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**“HIV Impact Assessment in Rural Industrialization: The Case of T-BIRD
Project in Buriram Province, Thailand”**

Proposed Pilot-Testing of the HIA Tool in Thailand

**presented
by
APHIRT Thailand Team**

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September 2000

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Introduction

One of the key elements in the HIA conceptual model is “population movement”. Development projects that induce population movements have the potential to spread HIV, and therefore, the HIV impact assessment (HIA) should be considered for any projects involving such population movements. The Thailand team has selected the rural development sector as a potential area of HIA pilot-testing in Thailand. It is well known that spatial differentials in wages and job opportunities between rural and urban areas influence migration behaviors. In Thailand, the rate of migration has been increasing in parallel with the pace of development of the country. An urban bias in government policies that promote export-led growth and the development of service sector is associated with the increased rural-to-urban migration, particularly to Bangkok (Phongpaichit, 1992). In order to reduce the volume of rural migration to Bangkok, various measures have been attempted, including the development of regional growth cities, decentralizing industries to areas outside Bangkok, and community development programs designed to alleviate rural poverty. While these measures contribute, to some extent, to altering the magnitude and direction of rural-to-Bangkok stream of migration, they may also have negative social impacts on the rural area, including the risk of HIV. Focusing particularly on a rural industrialization scheme, the proposed pilot testing will consider the risk of HIV which is potentially increased by the population movement triggered by rural industrialization projects. We also consider a special situation in which a massive population movement takes place following a sudden economic downturn, such as the economic crisis in 1997. To this end, we use the Thai Business Initiative for Rural Development (T-BIRD) as a pilot case study. We hypothesize that rural development will influence the amount of population movement and interchange between rural and urban areas in various ways. We also hypothesize that if the rural development sector facilitates population movements in various forms of migration, it will no longer keep the rural area immune to the impact of the risk of HIV. Finally, we hypothesize that there are at least four types of population movement which require particular attention in the context of rural industrialization. They include 1) return-migration attracted by new job opportunities created by the rural industrialization; 2) out-migration indirectly encouraged by the rural industrialization; 3) return-migration caused by a sudden economic downturn; and 4) the flow of in-movers seeking job opportunities created as a result of the multiplier effects of the T-BIRD factories. In what follows, we illustrate these four types of population movement attached to the T-BIRD project. We will then present a proposed HIA design to consider HIV risk for each type of population movement involved in the T-BIRD project.

Background of T-BIRD: A Development Project Aiming to Reverse Migration

The Thai Business Initiative for Rural Development (T-BIRD) is a project implemented throughout villages in rural Thailand by the Population and Community

Development Association (PDA). This project is based on the involvement of large Thai and international corporations in rural development. The T-BIRD project aims to transfer business skills to rural settings in order to allow villagers to improve their capacity to generate income. The touted success of the T-BIRD project has encouraged the Department of Rural Industrial Promotion of the Ministry of Industry to enthusiastically promote rural industrialization as a policy that can reduce out-migration of the rural population.

In 1988, PDA initiated the T-BIRD project in Buriram province, in the south of the Northeastern region, approximately 200 kilometers from Bangkok (see Figure 1). Buriram and Bangkok are linked through a good road system. The Northeastern region is the poorest region in Thailand, with limited availability of land and poor soil quality. Moreover, this region is the largest in terms of population size, accounting for one-third of the sixty million population of Thailand. The region has highest level of rural out-migration in the country (Goldstein and Goldstein, 1986; National Statistics Office, 1991; Chamratrithirong et al., 1995). The 1990 census indicates that of the seventy two provinces of Thailand, Buriram province ranks sixth in terms of the number of out-migrants (Pejaranonda and Guest, 1995). The main objective of T-BIRD has been to reduce out-migration by setting up medium size factories in villages, thereby creating jobs in rural settings that are similar to those offered in Bangkok and peripheral suburbs. The T-BIRD project also aims at reducing the income gap between rural areas and Bangkok, as well as developing the basic skills of rural people in order to improve their incomes and living standards. The basic strategy of T-BIRD has been thus to invite businessmen and industrial investors to participate in the community development process.

(Figure 1 about here)

At the end of 1997, there were fifteen factories in Buriram province, each with 100 to 200 workers located in villages in Nang Rong district and the bordering districts of None Suwan, Lam Plaimas and Chamni. More than 1,200 workers were working in these factories. The industries were run either by the companies themselves, villagers in the form of cooperatives, or joint investment by companies and cooperatives. Villagers could get some loans from the T-BIRD project in order to assist in the establishment of the factories. List of factories operated under the T-BIRD project in Buriram province is shown in Table 1.

