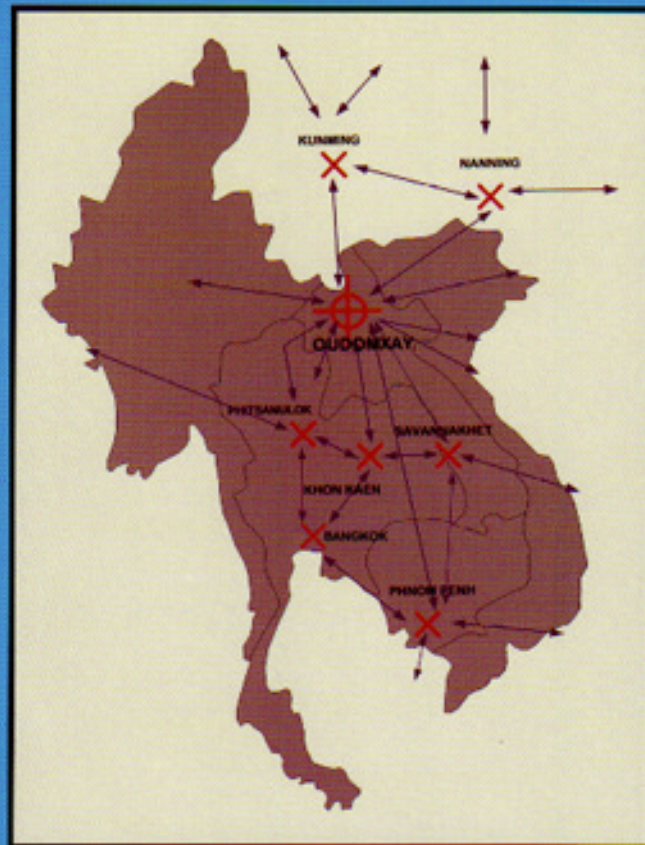




United Nations Development Programme
South East Asia HIV and Development Project

FROM AIDS EPIDEMICS TO AN AIDS PANDEMIC IS AN HIV/AIDS HUB BUILDING IN SOUTH-EAST ASIA?





• Capacity Building • Social Mobilization • Institutional Partnership • Advocacy & Information

New publication from UNDP South East Asia HIV and Development Project

**“From AIDS Epidemics to an AIDS Pandemic:
is an HIV/AIDS Hub Building in South East Asia?”**

On the basis of the previous work of the UNDP South East Asia HIV and Development Project, the paper discusses how the present rapid development of road building and upgrading could interact with other factors in such a way that the present epidemics are more effectively interconnected, resulting in a multiplier effect fueling a South East Asian pandemic.

This scenario would need confirmation and to do this requires collaboration between decision-makers and experts in the region. In view of the potential impacts of such a scenario, we believe the issue should be a matter for priority consideration.

Such a scenario brings to light two important issues for HIV strategies and programmes:

- a) the primary prevention necessary to disable the mechanisms behind the scenario would largely be through development interventions; this would represent a major challenge to the national AIDS programmes of the region;
- b) the emerging land transport hubs and networks have a major regional dimension and therefore require national AIDS programmes to collaborate with each other to create and implement a regional response.

It should be clear that the objective is not to be alarmist, to cry “wolf”, but, in application of the concept behind an Early Warning and Rapid Response System (EWRRS)¹, to attempt to preempt the possible negative consequences of otherwise positive developments in the region.

A handwritten signature in black ink, appearing to read 'Lee-Nah Hsu'.

Lee-Nah Hsu
Manager

UNDP South East Asia HIV and Development Project

¹ See the report published in July 2000: *Early Warning and Rapid Response System: HIV vulnerability caused by mobility related to development*, UNDP South East Asia HIV and Development Project.



**FROM AIDS EPIDEMICS TO AN AIDS PANDEMIC:
IS AN HIV/AIDS HUB BUILDING IN SOUTH EAST ASIA?**

Authors:

Jacques du Guerny
James Chamberlain
Lee-Nah Hsu

Manager: Lee-Nah Hsu
South East Asia HIV and Development Project

August 2000

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Contact information: Lee-Nah Hsu, Manager, UNDP South East Asia HIV and Development Email address: leenah.hsu@undp.org

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FOREWORD

The sequence of events leading to the preparation of this paper is an apt illustration of the method of building blocks used in this Project.

One can consider the Mapping Assessments conducted in several countries of the region as the first set of blocks. The mapping exercises studied the socio-economic and cultural vulnerabilities which could lead to HIV infection emerging along selected important highways.

The second block was the ASEAN Workshop on Population Movement and HIV Vulnerability held in Chiang Rai in November 1999 which brought together national authorities and experts to consider the results, initially focusing on migrants. However, the conjunction of the assessments, decision-makers and experts led to shifting the focus from migrants to underlying mobility systems.

Then, bringing together the road improvements and constructions taking place with the mobility systems, two ideas began to emerge: i) a development centred early warning system could perhaps be established, and ii) all these stretches of road joined together were perhaps more than just a network from the perspective of the HIV epidemics.

This led to the third block, in the form of the Think Tank Consultation held in May 2000 in Bangkok which, again, brought together national AIDS authorities of the Greater Mekong Subregion (GMS) and experts. The discussion not only endorsed the proposed Early Warning and Rapid Response System (EWRRS), but presented a number of the ongoing and planned highway developments.

This information on the developments in land transport demonstrated that when considering the possible inter-relations between the rapid socio-economic changes taking place in the GMS, the mobility systems highlighted in Chiang Rai and the road networks being established, dynamic hubs could be forming which potentially could connect different epidemics into a larger pandemic with a possible multiplier effect.

Hence, a new building block, in the form of this paper on hubs. This paper is meant to be a thought provoking paper on work in progress. It should really be considered in conjunction with the papers already mentioned, especially the EWRRS one. We would like this paper to start a discussion on the possible role of hubs in HIV epidemics, in relation to an EWRRS and, more broadly, in the area of mobility systems, development and HIV.

Lee-Nah Hsu
Manager
UNDP South East Asia HIV and Development Project

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FROM AIDS EPIDEMICS TO AN AIDS PANDEMIC: IS AN HIV/AIDS HUB BUILDING IN SOUTH EAST ASIA?

Jacques du Guerny, James Chamberlain, Lee-Nah Hsu*

SOME QUESTIONS AND ISSUES

Why could the way in which one attempts to apprehend the HIV/AIDS epidemic be important? Don't we already understand enough about the epidemic to design effective policies and programmes? A number of "success stories" are already available, don't we just basically have to replicate them to roll back the epidemic?

Maybe. However, would policy and programme effectiveness benefit from constantly re-examining the epidemic? One can thus try to enrich our understanding and therefore explore new ways for intervention.

The world around us is infinitely complex and there are many ways to look at it and explore it – from the atom to astrophysics in science, through the eyes of Plato, Einstein, Picasso or a rice farmer or hill tribesman. They all have their usefulness, coherence and weaknesses: we can learn from each and none has the last word, contrary to what some 19th century "positivists" thought.¹ Each worldview, product of its context and time, is accepted because it benefits those who adopt it within their context, but, as the situation changes, it evolves and/or is replaced by different ones with new or increased usefulness.

