JFPR-9006: "Community Action for Preventing HIV/AIDS Cambodia, Laos, Vietnam

# A Summary of the Project Implementation and Results ADB Regional HIV/AID Project 2001-2004

Japan Fund for Poverty Reduction



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ADB's Regional HIV/AIDS Project 2001-2004

#### A Summary of the Project Implementation and Results

#### HIV in the Mekong Sub-region

HIV/AIDS is a significant public health problem in all three countries. In Cambodia HIV prevalence rates have fallen from 2.6% to 1.9% among adults aged 15-49<sup>1</sup>, but remain among the highest in the region with some 123,000 people living with HIV. In Vietnam, while national prevalence is still low, HIV has been reported in all provinces and is relatively high, over 10%, among sex workers and injecting drug users - two key high risk groups. In Laos prevalence is still very low, and is largely confined to the two larger cities (Vientiane and Savannakhet) yet STD rates among service women are very high in a number of provinces, and Laos' relatively porous borders with Thailand and Cambodia suggest significant vulnerability<sup>2</sup>. In the case of Cambodia and Vietnam, HIV has spread sufficiently that both countries need strong, grass-roots prevention programmes to ensure it does not spread more widely, and will face significant burdens of care as those already infected progress towards AIDS. In Laos, there is an opportunity to contain the spread of HIV.

The project was based upon the assumption that significant levels of population mobility, both within and between the three countries, and largely confined to specific population groups such as sex workers, construction workers, fisherman and transport workers, both created significant vulnerability to the spread of HIV, and also created significant opportunities to target cost-effective prevention interventions at these groups and at specific situations<sup>3</sup>.

# JFPR 9006: "Community Action for Preventing HIV/AIDS"

The Project, JFPR 9006: "Community Action for Preventing HIV/AIDS" in Cambodia, Laos and Vietnam was funded from a grant from the Japanese Fund for Poverty Reduction, managed by the ADB, of \$8 million for a period of 30 months (July 2001 to December 2003). \$2.2 million was to go to Cambodia, \$1.4 million to Laos, and \$3 million to Vietnam; an additional \$1.4 was allocated for regional management and support.

#### **Project management**

In each country there was an Executing Agency and an Implementing Agency. The Executing Agencies were Ministry of Health Departments (or in the case of Vietnam the National Committee for Population and Family Planning) who were currently engaged in managing ADB loans, and so had adequate experience in ADB procedures to be able to get the project started quickly, and then ensure regular, timely, transparent and accountable management of the grant funds. The Implementing Agencies were the departments within the three Ministries of Health responsible for the three national HIV/AIDS Programmes: the National Centre HIV/AIDS, Dermatology and STD for (NCHADS) in Cambodia, the National Committee for the Control of AIDS Bureau (NCCAB) in Lao PDR, and the AIDS Division of the Ministry of Health in Vietnam.

<sup>&</sup>lt;sup>1</sup> The 2003 round of sentinel sero-surveillance (NCHADS 2004)

<sup>&</sup>lt;sup>2</sup> See project website for further details: www.jfprhiv.org.

<sup>&</sup>lt;sup>3</sup> See http://www.jfpr-hiv.org./ProjectDocuments.htm for all basic project documents.

#### Project implementation

Funds were allocated for the implementation of a specific set of HIV/AIDS prevention activities in selected provinces in the three countries: four (Battambang, Koh Kong, Prey Veng and Svay Rieng) in Cambodia; three (Khammouane, Oudomxai and Savannakhet) in Lao PDR, and five (Lai Chau, Quang Ti, Dong Thap, An Giang and Kien Giang) in Vietnam. A Regional Project Office was located in Cambodia, drawing on the expertise of four part-time international consultants; the project was back-stopped from ADB Manila. After two years of implementation, at the Mid Term Review in November 2002, it was agreed to extend the project, at no extra cost, for a further one year to the end of December 2004. By June 2005 all project funds had been disbursed

#### **Country responses and project focus**

The response to the HIV/AIDS epidemic in the three countries has been uneven. Although all three countries have established provincial national and organizational structures to develop a multi-sectoral response to HIV/AIDS, these organizations require further strengthening, especially with regard to decentralizing implementation of nationally designed and approved strategies. In addition, perhaps the biggest constraint these HIV/AIDS programmes face has been lack of financial resources. The project had therefore to address the specific challenges of strengthening the organizational capacity of programmes national to the utilize significantly increased levels of funding, and as close to the grass-roots as possible.

In addition, in both Cambodia and Vietnam sufficiently large numbers of people are already infected that significant burdens of care for people living with HIV and AIDS (PLWHA) are starting to present themselves, in what are essentially either still weak health care systems, or systems starting to undergo significant change. Because of the nature of the spread of HIV in these countries (primarily through sex work or injecting drug use) much of the initial care burden for HIV and AIDS will tend to occur among marginalized or poorer groups, whose access to health care is already restricted. In addition, care and treatment possibilities for HIV and AIDS are developing dramatically, especially with the development of relatively cheap and effective antiretroviral drugs. In these circumstances, the project provided an ideal opportunity to help develop and pilot models of HIV and AIDS care.

Finally, as substantial increases in funding start to become available for HIV/AIDS in the region, and national programmes start to scale up, robust and credible evidence of which kinds of interventions are effective, what sort of scale they need to be implemented on, and the organizational and institutional support necessary for them to be implemented in a timely and efficient fashion, is essential. The project, through a strict monitoring and evaluation design, was in a position to contribute significantly to the collection of this kind of evidence.

#### **Project Goal and Objectives**

The goal of the Project was to reduce HIV transmission among mobile groups of people, migrants, and source and host communities in the three countries in order to decrease the impact of the HIV epidemic in the region.

#### **Project objectives**

The Project aimed at achieving the following objectives:

- To support a comprehensive set of HIV/AIDS prevention activities in situations of particular risk ("hot spots");
- To strengthen the capacity on national and local HIV authorities and selected NGOs to develop community-based prevention and care programme.

With the following specific objectives:

In selected provinces within each country to:

- increase knowledge on HIV/AIDS and gradually change the people's behaviors toward HIV/AIDS prevention, specifically targeting identified populations;
- increase the number of STD patients receiving appropriate examination and treatment;

- increase condom availability and accessibility, especially through social marketing;
- increase the capacity of staff working in the field, for HIV/AIDS prevention;
- develop models for counseling, care and support for people living with HIV or AIDS, and their families and communities.

