Public Policy related to Fertility in Thailand: Past, Present and the Way forward

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Abstract
Thailand has been implementing public policies related to fertility for several decades. At present, Thailand is facing low fertility threats and is attempting to mitigate these problems. Understanding the experiences from the past may provide useful knowledge to handle challenging issues. The literature reviews with related secondary data have been utilized to analyse the research question. This study aims to review the past and present of those policies classified into three periods by the main policy objectives, consisting of pronatalist, family planning and challenging periods. Moreover, this study analyses the policy effectiveness of each period by applying the Mazmanian and Sabatier's conditions of effective policy implementation. Results indicate that the public policies under the pronatalist and family planning periods can meet all conditions in the checklist, showing the effectiveness of the policy implementation at that time. By contrast, policies under the challenging period can only meet some conditions, showing that some improvements need to be performed. Thus, if the missing conditions which are low priority in the national plan, unclear direction and official authorities as well as low support from the leaders are alleviated with the harmonious cooperation between policy makers and other program supporters, programs can achieve their goals.
Keywords: Fertility, Policy Implementation, Policy Assessment, Population Decrease

Introduction
The low fertility and the ageing society become one of the critical issues of several regions during the 21st century. Not only high-income countries, such as the OECD members, but high middle-income countries, such as Thailand, also confront these challenges at the progressive rate. Public policy has inevitable impacts on every aspect of life in the society. Public policies related to fertility consist of various objectives about fertility which are population policy to tackle the consequences of fertility and family policy aiming to raise birth rate.(Gauthier, 2001; Thévenon, 2011) In this research, public policies related to fertility can be defined as any policy with objectives to encourage or discourage fertility. Several previous studies about fertility have attempted to identify the causes, trends and effects of low fertility or the effects of population policies on the society and country (Andersen, Drange and Lappegård, 2018; Billari, 2008; Billari and Kohler, 2004; Jones, 2007; Kohler, Billari and Ortega, 2006). However, a few related works have suggested the factors or conditions driving the fertility policies to be effective. Sobotka, Matysiak and Brzozowska (2019) and McDonald (2006) suggested that effective fertility policies should contain comprehensive plans with clear and continuous policy implementation and budgetary. Nevertheless, both previous works did not consider some important policy actors, such as leaders, legislators, government officials and related agencies. We extend the previous works by including these factors into the analysis.

The trends of new birth rate in Thailand demonstrates that the rate has considerably decreased each year and is projected to further decline. Also, the current fertility trend is at 1.53 live births per woman lower than the average fertility rate of the world, of high-income countries, or even East and Southeast Asian countries (See Figure 1). Thus, Thailand has been attempting to mitigate this population decline for over two decades, but the fertility trend is still declining continuously. The research questions of this study are how Thailand's evolutions of policies related to fertility have been formulated and why the policies implementation in the past were more effective than the current ones. Regarding the success of policies in the past, this study aims to review Thailand's public policies related to fertility, from past to present. Moreover, this study aims to identify the conditions of effective policies using Mazmanian and Sabatier's checklist to find the missing conditions that the current policies need to be improved. This paper is structured as follows. Sections 1 and 2 express the overview of Thailand's recent fertility situation and the concepts of public policies related to reproductive decision. Then, public policies implemented in each period are reviewed and analysed by the effective checklist to provide policy recommendations for future policy implementation.

