

HCD REVIEW

RELATIONSHIP BETWEEN HUMAN CAPITAL DEVELOPMENT AND EQUITY IN THE REPUBLIC OF TAJIKISTAN



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European Training Foundation in cooperation with the SHARQ Research Centre January, 2011

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ABBREVIATIONS

ADB Asian Development Bank

ATP Adult Training Provision

CIS Commonwealth of Independent States

DRD Direct Rule Districts

ETF European Training Foundation

EurAsEc Eurasian Economic Community

GDP Gross Domestic Product

HC Human Capital

HCD Human Capital Development

IOM International Organization for Migration

MBAR Mountainous Badakhshan Autonomous Region

NGO Non-Governmental Organisation

SCSRT State Committee on Statistics of the Republic of Tajikistan

SIE Survey on Initial Education

TLSS Tajikistan Living Standards Survey

UNDP United Nation Development Programme

UNESCO United Nation Education Science and Culture Organization

USD United States Dollar

FOREWORD

This report is the outcome of the Human Capital Development (HCD) Reviews project initiated and funded by the European Training Foundation (ETF). The project aims to foster evidence-based policies on HCD and provide a basis to learn from the evidence.

The main remit of the work was to develop an HCD Review framework for the analysis and interpretation of trends, opportunities and challenges in HCD at country level. Where do countries stand in terms of their human capital? Which source of information can provide intelligence about the potential for HCD in future? To produce this framework ETF defined the scope of the reviews and identified consistent research questions as a basis for the design of the analysis methodology.

Within the reviews, human capital was defined as: '[those] skills and competences for gainful employment that contribute to the socio-economic development of the country'. Education, training and other forms of learning – notably those occurring in the context of labour markets – are instrumental in increasing human capital and these were used by researchers as input measures. The project thematic scope therefore covered education, learning, acquired competences and the application of these to the labour market.

The chosen definition allows for the lifelong dimension of HCD to be captured by removing limits on the age of learning, and, thereby, explores far beyond the boundaries of 'educational attainment' as a single indicator of the human capital of a country.

A second important element was the innovatory move to adopt equity as the focus for analysis. The study used this perspective to explore: whether human capital is developing in an equitable manner; if people are in a position to seize a variety of opportunities to deepen their knowledge and extend their competence; whether the options on offer are at the expected level of quality; and thus what type of barriers exist and where main disparities lay. This new definition of equity was seen to embrace the three dimensions of fair access, choice and quality of learning opportunities. Although the association between equity and education is not new, there have been few overviews of the lifelong development of human capital and deployment in the labour market, and none has covered the three cited dimensions of equity to date.

Human capital is central to social and economic development. Quality of competences and employment are important factors in innovation and potential competitiveness, whereas comparative studies show that social and economic achievements remain low where human development, including education, is also low. Hence, the negative impacts of unharnessed human capital represent a convincing indicator of the need for open access to multiple and good quality opportunities for developing human capital.

There is a link between knowledge, skills, gains in productivity, innovation and competitiveness but the dynamics of this relationship are complex and far from deterministic in nature, making them hard to measure. This level of complexity, together with statistics not always being available, prompted us to opt for a mixed methodology blending quantitative and qualitative assessment of human capital and its prospective development.

The present report contains the results of the HCD Review in Tajikistan and it is published in parallel to the HCD Review in the Republic of Moldova (ETF, 2011). The two reports are based on the ETF framework and methodology, build on previous research, add new empirical evidence to feed the debate, and elaborate the innovative concept of equity in learning opportunities through access, choice and quality.

These publications convey a message on the importance of contextualising policy design and implementation in each country situation. The data and information used all came from the most recent statistical sources and individual and collective feedback obtained in interviews and focus groups. We highly commend both country reports for the wealth of information provided and the inspiring analysis. They represent a resource for policy makers, researchers, practitioners and all those concerned with policies on human capital and links with the labour market.

Acknowledgements

The Sharq Research Centre worked with the ETF on the country analysis for the Tajik component of the project. Saodat Olimova and Muzaffar Olimov are the authors of the report and accept sole responsibility for the content, although have incorporated our advice. Data were collected and processed by Shoira Yusupova, Boron Saidaliev, Faizali Shofatov, Marjona Halimova, and Loiq Mirov. The professionalism of all those involved has added greatly to the success of the project.

We would also like to thank: the Deputy Minister of Labour and Social Protection, Subhon Ashurov, and the Deputy Minister of Finance, Shavkat Sahibov, who supported the project and provided invaluable suggestions. We are grateful to numerous other individuals who have contributed inputs and assistance that greatly improved this report. In particular, the leading specialists of the Ministry of Education, Muhammad Bobomurodov, Firuza Asiyaeva and Saidnosir Faizullaev; the leading specialist of the Ministry of Labour and Social Protection, Savlatsho Khorkashev; specialists in education Farogatkhon Isoeva, Sijouddin Sharipov and Azamjon Azimov; entrepreneurs Shahobiddin Mahmadshoev and Hakimali Mahmudov; and the Director of Research Centre, "Socservice", Jamshed Quddusov.

During surveys in the urban and rural areas, local authorities made themselves available for interview; individuals and institutions facilitated the work, answered questions and participated in focus groups to discuss preliminary findings.

All ETF team members made important contributions: Franca Crestani, Anastasia Fetsi, Jens Johansen, Manuela Prina, and Manfred Wallenborn have contributed their expertise on lifelong learning and human capital, labour market and mobility, equity-oriented analyses and survey methodologies, and in ensuring that the studies remained centred on the context and institutions of the two countries. Doriana Monteleone dramatically improved the quality of survey and data processing tools. Cristiana Burzio and Nadezda Solodjankina deserve special mention for the professional assistance they provided at all stages of this challenging project. I coordinated the entire project on the focus on equity for the HCD reviews was my choice.

The feedback of European Commission colleagues, experts and peer organisations has provided us with encouragement and the motivation to expand the boundaries of consolidated knowledge. Comments on methodology and suggestions for improvement have been gratefully received from within and beyond the ETF, through reviews, exchanges and discussions, both formal and informal.

Siria Taurelli HCD Reviews Team Leader, December 2010

EXECUTIVE SUMMARY

Despite the adverse circumstances of the transition period, the Republic of Tajikistan (hereinafter Tajikistan) was able to retain a high level of literacy and coverage of education. However, the following negative tendencies in the development of human capital took place after 1991: young people have lower levels of education than their parents; the quality of education has decreased significantly and there is higher inequity in access to education between different social groups.

The labour force in Tajikistan has a low level of vocational/technical skills for several reasons. Over the transition period the GDP composition of Tajikistan shifted from one dominated by relatively intensive industrial production to one dominated by services, retail and low technology agricultural production, which requires a low skilled labour force. The changes in the structure of GDP led to a general reduction of demand for workers with technical skills. Therefore, by mid 1990, due to low demand, the vocational education and training (VET) of qualified workers decreased.

From 2000, high rates of GDP growth created new demands for workers with vocational and technical skills, which cannot be satisfied because of the limited number of specialists in the labour force. This has created a situation where, despite a high level of education of the workforce (in terms of formal education and literacy), it is difficult to cover the demand for workers with good technical skills.

This high level of education is one of the key factors that affect the level of earnings, particularly in lowering the probability of extreme poverty. Vocational education and training in particular serves as an important instrument in reducing the likelihood of falling into poverty. At the same time, VET is not an important factor in providing very high incomes or securing high-ranking employment positions.

There is growing inequity in access to education among specific groups of the population. Girls have particularly restricted access to vocational and higher education. Low levels of maternal education is another factor that impedes the provision of education to children. Children from poor families also have fewer opportunities to enrol in education. The inequity in access to vocational and higher education exists mostly because of increased formal and informal payments, which lower income families cannot afford.

The legislation in place is directed at eliminating inequity in education especially in terms of access. However, the inequity in education still exists notably in rural areas due to shortages of electricity and heating, child labour, shortage of qualified teachers, very weak resources, low educational status of parents, remoteness and inaccessibility of schools in some locations and poor infrastructure.

Labour migration has a mixed impact on the quality of human capital. The positive effects include higher incomes and higher expenditure on education for children in migrant families, stronger incentives for studying foreign languages, a wider outlook on education, and better access to electronic devices. The negative effects include lower parental control over children in migrant households and higher school absenteeism. The majority of labour migrants acquire new skills on-the-job abroad, however there is no mechanism for recognition. At the same time these new skills are valued by the domestic labour market when migrants return.

There is an unmet demand for adult training in Tajikistan. According to the results of this study, 66.2% of men and 57.6% of women interviewed would like to obtain additional training. Additional training would include the acquisition of higher or new qualifications, new vocational skills, computer literacy, foreign languages, and others. In response to this demand the government has started to pay more attention to adult training.

However, there are serious obstacles to continuing training and only a minority of enterprises organise training for their employees. Beside being insufficient in number, very often these programmes lack the desired level of quality. Private consultants or donor organisations are often preferred as professional instructors, whereas public education and training are poorly equipped and have limited funds.

The evidence gathered through the study suggests that equitable access, choice and quality of human capital development in Tajikistan would benefit from improved governance: efficient management of the education and training system, coordination between relevant ministries and other state institutions, partnership with the private sector, and cooperation between schools, families and enterprises at local level.

INTRODUCTION

This country report aims to outline the current state of human capital development in Tajikistan, the differences in acquisition of HC in rural and urban areas and inequity factors affecting returns on education.

The report describes HC in Tajikistan and evaluates the current state of HC in the context of the country's socio-economic situation over the past 20 years. The report concentrates on the formation and development of HC through formal education and non-formal and informal learning. It also explores the role of various public, private and international actors that influence the HCD and education systems before going on to define possible future trends for HCD.

The report also covers the critical socio-economic processes that impact on the state and contribute to development of the labour market and HC in Tajikistan. These processes are:

- 1. Privatisation and the transition to a market economy
- 2. Extremely high levels of labour migration
- 3. The shifting economic structure of the post-independence period

Efforts will be made to define the current level of HC and the direction of HC development in the context of economy-wide processes in Tajikistan such as: labour migration; growing income inequity; poverty incidence; and the dwindling role and funding of state and public institutions. The differences in the level of HC in urban and rural areas will also be explored in order to provide the clearest possible picture.

The perspectives provided in this report are built on the basis of government reports, statistical data from living standards surveys (TLSS, 2007), national censuses (SCSRT, 2002), and published reports produced by international and private organisations.

Finally, the report draws conclusions that support the need for new policies on the funding and reform of the education and training system in Tajikistan in order to expand HC on a basis of equity and long-term sustainability. The report also provides methodological recommendations for future lines of study.

Methodology

The study was implemented in three stages. The first stage involved a desk review of various sources of information, including previous studies and media references. Statistical data was collected and estimates were calculated for major indicators. Particular use was made of official statistics, data from the Tajikistan Living Standards Measurement Survey 2007, the Labour Force Survey (SCSRT, 2005), the European Training Foundation (ETF) Labour Market Review in Tajikistan (Quddusov, 2009), UNDP Informal Economy Survey (Olimov, 2007) and Asian Development Bank (ADB) Labour Migration and Poverty Survey (Brown et al, 2008).

The second stage involved fieldwork including several surveys. The Survey on Initial Education (SIE) covered urban areas including Dushanbe city and seven rural villages in the Bohtar district of the Khatlon region. The survey targeted households and collected responses from youth and prime-age workers in the 15-24, 25-34, and 35-45 age ranges. A total of 131 face-to-face interviews were held on the basis of cluster and quota sampling. Interviews took place in the subjects' homes and covered individuals currently attending school and those who had already completed their education. The aim of the survey was to understand the use and usability of formal education, the expectations of the public and the demand for education and training.