(Table 1 about here)

The factories established by the T-BIRD project have been widely touted as having been effective in reversing migration to Bangkok. They have also been effective in absorbing surplus labor, rather than concentrating financial aids on agricultural development alone. The effects of T-BIRD on migration have been diverse; it offers jobs to villagers in their local areas, and hence not separating them from their families or forcing them to struggle in the cities, thus being considered to be a model of rural development (Mydan, 1997).

In a review of five T-BIRD projects in Thailand, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) concludes that: the benefits of T-BIRD are multi-dimensional. First, the newly created jobs created provide an

income that is not dependent on the harvest. Second, by having an income all year long, villagers break their dependence on money lenders who provide loans at high interest rates to tide people over between harvests. Thirdly, the income earned takes away the need to migrate. This allows villagers to keep their families and communities intact. Taken together, this means that villagers live and work in far better conditions than they would in the tenements of Bangkok (ESCAP, 1994: 16-17).

People at HIV Risk

Successful rural development encourages return-migration from the urban center thereby bringing different groups of people into contact. As a result, successful rural development may facilitate increasing the risk of contracting and/or transmitting HIV. It is possible that even in a rural area with a current low level of HIV infection, such as Northeastern Thailand, the level may climb and, soon or later, approach the levels of other high risk areas. Thus, the rural sector will no longer be immune to the impact of the epidemic.

Before the T-BIRD project was initiated, many rural residents in Buriram province migrated in Bangkok or in other places because of much better job opportunities and higher wages than those available in their home villages. Though they would prefer to work near their homes, there were not enough jobs available for the surplus labor from agriculture. Apart from the job opportunities, some migrants enjoy working far away from home because it means they have an opportunity to experience the city life that a lot of their village friends had been experiencing. Many people think that it is fun to visit home during long holidays and festivals with many other migrants who return from Bangkok. Their lives in Bangkok are rarely seen by those who stay in the villages, however. Some migrants are cheated, frustrated and suffering. Others suffered from loneliness, homesickness, missing their parents, and problems in getting along with their friends. Even so, if one's family has no better alternative, leaving home to work somewhere else must appear as a worthwhile adventure.

By setting up factories in rural villages, the T-BIRD project had provided well over 1,000 jobs to the population of Nang Rong district in Buriram province. The workers in T-BIRD factories are surplus to the needs of the agricultural sector in the area. If there were no jobs created by T-BIRD, these workers would have to seek other alternative. In terms of numbers, however, T-BIRD can not draw large numbers of migrants back from Bangkok and other places. In fact, T-BIRD factories at the moment can absorb very few of the surplus workers relative to the local demand for job and population size in the area of Nang Rong.

Once viable employment is available in their villages, therefore, the villagers do not need to migrate out again to seek jobs far from home. Thus, as this kind of rural industrialization advances and more job opportunities are created, that will draw migrants back to their homes. This is the first wave of population movement which will be subjected to an HIV impact assessment.

The second wave of population movement is out-migration indirectly encouraged by the rural industrialization. While the T-BIRD project contributed to reducing the

social impacts of migration to a certain extent, some people are still migrating to Bangkok. An increase in out-migration is possible because of the increased household income, and hence the increased ability to finance migration. Most of the employees of the T-BIRD factories also have relatively low levels of education, generally up to the end of the third year of high school. Those persons with higher levels of education, an increasing proportion of the population, still mainly have to migrate if they want a job that fits their level of education.

The third wave of population movement is return-migration caused by the economic downturn. In July 1997, the Thai government floated the Thai baht, resulting in the most severe and prolonged economic recession in the country's history. This economic crisis caused a surge of reverse migration from Bangkok to rural areas, especially to the poorer areas of the Northeast. The return migrants in these economic woes comprised mainly lower-skilled and semi-skilled urban workers laid off from the construction sector and lower-level service and manufacturing sector jobs. While the economic strains placed on already-weak rural household were discussed in various ways, other social impacts accompanied by such a mass population movement under the economic crisis, such as HIA, have not been fully considered.

Finally, we have to consider HIV risk for another group of people who may have been brought into the T-BIRD project area. Local employment of the factories will create employment in a number of ancillary service industries in the rural development sector. Although it is not possible to separate the effects of other development programs from the effect of T-BIRD on generating local employment opportunities, Corbitt (1996), in his appraisal of the T-BIRD initiative, notes how the town of Nang Rong has expanded since T-BIRD has been in place. For example, he notes the expansion from one motorcycle dealership to five. Another example is the building of a very large private hospital in the town. These job opportunities which have been created as a result of the multiplier effects of the T-BIRD factories will certainly draw more transients and in-movers to the project area, thereby increasing the amount of interchange among people from different parts of the region. Therefore, these in-movers and transients should be included in HIA.

