

THE NEED FOR ANOTHER REVOLUTION AFTER THE REPRODUCTIVE REVOLUTION IN THAILAND

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Introduction

Although great attention on reproductive revolution in Thailand during 1970-1990 has been made among Thai and foreign demographers, the seriousness of its consequences is not totally well aware of especially by top administrators of the country. Demographers argue that Thai population policy should not be on attempt to influence fertility anymore, but rather be more focused on the distribution of population and the quality of the population (Warangrattana et.al.,1996). However, the quality of the population is not only a policy option, but with current disadvantageous situations including the threats of illegal immigrants, it is a must. To target the human-centered development as focused in the Eight Five Year Plan, the country needs to have, after the reproductive revolution of the past three decades, another revolution, to complete this task.

The last reproductive revolution

At least among ASEAN countries, no other country has had as striking demographic transition as Thailand (Table 1). The success of family planning program in the past two decades in Thailand is well known. Starting from 1970, Thailand has experienced a major transformation in its reproductive behavior, commonly known and accepted as the "reproductive revolution". (Knodel et.al. 1987) Fertility has declined substantially since the mid or late 1960's to about 1.95 at the present time (Figure 1).

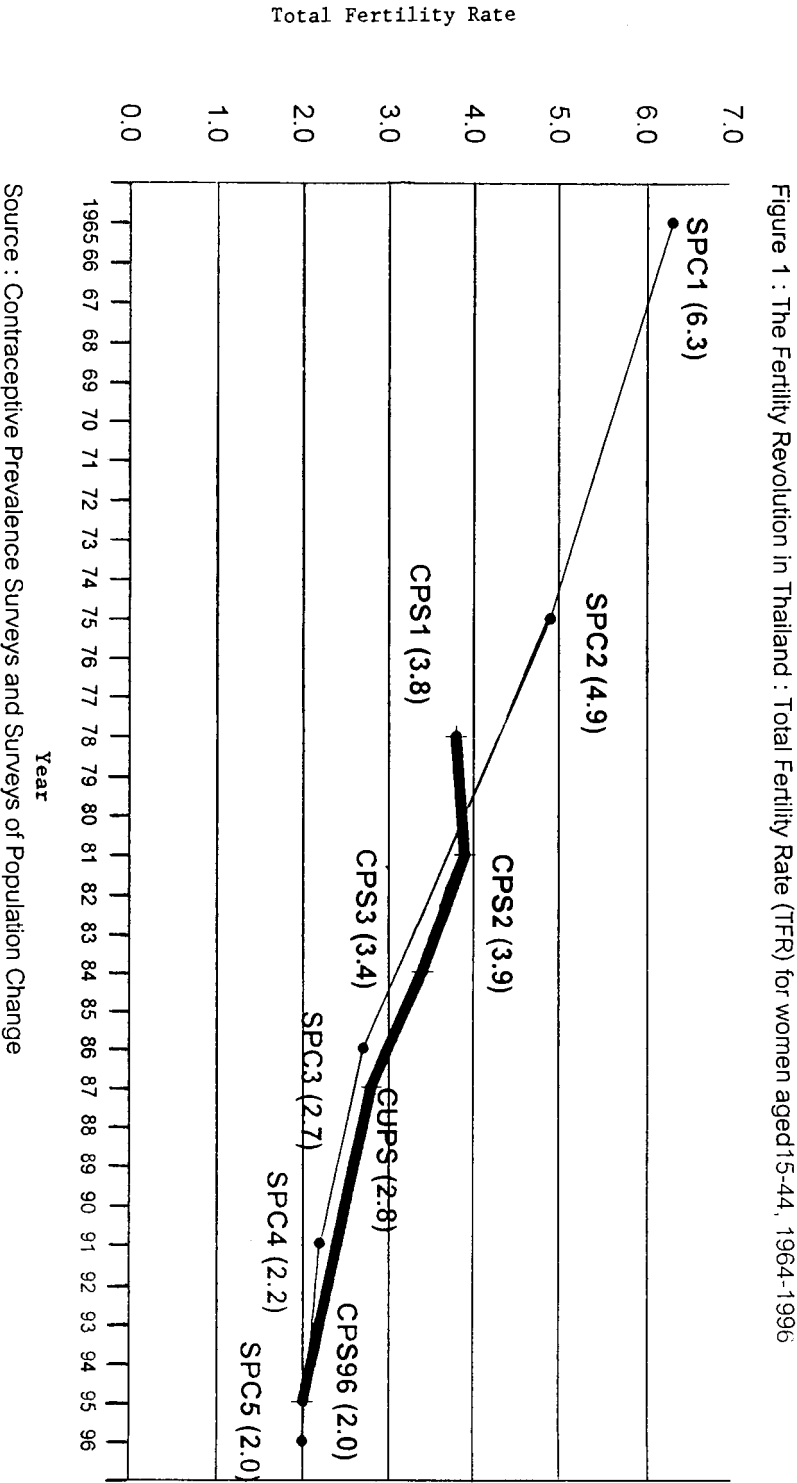
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This drastic decline in fertility in all parts of the country and in both rural and urban areas is viewed as a revolution in human reproduction. This fertility revolution was accompanied by a concurrent revolution in contraceptive behavior (Table 2). Contraceptive prevalence rose from 15 to 75 percent during 1970 and 1995. Rural-urban and regional gap also disappeared or narrowed down. The government has been the major source of supply of contraception (about 80 percent) although private sector is given important role in selected areas and selected contraceptive methods.

