Journal of Sociology and Social Work
December2019, Vol. 7, No. 2, pp. 135-144
ISSN: 2333-5807 (Print), 2333-5815 (Online)
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Published by American Research Institute for Policy Development
DOI: 10.15640/jssw.v7n2a14
URL: https://doi.org/10.15640/jssw.v7n2a14

Population Control Policies and Implementations in India

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Abstract

This paper describes the developments and changes of the population policies and their implementations in India since the 1950s. It roughly divides the population policies and the implementations into three period. The first is a service providing period between 1952 and 1961. The second is an imperative and target oriented period between 1962 and 1977. The third is a voluntary period since April 1977. The author concludes that India's population control is much less effective than the government expected. In the very traditional and highly diversified India society, family planning can be advocated and promoted, but cannot be forced. Therefore, a comprehensive socioeconomic development could be a more effective way in reducing the overpopulation problem.

Keywords: population policy; population control; Indian population; policy implementation; socioeconomic development

Introduction

India was the first major nation in the world to adopt policies to control the growth of its enormous population in 1952. However, the Indian population has kept on growing much more rapidly than the rest of the world after the population control policies have been implemented for more than six decades. According to the United Nations, the Indian percentage of the world total population increased from about 14.9% in 1950 to 17.8% in 2010. By around 2022, the Indian population will overtake that of China and become the most populous country in the world (2017). What are the population control policies and how have they been implemented in India? This paper intends to answer these two questions. Although India is the second most populous nation in the world and the first major nation to adopt policies to control the growth of the population, our understanding of the policies and the implementations is inadequate. In fact, many people have no idea about what the policies are and how they have been implemented. With one of the most dynamic economies in the world and about 18% of the world population, India's importance and its impact on the world will be increasingly significant. Therefore, this research paper describes what the Indian population control policies are, how they have been changed, and how they have been implemented since early 1950s. The discussions by the end of the paper will increase our understanding of the complicated culture and society as well as the population control policies and their implementations in India.

Influences of Gandhi and Nehru

Mahatma Gandhi and Jawaharlal Nehru have influenced the perspectives on population fundamentally but differently. Even before the independence in 1947, many leaders of the Indian independence movement were concerned about the huge population and its potential impact on the future development of India. Gandhi, the primary leader of India's independence movement, and Nehru, a leader of the nationalist movement and the first prime minister of India, had fundamental influences on India's population policies after the country obtained its independence. Therefore, this paper will briefly discuss their impacts first. Although Gandhi was educated in England, he was not influenced by the prevailing western perspectives on population which assumed that a huge population would affect socioeconomic development adversely and must be controlled for economic development. Gandhi's

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perspective on population was quite philosophical and it was based on the concepts of social affection, the doctrine of non-possession, and trusteeship (Ranjan, 1999). Gandhi did not believe a huge population would be a problem.

He once pointed out that by a proper land system, better agriculture and a supplementary industry, India was capable of supporting twice as many people as there were in India at that time. Gandhi believed that increase in population was not and ought not to be regarded as a calamity to be avoided. He also stated that contraceptives were an insult to womanhood (Mahatma Gandhi Media and Research Service, 2019). When many people worried that overpopulation might hinder economic development, Gandhi believed that once a new social order was created and the society is developed in its own terms of reference, it would adjust itself and find its own solution to population growth problems. Therefore, Gandhi did not think it was necessary to have one or two isolated and narrowly defined interventions (Ranjan, 1999). When debating with Sanger in the 1930s, Gandhi had spoken out against contraception. Although Gandhi died before the government adopted and implemented any specific policy for population control, his perspective on population did influence many people's ideas on population control in India. Two of his disciples, Rajhumari Amrit Kaur and Sushila Nayar who took turns leading the Ministry of Health of India government, waged a rear-guard action against birth control during the 1950s and 1960s. When other government officials promoted birth control in the early 1950s, Kaur continued to insist that only the rhythm method was acceptable (Connelly, 2006). Nehru had different perspective on population and he was fundamentally influenced by the prevailing perceptions on population in the Western countries. After observing the industrial revolution and the spread of modern technology that promoted the population growth in Europe, Nehru assumed that an eastward sweep of modern technology would result in a substantial population increase in India. Accordingly, Nehru perceived the huge populations in India a burden and a weakness that needed to be properly and productively organized (Nehru, 2004). On the other hand, Nehru was also influenced by the Communist ideology and liked a socialistic way of development. Therefore, he was willing to adopt programs to control the population growth in India. When he became the first premier of India, his idea about population formed the fundamental setting for the adoption of the population control policy in India in 1952 (Ranjan, 1999).