#### **Project Strategy**

# Promoting reductions in risk behaviours and exposure

In the countries of the GMS, where age of sexual debut is relatively high (around 19 or 20 years of age), multi-partner sex is largely confined to an establishment-based sex industry, and needle-sharing is a widespread practice among a relatively large IDU population, risk behaviours and exposure to infection with HIV are highly stigmatised and largely confined to specific situations groups. project and The therefore emphasised a strategy of targeted behaviour change communication, and saturation coverage of risk situations with condoms using the '100% condom use' approach to enabling create an and supportive environment with local authorities.

#### Managing Sexually Transmitted Infections

Throughout Asia, female sex workers and mobile populations are regarded as being at higher risk of STIs than the general population. The project therefore focused on targeting STI services for these groups, a strategy that required specific interventions dependent upon the local situation rather than a common approach for all three countries.

#### Developing a Continuum of Care for PLHA

In Cambodia and Vietnam substantial numbers of PLHA in need of treatment and care already exist; and costs of treatment and care have dramatically reduced. Therefore, while the primary focus of the project was on preventing HIV/AIDS, the development of models of care which could be introduced within the countries' health systems was an important element. The project strategy was to develop continuum of care frameworks, to maximize the involvement of a variety of partners in civil society, to make up for the relative weakness of existing public sector health care delivery systems.

#### **Project implementation**

The project was to be implemented by the Government HIV/AIDS National Programme in each country. As such, the objectives, both overall and specific, fitted well within National Strategies, and were entirely appropriate. Not all the detailed activities envisaged in the original project design, however, were appropriate. The IAs therefore adapted the project design to fit within their strategic plans. This was, in fact, a major benefit, as it helped strengthen the Governments' capacity to develop annual operational plans, based upon longterm strategic plans - a major need identified by the project early on: the First Half-yearly Report (July-December 2001) noted: ".... in all three countries the project is clearly conceptualised and embedded within the national programmes, and operational national government implementation mechanisms are fully in place."

# Technical guidelines and standard operating procedures

An important aspect of implementation was thus the development of both Technical Guidelines for various project components (eg 100% Condom Use, STI Services, Outreach Activities, the Continuum of Care, etc<sup>4</sup>), and standard operating procedures (SOP) for management, administration, accounting and control of implementation (see Annex 1 for details of project Work Planning). This took slightly different forms in each country:

- In Cambodia draft guidelines and operating procedures had already

<sup>&</sup>lt;sup>4</sup> These can be found on the Project website: www.jfpr-hiv.org.

been developed; these were further refined, tested and established as approved, official national guidelines for overall programme implementation; as the IA strengthened, using the project, the role of the EA became less important, and SOPs established under the project similarly became established for the programme.

- In Laos the project took the lead in developing, testing and producing technical guidelines for STI management, Peer Education, 100% Condom Use, and in starting training for central and provincial staff in these; operating procedures developed by the EA for the PHCP were used;
- In Vietnam the project provided an initial stimulus and impetus for coordination with a number of other donor-funded activities for a more protracted development of technical guidelines; operating procedures also developed more slowly, as many functions procurement, (eg accounting, disbursement) remained within the scope of EA implementation.

Overall, all partners, however, found the fundamental design of the project appropriate and useful in further developing their HIV/AIDS programmes, and seized sincere ownership (see separate Country PCRs).

#### **Project challenge**

The major challenge was the amounts of money expected to be used for implementation in such a short time-scale (30 months). The development of technical guidelines and operating procedures, the planning, establishment of reporting, procurement and accounting mechanisms at central level, and the need to build the capacity of provinces to plan the use of, disburse, manage and account for, funds, all caused implementation to be very slow for the first 18 months of the project. At Midterm Review, therefore, it was agreed to extend the project's life by a further 12 months at no extra cost (see Annex 2: Excerpt from the Report of the Second inter-country Meeting and Mid-Term Review of the Project<sup>5</sup>).

#### **Assessment of Project Inputs**

Under the project IAs and EAs had to face very real challenges in implementing cost-effective, substantial, targeted, evidence-based strategies and programmes. The emphasis on large-scale, flexible, and rapid decentralized implementation provincial through and community partnerships, while stressing transparency and accountability in project disbursement, accounting, management and evaluation, posed a number of managerial challenges which the IAs and EAs had to address. These arose primarily from the volume of funds to be disbursed, transaction costs in managing inputs, and the sheer scope and scale of implementation required.

#### The volume of funds to be disbursed

In all three countries, the increase in volume of expected expenditure was enormous; this presented conceptual, psychological, managerial, accounting and implementation challenges on a huge scale.

- In **Cambodia**, for example, in 2001, prior to the project, the four provinces spent a total of \$73,470; in the first two quarters of 2002, under the JFPR project, they spent 42% more than in the whole of the previous year! By 2004, however, the project was using an average of \$76,000 per month in Cambodia of which approximately 30% was being spent by the provinces.
- In Laos, similarly, in 2000, provinces spent on average \$6,000 each for the year. Under JFPR, the three provinces planned to spend annually, on average, \$115,000 each
  an 1800% increase. The JFPR 2002 budget for Laos, for just three

<sup>&</sup>lt;sup>5</sup> Full Report available at the website.

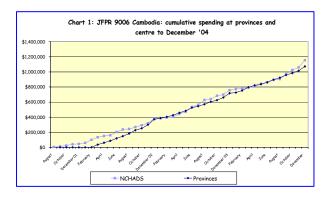
provinces and some spending by NCCAB, was 40% of total Lao PDR Government spending on HIV in the year 2000. By 2004, however, the project in Laos was using an average of \$40,000 per month – nearly half being spent by the provinces.

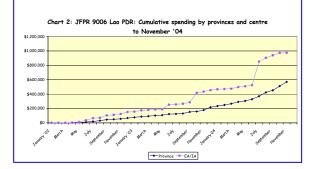
In Vietnam, provincial allocations are even larger than in the other countries
on average \$333,000 per province. By 2004 the project was using nearly \$140,000 per month on average - half being spent by the provinces.