Table 1 Total Fertility Rate by Country (Medium Variant)

| Country | 1960-1965 | 1990-1995 | % Decline | Medium Projection |
|-------------------|-----------|-----------|-----------|-------------------|
| | | | | 1995-2000 |
| Thailand | 6.42 | 2.21 | 65.58 | 1.85 |
| Cambodia | 6.29 | 4.50 | 28.46 | 4.29 |
| Indonesia | 5.42 | 3.10 | 42.80 | 2.70 |
| Laos | 6.15 | 6.69 | - 8.78 | 6.03 |
| Malaysia | 6.72 | 3.62 | 46.13 | 3.24 |
| Myanmar | 6.00 | 4.16 | 30.67 | 3.81 |
| Philippines | 6.61 | 3.93 | 40.54 | 3.57 |
| Singapore | 4.93 | 1.75 | 64.50 | 1.80 |
| Vietnam | 6.05 | 3.87 | 36.03 | 3.51 |
| Brunei Darussalam | 6.72 | 3.07 | 54.32 | 2.75 |

Source: U.N. 1993. *World Population Prospects: The 1992 Revision*, pp.218-219, New York : U.N.



The NFPP

The great success of Thailand's National Family Planning Program (NFPP) has been, first of all, because of the constant expansion of the methods of contraception and the staff providing services. The cafeteria approach providing several contraceptive methods has been experimented and made the focus of the NFPP. Service expansion is **three-fold dynamic** : more methods, more outlets and more practitioners offering each method (Figure 2). For example, there is a direct correlation between the increase in number and nature of staff authorized to provide a method and new acceptance of the method.

The mass

However, the success of the NFPP has been also studied and viewed from the demand side, the popular acceptance and readiness, that is determined largely by the country's socio-economic situation and changes. These include the cultural context in relation to Buddhism and the status of women. Buddhism, as practiced in Thailand, encourages responsibility for one's own action and a reluctance to interfere or express open disapproval of others' behavior. The great flexibility and loosely structured society characterize the country and its culture. This outlook toward life and toward the community greatly facilitated the diffusion of new concepts about the use of medicines and drugs to improve ones' health. Another aspect of Thai Buddhism which is intertwined with societal values is its respect for women. This has enable women to achieve considerable wage-earning potential and thus a place of respect in the family. Fertility decision is therefore mainly her own.