In fact, the leading politicians like Nehru set out to address the population growth issue as early as in the 1940s. The National Planning Committee under the chairmanship of Nehru set up a "sub-committee on population" which recommended the gradual increasing of marriage age; the teaching of contraception in medical colleges; a special training for doctors, nurses and health visitors; the establishment of birth control clinics; provision of free contractive supply; local manufacture of contraceptives; a vigorous mass publicity campaign; the education of people on the population problem; and the introduction of a eugenic program for sterilization of persons suffering from communicable diseases (Aspalter, 2002). These ideas strongly influenced the adaptation and the implementation of the population control policies by the Indian government after its independence in 1947. However, Gandhi's perspectives continued to influence the ordinary people in the Indian society and affected the implementation of the family planning programs.

From the 1950s to the 2010s, the population control policies and their implementations in India can be roughly divided into three periods. The first is a service providing period between 1952 and 1961. The second is an imperative and target oriented period between 1962 and 1977. The third is a voluntary period since April 1977. This division may help better understand the population policies and their implementations in India although the author fully understand that it may risk of being over simplified the highly complex population control in India. Since the population control policies and the implementations have always been part of its five year plans of the socioeconomic development, the descriptions of the policies and the implementations will follow the time frame of the five year plans of the Indian government.

Service Providing Period between 1952 and 1961

During the first ten years of India's population control, the government policy started in a modest way and its efforts focused on providing services. In 1952, during the First Five Year Plan period between 1951 and 1956, the Indian government assumed that rapid population growth would hinder the socioeconomic development. Accordingly, the government adopted a "family limitation and population control" program. This program intended to assess the factors that contribute to rapid population growth, identify suitable techniques for family planning, devise methods to disseminate the knowledge and techniques for birth control, and provide advice on family planning (Ranjan, 1999). The goal of the program was vaguely defined as a program to reduce the birth rate to the extent necessary to stabilize the population at a level consistent with the requirements of the national economy.

Accordingly, the Indian government allocated 6.5 million Rupees to fund the program (Planning Commission, 1952). The methods utilized to implement the policy include the use of a natural approach and a clinical approach. The natural approach was also known as Gandhian approach. Since those who followed Gandhi's ideas believed that artificial methods of birth control were not practicable and could be misused, the Gandhian approach suggested abstinence or the rhythm method which would be the most suitable method for the Indians. There is little evidence to indicate that this approach ever worked for India's population control. The clinical approach made the existing hospitals and health care facilities provide birth control information to meet the needs of parents. It emphasized the providing of contraceptive services among the couples to limit their family size. Although the existing hospitals and health care facilities made birth control information available, the government did not make any aggressive efforts to encourage the parents to use contraceptives to reduce their family size. As a result, the "family limitation and population control" program had little impact on the population growth and only 22% of the 6.5 million Rupees fund for the program was spent (Chaudhry, 1989).

During the Second Five Year Plan period between 1956 and 1961, the Indian government continued to implement its "family limitation and population control" program. State Family Planning Offices were established and posts of the officers were created in the states. Facilities for voluntary sterilization were also created and available. The Indian government also substantially increased its funding for the population control programs to 49.7 million Rupees. The distribution of contraceptives was extended through primary health centers. Gradually, the clinic approach gained some momentum and a great deal more services were made available at all hospitals and dispensaries in the country. The number of clinics was substantially increased from 147 to 4,165 and a sterilization operation was also included in the family planning program. The distribution of contraceptives was extended through primary health centers and government run hospitals, dispensaries, and maternity homes (Aspalter, 2002). At the same time, demographic research centers were established in Bombay, Calcutta, Delhi and Trivandrum. In both rural and urban areas, contraceptives were issued either free or with reduced prices to families with low income (Srinivasan, 2017). However, when there was a supply of clinics, contraceptives, or even sterilizations for family planning, there was no demand for them. Both the Gandhi and clinical approaches remained ineffective because most people did not think it was necessary for them to have family planning. Women who were targeted by the program were virtually unable to make decisions on family planning when men were dominating at home (Ranjan, 1999). Although the government increased its funding to the population control program, only about 44% of the 49.7 million Rupees fund was spent by the end of the Second Five Year Plan period (Chaudhry, 1989). The population census took in 1961 clearly indicated that Indian population growth was little affected and it kept on growing rapidly.

