, the 10% top-up for additional activities may be a bit too low. This report proposes to raise the 45% (the half-day salary as a proportion of the full-day salary) to 50%. This means that a teacher who runs two shifts receives the same salary as a primary teacher. This may also enhance the attractiveness of working in CbKs.

What does all of the above imply for the salary component of the unit costs? As said, few of the new workers that the CbKs will attract are likely to have a lot of years of experience. If Decree 478 is enforced, many will enter the sector at the lowest official salary level. However, as 2020 is the reference year for the estimations in this report (in keeping with the Education Development Strategy of 2011-2020), we have ten years to go. This is more than the eight years that it takes to reach the top of the salary scale. So it would make sense to assume that the new teachers that enter the profession in the coming years will by then be more than halfway to the maximum, on average. This would come down to a full-time salary of 2000 soms in current prices or 1000 soms for a half-day program. This allows us to calculate the salary component of the unit cost. We assume that there is one teacher only – no class-assistant – in each group of 20 children. This is defensible because the focus of our scenarios is the age group of five to seven; in many other countries these children are in primary school. We also need to take the 19% levy for social fund into account. This leads to the following calculation:

1000 soms monthly salary x 12 months x 1.2 social fund levy / 20 children = 720 soms

Teacher training and supervision

ADB, AKF and UNICEF have developed their own specific training programs for CbKs. This training takes about ten days and is followed by new teachers and practicing ones alike. Reactions are very positive, and this is in accordance with international experience. NGOs in many countries have found that is possible to provide a good starting point through a training of ten to fifteen days, on two conditions. First, the in-service training, usually referred to as refresher training, must be frequent. Second, supervision or on-the-job coaching must be intensive as well. The first second condition is not fulfilled. The state training is very infrequent. Officially teachers should be invited once in every five years, but in practice even this low frequency is often not observed. It is critical to ensure that if a teacher commence work after just ten days of pre-service training, an annual refresher training is absolutely

guaranteed. The second condition – supervision or on-the-job coaching – seemed well fulfilled during the site visits, but nationwide the situation seems less favorable²².

The pre-service training/education of new teachers should also be taken into account. AKF's policy is that new teachers should at the very least have completed general secondary education; preferably have completed some form of teacher training; and ideally have completed specialized teacher training for preschool education²³. One could imagine that the latter require less refresher training, but even these workers tend to follow the NGO training, appreciating it highly. This suggests once again that work in CbK has its own specific characteristics. It may also be the case that the focused training provided by the agencies is more up to date than the university courses (Ministry of Education and Science, 2009:8). Another promising strategy is the appointment of 250 mentors in resource centres throughout the country, who support teachers in primary and preschool education (*ibidem*).

Quite a few teachers said during site visits that they are following a distance learning course (such as the ones provided by the Kyrgyz Academy of Education and the former Pedagogical University) which seems a good addition to the ten day training of the agencies. It is also much less costly – both for the student and for the state - than following a fulltime University course, from which, by the way, only 15% of the graduates end up working in the preschool sector, where only half of these stay for a longer period of time. However, the distance learning option extends the already lengthy course of five years to six years. It would be worth considering to offer the three year teacher training course of the Pedagogical Colleges in a distance learning modality as well, and to add an accelerated program at the Pedagogical University for those in possession of the college diploma. This would create an attractive learning route, and it would save costs substantially, given the serious cost-price differences between distance learning and more regular education.

However, the costs of formal teacher training are beyond the scope of this report; the focus is on the ten day training. We will assume that the refresher training is ten days as well – as is in fact the case – which has the practical advantage that the technical difference between start up costs (pre-service training) versus recurrent costs (refresher training) disappears. Both can now be seen as recurrent costs, and we will simply assume ten training days per year for all teachers, new and practicing. We also build in a supervision component, ensuring on-the-job feedback once a month. This supervisor can of course be the head of a CbK – in fact this is likely – but since we follow a theoretical model it makes no difference who fulfils this role.

²² This is an observation from insiders, not an empirical finding.

²³ In practice, most teachers are fully qualified. However, if the expansion of preschool education would accelerate, more teachers may enter the profession without the full qualification. Formally, these under-qualified teachers would not be entitled to receive the official state salary, which is an issue that requires special attention. A solution may be an arrangement within which under-qualified teachers can “catch up” through a combination of on-the-job learning, supervision, and refresher training.

The total costs per child per year of training and supervision is estimated through the following five steps:

- **Facilitator.** We assume that the training is given by a professional facilitator earning 4000 soms per month. On an annual basis, this person works 240 days, of which 200 are training days and 40 for preparation, professional development, meetings et cetera. Within the 200 training days, the facilitator can deliver 20 trainings per year, each consisting of 10 days of training. We assume that each training is followed by 20 teachers, a maximum for adult learning activities. The “span of control” of one facilitator is thus 400 teachers per year. We further assume that half of these 400 teachers are full-timers (teaching two half-day shifts of 20 children, i.e. 40 children) and that the other half teach just one shift of 20 children. The average number of children per teacher is then 30. Hence the total span of control of one facilitator is $400 \times 30 = 12000$ children. As the facilitator earns $4000 \times 12 = 48000$ soms per year, the facilitator component per child per year is 4 soms.
- **Lunches and drinks during training days.** Per trainee per day this costs 60 soms, which makes $10 \times 60 \text{ soms} = 600$ soms per teacher per training. As teachers teach 30 children on average, this makes $600 / 30 = 20$ soms per child per year.
- **Training room.** We assume that training is delivered in resource centers or in other places close to where teachers live. This prevents high travel and boarding costs. The rent of a training-room is estimated at 1200 soms per month, i.e. 600 soms per ten day training. This benefits 20 trainers and therefore 20×30 children. Per child per year this is 1 som.
- **Supervision.** We assume that a supervisor needs half a day for a visit to a practicing teacher (observation, evaluation, instruction, et cetera), including travel time. If the supervisor can spend 200 of his/her annual working days visiting teachers, this means that 400 visits can be done annually. Assuming a salary of 4000 soms per year – like the facilitator in teacher training – it follows that the costs of one visit are $4000 \times 12 / 400 = 120$ soms. Each teacher requires 12 visits per year, which makes 1440 soms. This benefits 30 children, so the supervision component of the unit cost is then $1440 / 30 = 48$ soms per child per year.
- All unit cost components together make $4 + 20 + 1 + 48 = 73$ soms, which we round off to 75 soms for miscellaneous and unforeseen expenses.

Inventory

Furniture, equipment, learning materials, floor-mats or carpets, toys, and stationary are the most important constituents of the inventory of a CbK. Special attention should perhaps be given to ensuring the availability of books for children as well as pedagogical literature for staff. A particularly interesting innovation is the cassette of ten booklets that the ADB has developed and which has proven to be very effective in supporting parents in raising their children; this cassette deserves to be widely available.

Each of the three agencies have developed standard packages that they provide at the start of a CbK. UNICEF provides the following amounts of money for three program types:

- For a preparatory class: 2850 US\$
- For a half-day group: 2453 US\$²⁴
- For a full daycare group: 5697 US\$

This tabulation shows once again the cost differences between half-day versus full-day programs with meals and dormitories. The ADB works with the following standard packages per group, often in full-day programs:

- Furniture: 2135 US\$
- Learning materials: 1406 US\$
- Books 2000 soms (= ± 45 US\$)
- In total 3586 US\$

AKF provides for each school- or home-based satellite (half-day programs):

- Furniture, equipment: 500 US\$
- Training materials: 300 US\$
- In total: 800 US\$

In addition, AKF provides 100 US\$ for minor refurbishment in home-based satellites. In the case of school-based satellites, it is the host-school that is responsible for refurbishment.

The figures above reveal a degree of variation which can be explained partly but not entirely by the differences between half- and full-day programs. Variation in the content of the packages may well play a role, and the same goes for variation in the contributions from the community. Also, it is a tradition in community-based ECD that teachers develop learning materials by themselves, using local materials. The extent to which this happens may also vary. Regarding the AKF data it is important to note that this concerns just the satellites. Costs in the central kindergarten are undoubtedly somewhat higher since central functions are located here.

The differences between the three packages make it difficult to make a good estimation, but one could agree that a standard price of 100,000 soms (about 2260 US\$) is a defensible average. In order to convert this upfront investment into recurrent costs, we need to know the lifecycle of the respective components. During site visits, staff reported, generally, that furniture needs replacement every ten years; floor-mats every five years; toys 3 years on average; books for children 2 years (literature for staff lasts longer of course); and stationary every half year. This is broadly consistent with Carter et al (2008). We assume an average life cycle of five years, while the total number of children making use of the inventory at any given moment is 40 (two shifts of 20). The the unit costs for inventory then becomes:

100,000 soms / 5 years / 40 children = 500 soms per child per year.

²⁴ UNICEF donates 6132 US\$ per center. Each center has 2.5 groups on average. This makes 2453 US\$ per group of 25 children.

Utilities

Many CbKs struggle to cover the costs of utilities, especially energy. Some CbKs need to close down in winter time for lack of coal. Generally, the annual costs of coal or electricity (different heating systems exist) amounted to about 50,000 soms per year for a medium-sized CbK. A somewhat larger one (a former state KG) used 77,000 soms worth of coal. School-based and home-based facilities are obviously more energy-efficient as they are part of larger buildings that are being heated anyway. For home-based satellites, the additional costs of heating are covered by AKF for an amount of 120 US\$ or about 5300 soms per year. Important differences exist between facilities in the high mountains and those in the lower hills and valleys. Therefore there are no state standards; utilities are the responsibility of Ayil Okmotus who, on their turn, receive funding dependent on location. Maintenance costs have been very hard to investigate during the site visits, possibly because they are relatively low since CbKs have recently been refurbished. Only small amounts of money were said to be spent on maintenance and often this is generated by parents, who usually contribute in-kind also.

If we again assume constellations of one central CbK with two classrooms for two shifts of 20 children each plus a school-based and home-based facility of one classroom with two shifts each (see section 5.1) we find that this constellation spends $50,000 + 5000 + 5000$ soms = 60,000 soms per year, serving 160 children. This makes 375 soms per child per year.

Overall unit costs of the half-day two-shift program

Table 5 adds up the components of recurrent unit costs. Note that the recurrent unit costs of 1670 soms and the capital unit costs of 1250 soms are essentially different figures. They cannot be added up.

Table 5: Recurrent and capital unit costs, estimations

Unit costs	Costs (soms)
Salaries, including social fund	720
Training and supervision	75
Inventory	500
Utilities and maintenance	375
Total recurrent unit cost	1670
Capital repair of buildings and classrooms	1250

Source: compiled by the author based on calculations in this chapter

As one would expect, the recurrent unit cost of half-day ECD programs is lower than the unit costs of secondary education which stood at 2220 soms per pupil per year in 2006 (World Bank, 2008:2) and is likely to have risen in the mean time. The explanation is that in terms of costs, half-day preschool programs (without meals, dormitories, et cetera) are essentially not

every different from regular education programs, except that they are twice as short and thus twice as cheap.

In 2006, the unit cost for formal KG stood at 6010 (ibidem). Assuming that this figure has risen as well between 2006 and 2009, we can say that half-day programs are almost *four times* less costly as formal KG. The same ratio was found in a study on community based ECD centers in Poland: 4500 zlotys for formal KG against 1200 zlotys for a half-day program (Comenius Foundation for Child Development, 2009:53). The next chapter will investigate the implications of these and other findings at macro-level.

6. Scenarios

In this chapter we will multiply the recurrent unit cost of half-day programs in CbK – 1670 soms – with the numbers of children that will be enrolled in this program. At the very end of this chapter we will do the same for the capita unit costs of 1250 soms, but this figure is of a different nature so the technique will be different as well.

The “number of children that will be enrolled” is not something that we can calculate in a straightforward manner. It depends partly on demographic development, but partly also on choices regarding the children we wish to prioritize: which age groups, which social groups, which areas, et cetera. These choices are political, and this complicates decision making.

This is what scenarios are for: they explore a limited number of alternative strategies; they indicate their financial implications and feasibility; and they inform the debate and support the decision making process. It is possible that none of the scenarios developed in this chapter are considered entirely satisfactory. In that case it should be possible to make a combination of some of them. But the scenarios should in any case encompass the range of options.

For each scenario, this chapter will show the overall costs implications. These will be contrasted with a forecast of the development of the education budget in the coming decade. It will appear that for most scenarios, the budgetary space will gradually become available. Yet if the government would wish to mitigate the growth of its expenditure on preschool education, it can use the instrument of fees. This chapter will show how fees can be introduced in such a way that they do not hinder access for the poorest. A strategy for targeting the most disadvantaged rayons will also be presented.