The survey on Adult Training Provision (ATP) covered 24 enterprises and 20 individuals with responsibility for vocational training at the municipal and regional levels as well as employees of local employment services in Dushanbe and the Bohtar district. The survey sought to investigate the quality, access to and returns on informal and non-formal adult learning.

The third stage involved preparation of the final report. The SHARQ Research Centre conducted two focus group discussions (in rural and urban areas) to consider the main findings. These discussions with politicians, school teachers, parents of students, employers and employees provided deeper understanding of key parameters of the study and revealed the expectations of the general public on perspectives for HC development in Tajikistan.

In order to take into account possible different findings in urban and rural areas, it was decided to carry out interviews in the urban area of Dushanbe and in the rural areas of Bohtar and Hatlon.

TABLE 1	CLID	/EV A	/ED\	/IE\\/
IADICI	SUB	VF Y () 1	V F K \	/IFVV

Urban area	Rural area	Total
66	65	131
5	15	20
10	14	24
80	95	175
	66 5 10	66 65 5 15 10 14

1. HC IN THE REPUBLIC OF TAJIKISTAN

1.1 OVERVIEW OF HUMAN CAPITAL DEVELOPMENT

Over the past 15 years HCD in Tajikistan has been influenced by negative factors such as civil war, shocks from the transition to a market economy and the widespread impoverishment of the population. The education system suffered significant degradation during the civil war and a significant proportion of those with higher level education emigrated, adding a further negative blow to HC in Tajikistan. The government of Tajikistan has launched an education recovery and reform process for the post-conflict period.

Between 2000 and 2009, the government of Tajikistan prepared key legislation to regulate state policy on education. This legislation aimed to provide equity in access to education, lower gender bias, improve the overall quality and alleviate poverty by encouraging people to seek a better education. Over the past five years, the government has adopted 10 state education programmes, five national education plans and a number of projects to be implemented in the next 5-10 years (Ministry of Education, 2009:30).

These efforts have resulted in improved attitudes toward the acquisition of HC to such a point that investment in HC has become a strategic goal of the government of Tajikistan. Nevertheless, the education system still faces a number of complex challenges including the issue of equity in access to education.

TABLE 2. MAIN DEMOGRAPHIC INDICATORS IN TAJIKISTAN						
7.28 (2008)						
2.0 (2006-2008)						
99.6 (2007)						
26.4 (2007)						
21.5 (2004)						

The fall in the average age of the total population of Tajikistan and the growing share of younger age groups creates a heavy demographic burden on the public education system. This burden further weakens a system already negatively impacted by the civil conflict. As a result, the younger generation has lower levels of educational achievement than their elders and the percentage of younger individuals with complete secondary and professional education is significantly lower than the share of senior individuals with similar levels of education.

Moreover, the emigration of a significant proportion of the best educated people has also negatively affected the level of HC in Tajikistan. Regardless of this, the country was able to retain a relatively high range of education activities during the civil war.

TABLE 4 presents the education levels of individuals aged 15 and above by location, region, gender, age and level of consumption. Although the number of people with no education is quite small in general (0.7%), there is an increasing trend in the number of those with no education across the different age groups. The share of people without any education has increased over time: it is 0.2% for people now aged 35-44 and 0.8% for people aged 15-24. The differences in education levels by location show that while there are more people with technical and higher education in cities, differences in the number of people without education and with only primary education are quite small between urban and rural areas. The comparison of education levels by gender shows the amount of women without education is slightly higher than that of men without education (0.9% versus 0.5%), while the number of women with only primary or basic education exceeds the figure for men with equivalent education by a sizeable margin. The differences in education levels across five consumption quintiles are small for all levels of education except for secondary special and higher education.

TABLE 3. DEMOGRAPHIC INDICATORS BY LEVEL OF SCHOOLING (%)

	No education	Complete primary	Complete basic	Complete secondary	Professional or technical	University
Share of population aged above 15 in 1989	0.0	0.0	25.2	52.1	13.1	10.6
Men only	0.0	0.0	20.1	50.9	13.6	10.3
Women only	0.0	0.0	22.1	53.6	8.5	6.6
Share of population aged above 15 in 2000	0.0	5.9	19.1	57.5	6.6	8.9
Men only	0.0	5.0	17.0	59.0	8.0	11.0
Women only	0.0	7.0	22.0	60.0	6.0	5.0
Share of population aged above 15 in 2007	0.7	8.7	22.1	48,1	11,0	8,8
Men only	0.5	7.1	17.7	45.9	15.7	13.2
Women only	0.9	10.1	26.1	51.4	6.7	4.8

Source: TLSS 2007

TABLE 4. EDUCATION LEVEL OF PEOPLE AGED 15 AND ABOVE (%)

		Education level						
Descri	ption	None	Primary	Basic	Secondary general	Secondary special/ technical	Higher	
Location	Urban	0.5	7.4	17.4	43.6	14.9	16.2	
type	Rural	0.8	9.1	23.7	50.6	9.6	6.1	
Region	Dushanbe	0.3	7.1	17.4	36.2	14.9	24.	
	Sugd	0.5	6.8	19.8	55.7	8.9	8.3	
	Khatlon	0.8	9.5	22.9	49.5	11.2	6.2	
	DRD	1.1	10.8	27.0	43.3	11.1	6.7	
	MBAR	0.3	7.5	14.8	50.0	15.7	11.7	
Gender	Male	0.5	7.1	17.6	45.9	15.7	13.2	
	Female	0.9	10.1	26.1	51.4	6.7	4.8	
Age groups	15-24	0.8	14.4	33.0	46.3	3.2	2.3	
	25-34	0.4	2.0	16.1	58.7	11.1	11.	
	35-44	0.2	1.5	9.9	57.8	18.0	12.	
	45-54	0.6	2.4	14.5	49.9	19.6	13.	
	55-64	1.1	9.4	22.0	32.0	18.6	16.8	
	65+	3.0	31.8	28.0	18.2	10.2	8.8	
Quintiles of	Poorest	0.7	9.0	25.3	51.6	9.3	4.	
consumption	2	0.6	10.4	21.8	50.9	9.9	6.3	
	3	0.9	8.3	23.0	51.0	9.4	7.	
	4	0.8	8.7	22.4	46.9	11.6	9.8	
	Richest	0.7	7.2	18.5	44.2	14.2	15.3	
TOTAL		0.7	8. 7	22.1	48.7	11.0	8.8	

Source: TLSS 2007

TABLE 5 presents the ethnic and welfare characteristics of the population by location and by region. The data shows the population in Tajikistan is relatively ethnically homogeneous across the various regions and that although more than half of population is poor; there is relatively little difference in poverty incidence between urban and rural areas. There are some guite significant differences in poverty incidence from one region to another, with the Sugd region having the highest share of both extremely poor and relatively poor people.

		Total po	pulation	Location	Location type			Region			
			N	Urban	Rural	Dushanbe	Sugd	Khatlon	DRD	MBAR	
Ethni-city	Tajik	75.9	5 359 779	84.5	72.8	87.9	65.9	76.3	81.1	92.5	
	Uzbek	22.7	1 602 848	11.9	26.5	6.9	32.7	23.4	18.0	0.1	
	Russian	0.5	38 174	1.8	0.1	3.2	0.5	0.2	0.2	0.0	
	Other	0.9	62 998	1.8	0.6	2.0	0.9	0.2	0.7	7.4	
Poverty status	Poor	53.5	3 779 399	49.4	55.0	43.3	68.8	47.3	48.8	43.4	
	Non-poor	46.5	3 284 401	50.6	45.0	56.7	31.2	52.7	51.2	56.6	
Quin-tiles of	Poorest	20.0	1 411 801	21.5	19.4	19.3	34.8	10.8	16.4	12.0	
consumption	2	20.0	14 11 730	18.2	20.6	13.9	23.4	19.1	19.5	19.3	
	3	20.1	1 416 466	13.8	22.3	14.7	14.7	26.9	18.5	19.0	
	4	20.0	1 410 962	18.9	20.3	21.9	12.3	23.6	22.6	26.8	
	Richest	20.0	1 412 840	27.5	17.3	30.2	14.8	19.5	23.0	22.8	

Key findings:

Despite the many adverse circumstances of the transition period, Tajikistan was able to retain a high level of literacy and wide range of education. However, there were negative tendencies in the development of HC after 1991 and young people now have lower educational attainment than their parents, the quality of education has decreased significantly and there is greater inequity in access to education for various social groups.

People of working age increasingly have secondary general education diplomas, whereas enrolment and completion of vocational or technical education is in decline. Therefore the level of skills and knowledge acquired does not always correlate with the number of years of instruction; one implication is that disaggregate education statistics are needed to obtain an understanding of the actual situation in human capital.

2. HC FORMATION: ACCESS TO EDUCATION AND TRAINING OF YOUTH

2.1 ACCESS, RANGE AND COVERAGE OF EDUCATION

In the Soviet era there were high levels of equity in access to education and the coverage of the education system was virtually universal, but equity in access to education has fallen significantly since 1991. **TABLE 6** shows how the coverage of education shrank following the civil war and the related emigration of a large share of the urban population of Tajikistan. However, since 2000, there have been obvious operational improvements in the education system and increased equity in access to education. According to the SIE, most respondents believe the educational system has improved over the past five years, although it has not yet reached a satisfactory level.

In 2007, 99.5% of boys and 98.6 % of girls aged 8-10 years were in school along with 98.4% of boys and 95.2% of girls aged 11-15, but these relatively high numbers mask reduced school attendance in certain pockets of Tajikistan, particularly in the suburbs of Dushanbe, the Direct Rule Districts (DRD) and the Khatlon region.

Weak System of Pre-school Education

Enrolment in pre-school institutions is voluntary and is available to only a limited number of children. SIE data shows only 34.6% of respondents received pre-school education and most of these only attended preschool for 2-3 years. TLSS 2007 shows the coverage of pre-school education fell considerably from 1991, with only 18% of urban children and less than 3% of rural children attending pre-school.

	1992	1994	1996	1998	2000	2002	2004	2006	2008
Number of schools	3 229	3 377	3 460	3 524	3 591	3 695	3 745	3 804	3 810
Number of enrolled students (in thousands)	1 325.4	1 240.5	1 322.8	1 388.9	1 479.3	1 579.5	1 660.0	1 682.2	1 692.1
Number of school leavers with lower secondary education (in thousands)	110.9	102.2	99.1	102.1	117.8	105.8	144.0	149.8	147.9
Number of graduates with upper secondary education (in thousands)	89.1	67.4	57.9	50.6	51.7	65.2	63.3	79.6	76.3
Number of instructors (in thousands)	99.1	100.0	92.8	91.3	96.8	100.2	101.5	98.9	99.4

Access to pre-schools is limited by:

- a) a lack of preschool establishments: 83.5% those who did not attend pre-school claimed this was due to the lack of provision
- b) gender stereotypes and gender ideology: some parents do not send their children to pre-schools in the belief that mothers should be responsible for raising their own children

- c) low quality of pre-schools and inadequate curricula: parents do not send their children to pre-schools in the belief that pre-schools do not prepare children adequately for school
- d) the high cost of attendance of pre-schools: parents cannot afford to pay the fees.

Deferred enrolment and attendance in school

Comparative analysis of the age of first graders enrolled in primary schools and the coefficient of primary school attendance indicates that some children defer enrolment. A Multi-cluster Survey 2005 showed only 65% of all children eligible to attend the first grade of primary school at 7 years of age were actually enrolled. In a gender breakdown; only 66% of all girls of age 7 and 63% of boys of age 7 attended the first grade of school(Multi-cluster Survey, 2005: 75).