In a similar way for HIV/AIDS, there are many ways to study it and define the relevant frameworks or universes. From the infinitely small, at the level of the virus or even below, to macro level approaches, such as epidemiological ones and, more recently, broad developmental ones.

At the macro level, quite naturally, as AIDS is a disease, the paradigm through which it was perceived and combated, was a health based one. This paradigm was rapidly enriched through social sciences contributions on human behaviour and thus led to prevention strategies that were quite effective in particular in "developed" countries. However, the epidemic continued to spread unabated in many African countries. In developing countries, it was recognized that multisectoral, holistic responses were necessary and the analysis of success stories revealed that a number of ingredients were required for success, e.g. political commitment, human rights.

Working within a development paradigm is not that simple because it is still very much unmapped² and, in the face of difficulties, the temptation is frequently to drift towards the health paradigm.

¹ For example, the leading scientists of the second half of the 19th century, such as Lord Kelvin, a physicist and Marcellin Brethelot, a chemist, did not encourage their students to pursue physics or chemistry because according to them nearly everything had already been discovered in these fields.

² Lee-Nah Hsu, Jacques du Guerny, April 2000. "Population Movement, Development and HIV/AIDS: Looking Towards the Future". UNDP South East Asia HIV and Development Project (UNDP-SEAHIV) ISBN: 974-85835-3-8.

* Jacques du Guerny, Consultant UNDP-SEAHIV and former Chief, Population Programme Service, Food & Agricultural Organization of the United Nations (FAO) & FAO Focal Point on HIV/AIDS.

James Chamberlain, Consultant UNDP-SEAHIV.

Lee-Nah Hsu, Manager, United Nations Development Programme, UNDP-SEAHIV.

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For example, in the area of agriculture, rather than exploring how rural credit can decrease the vulnerability of farm-households, it is easier to try to transform extension workers' into health-based prevention ones, promoting condoms and safer sex! This was attempted for many years in family planning with limited success, as it is clearly not the extension workers' interest or area of comparative advantage.

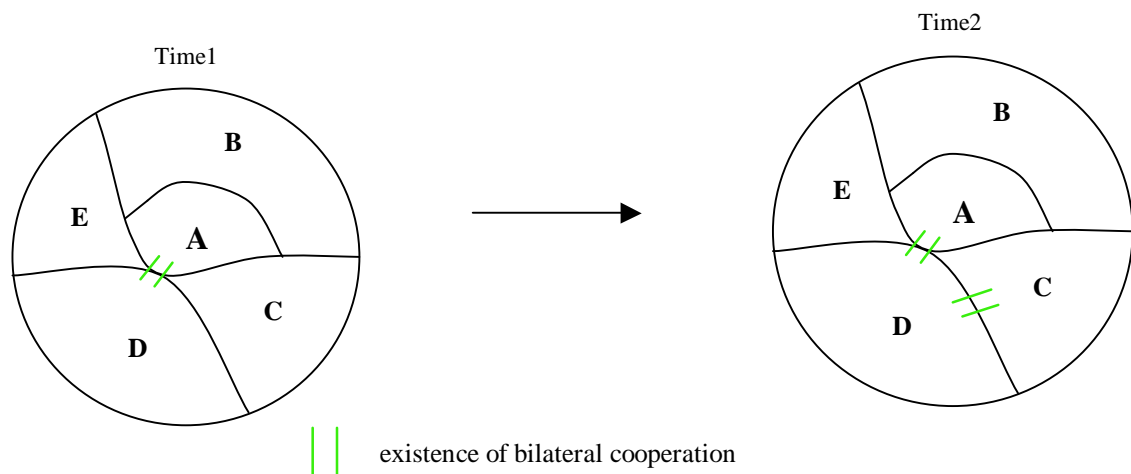
As working within a development paradigm is a vast enterprise, in this paper we would like to examine only whether a specific form of a development strategy, i.e. the transport hub can contribute to enriching our understanding of the ways in which HIV/AIDS can spread in part of South-east Asia and open the door to new or different policy and programme responses which will strengthen existing ones.

THE DOMINANT PERCEPTION OF THE HIV/AIDS EPIDEMIC IN PARTS OF SOUTH EAST ASIA

The epidemic has been perceived from two related perspectives: risk groups within traditional administrative units. This has led to identifying a Thai epidemic, a Cambodian, a Laotian, a Vietnamese, a Southern China and a Myanmar one. Each one is mainly seen as a separate entity, although, as is shown, first steps have been taken to link them bilaterally at border crossing points. Each country has a *national* programme and tends to focus its efforts on high prevalence areas and on high risk groups, eg. the military and police, commercial sex workers, injecting drug users. Sentinel surveillance monitors them as well as the low risk general population represented by pregnant women. Naturally, this compartmentalization is not very rigid and there are groups escaping administrative units such as truck drivers or seafarers. For the purpose of the paper, this level of generalization is good enough.

Policies and programmes are consequently nationally and independently prepared and implemented in each country on the basis of their respective surveillance systems, designed to fit into the health paradigm already established: see Figure 1.

Figure 1. Development of independent national programmes for countries A, B, C, D, E
(i.e. without taking into account Hub effect).



What can emerge from these approaches? Certainly very important information on the basis of which the Thai “success story” was possible. However, the countries of the region already recognize that their borders are not water tight and that migratory movements between their countries have made it necessary to set up bilateral programmes at major border crossing points, e.g. Thailand-Cambodia at Aranyaprathet and Poipet, Thailand-Lao PRD at Savannakhet, Vietnam-China at Pingxiang.

Are such bilateral agreements enough to deal with the consequences of international movements between the countries? Is it possible that the linkages between the various districts are much more complex and that the present perspectives do not enable the countries to see the various *epidemics* and their inter-relations which could form together a larger and more dynamic **pandemic** (see also Figures 2 and 5)?

This possible larger subregional pandemic could still be in its early stages of formation and, as yet, not be very perceptible. However, following a principle of precaution, it would be important to verify such a hypothesis subregionally and respond to it appropriately.

Why could one suspect the possibility of such a larger pandemic under formation? In the zones of N-E Myanmar, North Thailand, part of Lao PDR, Cambodia, Vietnam and Yunnan and Guangxi provinces of China tremendous changes and developments are beginning to take place: economic integration, infrastructure development and linkages, special economic trade zones, growing movements of goods and people within increasingly consumer and market oriented economies.

Areas and populations which were isolated are less and less so. The search for money - and related abandon of traditional modes of life or even self-subsistence – is increasing as well as are the income disparities. Such differences can often be related to new roles for sexual relations as a commodity, as a form of payments, as an instrument to access resources or as an expression of power and status. Traditional and cultural forms of sexual relations within a community or between neighbouring communities compete or are replaced by the new functions and roles within a vaster sub-regional economic zone in which the development processes are beginning to take place on a large scale. The consequences are not easy to predict, but one can fear that these massive changes in a vast geographic area comprising large and diverse populations could provide a favourable base for HIV/AIDS spread as local epidemics interface with one another with possible multiplier effects. In such a context, traditional administrative divisions, international boundaries or risk groups might obscure rather than shed light on what could be happening and thus handicap the possibility of implementing the most effective responses.