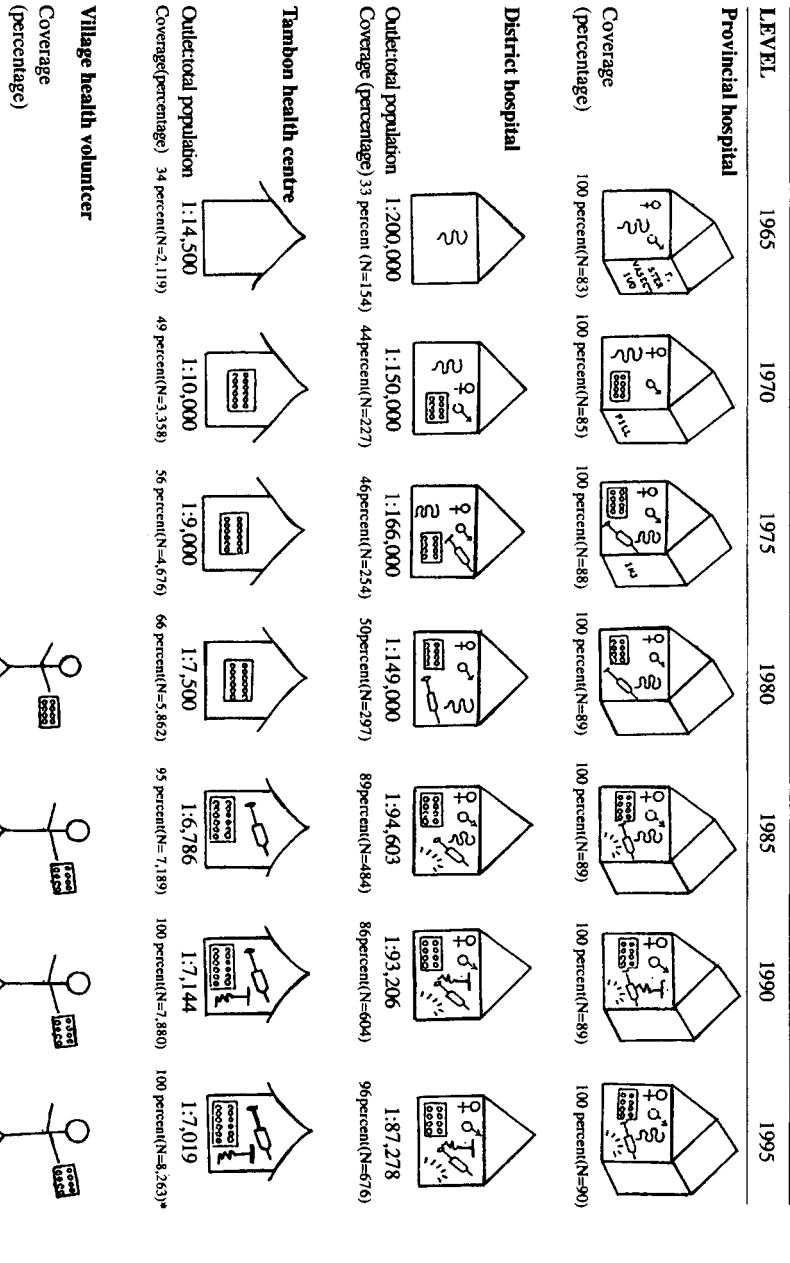
Table 2 Contraceptive Revolution in Thailand : Percent Currently Practicing Contraception among Currently Married Women Aged 15-44, by residence, 1969-1995

| Year and survey | | National | Rural | Urban | Bkk | Central | North | NE | South |
|----------------------|---------|----------|-------|-------|-----|---------|-------|----|-------|
| 1969/70 ^a | (LS1) | 15 | 11 | 33 | | | | | |
| 1972/73 ^b | (LS2) | 26 | 23 | 45 | | | | | |
| 1975 | (SOFT) | 37 | 35 | 49 | | | | | |
| 1978/79 ^c | (CPS1) | 53 | 51 | 63 | 63 | 57 | 55 | 46 | 37 |
| 1981 | (CPS2) | 59 | 58 | 65 | 65 | 64 | 66 | 55 | 44 |
| 1984 | (CPS3) | 65 | 64 | 69 | 72 | 69 | 71 | 61 | 50 |
| 1987 | (CUPS) | 71 | 71 | 71 | 72 | 77 | 77 | 68 | 55 |
| 1987 | (TDHS) | 68 | 67 | 69 | 67 | 71 | 75 | 67 | 52 |
| 1991 | (SPC) | 69 | - | - | 68 | 74 | 78 | 71 | 46 |
| 1995 | (SPC) | 75 | - | - | 71 | 74 | 83 | 78 | 60 |
| 1996 | (CPS96) | 72 | | | 76 | 75 | 76 | 71 | 62 |

Sources : Institute of Population Studies, 1971; Institute of Population Studies, 1977. Suwanajata and Kamnuansilpa, 1979; Kamnuansilpa and Chamrathirong, 1985; Institute for Population and Social Research, 1987. Institute of Population Studies, 1987. Survey of Population Change, National Statistical Office, 1991 and 1995. Chamrathirong et.al. CPS96.