There are significant variations in rates of attendance amongst eligible children across regions and between urban and rural areas. For example, in the Dushanbe and Khatlon regions, school attendance by 7-year-olds is 84-85%, while the DRD it is only 42%. There is less overall variation between rural and urban areas with school attendance by 7-year-olds in urban areas at 67% and 64% in rural areas. Levels of maternal education and the socio-economic background of children are also important determining factors: 88% of 7-year-olds enrolled in the first grade had mothers with at least secondary education; and 73% of 7-year-olds from wealthier households attend school as opposed to only 64% of 7-year-olds from the poorest households. (Multi-cluster Survey, 2005: 75-76).

School absenteeism

Even when children are enrolled in primary school they do not necessarily always attend and absenteeism has become an increasing challenge for secondary schools. Levels of school attendance have been falling since 2000 when 90% of enrolled students reported regular attendance in class. This figure had dropped to 88% by 2003 and had settled at just over 80% by 2007.

State authorities claim the real attendance rates may be significantly lower than reported numbers (Ministry of Education, 2009) as some secondary schools are forced to close for short periods during the school year and there is also the issue of serial non-attendees.

The temporary closures are generally either due to: electricity shortages and problems with heating in the winter periods (especially in the Sugd region); or children having to work alongside their parents in agriculture during the harvest period (mainly in the Khatlon region). In the 2006-2007 academic school year, 20% of all schools in Tajikistan were closed for several weeks during term time. This was most common in the Sugd region, where 40% of schools experienced temporary closures, against 18% in the DRD, 10% in Khatlon and 2% in Dushanbe.

Meanwhile, intentional absenteeism poses a less significant but still important threat to education. The main reasons cited for intentional absenteeism are health issues (49% of absences), bad weather (18%) or family agricultural activities. The latter reason is particularly relevant to the Khatlon region, where 27% of students missed classes due to agricultural activities, while in the Sugd area this factor accounted for 17% of student absences.

2.2 DIFFERENCES IN ENROLMENT BY GENDER, AGE AND **SOCIO-ECONOMIC GROUPS**

According to the multi-cluster survey, 2005, almost every fifth child of secondary school age is not enrolled in secondary school - these children have either dropped out of school or are still enrolled in primary education. In addition, the survey shows that 15% of high school students simply do not attend classes. Data from TLSS 2007 show a growing disparity in enrolment across different regions and on the basis of socio-economic group, age and sex.

Geographical region is another significant factor determining secondary school attendance. Eligible children in mountainous Badakhshan Autonomous Region (MBAR) (93% of all eligible students) and the capital, Dushanbe (84%), attend secondary school and urban children on the whole are more likely to attend school than children in rural areas.

Maternal level of education and economic background have a significant impact on school attendance rates at secondary level and the rate of school enrolment drops off sharply once the basic level of education has been completed. Most of the students dropping out at this level are girls and the highest levels of school dropout rates overall are amongst children from low-income families and residents of DRD.

Gender

The most significant disparities in school enrolment are found in gender categories: while 95% of boys aged 8-18 years are enrolled in schools, only 87% of girls in the same age category are enrolled (TLSS 2007). Gender inequity in school enrolment is not as evident in primary school, where the sex ratio of students is close to 1.00. However, this falls to 0.83 for students in high school, implying that there are only 8 girls for every 10 boys in high school.

TABLE 7 shows that boys are more likely to complete secondary education than girls, as girls are likely to drop out of school when primary education ends after the 4th grade. Female dropout rates at this stage are highest in Khatlon and DRD where only 70.5% of female students continue to study. In the Mountainous Badakhshan Autonomous Region (MBAR) and Sogd there is less pronounced gender inequality after the 4th grade. Levels are also lower among children from wealthier families and in urban areas, and there is less inequity among ethnic Uzbeks than ethnic Tajiks.

The level of maternal education also has a noticeable impact on gender inequity in attendance rates. In families where mothers have only primary education, 45.1% of girls and 79.4% of boys continue to attend school after the 4th grade, whereas in families where mothers have university education, 93.3% of girls and 96.3% of boys attend high school.

The major cause of gender inequity is the tradition that girls should contribute to domestic labour, especially in caring for younger siblings. Studies of child labour in Tajikistan show that girls spend much more time on housework than boys. Girls aged 13-15 spend the most time on housework as they have sufficient capacity to undertake complex forms of housework such as cooking, cleaning, caring for younger children, horticulture, sewing and mending. Several programmes have demonstrated that the provision of free school meals that can also be taken home stimulates the return of girls to school. Studies found 66% of girls were allowed to continue their education at high school after 4th grade when they were provided with a free school lunch.

Age and socio-economic groups

Enrolment rates are also age dependent, with 94% of 15-year-olds, 66% of 17-year-olds and 37% of 18-year-olds enrolled as students. Then there is a sharp decline in enrolment corresponding to completion of general secondary education. There has been an increasingly marked disparity in access to education between rich and poor students with an increased enrolment ratio between the highest and the lowest quintiles of consumption from 1.05 in 1999 to 1.07 in 2007. The ratio of enrolment in secondary schools increased from 1.09 in 1999 to 1.24 in 2007.

The drop-out of children from poor families is often viewed as a consequence of the high fees associated with schooling and these rates are consequently higher in fee-paying schools.

TABLE 7. GENDER PARITY IN PRIMARY AND SECONDARY SCHOOLS IN TAJIKISTAN (2005)

	CA for primary school (girls only)	CA for primary school (boys only)	Gender parity index for CA for primary school	CA for secondary school (girls only)	CA for primary school (boys only)	Gender parity index for CA for secondary school
Dushanbe	94.1	95.9	0.98	74.9	93.1	0.80
Khatlon region	92.9	95.1	0.98	70.5	91.5	0.77
Sogd region	84.9	86.5	0.98	81.5	86.3	0.94
DRD	82.3	80.4	1.02	69.4	87.6	0.79
MBAR	91.0	93.9	0.97	92.3	94.1	0.98
Urban areas	90.6	87.9	1.03	77.9	90.7	0.86
Rural area	87.3	89.5	0.98	73.1	88.7	0.82
No maternal education	52.0	81.7	0.64	52.2	74.3	0.70
Primary maternal education	81.6	79.2	1.03	45.1	79.4	0.57
Lower secondary maternal education	85.9	88.4	0.97	65.5	87.2	2. 0.75
Upper secondary maternal education	88.7	88.9	1.00	75.8	89.1	0.85
Vocational maternal education	88.6	91.2	0.97	74.3	92.5	0.80
University maternal education	96.5	95.6	1.01	93.3	96.3	0.97
Lowest consumption quintile	85.8	90.2	0.95	69.7	84.6	0.82
Second consumption quintile	87.3	89.1	0.98	66.9	90.2	2. 0.74
Average consumption quintile	87.8	87.3	1.01	74.8	90.1	0.83
Fourth consumption quintile	87.3	87.8	0.99	77.4	87.7	0.88
Highest consumption quintile	93.3	91.0	1.03	84.8	94.1	0.90

Source: SCSRT (2007:173). CA = Coefficient of Attendance

Region	Total	Females	Males
Dushanbe	84.5	74.9	93.1
Sogd	84.0	81.5	86.3
Khatlon	82.0	70.5	91.5
DRD	78.9	69.4	87.6
MBAR	93.2	92.3	94.1
Type of residence			
Urban	84.8	77.9	90.7
Rural	81.4	73.1	88.7
Age			
12-year-olds	95.6	92.1	98.4
13-year-olds	93.4	89.3	97.0
14- year-olds	91.6	87.0	96.3
15-year-olds	84.1	72.8	93.3
16-year-olds	70.1	53.9	84.0
17-year-olds	61.6	45.4	76.7
Quintiles of consumption			
Lowest quintile of consumption (poorest)	79.6	70.2	87.6
Second quintile of consumption (poor)	78.8	67.8	88.8
Third quintile of consumption (middle)	81.5	73.7	88.2
Fourth quintile of consumption (wealthy)	83.4	78.2	88.1
Highest quintile of consumption (wealthiest)	89.2	83.6	94.1

2.3 ASSESSMENT OF EQUITY AND INEQUITY IN EDUCATION

According to the SIE, most respondents believe there is a mechanism to guarantee equal access to education in Tajikistan. Two thirds of respondents claim education is equally accessible to everyone and one third claims there is inequity in access to education.

	Urban (N=65)	Rural (N=65)
Fully agree	23.1	24.6
Partly agree	43.1	38.
Partly disagree	27.7	26.:
Completely disagree	6.2	10.8
Total	100.0	100.0

Data from SIE identify three distinct groups with the lowest access to education: rural residents, girls and women and the poor.

Rural residents

The SIE shows disparity in access to education between rural and urban areas, implying that a growing number of people in Tajikistan have reduced access to education. The SIE shows that rural residents are 2 times more likely to abandon schooling due to the high cost of attending school and are almost 3 times more likely to abandon schooling due to the need to join labour force.

The lower quality of instruction provided in rural areas creates an indirect impediment to access higher grades of education, as graduates of rural schools have little real opportunity to continue their education in universities. According to the SIE, 40% of urban respondents and 78.5% of rural respondents strongly agree with the statement that rural residents have low chances of continuing education and obtaining professional qualifications, while 36.9% of urban respondents and 20% of rural respondents partly agree with this claim.

These findings are supported by public opinion on the quality of schooling, with rural residents less satisfied than urban residents. Only 43.1% of urban respondents and 26.2% of rural respondents think highly of the quality of secondary education, while 4.6% of urban respondents and 30.8% of rural respondents have very low opinions of the quality of secondary education.

Poor individuals

According to the SIE, one third of high school student respondents (33.8%) are not planning to continue their education because university or college education is too expensive. The same share of high school students believe they are sufficiently well educated already. According to poll results, 66.7% of respondents think that educational opportunities are limited for poor people.

	Urban (N= 32)	Rural (N= 43)
No need for further schooling	59.4	9.
Too expensive to attend school	28.0	58.
Need to join labour market	12.6	32.
Total	100.0	100.

TABLE 11. DISTRIBUTION OF RESPONSES TO THE STATEMENT THAT SECONDARY EDUCATION IS
HIGH QUALITY (%)

	Urban (N=65)	Rural (N=65)
Fully agree	24.6	1.5
Partly agree	43.1	26.2
Partly disagree	27.7	41.5
Completely disagree	4.6	30.8
Total	100.0	100.0
Source: SIE		

Females

The dominant gender ideology in Tajikistan limits female education and poverty exacerbates the situation as low income families prefer to invest in the education of boys over that of girls. Families believe that education may help boys to find employment in Tajikistan or abroad and that they will help support the older members of family in the future. They do not see such benefits in the education of girls, as daughters traditionally contribute to their husband's household after marriage at a relatively young age. As a result, parents prefer not to invest in the education of daughters who will be married off as soon as possible. This practice is particularly prevalent in rural areas, where 58.5% of urban residents and 67.7% of rural residents believe girls have reduced access to education.

The low educational attainment of girls and women leads to overall lower levels of education in the younger generation, as poorly educated mothers are less likely to encourage their children into education and training. A child's success at school depends far more on the input of mothers than fathers, and the worst impact of low maternal education is seen in migrant households where the mothers have sole responsibility for raising the children. Children are obviously more likely to succeed at school in migrant households run by higher educated mothers.

Migrant parents

In addition to gender, area of residence and income, there are other factors limiting school access and completion:

migration of parents and children's disability.

Labour migration of fathers affect the school performance of children who generally have lower level of academic success and miss classes more frequently in migrant than non-migrant households. These children also tend to join the labour force earlier to replace the shortfall from absent fathers. Children often drop out of school when their fathers fail to send remittances, thereby saving money on the cost of schooling and providing extra support for the household either by joining the labour force or by working at home.

Children with disabilities

This group also experiences limited access to schooling. Most respondents think children with disabilities should not attend public secondary schools. This attitude is particularly prevalent among rural residents where 78.5% of respondents believe that such children should not attend mainstream schools.