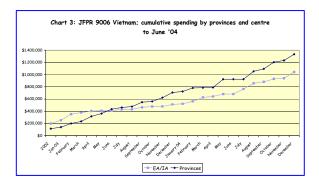
These increases in inputs demonstrate the enormous increase in capacity to absorb input that can be achieved, and that is implement HIV/AIDS necessary to programmes on the scale required. Yet countries managed, largely by establishing regular organizational mechanisms: "The implementation of the Project activities are carried out through regular annual planning, mid-year reviews of the NCHADS and provincial work plans, coordination meetings and supervision visits by NCHADS Units and the Project Team to provide ongoing support to provinces." (Cambodia PCR)

#### Transaction costs in managing project inputs

The three graphs show the distribution of expenditure between provincial level and central level in each of the countries. These demonstrate quite clearly the varying transaction costs over time and in each country.







In Cambodia equal levels of input from the centre are necessary to support programme expenditure: this is both to build programme infrastructure at provincial level, and to coordinate, support and supervise programme planning and implementation in provinces.

In Laos the relative weakness of provinces as programme implementers can be clearly seen; and the dominant role of the center as both designer and implementer of the programme. The sharp rise in expenditure in the final year is largely due to the contracting, by the center, of social marketing of condoms to PSI.

In Vietnam the relative strength of provinces as implementers can be seen, once initial investment costs are in place.

#### Audits:

All three countries conducted annual, external audits, that were, by and large, very clean. The audits demonstrated that governments can achieve high levels of transparency and accountability in the management of grant funds for HIV/AIDS activities. The scope and scale of implementation required Considering the scope and scale of implementation required for the project, a major challenge was the need to involve other partners to extend the scale of implementation, and the development of political and technical consensus , will and mechanisms to achieve this.

During the project two forms of partnership were identified in the three countries:

- Collaborative: working together with other partners, projects, departments to coordinate activities
- Contractual: contracting with other agencies or institutions for specific activities.

Cambodia's main project partnership experience was in collaborating and coordinating with the many other donorfunded programmes and NGOs to ensure no duplication, and to achieve greater synergy; though some small-scale local contracting with NGOs was undertaken. Vietnam and Laos both signed large contracts with social marketing organizations to ensure the availability of condoms.

#### Assessment by the countries

### From the Vietnam Project Completion Report (PCR):

- "Evaluate ADB personnel and consultants: Consultants' assistances are essential and effective during implementing the project
- Evaluate ADB's procedures : Issue should be considered: according to regulation, cost adjustment, which is not exceeding 30% of initial approved cost limited initiative and flexibility in implementation. Therefore, the cost adjustment should be based on effectiveness and feasibility".

#### Assessment by the countries

## From the Cambodia Project Completion Report (PCR):

 "NCHADS receive significant benefit from the fact that the Regional Project Office is based at NCHADS/MoH, Cambodia. Regional Advisor spends half of his time providing technical assistance to the Project in Cambodia. Long term capacity building of NCHADS staff in management of HIV/AIDS programme, particularly those of the Technical Bureau, are satisfactory.

- The Project Staff (Project Implementing Officer, Disbursement Specialist, Project Accountant, Administrative Assistant), has build a good team spirit to support NCHADS in the implementation of the Project activities. This shows a good example to NCHADS, particularly the Technical Bureau, that play an important role in planning, monitoring programme activities, and coordinating with relevant units and partners, to achieve the objectives of the NCHADS strategic plan.
- Help from the Consultant that assist in the Project Evaluation is crucial. This will help avoid the problem encountered during the baseline survey.
- NCHADS benefited significantly from continuous and efficient supports from the ADB Team at Headquarter.
- Application of ICB procedure for the procurement of antiretroviral drugs is not relevant. ADB should address this aspect of procurement as it becomes more and more involved in HIV/AIDS control in the region.

#### Assessment by the countries

### From the Laos Project Completion Report (PCR):

- "In general, TORs of regional and national consultants were prepared with necessary details, to meet the demands of the project to offer proper advice and guidance.
- Based on work plans established, assistance was offered by consultants at the appropriate instances, although some disruptions were faced due to unavoidable circumstances.
- Technical knowledge could be highlighted as very appropriate and competent. National consultants have gained rich, valuable and wide experience, while contributing immensely for implementation of project activities.
- Regional consultants were very helpful and rendered assistance, especially for preparation for Inter-country and mid term review meetings.

 Two national consultants have contributed immensely for successful completion of the Project, while undergoing many hardships unsung. Dynamism of PIO has to be well noted and highlighted, as a crucial factor for achieving success in the Project.

While appreciating stringent rules, regulations and procedures of ADB for project implementation, adequate flexibility should be exercised to meet and match circumstances. Provincial staff encountered enormous problems in financial administration. Decentralization of project implementation, adaptation to complete new and unfamiliar methods of administration could be mentioned as exerting unbearable pressure to soft spots.

Considering the enormous benefits accrued by this Project, it is strongly recommended to formulate similar projects in identified provinces, with the main aim of controlling HIV/AIDS/STI in Lao PDR including the region."

#### **Assessment of Outputs and Outcomes**

This section is drawn primarily from two sources: the Baseline and Final Surveys conducted in each country in early 2002 and later 2004 respectively; and service statistics and project monitoring data collected routinely as part of project management.

#### Changes in HIV transmission

The project intended to measure HIV prevalence trends either by using data from the national sentinel surveillance systems (as for Cambodia and Laos) or from particularly conducted baseline and final serological surveys (as for Vietnam). It should be noted, however, that a project period of three years is likely to be too short to reliably measure impact of interventions in terms of HIV transmission changes (incidence). Observed trends in transmission should therefore be interpreted with caution, and measured changes in outcome indicators (e.g. condom use, risk behaviours and changes in sexually transmitted infections) form a better basis for proper statements on the effectiveness of project interventions.

Vietnam: The baseline survey was conducted mid 2002 and the exit survey during the last two months in 2004, and the population groups included were FSWs, IDUs, unmarried young men and migrant workers (HIV status and behavioural data collected, total sample size about 8000). The baseline survey showed marked differences in prevalence of HIV by province in FSWs (pooled mean 7.8%) and IDUs (pooled mean 20.4% in the 4 provinces where IDUs were identied); but much lower and less varied levels in young men (pooled mean 0.4%) and migrant workers (pooled mean 0.4%).

Some marked HIV prevalence changes were observed by the Final Survey.