Notes : ^a Rural round in 1969: urban round in 1970
^b Rural round in 1972: urban round in 1973
^c Excluding provincial urban

Source: Family Health Division, MOPH, Thailand (communication with Mr. Anthony Bernetti, and Mr. Sathon Panyasitlok)
* 1994
** 1993



The socio-economic setting

The socio-economic improvements in Thailand are found to accelerate the pace of household adoption of modern values, consumption patterns, and contraception. Improved transportation links between towns and villages coincided with rapid reductions in infant and child mortality. The opportunity cost of children also increased as desire for material goods and higher education for one's children became more realistic. At the same time, the increasingly limited amount of arable land available for inheritance became an important pressure on the couple to limit family size. Rather than exerting a direct influence on family planning practice, these cultural, religious, social or economic dimensions of Thailand are found to enable the NFPP to experience widespread acceptability and expansion of contraception in a remarkably short period of time.

The positive consequences which can be temporary

The social and economic consequences of this rapid revolution in human reproduction in Thailand are also found to be enormous. At the macro-level, the consequences of the decline in the country's burden seen in terms of the dependency ratio between the young and those in the labor force are very obvious. Without the family planning program since 1970, the population of Thailand would be 17.8 million more in 1985 (Leoprapai, 1985). For example, at the end of the Fifth Five Year Plan in 1986, it was estimated that 420,975 births were averted by the NFPP and the estimated expenses on public services that were saved during that one year was about 6,245 million baht (Kirananda, 1985). The total amount of money that was saved during the period of the Fifth Five Year Plan (1982-1986) was over 20,000 million baht and during the Sixth Plan (1987-1991) was as high as over 51,000 million baht.

At the micro or the individual and family level, the survey studies have shown the same enormous impact of reduced family size. Apart from the consequences on the

health of the mother and child (Chamrathirong et.al., 1987), the social and economic implications are of great magnitude. The survey on family size and family well being in Thailand has shown that with reduced family size, the children's education attainment (Knodel et.al., 1990), wealth accumulation of the family (Havanon et.al., 1990), and economic activities of women (Podhisita et.al., 1990) have been greatly improved. Therefore, not only at the national level, the benefits of the rapid decline in fertility in Thailand are proved to be very significant at the family level.

In recent years, social and economic development in Thailand has been very rapid. As a result of its favorable age structure, at present Thailand is temporarily enjoying the most beneficial consequences of its demographic and social transition. The large numbers of young people in the prime labor force age resulting from the previous population explosion in the 1960's, together with the present small family norm result in a low dependency burden. This helps to reduce government and family expenses, and is a major factor underlying the economic growth. If without any external threats, with the timely expansion of the educational system and the high status of Thai women, the economic transformation should lead to rapid social mobility. The very young and energetic population with great social and economic opportunities are ready for their country's industrialization program and the entrance to the many new aspects of the international area. Their readiness is temporary.

The critical moment

At this critical moment, however, the reproductive revolution may be abused. It can be clearly seen from the review of the reproductive revolution provided above, that Thailand has succeeded in attaining its demographic goals using methods that are probably "too unique." Extremely rapid fertility decline has been achieved within a completely voluntary family planning program and the large range of choice of methods. This implies a great deal of customer - centered concept. The active and dynamic involvement of the private sector in both providing services and cooperating

with the government in planning to meet demand, the expansion of service outlets in order that all areas within the country could be served, and the subsidization of costs of methods mean a lot of sacrifice and commitment on the part of the government. But when lessons of successful contribution to fertility decline is to be applied to other areas in which rapid change is required, the challenges are from within and without. The success of the population program has contributed to a number of challenges faced by the government in its attempts to improve the quality of life of its citizens. Two of these threats that are of particular relevance are the large numbers of illegal immigrants now in Thailand, with some estimates putting the numbers at 2 million -- mostly from neighboring Myanmar -- and the continued concentration of the labor force in the low productivity sector of agriculture while other segments of the Thai labor that require more skilled labor suffer from a deficit of labor. The effort to change the economic structure is obstructed.