2.4 CHANGING PREFERENCES IN EDUCATION: HIGHER **EDUCATION VERSUS VET**

Demand for vocational education has dropped significantly in the course of post-Soviet transition, while the demand for higher education has grown. Enrolment in vocational schools fell from 40,700 students in 1992 to 34,000 students in 2008, although the steep drop in enrolment in 1992-98 has been followed by a gradual increase more recently. However, recovery in enrolment in vocational schools has been much slower than that of secondary schools, and this has not yet recovered pre-1992 levels.

	1992	1994	1996	1998	2000	2002	2004	2006	2008
Number of institutions	13	21	24	25	29	31	35	36	33
Number of enrolled students (in thousands)	69.3	69.0	74.0	76.7	79.2	84.3	107.6	132.4	154.2
Number of enrolled students per 10,000 people	124	122	126	126	130	135	165	191	214
Number of graduates (in thousands)	10.0	13.2	9.7	10.1	13.1	12.0	13.4	15.1	19.3
Number of graduates per 10,000 people	18	23	17	17	19	19	20	22	27

Meanwhile, enrolment at university has seen the strongest change with the number of enrolled students more than doubled since 1992 and the number of institutions almost trebled. In 2002-2006 the coefficient of coverage by higher education increased from 14% to 18%, and the number of university graduates per 10,000 exceeded 1992 levels by 72% in 2008.

2.5 ATTRACTIVENESS OF FIELDS OF STUDY

The SIE shows that the most important factor in determining a future profession is the chance of finding a job in Tajikistan or abroad after completing education. More importantly, 43.2% of male respondents and 44.4% of female respondents stated that they chose their field of study because of the prospects of emigrating. This line of thinking was more prevalent among rural residents than urban groups with 60% of rural residents and 32.6% of urban residents choosing professions that provide the best employment opportunities on the foreign labour markets.

There are other differences in preferences for the field of study between urban and rural residents (the question allowed multiple responses).

While urban residents value the quality of education, qualification level of teachers and usefulness of courses, rural residents primarily value those educational characteristics that offer the best prospects for employment.

TABLE 13. RESPONSES TO THE STATEMENT THAT THE FIELD OF STUDY WAS CHOSEN FOR **MIGRATION (%)**

	Gend	der	Plac	е	Age			
	Male (N= 37)	Female (N=36)	Urban (N= 43)	Rural (N=30)	15-24 (N=18)	25-34 (N=26)	35-45 (N= 29)	
Fully agree	24.3	22.2	7.0	46.7	33.3	19.2	20.7	
Partly agree	18.9	22.2	25.6	13.3	27.8	23.1	13.8	
Partly disagree	37.8	33.3	46.5	20.0	22.2	30.8	48.3	
Completely disagree	18.9	22.2	20.9	20.0	16.7	26.9	17.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: SIE

The main causes of dissatisfaction with education include the mismatch between the acquired knowledge and the skills demanded on the labour market, unmet expectations and the poor level of technical equipment in schools.

2.6 AFFORDABILITY OF EDUCATION

Higher education is the one area that holds clear barriers to education. As higher education in Tajikistan is available primarily to men from the wealthier sectors of society, gender inequity is rife. Poverty and tuition fees also serve as barriers to higher education. While regions with free education have a better coefficient for higher education coverage, the practice of families making private voluntary contributions toward the education of their children forms a formidable barrier for poorer families.

Students from rich families are more likely to be offered free places at college than students from poor families. About a half of all college students can obtain government funding and there is hot competition among applicants for these subsidised places. As the admission process is often corrupt, many children from poorer families simply cannot afford to obtain government funding. According to TLSS 2007, 72% of college and university students come from families in the top two quintiles and the situation is very similar in many vocational schools.

Key findings:

Over the past five years, the attitude toward acquisition of HC has changed. The idea of development of HC has become more evident. Equity in access to education has been announced as one of the key directions for development in Tajikistan (Ministry of Education, 2009:14). However, despite efforts in this direction, rising disparity on the basis of gender, income group, area of residence and migration status forms a barrier to greater equity in access to education.

Higher rates of school absenteeism, late enrolment in school and the falling interest in vocational and higher education are problematic aspects of education, which affect some groups more than others. Girls, the poor and rural residents are actually less likely to attend school. School absenteeism lowers the academic achievement of students and lowers their desire to continue in education.

The view of gender roles in Tajik society and the traditional cooption of girls into household chores are the main reasons behind gender inequity in access to education. Several programmes have shown that the provision of free school meals can stimulate the return of girls to schools.

The dropout rate of children from poor families is often viewed as a consequence of the high fees associated with schooling. Moreover, since children from poor families start work earlier, they are unable to attend school and eventually drop out.

The most significant reasons for low participation in education and training and differences in school attendance rates between urban and rural areas are the following: participation in household labour and in agriculture; lower quality of education in rural areas: lack of heating in schools; power shortages during the school year; high tuition costs; and the long distances to travel from home to school.

There is also growing inequity in access to education by region. The lowest level of inequity is found in the MBAR and Sogd regions and the highest in the DRD. The highest level of gender inequity is found in higher education: there are three times more male than female university students. Poverty also serves as a barrier to higher education.

Unfortunately, vocational education does not compensate for the lack of access to higher education. The demand for vocational education has in fact dropped significantly, while the demand for higher education has grown. This study has found that students are mainly choosing their education on the basis of their chances of finding a job after graduation. Therefore, students choose vocational schools only when they believe this will lead to a good job in the future.

3. HOW THE EDUCATION SYSTEM IS RESPONDING TO THE CHALLENGE

3.1 EDUCATIONAL INFRASTRUCTURE

The government of Tajikistan is taking various steps to rebuild the education system including improvements to infrastructure. School funding and the curricula are currently being reformed and great attention has been paid to the reconstruction and renovation of school facilities under the State Programme on the Construction, Renovation and Reconstruction of Schools in Private Residences, Administrative Buildings and Public Residences 2008-2015 adopted by government decree #436 of 27 August 2008.

General improvements were made to the school infrastructure between 2002 and 2007. More than 50% of local communities stated that the situation with school equipment (buildings, tables, chairs, blackboards, textbooks, heating and lighting) had improved over the past five years (ATP data). However, 17% of respondents believed the situation had worsened, while the remainder felt there was no change. The biggest improvements have occurred in cities and regions with higher standards of living, while the situation has worsened in rural and poor areas. Improvements were largely seen in the provision of school buildings, while school equipment worsened slightly and lighting and heating at schools became significantly worse. According to the SIE, many students in the Bokhtar region must stand during classes because of the lack of furniture. Meanwhile, ATP data states that 1 845 schools (56% of all schools in Tajikistan) are not heated during the winter period. All of these schools are located in rural areas.

School transport is judged to be satisfactory, but 5% of girls abandoned their education because of the long distances involved in travelling to school. Overall, 98% of students live within 5 km of their school, 95% spend no more than 15 minutes on transport and only 1% spends more than 45 minutes on transport. A total of 4% of secondary school students (5% girls and 1% boys) do not attend school because of the long distances they would have to travel (data from TLSS).

As was mentioned above, low quality education results in a contraction of educational opportunities and inequity in access to education. This is particularly evident in rural areas where there is a severe shortage of teachers. According to the ATP and data from the Ministry of Education, there is a shortage of gualified teachers nationally, especially in rural areas (44%) and in the DRD (69%). The main reason for the shortfall is due to the geographical location of many schools rather than low salaries and the biggest problems in recruiting adequate staff are experienced in the more mountainous, remote and inaccessible places.

The main problems identified in the educational sphere by the SIE were:

- poverty
- lack of stimuli for teachers and students
- outdated equipment at schools and inadequate infrastructure
- lack of heating and electricity in schools
- shortage of textbooks, inadequacy of textbooks and curricula
- low salaries of teachers and non-teaching staff
- low social status of teachers
- de facto lack of social benefits for teachers
- inefficient programmes for improved teaching skills and poor performance of graduates of the Institute of Advanced **Educational Training**
- excessive additional workload of teachers unrelated to school (organisation of activities such as municipal and parliamentary elections, etc.)
- didactic teaching approach
- corruption and the practice of taking money from students
- lack of cooperation between parents and schools
- insufficient funding of the educational sphere in general
- lack of efficient management skills (including financial management) among school principals and school accountants
- allocation of funds based on the number of students
- poor control exerted over schools and teachers by anti-corruption institutions
- obsolete curricula
- overall poor quality of school programmes (too many hours devoted to social sciences and humanities and little time spent on maths and sciences)
- age inappropriate content of some textbooks

There is a mix of mutually reinforcing problems, including infrastructure, management and teaching. In 2008-09, as many as 61% of the 96,127 teachers working in Tajikistan had completed university education; and 26.5% had incomplete university education or secondary professional or technical education. Most strikingly, in 2008, 10,809 teachers gave up teaching, mainly due to the low rates of pay (Ministry of Education, 2009:9).

3.2 PUBLIC INVESTMENT IN EDUCATION

The volume of state funding for education increased significantly from 1999 and an even greater increase has been seen over the past five years. In 2007, 3.4% of GDP was spent on education, down from 9.7% in 1991. However, this level has been growing steadily over the past decade.

Year	2004	2005	2006	2007	2008
Share of GDP spent on education	2.7	3.5	3.4	3.4	4.
Share of state budget spent on education	15.1	18.0	17.8	12.5	14.0

Public expenditure on education in 2008 (14.3%) was implemented as part of the National Development Strategy to 2015 (adopted by government decree #166 on 3 April 2007) and the Poverty Reduction Strategy for 2007-2009 (adopted by the government decree #167 on 3 April 2007). Per capita expenditure on education increased more than three-fold from USD 5 in 2002 to USD 18 in 2007. However, total expenditure on education is still relatively small, amounting to only 4.7% of GDP in 2008 (Ministry of Education, 2009:16).

3.3 EFFECTIVENESS OF EDUCATIONAL EXPENDITURE

The government recently reformed the public education budgetary system moving to the per capita allocation of funds for each school (government decree #505 of 3 October 2007) in order to lower the inequity inherent in the flat rate funding of schools. This approach has already lowered regional inequities, although it presents new challenges to school principals and accountants who are forced to take a more active role in managing their finances and in attracting additional resources from private institutions. There is a need for them to develop management, strategic planning and self-governance skills previously not required.

The best state schools (such as Isfara Gymnasium N° 1 run by Abduhafiz Azizov; the Tajik-Russian gymnasium "Hotam IPV" in Dushanbe) are able to raise additional income from private sources, donors and parents. This independence allows the management teams to develop their own financial plans and use resources more effectively.

3.4 PRIVATE EDUCATION SUPPLY

The state dominates education funding in Tajikistan, but private funding has been slowly gaining weight in recent years. The first privately funded education institutions (secondary schools, lyceums, gymnasia) opened in 1994, when a new law was passed to regulate licensed privately funded educational institutions. In 1999-2000 there were 8 private educational institutions with total of 1 012 students. In 2003-2004, the number of privately funded schools had reached 50 with a total of 14 126 students. At present there are 53 privately funded general education institutions including: 14 lyceums, 29 gymnasia, 7 secondary schools and 3 primary schools. All privately funded schools are supervised by the Ministry of Education of Tajikistan. There are also a number of unsupervised courses available, offering foreign languages, computer literacy and other such skills. These courses are valued more by urban than rural residents (85.9% to 24.6%), while 75.4% of rural residents think these courses are no use compared with 4.1% of urban residents.

