

### NORWEGIAN MISSION ALLIANCE BOLIVIA

### IEC IN HIV/AIDS PROJECT

### FINAL EVALUATION REPORT

### **FINAL DOCUMENT**

Dr. Carlos Tamayo Caballero Dra. Maria Tereza da Costa Oliveira



LA PAZ, JULY 2005

#### **Evaluation Team**

Carlos Tamayo Caballero - Surgeon, Master in Public Health, Holder of a University Degree in Science of Education, Expert in Higher Education and Consultant in Health and Education, Teacher in Evaluation at Postgraduate Level - has been responsible for project assessments, has written an educational text for project elaboration with the Logical Framework Methodology and has written and designed several projects for external development agencies.

Maria Tereza da Costa Oliveira – Paediatrician and Epidemiologist, Candidate for a Doctorate in Infectious Diseases / Tropical Medicine at the Faculty of Medicine / Federal University of Minas Gerais, Coordinator of the STI/AIDS Program of the State of Minas Gerais, Brazil.

Vicente Waldo Aguirre Tarquino - Holder of a University Degree in Economics, General Accountant, with a Master's Degree in Project Formulation, Evaluation and Management, Expert in Local Development and Holder of a Diploma in Higher Education, experience in Project Elaboration.

Roberto Erick Guzmán Miranda - Surgeon, Master in Public Health, Master in Project Management and holder of a Postgraduate diploma in Statistical Research Methods, IDB Certification in Project Formulation, Administration and Evaluation.

Abel Peña y Lillo Tellería, Surgeon, Expert in Higher Education, Chairman of the Bolivian Red Cross.

Nilda Flores – Holder of a Degree in Statistics, expert in the elaboration of surveys and statistical analyses, teacher at the state university Universidad Mayor de San Andrés.

Daniel Alba – Secretarial support.

#### Others involved in the evaluation

Dr. Remberto Argandoña Prof. Mario Quispe Nina

Prof. Martin Quenta

Prof. Dulfredo Villegas

Rev. Tito Montero

Lic. Omar Mostajo

Elvira Guarachi

Lic. Patricia Flores

Lic. Rita Choquemita

Lic. Julio Belzu M.

Dr. David Segurondo



This document was finished on July 31, 2005. La Paz – Bolivia

#### I. LIST OF ABBREVIATIONS

AIDS Acquired Immuno Deficiency Syndrome

CBA Cost Benefit Analysis
CEA Cost Effectiveness Analysis

CNPV National Population and Housing Census (Censo Nacional de Población y Vivienda)

DILOS Local Health Directorate (Directorio Local de Salud)
DINMA Diaconal Institute Norwegian Mission Alliance

ENDSA National Demography and Health Survey (Encuesta Nacional de Demografía y

Salud)

GTZ German Technical Cooperation
HIV Human Immunodeficiency Virus

HRe Human Resources HRi Human Rights

IEC Information, Education and Communication

INE National Statistics Bureau (Instituto Nacional de Estadística)

KAP Knowledge, Attitudes and Practices

LF Logical Framework

MSD Ministry of Health and Sports (Ministerio de Salud y Deportes)

MSPS Ministry of Health and Social Welfare (Ministerio de Salud y Previsión Social)

NMA-B Norwegian Mission Alliance - Bolivia

PAN Plan Alto Norte - Norwegian Mission Alliance

PLWHAs Persons living with HIV/AIDS

SEDES Departmental Health Service (Servicio Departamental de Salud)

SHP Strategic Health Plan

SNIS National Health Information System (Sistema Nacional de Información en Salud)

SOV Sources of Verification TOR Terms of Reference

UDSEA Decentralised Health Unit El Alto (Unidad Descentralizada de Salud El Alto)

#### II. INDEX

- I. List of Abbreviations
- II. Index
- III. Executive summary of the final evaluation
- IV. Project background
- V. Methodology of the evaluation
- VI. Principal technical results, according to expected results and purpose
- VII. Principal administrative-financial results
- VIII. Conclusions
- IX. Recommendations
- X. Bibliographical References
- XI. Annexes

#### III. EXECUTIVE SUMMARY OF THE FINAL EVALUATION

The evaluation of the Project "HIV/AIDS - city of El Alto" took place between June and July 2005 based on the TOR as the basic document for this process.

The purpose of the project was to improve the knowledge of 13,500 students from 42 state educational units on HIV/AIDS, thereto involving 84 teachers and personnel of local health care centres in the city of El Alto whose activities are in accordance with the "National STIs-HIV/AIDS Program" that forms part of the "Strategic Health Plan" (SHP) of the Ministry of Health and Sports<sup>1</sup>.

The project was developed in a rather unstable context characterised by social conflicts: from sectoral strikes including the educational and healthcare sectors to general strikes of the whole population from El Alto, which had a deep impact on the national level and which ended with a change of government in October 2003.

For the purpose of the evaluation, the structure, the process for Project execution and measurable results were considered.

Within this framework, the project has suffered a series of difficulties during execution; still, interesting results have been achieved, such as information provided to 97% of the students, participation of 68 teachers as facilitators and strategic alliances with the CSP (Pilot Health Centre), i.e. the natural training level of the Departmental Health Service La Paz.

Result No. 1. Shared co-management and reactivation of population segments who participate in the project. Progress of 75%, due to weaknesses in operation of the DILOS, mainly related to political party politics.

Result No. 2. A structured system for training in HIV/AIDS is operating in Educational Units of El Alto. The goal has been achieved in 92%, which could have been better but for the socio-political problems.

Result No. 3. The strengthened Health District provides training in HIV/AIDS and is developing IEC activities. Obtained progress of 73%, basically due to staff turnover and a change of authorities and peers in the healthcare system.

The conclusions of the evaluation team point at important and significant progress in most indicators proposed for the project; the activities carried out so far are highly valued and continuation of the project is highly recommended.

The conclusions and recommendations must be used mainly for implementation of the second phase. Further deepening the actions, young persons and adolescents will be given a chance to

acquire indispensable knowledge and thus to make informed decisions and live their life in fullness and with health.

It is important to take into account that on the moment on which the Project was evaluated, 1,400 cases of HIV/AIDS were registered in Bolivia, the department of La Paz being the second with the highest number of registered cases. Nonetheless, because of the subregistration and limited epidemiological surveillance, it is impossible to have a more precise estimate of the number of cases. Most cases are males between 15 and 44 years old, the age group of 15 to 24 being the most seriously affected group. The average age of persons affected by HIV/AIDS lowered from 34.3 years at the beginning of the epidemic to 29.7 years in 2003.1

There is no doubt as to the magnitude of this problem in the Latin American context; because of a considerable lack of information and living conditions in cities such as El Alto, this is a problem of public concern. Within this framework, this intervention is extremely important. Widening this project would be an important contribution to the country, giving special attention to activities with persons living with HIV/AIDS (PLWHAs) and ensuring increased accessibility to laboratory diagnoses. The lines of the intervention will have to focus on consolidation of the established organisations, support for actions of the public healthcare system and on generating a collective awareness of this topic, assuming there will be epidemiological surveillance from and for the community.

For attending the population as regards STIs and HIV/AIDS, one of the principal elements is the need for accessible, friendly and timely laboratory diagnoses. In this sense, it is important to consider implementation of a laboratory that ensures quality diagnoses and epidemiological control.

#### IV. PROJECT BACKGROUND

#### The city of El Alto

El Alto is the fourth municipal section of the province of Murillo, department of La Paz. Geographically speaking, it is located next to the city of La Paz, Bolivia's administrative capital. The city was created by Law on March 6, 1985.<sup>1</sup>

According to the National Statistics Bureau (INE), the city of El Alto has 649,958 inhabitants (CNPV 2001). According to data from population projections for the year 2005, the municipality of El Alto now has a total population of 800,273 inhabitants, i.e. 30.4% of the total population in the department of La Paz. There are 392,615 men and 407,658 women in El Alto, most of whom in the age group of 20 to 39 years old, while at the departmental level, most of the population is concentrated in the age group 5 to 19 years old. On the other hand, the smallest groups in both cases are adults older than 65. The annual inter-census growth rate in the department of La Paz is lower than in the municipality of El Alto, with 2.23% at the departmental level and 5.10% in El Alto². El Alto is a city with a "demographic explosion".

According to the census, of the total number of inhabitants, only 47,350 persons (7.5%) have their basic needs satisfied.<sup>3</sup>

El Alto has 62,681 citizens living on the "poverty threshold", another 312,807 inhabitants living in "moderate poverty", 108,434 people living in "indigence" and another 3,263 citizens living in a "marginal situation", totalling 487,185 persons with Unsatisfied Basic Needs.

Besides, El Alto is going through a phase of cultural transition, meaning that urban co-existence models are existing side by side with rural co-existence models, with a strong Christian Catholic religious influence and a strong growth of Protestant churches.

In general, the city of El Alto is subdivided into 562 neighbourhood councils or "grassroots neighbourhood units", covering the city's 649,958 inhabitants. These councils or units are grouped in nine Municipal Districts<sup>4</sup>:

Table No. 1

Municipal districts of the city of El Alto (2001)

District	Population	Area in Has	Population density Inhabit / Hectare	Principal zones
1	99,920	958		Ciudad Satélite, Rosas Pampa Villa Dolores, Santiago I
2	75,199	1,112	67.63	Nuevos Horizontes, El Kenko Santiago II, Bolívar B, D, E
3	135,014	1,869		Cosmos 79, Villa Adela, 1ro. de Mayo, Luis Espinal
4	90,787	1,843	49.25	Secke, Villa Tunari 1, 2, 3, 423 de Marzo, S José Yunguyo
5	91,216	1,505	60.60	Villa Ingenio, Río Seco, Huayna Potosí, Mercurio
6	101,493	1,642	61.81	16 de Julio, Alto Lima, Ballivián, Ferropetrol
7	20,118	4,980	4.04	B. Saavedra, 16 de Agosto, Porvenir I, II, V. Cooperativa
8	33,603	5,991	5.61	Mercedes A, B, C, D, E, F, G, Senkata, Cumaravi
9	2,608	15,149	0.17	Laguna Jhankho Cota Villandrini, Milluni
Total	649,958	35,049	18.54	

Source: www.elalto.galeon.com/elalto.htm

#### HIV/AIDS in Bolivia

On the moment on which the Project was identified, 800 AIDS cases were registered in Bolivia; the department of La Paz is the second with the highest number of registered cases. At the moment of the diagnostic, the highest number of cases was found among the male population, especially affecting the population under 34 years old. Because of the subregistration and limited epidemiological surveillance, it is impossible to have a more precise estimate of the number of cases.<sup>5</sup>

According to the UNAIDS report, in 2003 there is an estimated number of 4,900 cases of HIV/AIDS - in an estimated range of 1,600 to 11,000 persons – where the infected population group of 15 to 49 years old totals 4,800 persons.<sup>6</sup>

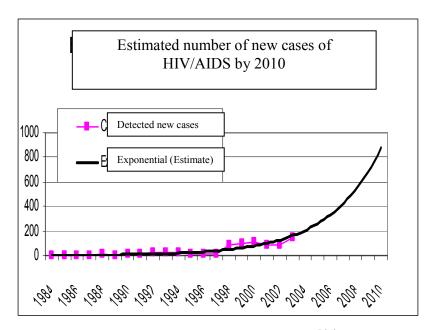
Table No. 2
Estimated number of adults and children living with HIV/AIDS at the end of 2003

		Estimated minimum	Estimated maximum
Adults (15-49) HIV prevalence			
radius	0.1%	0.0%	0.2%
Adults (15-49) living with HIV	4800	1600	9400
Adults and children (0-49) living with			
HIV	4900	1600	11000
Women (15-49) living with HIV	1300	400	2500
Estimated number of deaths in 2003			
(adults and children)	<500		1000

Source: 2004 Report on the global AIDS epidemic, Own translation

#### Estimated number of cases by 2010

Based on the information, an estimate was made of the number of HIV/AIDS cases by the year 2010; the estimate shows an exponential behaviour due to the geometric characteristic of transmission of the virus.