Government can or cannot make a revolution

The government recognizes some of these problems and tries to reform the education structure of Thai society. They are in the right direction but do not go far enough. This is probably because they fail to link education with population change. At the same time they are forced to come up with the registration of illegal immigrants and the resistance to extend minimum wage legislation. This merely serves to delay desperately needed change in the more modern economic structure. As the government is going slow, the policy encourages further illegal migration (because of the low number of young Thais available). Under the migration system theory, these illegal migrants will eventually settle down in Thailand. They will make up for all the births averted by the reproductive revolution three decades back. The reproductive revolution is then abused with painful experience.

Table 3 Percentage Distribution of Educational Attainment of Thai Labour Force by Age, Sex and Urban/Rural Residence.

| | Males | | | | Females | | | |
|--------------|-------|-----|------|-------|---------|-----|------|-------|
| | Prim | Sec | Tert | Total | Prim | Sec | Tert | Total |
| Urban | | | | | | | | |
| 15-19 | 39 | 60 | 1 | 100 | 39 | 60 | 1 | 100 |
| 20-24 | 42 | 46 | 12 | 100 | 45 | 38 | 17 | 100 |
| 25-29 | 45 | 38 | 17 | 100 | 47 | 30 | 23 | 100 |
| 30-34 | 44 | 33 | 23 | 100 | 57 | 23 | 21 | 100 |
| 35-39 | 52 | 29 | 19 | 100 | 65 | 15 | 20 | 100 |
| 40-44 | 59 | 20 | 21 | 100 | 70 | 14 | 17 | 100 |
| 45-49 | 59 | 26 | 15 | 100 | 74 | 17 | 10 | 100 |
| 50-54 | 69 | 19 | 12 | 100 | 84 | 10 | 6 | 100 |
| 55-59 | 77 | 14 | 9 | 100 | 88 | 6 | 6 | 100 |
| 60-64 | 83 | 10 | 7 | 100 | 92 | 7 | 1 | 100 |
| 65+ | 80 | 15 | 5 | 100 | 95 | 4 | 1 | 100 |
| Rural | | | | | | | | |
| 15-19 | 64 | 36 | 0 | 100 | 64 | 35 | 1 | 100 |
| 20-24 | 76 | 21 | 3 | 100 | 82 | 16 | 2 | 100 |
| 25-29 | 79 | 18 | 3 | 100 | 84 | 12 | 4 | 100 |
| 30-34 | 81 | 13 | 6 | 100 | 88 | 6 | 6 | 100 |
| 35-39 | 85 | 9 | 6 | 100 | 92 | 4 | 4 | 100 |
| 40-44 | 90 | 5 | 5 | 100 | 96 | 2 | 2 | 100 |
| 45-49 | 91 | 6 | 3 | 100 | 97 | 2 | 1 | 100 |
| 50-54 | 94 | 4 | 2 | 100 | 99 | 1 | 0 | 100 |
| 55-59 | 95 | 3 | 2 | 100 | 99 | 1 | 0 | 100 |
| 60-64 | 98 | 2 | 0 | 100 | 100 | 0 | 0 | 100 |
| 65+ | 98 | 2 | 0 | 100 | 100 | 0 | 0 | 100 |

Source : National Statistical Office. 1994, *Labour Force Survey (Round 3)*

The human resource revolution

The government in the Eight Plan, which is in its initial stages, is using a strategy of human resource development, which includes both expanded educational and skills training, to change the structure of Thai society. However, the population and social change that occurred over the last decade in the reproductive revolution, mean that incremental policies of human resource development are not sufficient. What is required to follow the revolution in human reproduction is the revolution of human resource. This refers to a complete change in the way in which education and training are provided to the Thai population, and a change in thinking about the uses of education. The lessons learned from the reproductive revolution can be applied to the human resource revolution.

Why expansion or reform is not enough ?