It is important to stress that we are not presenting a deterministic or causal model of what could happen. The rapid changes do not necessarily lead to the creation of an epidemic on an African scale. As stressed by authors such as Skeldon³, globalisation could first promote, then contribute to containing the epidemic. The point here is that the changes create population and individual vulnerabilities which can, if the conditions are appropriate, lead to an extension of the epidemic. Perhaps one also needs to go further and ask whether some of the developments taking place in parts of South East Asia do not create the conditions for a possibly explosive spread of the epidemic?

³ Ronal Skeldon, February 2000. “Population Mobility and HIV Vulnerability in South East Asia: An Assessment and Analysis”. UNDP South East Asia HIV and Development Project. ISBN: 974-858335-1-1.

In the face of such a complex and rapidly evolving situation, one feels ill equipped to analyze and identify the mechanisms at play. This is why it is suggested to explore the possible relevance of models not previously used to our knowledge in the field of HIV/AIDS.

In this paper, the model one would like to suggest could be useful is that of a *transport hub*.

TRANSPORT HUBS AND HIV/AIDS

In this section, we will look at some of the characteristics and functions of a transport hub and then see if they are possibly relevant to what is taking place in the area of South-east Asia discussed.

A. What is a “hub”?

The Webster defines a hub as “1) the central part of a circular object (as a wheel or propeller); 2a) a centre of activity: focal point; 2b) an airport or city through which an airline routes most of its traffic”.⁴

In fact the origin of the word is unknown but according to the Oxford English Dictionary it may be related to ‘hob’ which meant originally the back of the fireplace. Thus it might be assumed its current transformation from its central position in the house or in the family. The ancient word for hub of a wheel was ‘nave’, deriving from the Indo-European root for ‘naval,’ that is, the centre of the body.

If one consults internet search engines one will find numerous references under the word “hub”, largely divided between two fields: information technology and transport. It is the comparison with the transport hub which could be pertinent for HIV/AIDS.

The transport sector often uses a definition which stresses that the hub is a focal point where different forms of transport come together. For example, for inland transport, containers may go by rail to an inland container depot and then transfer their load to trucks for further transport. This highlights that the hub is linked to the outside world through spokes, e.g. feeder roads.

But perhaps the most appropriate connotation for “hub” in Asia appears in the Chinese poetry of the 5th century BC work known as the Tao Te Ching attributed to philosopher Lao Tsu, where, in Chapter 11, the following is written⁵:

Thirty spokes share the wheel’s hub;
It is the centre hole that makes it useful.
Shape clay into a vessel;
It is the space within that makes it useful.
Cut doors and windows for a room;
It is the holes which make it useful.
Therefore profit comes from what is there;
Usefulness from what is not there.

Advantage is had from whatever is there but usefulness arises from whatever is not.

⁴ Merriam Webster’s Collegiate Dictionary, 1997. By a strange coincidence, the work “hub” practically follows “HTLV-III”: HIV1”!

⁵ Gia-Fu Feng and Jane English translators. 1972. Lao Tsu: Tao Te Ching. New York: Vintage.

In other words, taken by itself, the hub is nothing more than empty space, but without that empty space the spokes would be useless.⁶ For purposes of the present analysis, we may interpret this as saying that the whole is more than the sum of its parts (non-summativity), and this is indeed the primary characteristic of the hub.

What emerges from these definitions is the emphasis on setting up a system through which gains in efficiency will be promoted; reducing costs, waste, etc. through improved interconnectivity. Thus, the hub with its spokes is a very efficient form of networking, combining the advantages of the traditional network with those of concentration and economies of scale. The resulting efficiencies depend on the efficiency of the connections inside this hub on the one hand and between the hub and the feeder or related areas through the spokes on the other.

B. The Hub multiplier effect in HIV epidemics

The term “hub” has been preferred to the usual one of “node” defined as a “point in a network at which lines intersect or branch” as the latter term does not convey the idea of dynamism which is so important in the spread of HIV.

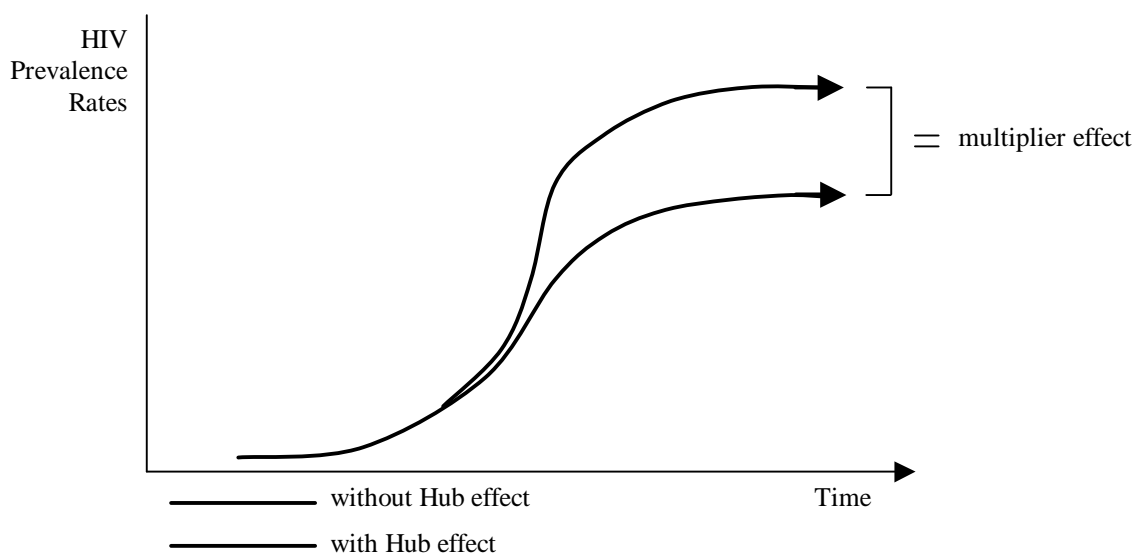
There are thus three questions which need to be answered:

(i) Can socio-economic developments taking place in the identified area of South-east Asia be considered to be in line with such a hub model?

(ii) If yes, could this have an impact on the future course of the various HIV/AIDS epidemics and the resulting pandemic? Or, formulated in a slightly different way, would the connections established between the various HIV/AIDS epidemics as a consequence of the socio-economic and the infrastructure changes taking place, result in a positive synergy and a greater pandemic than the sum total of the various limited epidemics? This is illustrated in Figure 2.

(iii) Again, if yes, what would be policy and programme implications in both the areas of development and of HIV/AIDS?