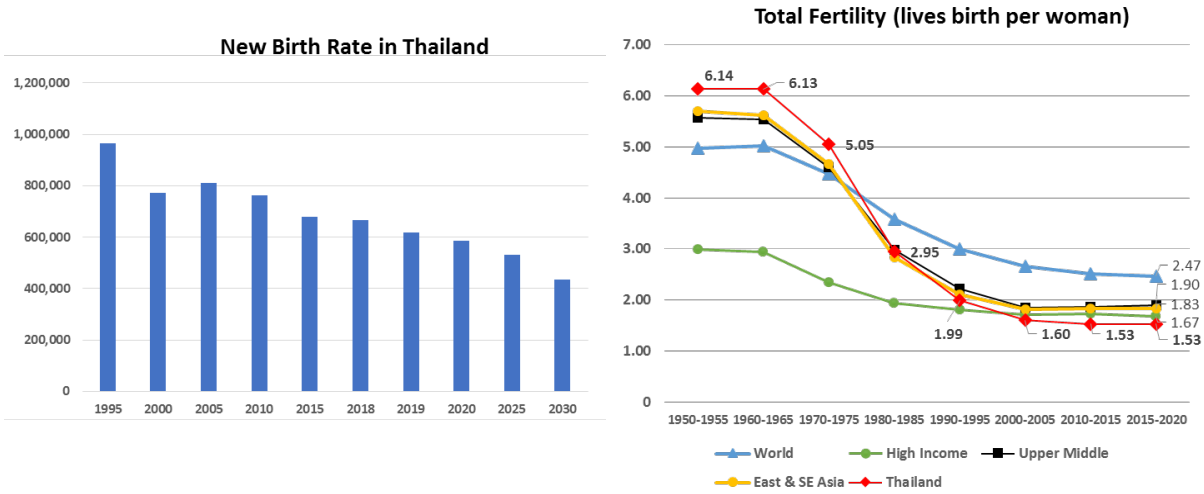

Figure1: Trends of New Birth Rate and Total Fertility in Thailand
Sources: The Ministry of Interior and the UN's World Population Prospect (2019)
Note: The Data of 2025 and 2030 are calculated from the UN's World Population Prospect 2019

Methods and Materials

This study was conducted by using related laws and regulations, international organizations documents, national development plans and various published literature from multiple electronic databases from 1960-2021. This was done to identify trends, development, policies, and policy implications relating to reproductive decisions over 80 years. Searched databases for peer-reviewed literature included Science Direct, SpringerLink, Google Scholar, Web of Science, SAGE online, Taylor and Francis and Wiley Online Library. Thai-Journal Site Index (TCI) Database and Thai universities E-Thesis databases are also utilized to find the information of the related polices implemented in Thailand from past to present. In addition, several web pages, literature, and official reports from the government, UN databases and WHO were utilized. The raw data were then screened by reading the title and abstracts and reviewing to identify policy phases and the key policy implications relating to fertility in each phase. Finally, they have been analyzed by the Mazmanian and Sabatier's six conditions of policy implementation in search of the effectiveness of policy implementation on fertility in Thailand. The conceptual framework of this study was illustrated in Figure 2.

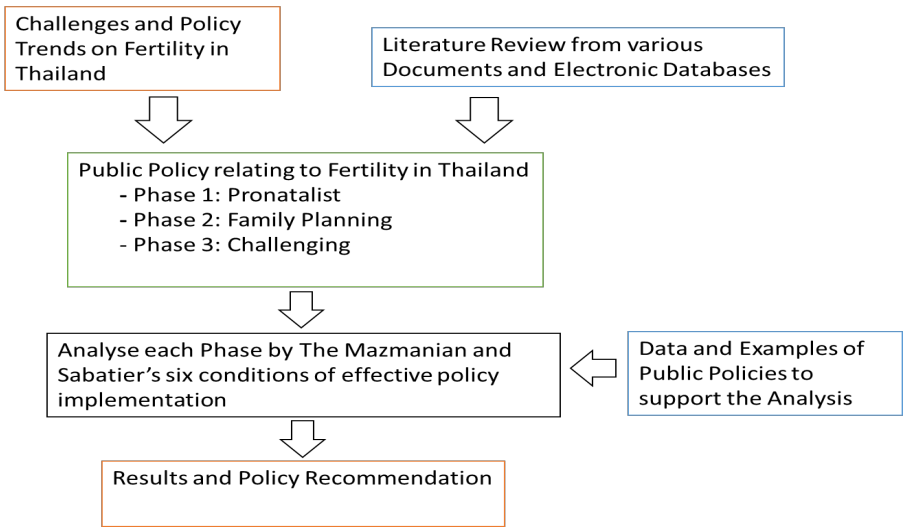

Figure 2: Conceptual Framework

Review of Public Policies on Fertility in Thailand

Recently, low-fertility countries have developed various family policies with specific target to reverse the fertility trends. Similarly, Thailand has developed policies to handle fertility and fertility-related issues for several decades. Generally, the Thai government has formulated economic and social policies based on domestic needs, international trends and guidelines from international organisations, such as the UN and World Bank. Hence, policies related to fertility has changed over time and can be categorised into three periods consisting of (1) pronatalist period, (2) family planning period and (3) challenging period, as described as follows.

