

ECONOMIC DEVELOPMENT AND RESEARCH CENTER



**MILLENNIUM DEVELOPMENT GOALS IN ARMENIA:
LOCALIZATION ISSUES**

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OXFAM PREFACE

Oxfam British non-governmental charity organization is founded in Oxford in 1942. Oxfam's mission is to work with others to overcome poverty and suffering.

Oxfam GB Armenia office is operating in Armenia since 1994, implementing different humanitarian assistance and (since 1996) development programs. Oxfam GB in Armenia has committed itself to supporting the civil society and the government of Armenia developing the various public policies through the contribution both in terms of shared experience from evidence-based program work and facilitating the civil society participation / involvement at a wider level.

The activities' components of Oxfam GB are development, relief, and campaigning, dedicated to finding lasting solutions to poverty and suffering around the world.

The issues of poverty have their own place also in poverty reduction programs adopted by UN member countries. The regeneration of the quality of human capital, possibilities necessary for having a decent living and ensuring human development are the guidelines for the UNDP and countries, which signed the Millennium Development Goals (MDG) Declaration.

Oxfam GB Armenia, jointly with its partner "Economic Development and Research Centre" non-governmental organization, has developed the "Millennium Development Goals: Localization Issues" paper, aiming at increased public awareness on MDGs, contribution to the effective civic participation in the processes of elaboration and evaluation of the relevant national policies, creation of the leverage for the proper localization of the millennium goals.

List of Acronyms

AIDS	Acquired Immunodeficiency Syndrome
bln	billion
CIS	Commonwealth of Independent States
EDRC	Economic Development and Research Center
GDP	Gross Domestic Product
GNI	Gross National Income
GoA	Government of Armenia
HIV	Human Immunodeficiency Virus
IMF	International Monetary Fund
kcal	kilocalorie
kg	kilogram
MDG	Millennium Development Goal
mln	million
MTEF	Medium-Term Expenditures Framework
NSS of RA	National Statistical Service of the Republic of Armenia
PPP	Purchasing Power Parity
PRSP	Poverty Reduction Strategy Paper
UN (O)	United Nations (Organization)
USSR	Union of Soviet Socialist Republics
WB	World Bank
WHO	World Health Organization

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INTRODUCTION

Mission

Millennium Summit held in September 2000 was the largest event ever organized by UN. Representatives of 189 countries participated in the Summit. The document adopted by the Summit declared the necessity to introduce positive changes in human development and expressed the collective political will toward that end. The Declaration prioritized the reduction of poverty by half by the year 2015 as the major challenge for the entire world.

The Millennium Declaration set 8 major goals that are reflected in 18 targets. The Declaration also contains indicators to monitor and measure the progress towards the achievement of the targets. Millennium Development Goals are relevant for all countries; however, it does not imply that all the indicators and targets are relevant for all countries. The participating countries expressed the commitment to initiating clear steps towards reducing human and income poverty. The main challenges ahead and the indicators pertaining to MDGs shall be set (adapted/localized) to each country specifics based on participatory discussions.

The present paper describes the approaches of experts outside the Government with respect to MDGs in Armenia and their localization. Simultaneously, basing on the analyses of the international experience and Armenian reality, localized targets and indicators are suggested. Moreover, the paper discusses also the potential policy scenarios to be pursued by Armenian authorities and external counterparts in order to ensure the achievement of those targets.

Thus, the present paper attempts to:

- Analyze the present situation with internationally accepted indicators of MDGs, their urgency and potential to achieve the set targets in Armenia,
- Analyze the localization of the MDG indicators in the PRSP of Armenia and differentiate the policies incorporated in the PRSP and the MTEF ,
- Present the approaches for the localization of the indicators in Armenia, set targets for the localized indicators and substantiate them.

Recommendations and approaches are suggested to be perceived by broad groups of stakeholders as food for discussions. The mission of the present paper is to initiate discussions on the Country Development Targets, which can assist the Government and other stakeholders in selecting the targets in an agreed manner.

The Economic Development and Research Center (EDRC) NGO initiated elaboration of the present paper in cooperation with the Oxfam GB Armenian office. EDRC wishes to express their gratitude to the organizations, individual experts and professionals for their participation and practical assistance during the analyses and discussions. Among the latter, we would like to note especially the contribution and advice of Mr. Hovhannes Azizyan, PRSP Secretariat Chief, Mr. Aghassi Mkrtchyan, Country Economist, UNDP, Mr. Samvel Manukyan, Individual expert, Mr. Tatul Hakobyan, Deputy Minister of Health, Mr. Sergej Balasanyan, Division Head, Ministry of Finance and Economy.

Methodology

Results of various similar research and analyses were used for the preparation of the present paper. The research and analyses concerning MDGs carried out in various years by the UN Yerevan Office were used, as well as indicators related to MDGs calculated by various Ministries and their analyses. The analytical papers and surveys carried out by the National Statistical Service are an invaluable source of information and data, in particular, household surveys, demographic and health statistics, etc.

The paper consists of 8 sections each devoted to each MDG. Each section contains the analyses of the current situation with regard to the respective MDG targets in Armenia, as well as the policies pursued towards the achievement of the specific MDG and our conclusions and recommendations. Major conclusions and recommendations are summarized in the Summary section. Annexes to the paper contain the indicators localized for Armenia in the PRSP, as well as those recommended by the authors together with possible targets for those indicators and assessment of their achievability.

The conclusions drawn were discussed in various formats and agreed upon in general. In this regard, one can state that the conclusions reflect not only the views of the authors, but also some of the stakeholders' representatives. Simultaneously, we do not insist that these views are indisputable and the single correct ones. In fact, they are a good basis for further discussions between respective stakeholders.

Framework of Constraints

Certain constraints existed to the development of the present paper, which in many cases hampered comprehensive assessment of certain realities and phenomena. Insufficient availability and quality of data can be mentioned as major constraints. There is no single database, which could assist an independent researcher to access easily the lavish data being collected and compiled. An evidence of the existence of a large data is the number of various researches and surveys, as well as the broad range of indicators being collected through administrative registers. Another constraint – quality of available data – one hand can be explained by absence of a unified methodology, and on the other – by insufficient specialization in the field of surveys (absence of clear minimum requirements and insufficient coordination). The latter negatively affects also the analyses of available data.

Diversification of deadlines for the collection of different indicators set by the GoA also hampers the elaboration of unified and compatible conclusions. In other words, adjacent or mutually supplementing data are collected with a 5 months' difference.

Due to abovementioned constraints, the analyses in many cases are inconsistent in terms of the data collection periods.

At the same time, it is worth noting that in cases when various sources report various indices of the same indicator, the authors reserved the right to use the data, which, to their own assessment, is more reliable.

MDG 1: ERADICATE EXTREME POVERTY AND HUNGER

1.1 Analyses of the Current Situation

Analyses aimed at determining the poverty criteria in Armenia started in 1996. Instead of the poverty line, the term of "less wealthy" family was introduced in Soviet Union in 1974, which was defined as a family with per capita income of less than 50 roubles. According to data of the USSR statistics department, income of about 20% of the households in Armenia was below the minimum in 1988.

Possibly, one can state that poverty started to emerge and spread in Armenia since 1990, when 55% of the population fell into poverty, whereas 30% (those who were previously considered less wealthy) – into extreme poverty. The poverty line in 1988 was equivalent to USD 87 monthly income (at official exchange rates) or USD 3 per day per capita.

Assessment of the poverty in Armenia, as well as definition of indicators and criteria bases on the sample household surveys carried out in 1996, 1998/1999, 2001, 2002 and 2003. Poverty is measured in two categories: against the food poverty line and national poverty line.

Table 1: Indicators of MDG 1 in Armenia

Targets	Indicators	1996	1999	2001	2002	2003	2015
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1a. Proportion of population below \$1 (PPP) per day in total population, % ¹	-	5.1	1.5	0.8	0	0
	1b. Poverty headcount ratio (% of population spending less than the national poverty line)	54.7	55.1	50.9	49.7	42.9	19.7
	2. Poverty gap ratio ²	21.5	19.0	15.1	13.5	8.9	5.0
	3. Share of poorest quintile in national consumption, %		6.6	6.6	6.9	7.8	9.1
Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	4. Prevalence of underweight children under-five years of age, as % of total children under five	-	-	3.0	-	-	1.4
	5. Proportion of population below minimum level of dietary energy consumption, as % of total population ³	0	22.9	16.0	13.1	7.4	2.1

Source: NSS of RA

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

The primary indicator for this Target is defined as the share number of population living at below USD 1 per day (PPP-adjusted) in total de facto population. Analyses of this indicator in Armenia give the feeling that it is already achievable, since PPP adjusted (adjustment factor is 3.8) expenditures should have been equal to USD 7.1, whereas the minimum food poverty line is two time higher (See Figure 1). At the same time, the PRSP monitoring indicator found appropriate to continue

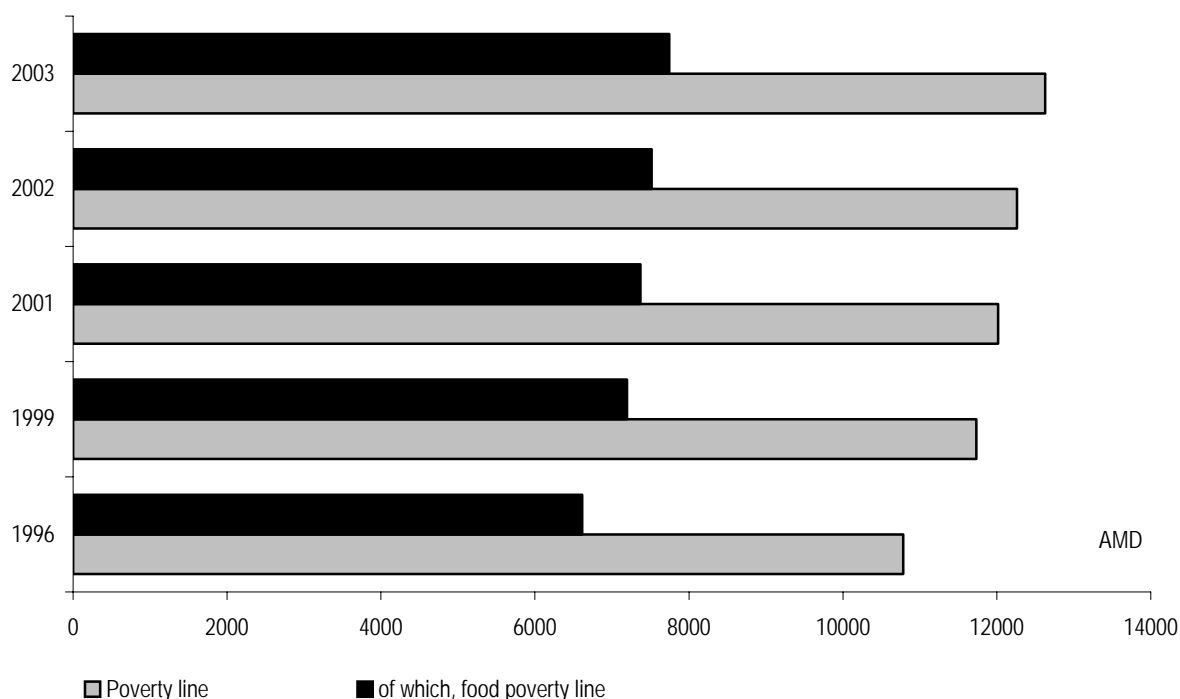
¹ USD Purchasing Power Parity for 2002 is taken AMD 141.

² Poverty depth is the average consumption deficit towards national poverty line in % of the national poverty line.

³ Extreme poverty incidence is used.

observing the dynamics of this indicator in order to carry out international comparisons. For a localized indicator, it is suggested to use the number of population below the national poverty line – as share in total de facto population⁴.

Figure 1: National Poverty Line and Food Poverty Line



Source: Social Snapshot and Poverty in Armenia, RA NSS, Yerevan 2004

Poverty gap is set as a second indicator for this MDG. Poverty gap is the sum that, if equally distributed among all poor, theoretically would be sufficient to raise their average monthly expenditures to the equivalent of the national poverty line (See Table 2). PRSP monitoring system uses the share of budgetary expenses for family benefits in the gap resultant from poverty depth (in %) as a proxy for the localization of this indicator. Poverty gap resultant from the depth of poverty describes the commitment of authorities to mitigate the poverty problem through transfers and the amount of funds required in addition to that. At the same time, the indicator used in the PRSP monitoring system does not fully reflect the essence of the problem, since the calculated poverty gap already incorporated the impact of family benefits on poverty.

Table 2: Poverty Gap and Family Benefits

	2001	2002	2003
Poverty gap as % of GDP	3.0	2.3	1.1
Budgetary allocations to family benefits, AMD bln	16.1	12.1	12.4
Proportion of budget allocations to family benefits in the poverty gap, %	33.7	38.7	67.9

Source: NSS of RA

The third indicator of Target 1 is the share of consumption of the lowest quintile in total consumption. In fact, the estimates of the consumption by the lowest quintile in Armenia can bring in little rationale for meaningful conclusions. PRSP monitoring

⁴ Poverty line is the minimum monthly per capita consumption basket in drams. It is calculated by adjusting the food basket by the factor of expenses on goods and services. Food poverty line is calculated based on the actual expenditures of households in drams on foodstuff considering that the minimum dietary energy consumption shall be 2100 kcal.

system, in this regard, has chosen the proportion of the consumption of the highest quintile to that of the lowest one (in %). This reflects the polarization among the living standards of quintiles in Armenia.