Source: Own elaboration based on various sources <sup>7,8,9</sup>:

#### **Project Justification**

The worldwide pandemic and its devastating effects on persons, families and society justify actions on prevention that tend to decrease expansion of the virus that might become uncontrollable, deteriorating the standard of living of persons and inflating the costs of treatment for the state and families.

In the case of Bolivia, the average age of the persons affected by HIV/AIDS lowered from 34.3 years at the onset of the epidemic to 29.7 years in 2003. Most cases affect persons of 15 to 44 years old, the age group of people between 15 and 24 years old being the most severely affected group. This is what we call "juvenilization" of the epidemic.

With regard to the forms of transmission of the virus, without any doubt sexual transmission is the most important one. If a person of between 20 and 29 years old falls ill with AIDS, we can assume that that person acquired the virus during his adolescence considering the long a-symptomatic period of the infection.

The Youth Census carried out in Bolivia in 2003 shows that in Bolivia, and especially in El Alto, 44% and 36%, respectively, of young persons started their sexual life between the ages of 13 and 24. Of this percentage, 40% of the surveyed persons in El Alto were 17 years old or younger at the moment of their first sexual experience and 4% of the young persons mentioned that their first sexual experience was through rape. In this group, the first sexual experience of 7.4% of the women was forced.<sup>11</sup>

Besides, we should take into account that for young persons who live in a precarious economic situation, it is difficult to access quality information; besides, they are susceptible to being influenced by harmful TV and radio programs in which sexuality is treated with very little respect. Because of the lack of information they become more vulnerable to Sexually Transmitted Infections.

Therefore, it is important to make investments in these young persons before they start their sexual life, informing them on how the virus is transmitted and how they can protect themselves.

There is no doubt as to the magnitude of this problem and the importance of this intervention, particularly in the city of El Alto.

The project is set in the context of NMA-B's Plan Alto Norte (PAN) that contemplates three basic programs: i) Human Development, ii) Economic Development and Environmental Management, and iii) Spiritual Development. In the Human Development program, the educational project is a component of school health, implementing the "Training in AIDS" project with the student population of schools in the districts of La Paz and El Alto. The project finds its origins in demands of social

organisations and administrative committees linked to the Educational Units, which arose during execution of the PAN, with active participation of the SEDES La Paz, the UDSEA and the Municipal Districts of El Alto and in response to the Strategic Plan for the Prevention and Control of Sexually Transmitted Infections and HIV/AIDS of the MSPS.

At the initiative of the pastoral office of NMA-B, in the second half of 2001, elaboration of the project was started after a study in some educational units, in which the students mentioned that they wanted to know more about Sexually Transmitted Infections, particularly HIV/AIDS.

Taking into account this aspect and behaviour of HIV/AIDS in Bolivia, especially in the cities of La Paz and El Alto, where most people are young with limited chances to receive information focusing on prevention, the parties agreed to prepare the project, with the purpose of sharing information on STIs-HIV/AIDS with secondary school students from educational units in El Alto Norte.

The process is started in 2002, as a community-based project that depends on the Development Institute as regards technical support and personnel, and two part-time employees are assigned to the project. The project operates from offices of the Institute, more or less with the required logistical support and a budget approved for 2002. The pilot project covers six educational units in El Alto.

Subsequently, another budget is approved to extend the pilot project for two years (2003 - 2004), covering 42 educational units (the 6 initial schools and 36 of the extended phase), which was monitored by two part-time employees: one from the Development Institute (missionary) and another one with a temporary contract (doctor). The project continued to be executed from the ID and depended on the time availability of the ID technician.

In April 2004, another technician (teacher) was hired to supervise the facilitators as the missionary was probably leaving in May. Later, the team is complemented with an assistant (Social Work graduate) and advantage is taken of the presence of a missionary (doctor) in support of the different project activities.

In this sense, Norwegian personnel worked in the project on certain moments as the capacities of these missionaries were taken advantage of in the different projects, according to their different fields of competence.

#### **Project summary**<sup>12</sup>

The project "HIV/AIDS City of El Alto" was implemented from 2002 to 2004 in state educational units, covering nearly 1/3 of the secondary school population, contemplating activities on training, information and actions aimed at consolidating the Strategic Health Plan (SHP) of the Ministry of Health and Social Welfare and reinforcing education within the framework of the Ministry of Education's regular study plan for secondary schools.

In this context, the objective of the project was implementing knowledge, attitudes and practices of the student population on STIs-HIV/AIDS and contributing to an improvement of the health situation in the municipality of El Alto. The project aims at reactivating the participation of students, teachers, parents and groups of young persons, implementing a training model in health services, consolidating a shared management structure around prevention and strengthening the local healthcare system.

The project is organised in two lines of action: management of the project, consisting of organisation of a Technical Managing Team composed of representatives from the state healthcare sector and NMA-B and, the training system that consists of three subsystems: structuring of work teams by levels, operation of the teams on every level and logistics regarding assigned and available materials and instruments.

Within this framework, the project was initially managed by the Development Institute.

Activities are carried out in the municipal section of El Alto. The target population are students in 42 state educational units at secondary school level, as well as teachers, parents, churches and other voluntary organisations.

#### V. METHODOLOGY OF THE EVALUATION

#### Justification of the evaluation

Evaluation processes help to improve the interventions, thus contributing to achieving outcomes of the best possible quality. This final evaluation has been carried out within the framework of a participatory model, involving all stakeholders: project beneficiaries (men and women), project decision-makers and executors and leaders from the private or public spheres.

One of the lessons learnt from the experience gained to date is that results of the combination of qualitative and quantitative methods have been better, starting from the paradigm that evaluations are about forming an opinion based on tangible evidence (facts or events), in which measurement is an indispensable and sufficient – quantitative - input for considering strengths and weaknesses of the process and for contributing to an improvement of the final product of the best possible quality.

The team of consultants has ample experience in management of all phases of the Logical Framework – Identification, Formulation, Execution and Evaluation (IFEE). This way, we have ensured the achievement of basically two results: i) a document reflecting results of the intervention and ii) installed capacity to improve the actions.

#### Overall Objective<sup>13</sup>

Make an evaluation of the first period (1.1.03-31.12.04) of the HIV/AIDS project in the city of El Alto, which has been implemented by Norwegian Mission Alliance (NMA-B) in relation to the interventions described in the project document.

Give recommendations on adjustments and changes in the project document prepared for the second project period (2005-2009).

#### Specific objectives

- Measure the degree of achievement of the project goals and objectives mentioned in the project document.
- Analyse qualitative and quantitative results in relation to the proposals contemplated in the project document.
- Assess the process and development of the project during execution in relation to the proposed results and activities.
- Evaluate the level of knowledge and satisfaction of the target group aimed at drawing conclusions on the project process and impact.
- Evaluate the internal organisation of the project and its organisation in relation to stakeholders, authorities and NMA-B.

- Analyse the aspects that enabled achievement of the results or the causes that hampered achievement of the results.
- · Assess the project methodology as regards planning, execution and participation.
- Identify together with the project team the constraints and lessons learned within the framework of project development.
- Evaluate the need for having Norwegian personnel in the project.
- Give recommendations on progress of the project upon the gradual conclusion of external support.
- Evaluate routines related to financial and accounting management.
- Make a general cost-benefit analysis, analyse the investment / beneficiary ratio and the operating cost / beneficiary ratio.

Based on its findings, the evaluation team must give clear recommendations on the changes and adjustments required in the project document for the second period of the project from 2004 to 2009.

#### **Evaluation Methodology**

The evaluation methodology shall be agreed upon by NMA-B, the project team and the external consultants hired for the evaluation.

The evaluation phase shall cover the following phases or steps:

Hiring of the team of consultants

- Direct invitation of at least three teams of professionals with experience in the field of Public Health. In the teams there will be one professional in administrative – financial matters to evaluate this specific component.
- The consultants will be selected on the basis of the quality of their proposal and the cost of their financial proposal.
- If the consultants do not submit an invoice, then NMA-B shall retain 15.5% of the total amount to cover the cost of legally obligatory taxes.
- NMA-B and the selected team of consultants shall sign an agreement to proceed with the evaluation.

#### Reporting

The final evaluation report must contain quantitative data in relation to the logical framework aimed at comparing the proposals and achievements during execution of the project, besides the qualitative data collected during the evaluation process and the survey on the achieved knowledge and satisfaction.

The final evaluation report must also contain clear recommendations on changes to be included in the new project plan as well as recommendations on other actions under the project.

#### **Participants in the Evaluation Process**

- Consultants and team.
- The technical operational team of NMA-B that participated in execution of the project.

#### Execution

The evaluation will take 20 calendar days.

#### **Expected Output**

The evaluation team is expected to produce the following products:

- A preliminary report to be submitted to NMA-B and the project team, if necessary.
- A seminar organised by the evaluation team to share its conclusions with the implementing team, project stakeholders, the funding agency and authorities of SEDES' STI program.
- A presentation of the final report in accordance with the Terms of Reference.
- A final written report to be submitted on the agreed date: two printed copies and one electronic copy.

#### **Execution of the evaluation**

#### Who carried out the evaluation

The evaluation was carried out by external consultants based on previously defined terms of reference and an agreement. The national team was composed of a Doctor Specialised in Public Health and with a Degree in Science of Education, and an Economist – Accountant with a Master's Degree in Project Formulation, Evaluation and Management. Furthermore, there was a Brazilian consultant in the team who is a Doctor specialised in Epidemiology and candidate for a Doctorate in Infectious Diseases / Tropical Medicine.

As regards internal project stakeholders, the following persons participated in the evaluation: the project implementation team, teachers-facilitators and medical staff of SEDES.

Type of Study: Descriptive and cross-cutting

Universe: The beneficiary population of 42 schools in the municipality of El Alto – Bolivia

#### Criteria for inclusion:

Neighbourhoods or zones in the different municipal districts

Geographical boundaries of the municipality

Schools outside the project – Control Group

#### Analysis unit:

Men and women who are direct Project beneficiaries.

**Sample:** Random, in every Municipal District. The following criteria were used for defining the sample:

For the value P, recent studies in Bolivia on the prevalence of HIV/AIDS for a given period, this is the value considered in the formula and value Q is the complement, possibly 0.5 for conventionality

#### Using these criteria, the formula is as follows:

$n = \frac{Z^2 PQN}{e^2 N + PQZ^2}$ Where:	n: Sample Z: Statistic for Normal distribution P: the Probability of Occurrence is 0.5 Q: Q = 1 - P e: Error N: Population
--	--

#### Sample size

With the objective of detecting the knowledge, attitudes and practices of students from the schools in El Alto where the project intervention of Norwegian Mission Alliance was concentrated, secondary school students were interviewed.

