

# FAMILY PLANNING AND SUSTAINABLE DEVELOPMENT: LESSONS LEARNT FROM INDIA'S SOCIAL POLICY PLANS

Shubhaang Sinha <sup>a</sup>

<sup>a</sup> NALSAR University of Law, Hyderabad, India.

<sup>a</sup> Corresponding author: shubhaang@gmail.com

©Ontario International Development Agency ISSN: 1923-6654 (print)

ISSN 1923-6662 (online). Available at <http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html>

**Abstract:** The link between sustainable development and population growth was first exposed by Thomas Robert Malthus, a British scholar and economist, who in his book "Essay on the Principle of Population (1798)" correlated uncontrolled population growth with scarcity of resources. Out of the two balancing processes in this regard; positive checks which include natural counters like war, famines and disease, and negative checks like delayed marriages and abstinence from sex, **Family Planning** is of the species of the latter set.

In India, the need for Family Planning at a functional level was felt as early as in 1951 when the first draft of the **First Five Year Plan** contained a section "*Population Pressure: Its Bearing on Development.*" However, most Indian policymakers, at that time did not view it as a pressing issue as they believed that as per the **Demographic Transition Theory**, high economic growth would in turn take care of the population rate just as it had in Europe in the early part of the twentieth century. However India did not have the luxury of utilizing resources from its colonies to feed its growth like the European powers had done in the colonial era and with increasing health facilities, increasing life expectancy and lower mortality rate, an enormous strain on the country's resources, despite advents like the green revolution, was evident, and the government was forced to intervene.

Over the decades, family planning as a government policy has yo-yoed over different extremes. The methodologies have varied from a position in the early 1950s where the then Minister of Health only considered the "rhythm method" as morally correct and distributed beaded necklaces to women to determine their safe days, to a more hardened approach of coercive vasectomies and tubectomies in the 1970s wherein camps were set up, government employees threatened, and in states like Rajasthan, more than 7.8 million men were sterilized. However despite all legal and extra legal efforts, the population growth rate remained steadily high.

A variety of reasons can be attributed to the failure of these policies. Most important of them emanate from the socio-economic peculiarities of India. **In this paper**, the population control aspects of **all the Five Year Plans** since independence and the **National Population Policy of 2000** have been examined in varying detail. For this, first the policies have been contextualized and then their effectiveness, i.e. their effect on the birth rate has been scrutinized using empirical statistical data and research literature. Following this, the shortcomings of the policies have been touched upon and their reasons, especially the ones which are still pertinent in today's context have been elaborated upon.

Under Indira Gandhi's tenure, three main obstacles for family planning in India were identified. First was the lack of contraceptive supplies, the second was inadequate medical personnel and finally the lack of awareness about the importance of birth control. However, these fail to go to the root of the problem.

In India, the varying **gender roles** are a major contributor to this issue. In traditional Hindu societies, sons are supposed to be the ones who have the duty to perform '*pinda dan*' and are considered as the propagators of the family line. Additionally, it is believed that through marriage, women become a part of their husband's family. It was the son who apart from being the economic breadwinner was responsible for ensuring the wellbeing of his parents during their old age.

Other factors in this discussion include the aspect of **religion based misgivings to contraception**, the **high mortality rate** triggering a failsafe mechanism and the **vicious cycle** of having a high percentage of population in the reproductively active age.

For population control plans to actually succeed, their importance in the private lives of individuals needs to be evident, as was corroborated in the Harvard sponsored **Khanna Study**, conducted in the early 1950s and for that, rather than just birth rate, an holistic overall health approach needs to be adopted

that includes the well being of the mother and the child, even after birth.

**In this paper**, the population policies from the countries like, *inter alia*, China and Indonesia, which face a similar population problem, have also been examined and their best practices have been extracted to arrive at suggestions to improve the presently ineffective Indian system. Many of these suggestions can also be adapted to suit the needs of other similarly placed nations. **Family Planning** is a highly complex, multifaceted, yet compelling issue and the fact that it is intrinsically linked with sustainable development makes it an exceptionally relevant and pertinent topic in the Indian as well as the international scenario.

**Keywords:** Family Planning, Indian Social Policy Plans, Population Control, Sustainable Development

### INTRODUCTION

**T**homas Robert Malthus, a British scholar and economist, in his book "Essay on the Principle of Population (1798)" proposed a systemic theory of population and postulated that even though population increase occurs exponentially, food production only increases in a series of arithmetic progressions. Thus in case of uncontrolled population growth, he argued that humans would essentially not have adequate resources to survive on and this would lead to worldwide catastrophe [1]. Malthus then mentioned two processes through which this disparity could be balanced. The first course possible is called Malthus' positive checks in which it is theorized that whenever an imbalance is reached with regards to excess population, it is countered by positive checks like wars, famines and disease. The other course is called Malthus' negative checks in which humans may pre-empt the discrepancy by taking steps like delayed marriages and abstinence from sex [2]. This second process of actively creating a sort of harmony between population growth and food production forms the basic foundation on which the need to create a family planning system can be affirmed.