- among FSWs the prevalence dropped in An Giang from 20.4% to 8.2% (and mainly in age-groups 15-24 years); though somewhat increased in Kien Giang (from 0.9 to 3.4%);
- among IDUs in Lai Chau the prevalence increased from 36.1 to 51%;
- cases of HIV infected young men were observed only in two of the provinces; in Lai Chau prevalence increased from 1.3% to 3.8%;
- no changes were found in migrant workers – prevalence remained the same.

Several factors might explain the marked drop in FSWs in An Giang. The high mobility in this group might cause variation in prevalence over time; and we found a change in the proportion who were mobile (defined as having worked in other provinces last year) from 50% in the baseline to 5% in the final survey. However, the decline in prevalence was mainly seen in the youngest age groups, an indication of decline in incidence. Achievements in terms of more consistent condom protection, less injecting drug use and reduction in STIs will further support this explanation (see below). The increase in prevalence among IDUs in Lai Chau indicates a sharp increase in the transmission of HIV. A harm reduction programme was implemented in this province, and a high number of syringes and needles were reported to have been distributed during the project period. Further assessment is urgently needed in order to identify the obvious limitations of this programme.

prevalence in Cambodia: HIV the 4 provinces fell during the project. According to the National Surveillance system data, in 2003 it was 21.8.3% among 'direct' (brothelbased) sex workers (DSW), 7.7% among 'indirect' (non-brothel-based) female sex workers (IDFSW), 3.1% among police and 1.5% among women attending ante-natal clinics (ANC). Table X shows the trends of HIV prevalence among these sentinel groups between 2000 and 2003. Overall, there are downward trends for all sentinel groups. It should be noted, however, that these are at present only the crude data; further analysis of the national data-set is presently being undertaken. On the basis of the present adjustments for Quality Control, however, and comparable to the national trend, the HIV trend for ANC is likely to be stable<sup>6</sup>.

#### Table 1: HIV trends 2000-2003 in the 4 provinces under JFPR project

	2000	2002	2003
DFSW	30.3%	26.2%	21.8%
<b>IDFSW</b>	15.9%	13.5%	7.7%
Police	4.0%	3.3%	3.1%
ANC	2.0%	3.5%	1.5%

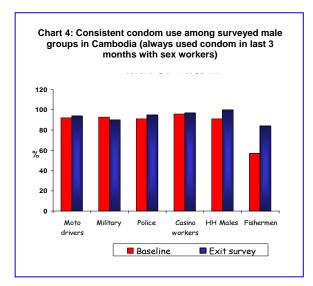
**Laos**: The first HIV surveillance (in 2001) showed 1% prevalence in service women and no infections in other groups. Data from the second round of the national surveillance system will be used to measure trends, but these data were collected late 2004 and are not yet available.

#### Condom promotion and use

Condom promotion and distribution was a strong focus of the project, including both the "100% condom use" approach comprising promotion, STI examination and treatment, and peer education, and social marketing to ensure widespread distribution. Social marketing organisations were contracted in Laos and Vietnam to ensure availability.

**Cambodia**: The national behavioural survey system was adapted for the project, and baseline data were collected in February-March 2002 and in a final survey conducted in August-September 2004 (8 population groups and a household survey of men and women; total sample size 3800).

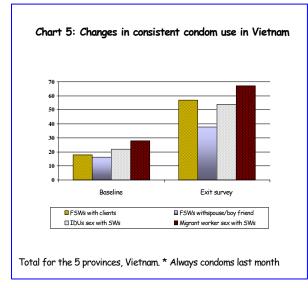
The baseline survey showed very high levels of condom use (>80% always use) among FSWs and in most male groups for sex with sex workers. This high level of condom protection was fond to have been sustained, and the proportion of fishermen reporting consistent condom use with FSWs increased from 57% to 84%. Also in most male groups condom use increased for sex with girlfriends, but the likelihood of consistent use was still below 60% in most groups and in men in the general population as low as 25%. While few FSWs complained about limited availability of condoms, most men groups reported low availability of condoms in their area.



<sup>6</sup> Source: HSS 2003 data, NCHADS

**Vietnam**: A sharp increase in use of condoms in all provinces was measured among both categories of FSWs.

- Street-based FSWs who reported always condom use the last month with non-regular clients increased from 18% to 58%; and a similar increase was seen for sex with regular clients.
- FSWs also increased their use of condoms for sex with spouse/boy friend, but consistent use was still relatively low (<40%).</li>
- Parallel rising condom use was reported by the male groups for sex with sex workers: IDUs from 22% to 54%, and migrant workers from 28% to 67%.



Laos: Two different sources of data were combined: i) the national behavioural surveillance survey (one province, only baseline data vet available); ii) behavioural surveys in all three provinces - baseline and final survey with the sample size limited to 100 per province for each of the three population surveyed. groups The behavioural surveillance survey showed high condom use among FSWs (service women) for sex with clients (71% reported "every time" use in last month in Savannakhet), but very low use for sex with non-clients (below 20%). In the behavioural survey (all project provinces) changes in condom use were measured using "condom used for last sex": which increased form 59% to 84%.

- Among tuc-tuc drivers, condom use with FSWs increased from 52% to 65%;
- Among construction workers from 43% to 61%.
- Condom use for sex with other partners than clients or FSWs was still low.

Data from the second round of the national Second generation Surveillance conducted in late 2004 will provide information on indicators on condom use comparable with those used in the two other countries.

#### *Risk behaviours, exposure : Frequency of sex with FSWs and casual sex partners*

While frequency of sex and partner numbers were not found to have changed in Cambodia, there was some evidence of changes in Vietnam, and quite substantial increases in the sale and purchase of sex in Laos.

Cambodia: There was no clear pattern of change in the proportions reporting sex with girlfriends/nonwith FSWs or commercial during the period. sex Multivariate analysis showed that the likelihood of casual sex (sex with other than spouse or regular partner) was closely associated with mobility (defined as stayed away from home more than1 month in the past year).

**Vietnam**: FSWs reported higher number of clients in the final survey compared with the baseline (consistently across provinces). The mean number of clients in the last week increased from 4.7 to 5.4 in street-based and from 3.9 to 4.7 in karaoke-based FSWs (pooled data). No clear pattern of change in type and number of sex partners were seen among migrant workers and young unmarried men. However, among young men the pattern differed across provinces: i.e. sex with FSWs was mainly reported from Kien Giang (25% last month) and An Giang (7%), whereas in other provinces sexual linkages were with girl friends.