Figure 2. Trends in HIV prevalence rates with and without Hub multiplier effect



⁶ Note that an alternate derivation for ‘nave’ is from the root for ‘boat’ whence ‘navy’ that is, another vessel whose usefulness arises from the empty space which keeps it afloat.

It is not possible, in this paper to answer fully these questions. The objective is more to explore whether these questions deserve more systematic and in-depth treatment or should be abandoned because they did not correspond to the reality of changes taking place nor to the developments of the HIV/AIDS epidemics.

1. Relevant developments taking place

In this paper, we shall focus on hubs emerging from the developments of the land transport system. Developments are also taking place in river and air transport which are also directly relevant to HIV spread. How these different transport systems interface and with what possible impacts on the future course of the HIV pandemic is a complex issue which possibly requires in depth study.

In order to simplify, hopefully without over simplifying, we shall examine some historical background and then focus on selected recent and planned developments in the land transport system. The presentation will cover three levels: (1) Oudomxay in Lao PDR, placing it in a larger context, i.e.(2) Lao PDR and finally, (3) the level of the Greater Mekong Subregion (GMS).

a. *Historical background: existence of former hubs?*

The quintessential hub in mainland Southeast Asia is located in northern Lao PDR at the provincial seat of Oudomxay. Converging here are transportation routes linking China, Vietnam, Thailand, Myanmar, and ultimately Cambodia, that is, all of the countries which comprise the Greater Mekong Subregion (GMS). In view of the pre-existence of a well entrenched hub, interventions would need to take into account certain factors:

- (1) it is located in the poorest province of the poorest region of an already poor country;
- (2) education and literacy rates are among the lowest in the world;
- (3) commercial sex workers are mostly from ethnic minorities who have little contact with the national government, let alone contact with other countries;
- (4) studies (e.g.UNDP-SEAHIV March 2000)⁷ have shown that AIDS awareness is exceptionally low and use of condoms sporadic;
- (5) northern Lao PDR is one of the primary opium producing areas in the world;
- (6) the adjacent territories of northern Thailand and Yunnan are active in the trafficking of women;
- (7) HIV infection rates are high in all of the countries contributing to the hub; and
- (8) because the roads are either new or will be opening within the next two years, a sense of urgency is lacking and local populations may not be aware of matters pertaining to the outside world.

A first characteristic of *hubs* is that *they serve as centres for trade*. Economically, it is of considerable interest that this region, especially southern China, northern Lao PDR, northern Vietnam, northern Thailand and the Shan State in Myanmar has long been an area of commerce dating from at least the 13th century with Louang Prabang and the Kingdom of Lane Xang as the trade route crossroads. Although the area decreased in importance with rise of shipping and the maritime kingdoms of Southeast Asia in the 17th century, as late as the 19th and early 20th centuries silver crown weight coinage to support on-going trade was minted in Yunnan using both Lao PDR

⁷ Chamberlain J.R. et al, "HIV vulnerability & populations mobility in the northern Province of the Lao People's Democratic Republic", UNDP-SEAHIV, March 2000, ISBN: 974-85913-8-7.

and Chinese languages for use in this inland region attesting to its unity and to the fact that it did not disappear entirely as an economic zone. An example is illustrated in the photograph below, see Figure 3.

Figure 3: Coin



The primary exports from Lao PDR to China and elsewhere are forest products. This seems always to have been the case. Tournier (1900)⁸ provides the following list of exports from northern Lao PDR in 1898 as illustrated in table 1.

Table 1 – Exports from Northern Lao PDR in 1898

Types of Goods	Average Purchasing Price \$	Average Selling Price \$	Number of Units Exported	Total Purchase Value \$
Cardamom	18	27	150	2,700
Benjoin	54	68	500	27,000
Laquer	10	14	2,000	20,000
Beeswax	54	60	20	1,080
Resins	2	3.5	10	20
Ramie	18	21	50	900
Silk (grège)	125	150	45	5,625
Hemp	18	21	15	270
Mats				1,620
Sashes and Skirts				3,500
Rhino Horn	2,000	2,500	1	2,000
Ivory	360	430	3	1,080
Horns	7	9	40	280
Deer Horns	10	14	10	100
Horns (molle)	2,500	3,000	1.5	3,800
Pangolin Scales	32.5	45	58	1,885
Tobacco	8	12	150	1,200
Animal skins	8	11	700	5,600
Other Misc. Forest Products				8,500
Other products			3,000	50,000
Cattle	7	12	300	2,100
Buffaloes	10	20	700	7,000
TOTAL				146,260

⁸ Tournier, Lt. Col. 1900. Notice sur le Laos français. Hanoi: F.H. Schneider.

A recurrent theme for Lao PDR apparent here is the central role of forest products in the economy. That this is still the case 100 years after the above figures were assembled may lead us to conclude that a major characteristic of Lao PDR is its position as a crossroads or hub.

A schematic representation demonstrating the early central position of Louang Prabang in regional trade is provided in Doré (1987) and shows clearly that the notion of a hub is well-justified.⁹ See Figure 4.

Although the economic unity of the region has been interrupted frequently by wars, these have not been of sufficient magnitude to dissolve the underlying system and with the return of peace the old patterns of communication have reasserted themselves. This same holds true even today, in the wake of the Asian financial crisis.

Nowadays, Oudomxay in Northern Lao PDR is already the primary marketplace for goods manufactured in China. Since the stabilization of the Lao Kip and Chinese Yuan exchange rate, between 50-80 trucks are arriving each day from Yunnan carrying primarily electronic goods. The quantity of goods being shipped would imply that they are destined for Thai and Cambodian markets as well as Lao PDR.

It can only follow that Oudomxay could emerge as a primary commercial centre. Marketeers in this city carry out business in a diverse array of languages including Ho Chinese, Tai Dam, Hmong, Lue, and even Seng Saly (Phou Noy originally from Phongsaly) in addition to Lao PDR. And, like the coins illustrated in Figure 3, the lingua francas of Oudomxay are still Lao and Chinese.

Thus another critical aspect of the *hub* is *stability or resiliency* resulting directly from its diversity which creates a complex web of interactional patterns. These have allowed for areas such as northern Lao PDR to retain a priority as hub at least since the 13th century and perhaps earlier.

Finally, a third characteristic of the *hub* is its *naturalness*. That is to say, hubs are natural phenomena, have evolved more or less on the basis of population and trade movements, as opposed to borders between nations which are artificial. Borders are the creation of governments whereas hubs can be the result of unplanned natural human exchange mechanisms. Borders may change, but the networks of human relationships remain the same. And for the prevention of AIDS it goes without saying that human relationships are primary.

2. The hub model for HIV/AIDS

Through the previous illustration of how Louang Prabang could function as a hub and some of the characteristics of such a hub, one can attempt to generalize further as is shown in Figure 5.