Pronatalist Period (1938-1960)

The public policy that was utilized during this period is pronatalist to promote nationalist policy. Family and fertility concepts were introduced to Thailand's public policy under Prime Minister Field Marshal Plaek Phibunsongkhram (1938-1944 and 1948-1953). In this period, nationalism and statism were popular and became the key concepts of government policies (Reynolds 2004). Furthermore, policies based on the eugenics principle[1], which indicates that healthy children should come from mentally and physically healthy parents, were also applied. Citizens in reproductive age must not have genetic diseases or imparity harmful to the next generation.

Public policies related to family and fertility under this era contained various programs categorized into four categories in Table 1. The first category is the policies focusing on parental health. By using the eugenics principle to produce healthy citizens, the Field Marshal Plaek government encouraged people to marry healthy partners and also offered pre-marriage medical check-up to ensure the healthiness of their children (Kawinraweekun, 2002). Thus, people with genetic diseases and unhealthy mental symptoms were discouraged from marriage. To improve citizens' family health, the government founded a midwifery school in 1939 to lower mother and child mortality rate and established a maternal and child health organisation in 1942. Furthermore, a venereal disease hospital was founded in 1939 to limit venereal diseases on children and family (NESDB and UNFPA 2011).

Secondly, marriage support policies were implemented to promote the marriage of Thai people. A marriage promotion organisation was established in 1942 to drive these policies. Some important guidelines were produced to provide marriage knowledge, such as the appropriate reproductive age for Thai people (20-30 for males and 18-25 for female) and a marriage manual, which elucidates the functions of family members, distributed nationwide in 1943 (Posrithong, 2020). To support marriage affordability, the government encouraged female

parents to lower the bride price and wedding ceremony cost, and they also organised mass wedding ceremonies. In 1944, the government induced single people to get married by implementing the 'Single Tax' for single males aged 25 and above to pay additional tax (10 percent of their income; 'Act on Single Taxation 1940').

The third and fourth policy categories were the motherhood and child support. The role of mothers was promoted to be a key in nation building. Mothers' Day with several maternal promotion activities, such as 'Excellent Mother' or 'Prolific Mother' was first implemented in 1943. Pregnant women also received some special benefits, particularly public transport fee discount. The concept of having many citizens is the fundamental of a nation was used for child support policies. Scholarships and other education support packages were provided for all Thai children born from a monogamous family with six children or above. Moreover, mass media were continuously utilised to gain donations for child support activities.

The pronatalist policy implemented in this era outstandingly augmented the population in Thailand. The increase in fertility rate and decrease in mortality rate caused Thailand's population to gain almost 2 times, from 14.46 million in 1937 to 26.26 million in 1960 (Pasuknirand,1960). After 1960, on the basis of the development framework from the World Bank[2], Thailand attempted to enhance the country overall and its economy by improving its basic infrastructure and formulating a national development plan to be a blueprint to modernise the nation.