The Terms of Reference for this report call for a focus on the two years before entry in primary school. This can be considered as the period of school-preparation. As long as the entry age for primary education is seven, this would concern the five and six year olds. If the primary entry age would be lowered to six, it would concern the four and five year olds. The issue of primary entry age will be addressed in the next section of this chapter.

In earlier chapters, this report has taken a broader view, looking not only at the school-preparation years but at early childhood policy overall and investigating the CbKs regardless of age. As we saw in chapter 4, Engle *et al* (2007:238) recommend enrolment in groups from age three, regardless primary entry age. And indeed, many CbKs and all formal KGs do actually enroll children of three. However, both in Kyrgyzstan and elsewhere, we can observe that programs for the three year olds are of a different nature. In community-based preschools and ECD centers, three year olds are usually in playgroups rather than in learning groups, and the frequency tends to be lower, with half-day sessions on two or three days per week. Following the Terms of Reference, this report will not address these playgroups. We will consider this as the “next frontier” for ECD in Kyrgyzstan, considering the two years before entry in school as the highest priority. Nevertheless, we do repeat the advice to the Ministry of

Health with IMCI and Village Health Committees to incorporate early stimulation and early learning in their scope of work (see chapter 4 of this report).

Simulating the cost implications of lowering the primary entry age to six

In chapter 1 (see figure 4 and the discussion following it) it was noted that many children of six years old are already in grade 1 of primary education, against a much smaller number of children in formal KG. It was suggested that it would be better to lower the entry age to six *officially*, and to see to it that children would actually enter at that age: not earlier, not later. Through this highly recommendable policy measure, Kyrgyzstan would (i) harmonize the real age of entry in primary education which is beneficial for pedagogical reasons, (ii) follow a global trend, (iii) improve its PISA results, since at the age of fifteen Kyrgyz children will have attended one extra year of schooling, and (iv) save costs.

This last point can now be elaborated based on the findings regarding unit costs in the previous chapter. Table 6 provides a simulation of four scenarios. For the sake of clarity, all parameters have been simplified. We assume that there are only ten children of six years old in Kyrgyzstan, who can find themselves either in formal KG, in CbK, in primary education, or in no structured learning environment at all (“not enrolled”). For primary education and formal KG we use rounded off unit costs of 2006 quoted in chapter one. For CbK we depart from the 1670 soms unit costs found in the previous chapter for half-day programs, but we round off downwards to 1500 soms for comparability with the three year old data for primary education and formal KG. Table 6 shows the three scenarios.

Table 6: Simulation of three scenarios for universalizing enrolment at age six

Status of child	Unit cost	Status Quo	Scenario 6.1 expand halfday	Scenario 6.2 all in preschool	Scenario 6.3 all in primary
In half-day CbK	1500	1 ²⁵	5	9	0
In primary ed.	2250	4	4	0	10
In formal KG	6000	1	1	1	0
Total enrolled		6	10	10	10
Not enrolled		4	0	0	0
Total costs sms		16500	22500	19500	22500
Extra costs sms		-	6000	3000	6000

Source: compiled by the author based on various findings in this report

²⁵ Two things should be noted. One, the total number of children in CbKs is smaller than the total number of children in formal KG. However, the enrollment in formal KG is distributed over five age groups (3-7), while enrolment in CbKs is much more concentrated among five and especially six year olds. Second, as we saw in chapter 4, many children enrolled in CbKs are in full-day programs rather than half-day programs. Presently, this is not very costly for the government since costs are mainly borne by parents, communities and agencies. However, when these programs are formalized, they will become just as costly as the formal KG program. In order not to complicate this exercise we ignore this, but we do assume that the *further* expansion of enrolment in CbKs will be in half-day programs entirely.

In the present situation, roughly one out of ten children in the country is in formal KG at age six. Four are in grade 1 of primary education (figure 4 of this report). Finally we assume that one out of ten is in CbK (see chapter 3). It follows that four children of six years old are not enrolled in any learning program. The present total costs are 16500 soms for these imaginary children.

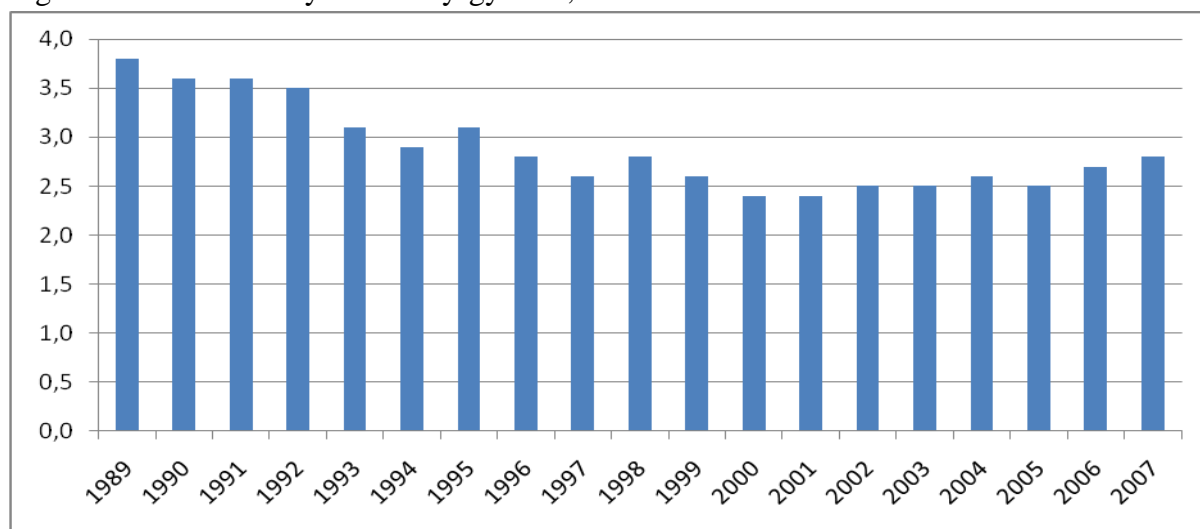
- Scenario 6.1. Our very first priority is to enroll all children of six years old. In scenario 6.1 this is done by leaving enrolment in primary education and in formal KG as it is, and expanding half-day programs. This costs 22500 soms, which is 6000 soms more than in the present situation.
- Scenario 6.2. We can also expand half-day programs to such an extent, that not only the 4 not enrolled children find a place there, but also the four that are now in primary. This second scenario is actually 3000 soms cheaper than scenario 6.1, and it does lead to the desired harmonization of entry age; all children enter at the same age: at seven. However, it is not very realistic to assume that the total capacity of half-day programs, country-wide, will be expanded rapidly. If the policy is to universalize preschool enrolment at age six, many children, especially in urban areas, will appear to go to formal KG rather than to half-day programs, given the strong preference of parents for the traditional model. Moreover, half-day programs are typically the “product” of CbKs; formal KGs are less likely to start and expand their provision of half-day programs. So this expansion of half-day programs would mainly have to be achieved by the CbKs, and they cannot be “rolled-out” as if they were fast-food outlets; they require a thorough process of sensitization and community mobilization. Therefore, the next scenario is much more feasible in practical and also political terms.
- Scenario 6.3. This scenario entails the lowering of the official entry age to six. Table 6 shows that this costs roughly the same as scenario 6.1, but 3000 soms more than scenario 6.2. However, the roll-out of this plan is more feasible than that of scenario 6.2 because it implies a capacity expansion of already existing and widely available institutions: schools. It would lessen the burden for the CbK movement, which can focus on the children of five years old (and eventually the younger ones). The financial feasibility of this scenario may actually be greater than table 6 suggests, since the number of six year olds in formal KG is not 10% but 12%, UNICEF (Innocenti Research Center, 2009:106), while there is also a number of seven year olds in this expensive form of preschool education. So ending the enrolment of six and seven year olds in formal KG would save a lot of money that can be spent in a better way, reaching more children.

Demographic development

To assess the concrete implications of this scenario exercise above, we need to know the current and future demographic situation. The annual number of newborns in Kyrgyzstan has been in the order of magnitude of 100,000 for the last quarter of a century, but it peaked at 118,000 some fifteen years ago and has climbed back up to that same level in 2007. Figure 16 shows that the total fertility rate has indeed increased somewhat in recent years, but the

increase seems not strong enough to explain all of the recent growth in the number of newborns.

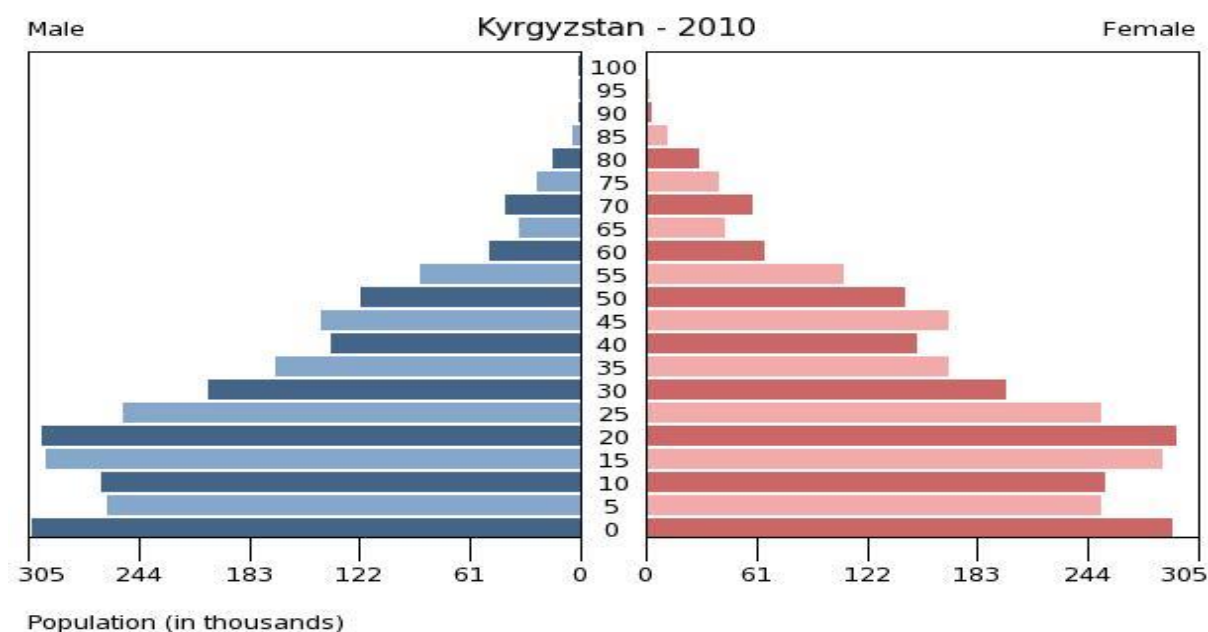
Figure 16: Total fertility rate of Kyrgyzstan, 1989-2007



Source: TransMONEE database 2009

Figure 17 – the so-called population pyramid - shows that there is an additional explanation for the recent growth in the number of births. This concerns the increase in absolute numbers of young men and women at the age at which they have children. In figure 17, each of the horizontal bars represents the number of inhabitants of Kyrgyzstan, with males to the left and females to the right, and with five age-cohorts grouped together (0-5, 5-10, et cetera).

Figure 17: Population pyramid for Kyrgyzstan, 2010



Source: www.census.gov/ipc/www/idb/country.php

Figure 17 shows that until about 20 years ago, this graphic representation population of Kyrgyzstan still had the classical shape of a pyramid, with high fertility rates that caused every new age cohort to be larger than the previous one. In the years following the transition, the fertility rate dropped steadily – see figure 16 – though not quite as sharply as in many other transition countries. What we experience nowadays is that the large age cohorts that were born in the decade 1985-1995 are entering the age at which they have children themselves. Together with a slight recovery of the fertility rate this produces the recent growth in the number of newborns.

Knowing the cause of this recent trend, we can safely assume that it is temporary. Even if the fertility rate would remain at its present level, the number of newborns is bound to drop sharply when the generation born in 1995-2005 enters the age bracket in which they have children. This will happen even within the timeframe of the Education Development Strategy for 2011-2020. This means that on the long run it is defensible to assume that the annual number of newborns will go back to the old level of about 100,000, and that this level will be reached well before our target year 2020.

The total annual extra costs of various scenarios

We now return to table 6, knowing that the ten imaginary children that we assumed to be living in Kyrgyzstan in that simulation correspond in reality with 100,000 children. This means that the extra costs of scenario 6.1 (expanding CbK to 90% coverage) and 6.3 (all six year olds in primary) are 6,000 soms x 10,000 = 60 million soms per year eventually. In the first few years, the extra expenditure will be much less, because expansion processes take time. But assuming that the scenarios are completed by the year 2020, the annual costs in that year, and beyond, will be 60 million soms more than what is now being spent. Of course this is expressed in current prices; by 2020 the exact figure will of course be higher due to inflation. The less feasible scenario 6.2 will cost 30 million soms extra per year, eventually.