Figure 5 is a variant of Figure 1. The differences lie in the fact that it introduces a major or “primary” hub in Country A and then that this primary hub is linked to lesser or “secondary” hubs in other countries. Together they form a hierarchical network or system of hubs determined by development processes. Each of these hubs attracts, concentrates and redispaches people from other parts of the country or region and exposes through such processes many individuals to

⁹ Doré, Pierre S. (Amphay). 1987. *Contribution ethno-historique à la connaissance de la culture Louang-Phrabanaise*. Mémoire présenté pour le Doctorat d’Etat, es-Lettres & Science humaines. Université Paris V: René Descartes.

Figure 4.

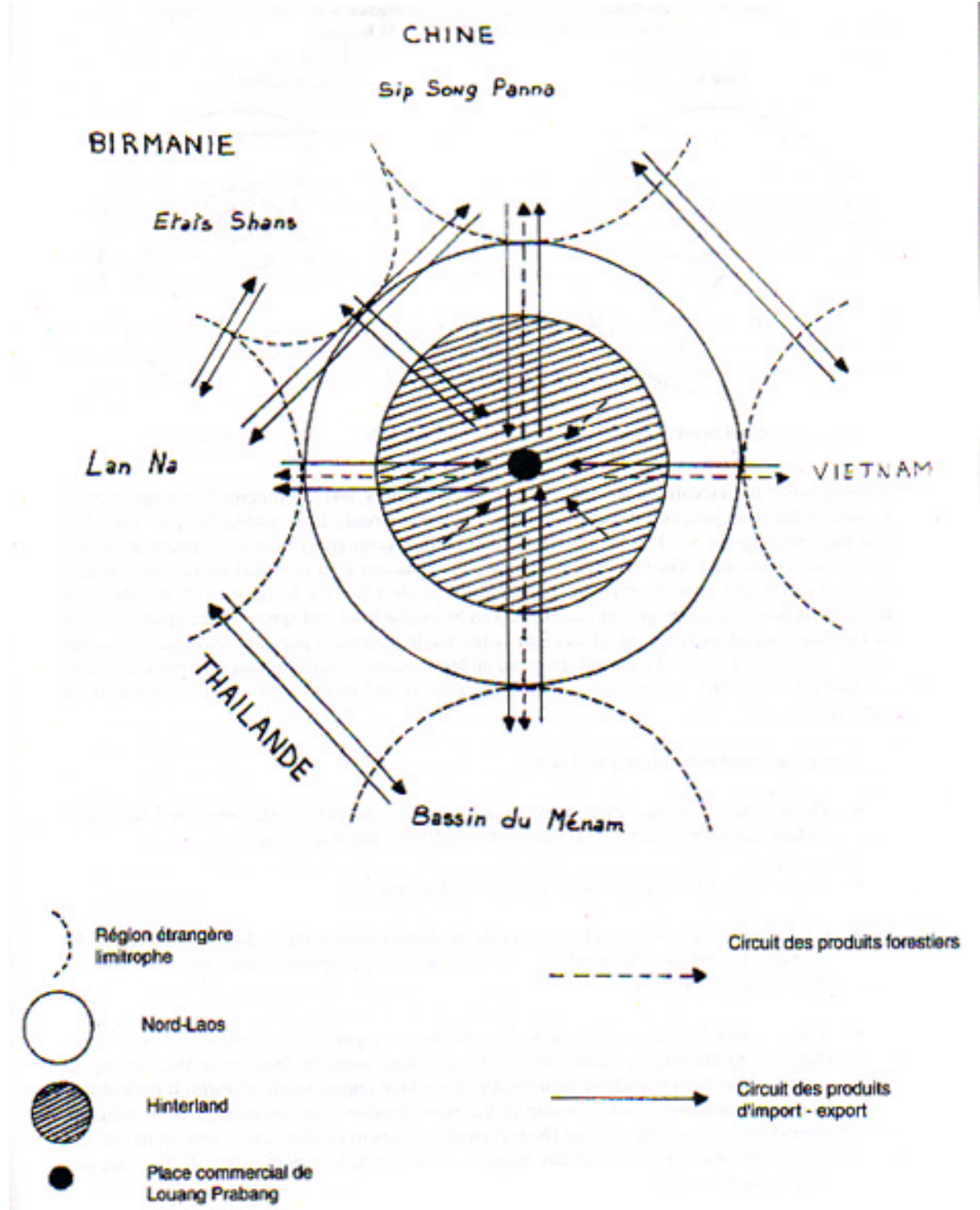
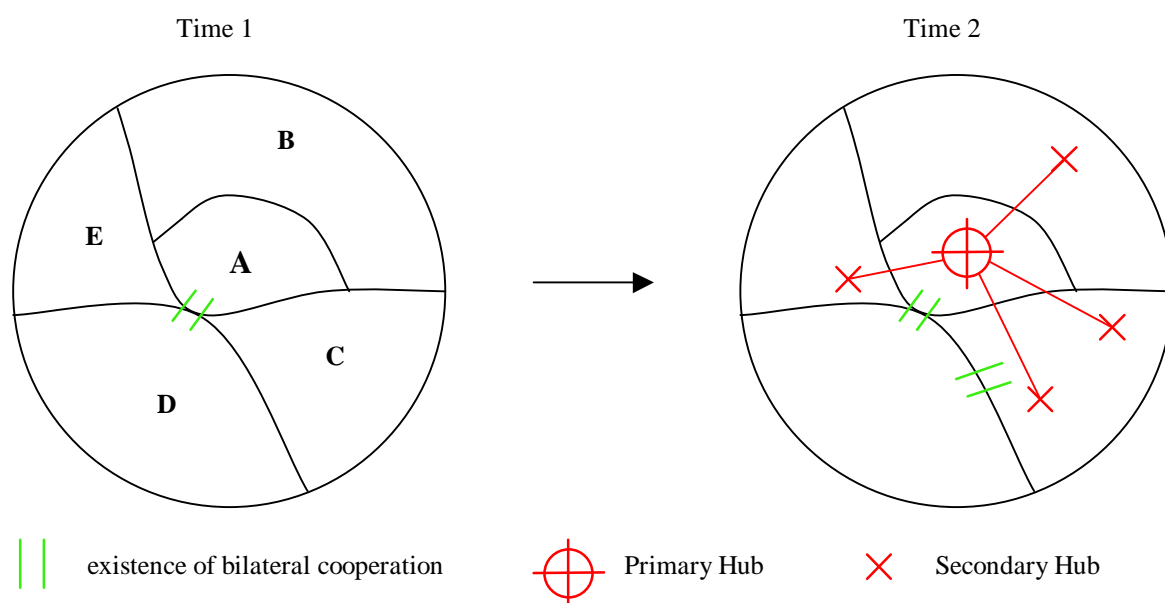


Figure 5. National Programmes challenged by the emergence of primary and secondary Hubs in Countries A, B, C, D, E.



meeting other individuals under all kinds of circumstances and conditions. Furthermore, as is known, individuals, whether those on the move or those already from within the hub, can often lose their bearings or consider that different rules of behaviour apply than those practiced within their usual community when dealing with strangers. This can lead to situations of vulnerability, abuse of power and more generally of risk taking. It is clear that the larger the hub and the more efficient its functioning the greater the impact can be on the level and spread of the epidemic. One of the most important functions of the hub is the mixing between populations which might not occur otherwise, or not to the same degree and under the same behaviour patterns, thus facilitating the transfer of the HIV virus from one group to another and its redispaching to lesser infected populations.