Imperative and Target Oriented Period between 1962 and 1977

From 1962 to March 1977, the Indian population control changed gradually from a service providing program to an imperative and target oriented population control policy which was gradually intensified. During the Third Five Year Plan between 1961 and 1966, the Indian government perceived the high birth rate in India as the greatest obstacle to economic development. Accordingly, the government created a separate Department of Family Planning in the Ministry of Health and Family Planning and set a goal of reducing the birth rate to 2.5% by 1972. The demographic goals were specified state by state and district by district for each family planning program. The government also set fixed targets on the number of contraceptive acceptors for the family planning workers (Sidhu, 2016). In order to stabilize the population growth, the government increased its funding for the family planning program to 270 million rupees and decided to increase the number of clinics five folds. At the same time, every village and town was directed to form a family planning committee, and 'natural group leaders' were paid an 'honorarium' of 4,000 rupees to develop the 'small family norm among their group' (Connelly, 2006). In implementing the policies, the ineffective Gandhian and clinic approaches were replaced by an extension approach which stressed the role of intensive education of the masses by appointing an army of extension educators to provide knowledge and education to the masses. The government also provided facilities and advice to the rural and urban communities. During the plan holiday period between 1967 and 1969, the family planning program was integrated with the public health program. The delivery of family planning services was extended through the commercial distribution of condoms. With a generous international support, a new system of payment of incentives to acceptors of family planning practice was introduced.

Monetary rewards were paid to family planning workers and officials who procured cases for sterilization. As a result of the increased government efforts, nearly 92% of the allocated fund of 270 million Rupees were spent. The number of family planning acceptors also increased to more than two million (Chaudhry, 1989).

During the Fourth Five Year Plan period between 1969 and 1974, Indira Gandhi, the daughter of Nehru, came to power and the Indian government intensified its population control. The government further increased the funding for family planning program to 3.15 billion Rupees (Aspalter, 2002). A new specific target was set to reduce the national birth rate to 3.9% by 1974 and further to reduce it to 2.5% within 10 to 12 years (Ranjan, 1999). To enforce the new population control policy and reach the set target, a cafeteria approach was introduced to make all possible methods of contraceptives available. The cafeteria approach included the use of condoms, diaphragms, jelly, creams, and foam tablets for newly married couples; the use of intra-uterine contraceptive device (IUCD) for couples with one or two children; and sterilization for couples who do not want any more children. In fact, sterilization became a major strategy of the family planning program. In 1971, the government adopted the Medical Termination of Pregnancy Act to allow for abortion performed by a medical practitioner within the first three months of pregnancy, except in the states of Jammu and Kashmir both of which are mostly inhabited by Muslim population (McBride, 2012). When IUCD was first introduced in the family planning program in the 1960s, the results were effective. However, bleeding and rumors soon set the program back and the number of Indians accepted the use of IUCD started to decline. Then, during the early 1970s, mass vasectomy camps were organized in different parts of the country and incentives, such as cash, were used to encourage sterilization. Group approach was also used to encourage more people to participate. As a result, a large number of males were sterilized. The total number of acceptors increased from 3.8 million between 1970 and 1971 to 5.9 million between 1972 and 1973 (Chaudhry, 1989).

At the beginning of the Fifth Five Year Plan period between 1974 and 1979, the Indian government policy makers strongly believed that excessive family size had to be dealt with as an integral part to a general development strategy (Heitzman and Worden, 1996). Therefore, a new target was set to reduce the birth rate to 3% by 1979 and to 2.5% by 1984. In order to reach the newly set goal, a new population policy was adopted. The National Population Policy was passed by the Indian Parliament in April 1976. The 18 points of the new policy aimed at making a frontal attack on the problems of population (Srinivasan, 2017). More specifically, the new policy raised the minimum age of marriage from 15 to 18 years for females and from 18 to 21 years for males. It also increased monetary compensation for sterilization; froze people's representation in Lok Sabha and State Legislative on the basis of 1971 census up to 2001; fixed the devolution of taxes, duties and sanctions of grant-in-aid on the population figures of 1971 until 2001; made 8% of central government's assistance to state plans on the basis of the performance in family planning; and introduced compulsory sterilization and specific measures of incentives and disincentives to family planning (Ranjan, 1999). As for the compulsory sterilizations problems, the Indian government let the state governments make rules or decisions to handle them (Chaudhry, 1989). Along with the new policy, education about the population problem became part of school curriculum. In some areas, government enforced sterilization was part of the measures for birth control. Female health workers and childhood nutrition workers were given financial incentives by the Indian government to meet the yearly sterilization quotas. On the other hand, health care workers who failed to meet their quotas risked losing their jobs. When the use of coercion increased, the achievements were made in all the states in India, and some even exceeded their targets (Chaudhry, 1989). The emergency period imposed by the Prime Minister Indira Gandhi between June 1975 and March 1977 allowed the government to exercise its power ruthlessly and enforced mass sterilization programs. When most of Gandhi's political opponents were imprisoned and the press was censored, Indira Gandhi's son, Sanjay Gandhi, spearheaded a forced mass-sterilization campaign.