3.5 PRIVATE EXPENDITURE ON EDUCATION BY PARENTS OF **STUDENTS**

Household spending on education almost doubled from 2.4% in 1999 to 4.3% in 2007 with urban citizens and wealthy households spending more on education than rural citizens and poorer households. In urban areas, the average monthly expenditure on education is 15 somoni (USD 4.4) or 5.2% of total expenditure. This is significantly higher than monthly expenditure on education in rural areas at 8 somoni (USD 2.3) or 3.9 % of total monthly expenditure. The share of expenditure on education is higher in urban families in almost all quintiles of consumption and affluent households spend more money on education than poorer ones (TLSS 2007). Poor households have lower expenditure on education because of their lower incomes and children in poor rural families express less interest in education, due to their perception of having limited opportunities for using their education in any career.

Parents are often asked to make additional payments toward the renovation of schools, purchases of school equipment, school activities and so on. Results from both the SIE and ATP show professional or technical institutions and universities also have extra charges on top of the formal payments. The amount raised by these additional payments has reached such a high volume that the National Strategy for Development of Education for 2009-2018 openly suggests public control and supervision of these funds (Ministry of Education, 2009:27).

Low-income families have fewer resources with which to pay and girls are often viewed as not worthy of the additional expense of education. In 2007, in an effort to increase access to education for children aged 7-15, the government of Tajikistan adopted decree #244 on the payment of monetary subsidies to low-income families with children enrolled in secondary schools. This scheme provides two payments a year from local budgets to the 15% of families with the lowest incomes for up to 3 children in secondary school per family. However, this approach has only gone part way toward resolving the problem of inequity in access to education.

Key findings:

There have been signs of improvement in the educational system since 2000. The percentage of GDP spent on education has increased to 3.4% and is showing signs of sustained increase. Between 2002 and 2007 improvements to buildings and equipment have become visible as the SIE and focus group discussions revealed.

Nonetheless problems such as lighting and heating remain severe, as well as a lack of furniture in some areas. Besides infrastructure problems, quality is affected by the shortage of teachers and their declining motivation due to salary levels and lowering social status.

School funding is being changed to a per student allocation system. This reform is directed at lowering inequity in the funding of schools as well as regional distribution. At the same time the reform brings about new challenges, notably for school principals and accountants who are expected to better manage finances and attract additional resources.

Schools in Tajikistan are funded from a variety of sources: government funds, donor financing and private payments. These sources are complemented by parental contributions (including expenditure on basic education) that now constitute a significant proportion of school funds. However, this move creates a heavy burden on low-income households and leads to income inequality. Gender inequity is also largely dependent on household income, as low-income parents would rather not pay for the education for their daughters.

Students from poor families are less likely to be able to pay for technical or professional and higher education than students from affluent families. As a result, children from low-income household and girls in general have a low rate of access to education and may need targeted financial support.

4. EMPLOYMENT AND QUALIFICATIONS

The collapse of the Soviet Union led to the breakup of inter-industry links, the closure of many enterprises and a sharp rise in unemployment. The de-industrialisation process led to a fall of employment in industrial production from 21 % in 1991 to 8 % in 2003 (SCSRT, 2003). Most of the new unemployed found employment in agriculture, the retail trade, services and household production or stopped looking for job completely. At the same time, the share of labour migrants in the workforce increased significantly. However, the unemployment rate has decreased over the past 10 years, although it still remains quite high (Quddusov, 2009).

The Labour Force Survey of 2004 put unemployment at 7.4 %, with a total of 196 000 people unemployed (SCSRT, 2005:63). The unemployment rate is particularly high among women and young people.

TABLE 15 provides a profile of the labour force in Tajikistan. According to the data, 43.8 % of the total population was economically active in 2007. Khatlon region had the highest participation rate at 47.1 % of the population, while Dushanbe city and MBAR had the lowest participation rates. The gender composition of the economically active population shows that while 58.1 % of all men were economically active, only 31.1 % of women participated in the paid workforce.

Analysis of educational attainment shows that only 0.35% of the economically active population have no education at all and only 2.97% have just primary education. Meanwhile, 15.1% of the employed have incomplete secondary education and 49.59% have completed secondary, while only 16.44% have technical or vocational education and 14.64% have higher education. More than 68% of those with technical or professional and higher education are economically active in comparison to 45% of those with secondary general education. Thus, acquisition of at least technical or professional level education increases the participation rate by 14%.

These numbers demonstrate that the general quality of the labour force is relatively high (given the small number of people with no education or with basic education only). Those in the labour force that have vocational education or above are a minority, although they seem to be in demand. Their participation rate is in fact significantly higher than for those with general secondary education. The distribution of the economically active population by quintiles of consumption does not reveal any strong differences in labour force participation rates.

The changes in composition of GDP from industrial production to trade and services over the past decade resulted in changes in the quality of labourers on the market. **TABLE 17** summarises the industrial composition of national GDP in 1995-2007 and shows the share of industries employing more skilled labourers has decreased, while that of industries employing less skilled labourers has increased. For instance, industrial manufacturing requiring skilled labour fell by more than 50%, while the figures for trade employing relatively less skilled labourers almost tripled. The construction and services sectors have grown most intensively and they are both sectors that employ relatively less skilled labourers.

TABLE 15. SHARE OF ECONOMICALLY ACTIVE PEOPLE AGED 15-64 (LABOUR FORCE) (%)

		Total	
	Description	Share of economically active population among people aged 15-64	Total population aged 15-64
Location type	Urban	40.8	1 185 286
	Rural	44.9	3 231 326
Region	Dushanbe	39.7	415 788
	Sugd	44.9	1 318 836
	Khatlon	47.1	1 549 156
	DRD	40.2	983 324
	MBAR	35.4	149 509
Gender	Male	58.1	2 080 221
	Female	31.1	2 336 391
Age groups	14	5.1	161 260
	15-24	27.0	1 639 570
	25-34	52.9	946 451
	35-44	63.9	748 125
	45-54	59.9	622 439
	55-64	44.7	298 767
Education level	None	26.5	25 576
	Primary	13.4	430 018
	Basic	31.3	933 398
	Secondary general	45.3	2 117 746
	Secondary special/technical	68.9	461 105
	Higher	77.0	367 899
Quintiles of	Poorest	41.2	818 441
consumption	2	43.7	844 684
	3	45.5	870 294
	4	44.8	912 698
	Richest	43.7	970 495
TOTAL		43.8	4 416 612

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Industrial manufacturing	34.0	25.71	21.99	20.10	21.68	33.15	33.47	33.10	30.37	23.64	22.72	21.3	15.4
Agricultural production	36.7	36.01	32.01	25.11	25.38	25.12	23.81	22.23	24.19	19.22	21.19	21.5	19.8
Construction	3.15	2.56	2.74	3.85	5.43	2.13	2.72	2.05	2.87	7.47	4.64	6.1	8.7
Trade	7.59	14.62	20.49	22.08	19.73	10.72	10.47	11.39	11.21	16.11	16.19	16.9	19.8
Transportation and communication	4.44	4.02	2.91	4.17	7.36	4.75	4.98	5.50	5.34	6.63	7.40	7.2	5.
Material and technical procurement (logistics)	0.29	0.36	0.19	0.53	0.35	0.13	0.24	0.30	0.21	0.38	0.34	0.2	0.:
Other types of Manufacturing	0.44	1.23	1.43	0.99	0.80	0.54	0.35	0.44	0.34	0.42	0.34	0.3	0.2
Services	8.74	7.91	8.62	15.58	11.99	15.07	14.97	15.13	14.79	15.10	15.64	15.3	19.0
Indirect taxes	4.58	7.59	9.61	7.59	7.29	8.38	8.98	9.86	10.68	11.02	11.53	11.4	11.9
Total GDP (in %)	100	100	100	100	100	100	100	100	100	100	100	100	100

The varying demand for labour in different sectors of GDP also has a great deal of influence on the acquisition of HC. Major changes in the composition of GDP over the past decade from industrial production to trade and services have resulted in shifts in demand for labourers of different skill levels. As the share of industries employing less skilled labour has increased, there has been a falling demand for HC in terms of the acquisition of professional or technical qualifications. The current structure of jobs available offers a greater number of positions for unskilled workers and less for the relatively more skilled workers (including individuals with vocational education).

High unemployment rates during the transition period have been an added disincentive to HC acquisition. TABLE 17 shows the dynamics of the unemployment rate over recent years. The unemployment rate dropped from 16% in 1999 to 11.4% in 2002, falling further to 7.4% after 2003. The stabilisation of unemployment since then should be seen as an incentive for increasing HC amongst those currently on the labour market.

TABLE 18 lists responses of senior managers relating to the level of workers' qualification. An average 32% of senior managers found there was a skills shortfall in terms of professional and technical proficiency among available workers. This situation is worst in production, construction, public utility and community services and other services, while the situation is not quite so critical in transportation, trade and catering and agriculture. The skills deficit is generally less of a concern in those industries that have experienced the highest growth rates since 1995 (such as trade and catering, other services and transportation), while the lack of skilled labour is more pronounced in those sectors with the biggest shrinkage in GDP. TABLE 18 confirms that the quality of the labour force in Tajikistan has fallen in terms of professional

TABLE 17. UNEMPLOYMENT RATE (% OF LABOUR FORCE)							
	1999	2000	2002	2003	2004		
Unemployment Rate	16.0	9.3	11.4	12.0	7.4		

qualification due to changes in the composition of GDP. The increased share of services and the relative fall of manufacturing and industrial production since 1998 have lowered the demand for skilled labour. The share of labourers with professional qualification has fallen accordingly, as is evidenced by dwindling employment rates in vocational schools. Consequently, those industries that need to employ relatively more skilled labourers have suffered most heavily from the overall reduced professional and technical proficiency of the labour force.

TABLE 19 presents responses from senior managers on the quality of the labour force distributed by region. The results show that senior managers in Khatlon and MBAR frequently have to deal with less skilled individuals in the labour force, whereas this is less of an issue for senior managers in Sugd and the DRD.

TABLE 18. OPINION OF SENIOR MANAGERS ON THE SKILLS AND QUALITY OF LABOUR FORCE BY **INDUSTRY (%)**

Branch of economy	Quality of labour force is not a problem	Quality of labour force is a small problem	Quality of labour force is a moderate problem	Quality of labour force is a serious problem
Agriculture	22.7	38.7	18.4	12.3
Industry	30.4	24.6	21.7	14.5
Construction	21.3	30.7	30.7	10.7
Trade and catering	25.6	45.5	18.2	3.3
Public utility and community services	26.7	23.3	23.3	23.3
Communication services	27.3	27.3	36.4	0.0
Transportation services	50.0	35.7	7.1	0.0
Other services	0.0	45.5	27.3	27.3
Housing services	50.0	0.0	50.0	0.0
Health care and social services	50.0	0.0	50.0	0.0
Total	25.1	35.7	21.5	10.4
Source: Olimov (2007:78)				

TABLE 19. OPINION OF SENIOR MANAGERS ON THE SKILLS AND QUALITY OF LABOUR FORCE BY **REGION (%)**

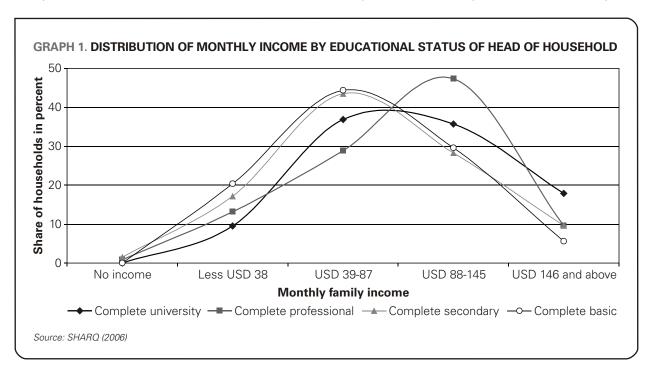
Region	Quality of labour force is not a problem	Quality of labour force is a small problem	Quality of labour force is a moderate problem	Quality of labour force is a serious problem
DRD (incl. Dushanbe)	29.0	38.6	17.4	6.8
Sugd	27.0	35.1	24.1	6.9
Khatlon	16.8	29.0	25.2	22.4
MBAR	0.0	60.0	20.0	20.0
Average across regions	25.1	35.7	21.5	10.4

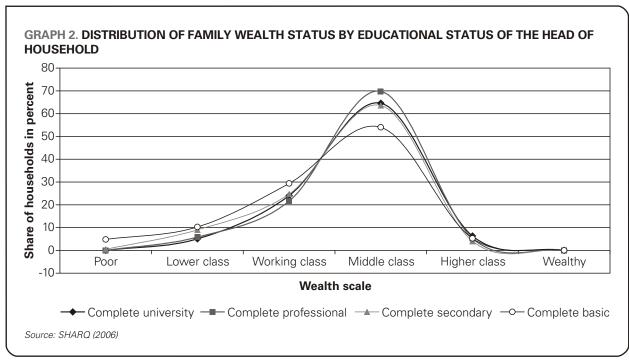
Source: Olimov (2007-78)

The relationship between monthly household income and level of education of the head of household indicates the rate on return to education. GRAPH 1 illustrates the distribution of monthly income by educational status of head of household, showing income distribution for households headed by individuals with complete basic or complete secondary education are practically identical. However, households in the professional education bracket exhibit a shift to the right, peaking at USD 88-145. Family monthly incomes for heads of household with complete professional education at USD 145 are quite common and drop rapidly above that rate while those with university education have more evenly distributed income levels.