Four points need to be highlighted here:

- The hub by itself, and even more so when interconnected to other ones and forming a system, can have a *multiplier* effect on the epidemic. Refer to figure 2.
- The key forces fueling such a system are development ones.
- It is important for policy and programmes to identify such systems, both to understand the mechanisms behind the pandemic and to devise appropriate strategies and effective allocations of resources.
- If the system formed is transnational, as shown in Figure 5, it constitutes then a major challenge to the way in which national programmes normally function as they are not in control of the hubs outside of their borders but which impact inside of them. It is clear that bilateral arrangements, while a step in the right direction, are not enough to be effective against the hub system, because the real challenge lies in tackling the system in its entirety

at a developmental level and this requires a coordinated strategy from all the countries covered by the system.

Map 1 illustrates the relative position of the Oudomxay Province in relation to its contacts with surrounding countries. It is of importance to note in addition that Oudomxay links overland with water transport routes in the form of the Mekong river, itself a historically significant, transportation route linking Lao PDR with China, Myanmar, Thailand, Cambodia and ultimately the Pacific Ocean. This connection intensifies the force of the Oudomxay hub in terms of its potential for harboring unseen or unnoticed channels for the spread of the virus.

Map 2 shows the national road system of the Lao PDR. The impressive array of international crossing points leading to the hub at Oudomxay is especially noteworthy. Also of interest and of concern internally, is the fact that the road network extends to each and every province, large portions of which are poor areas peopled by ethnic minorities who lack awareness of HIV/AIDS, and for whom the road is, both physically and metaphorically, a highway to the hub.

When one considers these maps together, one can but be struck by the impressive road system in the making. This system will eventually connect the remotest villages to all the important centres and can be expected to play a major role in the GMS integration and socio-economic development. See Map 3.

Although it can be foreseen that the land transport system will play a key role among transport systems in facilitating population movements, the role of other transport systems should not be overlooked. For example, the air transport map shows roughly similar networks of linkages for the sub-region with a growing importance of the role of hubs, even if their location is not always the same as for land transport. See Map 4 Aviation Hubs of South East Asia. The maritime and river transport systems are just mentioned here, *pour mémoire*.

One can thus conceive of a scenario in which the growth of each type of transport system, combined with the interconnectivity of the systems, and the dynamic role of the hubs can fuel mobility on a scale unprecedented in the sub-region.

Once again, it is important to stress that it is not the movement of people, *per se*, which is the issue, it is the combination of unsafe sexual behaviour, injecting drug use, socio-economic vulnerabilities and mobility which is. Where the first three conditions are found, mobility may introduce a connectivity between separate epidemics creating a pandemic coupled with a multiplier effect on the spread of HIV. Just as health centred strategies have been addressing sexual behaviour and injecting drug use, development centred strategies have now to address effectively socio-economic vulnerabilities and development interrelations with mobility. Some suggestions are presented in the following section.

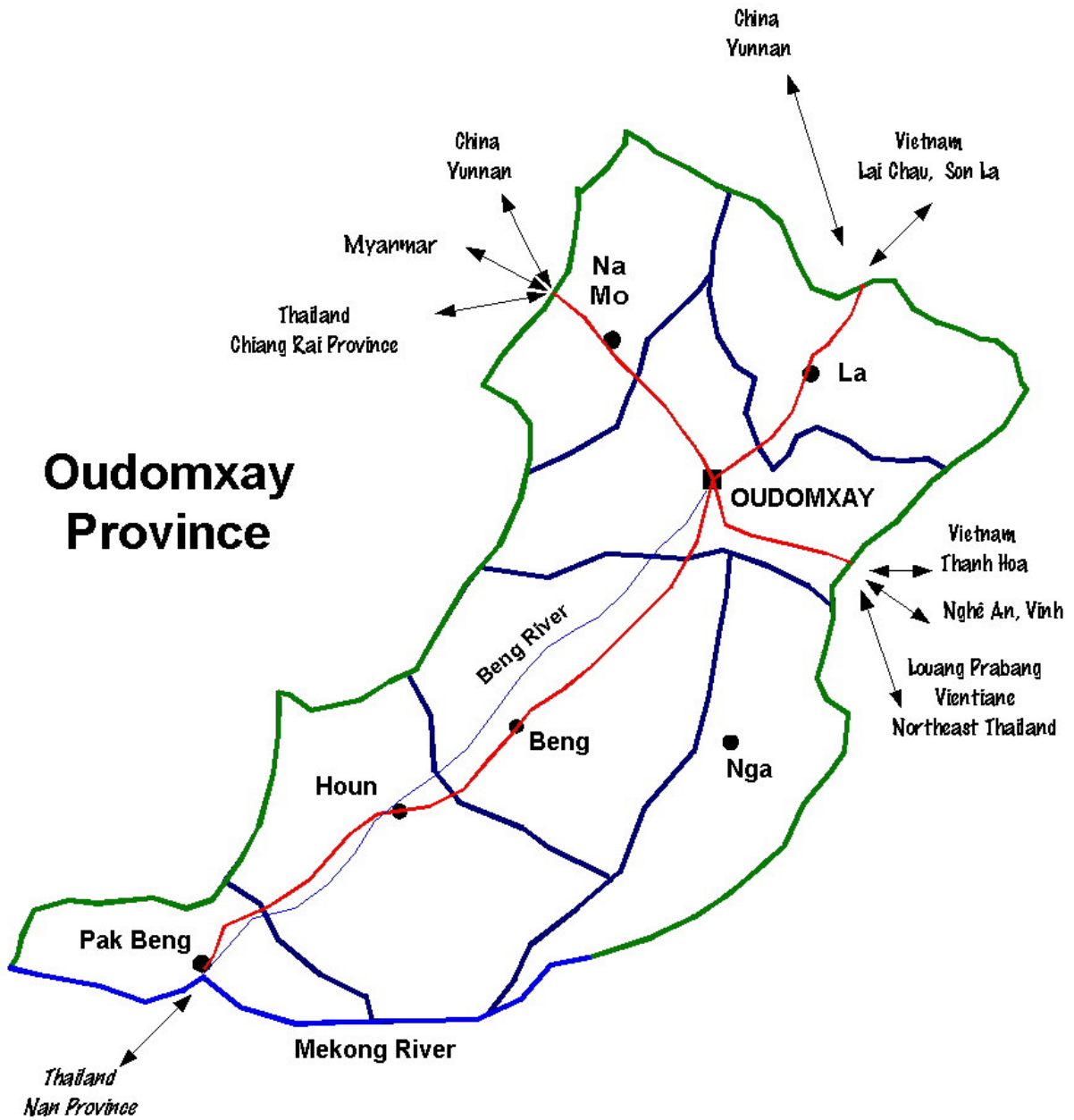
3 Policy and programme implications of the hub model

These are tentative, as has been mentioned, the validation of the hub model needs to be confirmed. In this section, one is just illustrating the kind of implications one could consider.