**Laos:** The behavioural survey data indicated a sharp increase in the volume of sex work (more clients among service women). Also in the male groups a higher proportion reported sex with FSWs in the past month, i.e. from 24% to 34% in tuc-tuc drivers and from 16% to 33% in construction workers. These indications need to be verified with findings from the national behavioural surveillance.

# *Risk behaviours, exposure : Needle sharing in Vietnam among FSWs & IDUs*

A health education and harm reduction programme was established in Lai Chau and Dong Thap, i.e. friend-help-friend among IDUs and FSWs. This included syringe and needle exchange and condom marketing.

- FSWs: The proportion of FSWs having ever used drugs was low in the baseline and declined further during the period: in the final survey less than 1% stated they had ever injected drugs, in any province.
- IDUs: There was no clear evidence of changes in the sharing of needles and syringes (N&Ss); and about 80% stated that they never share. A reduction was seen among IDUs in two provinces, whereas increasing or stable in the two other. Proportions stating to "have shared N&Ss about half of the time in last month" were still high in Lai Chau (25%) and An Giang (18%). Frequency of sex with FSWs did not change during the period. However, consistent condom use increased significantly, thus, all in all, leading to a marked reduction in the transmission probabilities in such relationships.

#### Changes in knowledge and misconceptions

Questions on HIV-related knowledge asked in the various surveys appeared to be of limited value to measure relevant trends. What should be noted, however, is that the question "Can appearance tell if a person is HIV infected?" appeared as a valuable indicator of misconception. A significant reduction in the proportion responding positively to this question was observed both in Cambodia and Laos:

- in FSWs from 37% to 7% (Cambodia)
- in male groups from 51% to 19% (Laos).

The question was not included in the Vietnam surveys.

#### Sexually Transmitted Infections

Cambodia: STI services were targeted towards female sex workers (FSWs) through designated STI clinics that used a specific FSW STI treatment algorithm. Direct brothel-based sex workers covered by the 100% condom use programme attended on a monthly basis and about 50% were treated for gonorrhoea and/ or chlamydia at each visit, a strategy that could be said to be one of partial periodic presumptive treatment (PPT). Monthly coverage increased to reach 93% and this high level was sustained for most of the project. Indirect sex workers and men with STI symptoms were also encouraged to attend the STI clinics for assessment and treatment.

Compared with the initial STI baseline survey in 2002, the exit survey in 2004 showed reductions in both the numbers of new STI cases/ all cases in health centres with STI services from 7.4% to 4.6% and the numbers of new STI cases/all cases in health centres without STI services from 8.8% to 7.2%. The proportion of men seen in STI clinics decreased from 27% to 9%. This data suggests a significant reduction in the burden of STIs across the whole community. The availability of STI drugs increased between 2002 and 2004 and a very high standard in both the accuracy and quality of STI care delivered by health care providers to FSWs was identified both at baseline and during the exit survey. The completed project STI-related 13673 treatment attendances in FSW and 20220 in the general population.

#### Cambodia

- Monthly coverage of sex workers attending designated STI clinics reached 93% and this high level was sustained throughout most of the project.
- The proportion of STI cases compared to all health problems identified in health centres decreased significantly in the community.
- The proportion of men attending STI clinics decreased from 27% to 9% between 2002 and 2004, also suggesting a real community reduction in STIs.

Vietnam: At the start of the project, government STI services had no specific focus on sex workers and the majority sought care either directly from pharmacies or the private sector. An initial STI prevalence baseline survey in 903 FSW in the five provinces in 2002/3 identified high STI prevalences of gonorrhoea and/ or chlamydia as follows, Lai Chau 27%, Quang Tri 33%, Dong Thap 16%, An Giang 11%, Kien Giang 24% and overall 20%. Infection rates were higher in provinces that had not been supported by STI-related donor projects previously.

STI care was delivered to the target group through the formation of mobile outreach teams that focused on FSWs. Each province decided on the makeup of local teams and how they could offer a user-friendly FSW oriented service. In general, those provinces that offered a more public health centred approach involving presumptive treatment fared better than those with a more clinical strategy. For example, An Giang decided upon a PPT strategy that involved a "treat all" approach whenever FSW were seen whilst in some of the other provinces, STI specialists took the lead but were reluctant to accept that over treatment was justified despite the absence of good quality laboratory tests. Indeed, physicians tended to prefer a laboratory-based assessment relying on the Gram stain rather than risk assessment. Where treatment was given in health centres and by non-specialist doctors

and nurses, the principle of presumptive treatment was accepted and a lot more of the target population were treated correctly.

Following the implementation of the project, an exit survey was done at the end of 2004 in a similar FSW population to that sampled at baseline. The prevalences of gonorrhoea and/ or chlamydia were: Lai Chau 11%, Quang Tri 8%, Dong Thap 8%, An Giang 7%, Kien Giang 19% and overall 11%. These data confirm significant reductions in STIs with the exception of chlamydia (16%) in Kien Giang. This was thought to be due to a lack of project personnel in the province that resulted in a delay in the formation of the mobile team and a reliance on the Gram stain as a method of diagnosing chlamydia. If the high chlamydia prevalence in Kien Giang was excluded, the final overall gonorrhoea and/ or chlamydia prevalence would have been 8%.

In addition to the above, a template for a National STI reporting system was set up, new sources of cheap, sustainable STI drugs were identified and National STI guidelines were updated. The project treated just over 50,000 STI cases in total.