The idea was to carry out an ample survey with a sufficient number of students so as to reach statistical conclusions by comparing students from educational units that participated in the Project with students from educational units that did not participate. But this was impossible because of the political situation of the country and the resulting school holidays. Considering this contingency, house surveys were carried out in the intervention area hoping to find students from the schools where NMA-B intervened.

This way, it was possible to interview 364 students, 127 of whom from project establishments (cases) and 237 from other educational units not covered by the Project (control group). For the groups to be comparable, the following selection criteria were defined:

- Case: any student from a school covered by the NMA-B project who participated in an activity for training in STIs-HIV/AIDS.
- Control: Any student from a state school that was not covered by NMA-B and that did not participate in any activity for training in STIs-HIV/AIDS.

Students from state schools who were benefited with some type of training were excluded as this implies that they would be in the same situation as the cases (Beneficiaries).

Students from private schools were excluded as well, as it was assumed that because of their social and economic condition, they have access to multiple means of information besides a differentiated education at their schools. Moreover, their parents have higher levels of education that ensure more communication and information on topics related to STIs-HIV/AIDS.

Table No. 4
Statistical information for the sample

Variable	Value for beneficiaries	Value for the control group				
Universe*	13120	46319				
Estimated Percentage of	50%	20%				
the sample **						
Confidence	90	90				
Error	7.9%	9.4%				
Sample Size	106	49				

<sup>\*</sup> The Universe can be seen in Table No. 7

Source: Own elaboration, using the STATS statistics software for the calculation.

Of a total number of 13,120 beneficiaries, 106 persons were included in the sample, with a level of confidence of 90% and an error margin of 7.9%. Likewise, as regards the control group, the estimated universe are 46,319 persons, of which a sample of 49 were interviewed, with a level of confidence of 90% and an error margin of 9.4%, which is acceptable for this type of social studies for which the error margin is up to 10%.

#### Data gathering instrument

An instrument was prepared, which was validated with a group of 66 persons with more or less the same characteristics as the population targeted by the study. Upon validation of the instrument, a group of surveyors was trained for the house-to-house interviews.

The following basic conventionality was used:

<sup>\* \* 20%</sup> is used for the control group because at the moment of purifying, it was clear that approximately 1 out of every 5 students has not received information on or training in STIs-HIV/AIDS.

- Establish the starting point of existing information.
- Develop the data gathering instrument.
- Complement the obtained sample size
- Define and elect the students' household, defining the area of coverage of their educational unit. This way, it is possible to find students covered by the intervention as well as control students with the same characteristics.
- If the household is correctly chosen, the possibility of twists is reduced. It is important to avoid the selection of a certain household for technical convenience.
- Random sample, in which every household has the same probability of being chosen for the survey. Simple random sampling implies random selection.
- The selection criterion was being a secondary school student.

#### **Tabulation and analysis**

The survey was coded and entered into a computerised database, using the SPSS 11.5 software.

The analysis plan is based on the construction of frequencies and percentages for the project performance indicators. The qualitative analysis is based on categories classified according to interest and achievements found during data gathering efforts and the use of semi-structured instruments with different project stakeholders. The results of recordings were literally transcribed as base material for defining strengths and weaknesses.

#### Criterion for calculating the beneficiary population

The beneficiary population has rotated and the amount of training they received has increased<sup>1</sup>, in other words, the students who were trained in 2002 when they were in the first grade of secondary school have received 3 training doses by the year 2004 and are in the fourth grade of secondary school in 2005. Those who were in the second grade of secondary school or higher levels in 2002, are no longer at school in 2005 and have received 3 training doses if they were in the 2<sup>nd</sup> grade in 2002. This can be seen also in the table below.

<sup>&</sup>lt;sup>1</sup> A training dose is the annual amount of training teachers provide in every establishment, so a student receives one dose during one year, and the next dose in the next grade, and thus successively.

# Table No. 5 Training dose by year and by level

	YEARS				
Training dose	2002	2003	2004	2005*	
1			1 <sup>st</sup>	2 <sup>nd</sup>	
2		1st	2 <sup>nd</sup>	3 <sup>rd</sup>	
3	<b>1</b> st	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	
3	2 <sup>nd</sup>	3 <sup>rd</sup>	<b>4</b> <sup>th</sup>	No	
2	3 <sup>rd</sup>	4 <sup>th</sup>	No		
1	<b>4</b> <sup>th</sup>	No			

<sup>\*</sup> up to 2004, hence the doses in 2005 are not counted.

Source: own elaboration based on collected information.

With regard to the number of beneficiaries, the reference is the number of 10,272 beneficiaries, calculated on the basis of the average number of students per course per school, considering two parallel courses of 40 students: considering 4 courses of the  $1^{st} - 4^{th}$  grade of secondary school, considering 40 students in every parallel course, we have a total average number of students of 320 in every school  $^{14}$ . In fact, the number of beneficiaries is higher because beneficiaries have increased cumulatively in the schools, considering that in the first years, there were 320 beneficiaries, but this number increased in the next year when 80 new students joined the first grade. This means that over a three-year period, by the year 2004 the accumulated number of students benefited in every school totals 480. This is also clear from the table below:

Table No. 6
Accumulated number of benefited students in the years 2002-2004

2002		2003		2004	
Degrees receiving training	Students	Degrees receiving training	Students	Degrees receiving training	Students
<b>1</b> st	80	1st	80	1 <sup>st</sup>	80
2 <sup>nd</sup>	80	2 <sup>nd</sup>	80	2 <sup>nd</sup>	80
3 <sup>rd</sup>	80	3 <sup>rd</sup>	80	3 <sup>rd</sup>	80
4 <sup>th</sup>	80	4 <sup>th</sup>	80	4 <sup>th</sup>	80
		4th (2002)	80	4th (2002)	80
				4 <sup>th</sup> (2003)	80
Total Yearly				·	
Accumulation	320		400		480

Source: Own elaboration based on collected information.

In order to calculate the benefited population, the following reasoning was used, based on the collected information:

In 2002, the project has provided IEC to 6 schools, each with an average of 480 trained students by the year 2004. By the year 2004, 32 schools were benefited, each with an average of 320 students. Hence, a total number of 13,120 students have been benefited by the end of 2004.

Table No. 7
Calculation of the total benefited population

Trained schools	Number	Average no. of students	Total no. of students
Since the baseline year	6	480	2880
Year 2004	32	320	10240
Total	48		13120

Source: Own elaboration based on collected information.

#### Criterion to calculate the control population

The control group is made up of peers of the beneficiaries who were not benefited with the project IEC. For calculating this group, the estimated number of secondary school students in 2004 was used, i.e. 46,319<sup>2</sup>. Of this group, only students who did not receive any training in STIs-HIV/AIDS were considered for the control group.

#### How did we do it

- A) An evaluation process, applying instruments, interviews and meetings for data analysis, besides a revision of documents.
- B) Using participatory techniques that facilitate communication and free expression of the beneficiaries and actors of the HEALTH AND EDUCATION SYSTEM.
- C) Using recordings, aimed at reflecting the perceptions of interviewees regarding the following three questions

<sup>&</sup>lt;sup>2</sup> Own elaboration based on the number of students enrolled in the secondary cycle; calculation based on the number of enrolled students in the year 2000 (37,962 students according to the Ministry of Education); this information was used to estimate the inter-census growth rate of 5.1%, (CNPV 2001 -INE)

# 1. WHAT DID WE DO RIGHT 2. WHAT DID WE DO WRONG AND HOW DID THAT AFFECT US 3. WHAT DID WE NOT DO, WHICH WE SHOULD DO NEXT TIME

#### Methodology for administrative - financial results

To evaluate the specific objectives of the administrative – financial component, a mixed methodology will be used, combining a Cost Benefit Analysis (CBA) and a Cost Effectiveness Analysis (CEA).

- Based on the CBA, we can make an estimate of the project costs and benefits, externalities, and an approximate quantification of its social benefits: the social cost of avoiding a case of HIV/AIDS, the money saved related to treatment and the positive effect on productivity of the beneficiaries; these benefits are estimated on the basis of the characteristics and context of the population.
- The CEA will asses the impact based on the project cost in units (indicators), i.e. we will asses the obtained outcome or output units based on the resources and input assigned to every objective, results and activity. The results will be compared to national and/or international parameters of projects with similar objectives and characteristics.

This analysis will contribute to estimate efficiency, effectiveness and impact indicators: i) efficiency; overall cost / benefit parameter, cost of the investment / beneficiary, operating costs / beneficiary; ii) effectiveness; assessment of achieved versus planned results based on used and programmed input.

#### Validation of preliminary data

In order to validate preliminary data, a draft document was presented to NMA-B and the project implementing team. Together with them, in a workshop a revision was made of the first systematised conclusions regarding Strengths and Weaknesses, discussing evaluation procedures, results and methods in a technical-methodological debate. For elaboration of the final document, a second workshop was held in which the evaluation results were shared, including results of the survey. The project implementing team participated in this second workshop, as well as the external evaluators. In this workshop, the strengths and weaknesses of the evaluation were consolidated.

### VI. PRINCIPAL TECHNICAL RESULTS, ACCORDING TO EXPECTED RESULTS AND PURPOSE

#### Results of interviews with students

The results reflect the level of efficiency and effectiveness achieved in the project during the evaluated period of time. These results are shown in tables and graphs, showing percentages and frequencies. The table below shows age distribution of the interviewees.

Table No. 8

Distribution by age of the students according to intervention or non-intervention from Mission Alliance, El Alto, 2005

Age	Students a	Total				
With intervention from		on from NMA-B	Without intervention from NMA-B			
	Frequency	Percentage	Frequency	Percentage	Frequency/percentage	
15	12	11.3	2	4	14 (9)	
16	26	24.5	10	20.4	36 (23.2)	
17	37	34.9	20	40.8	57 (36.8)	
18	19	17.9	13	26.5	32 (20.6)	
19	7	6.6	4	8.2	11 (7.1)	
> 20 <u>&lt;</u> 24	5	4.6	0	0	5 (4.6)	
Total	106	100.0	49	100.0	155 (100.0)	

Source: Survey among students

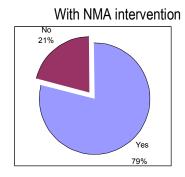
Of the 106 interviewed students in the educational units that participated in the Project, 46 (43.4%) are girls and 60 boys; 72 (68%) of them are in the 4<sup>th</sup> grade and 32 (30%) in the 3<sup>rd</sup> grade. As regards the activities, 56.6 % say they participated in fairs; 35.9% in seminars and 7.5% in courses.

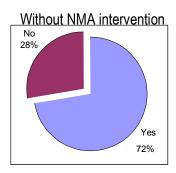
In answer to the question "Do you know any institution or organisation that provides information or training on sexually transmitted infections and/or HIV/AIDS?", two thirds of the students from the educational units covered by the Project said they know an organisation or institution.

Graph No. 2 shows the consolidated answers regarding propaganda on AIDS on TV in the group of students where NMA did not intervene; 72% said they had seen some program or other, as compared to 79% in the group where NMA intervened, i.e. a difference of 7%. This difference could be related to the fact that students covered under the project are more sensitive to this topic and therefore pay more attention to information on this topic.