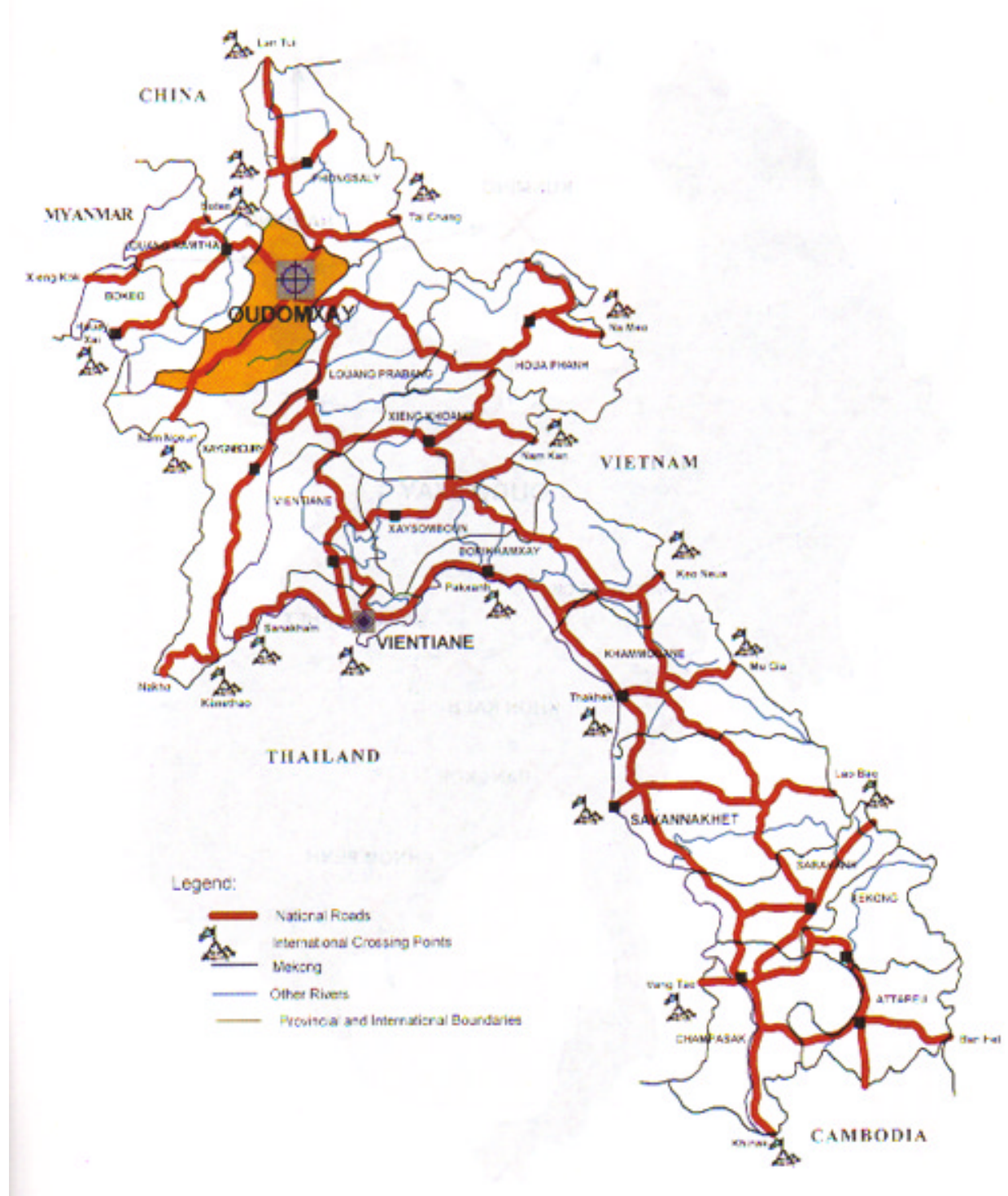
As a first principle, given the economic efficiency and resiliency of the hub, HIV/AIDS programs should take advantage of the existing system and utilize its status as an information crossroad, as opposed to trying to interrupt its operation. Because, as we have seen, even the forces of war, not to mention the winds of time, have not succeeded in changing the patterns of communication.

Indeed, a golden opportunity exists for the utilization of the hubs as points of dissemination of information and preventative services.