#### Vietnam

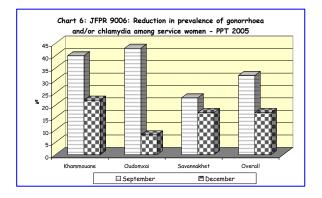
- Gonorrhoea and/ or chlamydia levels were reduced in FSW from 20% to 11% overall. If the high Chlamydia prevalence in Kien Giang was excluded, the final overall prevalence would have been 8%.
- Mobile teams that focused on presumptive treatment rather than a laboratory-based approach tended to treat more FSWs at high risk of gonorrhoea and chlamydia.
- Cheap, sustainable STI drugs were identified
- A template for a National STI surveillance system was set up



**Laos:** At the start of the project STI services in Laos were poorly developed. Surveys in women in Laos had shown service surprisingly high levels of STI, amongst the highest in FSWs in Asia, considering the relatively low numbers of partners reported by service women. Clearly, when service women were getting infected with STIs they were not getting treated correctly and their male clients and partners were also highly likely to be infected. An initial survey of health facilities and pharmacies showed that few acceptable STI drugs were available in the project provinces. Under the project National STI guidelines were developed and updated following meetings with relevant stakeholders

At a consensus meeting in Vientiane in April 2002 attended by a number of donor agencies, either presumptive or PPT was decided upon as the optimal strategy to deliver STI care to service women. The ADB project decided upon PPT, a strategy that is, in essence, a public health oriented approach involving treatment at regular intervals, without doing laboratory tests, based on the assumption that the treated group have a high probability of gonorrhoea and/ or chlamydia. The Ministry of Health endorsed this approach but implementation in the provinces was delayed whilst community groups and interested parties were consulted.

PPT was implemented in the three provinces with two rounds in Oudomxai and Savannakhet and three in Khammouane over three months. Treatment involved a single dose of azithromycin one gram. Condoms were promoted and provided free. The prevalence of gonorrhoea and/ or chlamydia was reduced from 43% to 8% in Oudomxai, 40% to 22% in Khammouane, 23% to 17% in Savannakhet and overall from 32% to 17%. About half the service women in Oudomxai and Khammouane and two thirds in Savannakhet were from provinces other than their home province indicating a significant degree of mobility in this high-risk group.



At the start of the project neither cefixime nor azithromycin, the drugs of choice available orally in a single dose for gonorrhoea and chlamydia respectively, were available in Laos. These drugs were subsequently licensed and are now available at a combined cost of less than \$3. Clearly, with drugs this cheap, PPT can be sustained in service women for the foreseeable future until STI levels are reduced to more acceptable levels. The project treated 8,000 STI cases in total.

- The prevalence of STIs in service women initially was very high. A short intensive PPT programme reduced the overall level of gonorrhoea and/ or chlamydia in FSW from 32% to 17% and fivefold in Oudomxai. This is the first time a PPT strategy for controlling gonorrhoea and/ or chlamydia has been implemented in Asia.
- Cheap and affordable STI drugs are now available in Laos enabling PPT to be considered, along with condom promotion, as on-going sustainable strategies for reducing STI levels in service women.
- As communications and transport systems are developed and improved throughout the country, mobile service women are a key group to target for HIV/STI prevention while HIV levels in Laos are still low.

Laos

#### Availability/acceptability & use of voluntary HIV counselling and testing (VCT)

VCT is an important entry point to prevention, care and support. The scale of implementation in terms of establishment and promotion of VCT varied in the three countries.

**Cambodia**: VCT services were established in all operational districts as a component of the continuum of care. There were 3 VCT centres functioning at the start of the project; 9 new services were established and run by trained staff.

Findings from the population surveys and assessments indicated a major achievement through regarding availability and acceptability of VCT.

- In the baseline survey a high proportion of FSWS (close to 70%) reported having been tested for HIV - but few (14%) had received counselling.
- In the final survey, however, 70% had been counselled when HIV tested the last time.
- For all other groups there was a sharp increase in the proportion having received counselling last time they were tested. In the general population of men the proportion tested for HIV increased from 5% to 10%.

Vietnam: Counselling services were developed in all provinces in Vietnam, but the assessment showed variation in achievements by province. However, all provinces strongly decentralised and strengthened their counselling capacities.

Survey findings showed HIV test rates to have increased somewhat among FSWs (21% ever tested), but the most striking change was seen in the proportion having received pre- and post-test counselling.

 In the two provinces with the highest number of sex workers, An Giang and Kien Giang, only 19% had received counselling in the baseline survey whereas 87% had in the final survey.

- A marked increase in pre- and post-test counselling was also seen in IDUs - from 20% to 47%, 17% ever tested.
- Among young men 4% had ever been tested (from 2% in baseline), and 35% of these received counselling services (from 4% in baseline).
- Among migrant workers the test rate was 6% but few reported to have received counselling services.

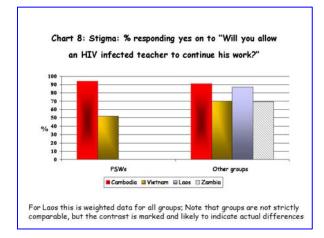
**Laos:** VCT was introduced in target districts in Savannakhet province only (establishment of VCT sites and training of staff). No information is available on outcomes.

#### Stigma

A small set of indicator questions were employed in the final surveys (only) in all countries: i)"Willing to care for infected family member", ii)"Allow infected teacher to continue", and iii)"Keep it a secret if a family member is infected"

The responses on the first question did not differ either by population group or country (>90% in most groups responded positively). However, responses differed by country on the other two, and particularly on the last question, see graph. These are clear signs of strong stigma related to HIV in a high proportion of the population, with the exception of Cambodia.





On the data from Cambodia we employed a multivariate model to analyse factors associated with stigma. The findings showed stigma to increase strongly by educational attainment in both men and women in the general population. Among men (n=637): the likelihood of "high stigma" (based on an index) was 4.2 times higher (95% CI, 2.5-7.0) in the group with low versus high educational attainment. The respective association in women was 5.2.

#### **Cost Analysis**

The project kept meticulous records of expenditure( inputs) and achievements (outputs) in order to be able to make some empirical estimates of unit costs of the activities that make up the 'package' of HIV/AIDS interventions being used in the three countries. This is an outstanding, and very rich data-set, analysis of which has only been started.

Table 2 shows some of the Cambodian analysis.

Some things can be noted immediately from the **Cambodia** data:

- On the one hand, interventions such as these are ridiculously inexpensive, on a per capita basis: even including the ART costs, less than 50 cents per head per year. This is just 18% of per capita public health spending in Cambodia – for a disease burden that accounts for an estimated 50% of young adult deaths and reduces poverty reduction targets by 60%.
- On the other hand, these are primarily targeted interventions aimed at specific groups: if we take unit costs of reaching, for example, 'at risk' women (the wives or sex partners of currently infected men) with IEC messages, at nearly \$900 each over three years, these are ridiculously expensive; similarly for reaching sex workers.