Table 1 Summary of Key Public Policies Related to Family and Fertility during the Pronatalist Period (1938-1960)

Type	Programs and Activities	Facilities	Other Policies
1) Parental Health	- Offered free pre-marriage checkup for physical and mental health to acquire a certificate before marriage	- Established a midwifery school in 1939 - Established a maternal and child health organisation in 1942 - Established a venereal disease hospital in 1939	- Encouraged people to marry a healthy partner - Discouraged people with genetic disease/unhealthy mental people from marriage - Contraception was only allowed by physicians
2) Marriage Support	- Organised mass marriage ceremonies supported by the government - Distributed a marriage guideline nationwide in 1943 - Implemented the 'Single Tax' for single males aged 25 and above in 1944	- Established a marriage promotion organisation in 1942 - Established the office of marriage information to take the role of a matchmaker in 1943	- Recommended a suitable marriage age: 20-30 for males and 18-25 for females - Encouraged female parents to lower bride price and wedding ceremony cost
3) Motherhood Support	- Organised Mothers' Day activities - Provided discount to public transport fee for pregnant women		- Enhance the role of women in giving birth and nurturing children as a power of nation building
4) Child Support	- Supported scholarship and other education for all children from a monogamous family with six children or above - Used mass media to gain donation to support activities for children		

Source: Kawinraweekun (2002); NESDB and UNFPA (2011)

Family Planning Period (1961-2001)

The public policy in this period aims to decrease population by using family planning as the main policy implications. The first five-year NESDP was formulated in 1961 to be Thailand's master plan for national development. In addition to the economic growth enhancement, the social and human resource development, such as family and health issues, was prioritised to increase people's wellbeing. At that time the concepts of population and development interrelation indicated that the high population growth can cause poor socioeconomic development. Thus, some governments at that time considered population growth as a national threat and began to perceive the need of population control (Berro, 2018).

Then, the Declaration on Population, which was signed by several heads of states, including Thailand, in 1966-1967, encouraged many countries to have the provision of family planning services (Ayala and Caradon 1968). Thailand adopted family planning concepts in the second NESDP and had fully implemented them, targeting to reduce the population growth since the third NESDP (Phyormyont, 1992). In view of the strong determination and continuity of family planning policy with the cooperation between public and private sectors, the fertility rate and population growth have declined successfully (Ismartono, 1984). Policies that support family planning and family health are summarised in Table 3.

In view of family planning, several incentive tools were used to promote this program. To motivate people to enrol in family planning, the requirements to have sterilisation, which was previously serviced only for parents with four children or above, was dismissed. Then, rewards or bonuses were given to service providers and agents that could persuade people to receive sterilisation. In addition, tax incentives, including tax exemption on contraceptive devices and income tax reduction for those who donate to family planning activities, were utilised.

To ensure the nationwide access to family planning services, the government planned to construct and improve health service units and midwifery service centres and hire related medical staff to respond to such programs in urban and rural areas. Furthermore, in addition doctors, other trained health professionals could provide sterilisation and contraceptive pills (Rosenfield and Min, 2007). The government also implemented other measurements to provide knowledge and realisation of family planning nationwide. Firstly, the national curriculum provided students basic contraception knowledge. Mass media were also utilised to publicise the motto 'Having many children leads to poverty' and implant the social value of two-child family as an appropriate family size (Hatlem, 2014). Privilege village loan grant was also provided for family planning users as intensives. In addition, public sectors cooperated with private sectors to enhance family planning activities. A famous project was the 'Mechai's Condom[3]' that promoted the use of condom for contraception and sexual health (Pillai and Kelley, 1994).

To support family health, tax income reduction was provided for donors supporting family and child lunch activities and preschool child centre establishments. The government expanded preschool child centres and enhanced reproductive and child health services, including maternal and child nutrition and sanitation. Other plans consisted of modernising the abortion law and providing parental readiness for newlywed couples.

In this period, family planning had become an important public policy in all NESDP master plans. The concern on the threat of high population growth made the government continuously generate several tools to enhance this policy, causing the fertility rate to decline evidently (Guest and Jones, 1996). In 1960-2000, the fertility rate represented by the average children of women in their productive age (15-49 years) had greatly declined from 6.13 to 1.77, which is lower than the UN replacement rate (Figure 1). Thus, after the end of the eighth NESDP in 2001, the extremely low birth rate has initially forced Thailand to reconsider its public policies related to fertility and family that were implemented for over the past 40 years. This period will be discussed in the next session.