Table 3: Incomes and Expenses of Population

	1999	2001	2002	2003
Annual income of the richest quintile as ratio to the annual income of the poorest quintile	3.4	5.8	6.8	7.6
Share of the lowest quintile in aggregate consumption, %	6.6	6.6	6.9	7.8

Source: NSS of RA, Household Surveys

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

The first indicator under this Target is the share of underweight children under five in % of total children of the age under five. The developments in this field in Armenia are becoming worrying: the share of underweight and underheight children in that age group is quite high⁵. This has a negative impact on the physical health, mental capacities and other characteristics of children, thus, creating a fertile soil for the development of various diseases of social origin in future (i.e. tuberculosis, diseases resulting from the insufficiency of iodine and protein).

The number of underweight and underheight children differs from one province to another. The situation is relatively favorable in Yerevan (See Table 4). These indices in general correspond to the poverty prevalence in provinces.

Table 4: Prevalence of Underweight and Underheight Children in Total Under Five

Province	Underheight (%)	Underweight (%)
Yerevan	8	0.7
Aragatsotn	9	2.0
Ararat	15	3.3
Armavir	9	1.4
Gegharkunik	32	3.6
Lori	12	0
Kotayk	8	9.3
Shirak	22	5.9
Syunik	16	5.2
Vayots Dzor	11	4.3
Tavush	10	1.4

Source: NSS of RA

The second indicator for this target is proportion of population below minimum level of dietary energy consumption in total. In 1996, almost quarter of population, and 7.4% in 2003 was not able to consume food equivalent to the minimum food basket. Armenia officially adopted the FAO-recommended per capita dietary energy consumption in the PRSP framework, which is 2100 kcal. This also allows international comparisons. Simultaneously, the food basket developed in conformity with the mentioned dietary value still bases on the structure of food basket calculated in 1996, which is often called "Armenian bread

⁵ PRSP, GoA, Yerevan 2003

basket” for international comparison. This basket after considerable modifications during the last 10 years is not consistent with the current reality and it needs to be revised to meet its structure with current life realities.

Table 5: Main Poverty Indicators

Main Poverty Indices of the Population	1996	1998/1999	2001	2002	2003
Poor, %	54.73	55.05	50.9	49.7	42.9
Very poor, %	27.67	22.91	16.0	13.1	7.4
GINI coefficient, per capita income	0.653	0.570	0.528	0.451	0.434

Source: NSS of RA

Indicators of this MDG are directly incorporated into the PRSP monitoring system and do not require further localization for Armenia.

1.2 Policies Oriented to the Achievement of the MDG

Eradication of extreme poverty and hunger is set as a priority task in the PRSP of Armenia. Achievement of this Target is anticipated in the medium term: by gradual reduction reaching 2.1% in 2015 as compared to 7.4% in 2003.

According to the PRSP, an efficient social policy and increase in the income of the population are viewed as the effective methods to combat poverty.

To the end of eradicating extreme poverty and hunger, PRSP gives high importance to the family benefits system. It is envisaged to increase per capita family benefits to the equivalent of the food basket. PRSP also envisages continuous increase of pensions, thus, aiming at reaching 1.6 times of the national poverty line.

Simultaneously, PRSP projects high real growth rates, which, on one hand, will increase the revenue base for the Government to finance social programs and on the other – will raise the wage income of the population.

1.3 Major Conclusions and Recommendations

Analyses of MDG 1, its targets and indicators show that it is feasible to eradicate extreme poverty and hunger in Armenia by 2015. Furthermore, we believe that the set time-target is rather conservative. The set target can be achieved even earlier – e.g. by 2008, provided that efficient policies are implemented. This is derived from the fact that in order to cover the poverty gap the Government would need about 1.1% of GDP as additional social transfers in 2003, however, provided the transfers to be much better targeted.

Likewise, we consider the poverty reduction targets conservative, too. We believe that the poverty line of USD 4 per capita per day would be more appropriate. On one hand, it would be closer to the poverty line used in Soviet Union (or in 1999), on the other – it would better reflect the current needs for preserving the human capital of Armenia.

Stating the achievability of internationally set targets for Armenia, we find necessary to assess whether it is feasible to implement the general message of the PRSP, which is reduction of poverty incidence to a level, which will not hamper future development of Armenia.

In that regard, we would recommend to use substitute for MDG 1, which can be formulated as follows “**Reduce poverty to a level that does not threaten the development of the country**”. At the same time, we suggest introducing the following additional indicators.

➤ **Per Capita GDP**

The targets for this indicator shall be defined basing on the strategic development prospects of Armenia. I.e. in order to join EU Armenia needs to have at least 1/3 of the EU per capita GDP (that level has the countries with the lowest income level recently joined the EU). In other words, if Armenia sees itself as part of EU by 2015, it shall have per capita GDP at the level of around 33% of the average per capita GDP in EU (PPP-adjusted average per capita GDP currently is about USD 10 000). Currently, per capita GDP in Armenia is only one sixth of the average EU per capita GDP.

➤ **Share of Non-Food Consumption Expenditures in Total Household Expenditures**

This indicator can describe not only the capabilities of the poor in ensuring their basic needs, but also the degree of their social isolation.

Table 6: Household Expenditures on Food Products

	2001	2002	2003
Consumption expenditures, monthly average per capita, AMD	11949	11983	14404
of which, on food, AMD	7719	7978	9669
Share of non-food consumption expenditures of households in total consumption, average, %	35.4	33.4	32.9
Share of food consumption expenditures of the lowest quintile in total consumption, average, %	78.6	78.7	79.8

➤ **Wage Income of Households in Total Income**

This indicator describes the dynamics of the employment income of households, including self-employment, sales of agricultural products and living stock. This indicator is also incorporated in the PRSP monitoring system, however, is not intended to be localized. This indicator may describe the opportunities of growing out of poverty without any help.

➤ **Regional Proportions of Wealth**

It is well known, that the development of the recent years resulted in deeper disproportions between the regions of Armenia, in particular, poverty and wealth inequality is huge between the capital and provinces. Thus, we recommend to introduce an indicator describing the disproportions of poverty incidence in various regions. The ratio of poverty incidence in Yerevan to the poverty in provinces can serve as such.

Furthermore, other indicators can also be broken down per provinces, e.g. infant mortality, etc.

The indicators recommended for localization, as well as their target values are presented in Annexes.

MDG 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION

2.1 Analyses of the Current Situation

When discussing the problems in education sector in Armenia it is important to address the preconditions for their emergence. Statistical data states the high literacy rates and perception of these problems by the population. This fact, of course, bears the inertia from the obligatory education in Soviet Union and traditions put their impact on the picture of enrollment in the general education.

Significant tensions arose in education in 1990-94 when, along with the decrease in the share of education financing in GDP, the absolute values of the GDP shrank, too. Although stable growth is recorded in education financing since 1997 (accompanied by the GDP growth) it is still 2-3 times below the 1990's level.

Table 7: Indicators of MDG 2 in Armenia

Targets	Indicators	1990	1996	2000	2001	2003	2015
Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	6. Net enrollment ratio in elementary education, %	97.3	99.0	97.3	96.8	97.0	99.9
	7. Proportion of pupils starting grade 1 who reach grade 5, %	99.2	-	-	99.8	99.0	99.9
	8. Literacy rate of 15–24 year-olds, %	99.9	-	-	99.7	-	99.9

Source: NSS of RA

Net Enrollment Ratio in Primary Education

MDG-2 has only one target, the first indicator of which is the Net Enrollment in Elementary Education. Both the official statistics⁶ and various reports⁷ show that this is not an issue in Armenia. However, it is early to state that this target is achieved. The socio-economic conditions of the country, shifts in education sector and the fluctuations of the attitude toward education in some groups of population are creating certain concerns in that regard.

Among the countries with comparable development levels favorability of the situation in Armenia in terms of this indicator is rather illusive since it already shows declining trends (See Table 8).

Table 8: Net Enrollment Ratio in Primary Education (% , school years)

	1994-95	1996-97	1999-00	2000-01	2002-03	2003-04
Net enrollment in primary education, %	97	98	97,3	96,8	96,6	97

Source: Data of Education Management Information System (EMIS)

High enrollment rates in elementary education are mainly conditioned by the following factors:

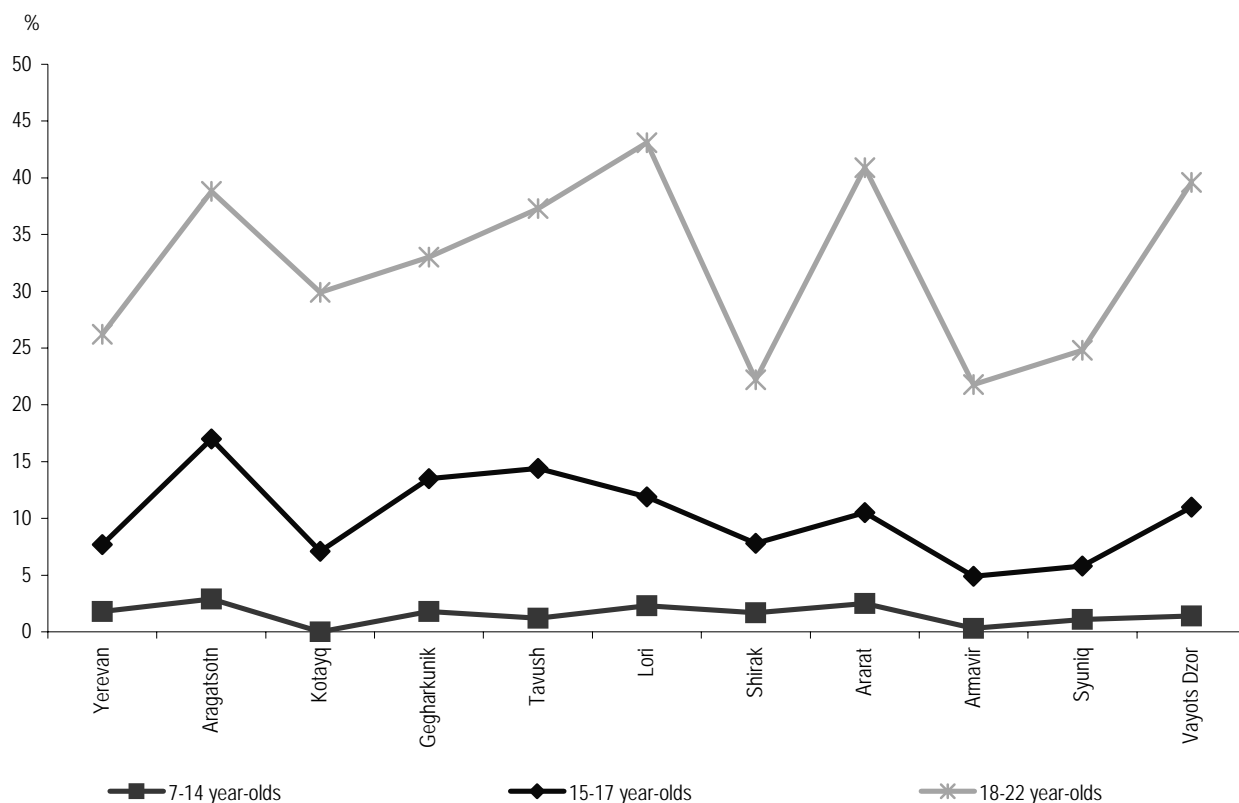
1. mentality inherited from Soviet era and current affordability of elementary education,
2. age of children involved in elementary education (6.5-9 years old) since this group is not yet involved in family tasks,
3. absence of a link between the education quality (marks of pupils) and enrollment.

⁶ Concept on PRSP monitoring system adopted by the GoA Decree N 1780-N dated November 11, 2004.

⁷ Country Assistance Strategy, Republic of Armenia, 2004-2008, WB, June 2004.

These factors will hardly remain valid in the long-run future. Enrollment rates can be affected by both affordability issues and education quality. In particular, expenses for school clothes, stationary and other, seemingly “insignificant” expenses become problematic for a large stratum of population. Figure 2 presents the picture of those who are not enrolled for affordability reasons per age groups and provinces.

Figure 2: Dropouts Due to Affordability Reasons in Age Groups, %⁸



Quality issues of the elementary education may also affect enrollment rates, which are then directly reflected in the enrollment rates of the next age group.

Proportion of Pupils Starting Grade 1 Who Reach Grade 5

Children reaching grade 5 as share of those entered grade 1 shows what share of children graduates the elementary school. Definitely, it is quite high in Armenia. However, some problems already appear in this area, which seriously endangers enrollment rates in the entire educational system. These problems are:

1. significant increase in expenses of households for schoolchildren,
2. increased involvement of children in meeting financial needs of households,
3. objective mistrust of parents towards further professional education,
4. change of the attitude towards education,
5. existing deficiencies in the education system and insufficient quality.