These patterns lead to several conclusions. Firstly, vocational education can significantly increase monthly income but it will not push family income into the very high category. University education pushes family incomes up from the extremely low to average levels and may also move family incomes up to extremely high levels. The positive effect of university education on increased income appears to be more uniform than that of vocational education. Thus, vocational education can be viewed as a major instrument in reducing extreme poverty but is not the best means for expanding family income.

GRAPH 2 shows the distribution of family wealth status by the educational status of the head of household. There is clearly a similar distribution curve for the household wealth for complete basic, secondary, vocational and university





education. However, the distribution of household wealth status for household heads with terminal complete basic education is flatter and is skewed toward the lower class end of the wealth scale. The wealth distributions for terminal secondary, vocational and university education mostly coincide, but household heads with university education are slightly more heavily weighted in the middle and higher class categories.

The patterns shown by these two graphs support the earlier conclusion that while education and increased HC may lift households out of extreme poverty, they do not have a significant impact on the achievement of higher status.

Key findings:

In Tajikistan, interest in increasing HC has significantly decreased due to adjustments in the labour market during the transition period. The low return on education resulted in a weak demand for educational services and a drop in long-term accumulation of HC. The profile of the labour force has therefore changed significantly over the last 20 years from one dominated by more skilled workers (with vocational education) to one dominated by less skilled workers (with only secondary or basic education). The drop in the share of high skilled individuals in the labour force can be attributed to a variety of factors including changes in the industrial composition of GDP away from technologically intensive production. Current industries in Tajikistan suffer from a deficit of skilled labour despite widespread unemployment, and skills levels vary from region to region within the country.

Nevertheless, this study has demonstrated that vocational education can significantly increase monthly income from extremely low income levels even though it may not advance families into very high income areas. University education elevates family incomes from extremely low levels to average levels and may also move family income up to extremely high levels.

Thus, vocational education can be viewed as a major instrument in the reduction of extreme poverty levels rather than a means by which to achieve higher status. Vocational education also creates incentives for more active economic participation in Tajikistan: acquisition of vocational education is associated with an increase in participation in the labour force by 23%.

5. MIGRATION AND MIGRANTS

5.1 MIGRATION AND DEVELOPMENT OF HC

Significant changes have occurred in the level and scope of internal migration in Tajikistan since 1991. During the civil war, many rural people actively migrated to cities for their own safety, but employment and study have been the main motives for internal migration since 1997. However, internal migration in Tajikistan is largely insignificant and does not have a sizeable impact on HC. In the last five years about 10 000 to 12 000 individuals migrated from rural to urban areas and about 5 000 to 6 000 migrated the other way annually.

International migration has much stronger impact on the level of HC in Tajikistan. A large percentage of the labour force in Tajikistan has been employed abroad as temporary labour migrants since the trend began in 1994-1995. A comparative look at international figures demonstrates the scale of Tajik involvement in international labour migration. TLSS 1999 showed 1.5% of households had migrant workers and the figures grew steadily until 2004, when the increase accelerated, reaching 5% in TLSS 2007. Data from the Ministry of Labour give the total number of labour migrants as 224 000 in 2003, 254 000 in 2005, 727 000 in 2007 and 805 000 in 2008 (Bobovich, 2009)

A study funded by the Asian Development Bank (ADB) in 2007 stated that 37.3% of households had at least one migrant member. This report gave the number of temporary migrants from Tajikistan at about 700 000 people, more than 500 000 of whom were working in Russia (Brown et al, 2008). In autumn 2008 - spring 2009, the number of labour migrants shrank by 25% or around 120 000 people¹ as Tajikistan experienced a wave of return migration for the first time. These developments were largely due to the world financial crisis and the sharp decline in economic activity in the Russian Federation.

The ADB survey data presented in **TABLE 20** indicates that labour migrants from Tajikistan are mostly male (93% of all migrants), that young men represent the bulk of these, (66.7% of all migrants are between 16–34 years old) and that 76% come from rural areas. The level of education of labour migrants is higher than the average in Tajikistan; 22.3% of migrants have higher education and 76.2% have secondary education.

The survey data on migrant employment in the home country given in **TABLE 21** suggest that lack of jobs and low wages are main factors driving people to look for paid, or better paid employment abroad. More than 60% of migrants had no employment in their home country although only 15.6% were unemployed looking for jobs at home. Meanwhile, 10.8% of the surveyed population was engaged in unpaid work within their household, and there were three groups of a similar size: students (6.0%), self-employed (7.2%) and those employed in the private sector (8.4%). Civil servants formed the smallest group representing 3.6%.

The figures reflect the long-term migration status of much of the sampled population as 45.8% were inactive in Tajikistan i.e. not employed and not looking for a job, in the year of the survey (2006). Most seasonal workers in fact return home during the winter but do not seek work. This can be largely explained by the nature of the sectors of employment abroad, among which construction is an important one.

Labour migrants work predominantly in Russia. The cited survey showed that most of them were employed in the private sector, around a fifth were self-employed, while 9.3% worked in the public sector and 4.2% were entrepreneurs with hired employees. While the private sector provided the greatest source of employment abroad for all migrants, the breakdown by education level highlighted a slight difference in terms of stability. Those with higher education had more frequently obtained an employee job, in the private or public sector; those with secondary education had more likely than others become self-employed or entrepreneurs. Risk-taking attitudes, technical and vocational competences, longer duration of the migration experience are some factors that may explain these different outcomes.

Migrants' education level and income abroad are correlated. Thus there are strong incentives to acquire skills in Tajikistan, despite the weak signals from within the domestic labour market.

Data on the distribution of remittances give some indication of the returns on education for migrant workers although there are many other factors involved in the process aside from the ability to earn higher wages on the basis of higher educational status. Other influential factors range from the strength of family ties to the weakness of the financial system in Tajikistan. However, variation in the distribution of annual remittances on the basis of the educational status of remitting migrants may still offer some degree of insight into the returns on education associated with employment abroad.

	(N=1 658)
Capital	5.1
Other urban areas	18.9
Rural areas	76.0
Male	93.2
Female	6.8
15 years old or younger	0.4
16–24	26.5
25–34	40.2
35–44	24.5
45–54	7.8
55–64	0.5
65 years or older	0.1
No formal education	0.4

0.9

76.2 22.3

0.2

39.5 60.0

Source: Brown et al (2008)

Primary

Tertiary

Secondary

Post-graduate

Unmarried

Married

TABLE 21. LABOUR MARKET STATUS OF MIGRANTS IN TAJIKISTAN AND ABROAD (9	%)
TABLE 21. EADOON MAINET STATOS OF MIGHANTO IN TAMINISTAN AND ADNOAD (7	/U/

	In home country [Base: migrants who worked in the home country in 2006; N=83]	Abroad [Base: all migrants; N=1,698]
Self-employed	7.2	19.8
Entrepreneur with hired worker(s)	0.0	4.2
Employed in public sector	3.6	9.3
Employed in private sector	8.4	59.0
Unpaid family work	10.8	1.5
Unemployed (looking for work)	15.7	1.8
Unemployed (not looking for work)	45.8	1.4
Student	6.0	0.9
Retiree with pension	0.0	0.5
Others	2.4	1.5

TABLE 22 shows that migrants with vocational education remit higher sums of money (from USD 501 to above 2501) more frequently than labour migrants with any other level of education. The general pattern is for individuals with a higher level of education to remit higher sums of money more frequently. The distribution of educational level within the survey sample suggests that those with completed general or vocational secondary find employment more easily, hence are in greater demand.

The average amount of annual remittances sent by labour migrants with complete basic and secondary general education appear to be quite similar at around USD 501-1500, while those from individuals with incomplete basic education send less than USD 500 in the majority of the cases. It has to be noted that those with complete basic or less education, and with higher education are underrepresented in the survey sample, showing they may be less demanded in the international labour migration.

Remittances have a positive impact on poverty, lowering income inequity and alleviating poverty throughout Tajikistan but most particularly in rural areas. Without this income, average poverty incidence would increase by 150% to 74.5% of the population, and extreme poverty would climb from 32.2% to 54.5% across the country as a whole, and by 25% in rural areas (Brown et al, 2008).

Expenditure on education represents a small share of total household expenditure in most migrant units. Migrant households in the three poorer quintiles spend a little more on education than other households because these services are not well differentiated in terms of quality and cost in Tajikistan, with the cost of attending school and university being the same for households at all income levels. The overall effect on HC is controversial, considering the absenteeism that can be observed among the children of migrants' households.

Migration and skills

The relationship between migration and skills is characterised by a twofold trend. Although labour migration offers positive employment prospects, workers from Tajikistan are not necessarily interested in acquiring vocational education and training at home prior to departure. With the skills they posses, most of them find work in sectors such as construction and trade.

Many labour migrants however acquire higher skills that improve their productivity while working abroad. Because mechanisms for recognition are lacking, very few are given any formal certification of their added capacities so the acquisition of new skills abroad is not credited nor does it easily translate into higher wages.

In 2007, about 700 000 Tajik temporary migrants were working abroad, meaning about 15% of the economically active population of Tajikistan were labour migrants. More than half a million Tajik people were employed in Russia (Brown et al, 2008), with significant numbers also in Kazakhstan, the United Arab Emirates and other countries.

TABLE 22. DISTRIBUTION OF ANNUAL REMITTANCES BY EDUCATIONAL STATUS OF LABOUR
MIGRANTS (USD)

	less than 500		501-1 500		1 501-2 500		2 501 and more		Total sample	
	N	%	N	%	N	%	N	%	N	
No answer	7	100.0	0	0.0	0	0.0	0	0.0	7	
No education or incomplete basic	5	71.4	1	14.3	1	14.3	0	0.0	7	
Complete basic	5	33.3	8	53.3	2	13.3	0	0.0) 15	
Complete secondary	392	31.0	627	49.6	194	15.4	50	4.0	1263	
Complete professional/ technical (vocational school)	122	33.1	145	39.3	71	19.2	31	8.4	369	
Complete higher (college, university)	1	33.3	2	66.7	0	0.0	0	0.0) 3	

Source: Brown et al (2008)

According to the same study, 74.1% of migrants in Russia are employed in construction, 10.8% in wholesale and trade, 5.4% in agriculture, 4.8% in industrial manufacturing and 4.8% in high skilled services such as education and health care. The large majority of Tajik workers in Russia are therefore employed in industries requiring comparatively easier entry, such as construction and petty trade, while few are employed in areas such as industrial production or higher skilled sectors like health care and education.