Costs	IEC/BCC	100% CUP	STI	Prevention	CoC	Project	Project/pa
per capita	\$0.38	\$0.11	\$0.20	\$0.69	\$0.41	\$1.35	\$0.45
per adult (15-49)	\$0.87	\$0.24	\$0.46	\$1.58	\$0.95	\$3.10	\$1.03
per 'bridger' <sup>7</sup>	\$13.69	\$3.82	\$7.26	\$24.77		\$33.80	\$11.27
per STI contact			\$9.34				
per STI contact (running costs)			\$6.29				
per sex worker	\$1,749.83	\$487.53	\$928.15	\$3,165.51			
per at risk woman	\$895.91	\$895.91	\$475.21	\$1,620.74			
per PLHA	\$46.01	\$12.82	\$24.40	\$83.23	\$49.86	\$133.09	\$44.36
per target group member	\$10.37	\$3.73	\$7.10	\$24.21	\$47.42	\$36.82	\$12.27

Table 2:	Cambodia	cost analysis
	Cumbbulu	cost analysis

• The point at which these targeted interventions probably become most costeffective, however, is when we get them targeted correctly. A little over \$2 per year per contact is expensive compared to national per capita health expenditure; if it ensures, however, as the project did,

<sup>&</sup>lt;sup>7</sup> 'Bridgers' are defined in Cambodia as men who both purchase sex and have regular partners or spouses – thus creating risk of transmission from one situation to the other.

almost complete monthly coverage of sex workers with STI treatment, it is making a significant contribution to reduction of HIV transmission.

- It can be seen that the 100% condom use programme is a similarly cost-effective targeted intervention, based on the concept of 'bridgers': men who both visit brothels and have regular partners - and are therefore likely to transmit the HIV they get in the brothels to women (and ultimately children) in the general population. These are the key target for to programme. If condom use 100% 'bridgers' can be persuaded, compelled or coerced into using condoms whenever they purchase sex, transmission can be greatly reduced. Again, at under \$1.30 per 'bridger' per year, it is an attractive intervention.
- By the same token, IEC/BCC appears quite expensive per 'bridger' - nearly \$14 over the project life. This can only be justified if the IEC/BCC is very appropriately targeted at 'bridgers', and reaches them.

The **Vietnamese** data produce much lower unit costs than the Cambodian data: but this is a function of the project country allocations by population. \$3 million was expected to cover an adult population in the five provinces of Vietnam of nearly 10 million – as against \$2.7 million to cover an adult population of only 1 million in Cambodia.

- Thus only \$1 per year was available per 'bridger' in Vietnam, as opposed to over \$11 in Cambodia.
- But at \$30 per year, the 100% condom use programme does appear, according to the increases in condom use found in the Final Survey, to be an exceedingly cost effective intervention.
- The STI unit costs are more similar in Vietnam and Cambodia.
- It will be interesting to see, from further analysis, whether the considerable variations in Vietnam in unit costs for different provinces can be linked to differences in changes in project outcomes in the different provinces.

	IEC/BCC	100% CUP	STI	Prevention	CoC	Project
per capita						
per adult (15-49)	\$0.10	\$0.09	\$0.05	\$0.24	\$0.04	\$0.32
per 'bridger'	\$1.01	\$0.89	\$0.50	\$2.45		\$3.18
per STI contact			\$7.14			
per STI contact (running costs)			\$3.75			
per at risk woman						
per PLHA						
per target group member						

#### Table 3 : Vietnam cost analysis

#### **Project Exit Strategy:**

This was discussed in detail at the Third Inter-country Meeting, held in Vientiane in April 2004<sup>1</sup>. The results are mixed.

**Cambodia**: has used the project highly successfully to establish a nation-wide implementation pattern for its Strategic Plan for HIV/AIDS and STI Prevention and Care 2004-2007, which is now being largely funded with an unallocated grant from DFID, plus funds from World Bank, CDC-GAP, GFATM, University of New South Wales, UE/ITM, etc, totaling some \$6 million per year.

**Vietnam:** has also used the project to develop implementation mechanisms and technical strategies, but to a lesser extent, since the operationalization of its Strategic Plan is less integrated. It has received substantial grants from DFID, PEPFAR, GFATM, is finalizing a World Bank loan and is preparing a further ADB grant, all for HIV/AIDS; and Government and partners are using lessons learned from the project to develop implementation strategies.

Laos: has learned a great deal from the project, and is using this to feed into its GFATM implementation. Technically, the 100% condom use programme, linked with PPT (Presumptive Periodic Treatment) for STDs in service women, which were introduced under the project, have now been approved as standard national strategies and are being extended under Laos' Round One GFATM Grant and a new ADB/WHO Regional Communicable Diseases Project. In addition, HIV/AIDS peer education methods and materials will be adopted into the Primary Health Care Extension programme.

#### **Lessons Learned:**

• The Project was the first major project managed by the governments in all three implemented countries that comprehensive programme of HIV/AIDS prevention and care activities at decentralized, provincial level. The project demonstrated that this is a feasible programme strategy, which can produce concrete, dramatic results in a relatively short space of time.

- In I all three country programmes, mechanisms have been put in place through which further funds from DFID, the GFATM, the World Bank and ADB are now being used, based on the technical and implementation issues identified, addressed and managed, and the experience gained National bv Programme staff, under the project.
- There are now good indicators of the level of inputs that are needed to achieve certain levels of outputs, and how to manage these inputs most effectively within the rather complex government systems in GMS.
- Specific interventions and systems developed and learned from in the project were both technical (such as targeted STI case management, PPT and 100% condom promotion), and management (such as decentralising funds, and planning, monitoring and reporting).
- All three countries gained important experience in working with, and contracting, NGOs.
- Important lessons about regional programming were learned: regional collaboration is most fruitful when it is based upon shared and common experiences of implementation within country programmes.
- The introduction of extensive treatment and care will pose serious challenges to health services: in terms of equity, capacity and capability, demand, and resources. But it can be an opportunity, too, for strengthening health services, and introducing innovative approaches, based on closer client-provider links.

#### **Project Impact:**

• **HIV Prevalence**: while it is difficult to ascribe changes in prevalence to the project in such a short duration, with the exception of Lai Chau/Dien Bien, prevalence was kept stable or decreased,

in situations where it would be expected to be rising; in Cambodia, where overall prevalence is falling, the project sites followed the national trend.