"Vasectomies were held in many government offices, schools, large railway stations, etc. The vasectomy booths set up in the Church gate and VT stations in Mumbai became notorious because of its ruthless nature: they gathered the young male passengers getting down the electric trains and made them pass through the vasectomy booths and sterilized them, unless they had a card saying they have already been sterilized" (Srinivasan, 2017:32-33). As a result, India's population control became much more effective. Between 1976 and 1977, a total of 8.26 million sterilizations were performed, more than the total number done in the previous four years (Srinivasan, 2017). On the other hand, anger increased among the Indian people. During this period, the family planning program focused mainly on terminal methods and the program received a setback due to rigid implementation of a target based approach (Department of Family Welfare, 1997). The coercive measures and government enforced sterilizations caused a great deal of anger among the general population. As a result, the Indira Gandhi's government that adopted and enforced the policy was voted out in 1977 election.

At the same time, the Congress Party also lost elections in most of the states that it had formerly ruled (Kamal and Meyer, 1977). Consequently, the new government ruled out the use of coercion.

Voluntary Period since April 1977

Since April 1977, the Indian population control policy has gradually and mostly changed from an imperative and target oriented policy to a comprehensive social development plan although some targets have been maintained. The coercive measures have mostly been replaced by voluntary efforts and the population control has become indirect. The new population control policy excluded the use of compulsory sterilizations. However, sterilization has gradually shifted to women for controlling their family size. During the Sixth Five Year Plan period between 1980 and 1985, the Indian government relaxed its population control policy and changed the name of the program from family planning into "family welfare" with the pretext that maternal and child health services and nutrition should also be part of any population control strategy. At the same time, the population control became part of the government policy to eradicate poverty and improve the standard of living of the Indian people. The government also postponed the target of reducing the birth rate to 3% by about 1982 and 1983 instead of by 1979. In order to reach this postponed target, the government outlined the magnitude of the work in terms of sterilizations to be done, IUCD to be inserted, and conventional contraceptives to be distributed. During this period, the government's funding further increased to 10.87 billion Rupees and the family planning programs further extended to rural areas through the network of primary health centers and sub-centers (Chaudhry, 1989). At the same time, efforts were also spent on promoting longer intervals between births although few people actually paid attention to it. The most fundamental change of the Indian population policy since April 1977 was that family planning became mostly voluntary.

As a result of the political fallout of the 1977 election, the Indian government now put more emphasis on incentives to attract people to accept family planning instead of coercive measures although the government still gave priority to the rapidly growing population problem. When the government set long-term policy goals rather than shorter ones, the targets for family planning were also substantially reduced. Unlike the early days of the population control policy that focused on the reduction of fertility rate through contraception, the government efforts now extended to maternal and child health services. The cafeteria approach continued, for it recognized the differences among the population and it attempted to meet different groups of people's needs (Ranjan, 1999; Aspalter, 2002). During the Sixth Five Year Plan, the government allocated 10.78 billion Rubes for the family welfare program but the actual spending was estimated at 14.48 billion Rubes. However, almost all the targets in population control were not reached (Srinivasan, 2017).

During the Seventh Five Year Plan period between 1986 and 1991, the Indian government's population control policy extended to including both long term and short term as well as specific goals. The long term goal was to fix the net reproduction rate to be achieved by 2001 and the short term goal focused on female age at marriage and the practice of contraception. The specific goal was to promote a two-child norm through independent choice of the family planning method that was most suitable to acceptors (Ranjan, 1999). The government efforts in population control further extended to increase the literacy rate of the population, especially of women; to improve the status of women by improving their employment opportunities; and to improve the health of mothers and children. The government also adopted communication strategies, such as multimedia and inter personal communication to increase the awareness of family planning (Sidhu, 2016). During this period, four special family planning projects were implemented. The first was the implementation of the All-India Hospitals Post-partum Program at district- and sub-district-level hospitals. The second was the reorganization of primary health care facilities in urban slum areas. The third was the reservation of a specified number of hospital beds for tubal ligature operations. And the fourth was the renovation or remodeling of intrauterine devices rooms in rural family welfare centers attached to primary health care facilities (Heitzman and Worden, 1996). In implementing the population control policies, the government also tried to make it a people's movement and decentralized planning and implementation of the programs.