Table 3 Summary of Key Public Policies Related to Family and Fertility during the Family Planning Period (1960-2001)

Type	Incentives	Disincentives	Accessibility/Facilities	Other Policies
1) Family Planning	- Dismissed the requirements to have sterilisation previously serviced only for parents with four children or above - Gave the rewards or bonuses to service providers and agents that could persuade people to receive sterilisation - Tax exemption for family planning devices - Tax reduction for those who donate to family planning programs	- Reduced child benefits of the fifth child or above and then limit to the third child - Limited child allowance to only the first three children	- Constructed and improved health service units and midwifery service centres and hired related medical staff nationwide - Allowed other trained health professionals to provide sterilisation and contraceptive pills	- Provided students basic contraception knowledge - Used mass media to publicise and implant the social value of two-child family - Cooperated with private sectors to enhance family planning activities
2) Family and Health Support	- Tax income reduction for donors supporting family and child lunch activities and preschool children centre establishment - 90 days of maternal leave		- Expanded preschool child centres and enhanced reproductive and child health services - Provided mandatory vaccination for 0-5-year-old children	- Modernised the abortion law and provided parental readiness for newlyweds.

Sources: NESDB (1977); Royal Decree on Social Assistance Related to Medical Treatment 1980; Royal Decree on Fringe Benefit related to Children's Education 1980; NESDB (1982); NESDB and UNFPA (2011):117; NESDB (1987); Labour Protection Act 1998; NESDB (1992); NESDB (1997)

Challenging Period (2002-Present)

In this period, the policy to maintain birth rate as well as child and family support policy was conceptualized in policy statement. Thailand has encountered the challenge of birth rate decline since the end of the 20th century, leading to the change in the population structure and the ageing society. The recent social structure changes, such as economic uncertainty, the role of women in the labour market, late marriage and non-marriage, as well as urbanisation, have been some key pressures affecting the low reproduction in several countries, including Thailand (Prachuabmoh and Mithranon, 2003).

Different from the previous period, the international family planning agenda has been changed as contraceptive use increased and the unmet needs decreased in almost every region (UN DESA, 2020). The UN has introduced Millennium Development Goals and Sustainable Development Goals (SDGs) to be the development framework, including economic, social and environment dimensions. The SDGs contain reproductive issues such as universal access to sexual and reproductive healthcare services', including family planning, information and education and the integration of reproductive health into national strategies and programs, as well as ensuring universal access to sexual and reproductive health and reproductive

rights (WHO/Europe, 2017). Thailand has integrated SDGs in its 20-Year National Strategy and the 12th NESDP (2017-2021). Therefore, plans and budgeting of all government agencies will be in line with SDGs. SDGs, as well as Thailand's strategic plans, have no target against infertility directly. Public policies related to family and fertility are summarised in Table 4.

At first, after the threats of low reproduction have become known, the government planned to balance the population structure by attempting to maintain the fertility rate and strengthen the family institute. The National Reproductive Health Development Policy and Strategy (NRHDPS) has been established to promote maternal and child health, as well as maintain the TFR of not less than 1.6 live births per woman (MOPH, 2017). The targets and measurements of NRHDPS have been included as a part of the current NESDP as well. To promote family and health, the government provides several benefits, such as parental leave, tax incentives, cash transfer and mother and child healthcare. Firstly, maternal leave with pay has been expanded from 90 days to 98 days, which include antenatal care leave, and 15 days of paid paternal leave has been given to government officials[4]. The tax income exemption that previously supported only the first two children has been extended to the third child and beyond and included prenatal care and child delivery. For cash transfer, social security members will receive a lump-sum for child delivery and child allowance up to the third child ages 0-6 years. In addition, the government has provided child support grant for low-income family (0-3 years). Finally, the Universal Health Coverage (UHC) has allowed pregnant women and children to receive free healthcare, including antenatal, delivery and postnatal care.

Meanwhile, public policies on family planning promotion have still been continued. Social security members who have sterilisation at registered private hospitals can partially claim the reimbursement of medical fee. To improve accessibility, general family planning services have been included in the UHC, making people under the programs receive free services thoroughly. Moreover, to prevent unplanned pregnancies, women age under 20 can receive intensive services, including providing free contraception devices, such as contraceptive implants and IUD.