#### Graph No. 2

### Student answers to the question "Have you seen any TV messages (propaganda) on HIV/AIDS from the Ministry of Health and Sports?"



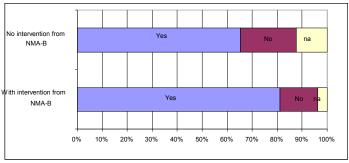


Source: Student survey

In order to evaluate the students' knowledge on this topic, the question shown in Graph No. 3 was used. The answers show a considerable better panorama among students in the educational units covered by the Project as compared to those in other educational units (Control Group).

Graph No. 3

Student answers to the question: "Do you know why people of your age contract HIV/AIDS?"

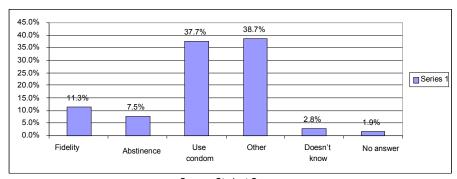


Source: Student survey

Also with the purpose of evaluating students' knowledge on the topic, the question shown in Graph No. 4 was evaluated.

#### Graph No. 4

### Student answers to the question: "Can you say what measures you should take with someone else to avoid being infected with HIV/AIDS?"



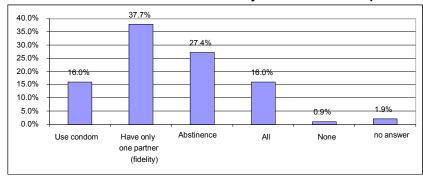
Source: Student Survey

Under the item *others*, students mention preventive values and practices such as: avoid brothels, avoid sex workers, avoid using used needles. It is important to consider that knowledge is insufficient to give rise to practices. In our environment many investments are made in IEC, but this is not linked to indicators such as age of the first pregnancy, age of the first sexual relation, use of condoms, etc. We therefore recommend measuring actions in terms of these indicators. In this sense, e.g. the National Demography and Health Survey 2003 (ENDSA 2003) shows that in El Alto the age at which adolescents have their first sexual relation has decreased by approximately 1 year<sup>15</sup>, although major investments have been made in recent years in Sexual and Reproductive Health.

In order to evaluate attitudes in students from the Project educational units, the question shown in Graph No. 5 was analysed.

Graph No. 5

### Student answers to the question: "which one of the following protection methods do you consider to be the best for a healthy sexual relationship?"



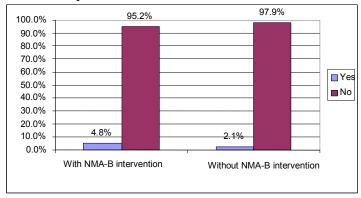
Source: Student Survey

As regards the use of condoms, 9 students (8.5%) say they use condoms and 15 (14.2%) say they do not; 81 (76.4%) of them said they do not have sexual intercourse, one did not answer the question.

Some of the relevant points in this survey are that 4.8% of all students from the project educational units said they knew someone with AIDS; in the control group, this percentage is 2.1%. This information is shown in Graph No. 6. This indicator may be related to the fact that students considered under the NMA intervention are better equipped to identify persons with STIs; besides, for these students it is easier to talk about this topic with others.

Graph No. 6

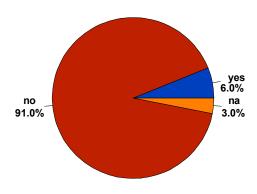
## Student answers to the question: "Do you have any friend who consulted a doctor because of a sexually transmitted infection and/or on HIV/AIDS?



Source: Student Survey

Moreover, 6% of the students are already a mother or father, as is shown in Graph No. 7. This coincides with other studies carried out in El Alto: the ENDSA 2003 showed that 5.5% of adolescent women have been pregnant<sup>16</sup>.

Graph No. 7
Student answers to the question: "Are you a mother or father?"



Source: Student Survey

In brief, this survey found students have a good level of knowledge and adequate attitudes as regards STIs-HIV/AIDS prevention and practices, because less than  $\frac{1}{4}$  (23%) said they have sexual intercourse. It is worth underlining that according to the Youth Survey in Bolivia in 2003, 36% of young people in El Alto informed having had their first sexual experience when they were between 13 and 24 years old. 17

#### The Training Model

#### **Educational Material**

The project used a diversity of support materials, such as: two types of triptychs, two manuals on STIs-HIV/AIDS, two videos, one flip-chart, radio jingles and TV spots.

#### Evaluation of the triptych.

The Triptych on values shares a series of messages. After reading the triptych, participants show awareness of the following aspects:

- AIDS can be prevented based on values
- The fundamental values are: life, love, non-discrimination of AIDS patients, fidelity in marriage, self-esteem, respect for sexuality
- You and I both need understanding and support
- Human values are important for oneself and for others
- Values and responsibility are the best means of protection against HIV
- Faithfulness to one's partner is a prime value
- AIDS does not discriminate
- Values support prevention
- The conservation of values is what I can give
- Values to avoid AIDS
- Sexual intercourse at an early age can have consequences such as HIV. To avoid this, pre-marriage sexual intercourse should be avoided

Los veleres
como prevencias
del
viriestora

**Edited Triptychs** 

Some key words were summarised, which young people and adolescents consider to be good or not recommended.

Positive	Expressions to be careful	
<ul><li>Fidelity</li><li>Abstinence</li></ul>	<ul><li>Prevention</li><li>Prevent</li></ul>	Promiscuity
<ul><li>Love</li><li>Life</li></ul>	<ul><li>Responsibility</li><li>Ignore</li></ul>	Discrimination
Comprehension	• Respect	Pressure
Marriage	Abstinence	Risks

Some aspects were also identified that are a risk for a healthy behaviour. These are mentioned below, aimed at ensuring that information and communication spaces contain clear and precise messages on these factors;

- Contagion is only sexual
- Only transmitted through sexual intercourse
- Not only fidelity for prevention
- TV and others influence my behaviour
- Very passive is alarming
- The moral approach is a problem worldwide
- The problem is of the interest of women in the couple

- Lack of information; poor quality information
- Fidelity offers absolute protection against contagion, there are no other ways of contagion
- Sexual intercourse at an early age

Control questions ratified the level of understanding and are possibly important indicators on personal behaviour. The following expressions were used:

- Abstinence and moral values
- Well-established values and fidelity in couples
- The marriage must be based on fidelity
- Orientation towards adolescents and information on fidelity
- Focus on values and fidelity to avoid HIV
- Communication must be direct and with specific solutions
- Information on promiscuity
- The more infected persons there are, the higher the possibilities of contagion
- One is responsible for one's acts and there must be a positive mentality for abstinence
- Knowing how to say no (responsibility) when the environment exercises pressure
- Fidelity and advertising
- We do not need to have sexual intercourse to be accepted, the best method is fidelity, having sexual intercourse with someone we love and who is faithful
- The social environment influences sexuality and intercourse when you reach a certain age
- Responsibility and saying 'no' can avoid many problems
- Sexual intercourse is part of a marriage
- Good source of information

Students also mentioned weaknesses in educational materials and give their perspective on what the material should focus on:

- How it is controlled, underlining how human beings feel worse over time
- More information on transmission
- Only oriented towards fidelity, although there are other ways of transmission
- More dynamic graphs should be used to attract young people's attention
- Emphasise the ways to act as regards sexual intercourse
- Show the physical and moral consequences of irresponsible behaviour
- It is only one means of support, which is insufficient

There were different types of positive opinions on the used material. The most relevant comments / messages are shown below, reflecting students' opinion on the concept of educational material

Simple and easy to read, using words that make you think

- The topic is well developed
- Interesting
- Covers an extremely important topic, as HIV is normally a consequence of sexual intercourse.

To make sure the messages are recorded in the collective unconscious of adolescents, we recommend that the messages start from actions and positive values that are socially and culturally accepted, i.e. the messages should show facts and events as close as possible to the target public's social, cultural and economic environment. Showing positive messages, people respond out of satisfaction; on the other hand, showing negative messages, people respond out of fear.

Table No. 9

Results of validation of the triptych: Sexually Transmitted Infections and HIV//AIDS

Results of Validation of the triptych. Dexidally Transmitted infections of	Test		
	Before		
Questions	reading	Test After	
	Triptyc	reading	
	h	Triptych	Difference *
a) Have you understood the message of the content?		77%	
b) Did you like the presentation?		131%	
c) Do the numbers mean anything to you?		40%	
1 Condoms are absolutely safe for protection from, STIs and HIV/AIDS?	61%	47%	14%
2 Someone with HIV/AIDS must be put into a hospital and isolated?	83%	89%	6%
3 Do you believe the use of condoms in youth has increased sexual intercourse in adolescents and			
young persons?	83%	73%	-10%
4 If someone has HIV, can the virus be transmitted by eating and drinking together?	93%	94%	1%
5 If someone has HIV, can the virus be transmitted by hugging and kissing?	93%	93%	0%
6 If someone has HIV, can the virus be transmitted by sharing the bathroom?	66%	91%	26%
7 If someone has HIV, can the virus be transmitted by breastfeeding her baby?	80%	94%	14%
8 If someone has HIV, can the virus be transmitted by a mosquito bite?	54%	87%	33%
9 If someone has HIV, can the virus be transmitted by coughing and sneezing?	81%	93%	11%
10 If someone has HIV, can the virus be transmitted by using the same clothes or dishes?	93%	94%	1%
11 If someone has HIV, can the virus be transmitted by donating blood?	100%	94%	-6%
12 If someone has HIV, can the virus be transmitted by exchanging needles or sharp objects	97%	96%	-1%
13 If someone has HIV, can the virus be transmitted by having sexual intercourse without condoms?	99%	96%	-3%
14 HIV is a virus that weakens our defences, but this does not mean we are actually ill, only that we			
are carriers.	74%	76%	1%
15 AIDS is the Acquired Immuno Deficiency Syndrome when the signs and symptoms of the disease			
appear.	81%	93%	11%
Average correct answers	83%	87%	5%**

<sup>\*</sup> The difference measures the increase in knowledge. The increased knowledge is a positive percentage.

Source: Evaluation of the Triptych

According to the results presented in a general way, we see that the readers' knowledge has improved by 5% as compared to the situation before reading the triptych. We also see that the interviewees' knowledge before reading the triptych was already good, 83%, which shows that the mass media have been able to increase knowledge in the public in general. Still, even with the new information supplied in the triptych, people do not yet assimilate 100% of the message, but only 87%.

Table No. 10 Positive answers

Type of	Te	Differ	
school	Before After		ence
Private	87%	90%	3%
State	81%	86%	5%
Difference	6%	4%	

When distinguishing between private and state schools, we see that the knowledge level in private schools is better with 87%, i.e. 6% more than in state schools.

Source: Evaluation of Triptych

<sup>\*\*</sup> rounded up to 5% (4.8%)

After reading the triptych, the knowledge level in state schools increased by 5% as compared to only 3% in private schools. Hence, we can affirm that the intervention in state schools has a deeper impact.

#### Evaluation of training manuals<sup>3</sup>.

Training manuals are a good option to reinforce the educational content both for personnel of the health systems and for teachers. Every teacher should have a "Manual on STI and HIV/AIDS". The manual should be user-friendly for didactical reasons.