The abovementioned problems do not significantly affect the level of children reaching the grade 5 (in the case of Armenia it is close to the net enrollment in elementary school). Likewise, they did not impact on the enrollment rates of the age groups

⁸ Social Policy Guidelines to Reduce Poverty, N. Jrbashyan, S. Manukyan, Yerevan, 2004

of 9-14; it is still very high. Meanwhile, enrollment problems become acute in the group of 15-17 year-olds, which mainly should be involved in high schools or tertiary education.

Literacy Rate of 15-24 Year-olds

According to the result of the 2001 Census literacy rate⁹ in the age group of 15-25 is 99.8%.¹⁰ This is, of course, due to the education system inherited from the Soviet Union. Although this indicator is very high, nevertheless, it may change depending on the socio-economic situation and affordability of education. The basis of literacy is put in elementary, primary and high schools, where enrollment, as already noted, had a declining trend. I.e. it is appropriate to state that literacy rate in future inevitably will show declining trends unless adequate policies are pursued.

In other words, current high literacy rates do not warrant the achievement of this MDG. It is necessary to introduce additional indicators, including those reflecting the quality of education that will more comprehensively show the achievability of this MDG in Armenia.

2.2 Policies Oriented to the Achievement of the MDG

According to PRSP, the GoA views preserving, developing the education system, as well as ensuring its competitiveness in the international arena as the primary priority for the economic development and one of the most important areas. Both the PRSP and annual Government Budgets envisage increases in the Government financing of Education sector as share of GDP.

In order to create a unified evaluation system and integrate to the international education system it is envisaged to introduce a 12-year education. To this end Evaluation and Testing Center, State Non-commercial Organization was established. Simultaneously, the measures taken by the GoA to solve the problems in borderline and mountainous regions intend to mitigate the regional polarizations in a relatively short time.

According to 2005-07 MTEF, large share of the Education financing (from 79.7% to 81.7%) is intended for financing the elementary, primary and secondary education.

In particular, it is intended to take the following measures during 2005-2007:

1. increase in salaries and qualification of school teachers,
2. provision of text-books in elementary schools free of charge,
3. construction and renovation of schools, continuation of the process to equip the schools with heating from their own individual boiler-houses,
4. provision of school furniture, computer equipment and other didactic materials,
5. service of the schools' Internet network and maintenance of computer equipment,
6. improvement of food supply to special (boarding) schools.

MTEF acknowledges the importance of the reforms in secondary professional and supplementary education by envisaging involvement and training of those who are unemployed for a long period¹¹.

⁹ An individual is considered literate who can clearly write and read- short expression, which defines literacy.

¹⁰ Data for age group of 15-25 is taken as presented in 2001 Census, as share in total population.

¹¹ 2005-2007 Medium-Term Expenditure Framework, Government of Armenia, Yerevan, 2004

The major priority in the Education sector is the improvement of the quality and efficiency by truly seeing it as serious preconditions for improving literacy and education, subsequently, ensuring adequate knowledge for entering the labor market and continuation of education.

2.3 Main Conclusions and Recommendations

Indicators for MDG 2 shall describe the commitments of country authorities and the public to maintain the high level of education, ensure further development of the education system and its competitiveness in the international market. At the same time, these indicators shall reflect the affordability and quality matters.

Basing on the abovementioned requirements, we recommend the following as localized indicators for MDG 2.

➤ **Public Expenditures in Education as Share of GDP**

One of the major preconditions of the development of the sector is the provision of adequate financing of the sector. Taking into account the current per capita GDP in Armenia (about USD 1100 in 2004, while PPP adjusted per capita GDP would equal USD 4200) one can state that no other country with similar income level would not be able to have the current, high education level. The unprecedented real growth rates of the recent years are promising. If the country is able to pay adequate attention to increase the education financing along the economic growth, then one could state that there are still possibilities to maintain the current education levels in the country.

Education system of Armenia is comparable to those in Eastern European countries. E.g. 77% of enrollment in general education in Armenia can be compared to 79% in Eastern Europe¹². Meanwhile, per capita GDP in Armenia is two times lower than in Eastern Europe. It is also worth comparing the public financing levels: in Eastern European countries education financing constitutes about 4.5% of GDP, whereas in Armenia it reached 2.5% in 2004. As a result, Eastern European countries spend per capita many times as much as Armenia in order to provide for the same level of enrollment (taking into account the difference between compatible per capita GDP values in Armenia and in East-European countries).

The reality is that under the current levels of income of households it is not feasible to maintain the same enrollment rates simultaneously ensuring the same quality. Therefore, it is time to consider the sustainability issues and possibilities to ensure quality of education services.

Thus, in order to create grounds for the further development of the education system and preservation of the current education levels, the minimum required precondition would be to achieve public financing of education at the level of 4.5% of GDP. Therefore, we recommend introducing a localized indicator for MDG 2 as follows: "Achieve by 2015 minimum public expenditures in education sector equivalent to 4.5% of GDP".

In particular, this indicator shall grow very fast in the coming 2-3 years, thereafter it should have slower and smoother growth pattern. This will allow preventing future decline in this sector.

➤ **Enrollment in Primary School**

Enrollment in elementary school is not yet a warrant for high enrollment rates in general education. Enrollment in general schools is very important and fundamental; therefore, we suggest setting a localized indicator of "Net Enrollment in the General Education".

The PRSP uses the Gross Enrollment in the High School as a localized indicator. However, low enrollment rates in high schools can be also due to higher enrollment in secondary professional (tertiary) education. I. e., leaving high school, pupils may choose to be involved in the tertiary or professional education. We believe that the expansion and development of tertiary education in Armenia should be more than welcomed, therefore, we recommend replacing the PRSP-used indicator.

¹² Human Development Report 2003. Millennium Development Goals, A compact among nations to end human poverty, UNDP, New York, 2003

In order to maintain the current levels of enrollment in general education and further improve them persistent steps shall be taken, including the following:

- Compensate to the extent possible the education costs of the socially vulnerable strata, linking the assistance to the attendance and enrollment in schools,
- Improve the quality of education at all levels,
- Ensure affordability of education services for the poor,
- Carry out Government propaganda aimed at restoring the propensity of population towards education.

Thus, the second indicator recommended is **“Net Enrollment in primary school”** for which the target should be 98-100% by 2015.

➤ **Enrollment of the Poor in Tertiary and Professional Education**

Affordable tertiary and professional (higher) education on one hand will reduce re-production of poverty, since the risk of getting into poverty for the educated people is considerably lower, and, on the other – it will serve as an additional stimulus for the poor households to be enrolled in general schools and obtain the required basic education.

It is suggested to introduce the following indicator: **“ensure the enrollment of at least 1/5 of the poor population of relevant age in tertiary and professional education”**.

➤ **Introduction of an Evaluation System in All Education Systems**

The decline in the quality of education observed in Armenia during the last 10 years took place due to various factors: in general and high schools, mainly due to insufficient financing, whereas in the tertiary and professional education – due to the absence of evaluation systems.

That is why unlike Eastern Europe (where enrollment in tertiary and professional education is similar to those in Armenia) the level of knowledge is significantly lower. In fact, it is appropriate to ask whether it is reasonable for the society to invest its scarce resources in education if the resultant quality will not be ensured; or do we need such higher education, which does not comply with international standards.

By introducing an accurate evaluation system in all levels of education, it is possible that enrollment in secondary professional and professional education systems may decrease in the medium-term, and here, the policies aimed at ensuring a minimum affordability threshold of education services for the poor will be crucial.

Thus, we suggest introducing a fourth indicator for MDG 2, which is, introduction of an evaluation system in all levels, and the target for that indicators will be **“to reach by 2015 the level of education system quality in Eastern European countries”**.

MDG 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

3.1 Analyses of the Current Situation

The Millennium Declaration, by declaring the principle of equal rights and opportunities for men and women, has stated the eradication of all kinds of discrimination of women as part of its radical goals.

This MDG has 1 target and 4 indicators to measure the progress in achieving the set target.

Table 9: Indicators of MDG 3 in Armenia

Targets	Indicators	1990	1996	2000	2001	2003
Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education not later than 2015	9. Ratios of girls to boys in elementary, secondary and professional education	-	-	-	-	-
	10. Ratio of literate women to men 15–24 years old	0.98	-	-	0.98	-
	11. Share of women in wage employment in the non-agricultural sector	49.4	-	-	-	49.0
	12. Proportion of seats held by women in national parliament	-	6.3	3.0	3.0	4.6

Source: NSS of RA

Proportions of Girls to Boys in Elementary, Secondary and Professional education

High enrollment rates prevail in the elementary and secondary schools in Armenia, which is no longer maintained in the professional education system. However, there is almost no gender inequality here as such. There are no grounds for concerns regarding the proportions of girls and boys in elementary schools. Although enrollment of boys in 6 Provinces exceeds that of girls, the difference is not significant (See Table 10). In the age group of 7-14, ratio of girls to boys enrolled equaled 103.4 in 1990 (i.e. number of girls exceeded the number of boys by 3.4%), whereas in 2003 it equaled 96.2. Women constitute 64% among those who have graduate degree. Gender equality is achieved also in secondary education (15-18 year-olds), where the girls/boys ratio equaled 102.5 in 1990, and 106.1 – in 2000.

Table 10: Enrollment in education systems¹³

	Enrollment in education systems, %					
	Elementary		Secondary		Tertiary	
	<i>Girls</i>	<i>Boys</i>	<i>Girls</i>	<i>Boys</i>	<i>Girls</i>	<i>Boys</i>
Yerevan	98.4	98.4	93.4	93.8	59.8	62.4
Aragatsotn	93.1	88.7	89.4	88.5	23.7	30.9
Kotayk	93.4	88.9	92.8	89.7	43.4	37.9
Gegharkunik	93.2	96.0	92.8	94.8	31.9	31.2
Tavush	100.0	93.2	91.5	95.6	41.0	30.5

¹³ Social Policy Guidelines to Reduce Poverty, N. Jrbashyan, S. Manukyan, Yerevan, 2004

Lori	88.6	86.4	87.6	91.4	36.4	32.1
Shirak	94.4	95.0	93.3	95.4	48.9	48.2
Ararat	87.5	89.3	91.9	91.3	31.4	46.9
Armavir	96.1	98.0	95.4	94.5	35.9	37.5
Syunik	95.9	95.1	93.1	98.4	41.9	48.3
Vayots Dzor	91.7	92.6	93.9	92.5	23.6	22.5

In the recent years, girls constitute 60% of school graduates; however, they are 53-54% of the students in higher education universities.

There is no any discrimination towards women in education system and as of 2005 gender equality in education is almost achieved. Therefore, there is no need for localization of this target in Armenia.

Proportion of Literate Women and Men in the Age Group of 15–24

According to 2001 Census, literacy rate in the age group of 15-24 is 99.8%, whereas the ratio of literacy rates among women to men is 1.014. Gender equality is also achieved for this indicator; therefore, one can conclude that there is no necessity to localize this indicator.

Share of Women in Wage Employment in the Non-Agricultural Sector

Employment of women is a concern in Armenia. Unemployment tends to grow among women. Unemployment rate among women was 7.7% and 7.5% in 1997 and 2000 respectively, whereas among men – 3.1% and 4.2%. Furthermore, unemployment above 6 months among women is 90%, above 12 months – 75.4%. Besides, the Women Empowerment Index shows a declining trend (See Table 11).

Women are mostly employed in low-wage sectors and jobs.

Table 11: Women Empowerment Indicators

	01.01.1997	01.01.1998	01.01.1999	01.01.2000
Administrative and leading posts (%-age of women in total)	29.6	29.0	32.1	35.4
Professional and technical staff (% in total)	66.2	68.5	65.1	65.6
Share of wage income (share of income received by women in total)	0.850	0.498	0.684	0.496
Women empowerment index	0.381	0.370	0.351	0.351

Source: National Human Development Report 2000, UN

Summary indicators of women employment in non-agriculture sector had a declining trend, too (See table 12). If income of women grew in 1998, the subsequent decline in 1999 set off that growth.

Table 12: Income proportions

1996	1997	1998	1999	2001
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Proportions of incomes of women and men employed in non-agricultural sectors, %	85.0	49.8	68.4	49.6	45.0
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Proportion of Seats Held by Women in the National Parliament

The National Assembly elected in 1995 had 12 women members (6.3%), whereas in 2003 – 7 members (5.0%).

There are no women Ministers in the Cabinet. 7 women held Deputy Minister posts, 21 – judge and 38 advocates (lawyers)¹⁴ in 2003. No women ever held the offices of Head of Province and currently only the Deputy Head of Armavir Province is female.

Table 13: Share of Women in the National Assembly

	1995	1997	1998	1999	2000	2003
Women – Members of National Assembly, % (as of the beginning of the year)	6.3	6.5	6.3	3.1	3.1	5.0

In 2002 elections of local governments the number of women elected as Community Heads and Elderly Councils has decreased: there were 12 women Community Heads and 450 women Council members in 1999, whereas in 2002 – 9 and 172 respectively.

3.2 Policies Oriented to the Achievement of the MDG

The GoA has declared certain provisions in the PRSP aimed at alleviating gender inequalities. Under formal absence of employment discrimination, the difference between the incomes of men and women is intended to be mitigated through ensuring higher growth rates of wages in social sector.

The GoA intends to increase the involvement of women in sectors with high returns, according to the PRSP, by encouraging small businesses through micro-financing. Simultaneously, it envisages certain measures to increase the involvement of women in state governance, even by introducing quotas for women¹⁵.