Despite these developments in promoting family planning, the 1991 census clearly indicated that India continued to have one of the most rapidly growing population in the world. The Eighth Five Year Plan period was between 1992 and 1997. Population control remained a priority for the Indian government even if the government attempted to introduce target-free approaches and changed the national plans to localized area plans. In 1996, the Indian government announced a new national population policy that eliminated numerical targets (Donaldson, 2002). In another word, the Indian government now attempted to control its population growth indirectly, not through specific target. The major focus of the government was shifted on human development, such as employment, education and public health.

In implementing the new population control policy, the government also adopted new indirect measures, such as the shifting its emphasis from the couple protection rate to birth rate lowering, giving large shares of the central government's assistance to the better performing states, involving non-government organizations and community leaders in population control programs, improving women status through poverty alleviation and employment, improving training and infrastructure, reducing infant mortality and maternal mortality rates, and introducing population study in schools and colleges (Shah, 2019).

However, targets remained in some states and were reinstated in some other states (Khan and Townsend, 1998). At the same time, health care workers who did not meet their quotas risked losing their jobs. Worse still, the set targets often made the health care workers misinform women about the health impacts of sterilization (McBride, 2012). During the Ninth Five Year Plan period between 1997 and 2002, the National Commission on Population put forward a new plan called the National Population Policy 2000 (NPP 2000) which "provides a policy framework for advancing goals and prioritizing strategies during the next decades, to meet the reproductive and child health needs of the people of India, and to achieve net replacement levels (TFR) by 2010" (Department of Family Welfare, 2002: 2).

This new policy addressed issues such as contraception, health care infrastructure, and reproductive health care. The immediate objective of the program was to address the unmet needs for contraception, health care infrastructure, and health personnel, and to provide integrated service delivery for basic reproductive and inter-sectoral operational strategies. The medium objective was to lower the total fertility rate to the replacement level by 2010. The long term objective was to achieve a stable population by 2045, at a level consistent with the requirements of sustainable economic growth, social development, and environmental protection (Department of Family Welfare, 2002). India's National Population Policy 2000 has decentralized the decision making to local government and improved the coordination between the government and the local and non-government organizations. The program requires more funding for the program, the improvement of health care infrastructure and services, and the empowerment of women (Anupama, 2015). The program that is uniformly applicable to the whole country includes giving more emphasis on spacing method like IUCD; making the fixed day static services at all facilities available; establishing quality assurance committees at state and district levels to provide quality care in family planning services; providing insurance for the deaths, complications and failures caused by sterilization; compensating those who accept sterilizations; and increasing male participation of family planning (Press Information Bureau, 2015).

During the Tenth Five Year Plan period between 2002 and 2007, the Indian population control efforts continued to shift from demographic targets to enabling couples to achieve their reproductive goals, from method-specific contraceptive targets to unmet needs for contraception to reduce unwanted pregnancies, from family planning to health care for women and children, from centrally defined targets to community need assessment and decentralized area-specific micro-planning and implementation of programs, from quantitative coverage to quality and content of care, from women centered program to the health care needs of the family with emphasis on involvement of men in planned parenthood, from supply-driven service delivery to need and demand driven service, and from service provision based on providers' perception to addressing choices and conveniences of the receiving couples (Shah, 2019). During the Eleventh Five Year Plan period between 2007 and 2012, the government aimed to reduce the total fertility rate to 2.1% by 2012. In order to achieve this goal, the government plan to expand family choices of contraceptives, to improve social marketing, to increase male involvement, to enhance the role of the mass media for behavioral change and to disseminate contraceptives through the satisfied users. Recently, the Indian government population control policy extended more services, including delivering of contraceptives at the doorsteps of the beneficiaries, providing counselling for newly married couples to delay of two years in birth and for couples with one child to have spacing of three years after the birth of the first child, and compensating for sterilization (Press Information Bureau, 2015). Since the Indian government mostly changed its quota oriented population control policy in 1978 and adopted new, mostly voluntary measures or approaches, the Indian population control policies and their implementations may have become more effective, for India's ten year increase rate reduced from 21.5% for the period between 1991 and 2001 to 17% during the 2001-2011 period (United Nations, 2017). The fertility rate was also reduced from 4.97% in 1980 to 2.44% in 2015 (Worldometers, 2019).