At the same time, these are sectors where labour migrants have the opportunity to increase their HC by learning additional skills on-the-job. The ADB study shows some labour migrants acquire additional skills they could not learn at home and many workers attempt to obtain professional or technical qualifications abroad by enrolling at local vocational schools or attending short courses, although few succeed in being certified.

TABLE 23 shows the distribution of labour migrants by qualifications acquired abroad. These figures show that 66.1% of individuals gained proficiency in Russian which is unsurprising given that the knowledge of Russian is a necessity for the employment and for professional progress. A striking majority, close to 70%, declared having acquired new skills, but their learning was not certified. Only 26 respondents, or 4.1%, had their skills assessed and certified.

Non-formal and informal learning are powerful means for developing HC, but manifestly the consideration for methods beside the formal system of education is limited in the present situation. Other obstacles are the absence of specialised programmes for training potential migrants (part-time classes, on-site training etc.) and mechanisms for funding the education of migrants (educational loans, financial help, time allowances) in the receiving countries.

In terms of equity, the relationship between skills and migration is marked by reduced or no access to further training, before and during emigration; and lack of reward for migrants' choice of preferred learning method, which in most cases is learning in non-formal and informal settings.

5.2 ROLE OF RETURNING MIGRANT WORKERS IN HUMAN CAPITAL DEVELOPMENT

The ADB survey shows that 9% of migrants return from abroad to find employment in Tajikistan each year. The basic reasons for returning are age, poor health, family problems and deportation. Working experience and the knowledge acquired abroad offer improved employment prospects for many returnees in Tajikistan. A study of returnees by the International Labour Organization (ILO, 2010) has shown that the experience of employment abroad helped 39.1% of returnees to find a well-paid job in Tajikistan. However, 42.7% of returnees found this was not the case and 18.2% found they actually had worse prospects. The same study by the IOM revealed that a total 68.1% of returnees were employed. Most of the employed returnees preferred to be self employed, running their own business (21.7%) or work

	Number of respondents	%
Did not acquire any new qualification	371	58.9
Learned Russian	416	66.
Learned English	12	1.9
Acquired new profession and obtained certificate without examination	11	1.
Acquired new profession and obtained certificate after passing an examination	26	4.
Acquired new skills without certificate	435	69.2
Graduated from vocational school abroad	13	2.
Graduated from university/college abroad	2	0.0
Obtained graduate degree abroad	4	0.0
No response	9	1.4

as independent contract workers (17.3%). A smaller share of returnees (14.4%) worked as hired workers in state or publicly owned enterprises and 10.1% were employed in private enterprises. Of the 31.9% of returnees without jobs, almost 20% were classed as unemployed; 15.6% were unemployed and were looking for work and 4.3% were unemployed and not looking for work.

The ILO study on returnees (ILO, 2010:37) showed that returning migrants actively participate in business development in Tajikistan, but their overall influence on technological development is insignificant.

Returnees play an important role in the modernisation of some enterprises, introducing new technologies and adopting new tools and skills. Work experience from employment abroad is applied mostly in small businesses owned and run by the returnees themselves. The greatest impact of the transfer of know-how is therefore in sectors with a high concentration of small businesses such as services, construction, manufacturing and the processing and storage of agricultural products. Employers in all these areas prefer to hire returnees and pay them higher salaries.

Returnees do not have a significant influence on the modernisation of technological processes in large state enterprises or in enterprises that undergo extensive and sizeable investment. Enterprises that do not plan technological or organisational innovation tend not to hire returnees, meaning that their valuable experience and additional qualification are not made use of precisely in those enterprises that would need them.

The poor health and advanced age of many returnees are barriers to employment in the domestic labour market. Returnees face problems when their employment abroad is not counted toward their work experience and the period of employment abroad may interrupt their career growth back home. Many migrants will work in different areas of specialisation while they are away and the skills and qualifications they acquired prior to departure may become obsolete. Another common problem for returnees is the lack of opportunity to employ their superior qualifications and experience from employment abroad because of the outdated technology of the respective work sector in Tajikistan.

Key findings:

Labour migration significantly affects the development of HC of Tajikistan, as 15% of the economically active population work abroad, with mixed effects. Men between 16-44 years old and originating from rural areas represent the greatest majority of migrants. The education level is completed secondary in 76.2% of the cases, which is higher than the national average. Russia is by far the main destination country.

Migrants with vocational education tend to send money home more often than migrants with lower levels of education. Those migrants that do not work in their areas of specialisation while abroad, have the skills and qualifications acquired prior to departure becoming outdated.

The greatest positive effect of migration is the availability of additional resources including for education in those families receiving remittances. Children of migrant families have stronger incentives to study foreign languages, better access to technical equipment and their parents usually have wider horizons. However these households also have a higher level of school absenteeism as children are subject to less parental control and are more likely to have to work.

Returning migrants make a significant contribution to small and medium businesses and agriculture in Tajikistan, bringing new technology, mechanisms, instruments, knowledge and skills.

The education and training system in Tajikistan is not ready to prepare individuals for employment abroad but a system of training for potential migrants is under development. In addition, the employment structure for Tajik migrants in Russia (the main host country) attract also labourers with low level of training, therefore incentives to further invest in HC are missing.

At the same time, labour migration allows individuals to obtain new skills and qualifications including in construction and trade sectors, thereby increasing HC. However, only a very small proportion of individuals have their skills certified, due to the absence of recognition mechanisms.

The limited availability of training and the lack of recognition of the skills acquired on-the-job bring to light equity issues. In particular, there is insufficient access to further learning opportunities, and disregard for the choice of individuals that see non-formal and informal as their preferred learning method.

The rate of employment of the returning migrants is fairly encouraging. Those who find their place in the domestic labour market upon return from abroad are predominantly employed in small business, where their improved skills are acknowledged and their salaries are above the average. Therefore the labour market values the acquired skills more than the education and training system does.

6. FUTURE EDUCATION AND TRAINING FOR ADULTS

6.1 ADULT EDUCATION AND LIFELONG LEARNING

There is a need for adult learning in Tajikistan. According to the SIE, only 20% of respondents said they were completely satisfied with their level of education, 55.4% were partially satisfied, 18.5% were partially unsatisfied and 5.4% were completely unsatisfied. Many of those who were unsatisfied with their level of education would like to continue. More generally, 66.2% of interviewed men and 57.6% of interviewed women declared they would like additional education or training. There is virtually no difference in the level of demand for learning between rural and urban workers, but the younger people generally expressed greater interest than their older counterparts. There are no significant differences in demand for additional education between people at different levels of education, although those with vocational and higher education appear less keen in general.

TABLE 24. SURVEY RESPONSES ON THE DESIRE FOR ADDITIONAL EDUCATION OR TRAINING (%)

	Gender		Place		Age		
	Male (N= 65)	Female (N= 66)	Urban (N= 66)	Rural (N=65)	15-24 (N=42)	25-34 (N=44)	35-45 (N=45)
Yes	66.2	57.6	60.6	63.1	78.6	59.1	48.9
No	33.8	42.4	39.4	36.9	21.4	40.9	51.1
Tot.	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SIF

Adults are most interested in: learning foreign languages; computer literacy; professional skills; gaining a graduate or postgraduate degree; gaining a second degree (as an economist, lawyer, health worker); and additional skills such as sewing, working with electric equipment, etc. Data from SIE and ATP show that many employees lack professional skills in their current employment and female professionals, rural residents, individuals aged 25-34, individuals with incomplete higher education, teachers and professionals in engineering and those in other technical spheres are most keen on professional or technical up skilling. Foreign languages are most sought after by urban residents, women, individuals aged 24 and above and those with incomplete secondary or completed secondary education.

Many respondents claimed that courses on the skills they need are offered at training centres, although significantly more urban residents than rural residents felt they could rely on education and training centres (76.3% of urban residents and 63.6% of rural residents). More rural residents (15.2%) that urban residents (5.3%) claimed there was no provision for courses in the skills they needed.

	(N=130)
Fully satisfied	20.0
Partially satisfied	55.4
Partially unsatisfied	18.5
Completely unsatisfied	5.4
l don't know	0.8
Total	100.0

Adult training supply

- 1) Courses for improved professional qualifications; the most popular courses are for teachers and civil servants at the Institute for the Improvement of Civil Servants' Professional Skills;
- 2) A number of modular courses for employed and unemployed people at the adult training centres under the Ministry of Labour and Social Protection at local employment office training centres, civil society organisations and non-governmental organisations (NGOs) training centres for children and teenagers;
- 3) Paid courses;
- 4) Courses and training provided by international and non-governmental organisations;
- 5) Courses and training provided by public academies;
- 6) Training provided by private companies for their workers.

The supply of training programmes to some extent reflects market demand for educational services, with 62% offering programmes to improve professional qualifications, 18.8% for computer literacy and 12.5% for foreign languages.

People with a higher level of education value these courses more often (68.4% of people with higher education) than those with complete secondary education or less (37.5%).

Respondents generally valued the quality of adult training courses positively, with 94.8% of urban and 84.2% of rural residents evaluating the quality as acceptable or high. Although more than a third of respondents believe that the cost of attendance is too high, the majority of respondents (63.2% of urban and 50% of rural residents) think the cost is acceptable. Respondents generally would like these courses to be free of charge, notably in rural areas. However, two thirds of urban residents are ready to pay part or all of the costs, whereas only a third of respondents in rural areas would pay at least in part. It is important to note that more than a third of respondents mentioned they had trouble finding information on how to improve their level of qualification and acquire new skills.

TABLE 26. SURVEY RESPONSES	ON WILLINGNESS TO PAY FO	OR EDUCATION AND	TRAINING (%)
TABLE 20. SUNVET RESPONSES	ON WILLINGINESS TO FATTE	JIL EDUCATION AIND	

	Gender		Place		Age		
	Male (N=65)	Female (N= 66)	Urban (N= 66)	Rural (N= 65)	15-24 (N= 42)	25-34 (N= 44)	35-45 (N=45)
yes, all costs	4.6	10.6	13.6	1.5	9.5	6.8	6.7
yes, some costs	50.8	36.4	50.0	36.9	45.2	47.7	37.8
no	44.6	53.0	36.4	61.5	45.2	45.5	55.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SIE

6.2 MISMATCH BETWEEN THE LABOUR MARKET AND THE **EDUCATION AND TRAINING OFFER**

There is a mismatch between labour market requirements and the educational and training system offer, due largely to the lack of proper mechanisms linking skills' needs analyses with planning and improvement of the supply. The education and training system is hence isolated from the labour market, from which it does not receive input information.

This situation is reflected in the information on vacancies gathered by Employment Service offices in all areas of Tajikistan on the basis of data provided to them by employers, for while state organisations willingly supply data on vacancies, private firms employ staff directly and do not report their vacancies to the Employment Services. This undercounting of vacancies is reflected in the data collected by State Committee on Statistics and results in an incomplete and uncertain overall picture of the labour market despite the creation of a new analytical department to improve data collection and analysis within the Ministry of Labour and Social Protection and Employment Service.

Preparation of qualified personnel for the international and regional labour market is in an even worse situation. So far, there is no assessment of skills needed abroad, in view of professional training for potential migrants in line with existing demand. There is no connection between the private employment and personnel agencies, the migration services, the

Ministry of Labour and Social Protection and educational institutions, meaning that these groups are unable to provide guidance as regards the specialisations covered or to coordinate the creation of appropriate training courses for the skills that are in demand.

6.3 QUALITY OF TRAINING

The Ministry of Education and the Ministry of Labour and Social Protection are the main suppliers of programmes in Tajikistan. State education centres are funded by the national budget and sometimes by international donors (international organisations, funds and banks) or other public organisations. International donors usually provide partial funding: paying for the services of experts and trainers; providing equipment, furniture etc. or cover the cost of the reconstruction of buildings. The private training centres are either donor-funded or offer programmes covered by the fees paid by enrolled learners.