3.3 Main Conclusions and Recommendations

One can state, that Armenia does not have serious problems in achieving the MDG 3 targets and problems in this field can be effectively solved by 2015, provided the GoA implements persistent policies.

Considering the current situation, challenges ahead and specifics of Armenia, we recommend the following localized indicators.

➤ Involvement of Women in Management Positions As Share in Total Number of Posts

One can suggest setting quotas to ensure achievement of this indicator, which will ensure, e.g. 20% of posts being held by women. This indicator is included in the PRSP monitoring system.

As localization of MDG 3 indicators for Armenia, one can see the indicators incorporated into the PRSP monitoring system, since they reflect the major areas of gender discrimination in Armenia, as well as suggesting protection of women' right as priority for the policies pursued.

¹⁴ Women and Men in Armenia, NSS of RA, Yerevan 2005

¹⁵ PRSP, GoA, Yerevan 2003

MDG 4: REDUCE CHILD MORTALITY

Table 14: Indicators for MDG 4

Targets	Indicators	1990	1996	1999	2001	2002	2003	2015
Target 5: Reduce by two-thirds, between 1990 and 2015, under-five mortality rate	13. Under-five mortality rate per 1000 live births	24	20	19	18.7	16.7	13.6	8
	14. Infant mortality rate (under-one) per 1000 live births	19	15	15	15	14	12	6
	15. Proportion of 1 year-old children immunized against measles, %	95.2	-	-	95.6	78.3	93.8	99.9

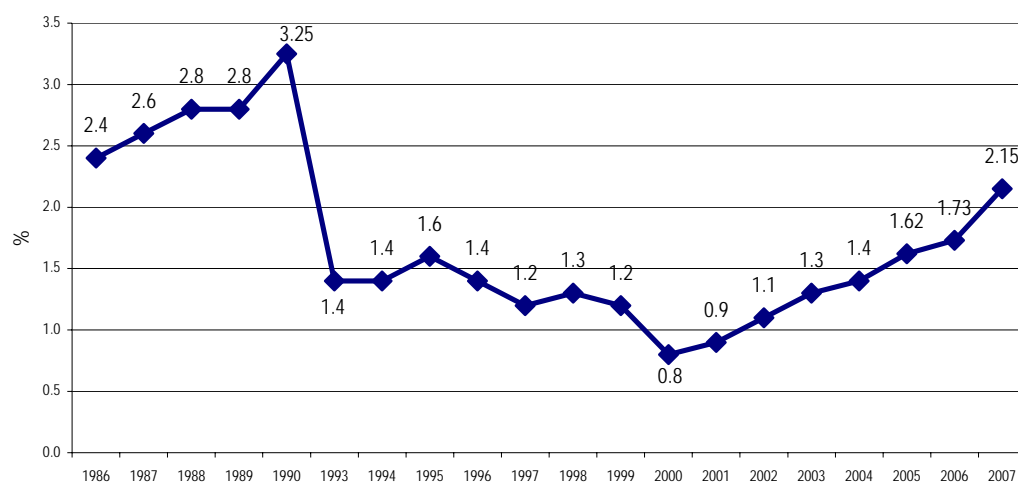
Source: NSS of RA

4.1 Analyses of the Current Situation

Healthcare sector in Armenia underwent a number of stages of reforms. Management and financial reforms aimed at the development of the sector and improvement of viability of various units. Despite that budgetary financing grew along with reforms, total public financing of the sector does not yet constitute 1.4% of GDP (See Figure 3):

Year after year, more attention is paid to maternal and child health issues. The main problems in this areas and strategic issues are incorporated in the PRSP, Strategy for the Preservation of Maternal and Child Health in 2003-15, National Program for the Protection of Child's Rights for 2004-15.

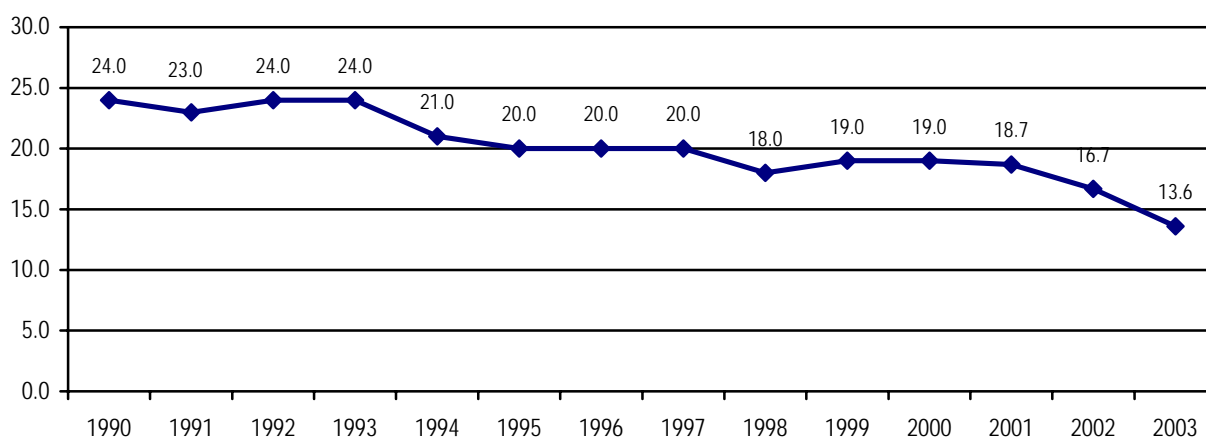
Figure 3: Healthcare Expenditures in GDP (actual for 1986-2003, programmed for 2004-2007)



Under 5 Mortality Rate per 1000 Live Births

Mortality rate under 5 has a declining trend in Armenia (See Figure 4). In 2003, it was 13.6 per 1000 live births, whereas in 1990 – it was 24.

Figure 4: Under 5 Mortality Rates, per 1000 Live Births



The absolute number of death cases under 5 has declined both during the last 3 and 10 years. According to official statistics, under 5 mortality rates have declined both among boys and girls, however it is slightly higher among boys (as of 2003, it was 14.9 among boys and 11.9 – among girls).

Table 15: Absolute Number of Deaths Under 5

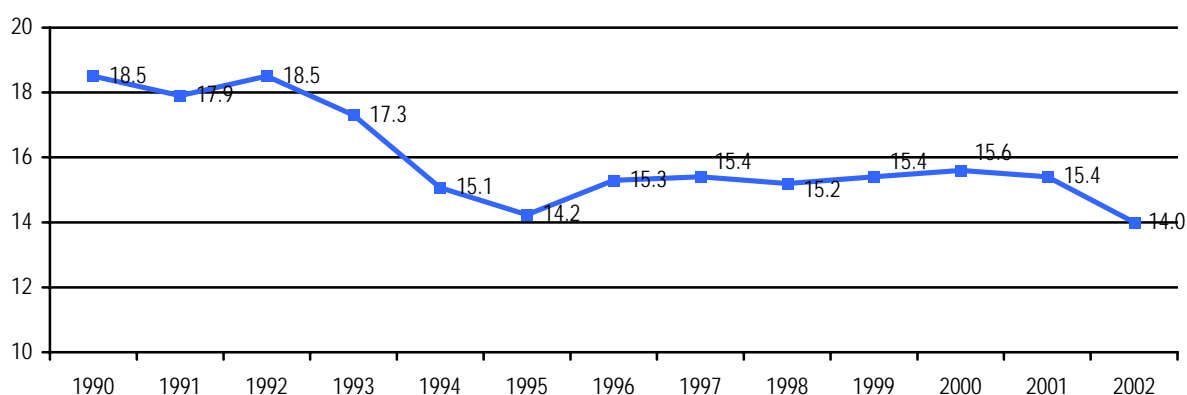
	1990	1995	1998	1999	2000	2001	2002	2003
Death cases	1899	973	723	704	683	604	535	485

According to the data of the Ministry of Health, infant mortality tool about 61.4% of mortal cases under 5. Although these are the official statistics, the data obtained through the sample surveys on demographics and health issues carried out by the NSS exceed them almost two times, but the general trends are the same, though.

Infant Mortality (under 1) per 1000 Live Births

Although showing a declining trend in recent years, infant mortality rate is relatively high. This indicator significantly decreased in 1991-1995 (from 17.9 to 14.2 per 1000 live births), after that it stabilized at about 15 (See Figure 5). Progress in reducing infant mortality during 1990-2001 is not substantial.

Figure 5: Infant Mortality Rate, per 1000 Live Births



Infant mortality is slightly higher among boys: it equaled 13.3 among boys and 10.1 among girls in 2003. Armenia, among the countries in the region, has infant mortality rates, which are on the average level for the region. According to preliminary data

for 2004, infant mortality rate was 11.7 per 1000 live births, whereas in 2003 – 11.8. It is considerably higher than in the Eastern Europe (8.1), however, it is much better as compared to the CIS average of 20.5.

Share of Infants (under 1) Immunized Against Measles

Immunization levels against both Measles and other child diseases were very high in Armenia during 1990-2001. It reached 94% - against measles, 94% - against poliomyelitis, 94% - against whooping cough, 92% - diphtheria and 92% - lymphogranulomatosis in 2003 (See Table 16). National Immunization program plays a very significant role in controlling various child diseases.

What concerns measles cases in Armenia, there were 1783 cases recorded in 2004, which is 0.05% of total population and does not constitute any epidemic concern. Analyses show that measles are more frequently recorded among adults, which is due to the fact that in late 1980s and beginning of 1990s immunization vaccines were not preserved in conditions they require.

Table 16: Immunization against various diseases (%)

	Disease	2001	2002	2003
1	Diphtheria, tetanus (under 1)	94.5	93.4	93.8
2	Whooping cough (under 1)	93.7	91.3	93.8
3	Measles (1 year)	95.6	78.3	93.8
4	Tuberculosis (under 1)	96.4	97.1	92.1

4.2 Policies Oriented to the Achievement of the MDG

The Ministry of Health of Armenia views the preservation of maternal and child health as one of its program priorities as the most important precondition to ensure the health of the new generation. In that regard, it is envisaged to increase significantly the public expenditures on obstetrical services in the frameworks of the women healthcare both in the hospital sub-sector and in the primary healthcare. Public expenditures in this field grew by AMD 209 mln in 2005, whereas in 2006 and 2007, they are intended to increase by AMD 102 mln and AMD 588 mln respectively.

Deriving from the objectives set in the 2004-2015 strategy for the improvement of maternal and child health, the GoA will continue implementing various action aimed at reducing maternal and infant mortality rates, reducing the number of underweight infants, as well as ensuring 95% and above immunization, breast-feeding increase, inclusion of handicapped children in rehabilitation programs, elimination of iodine deficit, etc.

The following targets are set to be achieved by 2015 in respect of child health:

1. reduce infant mortality under 1 and under 5 at least by 1/3, including the cases from respiratory illnesses – by 30%, and from diarrhea – by 50%,
2. reduce by 1/3 the number of underweight and premature births,
3. reach 95% immunization among children,
4. reach breastfeeding of 65% of infants under 4 months and 40% of infants under 6 months and ensure its continuity during the second year of life,

5. reduce problems caused by anemia by 50%,
6. reach 65% involvement of handicapped children in individual rehabilitation programs,
7. eradicate measles and declare measles-free area for certification,
8. ensure universal iodination of cooking salt.

4.3 Major Conclusions and Recommendations

Reduction of under 1 and under 5 mortality rates and increase in immunization against measles and other diseases is extremely crucial for the improvement of health in the country and ensuring healthy population.

It is necessary to pay more attention to the analyses of infant mortality reasons, as well as rehabilitative programs and higher involvement of children under 5 in the healthcare programs, and in particular, give special attention to the poor.

The PRSP monitoring system includes the indicator of immunization against measles (share of the immunized children under 2 in total of the same age group). At the same time, individual indicators are included for diphtheria, whooping cough and tuberculosis.

Thus, the main indicators of MDG 4 are already included in the PRSP monitoring system and there is no necessity further to localize them. Meanwhile, the achievability of these indicators will depend on the efficiency of programs in the sector. However, it is undisputable, that under the current financing levels, even with their increases defined in the PRSP, it will not be feasible to ensure entirely the MDG targets for infant mortality. Thus, we recommend including an additional localized indicator, which is the public financing of health sector in percents of GDP. This indicator will also be relevant for the next, 6th MDG.

MDG 5: IMPROVE MATERNAL HEALTH

5.1 Analyses of the Current Situation

Table 17: Indicators of MDG 5 in Armenia

Targets	Indicators	1990-1992	1993-1995	1996-1998	1999-2001	2002-2004*	2015
Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	16. Maternal mortality ratio per 100 000 live births	38,5	36,2	30,5	36	25	10
	17. Proportion of births attended by skilled health personnel, %	98.6	93	-	98.1	98.7	100

* preliminary data

Source: NSS of RA

Maternal Mortality

Maternal mortality, although reducing in Armenia during 1990-1996, exceeds the WHO accepted maximum level almost 2 times (WHO maximum is 15 cases per 100 000 births).

According to WHO Guidelines, for countries with less than 5 mln population, maternal mortality statistics are more reliable when quarterly averages are compared. This indicator equaled 38.5 per 100 000 live births in 1990-92, whereas for 2002-04 – 25 (See Table 17).