Discussions and Conclusions

During the service providing period between 1952 and 1961, the Indian population control policy was mostly calling the public for family planning and the government efforts were focused on providing information and services to potential users of contraceptives. The goal of the policy was not specifically defined and the efforts were not effective, for there was little demand for the services and family planning information supplied by clinics and health institutions. The population control policy and its implementation seemed to have little impact on the population growth in India. From 1950 to 1960, India's ten year population growth rate was 19.5%, which was about 1.1% higher than China's 18.4% growth rate (United Nations, 2017). During the 1950s, China did not have population control and had actually prohibited contraceptives and abortion before 1955 (Wang, 1999). In both 1950 and 1960, India's percentage of the world total population remained at 14.9%, which means that India's population was growing as rapidly as that of the world (See Table 1).

Table 1, Population Changes in India

Year	India's Total Population	India's 10 Year Increase Rate	India's Percentage of World Population	World Total Population
1950	376,325,000		14.9%	2,525,149,000
1960	449,662,000	19.5%	14.9%	3,018,344,000
1970	553,943,000	23.2%	15.0%	3,682,488,000
1980	697,230,000	25.9%	15.7%	4,439,632,000
1990	870,602,000	24.9%	16.4%	5,309,668,000
2000	1,053,481,000	21.0%	17.2%	6,126,622,000
2010	1,230,985,000	16.8%	17.8%	6,929,725,000

Source: United Nations Department of Economic and Social Affairs/Population Division. 2017. World Population Prospects: The 2015 Revision, Volume I: Comprehensive Tables (Pages: 18-21). Retrieved on January 18, 2017 at: https://esa.un.org/unpd/wpp/Publications/Files/WPP2015_Volume-I_Comprehensive-Tables.pdf.

During the imperative and target oriented period between 1962 and 1977, the Indian population control moved gradually from a service providing program to an imperative and target oriented policy. The government set specific targets and adopted coercive measures to reach the set targets. The policy implementation gradually changed from promotion of contraception to sterilization. This new policy and its implementation became more effective mostly in terms of enlisting family planning acceptors and sterilizations than the previous period. However, the achievement recorded on the paper has not always translated into effective reduction of population growth in India. The new population control policies and the coercive measures used in implementing the policies were more than the Indian society could accommodate. As a result, the social population policy was badly defeated in the political arena, which set the population control back in India in 1977. The coercive measures used in population policy implementation seemed not only inappropriate for the Indian society but also ineffective in terms of population control. Instead of reducing the population growth more effectively, the ten-year population growth rate was substantially increased from about 19.5% between 1950 and 1960 to about 25.9% between 1970 and 1980. The Indian percentage of the world total population was also increased from about 14.9% in 1960 to about 15.7% in 1980, which means that the Indian population increased more rapidly than that of the world in this period (See Table 1). After April 1977, the population control policies have become much less focused and the measures utilized to implement the policies have become mostly voluntary, as the Indian government proclaimed. Although the Indian government maintained the priority of the population control in its national socioeconomic development plans, it adopted indirect policies and measures to control the population growth. This change integrated health care and social development with family planning services. At the same time, the Indian population control policies have gradually changed from time bound and target oriented policies to mostly target free policies, and the implementation measures have also changed from compulsory approaches to voluntary approaches. Although the population control policies and the implementations since April 1977 have been unfocused, changing consistently, and the set targets have seldom been reached, this third period of population control policies and their implementations seem to have fit the Indian social conditions and the political structures much better. The decentralized policies seem more suitable than the centralized ones to the federal-like India. When different states or areas have different religion and socioeconomic development, they do need different measures to control their population growth.

Therefore, the new policies and new measures of policy implementations since April 1977 have in fact become more effective in population control. Between 1980 and 2010, the ten-year population increase rate decreased from 25.9% between 1970 and 1980 to 16.8% between 2000 and 2010 (See Table 1). Of course, the reduction of the population increase rate in India may also be attributed to the accelerated socioeconomic development since 1991 and other social changes. However, the Indian population control policies and their implementations are not effective in comparison to other countries in the world. For example, India's percentage of the world total population increased from about 15.7% in 1980 to about 17.8% in 2010, which means that the population growth rate in India was greater than the average growth rate in the world. At the same time, India's percentage of Asia's total population also increased from about 26.6% in 1980 to about 29.5% in 2010, which means that the population growth rate in India was much greater than the average growth rate in Asia, too. In 2022, India's population may overtake that of China and become the most populous country in the world (United Nations, 2017). The enormous and rapidly increasing population may continue to put great pressure on the socioeconomic development, natural resources and the environment in India although the young population may allow India to have some demographic dividend. India's population change seems to indicate that a restrictive population control policy and coercive implementation of the policy may not work as well as many people assumed. Between 1962 and 1977 when the Indian government adopted imperative and target oriented policies and applied coercive measures to implement the population control policies, the Indian population increased more rapidly than either the service providing period between 1952 and 1961 or the voluntary period after April 1977.