In the modern sense, economists implicitly started reading food production as proposed by Malthus to also include most limited natural resources and this model was also applied to a particular view on the growth of economies.

The World Health Organisation describes family planning as "Family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births [3]." Therefore, Family Planning in a modern sense also covers the health aspect of the issue.

Taking this into consideration family planning, apart from reducing the economic burden on poorer

families, is additionally important as proper measures including adequate birth intervals can save the lives of hundreds of thousands of women per year and also bring the mortality rate down [4]. Moreover, more women can join the labour force contributing to the economy and bridging gender inequality.

In the nascent stages of our country's existence, when India was only beginning its journey towards becoming a significant state, although the need for population check as understood through the Malthusian perspective was felt, its consequences would only be understood in the subsequent decades when it would become a major concern in the economic as well as political arena .

In the initial years of India's independence, rather than categorizing family planning as separate policy, family welfare was included in all India's Five Year Plans due of its encompassing character and as it was one of the most important aspects of the country's progress. Yet, despite more than six decades having passed since India gained Independence, the desired outcome has not been reached. In this light, the fact that Family Planning is such a complex, multifaceted, yet compelling issue even in the contemporary scenario makes it an exceptionally relevant and pertinent topic to research on.

### RESEARCH METHODOLOGY

The concept of family planning has been examined not from the narrow point of view of one policy document but rather all Five Year Plans since independence have been examined in varying detail. The National Population Policy of 2000 has also been analyzed.

The Five Year Plans are drafted by the Planning Commission every five years and these plans aim to set appropriate targets for all the different aspects that a country requires to prosper including economic as well as social issues.

The National Population Policy of 2000 on the other hand is a policy exclusively dealing with the issue of Family Planning, Control of Population and Reproductive Health. It mentioned certain targets regarding Population Control for the next decade for which it attempted to provide a framework and a course of action.

In the project, first the policies have been contextualized in the scenario and then their effectiveness, i.e. their effect on the birth rate has been scrutinized using research papers and empirical statistical data.

Following this, the shortcomings of the policies have been touched upon and their reasons, especially the ones which are still pertinent in today's context have been elaborated upon. In the project, there is an

attempt to correlate these reasons to attempt to explain the issue in a holistic and comprehensive manner.

### THE POLICIES AND THEIR IMPACT ON POPULATION GROWTH RATE

The need for Family Planning at a functional level was felt as early as in 1951 when the first draft of the First **Five Year Plan** contained a section "*Population Pressure: Its Bearing on Development* [5]." However, most Indian policymakers did not view it as a pressing issue. This was because they believed that high economic growth would in turn take care of the population rate just as it had in Europe in the early part of the twentieth century (The Demographic Transition Theory) [6][7][8]. The other aspect was that the growth rate of the previous decade, i.e. 1.26% had not been something to be particularly worried about and the Indian policymaker expected the rate to only increase up to 1.5% [9].

Therefore only 3 million Rupees were allotted for the program out of which only 1.5 million were actually used. At that point, mainly studies related to the study of reproductive patterns and practices were sponsored; 147 health clinics, a very small number in perspective, were started.

At that juncture, however, there was no active thrust at birth control as only the "rhythm method" was considered 'morally' correct by the then Minister of Health – Raj Kumari Amrit Kaur [9][5].

Later on the, India blamed the Catholic Member Countries of the WHO alleging that that they prevented India from accessing technical aid regarding scientific contraceptive implementation systems as their religion opposed the use of contraceptives. Due to a lack of other scientific methods, necklaces with different coloured beads were given to women to determine their safe days [9]. Lack of knowledge, especially amongst rural women and irregularity of menstrual cycles prevented this method from becoming effective and the government in the next decade eventually turned to other more scientific methods like condoms sheaths and diaphragms [9].

In the **Second Five Year Plan**, much of the same policies were followed, however there was more emphasis on setting up rural birth-control clinics. This time 22 million rupees were allotted and 4000 clinics set up. Despite all these efforts, at the end of the plan, the population growth rate stood higher than ever at 2.0% [9].

The **Third Five Year Plan** increased the allotted the budget of 250 million rupees to this project. With a high population growth rate and a declining death

rate, it was getting increasing hard for the government to provide for all its citizens [9].