Breakdown of maternal mortality cases per periods of pregnancy shows that the majority of death cases (63.6%) occur in the intranatal (after 28 weeks of pregnancy) and postnatal periods. Comparative analyses of urban and rural statistics show that maternal mortality in rural areas is considerably higher than both the indicator for urban areas and the country average, which is explained by the lack of (insufficient quality) of medical services outside Yerevan.

Mothers in Armenia mostly die from postnatal hemorrhage, hypertensive disorders and postnatal complications. In 2003, 28.6% of death cases took place from postnatal hemorrhage, 14.3% - due to postnatal sepsis, 14.3% - pregnancy toxikosis and 42.8% - from labor and postnatal complications. Large share of maternal mortality is due to postnatal suppurative – septic complications, especially after abortions and Cesarean operations. Despite the increasing trends of Cesarean operations in the last years (3% in 1990, 6% - in 2000), the current average for Armenia is much lower than in other countries and does not exceed 7%.

The focal strategy to avoid pregnancy complications and reduce maternal mortality bases on the quality antenatal observation and improvement of intranatal medical assistance. According to the Demographic and Health Survey carried out in 2000, majority of pregnant women in Armenia attended consultancy at least once, which is 92% of cases in urban areas. In rural areas, this indicator is much lower; however, 74% of women receive prenatal treatment by doctors and additional 14% - by nurses.

Births Attended by Skilled Medical Personnel

According to the Demographic and Health Survey in 2000, births in Armenia are in general attended by qualified medical personnel (97%). However, significant discrepancies are recorded among Provinces (See Table 18) which directly affects the indices of “Births-at-home” (not attended by medical personnel). As compared to 1.4% of total cases in 1990, it grew to 7% by 1995. Starting from 2000 a decline was recorded (2.2 % according to survey), and in 2003 it fell to 1%.

Table 18: Birth Place by Provinces

Province	Births in healthcare institutions (%)	Births ate home (%)
Yerevan	98.5	1.5
Aragatsotn	86.1	13.9
Ararat	91.8	7.7
Armavir	93.2	6.8
Gegharkunik	59.2	40.8
Lori	97.5	2.5
Kotayk	95.7	3.2
Shirak	91.5	8.5
Syunik	99.1	0.9
Vayots Dzor	97.8	1.5
Tavush	98.1	1.9

Source: Armenia Demographic and Health Survey 2000

Table 18 reflects the differences, which mainly have social grounds, determined by the affordability of healthcare services. Non-official payments for healthcare services have become widespread. With respect to obligatory supplement payments, according to the WB survey in 199, Armenia took one of the first places among European and Central Asian countries. Under such circumstances, women avoid attending medical institutions, which, in its turn, creates favorable grounds for pregnancy and birth complications. Thus, the maternal mortality cases during births at home tend to grow, despite the low rate of births at home

5.2 Policies Oriented to the Achievement of the MDG

One of the priorities of the programs in Health sector is maternal health, which is also set both in the PRSP and in MTEF. The priorities in maternal and child health preservation are reviewed and approved each year. This program intends to increase the public expenditures in obstetrical services both provided by hospitals and primary healthcare institutions.

5.3 Main Conclusions and Recommendations

Analyses of maternal mortality data show that there are serious problems and difficulties in the sphere in Armenia. They are mostly related to the antenatal surveillance of pregnant women and, in particular, insufficient medical services and unavailability of required medicines and other resources in rural areas, improper diagnosis of pregnant women in risk groups, insufficiency of equipment of obstetrical hospitals, etc.

Maternal mortality rate in Armenia exceeds the level set by WHO for Europe; and its reduction by $\frac{3}{4}$ by 2015 is not feasible to achieve in current circumstances. This assessment coincides with the view of the World Bank, which is the achievement of the MDG 5 in Armenia by 2015 is unrealistic¹⁶.

In order to ensure achievement of this MDG, the primary task is to increase the public financing of health sector. Simultaneously, the facts show that the majority of maternal deaths in Armenia (60-70%) could have been precluded, if the women received adequate medical assistance, especially if the high-risk patients were diagnosed timely and received quality assistance in the medical institutions of the 3rd level.

¹⁶ Country Assistance Strategy: Republic of Armenia, 2004-2008, WB, June 2004

The main indicators for MDG 4 and 5 are included in the PRSP monitoring system. Simultaneously, for both of the MDGs it is crucial to consider significant increase in **financing as share of GDP**. In particular, healthcare financing should be considered both from public, donor and private sources.

MDG 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES

Table 19: Indicators of MDG 6

Targets	Indicators	1990	2000	2002	2003	2004
Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	18. HIV prevalence among 15–24 year old pregnant women	-	-	1	0	0
	19. Condom use rate of the contraceptive prevalence rate	-	11.4	-	-	-
	19.1. Condom use at last high-risk sex	-	44	-	-	-
	19.2. Percentage of population aged 15-24 with comprehensive correct knowledge of HIV/AIDS	-	0	-	-	-
	19.3. Contraceptive prevalence rate	-	-	-	-	-
	20. Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14	-	-	-	-	-
Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	21. Prevalence and death rates associated with malaria ¹⁷	1	59	-	6	8
	22. Proportion of population in malaria risk areas using effective malaria prevention and treatment measures	-	-	-	-	-
	23. Prevalence and death rates associated with tuberculosis	92	157	167	155	
	24. Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)	-	84.4	-	-	-

6.1 Analyses of the Current Situation

Target 7: Halt the Spread of HIV/AIDS by 2015

Prior to March 1, 1988 317 HIV cases were recorded in Armenia, of which 301 were citizens of Armenia. An increase has been recorded in HIV. The cases recorded in recent years constitute more than 50% of total cases ever registered in Armenia. Only during 2004 53 HIV cases were registered which is higher than in any previous year. The first HIV case for women was recorded in 1996. Child HIV cases and fatalities were recorded in 2001. Since 1988 to September 1, 2002 193 HIV cases were recorded, of which 152 men and 41 women. 3 among them were below the age of 14. 76.1% of HIV cases fall into the age groups of 20-30 years old.

HIV in 2004 mainly transmitted through intravenous injections of drugs (45%) and heterosexual intercourse (39%); no cases of transmission from mother to the child. HIV infection of women took place through sexual intercourse (93%), whereas for men – mostly through drug injections (61%). It is worth mentioning that transmission of HIV through injections tends to grow in recent years. If prior to 1999 infection cases through sexual intercourse exceeded cases due to injections (41/22 cases respectively, in 1999), the ratio has changed abruptly (73/139). 29 cases out of total HIV cases are diagnosed as AIDS.

24 751 HIV tests were carried out in Armenia during 2004, of which 24 244 – citizens of Armenia. 11 957 blood donors, 3 219 pregnant women, 58 drug-addicts were tested. 726 tests were anonymously, and 2 085 – per clinical instruction.

60 fatal cases are recorded since the outbreak of HIV/AIDS, including 8 women and 1 child. 1/3 of deaths was recorded in 2004. As compared to the previous years, the number of HIV cases (53), AIDS (21), death cases for HIV/AIDS (20) is the highest in 2004.

HIV prevalence among pregnant women is still very limited; however, it gives rise to certain concerns (See Table 28).

¹⁷ Local cases

Table 20: HIV Prevalence among 15–24 Year Old Pregnant Women

Years	15-24 age group	Total cases
1995	0	1
1996	0	0
1997	0	0
1998	1	1
1999	1	1
2000	0	0
2001	0	0
2002	1	2
2003	0	0
2004	0	0

Source: AIDS Prevention Center of the Ministry of Health of Armenia

Surveys show that use of condoms is not common in Armenia. 40% of women have never used condoms. Only 7% of women mentioned the use of condoms during the last intercourse with their partner. Graduate women in urban areas are more apt to use condoms than others do. 7% of men noted that they had used condoms with their wife or partner last time. Probability of using a condom increases 6 times if man had a sexual intercourse with a non-permanent partner (43%)¹⁸. The results of the survey on condom use are summarized in Table 21.

Table 21: Contraceptive Prevalence Rate (% , 2000)

Gender	Awareness of condoms as prevention method from HIV	Condom use prevalence as contraceptive
Men	52.5	N/A
Women	27	15

Source: Demographic and Health Issues Survey, NSS of RA, 2000

AIDS Prevention Center, in cooperation with AIDS Armenian National Foundation, created a Potential and Development Center, which aims at training of professionals in HI/AIDS, as well as development and publishing of educational and informational papers and their provision to young people, drug-addicts, prostitutes, homosexuals, imprisoned people, migrants and refugees, pregnant women, HIV/AIDS carriers, etc. The center has so far organized 44 trainings and 951 professionals working in HIV/AIDS were trained in total, of which 576 – medical experts.

Target 8: Halt Incidence of Malaria and other Diseases by 2015

No local malaria cases are recorded in Armenia during 1963-1993, however, the situation changed and 196 cases of tertian malaria were recorded in 1994. Majority of cases – 195 – were imported by the military servants from areas adjacent to Azerbaijan (See Table 22).

Economic hardships, active migrations, general decline in quality of health service, insufficiency of equipment, knowledge and expertise to fight malaria due to absence of malaria for 30 years, along with the climate in Armenia, unawareness of the population about the reasons, transmission ways and prevention means of the disease, created a favorable environment for malaria outbreak and development of local cases, which reached its peak in 1998. 89% of cases in 1998 were reported to be in regions bordering with Turkey. No fatal cases have been reported since 1994.

¹⁸ Program Proposal for Fighting AIDS, tuberculosis and malaria, presented to the Global Fund, 2002.

Thanks to the Program on fighting malaria, the number of local cases was significantly reduced. 6 local cases of tertian malaria were recorded in 2004 (8 cases in 2003). The continuing declining trend in local malaria cases creates guarantees for the implementation of the 2005-09 National Program to eradicate local malaria incidence.

Table 22: Malaria Incidence (number of cases)

Years	1994	1995	1996	1997	1998	1999	2000	2001
Local cases	1	0	149	567	542	329	59	32
Imported cases	195	502	198	274	614	287	82	47
Total	196	502	347	841	1167	616	141	79

Tuberculosis cases recorded about two-fold increase during 1993-2003. In particular, the child cases are more worrying. The situation is threatening in prisons, where a rapid growth in tuberculosis cases is being recorded. The majority of cases are recorded in the age group of 15-25.

Table 23: Tuberculosis Mortality

Years	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Absolute number of cases	92	117	140	132	159	148	161	157	145	167	155
Per 100 thousands	2.59	3.12	3.72	3.49	4.19	3.80	4.20	4.13	3.81	5.2	4.8

Source: Ministry of Health of Armenia

It is worth noting that fatal cases due to tuberculosis largely depended on the fact that people do not attend medical institutions due to a number of reasons, such as unawareness, unaffordable healthcare services and low quality, etc. The share of DOTS patients in total has fluctuated considerably during 1995-2001 – from 18.5% to 99.6% (See Table 24).

Table 24: Identified and DOTS-treated Tuberculosis Cases

Years	1995	1996	1997	1998	1999	2000	2001
Absolute number	811	904	1047	1420	1434	1284	1343
Number of DOTS	150	371	437	873	1190	1084	1343
Share of those who are identified for the first time in total DOTS patients (%)	18.5	41.0	41.7	61.5	83.0	84.4	99.6

Source: Ministry of Health

*DOTS- Directly Observed Treatment Short Course

6.2 Policies Oriented to the Achievement of the MDG

The Ministry of Health adopted the National Anti-AIDS/HIV Strategy. Subsequently, 2002-06 national Anti-AIDS program was developed basing on the Strategy. The goal of the program is to reduce the spread of HIV/AIDS in Armenia. The tasks are:

1. development and implementation of a National Program of HIV/AIDS prevention,
2. HIV/AIDS prevention among drug-addicts,
3. development of safe sexual behavior,

4. prevention of HIV infection from mother to the infant,
5. ensuring of safe donor blood,
6. prevention of HIV/AIDS and sexually-transmitted diseases among teenagers and youngsters,
7. care for HIV/AIDS infected.

In April 2002 the GoA established an Inter-agency Council for HIV/AIDS prevention. Similar local councils are established in Provinces, and Provincial programs are developed in some of the Provinces in preventing HIV/AIDS.

An inter-committee parliamentary groups was created in the National Assembly in June 2002, which includes representatives from all fractions and all permanent committees of the Parliament.

National HIV/AIDS curing guidelines were developed according to WHO principles.

Table 25. HIV/AIDS Prevalence Indicators and Results Expected from Planned Measures

Indicators	2001	2007
AIDS mortality rate (per 100 thousands)	0,13	0,09
HIV prevalence among pregnant women of 15-24 years old	<1%	<1%
HIV prevalence among drug-addicts	15%	<7%
HIV prevalence among prostitutes	<3%	<3%

Source: Demographic and Health Issues Survey, NSS of RA, 2000

Fight Against Malaria Program was developed in 1996 and is being currently implemented. The strategy aims at improving the situation through measures adequate to local epidemic situation and strengthening the health sector and eradicates malaria by 2005 in Armenia. A Council is established under the Prime Minister of Armenia to coordinate the measures in combating malaria.

Based on the WHO recommendations, the Ministry of Health adopted the Program of Fighting Tuberculosis, the main direction of which is the usage of DOTS system. Since 1995 when DOTS was first introduced in Armenia, more than 5000 primary cases were cured. Curing indicators is 86% among those who suffer from this disease¹⁹.