China's population control experience may also support such understanding. For example, between 1973 and 1980, the Chinese government began to call the unmarried people to marry later, the married couples to increase the intervals between births, and each family to have fewer children voluntarily. China's birth rate reduced from 3.07% in 1971 to 1.82% in 1980. Similarly, China's natural increase rate also reduced from 2.33% in 1971 to 1.19% in 1980. However, after China adopted the restrictive one-birth per couple policy and began to implement the policy coercively in 1980, the birth rate in China actually increased from 1.82% in 1980 to 2.11% in 1990. During the same period, China's natural increase rate also increased from 1.19% in 1980 to 1.44% in 1990 (Wang 1999). The highly intensified and coercive implementation of the restrictive one birth per couple policy during the 1980s had reduced the birth rate and the natural increase rate less than had the voluntary family planning called for in the 1970s. Although China's population growth has been substantially reduced between the 1960s and 2010s, the rapid reduction of the population growth should be attributed more to the economic structure before the reforms began in the later 1970s or the rapid socioeconomic development after the 1980s. In comparison to India, the substantially improved education and woman status in China also contributed considerably to China's population control (Wang, 2018). India is the first major nation in the world to adopt and implement policies to control the growth of its huge population; however, the policies are often not well defined and changing constantly. The policy implementation measures usually lack focus and shift periodically. Consequently, the Indian government's set goals for population control are seldom reached and have to be revised repeatedly. This phenomenon may reflect or be caused by the social reality that the Indian society is very traditional and highly diversified. For example, almost every person in India is religious, 66% of its population live in the rural areas, and about 40% of the women are illiterate (Central Intelligence Agency, 2019), men and women are still not treated equally, and the caste system still affects the society fundamentally. At the same time, the Indian society is highly diversified. For example, India does not only have the vast majority of the world's Hindus, but also the second largest group of Muslims (Majumdar, 2018). Hinduism alone has more than 33 million gods. With diversified religions, there are very high levels of religion-related social hostilities in the society (Majumdar, 2018). Similar to the diversity of religion, there are 22 official languages and more than 19,569 languages spoken in India as mother tongues (Gulf News, 2019). Socially, the Indians were divided into five castes and the main castes were further divided into about 3,000 castes and 25,000 sub-castes. Although the caste system has been outlawed, it still affects the society fundamentally. Communal tensions between different castes have long plagued the Indian society. This unique social reality may not only affect the population policies and their implementations, but also the functioning of the society. Within such a very traditional and highly diversified society, population control can be advocated or promoted, but cannot be forced or implemented effectively. To conclude, social conditions do not only shape the social policies, but also determine the effectiveness of the policy implementations. Another fundamental factor that has affected India's population control is poverty, for much of India's population increase has occurred among the poorest population or poorer states. The ineffectiveness of the family planning program can be primarily attributed to the problem of poverty (Gupta, 2002).

Therefore, a more effective measure to reduce the population growth in the very traditional and highly diversified Indian society should be a comprehensive socioeconomic development. Such a comprehensive socioeconomic development may include the achievement of equal status for women and lower caste people, improvement of education, development of economy, urbanization, and modernization of the whole society. When the socioeconomic conditions improve, birth rate will be lower and the overpopulation problem will be reduced. Indira Gandhi may agree with this statement. After she returned to power in 1980 and was asked in a television interview, "Do you see any alternative for economic viability for the nation in the face of failure to curb population growth rate to a manageable proportion?" Gandhi answered that the real answer, of course, is development (Gandhi and Chhabra, 1981: 168). Bose also commented that family planning can succeed only when development planning succeeds (1981).

References

Anupama, U. (2015). National Population Policy 2000, AN EMMRC, Patiala Presentation. Retrieved on Feb. 8, 2019 from https://www.youtube.com/watch?v=rZwOAgu304E.

Aspalter, C. (2002). "Population policy in India". *The International Journal of Sociology and Social Policy* 22 (11-12): 48-72.

Bose, A. (1981). "Commentary". *Population and Development Review* 7 (1): 170-171.

Central Intelligence Agency. (2019). *The World Factbook, India*. Retrieved on March 22, 2019 from https://www.cia.gov/library/PUBLICATIONS/the-world-factbook/geos/in.html.