Now all available methods of birth control like Intra Uterine Devices, except the pill were adopted under a new "extension method". Sterilizations, i.e. vasectomy for men and tubectomy for women began and for men, an incentive program was launched in the **Plan Holiday** period wherein they were given incentives like cash benefits and holidays if they subscribed to the program [9].

Under Indira Gandhi's tenure, the Health Minister identified three main obstacles for family planning in India. First was the lack of contraceptive supplies, the second was inadequate medical personnel and finally the lack of awareness about the importance of birth control [9].

Pursuant to this manufacturing units were set up and by 1970s India had become self sufficient in the production of condoms. 35,000 medical practitioners were also integrated into the programme and on the publicity front, many slogans were invented and the inverted Red Triangle became a simple but visible symbol for the programme. The triangle symbolized declining population and unified the different efforts and made the programme more identifiable. This is the same effect which the red ribbon has had for AIDS awareness or the phrase "God's Own Country" has had for Kerala Tourism. However, by 1971, mass media only reached about 25% of the population. Additionally 45,000 clinics were been set up with 41,000 being in rural areas [9].

The **Fourth Five Year Plan** was an utter failure too. With an increase in the calorific intake of the people due to the green revolution, low infant mortality rate, lower death rate and higher life expectancy along with the influx of East Pakistani refugees, the population growth rate stood at a worrying 2.2%. Thus a need for an immediate solution was felt and right after the imposition of emergency, one of the most coercive sterilization programmes in history was initiated by Indira Gandhi which was ruthlessly executed by her son Sanjay Gandhi.

Government Employees were threatened with the fact that if they failed to get sterilized, certain facilities would be withdrawn from their service. They were made to find volunteers and failure to conform to the dictat meant strict sanctions including withholding their salaries or even sacking them [9]. There were certain riots and people were often randomly arrested and taken to sterilization camps. In 1976, the National Population Policy permitted State Legislatures to enact legislation for compulsory sterilisation and the State Government of Rajasthan consequently made sterilizations after having two children compulsory. The target of 4.3 million

sterilizations was exceeded by nearly double that number, i.e. in total 7.8 million.

This repressive policy of birth control is said to be one of the decisive factors for the downfall of Indira Gandhi [9][21] and this marked the end of the coercive form of birth control. Additionally, in spite of the efforts, legal and extra legal, the population growth rate at 2.37% had never been higher.

1977 saw a paradigm shift in its approach when India integrated its family planning programme with a comprehensive health and family welfare programme. In 1977, the coercive part of the **National Population Policy** was removed while the over encompassing part including increasing the age of marriage, promoting female education [10], spreading the small family norm, supporting research in biological health programmes as well as providing incentives for individuals, groups and communities was reiterated [Footnote 41 of 9].

Ever since, subsequent Five Year Plans have set certain targets to control the birth rate including setting targets for insertion of Intra Uterine Devices as well as sterilizations and have achieved mixed results. In the 1990s the target setting trend also disappeared and a local based Community Needs Assessment Approach adopted [11]. The element of coercion became non-existent now. Although the population rate has decreased significantly, the latest estimate for reaching a neutral Net Replacement Rate is still far off.

In 2000, a **National Population Policy** was formulated and its encompassing character is visible from Section 5 which says – *“Stabilising population is an essential requirement for promoting sustainable development with more equitable distribution. However, it is as much a function of making reproductive health care accessible and affordable for all, as of increasing the provision and outreach of primary and secondary education, extending basic amenities including sanitation, safe drinking water and housing, besides empowering women and enhancing their employment opportunities, and providing transport and communications [12].”*

Apart from controlling the number of pregnancies, the policy also talks about empowering women for improved health and nutrition, child health and survival, adolescent welfare, increased role of men and providing for the elder population among other things.

The policy also talks about establishment of various structures including a National Commission for Population as well as a coordination cell in the Planning Commission (this is required as there are various Reproductive and Child Health programmes instituted by National Rural Health Mission, National

Institute of Health and Family Welfare, Ministry of Women and Child Development as well as other agencies). The policy also mentions various incentive programs e.g.: Balika Smridhhi Yojana, etc which provides for cash inducements to promote smaller families [12].

Various States have also come up with positive and negative incentives to promote small family norms. Positive incentives include payment for the initiation or an effective practice to promote smaller families. Negative incentives effectively include withdrawal of certain benefits or governmentally provided medical treatment. There exists a separate category called disincentives which include legislations that debar persons not adopting the two child policy from contesting panchayat elections, etc aim to discourage families from having large families [13].