Results from the third round of the 1994 Labour Force Survey (undertaken during the planting season ie. in the period of highest employment) indicate the low proportions of the labour force with some secondary or tertiary population. (see Table 3)

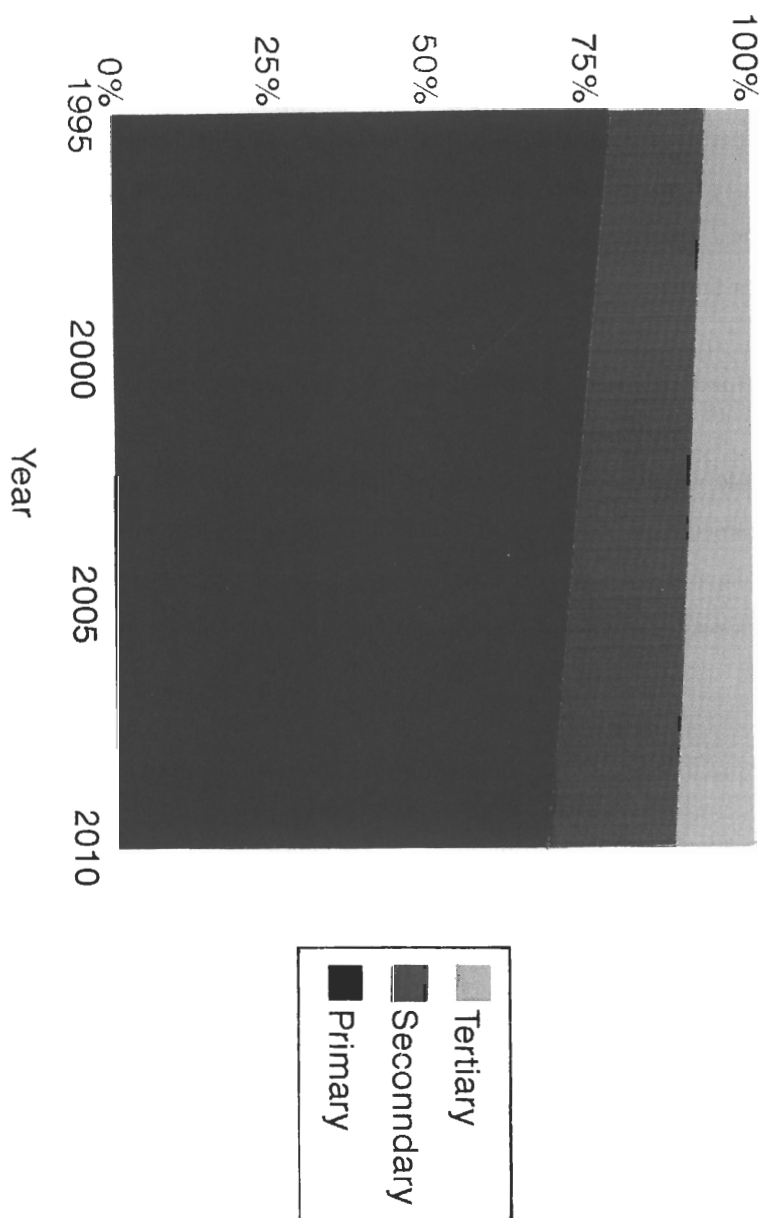
In rural areas, over three quarters of the labour force aged 20 and over have a primary school level of education or less. For females the percentages are over 80 percent. The urban labour force is much more highly educated, but even in urban areas generally, over 40 percent of the labour force has a primary level of education. The government has been attempting to rapidly expand education opportunities. However, a problem exist in that the vast majority of the labour force that will exist in twenty years time are already working. The number who are entering the labour force -- the ones who have benefitted from the expansion of educational opportunities over the last decade -- are declining rapidly. The youngest component of the more educated labour

force, those aged 15-19, will contribute a much smaller percentage of the overall labour force in the future.

Projection : the alarming future and how to set the target

If we assume changes in educational participation that are consistent with government policy over the last ten years, the educational structure of the Thai labour force will change to that shown in Figure 3 (Guest, 1966). In 1995, almost 80 percent of the labour force had only a primary school or lower level of education. If we take into account the increased proportions at secondary and tertiary levels of school now and the projected increases over the next 15 years, it can be expected that by the year 2010, the proportion of the labour force with a primary school levels of education will have only declined to the mid-sixties. While this would be an admirable achievement in a relatively short period of time, it is insufficient to dramatically improve the competitiveness of the Thai economy and improve the living standards of the Thai population. Even if all persons currently aged below 15 were to complete secondary school and to continue on to higher levels of education (secondary or higher), it would not be possible to have more than half of the labour force with a post-primary education by the year 2010.