For the five year olds we can also formulate scenarios. This is less complicated than for the six year olds because five year olds will in any case be in the preschool education, not in primary education. So the only choice is: a full-day program or a half-day program.

The age specific enrolment rate in formal KG for five year old children in Kyrgyzstan stood at 14% in the schoolyear 2007-2008 (UNICEF Innocenti Research Center, 2009:106). The total number of five year olds in the country was 94418 in 2007 (National Statistics Committee, 2008:10). This means that the absolute number of five year olds in formal KG must have been 13218, i.e. slightly more than the 11115 six year olds enrolled (National Statistics Committee, 2008:42). The number of five year olds in CbKs cannot be established. We know that the total number of children in CbKs, regardless of age, is 14624 in 2009, but this concerns several age groups together. We could estimate the share of the five year olds by assuming that the age distribution in CbKs is the same as in formal KG, but this assumption is likely to be false, given the stronger focus in CbKs on the older age groups. A better estimation would be to say

(i) that most children in CbKs are four, five or six; (ii) that six year olds are more strongly represented (in preparatory classes) than others; and (iii) that the age distribution of four, five and six year olds is 15% - 25% - 60%. Under these assumptions, there would be about 3650 five year olds enrolled in CbKs, which is about 4% of all the 94418 five year olds. Total enrolment – of formal KG and CbK together – would in that case be about 18%. It should be kept in mind that this estimation is risky, the more so because figures from different years have been used.

Table 7 contains three scenarios for the five year olds. In scenario 5.1 we leave full-day enrolment as it is, and universalization is sought through expansion of half-day programs. Scenario 5.2 goes one step further: it assumes that the government only subsidizes the costs of half-day programs, and that parents (or employers) bear the extra costs of the full-day program. Scenario 5.3 shows what it would cost if preschool expansion would entirely take place through full-day programs. As for the scenarios for six year olds, we assume that the size of the age cohort is 100,000. Unlike table 6, table 7 is not a simulation. Based on the estimated 100,000 children per age cohort, it directly calculates total costs as well as extra costs compared to status quo.

Table 7: Scenarios for universalizing enrolment in preschool education at age five

Status of child	Unit cost	Status Quo	Scenario 5.1 expand halfday	Scenario 5.2 all in half-day	Scenario 5.3 all in full-day
In half-day	1500	4%	86%	100%	0%
In full-day	6000	14%	14%	0%	100%
Total enrolled		18%	100%	100%	100%
Not enrolled		82%	0%	0%	0%
Total costs sms		90 mln	213 mln	150 mln	600 mln
Extra costs sms		-	123 mln	60 mln	510 mln

Source: compiled by the author based on various findings in this report

The extra costs of scenario 5.1, in which excluded children go to half-day programs while government continues to subsidize full-day programs, are 123 million soms. This can be halved if the government would gradually withdraw its contribution to the full-day program, subsidizing only their half-day school-preparation component (scenario 5.2). Not surprisingly, scenario 5.3 is extremely expensive and hardly worth considering.

The last set of scenarios concerns the four year olds. If the primary entry age would be lowered to six, and if we would observe the advice to enrol children in programs during the last two years before primary entry, the four year olds should also be enrolled. Acknowledging that this has a lower priority than enrolling all five year olds, we should nevertheless take this option into account. The scenarios for the four year olds will not be very different from those for the five year olds. Enrolment among four year olds is a bit lower in the present situation so the extra costs will be somewhat higher. And the option of not enrolling the four year olds should of course constitute one of the scenarios. Table 8 brings together the various scenarios for the six, five, and four year olds.

Table 8: Summary of all scenarios for six, five and four year olds

Scenarios	Extra costs (mln soms)
Age 6	
6.1 10% remain in full-day and 40% in primary school; all others half-day	60
6.2 10% remain in full-day, all others in half-day	30
6.3 all six year olds in primary school	60
Age 5	
5.1 14% remain in full-day programs, all others in half-day	123
5.2 All five year olds in half-day programs	60
5.3 All five year olds in full-day programs	510
Age 4	
4.1 $\pm 12\%$ remain in full-day programs, all others in half-day	130
4.2 All four year olds in half-day programs	70
4.3 All four year olds in full-day programs	520
4.4 No policy effort to increase enrolment among four year olds	0

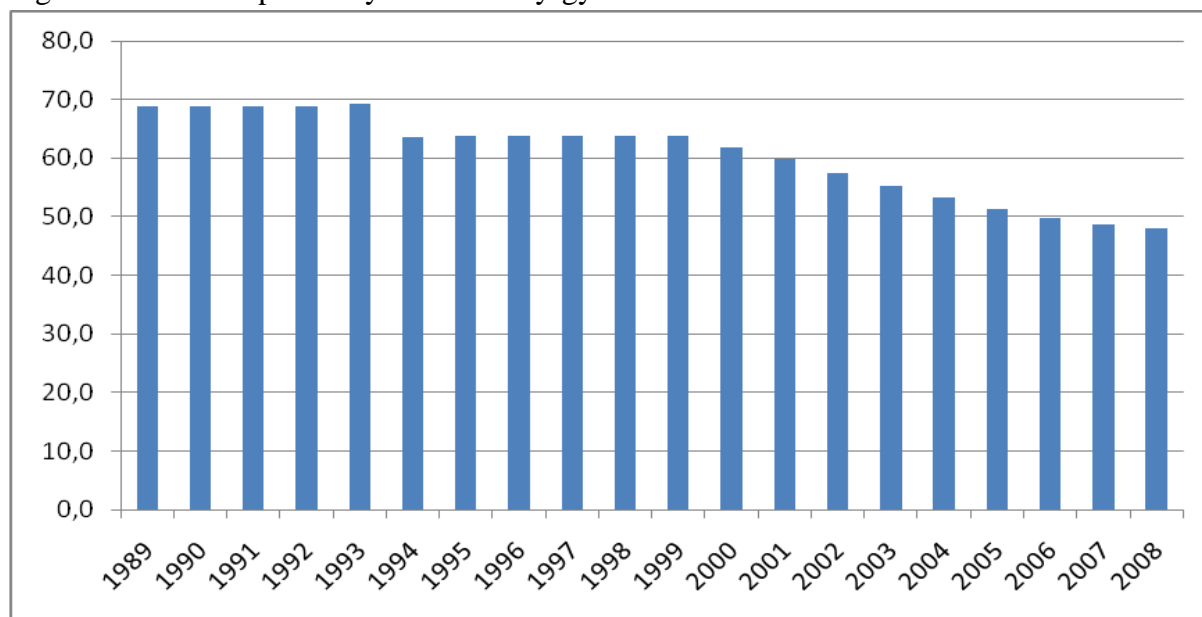
Source: compiled by the author based on various findings in this report

In a manner of speaking, table 8 represents a “menu” from which we can choose a policy option for each of the three age groups. Many combinations are possible. This report limits itself to the combination that is most in accordance with the international consensus. This is the combination of scenarios 6.3, 5.2 and 4.2, implying that all six year olds re in primary school, and all four and five year olds in half-day preschool programs. The overall extra costs of this combination are about 200 million soms. An alternative combination could be 6.3, 5.1 and 4.1; this combination is essentially the same, except that the government would continue to subsidize the enrolment in full-day programs of the 12-14% more advantaged children. This would cost about 300 million soms.

The future development of the education budget

To put the resource requirement of 200 million soms in perspective, we examine the current education budget. The latest officially published figure was the one for 2006, when the budget stood at 6,3 billion soms (National Statistics Committee, 2008:28). Today, in 2009, it is most probably higher, but even if we focus on the figure for 2006, we can conclude that the resource requirement of 200 million soms is in the order of magnitude of 3% of the 2006 education budget. A number of arguments can be given why it should be possible to free up this amount money gradually within the coming decade. The first is that the total number of education demanding children is decreasing relative to the number of (potentially) income generating adults, as figure 18 shows.

Figure 18: Child dependency ratio²⁶ of Kyrgyzstan



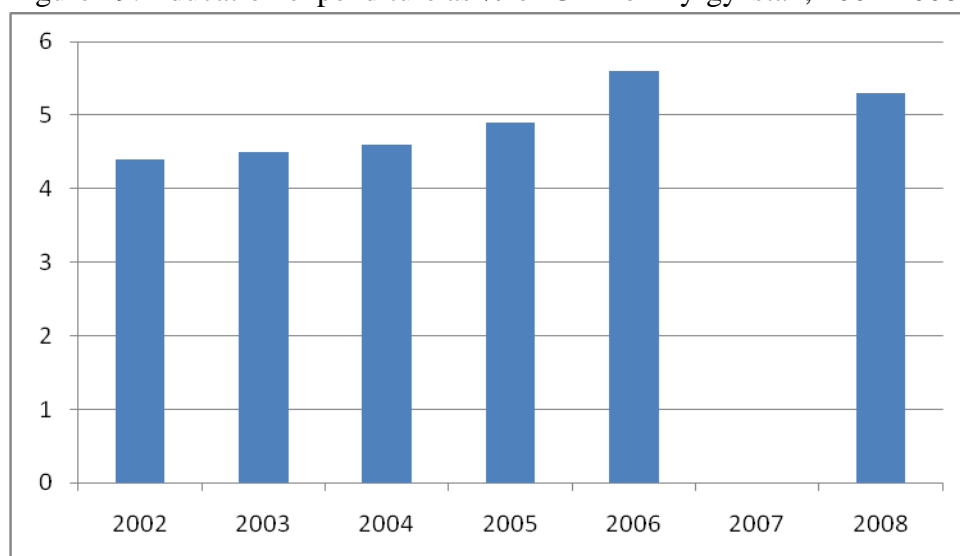
Source: TransMONEE database 2009

Figure 18 suggests that the (temporary) increase in the number of newborns has probably slowed down the decrease of the child dependency ratio, but it did not entirely stop it. Over a longer period of time it is fair to say that it will slowly become easier for Kyrgyzstan to finance child services, including preschool and other forms of education. Figure 17 (the population pyramid) tells us that this favorable situation will last for another ten years, i.e. in the plan-period of 2011-2020. After that, the number of retirees will increase more sharply than it did in the past, causing a new problem for Kyrgyzstan's state finance. In other words, we are now entering a ten year window of opportunity to build a strong preschool system.

What needs to be curbed, however, is the downward trend in the expenditure of education as a share of GDP shown in figure 19.

²⁶ This is the number of children of 0-14 divided by the total number of youth & adults of 15-59, in %

Figure 19: Education expenditure as % of GDP of Kyrgyzstan, 2002-2008



Source: for 2002-2006: NSC, 2008:28. For 2008: speech of President on 6 November 2009

The trend observed in figure 19 may or may not cause a decrease in the absolute volume of education spending. Whether this will actually happen depends also on economic growth. As a result of the financial crisis of 2008-2009 Kyrgyzstan may face growth stagnation. The estimate for 2008 is 7.6%, but the forecast for 2009 is a mere 0.9% (UNICEF Innocenti Research Center, 2009:47). Seen over a longer period of time, however, the picture is brighter. GDP growth stood at 7% in 2004, dropped incidentally in 2005, and was back at 5% in 2006 (Asian Development Bank, 2007:168). A projection made before the financial crises predicted a growth level of 7% for 2009 and beyond. A recovery to 5% annual economic growth should be possible.

In addition, unemployment within the country is decreasing (UNICEF Innocenti Research Center, 2009:48) while at the same time remittances are increasing (UNICEF Innocenti Research Center, 2009:46). To illustrate the triviality of the financial requirement of 200 million soms: even if the education budget would not grow as a share of GDP, and even if economic growth would be no more than 3%, this would still cause the education budget to grow by almost the 200 million soms needed to cover the extra costs of the proposed combination of scenarios. Admittedly, preschool education is not the only sub-sector of the education system that needs investment. Enrolment rates need to increase in secondary and higher education as well, while quality needs to be improved urgently (Agriconsulting Europe Consortium, 2009). But between now and 2020 there is not one but there are ten years in which the economy will grow, and probably at higher rates than 3%. Moreover, the education budget may grow as a percentage of GDP. The combined impact of these two trends can easily double an education budget within a decade. And if it would nevertheless come to the point that preschool education competes with primary, secondary and tertiary education for scarce resources, there are strong economic arguments to favour preschool (Heckman, 2006).