HIA Design

Basically, we employ the six steps of conducting the HIA mentioned in the HIA toolkit. However, since this is pilot testing, we may not be able to cover all the aspects of each step. Therefore, our proposed pilot-testing of HIA in Thailand is outlined as follows:

Step 1. "Collecting and analyzing data on background information of the proposed development project."

We will select one T-BIRD project area in Buriram province, which may be comprised of some districts. We will then collect background information of all the factories operating under the T-BIRD project in that area, including the number and socio-demographic composition of employees, duration of operation, etc.

Step 2. "Identifying population movement due to the proposed development project."

In this step, we concentrate on gathering information regarding the four types of potential population movement. That is, 1) return-migration attracted by new job opportunities created by the rural industrialization; 2) out-migration indirectly encouraged by the rural industrialization; 3) return-migration caused by the economic downturn; and 4) in-movers and transients seeking job opportunities created by the T-BIRD factories (see Figure 2).

(Figure 2 about here)

Step 3. “Assessing the need and desirability of an HIA.”

This step aims at gathering data regarding the characteristics and risk behavior of individuals falling in each category of population movement. Three sets of survey questionnaires will be prepared. The first set is for both return-migrants seeking new job opportunities created by T-BIRD and return-migrants caused by the economic crisis in 1997. It contains questions on migration history, destinations, types of jobs they engaged in, the duration of stay in Bangkok, intention to out-migrate again, as well as general socioeconomic and demographic characteristics. The interviews of this questionnaire will be conducted to workers currently working in T-BIRD factories. The second set of questionnaire is designed for transients and in-movers seeking job opportunities in places surrounding the T-BIRD factories. The T-BIRD project will create employment in a number of ancillary service industries, such as raw material transporters and vendors of various kinds. This category consists of local people living near the factories and transients from nearby communities. Since they do not work directly for T-BIRD factories, a separate questionnaire is prepared. The key to identify these people is the history of business establishment. For example, we will interview shop owners and vendors who came to operate their business after the T-BIRD factories had been established. The third set of questionnaire will be applied to potential out-migrants indirectly encouraged by the rural industrialization. This category mainly consists of people who have never been to Bangkok to work, but are now planning to do so due to the influence of the rural industrialization. For convenience, return-migrants who are currently unemployed, especially not hired by T-BIRD factories, are also included in this category.

Step 4. “Determining the risk of HIV based on data at individual, community and national level associated with the project.”

In this step, based on the results of the survey, we identify the prevalence of risk behavior among the four categories of people involved in the T-BIRD project. We will also construct comprehensive scenario of the potential contact between “risky people” and others in the community, thereby assessing the quantifiable and non-quantifiable impact of T-BIRD on the spread of the HIV epidemic in the area.

Step 5. “Costing the impact of HIV/AIDS based on quantifiable and non-quantifiable variables (economic, medical, social and psychological).”

In this step, using the scenario of the potential contact and interchange, we will estimate an increase in the HIV/AIDS prevalence rate in the area. We will also gather available economic indicators regarding the region in order to calculate the cost of medical treatment and home care, and the loss of income. In addition, we will explore the non-quantifiable social cost, such as an increase of orphans and changing family structure (e.g., an increase of households consisting of only frail elderly and children).

Step 6. “Evaluating possible preventive intervention strategies to mitigate the potential impact on HIV/AIDS epidemic.”

Finally, suggestions for possible preventive intervention strategies, such as encouraging factories to provide workers with HIV/AIDS education and blood tests, will be considered.