It is important to underline that the manual should be adapted to the educational needs of teachers in



Picture: Used Manuals

the different schools, i.e. the manual should have guidelines for group work, didactical suggestions on how to work with material in the classroom, case studies, dynamics to improve self-esteem and self-determination and guidelines for self-learning and interactive learning based on games, with graphs reflecting positive attitudes and set in the cultural and social context of the project. This way, the manual will be very significant.

As regards the materials for mass dissemination (videos), they must contain clear messages with a maximum duration of 15 minutes, as studies have shown that young people cannot concentrate for more than 15 minutes.

TV spots and radio jingles show good levels of acceptance, and have complied with the purpose of providing information to different types of audiences; however, it is useful to generate educational material that clearly defines the target public, the message we want to transmit and the expected behaviour we hope to achieve through this means, which are to be expressed in behavioural indicators.

It is important to underline that as no IEC material on STIs-HIV/AIDS is available in services or on other levels of the MSD and as this material is very much needed, the project prepared a series of educational materials, which have been very helpful in spite of some limitations.

The triptychs and videos are meant for giving information to students of the different educational units; the triptychs were also provided to the population through the different healthcare services. The Manuals and Flip Charts with specific contents and the more specific videos have been helpful for the teachers – facilitators as didactic instruments.

32

<sup>&</sup>lt;sup>3</sup> Two training manuals were evaluated, one of which was used as bibliographical material and was edited by the Ministry of Health, and the other one prepared by the project titled "Manual on STIs and HIV/AIDS".

As regards television spots and radio jingles, these were disseminated through different popular TV and radio stations with ample coverage aimed at informing households and the public in general.

Finally, the educational materials for healthcare personnel were provided by the MSD, mainly manuals for medical personnel. In this sense, the project coordinated its activities with the national program on STIs-HIV/AIDS. These manuals were on Syndrome Management of STIs and HIV/AIDS and on Biosafety and they were distributed in events for medical updating.

#### **Supervisors**

The principal functions of the supervisors are to visit educational units, coordinate project activities, distribute materials and support administrative tasks (differentiated support only for one supervisor).

The supervisors satisfactorily carried out the following actions: organisation of Educational Fairs with active participation of the beneficiaries, planning with the technical team, priority of activities with biology teachers with previous knowledge, some instruments to encourage beneficiaries (prizes, certificates).

The perceptions on what was done wrongly are related to communication problems with teachers and the lack of human and material resources for follow-up in educational units and training courses; the non-achievement of fully committed teachers; the lack of an optimum filing and documentation system and the fact that there was no administrative office from the start that could be used as a physical point of reference.



Should they have an opportunity to improve things, they would improve the following aspects: follow-up, ensure continuity with the schools considered in the first phase, provision of a motor vehicle (motorcycle) to improve access, work more intensively with school principals, improve documentation files and improve training courses.

The training supervisory models have given the best results, as they offer an opportunity to identify attainments and lessons

learned. This supervision model can be applied always provided there is an instrument to register success and/or failure indicators. Consequently, the project must generate an ongoing education model for the supervisors, including supervision, monitoring and evaluation of the teachers' performance in the schoolrooms. The possible concrete instruments are: The notebook or file students prepare during classes, the activity timeframe the direction of every educational unit proposes, besides the general programs proposed by the educational system.

An important factor is the equipment for two management divisions of the healthcare network, with audiovisual equipment, such as TVs, VHS, overhead projectors, as well as for the Pilot Healthcare Centre (data show). This equipment is being used also in other population groups beyond the groups covered by the project.

It is important to improve the consolidation and systematisation of the fairs organised during execution of the project, as this instrument does not only provide information to the community in general and students in particular, but also enhances active participation of all stakeholders (teachers, students, parents and the community).



Picture: Educational fairs in schools

When young people feel that they are the protagonists, they do not only internalise the concepts, but they also start to feel committed to their peers and the rest of the community.

A helpful and constant means of support are educational murals or giant posters, adapted to the context of El Alto, as all schools have big walls that can be used for educational murals and/or graffiti. A drawing / design competition could be organised for these murals among the students and teachers, and a team of experts could act as the jury for subsequent painting of the best works on these spots.

When someone's work is made public, his self-esteem improves and stimulates him/her to participate in other similar events.

At present, the Pilot Centre has a Training Program in STIs-HIV/AIDS, which is offered regularly.

Healthcare personnel of the *Lotes y Servicios* Network was trained in STIs-HIV/AIDS, Epidemiological Surveillance and Biosafety in three events that took place in the course of 2003.

The activities developed on STIs-HIV/AIDS in the different Educational Units are implemented within the framework of the crosscutting topics of the educational reform, thus ensuring sustainability of the project.

#### **Management Model**

#### **Project Personnel**

Project success depends on every participant's involvement in specific and coordinated responsibilities and functions, thus generating a training space to internalise the true scope of the project. The stigma and discrimination related to a HIV/AIDS project has an epidemiological importance that must be known and acknowledged by all project stakeholders. In this context, the people who do not clearly identify the objectives to be achieved carry out their tasks without any commitment to humanitarian solidarity with the persons living with HIV/AIDS or their immediate environment.

Table No. 11
Results of Interviews with Project personnel (In percentage)

results of interviews with Fojest personner (in personage)					
Questions	Yes (%)	No (%)	Total ( %)		
Do you know the "STI/AIDS Program" executed by The Norwegian Mission Alliance	83	17	100		
Have you participated in elaboration of the final project	33	67	100		
Have you had access to the document or information	33	67	100		

Source: Evaluation survey

The personnel that worked in the project from 2002 to 2004 was composed of 2 human resources, although the specific employees changed in the different years. These persons know and identify with the project. One of them did not participate in elaboration of the project as he was incorporated only in April 2004 to replace someone else who was leaving.

It is important to underline that the activities were implemented together with two teachers-facilitators in every Educational Unit, who were responsible for training the students.

The interviews carried out as part of the evaluation also covered 2 persons who joined the project team in September 2004, besides persons from other institutions who were involved in and provided administrative support to the project. The results are reflected in statistical figure 11.

The results of interviews with project personnel show conditions that can be reverted through actions and attitudes related to the environment of NMA-B.

The performance assessment system is based on periodic reports on compliance of the goals.

As regards training of implementing personnel, 67% of all employees say they have sufficient skills prior to starting to work for the project, 17% say they do not know and 17% they have insufficient skills and they recommend hiring personnel with more experience.

It is important to stress that 83% - 5 members of the team – knows the public policies related to the project topic.

The team considers that in order to improve possible technical deficiencies in facilitators, it is necessary to diversify the training events for facilitators and strengthen follow-up and monitoring.

50% of the team considers that the limited functionality of the agreements signed with the DILOS might affect the team's activities and actions in health in the municipality. However, the non-functionality of the DILOS cannot be attributed to the project.

The team also acknowledges that medical personnel of the Pilot Centre - as the facilitators for teachers – puts a lot of emphasis on the clinical behaviour of STIs-HIV/AIDS and therefore recommends improving the strategies and methodologies to transmit knowledge using a simpler language with students.

The following principal project strengths are mentioned: The nature of the non-profit Christian institution, work with the partners, the promotion of leadership and training of facilitators. As regards weaknesses, the team mentions the following ones: the unfavourable social situation, the lack of human resources and the lack of logistical resources.

Project personnel is of the opinion that the following things were done well: knowing the educational units of the sector, achieve cooperation of Health and Education instances for coordinated IEC activities.

What they feel was done wrong is the fact that facilitators have not prepared a database and limited follow-up by the facilitators, besides the lack of full interinstitutional coordination.

Educational processes and strategic alliances should be strengthened, follow-up of the facilitators improved and actions the team would focus on a next opportunity must be summarised.

Only 33% considers Norwegian Mission Alliance is confessional, 67% does not respond.

#### **Health Personnel**

As the solution of this problem is the responsibility of the whole community through its institutions and organisations, the opportunities offered by the Pilot Healthcare Centre as regards management of STIs-HIV/AIDS at the departmental level are a strength, not only for this project but for all actions of the National Program on STIs-HIV/AIDS. The capacity they developed is available to NMA-B. This capacity was developed thanks to the interinstitutional agreement and the interrelations of both actors and which must be channelled better so it would strengthen and enhance synergy with the overall project actions.

We highly recommend describing the expected performance profiles of teachers in classrooms, of school principals and the team supervisor.

The participation of schools is an opportunity to generate a system of informants on cases of STIs-HIV/AIDS in the context of El Alto, assuming that the level of communication between students and teachers is better developed than with personnel of the health system.

Persons who are aware of "cases" remain silent to avoid stigmatization and discrimination, they "secretly" continue with their sexual practices, with the risk of transmission to their partner. In this sense, we need to build an epidemiological surveillance network based on the performance profile of teachers in classrooms; however, we must avoid overburdening the teacher with tasks that do not necessarily fall within his field of competence.

A positive attitude in health personnel was found during the interviews, the results of which are reflected below.

# Table No. 12 Results of interviews with personnel of the Pilot Healthcare Centre (in percentage)

Questions	Yes	No (%)	Total (%)
	(%)		
Do you know the project "Training in AIDS in schools of El Alto, La Paz, 2002 – 2004" executed by Norwegian Mission Alliance, NMA?	100		100
Have you had access to documents or information on this project?	25	75	100

The four persons of the training team of the Pilot Healthcare Centre know the IEC in HIV/AIDS project, as the project document was discussed

and was accessible, mainly for the director.

The four persons involved in the Project were interviewed. Health workers are aware of and acknowledge the existence of gaps between the provision of healthcare services in public services and the ways to offer healthcare services to the population in relation to sexually transmitted infections and HIV/AIDS.



Picture: Training for teachers – facilitators provided by healthcare personnel of the Pilot Centre

In order to narrow the gap between the provision of

healthcare services in public establishments and the ways to offer healthcare services to the population in relation to STIs-HIV/AIDS, the healthcare system works with IEC, but there is no specific program to develop empathy between the true needs of the population and the public health provision services model. However, the required actions are developed in coordination with other organisations.

The population in general prefers private healthcare, as they distrust public services mainly because of the lack of warmth in the services they provide and the limited resources at their disposal. To improve this situation, the idea is to improve the services through the training of multidisciplinary teams.

In the STIs-HIV/AIDS program, the idea is to improve these aspects by means of a better quality service provision in clinical healthcare, with psychological and educational support through interpersonal and private communication.

In order to avoid the stigmatization and discrimination of persons living with HIV/AIDS, health personnel responded that it is necessary to train and raise awareness in healthcare personnel, emphasizing topics such as professional ethics, and the updating of healthcare personnel.

In the departmental program on STIs-HIV/AIDS there is no system for follow-up, supervision and monitoring of the treatment of STIs. There is only a quantitative register. Healthcare personnel also states that the trained facilitators are not subject to any follow-up because of a lack of resources. This is an opportunity for intervention of the project, generating actions and instruments.