Finally, we can express the preschool budget as a share of the education budget. Presently, the latter stands at 400 million soms (National Statistics Committee, 2008:28). This is about 6.3%

of the education budget, well below the international benchmark of 10% (Van Ravens and Aggio, 2008:60). Enrolling all four and five year olds in half-day programs would raise the preschool budget to about 530 million soms or 8.4% of the education budget, bringing it closer to the 10% benchmark.

Charging fees without excluding children

Despite the positive words in the previous section about the financial feasibility of the proposed policy, the government of Kyrgyzstan may still find it difficult to free up the annual amount of 200 million soms. Or there may be political obstacles. In such cases, a government can always try to reduce its own contribution to preschool education by charging fees. This is common practice in both the formal KGs and the CbKs. In the formal sector it has caused serious disparities as we have seen in chapter 2 of this report. But even the CbKs – while they are especially created to reach out for the most marginalized children – have found that a fee of 100 soms per month is too expensive for a fair share of the families (see Annex). This is important because even if “only” ten percent of the children would be excluded as a result of financial thresholds, this would still be a serious matter since the excluded children tend to be precisely the ones most in need. This report has refrained from rehearsing the literature about the benefits of preschool education since they are well known to all stakeholders in Kyrgyzstan, but it should be emphasized that the high rates of return that were found in evaluations of certain often quoted evaluations in the USA were caused by the fact that these programs were targeted to extremely disadvantaged groups. Had the programs had a wider focus, then the average returns would have been lower.

So any fee policy should provide for fee reductions for the poorest groups. These means-tested fees can be as refined as information systems allow them to be. The most simple approach would be to define one income threshold, above which people pay the full fee, and below which people pay, for instance, no fee or half the fee. A more complex approach would be the application of a sliding scale, with more than one threshold, and as many tariffs. The question is whether there is sufficient reliable information about families’ income situation to allow such a system to work. The advice received for this report varied. Some interviewees thought it would not be feasible, others pointed at existing social benefit schemes to which a fee structure could be linked, such as the Unified Monthly Benefit and the Social Monthly Benefit. Criteria for eligibility exist for these schemes, and it would be possible to give people who are in one or both of these schemes the right to free access or to access against a reduced fee. Different techniques exist, but they make no essential difference from the perspective of state finance.

For instance, the state could grant certain groups free access and pass on a per capita amount of money for them to the kindergarten. Or the state can give these groups vouchers or conditional cash transfers. So many possibilities exist that it is impossible to give the budget implications for all of them. As an example we elaborate one option:

- The unit cost for a half-day program in a CbK is 1670 soms as we found in chapter 5;

- There are 100,000 four year olds and 100,000 five year olds, so total costs are $(100,000 + 100,000) * 1670 \text{ soms} = 334 \text{ million soms}$ ²⁷;
- We decide to grant free access to all families in the Unified Monthly Benefit scheme; this concerns 18% of all families with children;
- Thus, for roughly 18% of all four and five year olds, the government provides a per capita funding to the CbK that enrolls them; this costs $18\% * 326 = 59 \text{ million soms}$;
- All others pay a fee of 50 soms per month. Annually, this equals 600 soms of the cost price of 1670 soms, leaving 1070 soms uncovered. The government needs to cover the 1070 soms for the remaining $100 - 18 = 82\%$ of the children. This costs $2 * 82,000 * 1070 = 175 \text{ million soms}$;
- Total costs for the government are $59 + 175 = 234 \text{ million soms}$ instead of the 334 million soms that the government would have had to pay in the absence of the fee policy.

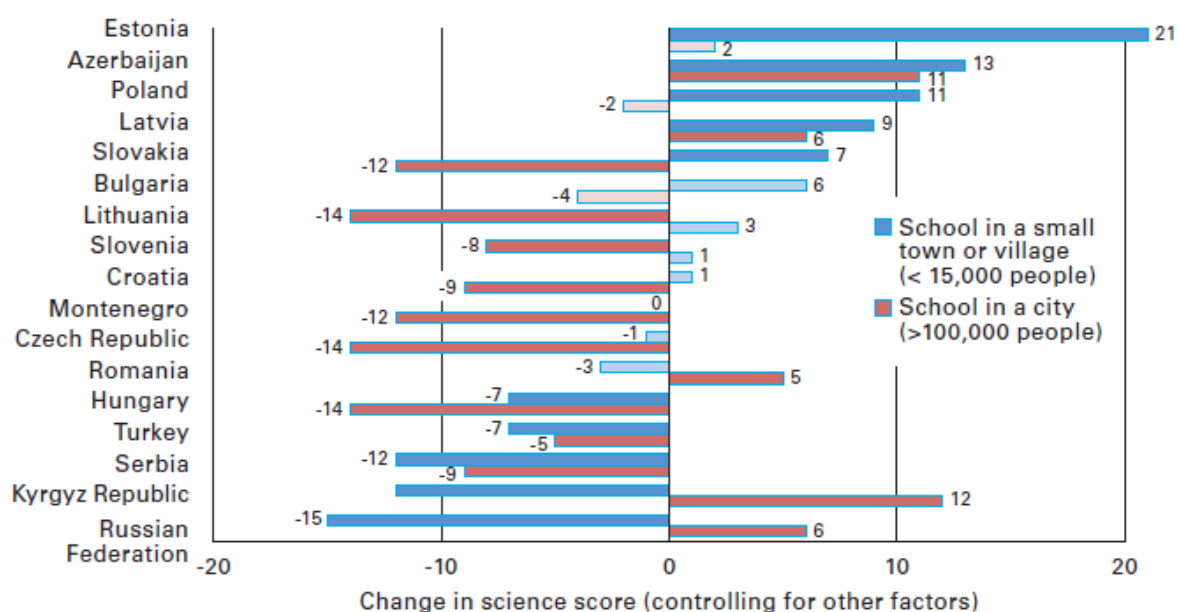
The conclusion of this section is that a reasonable fee policy can save 100 million soms without affecting access. Once again, it is just an example; many other options are possible in terms of both the technique of the fee policy and the parameters. What counts is that the fee can reduce the costs for government substantially, while safeguarding access for the poorest groups. A critical advantage of a fee policy is also that it cultivates a sense of ownership among the fee paying parents.

A high priority scenario: targeting the children most at risk

The two previous sections addressed expansion of preschool education for all children with a time horizon of 2020. However, some children cannot wait for that. As we saw in chapter 2, important disparities exist between rich and poor, and between urban and rural. For this reason, ADB, AKF and UNICEF have targeted their first wave of CbKs on some of the most disadvantaged rural areas in Kyrgyzstan. A strong argument to continue this strategy is found in a comparative study on PISA results in the CEE/CIS region (UNICEF, 2007). It found, not surprisingly, that rural children in all countries in the region do worse than urban children. The smaller the village, the lower the test scores (UNICEF, 2007:65). However, if researchers controlled for factors such as income or education level of parents, such differences tended to disappear or be mitigated in most countries. In other words: children of poor parents fare worse than those of rich parents, and usually there are more poor parents in rural areas than in urban areas. But in two countries, the difference between urban and rural remained significant even after controlling for such factors: Russia and Kyrgyzstan. Figure 20 shows this.

²⁷ This figure differs from the 200 million soms found earlier, because (i) the latter figure is only the *extra* money that government needs to invest in four and five year olds compared to the present situation and (ii) on the other hand the 200 million soms include some extra expenditure on primary education.

Figure 20: Differences in student achievement in science between urban and rural, 2006

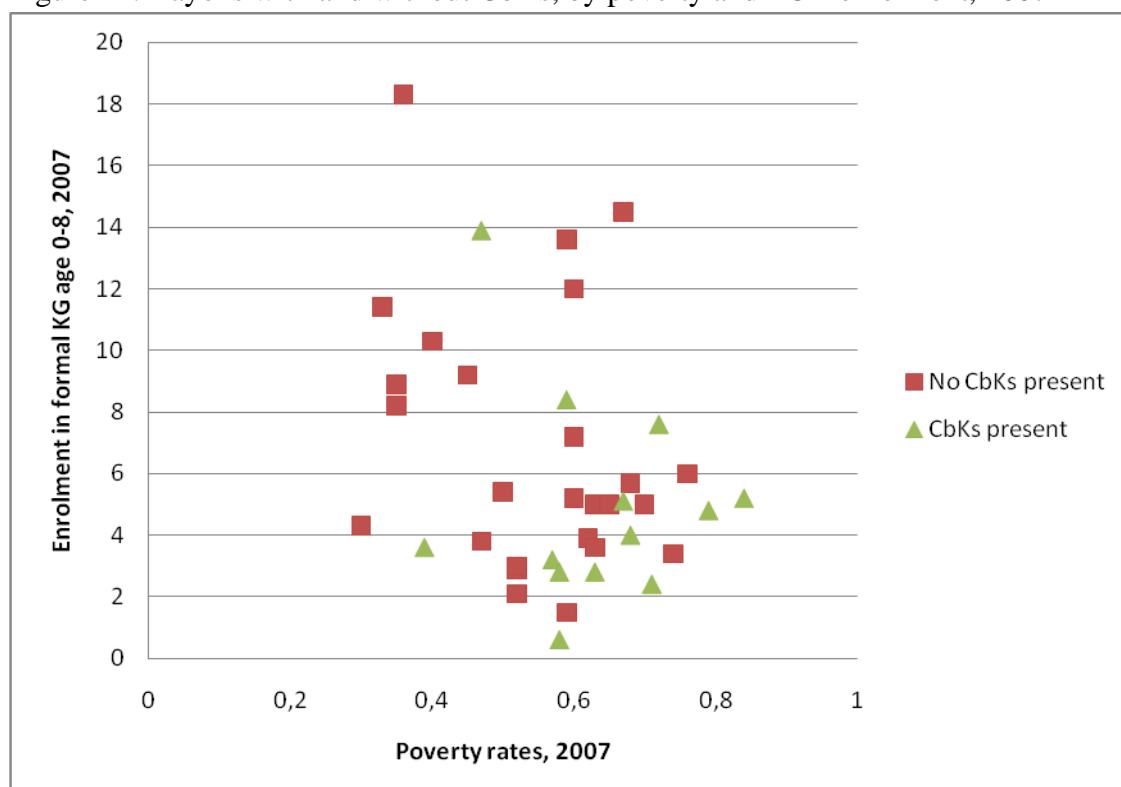


Countries are ranked by effect of school in a small town or village. Lighter-shaded bars indicate that differences are not significant.

Source: copied from UNICEF, 2007:66. Based on the PISA-2006 study of the OECD

The government of Kyrgyzstan may wish to tackle the problem of low academic performance in rural areas with the highest priority. In this light, this section explores the feasibility and costs of providing at least one year of school-preparation for the children in those disadvantaged rural areas where no CBKs have been introduced yet. Assuming that the entry age for primary education will be six, we focus on the five year olds. In chapter 3 we already identified rayons that meet three criteria: low enrolment in preschool education, high poverty rate, no CbKs present. From chapter 3 we repeat figure 14 hereunder.

Figure 14: Rayons with and without CbKs, by poverty and ECD enrolment, 2007



Source: compiled by the author based on enrolment data from National Statistical Committee and poverty data from (Kyrgyz Republic: the Geographical Distribution of Poverty, pp 18-23)

Table 9 lists all rayons where no CbKs are present, ranking them by enrolment in formal KG, from low to higher. As the red squares in figure 14 predict, the rayons with the lowest enrolment rates have the highest poverty rates. But there are exceptions. Ala-Bulinskei rayon, for instance is performing very well as it has a high enrolment rate despite a high poverty rate. Panfilovskei rayon does the opposite: it is the richest rayon but has a low enrolment rate²⁸. One way of selecting rayons for a high priority treatment is (i) to draw a line in terms of enrolment, e.g. at a level of 8%, (ii) to include the rayons with enrolment rates lower than 8%, and (iii) to exclude those rayons from that high priority group that have low poverty rates (on the grounds that they should be able to boost enrolment without special external assistance). So in table 9, the rayons with enrolment levels below 8% are colored blue, with the exception of Panfilovski rayon which is yellow, like the rayons with higher enrolment levels.

²⁸ In figure 14, this rayon is the red square to the left of the cluster of poor rayons with low enrolment rates.