For nearly two decades, Thai authorities have paid attention on low fertility trends and formulated some public measurements to cope with this challenge. Nevertheless, the TFR still further declined to 1.53 live births per woman in 2020; this value is lower than 1.6, which is a strategic goal under the NESDP plan. Moreover, the UN (2019) forecasted that Thailand's TFR will decline to 1.42 in 2030. These data indicate that the public policies for handling these issues should be refuelled.

Table 4 Summary of Key Public Policies Related to Family and Fertility (2002-2021)

Type	Incentives	Accessibility/Facilities	Other policies
1) Fertility			- Maintain TFR at 1.6 - 1st and 2nd NRHDPS for promoting maternal and child health
3) Family and Health Support	- Expand the maternal leave, including antenatal care leave - Benefits for social security members for every child delivery and antenatal care - Child allowance for social security members up to 3rd child (0-6 years) - 15 days of paid paternal leave for government officials - Child support grant for low-income family (0-3 years) - Tax exemption for prenatal care and child delivery - Increase tax exemption for the 2nd child and beyond		- Free medical services by UHC for pregnant women and children, including antenatal and postnatal care
3) Family Planning	- Support sterilisation for social security members	- Intensive family planning services for women under 20 - Include family planning services into UHC	

Sources: MOPH (2017); Social Security Act Amendment (2015); Cabinet resolution (22 March 2016); Regulation of the Office of the Prime Minister on Government Officers Leave Entitlement, (2012); The Cabinet Resolution on 31 March 2015 on the Child Support Grant Scheme for Newborn Children; Act Amending the Revenue Code 2017; NESDB and UNFPA (2011)

Analysis

The Mazmanian and Sabatier's six conditions of effective policy implementation were applied to analyse the three periods of the public policies on family and fertility in Thailand. Sabatier and Mazmanian's (1979, 1989), model lists six criteria for effective implementation. This concept is adopted to analyse various public policy implementations studies. Amongst the six conditions, the first and second ones have to be met at least moderately, and the remaining four conditions are necessary for the policy involving challenging issues. The results in Table 5 are summarised, such that the policy implementation during the pronatalist and family planning periods can fully and partially meet all the six criteria. The program objectives based on valid concepts in both phases are stated in the national agenda, with well policy implications and the focal point organisations. On the contrary, the policy implementations during the challenging period can partially meet three criteria; the first two and the fifth conditions of Mazmanian and Sabatier's list are moderately satisfied. Unlike policy directions in the first two phases which were clear, the policy direction in

the third phases has no priority and is fragmented, for instance, the 20-year Thailand's strategic plans and the 12th National Development Plan have no target against infertility directly and appear separately in the supporting plan, National Reproductive Health Development Policy and Strategy (NRHDPS), under supervision of the steering committee. The committee structure consists of the Ministry of Public Health and delegates from various departments and ministries as well as some of social organizations; therefore, the head of the committee has no hierarchical power to drive the policy. Furthermore, the indicators of the plan mostly reflected and supported SDGs which is not related to increase fertility rate in Thailand's context. For the leader factor and the fixers, who are the legislature support according to Mazmanian and Sabatier, there is no substantial support against low fertility much comparing to other phases reflecting from the priority of the national plan. About the fixer, there is no key fixer to drive the legislature upon fertility-promoted policies. During the first phase there is Prime Minister Field Marshal Plaek as a key fixer while the second phase had Ministry of Public Health as a fixer and Meechai as a key man of public private partnership to support family planning policy. In contrast, the third phase has no strong evidence.
The analysis results from Table 5 are detailed as follows.