## **Evaluation matrix**

Purpose: Improve the knowledge, attitudes and practices of students in schools in El Alto.				
Verifiable Indicators 70% of the participating students have improved their knowledge, attitudes and practices related to AIDS	Results 81% of the students have knowledge, attitudes and practices in relation to AIDS	Progress 116% There was no baseline to compare with: nonetheless, the survey was used as a reference		
Source of Verification: (Source: Evaluation survey)				

Result No. 1: Shared co-management and reactivation of population segments that participate in the					
project.		T			
Verifiable Indicators	Results	Progress			
1.1. Three management	Three agreements were	100%			
agreement were signed	consolidated.				
with SEDES, DDE and the					
municipality.					
1.2. A reactivated DILOS	Outside the project scope.	Compliance of this indicator			
participated in and	canada and project couper	cannot be attributed to the			
supported Project		project as the system does not			
management.		function due to the high turnover			
1.3 Two Health Districts with		of healthcare personnel.			
		or rieattricare personnei.			
their Teams manage the	B	500/			
project in the population	Partially complied with.	50%			
they cover.					
Source of Verification: Signed agreements.					

In Result No. 1, the overall progress is 75% on average based on the different verifiable indicators.

Result No. 2: A structured system for training in AIDS is functioning in the schools in El Alto.				
Verifiable Indicators 2.1. 67% of 126 facilitators participate in the process.	Results Only 53% participated (68 facilitators)	<b>Progress</b> 79 % (from 53% to 67%)		
2.2. 70% of 13,500 trained students know 2 symptoms and signs of STIs-HIV/AIDS	81% of the students have adequate knowledge, attitudes and practices in relation to AIDS, based on a universe of 13,120	97% ([13,152 / 13,500] x100)		

2.3. 70% of the trained students know the risks and ways to prevent HIV/AIDS.	students. 81% of the students know the risks and ways to prevent HIV/AIDS.	100%; however, this indicator was exceeded in 16% (116%; 81% from 70%), as measured in the survey.	
Source of Verification: Evaluation survey, project evaluation and database.			

On average, progress in outcome no. 2 was 92%, as measured by the corresponding indicators.

<b>Result No. 3:</b> The strengthened Health District provides training in AIDS and is developing IEC.				
Verifiable Indicators 3.1. 70% of the personnel of the Health Districts has been updated in STIs-HIV/AIDS.	Results 25% of the personnel was trained.	Progress 18% (25% of 70%), this percentage is low due to the change of personnel on the moment of the evaluation.		
3.2. Implementation of audiovisual equipment in two Health Districts	Equipment of the health districts.	100%		
3.3. Adequate operation of a system to disseminate materials and input	There is a system for dissemination, which distributed materials and input among teachers.	100%		
<b>Source of Verification:</b> Interviews / Survey, Inventory of Assets in the Health Districts, Reports and available materials and input.				

Average overall progress is 73%; however, there was insufficient material to cover all benefited students.

Achievement of the results has been influenced by the following risks and assumptions:

## Matrix of risks and assumptions

Narrative Summary	Assumptions	Compliance of assumptions
Purpose: Improve the knowledge, attitudes and practices of students in schools in El Alto.	The Project was executed regularly, complying with all components.	
Result No. 1: Shared comanagement and reactivation of population	The institutions accept the terms of the agreements *.	The institutions have accepted the terms of the agreements

and the first and the first		
segments that participate in the project.	There is participation of the	Participation of the DILOS is affected by
тте ргојест.	DILOS*.	personnel turnover and the change of authorities and peers in the Healthcare System.
	There are no social problems *.	Social problems have affected the activities as they have affected the school year.
Result No. 2: A structured	The facilitators have been	The school year is not regular, during the
system for training in AIDS is	trained.	school year there have been strikes that
functioning in the schools in		obliged both teachers and students to cut
El Alto.	The trained facilitators are working *.	some activities.
		As the facilitators (teachers) had less
		time, they gave priority to their academic
	The school year is regular *.	program, with less attention for HIV/AIDS.
Result No. 3: The	Healthcare personnel	
strengthened Health District	participates regularly.	
provides training in AIDS	The budget is sufficient.	
and is developing IEC.	There is sufficient input and	
	materials on the central level.	

The technical formulation of hypothesis, assumptions or risks suggests mentioning all factors that cannot be controlled by the project; on the moment of the project formulation; variables that can be controlled by the project have been incorporated. Therefore, it was necessary to purify this, so for the purpose of analysing the risks or assumptions, those that are outside control of the project are marked with an asterisk (\*) in the table.

## The management model

The project is set in the framework of the Public Policies regarding the objectives and expected outcomes of the Strategic Plan for the Prevention and Control of Sexually Transmitted Infections and HIV/AIDS of the MSPS<sup>18</sup>.

## Objectives:

- Increase Activities related to Information, Education and Communication.
- The Population in General and vulnerable groups in particular have increased their knowledge of STIs-HIV/AIDS as well as of the ways to prevent transmission.
- The individual and collective psychological, social and economic effects on persons with STIs and persons living with HIV have been reduced.

Sils and pers	ons living with HIV have	been reduced.	

A	1

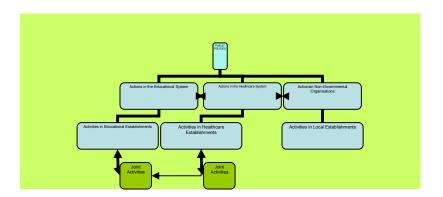
Results:

- Diagnostic of the IEC situation and the impact thereof on the population in general as regards the prevention and control of STIs-HIV/AIDS.
- The media develop IEC activities in prevention and control.
- The Ministry of Education, Culture and Sports incorporates IEC actions in prevention as crosscutting topics in the study plans of regular and alternative education.
- Development of comprehensive training programs for public and private healthcare staff.

## The project in the context of public policies

There are public policies that generally follow international recommendations, and besides, Bolivia is a signatory of many covenants and agreements. This is a fundamental opportunity from at least two perspectives: a) to strengthen the institutional response capacity by generating values added in the capacity of Human Resources (HRe) and b) to generate and raise funding within the perspective of sustainability of the actions and activities.

Graph No. 10
Flow of actors for complying with Public Policies



Having knowledge of the installed capacity in the country in terms of Public Policies and sources of funding, the institution can:

- raise awareness among individuals and organisations regarding their obligation to comply with laws and hence, Human Rights (HRi).
- acquire tacit knowledge of the problem and constantly learn from recent experiences.

- become an actor of change, thus contributing to overall Public Polices from their sphere of activity and with concrete actions.
- be a bridge between the healthcare and the educational systems.

## **Project formulation**

The Project was formulated in the context of NMA's Plan Alto Norte, set in the framework of the prevailing public policies at that time. A diagnostic was carried out to define the structure of objectives and indicators. However, no studies were carried out on social and anthropological aspects of the beneficiaries. The acknowledgment of primary healthcare is not sufficient if it is not complemented with concrete actions, e.g. constantly insist with the public healthcare system and other donor agencies that operate in El Alto.

The project aims at being an extensive intervention. However, the short-term achievements can neither be attributed to the project nor generate a change of conduct that ensures transmission of the acquired knowledge to future generations. Consequently, in the second project phase it will be necessary to analyse whether the intervention model should not be more intensive instead of extensive.

#### VII. PRINCIPAL ADMINISTRATIVE - FINANCIAL RESULTS

#### **Budget execution**

In 2002 – 2004, the Project executed an amount of USD 65,937, 51% of which corresponds to Expenses in Human Resources (34% professional fees and 16.9% Technical Team). This high important investment in HRe is understandable as this is an IEC project. The remaining 49% corresponds to miscellaneous expenses: 39.9% is for activities related to dissemination and training materials<sup>4</sup>.

## Table No. 13

<sup>&</sup>lt;sup>4</sup> There is a series of overheads that were not considered, e.g.: administrative expenses incurred by the office of NMA-B or the costs of missionaries estimated at USD 8,982 in the Missionary Budget for 2005.

## Budget execution by accounting items - 2002- 2004 (in USD)

				% of execution in relation to		
Description	Total budget	% in relation to the total budget	Total execution	the total amount	Difference	Percentage of execution
Value of origin						
Basic salary	11250.00	15.6%	0.00	0.0%	11250.00	0.0%
Professional fees and others	14990.00	20.8%	22416.43	34.0%	-7426.43	149.5%
Transportation	400.00	0.6%	67.65	0.1%	332.35	16.9%
Technical team	12050.00	16.7%	11140.96	16.9%	909.04	92.5%
Office supplies and stationary	1000.00	1.4%	155.14	0.2%	844.86	15.5%
Fuel and lubricants	1000.00	1.4%	0.00	0.0%	1000.00	0.0%
Expenses vehicles –tickets General repairs and maintenance	2900.00	4.0%	1471.27	2.2%	1428.73	50.7%
General expenses and unforeseen expenses	1691.00	2.3%	4364.92	6.6%	-2673.92	258.1%
Total investment in dissemination of activities in the AIDS project *	26719.00	37.1%	26320.94	39.9%	398.06	98.5%
Total	72000.00	100.0%	65937.31	100.0%	6062.69	91.6%

<sup>\*</sup> To ensure comparability of the budgets, for 2002 the accounts Input and Dissemination Materials are added up, for 2003 this is maintained and for 2004 the account Investment in dissemination activities and equipment and furniture.

Source: Own elaboration based on the Budget Execution (See Annex: Budget Execution by accounting items).

## Results-based budget execution

The formulated and executed budget shows that it has not been possible to execute the entire budget available for R1 and R2, in which only 21% and 74% were executed, respectively. In the case of R3 we see that budget execution amounts to 201%, which shows that considerable resources were destined to strengthening of the Health Districts<sup>5</sup>.

5	Today	Healthcare	Networks

## Table No. 14

## Results-based budget execution 2002- 2004 (In USD and in percentages)

				CROSSCUT	
Areas	R1	R2	R3	TING	TOTAL
Budget 2002 - 2004 (USD)*	990,34	12117,72	7096,78	51795,17	72000,00
Percentage of the total budget	1%	17%	10%	72%	100%
Executed budget 2002 - 2004 (USD)	207,79	8968,37	14269,54	42491,61	65937,31
Percentage of the total executed budget	0%	14%	22%	64%	100%
Difference between the budget and execution (USD)	-782,55	-3149,35	7172,76	-9303,56	-6062,69
Percentage of execution in relation to the budget	21%	74%	201%	82%	92%

- The exchange rate in December was: 1 USD = 6.83 Bs., Source: Central Bank of Bolivia
- \*\* Crosscutting means that the expense does not correspond to a specific item but affects all results
- R 1: Result: Shared co-management and reactivation of population segments that participate in the project.
- R 2: Result: A structured system for training in AIDS is functioning in the schools in EI Alto.
- R 3: Result: The strengthened Health District provides training in AIDS and is developing IEC.

Source: Project accounting information

In a horizontal comparison, i.e. the total amount of resources allocated to every result, most resources were allocated to and executed in crosscutting items, mainly Human Resources. We see that 17% of the budget was assigned to R2, however, actual execution was lower at 14%. When we look at the detailed information of this Result, we see that spending was the lowest in training.

We see that upon conclusion of the project, the highest executed budget item was the crosscutting item - including Human Resources - with 64%.