WHO continues to provide Armenia with anti-tuberculosis medicines. All Tuberculosis laboratories are equipped with microscopes and liquids. The personnel were trained domestically and abroad. The efficiency of the program is achieved due to reduction of the hospital stay and decrease in curing costs (USD 176 per patient as compared to USD 28 under the old methods).

Since February 2002, a multi-year DOTS expansion program is being developed. The National program of Fighting Tuberculosis started to operate fully in 2004, the objective of which is to protect the population from Tuberculosis, take measures to reduce the primary tuberculosis cases and mortality. Gradually, the situation with sufficiency of medicines, curing process, equipment, personnel training is being improved.

2005-2007 MTEF intends to reduce tuberculosis prevalence and mortality by 10%. Furthermore, the programs for ensuring hygienic and epidemic safety, prevention of socially important diseases and meeting the demands of the poor are continuously considered a priority.

¹⁹ Новые тенденции в здравоохранении Армении, А. Мкртчян, 2001г.

6.3 Main Conclusions and Recommendations

For the purposes of achieving MDG 6 it is necessary to focus on the prevention of the diseases and increase of the healthcare service affordability. Successful implementation of intended policies may ensure the achievement of MDG 6. Nevertheless, according to the WB assessment it is also less probable in Armenia.

For MDG 6, PRSP mainly uses the international indicators. We also believe that they are compatible with the situation in Armenia and there is no need for further localization.

MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY

Table 26: Indicators of MDG 7 in Armenia

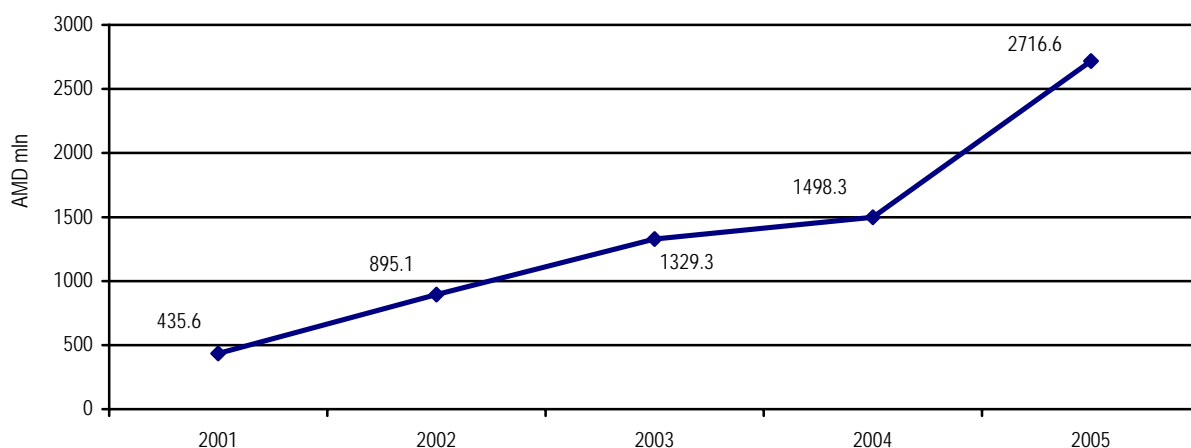
Targets	Indicators	1990	1996	2000	2001	2002	2003
Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources	25. Proportion of land area covered by forest, %	11.2	-	-	-	-	9.3
	26. Ratio of area protected to maintain biological diversity to surface area	10.0	10.0	10.0	10.0	10.0	10.0
	27. Energy use (metric kg oil equivalent) per \$1 GDP (PPP)	2.6	0.39	-	1.2	-	
	28.1. Carbon dioxide emissions (per capita), kg	7.0	1.6	1.9	2.0	3.0	4.2
	28.2. Consumption of ozone-depleting CFCs (ODP tons)	0.4	0.02	0.02	0.02	-	0.03
	29. Proportion of population using solid fuels	-	-	-	-	59.3	60.4
Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	30. Proportion of population with sustainable access to an improved water source, %						
	Urban	-	-	-	94.2	97.0	97.8
	Rural	-	-	-	64.7	77.0	80.6
	31. Proportion of urban and rural population with access to improved sanitation, %						
	Urban	-	-	-	-	-	-
	Rural	-	-	-	-	-	-
Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	32. Proportion of households with access to secure tenure (rented or owned)	91.5	-	-	94.9	91.0	91.0

7.1 Analyses of the Current Situation

Socio-economic crisis of the first half of 1990s, which was further deteriorated by the blockade and energy crisis, left a substantial impact on the environment. Large volumes of water was consumed from lake Sevan for power-generating purposes, massive forest throws took place, soil started actively to degrade, desertification became a real threat.

Environmental issues are paid more attention to during the last years, which can be proved by the budgetary allocations to this sector. As Figure 6 shows, budgetary expenses in environmental sector grew more than 6 times from 2001 to 2005.

Figure 6: Budgetary Expenditures in Environmental Protection



As one of the achievements in this sector, the stable trend of water level increases in lake Sevan should be noted specifically, which takes place mainly due to very strict quotas of usage of its water for power generation and additional transmission of water to Sevan through Arpa-Sevan tunnel.

Table 27: Lake Sevan Indicators

Indicators	2002	2003	2004
Water level in Sevan as of end of the year, meters	1896.8	1897.2	1897.7
Change in the water level in Sevan, cm	+44	+48	+41
Water transmitted through Arpa-Sevan tunnel, mln m ³	243.7	260.6	247.6
Water usage from Sevan for irrigation, mln m ³	98.3	117.5	148.8

Target 9: Integrate the Principles of Sustainable Development in Country Policies and Programs and Reverse the Losses of Environmental Resources

According to official data, forest reserves in Armenia cover about 460 thousand ha (about 13.7% of total area), of which forest area covers 334 thousand ha (11.2% of total area). Due to the energy crisis in 1991-95, massive throws reduced the forest area significantly. According to expert estimates, the share of forests currently equals 8.9% of total area as compared to 11.2% in 1990.

Throws continued after the energy crises, which is mainly conditioned by the fact that wood is used for heating purposes. Simultaneously, industrial throws also grew to significant volumes recently. The Human Development Survey in 2003 showed that 58% of households in Provinces use wood for heating. The share of households using wood for heating is higher in Tavush, Syunik and Lori Provinces (98, 80.1 and 74.6% respectively), which is explained by the availability of forests in these Provinces.

Protected areas are established in Armenia for preserving biodiversity: they cover 10% total country area. Those are 3 Reserve areas with total surface of 39 285 ha, 2 national parks with total surface of 178 095 ha and 23 protected areas with total surface of 100 240 ha. During the recent years, the former Reserve area of Dilijan was transformed into a national park, whereas Sev Lich reserve area – into a protected area.

Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Significant progress is recorded in recent years with regard to access to drinking water (See Table 28). Coverage of centralized water supply systems grew by 1.9%, which is mainly due to increase of coverage in rural areas by 3.6 percentage points.

Table 28: Access to Drinking Water (%)

	2001	2002	2003
Availability of centralized water supply system	85.0	89.1	91.0
Urban	94.2	97.0	97.8
Rural	64.7	77.0	80.6
Share of households fetching water	6.1	5.2	5.9

Source: NSS of RA, 2001, 2002, 2003 Household Surveys

Coverage of centralized water supply systems in rural areas was largely conditioned by a number of investment programs, because of which water supply systems of about 40 rural settlements was rehabilitated or constructed. Investments in water supply sector are one of the most important aspects of the public investment policy.

Table 29: Investments of the Government of Armenia in Drinking Water Sector

	2000	2001	2002	2003
Investments in drinking water sector, AMD mln	2366	150	636	6857

Despite the progress in access to drinking water recorded in recent years, it continues to remain one of the most urgent problems requiring solution, especially in rural areas. In fact, about 20% of households in rural areas not connected to centralized systems have to spend additional time and efforts, or even financial resources, which make them even more vulnerable with regard to poverty and increase the risk of being poor.

As a matter fact, the share of households with access to improved sanitation has not changed significantly and has fluctuated at about 70%. This is mainly relevant for rural areas where the households with no access to centralized sanitation systems are concentrated.

Target 11: By 2020 to have achieved a significant improvement in the lives of at least 100 mln slum dwellers

Housing became an acute problem in Armenia after the devastating earthquake in Spitak in 1998 and inflow of refugees from Azerbaijan. This also was affected by the deficiencies in operation of the multi-apartment blocks and landslides in some of settlements.

Formally, almost all households have housing in Armenia. After the privatization of the entire bulk of state-owned housing, overwhelming majority of households – 91% - became owners of their apartments.

The problem of those who live in temporary dwellings is more urgent. According to the 2003 Household survey, about 5.3% of households live in temporary dwellings.

Heating has become an important aspect of housing conditions, which, in fact, is not addressed by MDGs.

As the results of the National Human Development Research show²⁰, more than 6% of urban households do not heat their apartments during winter months that create certain concerns. The same research shows a clear correlation between heating and sickness cases: more illness cases were recorded in non-heated apartments than on the average for total. Thus,

²⁰ Social Policy Guidelines to Reduce Poverty, N. Jrbashyan, S. Manukyan, Yerevan, 2004

the calculations based on these results show that the probability of getting sick in a non-heated apartment is 2 times higher than in heated apartments. The households that do not heat their apartments are mainly the poor ones.

7.2 Policies Oriented to the Achievement of the MDG

PRSP, with regard to environmental issues, incorporates the following problems as targets for the policies: efficient forest management, prevention of soil deterioration, reduction of anthropogenic factors contributing to desertification, efficient water resource management, removal of solid waste and dangerous industrial waste. PRSP measures include 2004-06 tasks; however, they were mostly of legislative nature.

Access to safe drinking water, as one of the most important factors determining the living standards, is among the PRSP priorities. The main goal of the policy in this regards is to ensure affordable, high-quality access to water supply. To that end, the PRSP incorporates continuous investments in this sector. Investments shall be directed to the physical maintenance, rehabilitation and extension of the facilities, reduction of energy consumption, improvement and upgrading of the metering system.

It is intended to increase the coverage of centralized water supply to reach 86% of the population which implies additional 120-130 thousand households shall be connected to the system. According to PRSP, that will cost about USD 200-220 mln, which is about 55-60% of investments in this sector.

PRSP also include measures to improve the living conditions of the refugees who live in slums and temporary housing. An alternative to constructing new housing for them is to implement housing voucher programs at the assistance of donor organizations.

PRSP also defined the measures to increase the access to heating and the major emphasis is given to the introduction of local heating options; furthermore, the need for extending the gas supply network is also emphasized.

7.3 Main Conclusions and Recommendations

International Indicators of target 9 are mostly reflected in PRSP monitoring system. In particular, the indicators of Share of Forest area are kept as it is.

The PRSP monitoring system determined also the Biodiversity Preservation Indicator, which replaces the "Share of protected areas for the preservation of biodiversity". Indispensably agreeing with the importance of the latter (that is – the internationally accepted indicator), nevertheless, we find appropriate the approach used in the PRSP, since due to methodology problems, the internationally accepted indicator can be introduced in Armenia only in 2008. Furthermore, the policy shall be directed to the reforms of the existing system by emphasizing administration improvements, which shall target at the creation of the adequate environment for the preservation of biodiversity.

PRSP monitoring system also contains indicators of emissions of various dangerous gases, and, although they are very low, nonetheless, initiation and implementation of prevention measures is a must, especially, in terms of transportation means.

We find very important the internationally accepted indicator of the Proportion of population using solid fuel; however, we are of the opinion that the gasification indicator recommended for the next target will cover this issue, too.

Thus, PRSP-set indicators for Target 9 are in general acceptable and there is no need for further localization, therefore no additional indicators are recommended. Simultaneously, we do not consider the energy efficiency indicator very urgent currently and we believe there is no need to include it in MDG indicators.

There are 2 international indicators for Target 10 and they, in fact, coincide with those incorporated in the PRSP monitoring system, with the slight difference that the latter does not break them down to rural and urban areas. We believe, that the indicator of the Proportion of households with sustainable access to and improved water source especially in rural areas is a more urgent problem, therefore we suggest a localized indicator for that as follows: **“Proportion of households in rural areas not connected to centralized water systems”**. And the target value shall be set to halve, by 2015, the percentage of households in rural areas not connected to centralized systems.

1. The share of households fetching water is quite high in Armenia: about 6%. One of the major priorities of the public investment programs in water sector should be the construction of centralized water supply systems in rural areas that currently fetch water. In areas where construction of centralized systems cannot be economically justified, the Government policy shall aim at compensating the additional costs of water supply to the households. And as localized indicator for this, it should be set that the centralized systems in these areas shall be constructed by 2010, and if economically not justified, the target shall be to introduce household compensation mechanisms.

In that regard, an additional localized indicator is recommended to set as follows: **“Proportion of households fetching water in total number of water consumers”**.

The GoA policy shall be directed to construction sanitation systems, especially in rural areas, and the indicator shall be “to reduce the share of households not connected to sanitation systems from current 30% to 15% by 2015”.