- STIs: The PPT data on STI management from Laos, coupled with the data from the Cambodia STD Sentinel Surveillance, are the Vietnam surveys show that relatively simple STI interventions can make a significant difference to STI prevalence in high risk groups. These reductions in STD will contribute significantly to reducing risk of HIV transmission in risky-sex situations.
- **Behaviour:** The behavioural data from all three countries show that saturation with condoms (both socially marketed or distributed as part of BCC activity), mass media awareness-raising, and targeted BCC can change behaviour, especially key risk behaviours in key target groups: using condoms both with sex workers and with other partners increased dramatically.
- **Counselling:** the project extended counseling services easily and effectively; as access to treatment and care expand rapidly in the countries, counseling will play an increasingly important part in the continuum of care both in helping people identify appropriate access to treatment, and in building 'ARV literacy', and helping adherence.
- Cambodia, Care: In with the development and introduction of the models for the continuum of care for PLHA, by the end of the project 4 operational districts were offering the full CoC including ART, and all seven covered by the project had introduced CoC; 1778 PLHA were receiving comprehensive care for opportunistic infections, and 266 were on ART representing 7% coverage of the need in the four provinces. In Vietnam by the end of the project some 9,000 PLHA received some form of care and support.
- **Costs**: The activity-linked cost data demonstrate very clearly what kinds of

costs should be associated with the kinds of comprehensive, decentralized implementation the project suggests is the way forward for these countries. This is vital, both as guidelines for adding HIV activities into other (eg infrastructure) projects, or even designing stand-alone HIV projects, and also as a calibration of the UNAIDS/ADB overall costings for Asia; particularly in indicating the scope of scaling up that will be needed, in terms of absorptive capacity, etc. This could be important for the Cambodia verv experience of gearing up for '3  $\times$  5'.

• Capacity building: the capability of the National HIV/AIDS Programmes in the three countries to plan, manage, implement and report on substantial allocations of external funds transparently and effectively was strengthened. \$8 million was channeled to national government Executing and Implementing Agencies, disbursed and accounted for, and externally audited. Technical guidelines for the implementation of the 100% condom use programme, STI services, outreach and peer education services, voluntary testing and counseling, the continuum of care for PLHA, and standard operating project funds, were procedures for developed and have become official government programme guidelines. In addition, three articles have already been published peer-review journals, in another two have been submitted, and another four are to be submitted. More than 12 abstracts have been accepted and presented international AIDS at (Melbourne, Conferences Barcelona, Bangkok and Kobe). On the basis of capability demonstrated during project implementation, four staff from the national programmes involved in project implementation have been awarded scholarships for Masters or Ph.D programmes Centre for at the International Health at the University of Bergen; another one has been recruited into WHO.

#### Project Impact: in the 12 project provinces between mid-2001 and end 2004

#### Condom use:

- An increase from 18%-58% among street-based sex workers in Vietnam who reported consistent condom use the last month with non-regular clients; and a similar increase was seen for sex with regular clients.
- An increase from 22% to 54% among IDUs, and from 28%-67% among migrant workers, in condom use for sex with sex workers in Vietnam.
- An increase from 52% to 65% in condom use with 'service women' among tuc-tuc drivers in Laos, and from 43% to 61% among construction workers.
- An increase from 57% to 84% among fishermen for condom use with sex workers in Cambodia; sustained high levels in other groups (>80% always use).

#### STD prevalence:

- Reductions from 20% to 11% in gonorrhoea and/or chlamydia prevalence levels in sex workers in Vietnam.
- Reductions from 32% to 17% in the overall level of gonorrhoea and/ or chlamydia in 'service women' in Laos.
- Decrease from 27% to 9% in the proportion of men attending STI clinics suggesting a real community reduction in STIs in Cambodia.
- 91,893 cases of **STD treated** at an average cost of \$14 per case treated.

#### **Counselling:**

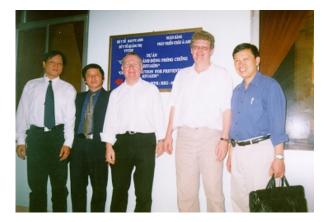
- An increase from 19% to 87% in counseling associated with HIV testing among sex workers in An Giang and Kien Giang.
- An increase from 20% to 47% in pre- and post-test counselling in IDUs tested for HIV in Vietnam.
- An increase from 4% to 35% in **counselling in young men tested for HIV** in Vietnam.
- An increase from 7,143 to 9,288 annual caseload for VCCT services in Cambodia.

#### Care:

- 1778 PLHA were receiving comprehensive care for opportunistic infections, and 266 were on ART – representing 7% coverage of the need, in the four provinces in Cambodia
- Some 9,000 PLHA received some form of care and support annually in Vietnam by the end of the project.

#### **Capacity building:**

 \$8 million has been successfully, effectively and transparently disbursed by the National HIV/AIDS Programmes at provincial level. Government capacity to manage these levels of expenditure has been demonstrated.





#### Recommendations

The following recommendations to ADB for future HIV/AIDS programming in the region are made, based upon the experience of the project.

- Comprehensive HIV/AIDS intervention activities and programmes need to be established nation-wide in all GMS countries as integral components of health and development sector planning and implementation to ensure long-term sustainability of effective prevention of the spread of HIV.
- 2. Funding and responsibility for these programmes should be **channeled primarily through Government programmes**: only governments have the capacity to manage implementation on the scale needed. They can also be used as an important tool for strengthening **governance**.
- 3. The programmes should be encouraged to develop **effective operationalization mechanisms of national strategic plans**, involving **decentralized** planning and management and accountability.
- 4. Programmes should be encouraged to develop **collaborative and coordinated partnership approaches**, particularly with civil society; this will be particularly important as countries access and use **GFATM funding**.
- 5. **Regional programming** should be based on self-contained national programmes, sharing experience, tools, approaches and technical strategies, rather than attempting regional activities.
- 6. HIV/AIDS programming should be based on **good epidemiological evidence and technical best practice**, especially in GMS countries where the epidemic is still very concentrated.
- 7. **ADB** should continue to fund HIV/AIDS activities; its **credibility and position** strengthens and supports national efforts to deal with the difficult political, social, cultural and technical public health issues raised by the epidemic in Asia.









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Based on project files, and Baseline and Final Survey from 3 countries.

### May 2005







Community Action for Preventing HIV/AIDS (ADB/JFPR: REG-9006)