Figure 3 : Percent of Labour Force By Education Level: 1995-2010
Assuming 2.5% p.a. Urban Growth, Changes in LF Participation and Education Distributions



Source : Guest, 1996

The target we aim for is the decline of primary educated labor force from about 80 percent in 1995 to about 30 percent by the year 2010 or 2015, if it is to be a revolution. This is to replicate the reproductive revolution during 1970-90 where non user of family planning program also declined from about 80 percent in the 70's to about 30 percent in 1990. To achieve this rapid transformation of the education and skill levels of the Thai labour force in a short period of time requires, at least making a concerted effort (both top down and bottom up approach) to train that segment of the labour force that is the largest and which is growing the fastest. This is the group of workers in their thirties and early forties.

Organizational changes required for the human resource revolution

How do we go about making such a transformation? Here we need to apply the lessons learned from the reproductive revolution and the context of Thai society where it did happen. There is no other way. Table 4 presents the hypothetical comparison between revolution in human reproductive and human resource. The Table explains itself.

Conclusion on the revolution of the two human re's

In the past (if not the future) it has been said that Thailand was a country of revolutions. While this use of the word 'revolution' was to describe political events, it also is applicable to the pervasive changes in reproductive behavior experience over the last quarter of a century. However, it is the nature of revolutions -- as often witnessed in the political sphere -- that one revolution often requires a further revolution.

Reproductive changes have resulted in other processes such as immigration, high levels of temporary migration, and even a stagnant agricultural sector. A human resource revolution is required to help alleviate some of the negative aspects of these processes. This revolution must improve on the current policy of expanding

educational opportunities for the young, and especially targeting for education and skill training of those persons aged between 30 and 45 -- the fastest growing segments of the labour force.

Table 4 Comparison between Reproductive Revolution and Human Resource Revolution (if any).

| Issues | Reproductive Revolution | Human Resource Revolution |
|-----------------------------------|--|--|
| Period | 1970-1990 | never happen yet |
| Private sector involvement | Private sectors are encouraged and are meant to be dynamic and experimental. | Private sectors are blocked by government intervention and are not in a position to compete successfully with government institutions. |
| Organization | Top down as well as bottom up. Hospital based as well as community based. Personals and outlets for family planning services are made dynamic. | Top down. Targeting for education development and education reform but not a revolutionary reorganization for bottom up or community based. |
| Finance | Government and outside help such as foreign aids. Individual couples gain access to free contraceptives. | The country has enough money saved from fertility decline but is not yet determined to use for human resource. Parents cannot afford high cost of education (including cleaning and ironing white shirt uniform) for their children. The direct and indirect cost is unnecessarily high. |

Table 4 (Continued).

| Issues | Reproductive Revolution | Human Resource Revolution |
|---------------------------------------|---|--|
| Choice and Standardization | Many researches and trainings on technology and service system are implemented to give all kinds of choice of contraception for couples (cafeteria approach). Standardization of contraceptives and services is more dynamic and localized. | Not enough choice for basic or higher education or training. Standardization is too rigid. People are forced to go one direction but cannot afford their opportunity costs. Standardization conflicts with people's way of life and means of living. |
| Cooperation of line ministries | MOPH cooperates successfully with other line ministries (Interior, Education, University Affairs, Finance NGO's, etc.). They are under the same umbrella of National Family Planning Program. | No cooperation even within Ministry of Education. Ministry of Labor and Social Welfare can not initiate much. No "accreditation" system from the community is allowed. Top down but not an umbrella. |
| Consequences | Improvement in the dependency ratio. More female labor force participation. Economic growth of two digit point. This advantage is temporary. | Without human resource revolution, labor intensive industry becoming impossible, the country ends up inviting immigrants to replace all the births averted by the reproductive revolution of the past decades. |

Human resource revolution requires that the lessons of the family planning program be applied. There must be more private sector involvement. New ways of delivering education and training must be sought and choices provided to people (especially those already working). The government cannot be the sole authority in applying standards of what is appropriate. They should play an active role in subsidizing training -- both through government programs but also through providing incentives for private sector programs. Lastly, there are always some illegal elements in all kind of revolution process. The government should tolerate, if law reform regarding the education delivery system is still delayed.

If effort from the government and NGOs in Thailand as well as foreign attention, assistance and cooperations, approach human resource training as they did family planning, and to some extent HIV/AIDS, it is conceivable that by the end of the next decade, Thailand will have completed another revolution of human resource, the base for chain of other social revolutions for the Thai people in the near future.

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