An additional target should be introduced to reflect the problem of heating apartments in an environmentally sustainable and affordable manner. The two main directions of the Government assistance should be improvement of heating options and compensation of heating costs to the poor. The first direction refers to the introduction of more efficient heating option (gasification or local heating options) and assistance to the poor, in particular. Special attention shall be paid to gasification of areas close to forests. In order to ensure affordability of efficient heat options the GoA may compensate part of gasification costs for the poor. Meanwhile, the second direction of assistance is compensation for part of recurrent heating costs of poor. Thus, for localization, we recommend using the following indicator: **“by 2015, ensuring gas supply of all communities with more than 300 households”**.

The next indicator in the PRSP monitoring system which is the local equivalent to the **Proportion of Households with access to secure tenure** is set as follows: Proportion of households living in temporary dwellings”. This approach is also acceptable and we believe that the target value for this indicator by for 2015 shall be to ultimately solve the issue that is no households shall live in temporary dwellings by 2015.

MDG 8: DEVELOP GLOBAL PARTNERSHIP FOR DEVELOPMENT

8.1 Analyses of the Current Situation

MDG 8 determines the additional assistance needs of the low-income countries in achieving MDGs to be provided by their development partners. At the same time, this MDG obliges the developed countries annually to provide equivalent of 0.7% of their GNIs to developing countries to assist the latter in achieving MDGs.

Of course, MDG 8 contains other very important targets, but here we discuss only the realities of the main idea and feasibility to achieve it²¹.

Despite the size of assistance determined by MDG 8, actual assistance volumes provided by developed countries are very low: almost twice as compared to the target values. Assistance provided by the developed countries did not exceed 0.3% of their GDPs in the last years. This gap is mainly explained by the following circumstances.

- First, developed countries state that they have internal problems and are not able to provide assistance of such size which will create tensions in their own countries,
- The developed countries also argue that the domestic development needs and directions are not fully formulated in the countries seeking assistance, and wherever they are, the decision-making mechanisms are not reliable; it is not clear whether they are participatory or not.

As an assistance-seeking country, we need to create basis for eliminating at least the grounds for the second argument mentioned above. To that end, this section of the present paper will summarize our approaches to the utilization of development assistance provided for the achievement of the localized MDG indicators and their targets. They base on the need for further stabilization and improvement of the democracy in the country as a pre-condition for receiving assistance and its efficient utilization.

In this regard, Armenian authorities and the public has a significant work to do. In recent years prior to 2003 Armenia was quite favorably ranked among developing countries in terms of civil rights and responsibilities, however, analyses carried out in 2004 showed certain regress in these indicators.

8.2 External Assistance Usage for the Achievement of Localized MDG Indicators

Estimates contained in the present paper prove that there are considerable obstacles and difficulties to achieving MDGs with own resources of Armenia. In that regard, it is first important to determine those priority areas for external assistance that would contribute to the achievement of MDGs, thus resulting development of the country.

According to our conclusions, in general, our priority is human development, which is attempted to substantiate by the results of the analyses presented below. According to them, preservation of human development levels in countries with relatively high levels is one of the major factors contributing to the economic growth of these countries.

The PRSP notes that human poverty in Armenia currently is significantly lower than income poverty. Furthermore, from the viewpoint of human development, in many aspects Armenia can compare with countries economically far more developed and rich countries.

²¹ For the full text of MDG package, please, see Economic Policy and Poverty periodical, Volume II, #1, EDRC, Yerevan, 2005, <http://www.edrc.am/public.html?ID=26>

The 2004 UN Human Development Report also notes the same: according to it, Armenia is in the 82nd place among 177 countries with regard to HDI, whereas in terms of per capita GDP – Armenia is only the 115th country. In other words, Armenia's HDI is higher than its respective rank for per capita GDP by 33, which is a substantial discrepancy. Only seven countries included in the 2004 Human Development Report had such discrepancy of more than 30 positions, five of which were former Soviet Union countries (See Table 30).

Table 30: List of Countries with Large Deviations Between Human Development Index and per capita GDP

Country	Country ranking for Human Development Index (1)	Country ranking for per capita GDP (2)	Difference between (2) and (1)
Cuba	52	91	39
Albania	65	96	31
Armenia	82	115	33
Uzbekistan	107	142	35
Kyrgyzstan	110	143	33
Moldova	113	149	36
Tajikistan	116	161	45

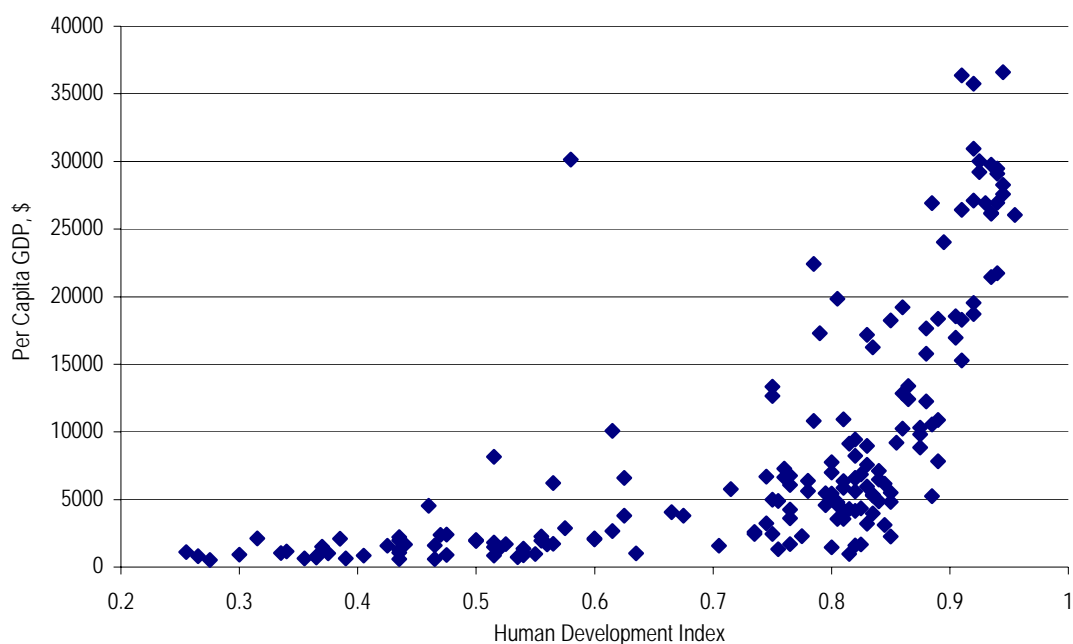
The impact of abrupt rise in poverty and inequality during the transition period is relatively weak in Armenia mostly due to the existence of a large social infrastructure inherited from Soviet Union.

It is apparent that the gap between Human development indicators and per capita GDP will decrease in coming years, and eventually these two factors will reach equilibrium – both by gradual increase in per capita GDP indicator and due to deterioration of human development indicators. However, if the public expenditure policy, as well as external assistance are successful in maintaining the current human development levels, one can expect that Armenia may have higher per capita GDP by the time it reached the equilibrium.

In this regard it is very interesting to estimate per capita GDP level which is compatible with the current human development level, assumed that they are in equilibrium. Figure 7 shows that certain correlation exists between Human Development Index²² and per capita GDP, i.e. higher per capita GDP suggests higher HDI and vice versa. However, the correlation is not statistically very significant ($R^2=0.65$), which is due to the fact, that the correlation bases on the data for all 177 countries included in 2004 UN Human Development Report. In other words, it also contains transition countries where the human development indicators and per capita GDP indices are not consistent: this affects the quality of the analyses.

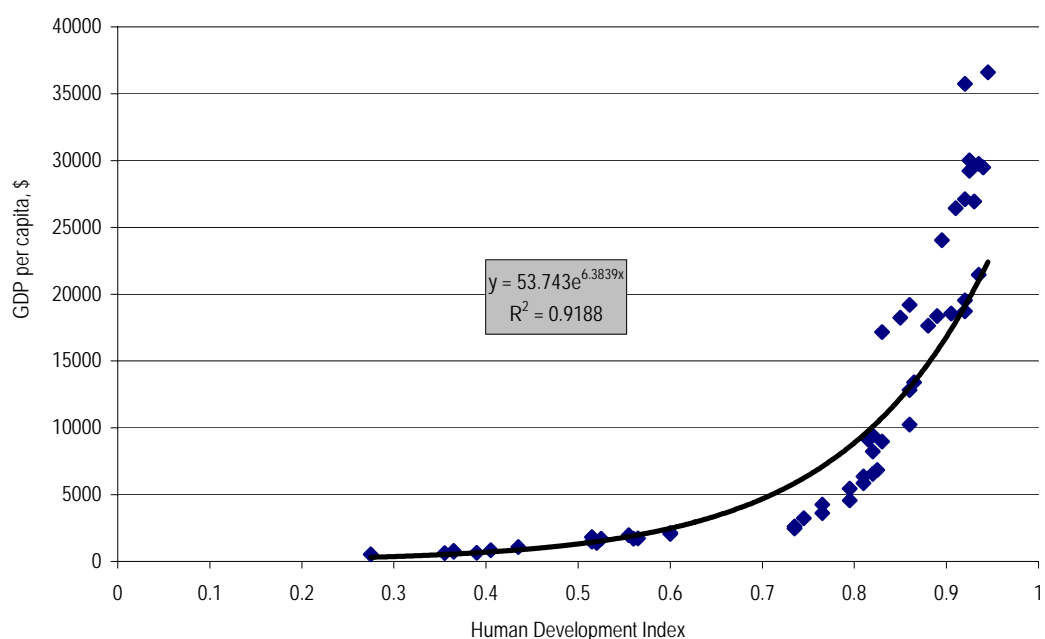
Figure 7: Correlation between per capita GDP and HDI

²² Figures 7 and 8 used the simple average of the two components of HDI (excluding per capita GDP) – education and life expectancy.



The results for only those countries that have reached equilibrium²³ are completely different ($R^2=0.91$, See Figure 8):

Figure 8: Correlation between per capita GDP and Human Development Index in Countries in Equilibrium



According to this formula, Armenia, if reached equilibrium under the current human development indices, would have PPP-adjusted per capita GDP of USD 11 833, which is 3.8 times higher than the current actual.

Thus, one can conclude that if the current human development potential of Armenia is preserved, it is feasible to expect some time in future GDP 3 times higher than its current level.

²³ Figure 2 includes those countries where the HDI and per capita GDP rankings do not differ more than by 5 items: these countries are considered to have reached the equilibrium.

However, the following aspects need to be analyzed thoroughly: first, one need to determine the period of time that the country needs for reaching its “equilibrium”, and second, the size of resources, including external assistance, required to preserve the current level of human potential.

8.3 Main Conclusions and Recommendations

Main direction of the external assistance to Armenia shall largely be the preservation of the current human capital potential. As it was mentioned, the high human development level in Armenia contains high potential for economic growth. If the authorities succeed in maintaining the human capital both by efficient national policies and targeted external assistance it will potentially be reflected in significant growth in a certain timeframe.

Simultaneously, Armenian authorities shall ensure such political environment in the country, which can effectively contribute to human development, as well as attract external assistance and efficiently use it. In that sense, MDG 8 is recommended to localize for Armenia in the following manner: define MDG 8 as **“Ensure such level of political rights and responsibilities in the country that would contributes to the growth of external assistance and its utilization”**. As an evaluation and monitoring indicators of the progress, we suggest using the periodically published and internationally accepted Political rights and political responsibilities indexes.

If these indicators are significantly improved, Armenia has the potential to enter into the group of Fast Track countries and will get the opportunity to receive priority external assistance.

EXECUTIVE SUMMARY

1. UN member countries, by signing the Millennium Declaration, committed to putting efforts for substantial improvement in human conditions by 2015. MDGs oblige the international community to expand the development idea by bringing in the poverty reduction and human development as factors for sustainable social and economic development in all countries, and emphasizing the importance of global partnership in development processes. Basing on the commitments stated in the Declaration, all developing UN member countries committed themselves to put MDGs in the basis for the development of their national long-term strategic documents.

2. There are 8 MDGs that are respectively reflected in 18 targets and 48 global monitoring and evaluation indicators. MDGs shall be achieved by 2015 and the progress shall be compared to the indices of 1990. The first 7 MDGs mutually strengthen/supplement each other and all of them target at poverty reduction in its various aspects. Meanwhile, MDG 8 is a means to ensure achievement of the previous 7.

3. MDGs are set to measure the progress of each country and are not intended for cross-country comparisons or competition. Therefore, it is necessary that every country, through a participatory process, adapt MDG targets and indicators to its own specifics and needs. Achievement of MDGs is the commitment of the country's Government; however, the civil society and donor community shall be involved in adaptation/localization and progress evaluation.

4. MDGs are very urgent in Armenia. The GoA has expressed its commitment through the adoption of the Poverty Reduction Strategy Paper. Localized MDG indicators have been reflected to a certain extent in the PRSP. The present paper discusses and suggests approaches to adapting MDGs and their indicators for Armenia that can be incorporated into the revised PRSP, which is planned to be developed in the nearest future, and its monitoring system.

5. PRSP of Armenia addresses MDGs stating the measures and schedules necessary for their achievement. These measures were reflected in financial terms in the MTEF. In order to ensure successful achievement of MDGs it is advisable to base its indicators on the socio-economic and national specifics of Armenia. In other words, it is necessary to adapt MDG indicators for Armenia to a certain extent.