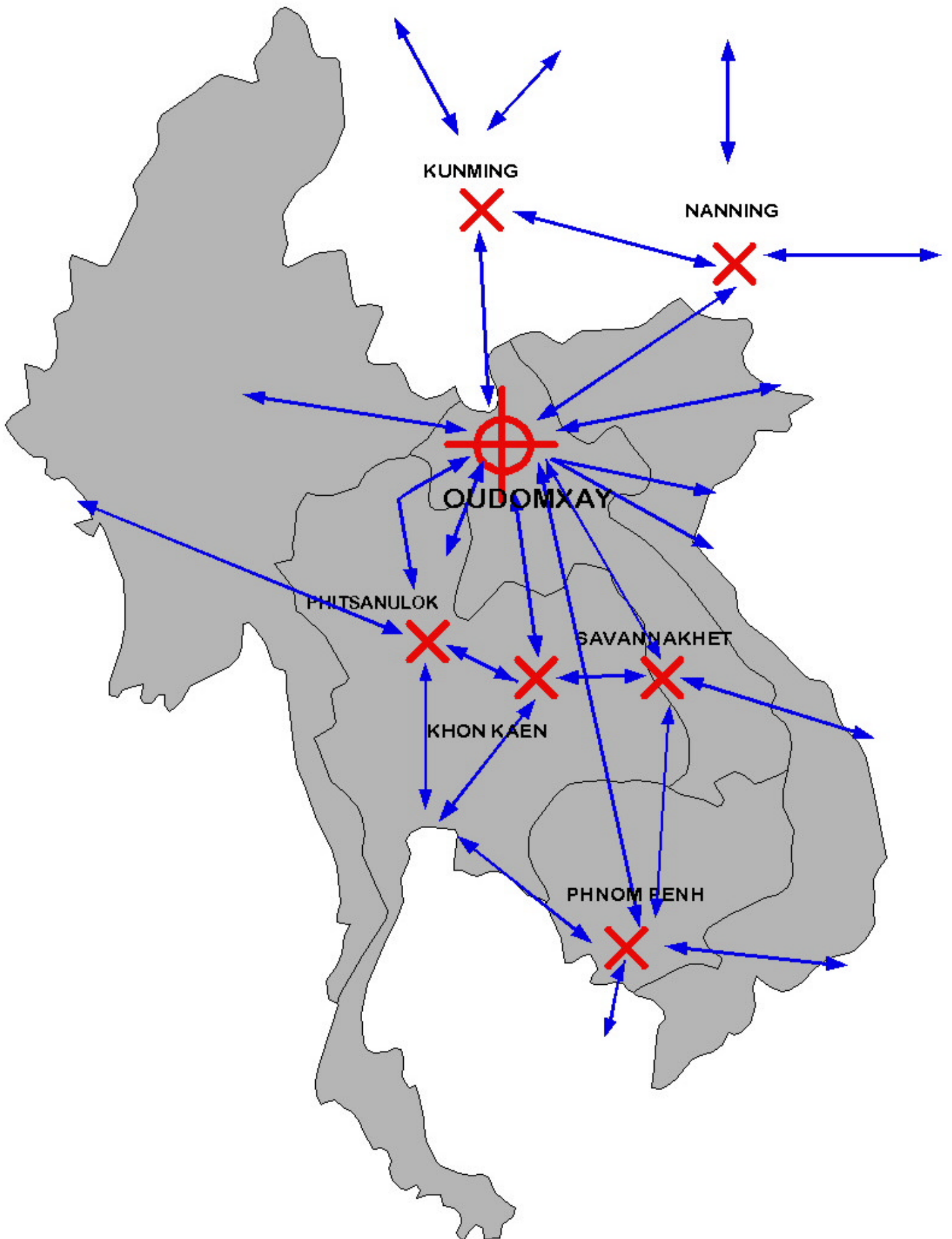
Map 1



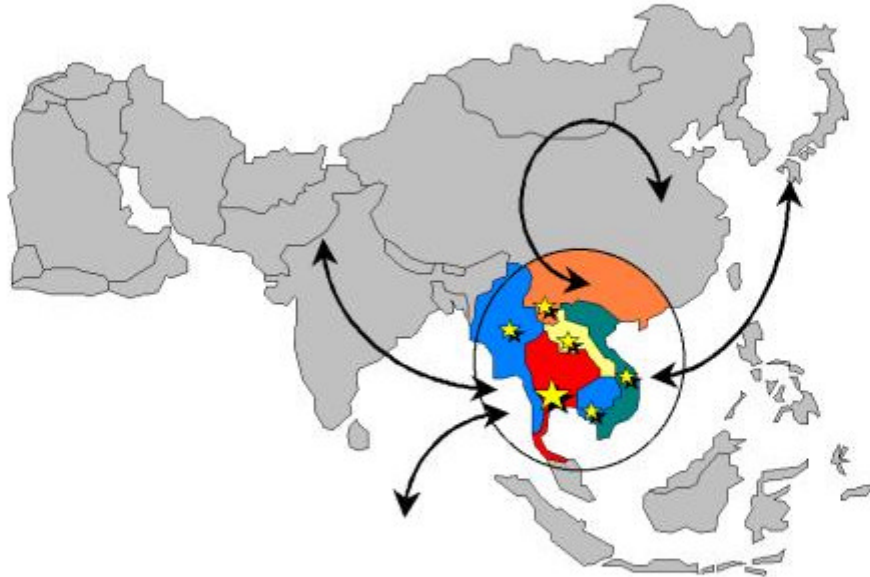
Map 2 Transportation routes in the Lao PDR



Map 3 GMS land Transport Hub



Map 4 South East Asia Aviation Hubs



Source: Virachai Wannukul, VG Consultant Co.,Ltd.

Strategy for Thai Aviation, 9th August 2000 Reprinted with the authors kind permission.

It should be clear that one is not advocating to slow down development, but to make sure that it is done in such a way that HIV/AIDS' negative consequences do not occur.

It is thus proposed by UNDP-SEAHIV that the following actions be undertaken:

- a. Complementing present national policies and programmes with:
 - (i) multisectoral responses designed to disable synergies between mobility induced by development and HIV epidemics. This would mean either attempting to disable specific epidemics but also focusing on the interface between specific epidemics: e.g. the connection between truck drivers and water-born transport workers via their common partners.
 - (ii) Programmes which go beyond bilateral activities at border crossing points and cover all the related borders in a coordinated manner.
- b. Explore with the relevant other national programmes how best to address the development of hub-HIV/AIDS links and set up networks.
- c. Explore with development sectors the possibility of partnerships which would contribute to the implementation of the new programmes and activities identified as necessary.

CONCLUDING REMARKS

As can be expected, present strategies are designed on the basis of the perception of the epidemic. Mobility systems do not enter in this field of vision, only migrants and some mobile professions do, but as previously discussed in this paper and in others published by the Project, these are but some of the more visible manifestations of the underlying mobility systems. The logical consequence is that, at the intercountry level, activities promoting safer sex and safer injecting practices tend to focus on migrants at border crossing points and truck drivers at rest stations.

One can, however change the lenses through which one observes the HIV epidemics and put on development, instead of health, glasses. In a rather similar manner, astronomers who only used to have telescopes designed to capture wave lengths in the visible range of light, now have at their disposal a rich range of instruments capturing many different wave lengths (e.g. X rays or gamma rays) and revealing unsuspected views of the universe which have helped renew the entire field of astronomy. If one conducts such an exercise, one can view socio-economic and other development factors underlying behaviours. Mobility systems thus emerge as being potentially important factors in influencing the future course of the HIV epidemics.

With the present and foreseeable rapid socio-economic changes taking place in the GMS countries interacting with the colossal infrastructure development effort especially in land transport, one can expect mobility systems to interact with the existing factors impacting on the epidemics¹⁰. The outcomes of such interactions are not predictable at this stage, but there does exist, *prima facie*, a case to be very careful which encourages strongly to use development activities as primary prevention instruments to prevent a possibly disastrous junction occurring.

¹⁰ Early Warning Rapid Response System for development-related mobility as it links to HIV vulnerability, UNDP South East Asia HIV and development Project ISBN: 974-680-169-4.

In such a context, the suggested hub model could be a useful one in advocacy to decision-makers for new development centred policies and strategies addressing the mobility systems. It could also help in designing research to understand better crucial interrelations and conceive and implement responses tailored to entire systems rather than limited to some of their more immediately visible manifestations. A point already mentioned needing to be reemphasized is that national programmes should not limit themselves to bilateral agreements aiming at border crossings. This is why the steps being taken by the GMS to create an enabling environment for development centred strategies is extremely important. Such an enabling environment is to operate at the macro level under the aegis of ASEAN and at the sub national level through a Memorandum of Understanding (MOU) to be signed towards the end of 2000. This MOU would enable provincial authorities to address connections between hubs as well as internal and international movements.

The Joint Action Programme (JAP) under development by the UNDP South East Asia HIV and Development Project in close collaboration with national authorities and NGOs is designed, among other objectives, with a view to facilitate the implementation of development centred policies and strategies made possible by the improving policy environment.

Capacity Building 🏳️ Social Mobilization 🏳️ Institutional Partnership 🏳️ Advocacy & Information



UNDP South East Asia HIV and Development Project, United Nations Building, Rajdamnern Nok Ave, Bangkok 10200, Thailand
Tel: 66-2-288-2165, Fax: 66-2-280-1852, Website: www.hiv-development.org

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Development is the process of enlarging peoples' choices to live long and healthy lives, to have access to knowledge, and to have access to income and assets; to enjoy a decent standard of living.