Table 9: Rayons by poverty rate and enrolment rate, 2007

Rayon	Poverty rate 2007	Enrolment Formal KG 2007
Aksyiskei rayon	0.59	1.5
Jetioguzskei rayon	0.52	2.1
Tupskei rayon	0.52	2.9
Talasskei rayon	0.52	3.0
Uzgenskei rayon	0.74	3.4
Manaskei rayon	0.63	3.6
Tonskei rayon	0.47	3.8
Syzakskei rayon	0.62	3.9
Panfilovskei rayon	0.3	4.3
Aravanskei rayon	0.63	5.0
Kara-Burinskei rayon	0.65	5.0
Bakai-Atiskei rayon	0.7	5.0
Karasuiskei rayon	0.6	5.2
Chuiskei rayon	0.5	5.4
Kadamjaiskei rayon	0.68	5.7
Aksyiskei rayon	0.76	6.0
Bazarkorgonskei rayon	0.6	7.2
Alamudunskei rayon	0.35	8.2
Sokulukskei rayon	0.35	8.9
Keminskei rayon	0.45	9.2
Issyk-Atinskei rayon	0.4	10.3
Moscowskei rayon	0.33	11.4
Issykkulskei rayon	0.6	12.0
Nookenskei rayon	0.59	13.6
Ala-Bulinskei rayon	0.67	14.5
Jayilskei rayon	0.36	18.3

Source: compiled by the author based on enrolment data from National Statistical Committee and poverty data from (Kyrgyz Republic: the Geographical Distribution of Poverty, pp 18-23)

The total number of children of five years old in the 16 blue rayons is about 45,000. On average, 5% of them are enrolled in formal KG, leaving 42,750 children excluded. If we multiply this by the unit cost of 1670 soms, the total cost of enrolling these children in half-day programs are 71 million soms per year. The government's share in this budget could be mitigated by introducing means-tested fees, although special attention should be given to the risk of excluding children since this high priority strategy is targeted at the poorest rayons.

Capital investment

The last issue is the capital investment in the refurbishment of buildings and classrooms. Chapter 5 found that the unit cost for this is 1250 soms per child-place. One of the underlying assumptions was that many children will visit school- and home-based satellites of CbKs. We treat the capital investment separately from the recurrent unit costs because of the essentially different nature of the two. The investment in refurbishment and construction has a long life-

cycle (e.g. 50 years). What counts now is that Kyrgyzstan needs to make a wave of investment in preschool buildings and classrooms within a limited time-span (2010-2020). If that can be accomplished with the assistance of donor-organizations, the long term sustenance of this stock of buildings and classrooms will be a financially feasible task for the government.

The total costs of this wave of capital investment is the multiplication of the unit cost of 1250 soms per child-place with the total number of presently not enrolled children. Of the estimated 100,000 five year olds, 4% are now in CbK and 14% in formal KG (table 7). This means that $82,000 * 1250 \text{ soms} = 102.5 \text{ million soms}$ would be needed. This could be mitigated if some of the existing formal KGs would reorganize themselves by replacing full-day capacity by half-day capacity. In this manner they could easily double or triple the number of children that they serve within the same space. For the four year olds, the calculation will not be very different; the outcome may be a bit higher since the present number of enrolled four year olds is lower than for the five year olds. Total capital investment will thus be in the order of magnitude of 200-250 million soms. It should be added that this estimation is sensitive to assumptions; if the suggestion regarding home- and school-based programs would not be followed, total investment costs may appear to be much higher.

For the coverage of these investments, a number of possibilities are open. First of all, many CbKs have received excellent donor support from organizations such as ARIS, Mercy Corps, the Foundation for Tolerance International (Ferghana valley project) and various bilateral donors. ARIS, for instance, has 60 mln US\$ available for a range of development objectives, including preschool education. The Fast Track Initiative has decided to allocate 4.6 million US\$ for a range of start-up costs for CbKs, including refurbishment (another 200,000 US\$ are available for an awareness campaign and for community mobilization, as well as 800,000 US\$ for enhancing the human resources for preschool education). These are substantial amounts of money that can have a strong impact on enrolment as long as cost-effectiveness is striven for by expanding school- and home-based provision.

Last but not least, there is the energy of communities themselves. The efforts made by parents and other community members have already been mentioned. Companies are known to have contributed to preschool education as well, although there are not many of them in rural areas. AKF is experimenting with linking micro-credit to preschool education. And perhaps the most striking example of dedication to preschool education concerns some of the staff of CbKs who generate income from farming and livestock. It is hoped that by this report, the people at community level receive the support they deserve in creating better futures for their children.

7. Conclusions and recommendations

Conclusions

- a. Historically, enrolment in formal KG has always been low in Kyrgyzstan, and in the transition period it dropped more sharply than in other countries in the region. Recovery was very limited. Yet the current enrolment rate of 13.4% tends to underestimate real enrolment since it excludes most CbKs and since it is based on the broad age range of 0-8.
- b. Access to formal KG is highly inequitable. In the poorest quintile, 7% of the children had access in 2006, against 47% among the richest 20%. Among rural children, enrolment stood at 10%, against 33% among urban children. Generally, the situation tends to best along the northern border and worst along the southern border, but pockets of exclusion occur all over the country.
- c. About 40% of the children of six years old – who should be in kindergarten - are already in primary school. This means that many children are not following a curriculum that is tuned to their age and stage of development.
- d. By 2009, 351 CbKs were operating in Kyrgyzstan, welcoming 14624 children in 2009. Compared to the 465 formal KGs (in 2006) this is a significant achievement. The CbKs offer half-day programs against a fee of about 50 to 100 soms per month, as well as full-day programs costing 200 to 300 soms per month in most cases. There are strong signs of exclusion among families who cannot afford these fees. Nearly all CbKs find themselves in rayons where high poverty rates go hand in hand with low enrolment in formal KG. In all but one of the rayons where they are located, CbKs enroll more children than the formal KGs. The same can be said for the oblasts Naryn and Osh.
- e. Contrary to the ambition to reach as many children as possible, the CbKs attend 69% of their children in full-day programs that do not differ much from formal KG, with staff-to-child ratios as high as 1:3. This tends to make further expansion unaffordable.
- f. CbKs are generally struggling to make ends meet. Salaries, for instance, are particularly low in many cases and there is a serious risk of attrition. If preschool education is to be expanded substantially in the coming years, it will not be by simply replicating existing practice, but by considering what is really needed for quality child services.

Recommendations

- a. The recurrent unit costs for a half-day preschool program should be set at 1670 soms in order to meet quality requirements in terms of teacher salaries, training and supervision,

inventory and utilities. The physical space requires a capital investment of 1250 soms per place, which can be use by two children attending half-day programs.

- b. It is highly recommendable both for financial and pedagogical reasons to lower the entry age of primary education from seven to six. About 40% of six year olds are already there, and the money that is now being spent on the six and seven year olds in the expensive formal KG can be used to enroll many other children in primary. The remaining costs of enrolling all six year olds in primary school amount to 60 million soms annually.
- c. The literature provides compelling evidence that (i) children should attend preschool education during the two years preceding primary school, and (ii) that half-day programs are at least as effective as full-day programs. In fact, an alternation between half days spent in a center and the other half in the home environment and with the peer group is even better from a perspective of child development than full-day care.
- d. Following the advice in recommendation c would imply the enrolment of all four and five year olds in half-day programs. This costs in the order of 125 million soms for each of the two age groups, but it is recommended to halve these costs by phasing out the government's contribution to the full-day program. To prevent disruptions for formal KGs, this can be a very gradual process, and the government could continue to subsidize the half-day school-preparation component of full-day programs.
- e. This report presents a “menu” of various scenarios for the six, five and four year olds. The most recommendable combination – primary entry age lowered to six, and all four and five year olds in half-day programs - leads to an extra cost of about 200 million soms per year compared to the present. Moderate economic growth would be sufficient to free up this budgetary space in the coming years, even if the education budget would not grow as a share of GDP. There is strong economic evidence for high returns on this investment.
- f. To ensure equitable access, it is recommended that fees do not exceed 50 soms per month and that they be waived for the poorest families. Even such moderate fees could mitigate the government's financial burden substantially. It is also advised to prioritize rural areas where no CbKs have been introduced yet, and that pair low enrolment in formal KG to high poverty rates.
- g. Expanding preschool capacity through school- and home-based satellites is very recommendable in that it brings services close to children and reduces costs. On this assumption, capital costs of refurbishment are the order of 200-250 million soms. Since this is incidental, not recurrent, this could be financed with external assistance.
- h. Parental education deserves more attention in Kyrgyzstans future plans for ECD policy. The Feldsher-Accoucher Posts and Village Health Committees should integrate early stimulation and early learning in home-visiting schemes, prior to enrolment in a kindergarten. This can be done against limited costs.

References

Aga Khan Foundation, 2009. Learning Achievement of Students in Grade 1 in Kyrgyzstan. Bishkek, Aga Khan Foundation

Agriconsulting Europe Consortium, 2009. Education Development Strategy of the Kyrgyz Republic for 2011-2020. Bishkek, Ministry of Education and Science, Department of Strategic and Analytical Work

Asian Development Bank, 2007. Sector Analysis and Strategy. Second community based early childhood development project. TA 4749. Bishkek, Asian Development Bank

Carter, J., Biersteker, L., and Streak, J., 2008. Costing center-based early childhood development programmes for children under age five: case studies from the western cape. Pretoria, Human Sciences Research Council

Comenius Foundation for Child Development, 2009. A good start. How to introduce alternative early childhood education services in local communities. Warszawa, Comenius Foundation for Child Development

Consultative Group on Early Childhood Care and Development, 2008. The Four Cornerstones. To secure a strong foundation for young children. www.ecdgroup.com

Engle, P., Black, M., Behrman, J., Cabral de Mello, M., Gertler, P., Kapiriri, L., Martorell, R., and Young, M. 2007. Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world. In: The Lancet, 369 (9557, 20 January, pp. 229-242

Evans, J. (John), 2008. Mountain Societies Development Support Programme Kyrgyzstan. Evaluation of the early childhood development program. Bishkek, Aga Khan Foundation

Evans, J. (Judith), 2006. Parenting Programmes: An important ECD Intervention Strategy. Background Paper for the EFA Global Monitoring Report 2007, Paris, UNESCO

Government of Kyrgyz Republic, 2009a. Law on Preschool Education of June 29, 2009, Bishkek, Government of Kyrgyz Republic

Government of Kyrgyz Republic, 2009b. Resolution 478 of 28 July 2009. Bishkek, Government of Kyrgyz Republic

Government of Kyrgyz Republic, 2009c. Country Development Strategy 2009-2011. Bishkek, Government of Kyrgyz Republic, 2009

Grantham-McGregor, S., Cheung, Y., Cueto, S., Glewwe, P., Richter, L., and Strupp, B. 2007. Developmental potential in the first five years for children in developing countries. In: The Lancet, 369 (9555), 6 January, pp. 60-70

Heckman, J., 2006. Skill Formation and the Economics of Investing in Disadvantaged Children. In: Science. no. 5782 vol. 312, pp. 1900-1902.

Irwin, L., Siddiqi, A., and Hertzman, C. 2007. Early Child Development: A Powerful Equalizer. Geneva, World Health Organization

MacLean, H., 2006. Reflections on Changes in legislation and national policy frameworks: ECCE in Armenia, Kyrgyzstan, Romania and Ukraine. Background Paper for EFA Global Monitoring Report 2007. Paris, UNESCO

Maclean, H. And Orozova, R., 2007. No wolves along the way: towards a national ECD model for Kyrgyzstan – UNICEF's pilot interventions in Batken rayon. Bishkek, UNICEF Office in Kyrgyzstan

MediaNet Limited, 2009. The Kibaha experience. Implementation of the early childhood cognitive and psychosocial development project. Dar es Salaam, UNICEF

Ministry of Education and Science, 2009. Fast Track Initiative Catalytic Fund Grant for Education Development. Technical proposal second year grant allocation. Bishkek, Ministry of Education and Science

Myers, R., 2004. In search of quality of programs in early childhood care and education. Background paper for Education for All Global Monitoring Report, Paris, UNESCO

National Statistics Committee and UNICEF, 2007. Multiple Indicator Cluster Survey Kyrgyz Republic, 2006. Final Report. Bishkek, National Statistics Committee and UNICEF

National Statistics Committee, 2008. Education and Science in the Kyrgyz Republic. Bishkek, Ministry of Education and Science and Rural Education Project funded by World Bank

Nizovskaya, I. and Teleshaliyev, N., 2009. How to establish and run different models of early childhood education and care in Kyrgyzstan. Bishkek, UNICEF Office

OECD, 2001. Starting Strong: Early Childhood Education and Care. Paris, OECD

Orivel, F., Ana, F., Tuhari, I., 2007. Republic of Moldova. Financial and Legal Analysis of Community-based Child and Family Centers. UNICEF Moldova, Chisinau

Reynolds, A. And Temple, J., 2008. Cost-effective Early Childhood Development Programs from Preschool to Third Grade. In: the Annual Review of Clinical Psychology. 2008. 4. 109-39. Berkeley, University of California

Sammons, P., Silva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B., Barreau, S. And Grabbe, Y. 2007. Influences on children's attainment and progress in key stage 2: social/behavioural outcomes in year 6. London, University of London