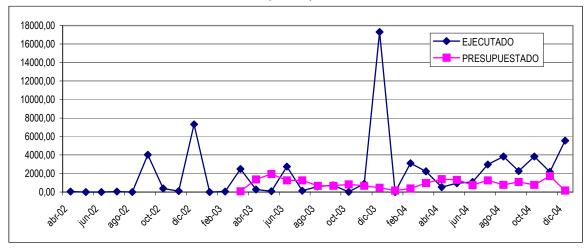
## Chronology of budget execution

During formulation of the Project and at the beginning of the annual activities except in 2004, budget execution is not programmed. Considering this weakness, based on the initial activity timeframe a theoretical budget execution curve was developed. Another weakness is that when the project was formulated, there was no detailed budget per activity. Rather, the necessary resources for executing the activities and obtaining results were quantified very generally.

A comparison has been made of the programming curve with the execution curve, which shows that execution is not necessarily as recommended. Nonetheless, the explanation of this is that in the "peak" months, the most important investments were made in equipment, dissemination and professional fees, which did not correspond to the programmed curve. We also see that in 2004, execution is nearer to programming, which shows that programming has improved.

The months with the lowest levels of execution in the last two years are January/03 with USD 0, February/03 with USD 44.64, October/03 with USD 14.35 and January/04 with USD 7.19. This is because of the social conflicts and convulsion in the country in those months, which also explain the difficulties for executing the budget.

Graph No. 11
Planned and executed budget
2002 - 2004
(in USD)



Own elaboration

Source: Financial Documents of the Project.

## Cost - Benefit analysis

There are costs generated by the Project, but which are not registered in the accounts as they are assumed by society as a whole, e.g. the costs related to participation of public sector employees from the healthcare and education sectors, infrastructure, etc. These costs must be monetised considering the importance they have in the project.

- There have been two training workshops for teachers, which in case an institution had been paid for facilitation could have cost USD 1,000 each per three-day workshop, totalling USD 2,000 for the two courses.
- Assuming that a teacher is paid on average USD 3 per academic hour / per parallel course, and that the project has required at least 10 academic hours per parallel course and that there are about 8 parallel courses in a school and that 6 schools were covered from 2002 to 2004 and 32 only in 2004, we reach a total cost of USD 12,000.

Table No. 15
Approximate level of training costs

Schools per year	Number of schools	Number of courses	Number of academic years	Costs per academic hour	Average hours	Total
Base year	6	8	3 (2002-2004)	USD 3	10	4320
Year 2004	32	8	1 (2004)	USD 3	10	7680
Total						12000

Source: Own elaboration based on collected information.

Based on the mentioned assumptions we can affirm that the cost of training totalled USD 14,000.

## Approximation of benefits

The benefits for savings related to the treatment of persons were estimated on the basis of country information and the number of persons trained by the project, subject to the following assumptions:

- The probability of contracting AIDS, based on the estimated number of cases in the country is 0.1% (10,000 / 8,000,000). Considering this ratio, we can assume that the Project has avoided that at least one person contracts AIDS.

- Statistics show that the beneficiary population is 16 years old on average. If we assume that this person will have the virus when (s)he is 32 years old and considering a life expectancy of 65 years, we can infer that this person would have to use antiretroviral medication during 33 years.
- The cost of the treatment is USD 3,500 per year, totalling USD 115,500 during the mentioned 33 years.
- If this person cannot work due to discrimination or because his/her self-esteem is very low, or if the virus has affected his/her productive capacity, (s)he would no longer have an income. If we consider that the minimum national salary is USD 50 / month, then this person would no longer earn USD 600 a year, i.e. USD 19,800 in 33 years.

Besides, we should consider invisible costs (which are difficult to assess), such as:

- The time used to care for a patient.
- The dedication of the patient's relatives which means that they have to sacrifice productive and recreational activities, and which also have a cost.

As the project has not only focused on schools, but has also informed the community of El Alto through the mass media (TV and radio), we can affirm that the achieved benefits have been considerable.

## Savings for the Government related to treatment

The cost of treatment / year of a patient with HIV/AIDS is estimated at USD 3,500. Even though this cost has decreased, it is still a high cost for the population and for the government in case the government assumes responsibility for the treatment. Anyway, this cost — covered by the government, the individual or an institution — implies a cost for society as a whole as these resources could be used for something else. Besides this social cost, there is a cost related to the loss of this person's productive capacity which means that (s)he no longer earns the income (s)he would generate if (s)he were healthy.

It is important to underline that the savings through prevention are considerable, because for every case that is prevented savings for society amount to USD 3,500 a year ("society" because this cost is absorbed by either the government or the individual). Estimates are that this cost could be reduced to USD 350 yearly depending on the agreements as the Bolivian government might enter into. Still, a life does not have a cost and even though there are treatments for AIDS, the cure has not been found as yet.

## **Cost - efficiency**

The cost efficiency analysis shows us that the cost for executing the project aimed at training 13,210 students was approximately USD 65,937.31, i.e. an average cost per student of USD 4.99. The total cost including social costs was USD 79,937, i.e. a total cost of USD 6.05 per beneficiary.

Originally, the project planned to train 13,482 students with a total amount of USD 70,000, i.e. USD 5.19 per student. Upon conclusion of the project, 13,210 students had been trained at a cost of USD 4.99, which means that the project resources have been used efficiently.

#### Other results

- Interviews were carried out with and instruments applied on 100% of the personnel involved in the Project.
- 100% of the interviewees establish the level of satisfaction in execution of the project.
- In 100% of the leaders linked to the project, the level of knowledge and participation was identified, besides their perception of the project.
- 80% of the project implementers have adopted the educational project evaluation methodology as a value added of the consultancy.
- There have been two training workshops for implementing personnel.

## Limitations of this analysis

For the purpose of this study, all students from secondary schools in El Alto where at least one teacher was trained and develops an activity with them on this topic were considered as exposed students.

Besides, probably various other interventions on this topic (including NMA's activities such as propaganda on radio and TV) are taking place in El Alto, so it is difficult to define who was and who was not exposed. In other words, it is difficult to establish a control group for the purpose of comparison and, based on a probabilistic sample, it is difficult to make statements on statistically significant differences between both groups. The evaluation considered that unexposed students were all those from secondary schools in El Alto who said they did not participate in activities on this topic in their school in the period in which the Project was developed.

Considering these definitions, various interviewed persons were not considered eligible. As this is a descriptive study, it is useful to convert this into a baseline for future interventions.

#### VIII.CONCLUSIONS

The evaluation team has no doubts as to the value of the implemented activities and the fact that continuation of the Project in the area is indispensable. Therefore, the conclusions described below will be helpful for implementation of the second phase.

## Conclusions regarding the management model

The Project was formulated in the context of NMA's Plan Alto Norte within the framework of public policies. A diagnostic was carried out for structuring the objectives and indicators. However, no studies were carried out on social and anthropological aspects of the beneficiaries.

Follow-up and monitoring were supposed to be responsibilities of local healthcare personnel. Nonetheless, because of the limited resources, the size of the area and the lack of means of communication and considering that the STI program did not carry out any follow-up actions either, the scope of this activity was limited. Therefore, follow-up and monitoring of the project were limited, which hampered optimum execution of the project

Much patience is required with public instances as their answers are very slow. Still, as part of the project, agreements were signed with partners of the healthcare and education systems as well as operational agreements with local services and a strategic alliance with the CSP. Hence, sustainability is probable.

The cost-benefit analysis shows us that the cost for NMA-B executing the project aimed at training students is low compared to other experiences. The total cost includes the social costs, which supposes efficiency in use of the project resources, with a low total cost per beneficiary.

During execution of the project, various circumstances somehow hampered a better process: limited infrastructure, limited project visibility, insufficient human resources for executing the project, social and political conditions affecting regular execution of the project. However, in spite of these conditions, results are acceptable.

Acceptance of the project in educational units is good; the project has become part of the institutional culture of the schools, particularly at the level of school principals and teachers.

Studies that contribute to the project and society in general have been promoted, generating reliable information as a resource for subsequent studies or decision-making.

The project adequately channelled resources destined to the vulnerable population of the intervention area.

#### Weaknesses:

There were no definitions as regards the minimum number of teachers who had to be trained per school, the required number of hours of work in the topics and the minimum activities to be developed for affirming that the school participated in the Project.

There is no system for monitoring and evaluating performance of the Project / personnel and competence and functions of the superstructure (which affects the budget).

There is no precise information on "why we intervened" in the community.

During execution, the project had no infrastructure.

During execution of the project, various circumstances somehow hampered a better process: limited infrastructure, limited project visibility, insufficient project resources.

Sustainability of the project is doubtful if the weaknesses and the model are maintained.

No effective counterparts are visualised.

Limited visibility of the project.

The indicators for evaluating the process, structure and results are very fragile.

#### Conclusions on the training model

#### Strengths:

The training provided to Facilitators in the Pilot Health Centre (CSP), which is the centre of reference for training in STIs-HIV/AIDS of the Ministry of Health and Sports, consists of intensive two-day courses, which are strengthened with other events such as healthcare fairs.

At the level of the educational units and the population of El Alto, beneficiaries have accepted the project as something positive, mainly because of the institutional response to the training needs mentioned by students and school councils and because of the confidence the community has in the institution.

The project is taking advantage of the opportunities of the Pilot Health Centre, which are a strength not only for this project but for all actions in this field. The capacity developed by this centre is at the disposal of NMA-B because of the strategic alliance we have entered into.

Participation of the schools is an opportunity to generate a system of informants on the cases of STIs-HIV/AIDS in the context of El Alto, assuming that the level of communication between students and teachers is more intense than with personnel of the healthcare system.

Trained professionals liked the opportunity to acquire more knowledge of this topic and for school principals, it was a satisfaction to have well prepared teachers.

Professionals adequately applied what they learned and they carried out different types of activities with students on this topic.

The Pilot Health Centre is open to supporting overall project actions and activities of the facilitators – teachers.

#### Weaknesses:

The training model centres on the manual, which is insufficient.

No awareness raising activities have been planned with parents and probable project partners.

Training courses for project implementing personnel and local healthcare professionals have been weak.

There is no performance profile of the teacher – facilitator.

Performance of the teachers - facilitators has not been followed up.

There is no "incentive" for quality execution at the level of teachers – facilitators.

The material is not set in the context and does not respond to the reference framework of the project.

## Conclusions regarding educational material

## Strengths:

The Project has produced different types of materials for every segment: triptychs and videos, for students (the triptychs were distributed to the population through the different healthcare services), manuals – guides, flip charts with specific contents, and videos. The teachers – facilitators used this material as didactic instruments.

The educational material prepared by the project was well received by the population. People used the following positive expressions with reference to this material: well prepared, easy and reader-friendly, the used words make one think. The topic is adequately explained. Interesting. HIV, the topic covered in the material is very important.

The TV spots and radio jingles, with mass dissemination through the different means of communication for ensuring access to the population in general, were generally accepted and have complied with their purpose of providing information to different publics.

The selected topics were adequate (values and STIs-HIV/AIDS).

The educational material prepared by the project was acceptable to the population.

Weaknesses:

There were few triptychs (less than the estimated target public).

The videos are very long.

No detailed manuals on this topic were prepared for students.

Some drawings are not adequate for adolescents. Example: say that HIV is not contaminated through bathing suits (intimate pieces of clothing, the sharing of which should not be recommended anyway).

The materials were not validated with students, mothers and fathers, teachers and professionals of the healthcare sector.