	%
ocal professional school	4.5
rivate consultants	22.7
Partner companies	27.3
nternal trainers	22.7
The Internet	4.5
Ministry of Labour and Education	4.5
Durselves	13.6

Users believe better quality training is provided by international donors and private advisers, followed by non-governmental organisations, internal trainers and public academies. The worst quality education is believed to be provided by universities and local vocational schools.

Adult training programmes are often aimed at certain target groups. For example, the modular training centres target the unemployed and potential migrants. Someone who is registered unemployed will be granted benefits at 50% of their former salary if they attend new professional training. The state training centres provide each student a monthly grant of 34 somoni (USD 9.95) during academic year (from 3 to 5 months).

There are placement quotas for disabled students, women, single mothers, released prisoners and former members of the armed services. These quotas are defined by Ministry of Labour but are rarely implemented in practice.

Possibly the weakest point of adult education and training is the extremely low level of coordination between the various departments and organisations. The Ministry of Education and Ministry of Labour do not coordinate their actions and there is no mechanism for interrelation between universities, other professional educational institutions, courses and other forms of training within the labour market structures. Personnel agencies that could have created databases of the qualified workers and vacancies have failed to do so.

The most acute problems are:

- lack of funding, weakness of the education and training system that does not allow for preparation of experts in range of specialisations
- weakness of teaching staff in the system due to 'brain drain'
- absence of satisfactory data on the needs of the labour market
- absence of communication between labour market structures, universities and vocational education and training institutions
- insufficient flexibility of the training system
- weak coordination and cooperation between Ministry of Education and Ministry of Labour and Social Protection.

6.4 PROFESSIONAL TRAINING BY ENTERPRISES

Professional training is completed by public and private enterprises. However, the ATP survey conducted as part of this study shows most companies (over half of those interviewed), are not interested in increasing the professional knowledge of their workers on the basis of the following three arguments: a) business in Tajikistan is basically small in nature and it is difficult to organise full scale skills' upgrading; b) training of workers is expensive for companies; c) the low technological level does not demand improved professional skills. Thus the most popular methods of training in these establishments are mentorship (37.1%) production training (34.3%) and self-education (8.6%), rather than structured learning programmes.

Informal methods for the preparation of qualified personnel are also widely used by more active companies, with many employers undertaking staff training due to the shortage of qualified staff. Data from the ATP show that almost half of surveyed firms took action to train staff, or employed students in the corresponding specialisation to complete their training at the workplace. Fewer will send employees on training courses outside the company to improve their professional skills or provide grants to train experts in specialisations that are particularly in demand.

	%
Provide grants for training	0.86
Send staff on course to improve professional skills	6.47
Employ a student to prepare a qualified employee	9.05
Attract an employee from another enterprise	18.10
By recommendations of friends\acquaintances	26.72
Address employment agencies	8.19
Address state employment agencies	8.62
Advertise in the mass-media	13.36
Accept under patronage of people on whom the business depends	8.19
Other	0.43

Employers who are interested in qualified personnel increase the skills of their employees through professional training, and providing staff with information technology and computer literacy skills. These companies see that training programmes increase labour productivity and expand the position of the company on the market.

There is benefit for the employees too, as this form of training also improves the labour skills of workers and helps increase their income. The target groups receiving training in the companies of the ATP survey are more frequently the new employees, the least educated employees and the young workers.

Meanwhile, most companies cannot or do not wish to invest large sums in improving the professional skills of their employees. The ATP survey showed companies are prepared to allocate an average of 3% to 4% of their budget for these purposes. The lack of funding is the main obstacle to the provision of training in companies. Half of the companies surveyed sought additional funding from joint partnerships, international and non-governmental organisations, or state (national, regional or local) entities and establishments.

6.5 GOVERNMENT IMPLICATION IN ADULT TRAINING

The National Strategy for Education Development in the republic of Tajikistan was introduced in 2006-2015 with particular priority on the development of professional training and reform of the Technical Training College. In line with the Strategy, Government decree #115 of 5 March 2008 established the adult training centres system. This system includes 15 training centres and 4 branches offering 3-6 month courses in various specialist areas. The learners of these centres also include the unemployed and individuals who have no certification for their professional skills; most often returning migrants.

Another important purpose of the decree is the recognition of diplomas and other qualification certificates in line with Tajikistan's commitment as signatory of the Commonwealth of Independent States (CIS) agreement on the recognition of diplomas. The nation actively supports the council on mutual recognition and equivalence of education documents, degrees and ranks under the Eurasian Economic Community (EurAsEc) Integration Committee. Tajikistan supports multilateral initiatives and aspires to bilateral agreements to protect the rights of migrant workers. Agreements on issues such as the protection of the rights of migrant workers and the mutual recognition of educational and scientific degrees have been signed with Russian Federation and Kazakhstan.

Key findings:

There is a mismatch between labour market requirements and the offer from the education and training system, partly as the two systems operate in isolation. There is no mechanism to link the skills needs assessment in the labour market with the planning and delivery of education and training at universities, vocational institutions and other training providers. The weak coordination between relevant ministries is part of this problem.

There is currently a demand for good professionals in the labour market. The prospect of better jobs encourages people to acquire additional skills and qualifications, and stimulates demand for training services, especially short courses of up to three months. Fields such as computer literacy and foreign languages increased their popularity following the transition period as these became desired commodities in the labour market. There is virtually no difference in the level of demand between rural and urban workers, there is rather a difference between age groups with demand for additional education and training being higher amongst younger individuals.

Individuals in rural areas however have less choice, due to the limited training offer there, or they find the provided training financially unaffordable. Lack of information is one barrier to wider access. In general those who attend courses value the quality of the training, but more so in urban areas. The assessment of corporate organisations is sharper: they prefer international providers, private consultants, internal trainers, and non-governmental organisations, better than local public schools or universities. Some companies provide their own professional training but such opportunities are limited by the small size of companies, the shortage of financing and their low level of technological development. At the same time learning takes place informally, on-the-job, in the best cases under the supervision of a mentor.

The government of Tajikistan is aware of the existing issues and its support for the adult learning system is reflected in the National Strategy for Education Development in Tajikistan 2006-15. A strategic cooperation with the private companies, supported by a system of incentives, would help broadening the spectrum of training services, improve their quality, and create flexible interaction between the formal, non-formal and informal way of learning.

GENERAL CONCLUSIONS

- 1. The development of HC in Tajikistan is characterised by contrasting trends. Structural shifts in the economy during the transition period and changing employment practices caused changes in the worker profile and lowered returns on education. This reduced individual motivation to increase levels of education and training and to invest in the education of children.
 - Although the average rate of return on education is low, this is not uniform across all professions: for instance, knowledge of English and computer skills provides an immediate and relatively high return, whereas additional education for teachers does not lead to salary increases (even though their work is extremely important).
- 2. This study found that in Tajikistan education reduces poverty. It also found that income levels increase at the same rate regardless of whether an individual has completed higher education or completed vocational education. This is an indication of the current relevance of vocational education and training to the labour market.
- 3. Education stimulates the population to become active in the labour market with vocational education alone increasing participation in the labour market by 23% (TLSS, 2007). This proves especially true for women and young people from rural areas thus bringing significant inequity reduction between people of different genders and locations.
- 4. There have been improvements in the national education and training system since 2000. However, there is increasing inequity in access to education on the basis of gender, geographical location, income brackets and migration status. Considering the complex interaction of these four major factors, convergence between education and training strategies, and other relevant Governmental policies should be sought.
- 5. The quality of education is a leading factor for equitable access to education, as individuals from poor families and rural areas are often unprepared to continue education and further training after the basic cycle.
- 6. Both the domestic and international labour markets have an impact on the demand for skills in Tajikistan. The present education and training system does not cater for the external demands, offering a poor choice of subjects and quality of education for individuals considering employment abroad (potential migrants). A mechanism to recognise the skills that returning migrants have acquired abroad is also missing. The overall situation results in the ineffective use of private and state investments in HC and HC depreciation in the long-term. The Government of Tajikistan has been paying close attention to the issue of training for potential migrants in recent years. Government agencies and donor institutions have been implementing important policies in this sphere, but more needs to be done for potential migrants and returning migrants in terms of HCD, given the large numbers of migrant workers and their significant impact on both economy and society.
- 7. Continuing training is provided by state institutions and by private companies. Governmental programmes are delivered at training centres and addressed to unemployed, as part of the active labour market measures, and other population groups.
 Companies are offering training opportunities depending on their size, the sector, as well as their location. Access and choice is therefore uneven, whereas most of the employees learn on-the-job, either on their own self-initiative or guided by mentors according to their seniority in the company. At present there is no integration between formal, non-formal and informal learning.
- 8. The education and training system in Tajikistan is funded from various sources: state funds, external donations and private sources among which fees and additional parents' contributions. The latter (including informal payments) now form an important source of funding at all education levels.

 This creates inequity in access to education especially for girls, whose parents are unwilling to pay for their schooling due to the traditional perception of gender roles in the Tajik society. Along with persistent problems of access, there is no evidence that the funding system in place has brought improvements of the quality.
- 9. The government of Tajikistan has already launched reforms in the sphere of education and training with the support of donor institutions and the legal framework is an advanced one. These reforms include rebuilding of the education infrastructure, changing the budget allocation method from per school to per capita, the establishment of parent associations and introduction of the adult training centres network. These measures have already led to positive results, but more problems are awaiting solution especially in terms of equity of access, choice and quality. Greater equity in human capital development in Tajikistan calls for more effective governance: strategic management of the education and training system, improved strategic planning and coordination between state institutions, donor institutions, businesses and social organisations. The partnership between state and private education institutions must also be developed as far as possible.

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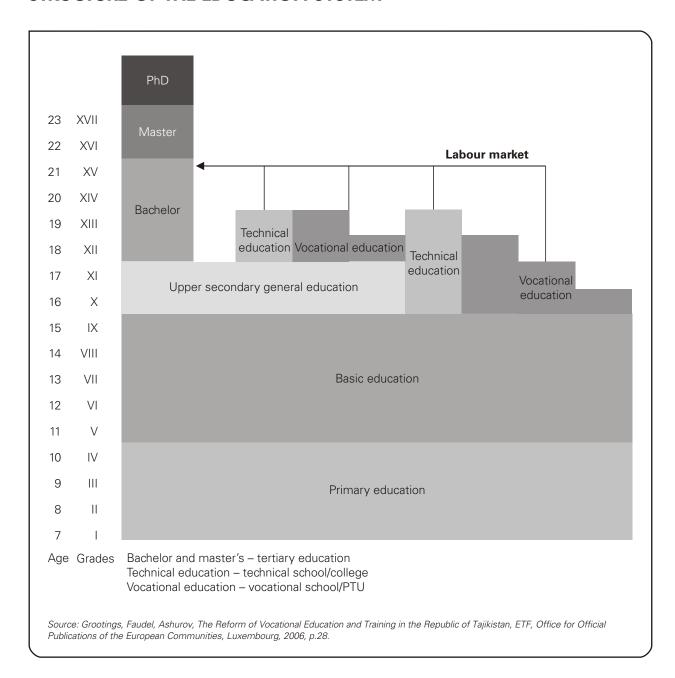
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ANNEX

STRUCTURE OF THE EDUCATION SYSTEM



CONTACT US

Further information can be found on the FTF website

www.etf.europa.eu

For any additional information please contact:

European Training Foundation ETF Communication Department Villa Gualino Viale Settimio Severo 65 I – 10133 Torino

E info@etf.europa.eu F +39 011 630 2200 T +39 011 630 2222