UNESCO, 2003. Education for All Global Monitoring Report. Gender and Education for All: the leap to equality. Paris, UNESCO

UNESCO, 2004. Education for All Global Monitoring Report. The Quality Imperative, Paris, UNESCO

UNESCO, 2005. Policy Review Report. Early Childhood Care and Education in Kazakhstan, Paris, UNESCO

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

UNESCO, 2007. Education for All Global Monitoring Report. Will we make it? Paris, UNESCO

UNESCO, 2008. Education for All Global Monitoring Report. Overcoming inequality: why governance matters. Paris, UNESCO

UNICEF Innocenti Research Center, 2007. An overview of child well-being in rich countries. Report Card 7. Florence, Innocenti Research Center

UNICEF Innocenti Research Center, 2009. Innocenti Social Monitor 2009. Florence, Innocenti Research Center

UNICEF, 2007. Learning Achievement in the CEE/CIS region. A comparative analysis of the result from the 2006 PISA. Geneva, UNICEF

UNICEF Regional Office for CEE/CIS, 2007. Developmental Readiness for Schooling; Early Childhood Development in CEE/CIS. Geneva, UNICEF Regional Office for CEE/CIS

Van Ravens, J. and Aggio, C., 2008. Expanding early childhood care and education: How much does it cost? Working Paper 46. The Hague, Bernard van Leer Foundation

Walker, S., Wachs, T., Gardner, J., Lozoff, B., Wasserman, G., Pollitt, E., and Carter, J. 2007. Child development: risk factors for adverse outcomes in developing countries. In: The Lancet, 369(9556) 13 January, pp. 145-157

World Bank, 2008. Kyrgyz Republic. Education Sector Fiduciary Capacity Assessment Report. Report No. 46652-KG. Bishkek, World Bank

ANNEX: Reports on site visits

Several CbKs and two formal KGs have been visited for this report between 12 and 20 October 2009. These visits cover, in chronological order:

- A CbK plus two satellites supported by AKF, in Osh oblast, Alai rayon
- CbKs supported by UNICEF, including one school-based CbK, in Batken oblast
- A formal KG supported by the FTI, in Batken city
- CbKs supported by the ADB, in Naryn oblast, Kochkor rayon
- A formal KG supported by the FTI, near Bishkek

A format has been developed in order to streamline the reports on these site visits. These formats/reports follow hereunder. Not all of the cells of this format are completed, for instance when issues were combined or, as in the case of “health”, when the situation was more or less the same for all visited KGs. Generally, the first formats are longer than the later one, since some issues appeared to be the same for all CbKs.

Salaries, fees and other financial amounts are usually in Kyrgyz soms per month, which is abbreviated to “s/m”. If amounts are per day or year, or in dollars, this is indicated.

AKF supported sites in Alai rayon (12.10.09)

This section reports on three visits:

- to a Central CbK in Kengjylga,
- its home-based satellite KG in the same village,
- its school-based KG in the village called 1 May.

<p>service hours age groups enrolment fees salaries</p>	<p>The central CbK runs 2 full daycare groups of 30 each (> 60) from 08:00 – 17:30 and 2 shifts of half-day groups of 15 each (>30) from 08:00 – 12:00 and 14:00 – 17:00. The reason that there is demand for full daycare is that in many families both parents work in agriculture (small scale farming).</p> <p>The fee is 120 s/m for the full daycare program and 125 for the half-day program. The reason why the half-day program is (slightly) more expensive than full-day program is that the (four) full daycare teachers receive the state salary (of 1700 s/m on average) while the half-day teacher is paid directly from the fee: of each 125 s/m, 100 is for teacher. She thus earns $2 \times 15 \times 100 = 3000$ s/m. The remaining 25 s/m is for tea; children bring food. Children from age 4 onwards are admitted. The KG-staff would prefer admission from age 3, but lack of space prevents this. The Head also earns the state salary of, in her case, 3000 s/m. Her maximum salary would be 4000 s/m.</p> <p>The school-based satellite charges 50 s/m, which is entirely spent on the salary of the one teacher. So with 19 children attending, she earns less than 1000 s/m. Until last year she was paid by the Ayil Okmotu (AO) and received 2500 s/m, but this has stopped. She now hopes for the state salary. There is one group of 19 children of ages late 5 and early 6 who attend 12:00-14:30. They attend during just one year; then the graduate to the host-school. This program focuses mainly on school-preparation. Tea is provided by the host-school who manages to do this from the state subsidy for grades 1-4 (of 5 soms per child per day). Again, parents provide food (biscuits). Most children of this village attend, but there is more demand from surrounding villages and therefore the school principal considers 2-shift operation.</p> <p>The home-based satellite serves 15-20 children in one group from 09:00-13:00. These are children of 5/6 but in practice they bring younger siblings of 4/5. The teacher divides them into 2 subgroups. The fee is 50 s/m; such issues are decided at meetings of the parent board. The fee is partly used for materials and partly to supplement the salary of 610 s/m that the teacher receives from the AO. It was noted that in principle it is not legal that the AO pay this salary.</p> <p>In general, children attend 5 days per week during 8 months per year. Holidays are Summer (3 months) Autumn (1 week) Winter (2 weeks) Spring (1 week).</p> <p>The overall impression is that although there is scope for expansion (to admit younger children and children living at a wider distance) there is no exclusion of children who should enroll but have no access on financial or other grounds.</p>
---	---

<p>Teachers' initial and refresher training and supervision</p>	<p>The teacher of the school-based program followed a full professional education at the University of Osh of normally 5 years, but in her case it was 6 years as she took the distance education option.</p> <p>The home-based teacher had completed secondary education but followed no specialized training other than the 10-day refresher training. However, this training is frequent (twice per year) and there is frequent supervision by the Head of the central CbK ("at least once a week"). There is a very strong impression that since this teacher is very dedicated and talented, she does an excellent job based on the combination of short preparation and frequent refresher training plus supervision. The Central CbK also organizes meetings of all teachers and workshops.</p> <p>(If the Head would not provide supervision, there are alternatives: a supervisor of the Rayon Department of Education, parents' committees, community councils. We have no indications of the quality of these alternatives)</p> <p>AKF's policy is as follows: the first preference is to attract teachers with a specific education for work in KG; the second is teacher training for primary education, and the third is general education on the condition that the 10-day course is taken.</p>
<p>Buildings and rooms</p>	<p>The room in the school-based satellite was made available by the host-school, as it has an interest in well-prepared children. Renting a similar room somewhere would cost 1000 s/m, but renting is not common. To construct a building with a room of similar size including toilet and entrée would cost 500.000 soms. However, if such a building were constructed, parents would help to build it thus saving costs. We asked if in principle any school could follow the example of this school-based KG. The answer was that many a school would not be able to do this, for lack of space. Some schools even run 3 shifts, since the numbers of children are on the rise in the area. Both in the school-based and the home-based satellite, AKF gave a start up subsidy of 5000 US\$ for furniture and equipment. Training materials cost 500 US\$. For maintenance, 1500 soms per year is given.</p> <p>The central CbK is located in a former office building. This was in a bad state at the time. A grant of 15.000 US\$ was given by AKF to make it suitable. Electricity (including for heating) costs 45.000 soms per year, while water is brought in from a nearby well.</p> <p>The home-based center, too, received a grant of 5000 US\$ from AKF for furniture and equipment. This is the same amount as what the school-based program received. In addition, the home-based programs receive a quantity of coal worth of 5000 soms each winter.</p>
<p>Learning materials</p>	<p>Subsidy for learning materials is included in the 5000 US\$ grants for home and school-based programs. Floormats are among the traditional handicraft products of Kyrgyzstan and are made and provided by parents. The home-based teacher was particularly skillful in making learning materials. Her facility looked excellent.</p> <p>Different items have different life cycles. Furniture lasts 10 years, mats and some materials 5 years, and stationary 6 months.</p>

Parental involvement	This is presently not a core activity for the CbK or its satellites, but there is a program called Reading for Children in which facilitators are trained who then reach out to parents with mini-libraries, teaching them to educate their children, and more in particular to read with their children.
Health	<p>For healthcare in preschool education there are strong national standards that each institution (formal or nonformal) must respect. This KG has a part-time nurse who works in healthcare institution for the rest of her time. Blood-tests and growth monitoring are among standard items, and for each child there is a personal file that is passed on to primary school when the child goes there. Info related to parents is also available.</p> <p>Children in the school- and home-based programs come to the central CbK to be treated in the same manner. Teachers play a signaling role; they meet monthly and discuss children that lag behind in any respect, including health.</p>
Additional remarks	<p>The satellite concept is a very interesting approach that makes it possible to work with low cost options such as home/school-based centers (with relatively low investment in classrooms) and yet to secure quality. This is done by having the central CbK operate as a resource center for supervision, health facilities, common events, and other things for which stand-alone school- or home-based outlets would not have the scale. In this way it is possible to reach out for children in remote and sparsely populated areas.</p> <p>The Head is particularly active in ensuring the financial sustainability of the center and satellites. She created their own sources of income, e.g. from farming and from handicrafts; a women's group donate 5% of their revenues. Given the suggestion that cooperation with micro-credit organization could enhance financial stability, she agreed; AKF is liaised with the FMCC, the First Microcredit Company.</p> <p>The home-based teacher seemed to perform quite well despite her lack of "regular" teacher training. As in many other countries, short courses followed by tight supervision and frequent refresher training work well. At macro-level this would imply very significant saving on "hidden costs": lengthy studies in higher education are much more expensive. However, this expenditure appears as part of the higher education budget, not the ECD budget. Connecting these issues can lead to important efficiency gains.</p>

UNICEF supported CbK “Akjoltoi” in Bujum in near Batken (13.10.09)

This section is about a visit to a CbK that follows the “mixed model”: a daycare and a 2-shift half-day program. This KG is located close to a school but it is independent having its own premises and a piece of farmland.

<p>service hours age groups enrolment fees salaries</p>	<p>There is one daycare group of 40 children and a 2-shift program of 40 children for each shift, bringing the total number to 120 children.</p> <p>2-shift program: The teacher’s salary is derived from merely the 50 s/m fee that parents pay. Theoretically this would amount to $2 \times 40 \times 100 = 4000$ s/m, but in practice the salary is about 2800 s/m since some of the attending children are orphans, have disabled parents, are second enrolled child of a family (and get discount), or have poor parents who do not manage to table the money. Comparatively, the 2800 s/m is not a low remuneration, but it is a long working day: 09:00-12:00 + 12:00-15:00.</p> <p>Daycare program: The 40 children range from 3-6 and are split in 2 groups: one of 3-4 and one of 5-6. They can be separated since there is a second room adjacent, but for the single teacher it is hard to manage the two subgroups in the two separate rooms. UNICEF has recommended to appoint a second teacher, which is difficult for financial reasons. The fee was initially 300 s/m. It dropped to 200 s/m thanks to financial support, but will probably be raised back to 300 s/m. This will be decided at the parents’ council.</p> <p>While the 2-shift teacher is paid from fees, the rest of the staff receives 6500 s/m in total from the AO. This matched AO-data received later. In addition, AO pays 148000 per year for the social fund. The 6500 s/m is divided over:</p> <ul style="list-style-type: none"> • Head: 2200 s/m. She is manager, methodologist, nurse, all in one. She frequently takes over when teachers are absent or have quit the job • Daycare teacher: 1200-1300 s/m • Cook: 1000 s/m. This is a full day job, preparing 3 meals • Guard: 1000 s/m. Watches all night <p>For meals, 1400000 was reported to be spent annually, of which 500000 comes from the Aiyl Okmotu and 900000 from parents.</p> <p>Are there excluded children? In this village there are about 200 children of 0-6. This CbK enrolls 120, and the rest either lives too remote, or is indeed too poor. However, an important share is in the 0-3 age bracket for which there is no offer. The CbK has the ambition to expand, also in order to reach out for the younger ones. There is demand for this for two reasons: many parents are both working (sometimes abroad with grandparents as carers), and parents are beginning to see the importance of good early childhood development.</p> <p>Primary school teachers, in their turn, see important differences between KG and non-KG children, but <i>no</i> significant difference between short versus daycare graduates. The KG teacher themselves find running the daycare program much</p>
---	---