Table 5 The Checklist of Conditions of Effective Policy Implementation

Condition of Effective Implementation	**Phase I (Pronatalist)**	**Phase II (Family Planning)**	**Phase III (Challenging)**
1) Policy objectives need to be clear and consistent or at least provide substantial principles for resolving goal conflicts.	✓✓	✓✓	✓
2) The policy should include valid reasons linking target group behavior to their objectives and provide officials sufficient power to make legal decisions over the target groups to achieve the desired goals	✓✓	✓✓	✓
3) The policy decision contains unambiguous directives and organizes the implementation process so as to maximize the probability that officials and target groups can perform as desired.	✓✓	✓✓	○
4) The leaders are supportive of the policy objectives and skillful in utilizing available resources	✓✓	✓	○
5) The policy needs support from legislative and executive sovereign as well as supportive interest groups throughout implementation process	✓✓	✓✓	✓
6) The policy is not undermined by changing socioeconomic conditions	✓✓	✓✓	○

Note: ✓✓ = meet the criteria; ✓ = partial meet the criteria; ○ = unclear
Source: Applied from Mazmanian and Sabatier (1979, 1989)

First condition: We found that the first two phases have clear objectives, with obvious targets to increase or decrease fertility, and have included them into national agenda steadily. By contrast, the third phase can partially meet the condition. Although the challenge of low fertility and the importance of fertility enhancement have been stated in the national and supporting plans, it lacks some policy consistency. Instead of raising the fertility rate, at the beginning of the third period (under the 9th and 10th NESDP; NESDB, 2002, 2007), TFR was planned to maintain at least the replacement rate (2.1 live births per woman); then, it has declined to at least 1.6 for the last two NESDP (11th and 12th NESDP, 2012, 2017).

Second condition: The components of this condition are technical and target group compliance, which indicates that the target group compliance and the costs must be correctly linked to the ultimate goals of the policy. The first and second phases meet this criterion. The objectives of the pronatalist period were to increase population, and the target group was the reproductive age citizen. Thus, intensive measurements were aimed to encourage citizens to get married and have more children. Similarly, the government under the family planning period attempted to make targets groups, such as families with two or more children, have convenient access to family planning services and employed related medical staff to respond to this program nationwide. Nevertheless, the third phase can partially meet the condition. According to McDonald (2008), the cause of low fertility can stem from economic and social factors. For instance, many couples do not want to have children because of the high costs or burdens to have and raise children. However, during the third phase, several programs have been insufficient to lower these issues.

Third condition: The policy decisions during the pronatalist and family planning periods were clearly determined, such that officials and target groups understand the goals and benefits of the program. Several measurements with well-organised processes and financial resources were provided to support fertility programs and their accessibility and acknowledged target group perceptions to the programs via school curriculum and mass media. On the contrary, during the third era, the public policy direction related to family and fertility has been unclear. Meanwhile, the government attempted to enhance the fertility rate, but it also made family planning services, such as sterilisation and basic birth control comfortable to access nationwide under UHC scheme. Furthermore, the policy implementations have not been inclusive and beneficial for some target groups, particularly families with babies or young toddlers. For instance, the early education policy for 0-2-year-old children indicates that the children should be child-reared by family, which is difficult considering the current three-month maternal leave period; thus, childcare services are urgently needed. Nonetheless, day care centres subsidised by the government or local administration organisation only take care for children age 2 or above. Hence, families with 3-months to 2-year-old children must fully pay for private day care services.

Another component of the conditions to be pointed out is that the assigned supportive agencies for policy implementation. In the third phase, MOPH is the key agency which could promote healthcare issues but not comprehensively cover other important factors of fertility decisions such as family structures, gender inequity, labour laws or economic inequality. Moreover, the policies during the third period did not provide substantial hierarchical integration resulting from the assigned key agency. Finally, according to the conditions, the implementing agencies hierarchy should be aligned and has full authority.

Fourth condition: A skilful leader will help utilise available resources and develop good relationship with supportive agencies. Amongst the three periods, the leaders of the pronatalist period were more supportive, especially Prime Minister Field Marshal Plaek who often prioritised program activities such as participating in mass marriage ceremonies or giving public speech on importance of having a large and healthy population as a foundation of nation building. The leaders in the second period were less supportive than the previous one, but still

had some influence on family planning programs via mass media. However, the leader roles had been obscured in the third phases, because intense support from the government leaders to handle the low fertility threat or support family issues was lacking.