6. It is recommended to adapt MDG 1 for Armenia by defining it as reduction of poverty to a level which does not hamper the development and introduce the following supplementary indicators:

- Per capita GDP,
- Expenditures on non-food consumption as share in total consumption, %,
- Share of wage income in total, %,
- An indicator describing regional disproportions in poverty,
- Poverty incidence below USD 4 per capita per day.

7. In the Armenian reality, indicators of MDG 2 shall describe the commitment of authorities and the public to maintain the current high educational levels, ensure the future development of the system and its competitiveness in the international market. Simultaneously, those indicators shall reflect such issues as quality and affordability of education for the poor.

8. There is a discrepancy between education and income levels, mainly due to inertia from the former education system. In other words, current education level is not consistent with current income levels. This gap mostly endangers the implementation of MDG 2, i.e. if no actions are taken, the results by 2015 may significantly be lower than 2000 level.

9. Coming from the specifics of Armenia, when discussing school enrollment issues it is recommendable to select the age group which is more at risk with regard to drop-out from schools, but not the elementary school. Simultaneously, it is

important to pay adequate attention to secondary education and, in general, establishment of qualitative requirements to the education (minimum quality standards). Only implementation of rationally designed and targeted programs will allow for reaching maximum results in minimum period of time, considering and correctly assessing the national traditions and potential.

10. The following localized indicators are suggested for MDG 3:

- Public financing of Education as share of GDP,
- Net enrollment in primary education,
- Enrollment of the poor in tertiary and professional education,
- Introduction of quality evaluation system in all systems.

11. In recent years, unemployment of women grew in Armenia and they are in practice have dropped out from the decision-making process²⁴. In that sense, current legislation is merely a declaration due to deficient enforcement and enactment mechanisms. There is almost no discrimination for women in social infrastructure and school enrollment.

12. In order to provide for the achievement of MDG 3 and evaluation of progress towards its achievement it is recommended to consider involvement of women in management positions (% of total) as a localized indicator for Armenia.

13. Infant mortality rate under 1 and child mortality under 5, as well as immunization coverage speak about the health and socio-economic development levels of a country. It is necessary to analyze infant mortality reasons, rehabilitative programs and increases of involvement of children under 5 in healthcare system, in particular, paying more attention to the involvement of the poor.

14. Indicators for MDG 4 are already included in the PRSP monitoring system. Their achievability entirely depends on the efficiency of programs being implemented in the sector. However, it is apparent that under current levels of financing, even with PRSP-defined supplementary financing, Millennium targets for infant mortality are not feasible to achieve.

15. Indicators of MDG 5 are incorporated in the PRSP monitoring system without any modification. We suggest a supplementary indicator for MDG 4 and 5 to be included: share of expenditures in healthcare services in GDP. The target value for this indicator can be set at 5% of GDP (private expenditures included).

16. The GoA, by implementing improvements in areas concerning MDG 6, simultaneously initiated institutional regulation measure that will coordinate and regulate the mechanisms and affordability of these services in future. Taking into account the current situation, one needs to focus on the prevention of various diseases and improvement of the affordability of healthcare services in order to ensure implementation of MDG 6.

17. Indicator for MDG 7 – access to safe drinking water – needs to be localized for Armenia and set a target to increase the coverage of centralized water supply system in rural areas. However, the target value shall be set to halve, by 2015, the percentage of households in rural areas not connected to centralized systems.

18. The share of households fetching water is quite high in Armenia: about 6%. One of the major priorities of the public investment programs in water sector should be the construction of centralized water supply systems in rural areas that currently fetch water. In areas where construction of centralized systems cannot be economically justified, the Government policy shall aim at compensating the additional costs of water supply to the households. And as localized indicator for this, it should be set that the centralized systems in these areas shall be constructed by 2010, and if economically not justified, the target shall be to introduce household compensation mechanisms.

²⁴ National Human Development Report 2000, "Human Rights and Human Development: Action for Progress", UNDP, 2000

19. The GoA policy shall be directed to construction sanitation systems, especially in rural areas, and the indicator shall be to reduce the share of households not connected to sanitation systems from current 30% to 15% by 2015.
20. With regard to housing, an additional target should be introduced to reflect the problem of heating in an environmentally sustainable manner. As the main direction, the problem of safe gas supply to average-sized communities shall be addressed.
21. With regard to the share of households with access to secure tenure, this indicator needs to be adapted for the Armenian reality by defining it as share of households living in temporary dwellings. The target value for 2015 shall be to solve ultimately the issue that is no households shall live in temporary dwellings by 2015.
22. As MDG 8, the present paper discussed the issue of clearly defining the areas for external assistance and the required size. In general, the major direction of external assistance shall be to preserve the current human development potential. Human development level in Armenia has a huge potential for economic development and, if the authorities succeed in preserving it through efficient policies and external assistance, it is realistic to expect adequate returns in terms of significant economic development. Simultaneously, Armenian authorities shall ensure a political environment in the country, which would effectively contribute to the inflows of external assistance and its efficient use. In that sense, we recommend to use the internationally known and periodically published Political Rights and Political Responsibilities indices as a localized indicator for MDG 8.
23. The final conclusion is the following: localized MDG indicators for Armenia are in general feasible to achieve if the GoA makes adequate adjustments to policies and if adequate financing of sectors is ensured (including external financing). Potential problematic targets can be the ones for infant and maternal mortality, which do not seem to be achievable currently.

ANNEX 1: LOCALIZED INDICATORS FOR MDGs

MDGs	MDG Targets/Indicators	PRSP Indicator	Recommended Indicator
Goal 1: Eradicate extreme poverty and hunger			
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day			
1. Proportion of population below \$1 (PPP) per day in total	Number of poor, as % of total de facto population	Number of poor, as % of total population	
2. Poverty gap ratio	Budgetary allocations to Family Benefits, as % of poverty gap	Per Capita GDP	
3. Share of poorest quintile in national consumption, %	Budgetary allocations to Family Benefits as % of poverty gap (at poverty depth)	Average non-food consumption of population in total consumption, %	
4. Prevalence of underweight children under-five years of age	Annual income of the richest quintile as % of the income of the poorest quintile	Annual income of the richest quintile as % of the income of the poorest quintile	
Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	Wage income of population as share of total income, %	Prevalence of underweight children under-five years of age (in % of total under 5 population)	

		An indicators reflecting the regional disproportions of poverty
5. Proportion of population below minimum level of dietary energy consumption, % of total de factor population	Extreme poverty, % in total population*	Extreme poverty, % in total population

Goal 2: Achieve universal elementary education

Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

6. Net enrollment ratio in primary education, %	Gross enrollment ratio in high school	Share of public expenditures in Education in GDP
7. Proportion of pupils starting grade 1 who reach grade 5, %		Net enrolment ratio in primary education
8. Literacy rate of 15–24 year-olds, %		Literacy rate of 15–24 year-olds, %
		Enrollment of the poor in tertiary and professional education
		Introduction of a single quality evaluation system

Goal 3: Promote gender equality and empower women

Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015

9. Ratios of girls to boys in primary, secondary and professional education		
10. Ratio of literate women to men 15–24 years old		
11. Share of women in wage employment in the non-agricultural sector		

12. Proportion of seats held by women in national parliament, %	Share of women in leading posts (National Assembly, Community Councils, Civil Service (per Civil Services post groups), judicial system, School Directors) , %	Share of women in management posts, % of total posts
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Goal 4: Reduce child mortality

Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

13. Under-five mortality rate per 1000 live births	Under-five mortality rate per 1000 live births *	Under-five mortality rate per 1000 live births
14. Infant mortality rate (under 1) per 1000 live births*		Infant mortality rate per 1000 live births
15. Proportion of 1 year-old children immunized against measles, %	Immunization coverage per diseases *	Immunization coverage per diseases

Goal 5: Improve maternal health

Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio

16. Maternal mortality rate per 1000 live births	Maternal mortality rate per 1000 live births (3-year average)	Maternal mortality rate per 1000 live births (3-year average)
		Share of public Expenditures in Health in GDP
17. Proportion of births attended by skilled health personnel, %	Proportion of births attended by skilled health personnel, %	Proportion of births attended by skilled health personnel, %

Goal 6: Combat HIV/AIDS, malaria and other diseases

Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

18. HIV prevalence among 15–24 year old pregnant women	HIV prevalence among 15–24 year old pregnant women	HIV prevalence among 15–24 year old pregnant women
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19.	Condom use rate of the contraceptive prevalence rate	Condom use rate of the contraceptive prevalence rate	
a.	Condom use at last high-risk sex		
b.	Percentage of population aged 15-24 with comprehensive correct knowledge of HIV/AIDS		
c.	Contraceptive prevalence rate	Contraceptive prevalence rate (CPR), %*	Contraceptive prevalence rate (CPR), %
20.	Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14		

Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

21.	Prevalence and death rates associated with malaria	Primary malaria cases per 100 000	Primary malaria cases per 100 000
22.	Proportion of population in malaria risk areas using effective malaria prevention and treatment measures		
23.	Prevalence and death rates associated with tuberculosis	Active tuberculosis cases per 100 000	Active tuberculosis cases per 100 000
24.	Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)	Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)	Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)

Goal 7: Ensure environmental sustainability

Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources

25.	Proportion of land area covered by forest, %	Proportion of land area covered by forest, %*	Proportion of land area covered by forest, %
26.	Ratio of area protected to maintain biological diversity to surface area	Biodiversity preservation index *	Biodiversity preservation index
27.	Energy use (metric kg oil equivalent) per \$1 GDP (PPP)	Energy Efficiency Indicator	
28.	Carbon dioxide emissions (per capita) and consumption of ozone-depleting CFCs (ODP tons)	Emissions into the air, '000 tones*	Emissions into the air, '000 tones
29.	Proportion of population using solid fuels		

Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

30. Proportion of population with sustainable access to an improved water source, urban and rural	Proportion of population with sustainable access to an improved water source, %	Share of rural households with no access to drinking water
		Share of households fetching water in the total households consuming water, %
31. Proportion of urban and rural population with access to improved sanitation, urban and rural	Proportion of urban and rural population with access to improved sanitation, %	Share of population of access to improved sanitation
		Share of communities with more than 300 households with access to gas supply
Target 11 By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers		
32. Proportion of households with access to secure tenure	Number of households in temporary dwellings per 1000 households	Number of households in temporary dwellings per 1000 households

Goal 8: Develop a global partnership for development

Political Rights indicator

Political Responsibilities indicator

ANNEX 2: ACHIEVABILITY OF LOCALIZED INDICATORS

MDG Targets/Indicators		Target Values	Achievability
Goal 1: Eradicate extreme poverty and hunger			
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day			
1	Number of poor, as % of total population	1/3 of the level for the EU countries	
2	Per Capita GDP	30 %	
3	Budgetary allocations to Family Benefits as % of poverty gap (at poverty depth)	50 %	
4	Average non-food consumption of population in total consumption, %	80 %	
5	Annual income of the richest quintile as % of the income of the poorest quintile	80 %	
6	Wage income of population as share of total income, %	15 %	
Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger			
7	Prevalence of underweight children under-five years of age (in % of total under 5 population)	1.4 %	
8	An indicator reflecting the regional disproportions of poverty	Regional disproportions in poverty are minimized	
9	Extreme poverty, % in total population	2.1 %	
Goal 2: Achieve universal elementary education			
Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling			
10	Share of public expenditures in Education in GDP	4.5 %	
11	Net enrolment ratio in primary education	99 %	

12	Literacy rate of 15–24 year-olds, %	99 %	
13	Enrollment of the poor in tertiary and professional education	20 %	
14	Introduction of a single quality evaluation system	System is operational	
Goal 3: Promote gender equality and empower women			
Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015			
15	Share of women in management posts, % of total posts	Women in management positions reached a reasonable level	
Goal 4: Reduce child mortality			
Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate			
16	Under-five mortality rate per 1000 live births	8	
17	Infant mortality rate per 1000 live births	6	
18	Immunization coverage per diseases	99.9 %	
Goal 5: Improve maternal health			
Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio			
19	Maternal mortality rate per 1000 live births (3-year average)	10	
20	Proportion of births attended by skilled health personnel, %	100	
21	Share of public Expenditures in Health in GDP, %	5 %	
Goal 6: Combat HIV/AIDS, malaria and other diseases			
Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS			
22	HIV prevalence among 15–24 year old pregnant women	0.5	
23	Condom use rate of the contraceptive prevalence rate (CPR), %	50 %	

Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases			
24	Prevalence and death rates associated with malaria (local) per 100 000	0	
25	Active tuberculosis cases per 100 000	2	
26	Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)	100 %	
Goal 7: Ensure environmental sustainability			
Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources			
27	Proportion of land area covered by forest, %	11.2 %	
28	Ratio of area protected to maintain biological diversity to surface area	10 %	
29	Emissions into the air, '000 tones	100	
Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation			
30	Share of rural households with no access to drinking water	1 %	
31	Share of households fetching water in the total households consuming water, %	2.5%	
32	Share of population of access to improved sanitation	85 %	
33	Share of communities with more than 300 households with access to gas supply	100 %	
Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers			
34	Number of households in temporary dwellings per 1000 households	0 %	
Goal 8: Develop a global partnership for development			
35	Political Rights Indicator	3	
36	Political Responsibilities Indicator	3	

Green	Achievable and/or achievable under efficient structural reforms
Yellow	Achievable under efficient structural reforms and proactive external assistance
Red	Not achievable (can be assessed as difficult to achieve)