	<p>more demanding than the short program, because of the hassle with meals and sleeping.</p> <p>Remarkably, there are no vacations other than an occasional Winter-break when snows blocks the roads, and a 20 day Autumn-break when graduates left but new kids have not yet entered. It is probably parents' continuous need for daycare that prevents closing down. The CbK is open five days per week, 08:00-18:00.</p>
Teachers' initial and refresher training and supervision	<p>The 2-shift teacher followed the 5-year higher education course for primary education teachers and then took the UNICEF training of 3 x 3 days.</p> <p>The daycare teacher followed a 3 year pedagogical college (tertiary non-university level) and will soon take the UNICEF training.</p> <p>All teachers are of course directly supervised by the Head of CbK.</p> <p>The next refresher training depends on the National Institute of Education, because <i>they</i> invite (not the CbK itself or community council, parents or other local actors). Normally the interval is 5 years. A teacher can diminish the interval by paying by her/himself, however travel and boarding costs are high. AO prefers that state pay this, and UNICEF hopes that 2-shift teachers will also have a right to benefit from the system.</p>
Buildings and rooms	<p>The building and land were and remain the property of the AO. The investment to make it suitable as a KG was 355000 soms, supported by ARIS. For maintenance there are no dedicated resources, so this year for instance they need to obtain a total of 6000 soms from additional parental contributions. The KG-staff argue that AO should cover maintenance, since it is not much and it would avoid begging from parents.</p>
Learning materials	<p>Toys cost 20000 for the 40 children of the daycare group, and the same amount for the 2 x 40 children of the 2 shifts. Toys have a life cycle of 3 years.</p> <p>Materials and books: same amounts. Materials life cycle is 1 year. Books 2 years.</p> <p>Furniture (excluding beds) costs 60000 soms.</p> <p>Typical daycare inventory is particularly expensive: beds, linen, cups & dishes.</p>
Parental involvement	<p>At the start in 2006 there was actually a scheme for parental education. UNICEF trained a number of facilitators (including Head) to run groups of 30 parents twice a month for 2 hours in weekends or evenings. They used the available room of the parents council in the CbK (which is inexpensive since it has no tables and chairs, just carpets). This scheme addressed the usual subjects, using the ADB cassettes. It was discontinued by UNICEF in 2009 for lack of policy support.</p>
Health	<p>Basically the same procedures are followed as described for the AKF supported sites. Although the Head plays the role of the nurse, she has the full qualifications and keeps close contacts with local healthcare and hospital. A hospital nurse regularly visits the CbK.</p>

Additional remarks	<p>There is no fixed entry fee, but from time to time the CbK is forced to ask additional contributions, e.g. when bed linen needs to be replaced gradually. This may depend on income. There is also a “fund of young fathers”, which is not really a financial fund but rather a labor pool, with fathers assisting the CbK with their respective craftsman’s skills (plumbers, electricians, carpenters). It was noted that in some remote villages there is a lively culture of support to CbKs. In other words, ECD is becoming a social movement.</p> <p>The CbK applied for a subsidy from the French NGO Acted but did not get it. The winning KG received 40000 soms and bought cows and chicken for it, using a part of their products by themselves and selling the rest. This CbK will try again, but also investigate other options.</p> <p>It is remarkable that within one KG there are teachers receiving the state salary merely because they work in the traditional daycare program, versus a teacher not receiving that salary just because the short program is not recognized. The recent government Decree 478 would end this inequality.</p> <p>The CbK is introducing the Waldorff-Schneider method: development by creative play.</p> <p>It was noted that training can become more efficient by training first the teachers in the village, register it on video, and distribute the CD to more remote teachers.</p>
--------------------	---

UNICEF supported school-based preparatory class in Aksay, Batken (14.10.09)

This section describes a preparatory class in Hodjaev secondary school (ages 7-17) where 6 year olds follow a one year program in a spacious classroom, made available by the Principal in 2006

<p>service hours age groups enrolment fees salaries</p>	<p>There are 27 children in this class which runs from 08:30 to 11:40. The fee is 100 s/m. From this fee, the teacher is paid and tea-breaks are financed. From this class, the teacher earns about 2000 s/m, but she earns another 1800 s/m from teaching a regular class in the school in the afternoon. This regular salary keeps her in the state system, building up pension and years of experience. The 2000 s/m salary is very insecure; if children stay away for a month her income suffers immediately. She also needs to continue work during summer, while regular teacher receive pay during vacation (this differs from the AKF supported school-based KG, which followed national vacations).</p> <p>Some children in the vicinity are not enrolled, partly since they are too poor, partly since they live too far away. When asked whether the home-based satellite model would work for these children and whether she would then like to mentor it, the teacher answered positively.</p> <p>The Principal emphasized that when these children graduate to school they will be divided over two parallel classes, to prevent the creation of a quasi-elite class that performs better than the children who did not follow this program. By mixing the children, the positive effects of the program may spill over to some extent to others. (Interestingly, a CbK in Kochkor follows the opposite approach, as we shall later in this annex).</p>
<p>Teachers' initial and refresher training and supervision</p>	<p>The teacher is well qualified and has 19 years of experience. Yet she recently also took the UNICEF training of 3 x 3 days, as well as a health training.</p>
<p>Buildings and rooms</p>	<p>The classroom was made available by the Principal, who indicates that despite population growth the school was large enough (unlike the AKF supported host-school in Osh Oblast that we visited, where a separate building was used). This school would even have the space and teacher to start a second group (e.g. for five year olds) but it would not attract enough children and they would lack the UNICEF support for this second group.</p> <p>Preparing the classroom and fixing the heating system cost 40000 soms in total. Furniture and materials were partly provided by UNICEF. UNICEF paid for the books, toys and furniture, for which it has the standard packages and prices: Half-day education programs: 2800 US\$ (this applies here in this KG) Preparatory classes: 1900 US\$ Full day programs: 12900 US\$ Partly the school and parents contributed too.</p>
<p>Learning materials</p>	<p>See above</p>

Parental involvement	Parents come along spontaneously and ask questions about child-rearing. In addition there is a monthly parental meeting which is informal and parents bring tea and food. This starts to attract more parents, also of five year old children who are not (yet) enrolled. Teachers also give health training. In addition to the informal gathering, there is also a more formal parent's meeting for discussion and decision making.
Health	Same procedure as for earlier visited KGs: child is checked and does not enter unless healthy. For children who do not attend, this procedure takes place upon entry in school. Thus, this health check is predominantly preventive, with a view to prevent disease to spread in schools. See next visit/format for broader info on the links between KGs and early healthcare.
Additional remarks	This particular teacher distinguishes herself by a high level of creativity, both in music and in arts. She composed for instance children's song that are to be published by UNICEF.

UNICEF supported CbK “Janybak” in Batken with 2-shift system (14.10.09)

This section concerns a CbK in very attractive building sponsored by Aris. Running only 2-shift groups, this CbK is very effective, reaching out to a large total number of children

<p>service hours age groups enrolment fees salaries</p>	<p>There are six groups: 2 consisting of 4 year olds (one in the morning shift and one in the afternoon shift), 2 consisting of 5 year olds (same schedule) and 2 consisting of 6 year olds (again same schedule). In total there are 85 children, with on average 15-17 per group. The morning shift is from 09:00 to 12:00 and the afternoon shift from 13:00 to 16:00.</p> <p>The Head (earning 1800 s/m), one teacher (1390 s/m) and a nurse (1000 s/m) are on the official state budget, and another teacher’s salary comes from fees. The fee is 60 s/m and her salary is 1500 s/m. As in other KGs, this is rather unfair, as this teacher is not building pension. She also does not accumulate the years of experience that would be needed to get into a higher salary scale once in the state system.</p> <p>There are 109 children of 4-6 in this village (the CbK has literally mapped them) of which 85 are enrolled. Reasons for not enrolling are (i) living too far away, (ii) parents work abroad and children are reared by grandparents who may live elsewhere, may lack the money, or may not be physically able to walk children to school, (iii) some children do not have proper clothing and parents feel embarrassed. Interestingly, the parents committee sometimes decides to waive the fee for poor children. There are two disabled children enrolled.</p>
<p>Teachers’ initial and refresher training and supervision</p>	<p>All teachers follow the distance learning course at the pedagogical university.</p>
<p>Buildings and rooms</p>	<p>Aris paid the refurbishment of the building which was in a very bad state. This cost 813000 soms. (There were plans to turn it into a café, but community members preferred a CbK).</p>
<p>Learning materials</p>	<p>UNICEF paid for the books, toys and furniture. For this, UNICEF has the following standard packages and prices: Half-day education programs: 2800 US\$ (this applies here in this KG) Preparatory classes: 1900 US\$ Full day programs: 12900 US\$</p>

Parental involvement	<p>The aforementioned system of mini-libraries is being applied here too. It concerns the same books as children read, and parents are encouraged to read to their children, including the younger (not yet enrolled) ones.</p> <p>In addition, there is a meeting of parents every month where questions are asked and answered about child-rearing. A questionnaire is in the making to find out what parents' wishes are. Child protection day (1 June) was a big celebration.</p> <p>Parents also take turns walking children to/from school.</p>
Health	<p>The CbK is located right next to the Feldsher-Accoucher Post (FAP) (nurses, midwives) with which the CbK cooperates closely. In addition, there is a Village Health Committee of 15 members, who go door to door to provide information (both orally and in print) about breastfeeding, hygiene, sanitation, et cetera. Five of the 15 were trained in Batken by the Red Crescent, and they coached the other members. This system is said to be universal in Kyrgyzstan. (See ADB report 2007).</p>
Additional remarks	<p>It appears that the fees that the CbKs collect do not remain in the CbK's own account but are passed on to the Aiyl Okmotu. The money is then passed on the Rayon, who return it to the CbK only on request. E.g. if the CbK wants to buy materials from its collected fees, they must request it formally. Such requests may actually be refused occasionally, or the Rayon may pay less than the requested amount. This practice seems quite common, perhaps universal. It may affect the autonomy of the CbK and its community-owned nature. The argument is that without this financial "loop" the collection of fees would not be legal.</p>

FTI supported State KG “Orukzar” in Batken

This is one of the older KGs (it started in 1979) that survived the transition period although it has seen difficult times, especially from 1997 onwards. Recovery was based on very active resource mobilization by the Head, who came in 2002 when there were only 30 children.

<p>service hours age groups enrolment fees salaries</p>	<p>At this moment, 220 children are enrolled of which 180-190 are usually attending. The official capacity is 140. The KG offers exclusively full daycare, for which there is said to be a big demand, especially from parents who both work. These seem to be predominantly “working poor” rather than “double career-couples”. The fee is 200 s/m, which covers half of the costs of the food. This is insufficient. Together with the Government contribution of also 200 s/m this makes 400 s/m, but what is needed is 1000 s/m. Raising the fee is not an option because this would cause too many parents to withdraw their children. Mercy Corps helps in-kind with flower, rice, et cetera. Parents typically earn 2000 s/m, so with 2 children in this KG they would spend most of their income on childcare.</p> <p>The seven groups are divided by age: 1.5-2 / 2-3 (2x)/3-4/4-5/5-6/6-7. There is increasing demand for the 0-3 group, but also for the 6-7. The Head emphasizes that the 6-7 group’s program in the classical KG is much broader than for instance the 100 hour programs.</p> <p>There has been a short program of 2 hours per day running from 2004-2006 called “mothers’ school”. It was discontinued because teachers were not paid. They were volunteers and stopped the program when the demand for the daycare program increased. The fee was 20 s/m but even that was too much for many families. The children on the short program received the leftovers from the daycare group. Sometimes parents simply did not pick up their children after the program so that effectively they stayed with the daycare group. Furthermore, some children were orphans, and others were children of parents working abroad who did not send money (possibly because they were legally not allowed to transfer remittances).</p> <p>This KG has the typical staff formation of a classical KG including Head, 7 teachers, 2 cooks, a nurse, a music teacher, a laundry lady, and 2 guards. The average teacher salary is 3000 s/m. One awarded teacher earns extra salary.</p>
<p>Teachers’ initial and refresher training and supervision</p>	<p>All teachers followed the specialized preschool teacher training of 5 years. They also participated in the 3 x 3 days training by UNICEF and they introduced the Waldorff-Schneider methodology in this KG.</p>
<p>Buildings and rooms</p>	<p>For refurbishment (e.g. leaking roof) this KG received 277000 soms from the Urban Institute; 30000 soms from the Oblast; 15000 from the Rayon; and some smaller contributions from the AO. Parents made in-kind contributions, e.g. in the form of wood. The heating system was repaired by the Foundation for Tolerance International (Ferghana Valley). Aris repaired toilets for 156000.</p>

Learning materials	The present set of furniture (desks, tables, chairs, bookcases) cost 179666 soms, of which 25000 was donated by the city municipality, 10550 by parents, and 126600 by Mercy Corps. A new proposal for 366600 has not yet been approved. There is a lot of pride about these achievements in this KG, also among parents.
Parental involvement	<p>There are three types of activities.</p> <ul style="list-style-type: none"> • Informal parental gatherings monthly in the music room after 16:00, where parents bring tea and snacks. This is to build social capital and support for the KG. These meetings cut across the children's age groups. • Formal meetings of the parent council. • Monthly training, also by nurses and doctors, on hygiene, infectious diseases, nourishment, seasonal clothing, et cetera
Health	As described in earlier sections.
Additional remarks	<p>The Head learned the art of writing proposals in Bishkek, and once in Batken she benefited from it strongly. The way in which this KG has been saved and revitalized is admirable. But it seems not replicable. Many people elsewhere in the country, especially in remote areas, lack similar fund raising skills. And even if they acquire these skills, the total volume of available resources from benevolent organizations would not grow proportionally.</p> <p>This visit underscored that there may be an important group of "working poor" who need daycare for their children but would not be able to afford it if fees were any closer to the cost price.</p>

ADB supported CbK in Janyjol village near Kochkor (16.10.09)

This CbK is called Kichi Umut and is located in the building of a former KG which was closed but not sold. So there was the opportunity to reopen it in 2007.