Chaudhry, M. D. (1989). "Population policy in India". *Population and Environment: A Journal of Interdisciplinary Studies* 11(2): 101-121.

Connelly, M. (2006). "Population control in India: Prologue to the emergency period". *Population and Development Review* 32(4): 629-667.

Department of Family Welfare, Ministry of Health and Family Welfare, Government of India. (1997). *Reproductive Health and Child Health Programme: Schemes for Implementation.* New Delhi: Ministry of Health and Family Welfare.

----------------. (2002). "Introduction". *National Population Policy 2000 (Reprint 2002)* New Delhi: Nirman Bhawan. Retrieved on March 10, 2019 from https://mohfw.gov.in/sites/default/files/26953755641410949469%20%281%29.pdf.

Donaldson, P. J. (2002). "The elimination of contraceptive acceptor targets and the evolution of population policy in India". *Population Studies* 56: 97-110.

Gandhi, I. and Chhabra, R. (1981). "Population policy in India: two comments". *Population and Development Review* 7 (1): 168-171.

Gulf News, Asia. (2019). "Census: More than 19,500 languages spoken in India as mother tongues". Retrieved on March 30, 2019 from: https://gulfnews.com/world/asia/india/census-more-than-19500-languages-spoken-in-india-as-mother-tongues-1.2244791.

Gupta, A. (2002). *A Billion Is Enough: India's Population Problem-A Way Out.* Chandigarh: Unistar Books PVT, LTD.

Heitzman, J. and Worden, R. L. (1996). *India, a Country Study*. Federal Research Division, Library of Congress. Washington DC: U.S. Government Printing Office.

Karmal, K. L. and Meyer, R. C. (1977). *Democratic Politics in India.* New Delhi: Vikas Publishing.

Khan, M. E. and Townsend, J. W. (1998). "Has the Indian family welfare programme lost momentum under the target-free approach? Emerging evidence". Paper prepared for a World Bank Workshop on the Target-Free Approach. New Delhi (April 2-3, 1998).

Mahatma Gandhi Media and Research Service. (2019). *Thus Spake Gandhi, Select Quotations by Mahatma Gandhi, Birth Control*. Gandhiserve Foundation. Retrieved on March 22, 2019 from https://www.gandhiservefoundation.org/about-mahatma-gandhi/thus-spake-gandhi/birth-control-1/.

Majumdar, S. (2018). "5 facts about religion in India". *Facttank: News in the Numbers. Pew Research Center*. Retrieved on March 30, 2019 from https://www.pewresearch.org/fact-tank/2018/06/29/5-facts-about-religion-in-india/.

McBride, M. (2012). "History of population control in India". *Eye on Asia*. Retrieved on March 2, 2019 from https://humanrightsinasia.wordpress.com/2012/07/31/history-of-population-control-in-india/.

Nehru, J. (2004). *The Discovery of India*. East Rutherford, NJ: Penguin Books.

Planning Commission, Government of India. (1952). *First Five Year Plan 1951-1956*. New Delhi: Government of Indian Press.

Press Information Bureau, Ministry of Health and Family Welfare, Government of India. (2015). *National Population Policy Provided by the Health Minister*, Shri J P Nadda as a written reply in the Lok Sabha on December 11, 2015.

Ranjan, A. (1999). *Population and Development: The Indian Perspective*. USA: Universal Publishers/Upublish.com.

Shah, S. (2019). "Population policy of India." *Sociology Discussion*. Retrieved on March 4, 2019 from http://www.sociologydiscussion.com/population/population-policy-population-policy-of-india/2377.

Sidhu, S. S. (2016). *Population Policy in India, Key Factors*. Online Lecture, YouTube. Retrieved on Feb. 7, 2019 at https:/www.youtube.com/watch?v=d_F9x3Y-D94.

Srinivasan, K. (2017). Population Concerns in India: Shifting Trends, Policies, and Programs. New Delhi: Sage Publications India Pvt Ltd.

United Nations Department of Economic and Social Affairs/Population Division. (2017). *World Population Prospects: The 2015 Revision,* Vol I. Comprehensive Tables.

Wang, G. T. (1999). *China's Population: Problems, Thoughts and Policies.* Aldershot: Ashgate Publishing Limited.

--------------. (2018). "The population change and the social factors that affected the change in China and India". *Jiang Su Social Sciences* 2018 (5): 82-91.

Worldometers. (2019). "Population of India (2019 and Historical)". *Population.* Retrieved on March 16, 2019 from http://www.worldometers.info/world-population/india-population/.