Fifth condition: To sustain policy priority, the need for a 'fixer (s)' and supportive interest groups. A fixer is an important legislator or executive official who controls resources important to other actors, whereas the interest groups are those who monitor, intervene, underpin or compel the implementation. In the first period, the policy gained full support from those components. The second period gained support from the UN and key agencies, such as the Ministry of Public Health and private agencies. The challenging period partially met the condition and had moderate support from fixers and the public. Although the program received support from legislative and executive parts, it gained mediocre support from interest groups. Many public and private organisations in Thailand have been less enthusiastic in promoting family and fertility activities. For instance, the facilities and benefits for parental officers have not been sufficiently provided, such as day care services, room for breastfeeding or diaper change, flexible working time and paternal paid leaves.

Sixth condition: The change in socioeconomic conditions can alter the support and interest of target groups to the program over time. The first two periods were not significantly undermined by changing socioeconomic conditions. The policy direction in the pronatalist phase was certain due to strong leaders, and the family planning period was also decisive based on domestic and international pressures. By contrast, the policy under the third period had been vulnerable to several socioeconomic factors. For example, economic uncertainty, including cost of having and raising children, urbanisation expansion, gender equality and diversity and various international trends on population affecting the policy decisions over time led to the ambiguity of the last criterion.

Conclusion and Policy Recommendation

Thailand has implemented family and fertility policies for several decades. Such policies can be classified into three phases which are the pronatalist, family planning and challenging periods. The policy results indicate that the policy implementations during the first and second phase were relatively effective. By contrast, the policy performance of the third period remains questionable. Consequently, public policies related to family and fertility are reviewed and analysed using the checklist of Mazmanian and Sabatier—six conditions of effective policy implementation—to clarify the key differences amongst the three periods. The analysis results are consistent with the policy outcomes of each period. They indicate that the pronatalist and family planning periods can meet all the criteria, demonstrating the effectiveness of the policy implementation at that time. However, the third period can only meet three conditions, implying the need for some improvements on policy implementation.

All the six conditions of effective policy implications are necessary in the case of extremely difficult issues, such as those involving significant behavioural changes. Thus, to strengthen policy effectiveness, explicit and implicit programs should be assembled and aligned to address the problems. Firstly, policy targets should be highlighted to increase the fertility rate, at least equal to the replacement rate instead of previously maintaining the TFR, and stated clearly in the national plans, with major supports from the government leaders, especially the Prime Minister.

In addition, to gain support from interest groups, policy implications should be precise and comprehensive. Although basic family planning services have been provided in the UHC program, some sufficient services to enhance fertility and child health, such as assisted reproductive technology and recommended vaccination for children, have not been contained in the program. Hence, the government should partially subsidise these healthcare services or include some of them into the UHC scheme. Finally, to protect the policy from socioeconomic

condition changes, the government should support the demand of having children for people in all income classes and promote the benefits of having children to families and societies by utilising mass media and policy tools. In this manner, the obstacles of having children can be alleviated, burdens of childbearing can be lowered and couples who nurture children can be guaranteed to have good quality of life. In summary, although the policies in the third period are less effective at present, the harmonious cooperation between policy makers and other program supporters with potential tools can overcome the challenges and lead the programs to achieve their goals.

Notes

1) Eugenics implies the selection of desired heritable characteristics to improve future generations, typically in reference to humans. The term eugenics was coined in 1883 by British explorer and natural scientist Francis Galton, who, influenced by Charles Darwin's theory of natural selection, advocated a system that would allow 'the more suitable races or strains of blood a better chance of prevailing speedily over the less suitable'.
2) At that time, it was called International Bank for Reconstruction and Development (IBRD)
3) Mechai Viravaidya is a pioneer activist who promoted condoms, family planning and AIDS awareness in Thailand
4) At present, the paternal leave is legally provided only for government officials. They also receive the child benefits on tuition and medical fee up to third child.

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