<p>service hours age groups enrolment fees salaries</p>	<p>There are 23 children of 3-5 in full daycare, plus a preparatory class of 12 children of 6 years old. The latter children also spend the day in this KG but in a separate space. Even for these children there is a dormitory. This was on the request of the parents who argue that a dormitory is an essential part of a KG. However, if the children do not want to go to bed, they are not forced to.</p> <p>The children attend from 09:00 to 17:00 and the KG is open all year around since most parents work. Many are teachers or farmers and even if they have no regular occupation there is always work to do around the house, such as taking care of livestock. However, it was also suggested that parents find it convenient to be relieved from the care throughout the day, and that they have a traditional view on KGs, meaning that it should include three meals and a dormitory.</p> <p>Since this year, all staff are paid from the national budget (this may also have been an argument to make the preparatory class a full daycare program; without the dormitory it would perhaps not have qualified as a KG program that is eligible for state subsidy).</p> <p>The total salary budget is 16474 s/m from which the following are paid: Head, teacher, assistant teacher, cook, music teacher, nurse, laundry lady, guard, and handyman. In addition there are two vacancies. Including the vacancies there are 11 staff for 35 children, i.e. a staff to child ratio of 1 : 3.</p> <p>The total number of children of 3-7 in this village is 60. The reason that only 35 of them are enrolled is the location. The KG is situated on the edge of the village, too far away for children on the other end. Especially in winter the attendance drops. The Head regrets this location but it was the only one available.</p> <p>The fee is 300 s/m, all of which is spent on food. This amount is not sufficient, and the Head says they are not meeting the national standards in this respect. As of January 2010, money for food will come from the national budget, but that too will not be enough. Therefore the intention is to undertake farming activities to make ends meet.</p> <p>Primary school teachers praise the KG for the good performance of children coming from the preparatory class.</p>
<p>Teachers' initial and refresher training and supervision</p>	<p>All teachers followed the 5 year initial training, take the refresher training ever five years, and took part in the ADB's 12 day training.</p>

Buildings and rooms	<p>The costs of refurbishment are 205000 soms, covered by ADB plus 25000 covered by the people of the community as well as in-kind contributions. The playground and its fence were financed by the ADB for 100000 by the ADB.</p> <p>2385 US\$ was provided b the ADB to purchase inventory such as furniture, kitchenware, bedding, desks, chairs.</p> <p>For heating, 31 tons of coal are provided by the AO to get through the long heating season of 6 months. This costs 77000 soms per year. (Previously, the need for coal was underestimated by the AO which caused the KG to close down temporarily.</p>
Learning materials	Learning materials and toys were provided at a cost of 2812 US\$ (The standard of ADB is 1406 US\$ per group)
Parental involvement	There is a monthly meeting to update parents on the situation of the KG. A parents committee of two are encouraged to come and observe the KG at any time. They also distribute the ADB's cassette with 10 booklets and provide occasional parental training, though never in harvest time.
Health	
Additional remarks	

ADB supported schoolbased CbK in Ak-Talaa village of Karasu Aiyl Okmotuu (16.10.09)

This concerns a KG called Kelechek that started in 2008 on the premises of a secondary school

<p>service hours age groups enrolment fees salaries</p>	<p>The initial intention was to start just a half day preparatory class, but the parents insisted on having full daycare. Again, the argument was that parents both work: partly in Bishkek, partly in Russia, and partly locally. Of those working locally, most are actually teachers in this particular secondary school or in the KG itself. Others are farmers who in the summer move to the higher pastures leaving children with grandparents.</p> <p>Children can generally enroll from age 3, but children of teachers can enroll at age 2.5. There are 13 children of 2.5/3 – 6, and 12 six year olds in a separate preparatory class. About 30 to 40 village children in these age ranges are not enrolled. Two reasons for not enrolling include: parents are unemployed and too poor; children are cared for by their grandparents (this was also noted at other site visits, and there is the impression that grandparents do not always physically manage to bring children to the KG and pick them up).</p> <p>The fee is 125 soms which is used for food. In addition the KG receives 18 soms per child per day from the national budget. This is said to differ by region (for comparison, the standard amount for primary education is 7 soms per child per day, but this is for one meal, not three).</p> <p>The 7 staff are: Head (2100 s/m), 2 teachers (2400 s/m), nurse (600 s/m), cook (1600 s/m), guard (1000 s/m), cleaner (600 s/m). The Head receives less than the teachers since her years of experience are not taken into account. Since June 2009, all are paid from the national budget.</p> <p>Children who graduate from this KG all go to the host-school. In grade 1 of that school, 12 children are from the KG and only one has no ECD experience. This child is said to stay behind, while others thrive. This approach contrasts with the school-based CbK in Batken, where disparities are being prevented.</p>
<p>Teachers' initial and refresher training and supervision</p>	<p>The Head completed a five year teacher training in higher education and took the 10 day ADB training, while the teachers follow the distance education course. The will follow the ADB training once they are invited.</p>
<p>Buildings and rooms</p>	<p>The CbK is located in a formerly unused building on the premises of a secondary school. The ADB invested 190000 soms in refurbishment and another 190000 soms for inventory. Parents contributed 25000 and 19000 respectively for these purposes, and also made also in kind contributions.</p> <p>The AO provides 15 ton of coal annually, which costs 45000 soms.</p>
<p>Learning materials</p>	<p>ADB provided 1406 US\$ for learning materials, 912 US\$ worth of toys was provided.</p>

Parental involvement	Activities for/with parents are not yet frequent. A training took place based on the ADB booklets, and there was a meeting about fees. A special training for young parents was held, and one for caring grandparents is planned.
Health	The KG has its own nurse who cooperates closely with the FAP. The rayon health center provides information, e.g. on breastfeeding and tooth-care.
Additional remarks	

ADB supported CbK in Buguchu village in Kum Dobo Aiyl Okmotu (16.10.09)

This concerns a KG called Sezim which is located in a new building, built by the community. It is located near the FAP, which is also new. The husband of the Head has welded the equipment of the playing ground.

<p>service hours age groups enrolment fees salaries</p>	<p>There is one group of 20 children of 4-6. The space is too small to split up the group, but nevertheless the 5 older children do follow a separate program focused on preparation for school.</p> <p>Service hours are 10:00 to 16:00, but once the KG is fully part of the national system, it will be extended to 09:00 to 17:00.</p> <p>Notwithstanding the 10:00 to 16:00 operation, there are three meals: at 11:00, 13:00 and 16:00 (light meal). Since the fee of 200 soms does not cover this, Mercy Corps provides some additional products. The state standard is 18 soms per child per day. Once part of the system, the CbK will receive this, although it is not enough.</p> <p>The fee is 250 s/m, of which 200 soms is used to partly cover food. The fee is transferred to AO, which sends it through to rayon Treasury, who finally pay the KG upon request. When asked for the reason for this loop, the AO accountant said that this is what the Law requires. The fact that this KG receives some money from the national budget gives it a legal, official status. This means that all cash flow must be registered by leading it through the rayon treasury. This practice seems to affect autonomy and accountability of KG. It is not clear why the CbK cannot simply report the collection of fees and the expenditures made with it.</p> <p>The remaining 50 soms of the fee is for salaries. These are unusually low: 500 s/m for the teacher, 500 soms for the cook, and nothing at all for the Head. A request for more salary has been submitted to the rayon, with the support of the AO.</p> <p>There are 160 children of 0-8 in this village, so the number of 4-6 is about 70-75. This means that some 50 children in the relevant age bracket are not enrolled. The reason is that there is not enough space. The obvious question was: why not a 2-shift system. Once again the answer was that parents did not want this. They insisted on a full day program, and otherwise they would not pay. The opinion of the parents of the excluded children is not known.</p> <p>Remarkably, the argument for full daycare was <i>not</i> double employment of parents in this case. Even unemployed parents insisted on full daycare; this is simply their image of what a KG is, as we saw earlier.</p>
<p>Teachers' initial and refresher training and supervision</p>	<p>The teacher follows the distance education course at pedagogical university, did follow the refresher training, and will take the ADB training. The Head already took the ADB training; she has a degree in food technology.</p>

Buildings and rooms	<p>Total construction costs of this new building amounted to 462000 soms, of which 358000 was provided by the ADB and the rest by the community, partly in-kind. (The slightly smaller FAP building cost 262000 soms).</p> <p>There is no dormitory; children sleep on mats on the floor of the playroom.</p> <p>Heating is electric; costs are covered from national budget through Aiyl Okmotu (AO makes the payment, so that Head is <i>not aware</i> of costs; this is something that was noted on some other occasions as well). Accountant of AO was also present and said that AO can hardly cover any costs other than through the national budget. Main exceptions are some food and contingency (below 5000 soms). For capital repair the KG must apply to AO, which on its turn forwards the application to rayon, which finally applies for national budget to MoF.</p>
Learning materials	The ADB provided standard packages of furniture (2135 US\$), toys (1000US\$), and books and methodological literature (20000 soms).
Parental involvement	Parents gather monthly. Staff took the ADB training on how to work with parents using the ADB booklets.
Health	The Head of the KG is also the Head of the Village Health Committee. Three of the 22 members of this Committee took training at Red Crescent: one on breastfeeding, one on rearing 0-6 months old children, and one on rearing 6-24 months old children. The three then spread the knowledge among all 22, and they now go door to door sharing this knowledge plus the booklets. The FAP has a room for the Village Health Committee. The work of this committee covers only health, not early stimulation. When asked if they would be willing to cover that as well, the Head responded positively.
Additional remarks	Only 4 children have graduated from this KG thus far. The teachers in primary education are very positive about these four.

ADB supported CbK in Isakeev village of Kochkor Ayil Okmotu (16.10.09)

This concerns a KG for just 6 year olds that is located in a space within a larger KG that belongs to a road construction company. The latter KG covers children below 6 years old, so the two KGs supplement each other.

service hours age groups enrolment fees salaries	<p>The program runs from 09:00 to 17:00 but for the fee of 250 soms they can only provide lunch and a light meal at 16:00. Again, it was the intention to run a 2-shift program but parents insisted on daycare. There are 30 children in this KG, and there is a dormitory with beds for all of them. The Head expressed her worries about the excluded children, especially the ones who live far away. We advised her to try a home-based program using the satellite model applied by AKF.</p> <p>Besides the Head there is one teacher. She earns 3000 s/m, partly paid from the fee. Other staff such as music teacher, security, etc is shared with the other KG.</p> <p>Children receive three meals per day which costs 31 soms per child per day. This cannot be financed from the fee, so the Head uses crops from her own piece of land.</p> <p>There are many children who are not enrolled because the parents cannot afford the fee. This concerns poor and mostly unemployed parents. We asked why there is not a cheaper half-day program, since unemployed parents are not in need of full daycare. The response was that these unemployed parents are generally reluctant if not ashamed, and would see the half-day program as a second rate option.</p>
Teachers' initial and refresher training and supervision	The teacher was trained as a primary school teacher and has 25 years of experience. She followed the ADB training.
Buildings and rooms	Before the ADB involvement the roof was renovated. Next, with the help of ADB, the walls and the heating were renovated for which ADB paid 100000 soms and the community 38500 soms, in kind. After this, ADB financed toilet rooms, provided furniture (1400 US\$), materials & books (20000 soms), toys (910 US\$), inventory & equipment (88000 soms). Finally, ADB provided 122000 soms for playground, bedding & mattresses. The community contributed 30500 soms for the playground, and assisted in kind.
Learning materials	See above
Parental involvement	Once a month there is a parental meeting to discuss the situation at the KG. On some Saturdays training is provided on issues like nourishment and child rearing. The Head also visits parents at home to observe living conditions.
Health	
Additional remarks	As usual, teachers in primary education are very positive about children graduating from this KG, and there is even competition among several schools in the area to enroll children from this KG. The policy of the KG is to keep the graduated group together since they have become good friends.