#### **General Conclusions**

Results of the survey on knowledge, attitudes and practices have shown adequate results for these three variables related to the prevention of STIs-HIV/AIDS, as 77% stated they had not had sexual relations and only 23% stated having had sexual relations. According to the Youth Survey in Bolivia 2003, 36% of the young people in El Alto informed that they had had their first sexual relation between the ages of 13 and 24. This confirms good practices as regards their sexual and reproductive health. However, the high percentage of young persons who said they already were a mother or father (6%) is worrying.

#### IX. RECOMMENDATIONS

## **Project management**

The Project focused on being an extensive intervention. Nevertheless, the short-term achievements cannot be attributed to the project, and neither can the generation of changes of conduct that ensure transmission to future generations. Consequently, it is necessary to consider coverage of the second project phase and analyse whether the intervention model should not be more intensive instead of extensive.

This conclusion shows the importance of having a monitoring and follow-up system, in which the institution must assume this responsibility as a joint activity, recommending the application of this type of instruments to STIs-HIV/AIDS.

It is important to underline that actions as those carried out by the project are not sufficient if they are not complemented with concrete actions, e.g. constantly insist with the public healthcare system and other donor agencies operating in El Alto to ensure sustainability through Strategic Alliances.

It is necessary to define a functions and procedures manual that refers to the Project at all levels, including the definition of a minimum group of teachers and the planning of actions in every school and criteria for monitoring, as well as for coordination of the project, with periodic progress reports.

The implementing team must be strengthened. Because of the distances between the educational units and the number of students, we suggest that every supervisor be responsible for a maximum of 10 educational units and that the coordinator have a direct advisor to support his activities.

The project should be widened to students of 10-12 years old; in other words, primary school teachers must be trained in all educational units of El Alto. We should not forget that young persons start their sexual life early and hence, they need to be prepared and have knowledge on this topic.

It is necessary to include the local level. A representative of the healthcare service must be trained and must participate in actions developed by the schools to thus ensure creation of a reference healthcare system and provide timely medical attendance.

It is necessary to enhance the participation of parents in the project. Parents must know the Project objectives and the investment of NMA in health, so that they will support the activities. It is important to "break the ice" and talk on sexuality with participation of the families. Parents must know all materials that will be used with the children.

We recommend finding partners in the community.

It is necessary to define measurable, applicable and adequate indicators to evaluate the structure, the process and the impact (outcomes). This evaluation can be used as a baseline for continuation of this Project.

Implementation of a laboratory in El Alto is an urgent need to facilitate the epidemiological control of HIV/AIDS linked to the public healthcare system, thus ensuring sustainability.

## **Training**

Training must include important topics such as sexual violence, pregnancy of adolescents and drug addiction. According to the Youth Survey in Bolivia 2003, 4% of the young persons who started their sexual activities between the ages of 13 and 24 mention that the first sexual experience they had was through rape. In this group, the first sexual relation of 7.4 % of the women was a forced relation. Besides, 2.5% of the population in this age group in El Alto stated they had already used drugs. As regards pregnancy, 6% of the 106 interviewed students in schools where Norwegian Alliance intervened are already mothers or fathers.

The training provided to Facilitators of the Pilot Health Centre on STIs-HIV/AIDS is intensive and covers two days. Hence, the recommendation is providing ongoing training with updating workshops every six months. These updates could be shorter, about four hours.

The training supervision models have shown positive results as they are an opportunity to identify positive attainments and lessons learned. This model can be executed only provided there is an instrument that can be used to register performance indicators.

The training model must consider the youth protagonist strategy.

Training courses must include and integrate professionals in the fields of healthcare and education.

A model for awareness-raising must be generated.

It is necessary to define and create collective awareness among project participants on "Why we are intervening in the community".

### **Educational materials**

Although the educational materials prepared by the project are considered adequate, some materials such as the triptychs and the videos must be set in the context to have a greater impact in the student population. This recommendation was already being implemented on the moment of the evaluation through the adjustment of materials.

A sufficient quantity of printed educational materials such as posters, cards and triptychs must be available; in other words, there must be more materials than the number of beneficiaries so that students would have sufficient material to distribute among their peers, thus enhancing the protagonist role of youth.

Students need more detailed information material on STIs and AIDS; we recommend preparing manuals for them.

We recommend developing a quality control plan for educational materials (validation with adolescents, parents and professionals in healthcare and education before the material is printed; with subsequent measurement of results).

The materials must emphasise solutions and not consequences, i.e. they should not make adolescents afraid but rather underline the importance of affective, stable and respectful relations.

We recommend making sure that the drawings and messages be "nice", positive and enhance solidarity and healthy activities such as sports and a protagonist role for youth.

As regards movies and videos, these materials should contain objective, clear messages for the public to be reached and they should be short (not more than 15 minutes, as this is the maximum time during which the attention of youth can be drawn). After the presentation, there could be a talk or a discussion on the topic with the students.

The principals of two schools informed us that they have a DVD, so this means that not only VHS tapes should be produced but also CDs for DVDs.

We recommend that the messages focus on positive actions and values and that they be culturally and socially acceptable, i.e. the messages should reflect events and situations linked to their socio-cultural and economic environment. It is a fact that if people are shown positive messages, they respond from a perspective of satisfaction, whereas negative messages cause fear-related reactions.

In order to achieve a protagonist role of students, it is important to strengthen the educational fairs and document the results so as to draw lessons.

It is highly recommendable to generate collective awareness of self-care practices and to organise pedagogical competitions, such as drawing competitions, converting the drawings into murals in the schools or even in community spaces.

Training manuals are a good option to reinforce the educational content both for staff of the healthcare system and for teachers. Hence, we recommend that every teacher have a "Manual on STIs-HIV/AIDS". The manuals should be user-friendly.

In the context of El Alto, another useful instrument is educational murals or giant posters, particularly considering that the schools have big walls that offer opportunities for educational murals and/or graffiti. These murals could be selected through drawing competitions on the topic. A group of experts would then select the best drawings for reproduction on the walls.

### Administrative – financial aspects

The "real" budget per activity must be defined.

More resources must be assigned to production of the graphical material to be distributed among the adolescents.

Improve the budget execution and avoid fund deviations.

Prepare approximations by monetizing local counterpart contributions.

## Complementary impressions of the evaluation team

In general, we consider that the Project has attained the objectives proposed for the project period. Below, we have reproduced some of the impressions of school principals, teachers and students:

#### School principals:

"In my opinion, the most important part of the Project is training my teachers, I wished all of them had been trained in the topic and not only some teachers from the secondary level".

"I would like to have some material with pictures on STIs to teach the students".

#### Teachers:

"It is very important to discuss this topic with the students, Last year, two young girls told me they were pregnant. I would like to have more material to give them".

#### Students:

When asked what AIDS is:

"It is the Human Immunodeficiency Syndrome that makes that someone's body no longer has defences".

When asked about other STIs:

"Sexually transmitted infections such as gonorrhoea and syphilis".

With this Project, Mission Alliance is giving these young persons an opportunity to acquire indispensable knowledge and make informed decisions and live their life in fullness and with health.

#### X. BIBLIOGRAPHICAL REFERENCES

Webpage: www.elalto.galeon.com/elalto.htm

- <sup>2</sup> INE (National Statistics Bureau), Estadisticas de la ciudad de El Alto 2005, en base a el CNPV 2001 (Statistics of the city of El Alto 2005, based on the National Population and Housing Census 2001), La Paz Bolivia 2005.
- <sup>3</sup> INE (National Statistics Bureau), Estadisticas de la ciudad de El Alto 2005, en base a el CNPV 2001(Statistics of the city of El Alto 2005, based on the National Population and Housing Census 2001), La Paz Bolivia 2005.
- Webpage. www.elalto.galeon.com/elalto.htm
- World Vision Bolivia. In: Aproximandonos. Belo Horizonte, 2004
- 6 UNAIDS, Epidemiological Fact Sheets, On HIV/AIDS Sexuality Transmitted Infections, 2004.
- Barroz Alto Rildo Alex, SEgales Apaza Jaime Donato, Thesis "El alcance geográfico de las políticas de capacitación sobre el VIH SIDA en el nivel secundario Zona Norte de la ciudad de El Alto" (The geographical scope of training policies in HIV/AIDS at secondary school level Zona Norte city of El Alto), with support from NMA-B, La Paz Bolivia 2004.
- Ministry of Health and Sports, Plan Estratégico de Prevención y Control de las Infecciones de Transmisión Sexual VIH/SIDA 2000 2004 (Strategic Plan for the Prevention and Control of STIs-HIV/AIDS 2000 2004), La Paz Bolivia 2000.
- Ministry of Health; Sistema Nacional de Información en Salud SNIS (National Health Information System), La Paz – Bolivia 2005
- World Vision Bolivia. In: Aproximandonos. Belo Horizonte, 2004-
- GTZ, PROYECTO SALUD REPRODUCTIVA NACIONAL (National Reproductive Health Project), "Encuesta de Juventudes en Bolivia 2003" (Youth Survey in Bolivia 2003), La Paz Bolivia 2003.
- IDMAN, "Proyecto Capacitación en SIDA, en colegios del Alto de La Paz, 2002 2004" (Training Project in AIDS in schools in El Alto, La Paz, 2002 2004), El Alto -La Paz Bolivia 2002.

- NMA-B, Proyecto Capacitación en SIDA, en colegios del Alto de La Paz, 2002 2004 (Training Project in AIDS in schools in El Alto, La Paz, 2002 2004), "Terms of Reference". La Paz Bolivia 2005.
- MSPS quoted in: IDMAN, "Proyecto Capacitación en SIDA, en colegios del Alto de La Paz, 2002 2004" (Training Project in AIDS in schools in El Alto, La Paz, 2002 2004), El Alto La Paz Bolivia 2002: Annex.
- INE (National Statistics Bureau), "Encuesta Nacional de Demografía y Salud 2003" (National Demography and Health Survey 2003), Ministry of Health and Sports, La Paz-Bolivia 2004.
- INE (National Statistics Bureau), "Encuesta Nacional de Demografía y Salud 2003" (National Demography and Health Survey 2003), Ministry of Health and Sports La Paz-Bolivia 2004.
- GTZ, PROYECTO SALUD REPRODUCTIVA NACIONAL(National Reproductive Health Project), "Encuesta de Juventudes en Bolivia 2003" (Youth Survey in Bolivia 2003), La Paz Bolivia 2003.
- Ministry of Health and Sports, Plan Estratégico de Prevención y Control de las Infecciones de Transmisión Sexual VIH/SIDA 2000 2004 (Strategic Plan for the Prevention and Control of STIs-HIV/AIDS 2000 2004), La Paz Bolivia 2000.

#### XI. ANNEXES

- Annex No. 1: Map of the city of El Alto.
- Annex No. 2: Principal Question and Working Questions of the Evaluation.
- Annex No. 3: List of proposed documents for consultation.
- Annex No. 4: List of consulted documents and input.
- Annex No. 5: Survey for students.
- Annex No. 6: Instrument to interview school principals.
- Annex No. 7: Instrument for facilitators.
- Annex No. 8: Interviews with SEDES personnel.
- Annex No. 9: Interviews with project personnel.
- Annex No. 10: Instrument for validating educational material.
- Annex No. 11: Strengths and weaknesses of the training model.
- Annex No. 12: Strengths and weaknesses of the management model.
- Annex No. 13: Strengths and weaknesses of the project formulation.