Table 1. Factories Operating Under the T-BIRD Project in Buriram Province

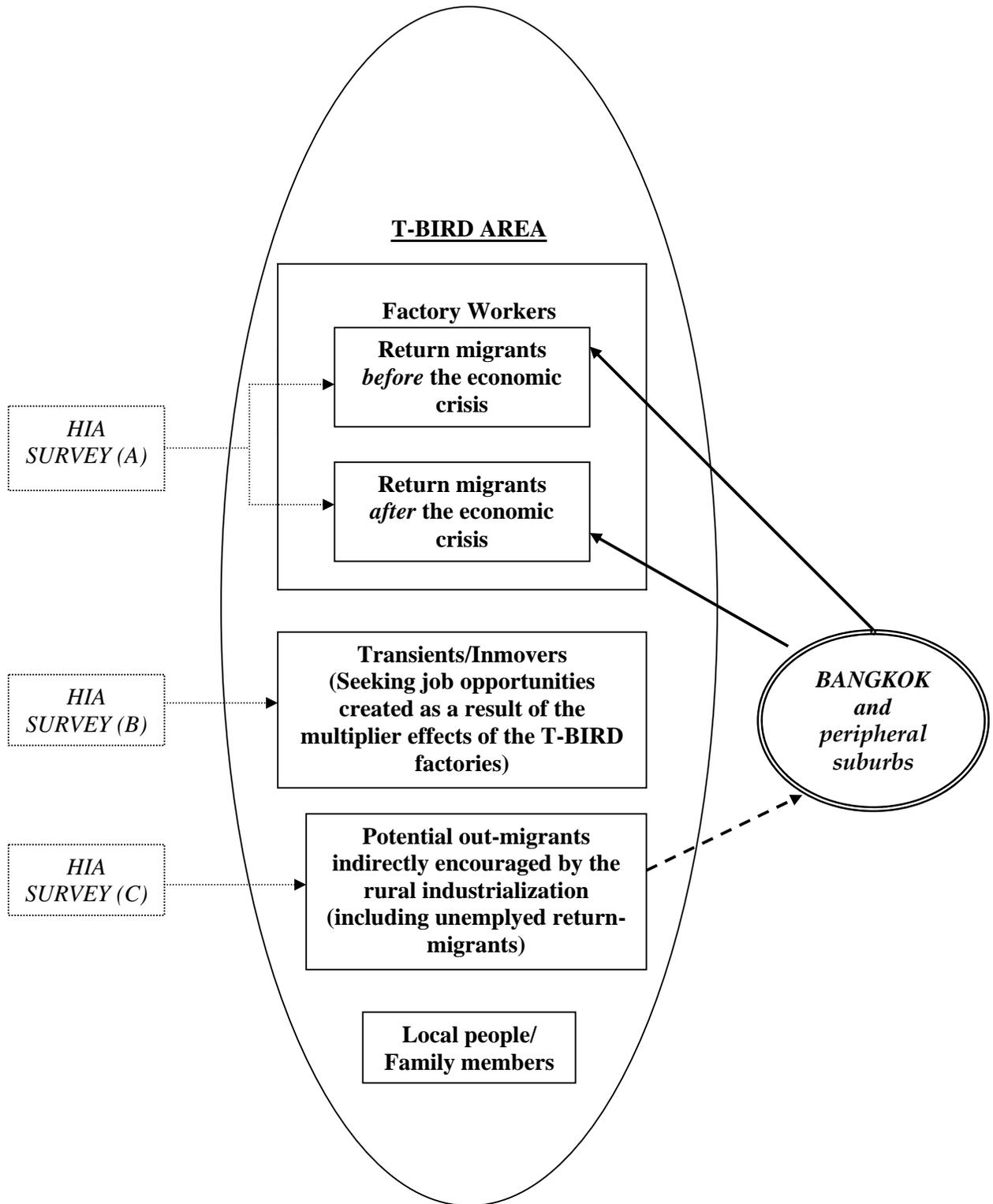
Company	Location/investment	Type of Industry	Number of workers Average income
Tip Win Group	Krokgaw, D.None Suwan, Cooperative 100%	Garment	100 workers, 130 Baht/day
Idea Apparel	D.Nang Rong, Cooperative+Company Nongbote	Jean pants	100 workers, 130 Baht/day.
Universal	Nong Krating, D. Lam Plaimas, Company 100%	Garment	Under preparation.
Maximum Garment	Nong Done , D. Lam Plaimas, Company 100%	Garment	Under preparation.
Union Shoes	Koke Glang, D. Lam Plaimas, Company 100%	Shoes	250 workers, 130 Baht/day.
Pan Asia Footware	Sup Pa Ya, D. Nang Rong, Cooperative 100%	Shoes	50 workers, 150 Baht/day.
Bata Shoes of Thailand	Nong Bote, D. Nang Rong, Cooperative 100 %	Shoes	52 workers, 130 Baht/day.
Union Shoes	La Luad, D. Nang Rong, Cooperative 100 %	Shoes	150 workers, 130 Baht/day.
Pan Asia Footware	Chamni, D.Chamni, Cooperative 100 %	Shoes	43 workers, 150 Baht/day.
Bata Shoes of Thailand	Nong Sai, D. Nang Rong, Cooperative 100 %	Shoes	48 workers, 130 Baht/day.
Goldmine Garment	Nong Bote, D. Nang Rong, Cooperative + Company	Garment	148 workers, 140 Baht/day.
Bata Shoe (Training Center)	C-BIRD Center, Company 100 %	Shoes	173 workers, 130 Baht/day.
Bata Shoe	Lam Sai Yong, D. Nang Rong, Cooperative 100 %	Shoes (part of)	48 workers, 140 Baht/day.
Bata Shoe	Ban Sing, D. Nang Rong, Cooperative 100 %	Shoes (part of)	55 workers, 140 Baht/day.
Pan Footware	Kok Glang, D. Lam Plaimas, Company 100 %	Shoes	195 workers, 160 Baht/day.

Note: US\$1 = 42 Baht (at the 1998 exchange rate).



Figure 1. The Location of Nang Rong

Figure 2. Population Movements Associated with Rural Industrialization



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