In the present times, the government has also joined hands with international organizations like the WTO and United Nations Population Fund with which it signed an agreement on 30<sup>th</sup> January 2013 to work in partnership during of the 12<sup>th</sup> Five Year Plan from 2013-2017. UNFPA aims at spreading education especially connected with gender inequality and its solutions [14]. NGOs like Population Foundation of India and Population Council [15] also help in spreading awareness and contributing to the knowledge base [16].

Despite all measures, the population rate is nowhere close to ideal currently. India has missed its population targets set by the National Population Policy of 2000 [17]. In such a scenario it is imperative that we examine the reasons which make population control such a challenging task in the Indian scenario. The next section of the project deals with this aspect.

## SOCIOLOGICAL ANALYSIS OF THE ISSUE

### Gender

One of the primary reasons for high birth rate amongst Hindus is the importance given to sons or male children in traditional Hinduism.

In traditional Hindu societies, sons are supposed to be the ones who have the duty to perform *pinda daan* [18] so that their parents can go to heaven after their deaths. Sons are considered as the propagators of the family line and a family without sons is often considered to be accursed [19].

Traditionally in an agrarian society males were considered economic assets as they were expected to help in the economic production of the household which mainly depended on farming.

Another factor that comes in the picture is that sons were supposed to take care of parents after their

retirement [9]. It was believed that through marriage, women are given away and become a part of their husband's family. It was the son who has the responsibility of ensuring the wellbeing of his parents during their old age. Even age old Indian stories like the tale of Shraavan Kumar exemplify and glorify the role of an ideal son.

In such situations, families keep on producing children till one or two sons have taken birth in the family. It is scientifically established that there is a ½ probability of a child being of either sex or therefore a lot of families, in the hope of having at least two male children end up having four off springs creating enormous pressure on the population threshold.

To counter this train of thinking therefore, the state needs to provide its citizens a social security plan, especially in terms of adequate income through security of work and retirement security for the elderly.

### **Mortality Rate**

With little access to healthcare, the **Infant Mortality Rate (IMR)** was very high in the earlier times. With the fact weather children would survive up till adulthood uncertain, parents tended to produce more and more children. To put it in a rather blunt and insensitive manner, this was supposed to be a guarantee in case something untoward happened to any of them. Another reason is that many of the women married today, despite the minimum age of marriage under the Hindu Marriage Act having been raised to eighteen for the bride, a large number of children born were to mothers who had not yet attained maturity. Children of such women were more likely to not survive till adulthood and this has contributed to the high IMR [12]. In such a situation it was considered economically necessary to have more children, as a sort of insurance for the death of one progeny [9].

With advances in medical technology over the past few decades, IMR has been brought down significantly. However, this continues to be a major problem even today in the rural part of India and therefore despite the more favourable IMR, it has been hard to convince people and the corresponding change in the behaviour and mindsets of people has not yet been achieved. This is another reason why the population, especially in the non-urban sectors is still rising steadily.

### **Marriage, Religion and Contraception**

Marriage is a sanctified social as well as personal institution which has many external connotations which transcend modern ideology.

Muslim marriages are defined as – "*Nikah* (Marriage) is defined to be a Contract which has for its object -

the Procreation and the Legalizing of Children [20].” Therefore views towards use of contraceptives in India have been divergent on the issue. Some schools of Muslim Law do not allow it at all [21] by extending the quote "*You should not kill your children for fear of want*" (17:31, 6:151) [22] to contraception too. Others approve of the use of a method called "*coitus interruptus*" which is the withdrawal method [22]. Yet others endorse scientific methods like condoms and diaphragms while all schools oppose permanent solutions like sterilization as there is text against self castration [22].

The Roman Catholic Church is also strictly against the use of artificial contraceptives as tampering with the '*Male seed*' amounts to murder [23].

Hinduism prescribes four stages of the life of every man. The second stage i.e. the *Grihasta* stage or the householder stage is when the matrimonial life including the procreation of children takes place [24]. Even though Hinduism does not really talk about contraception, most Hindus would only like to use a permanent method after they've had the desired number of children [25].

Therefore the use of family planning mechanism s like contraceptives has been vehemently opposed by the Church and to a certain extent also by Islamic scholars. This has also proven to be an impediment to the control of population [26].

### **Sterilization and its Failure**

Sterilization became the choice method of contraception for the government from the Third Five Year Plan onwards as it was a permanent solution and did not require any additional cost for subsistence. Various incentives were given to the people who subscribed to this method. Yet, despite a substantial number of people having taken part in this programme, population growth rate showed no signs of abating. The most important aspect was that the people who had been sterilized did not really constitute the most reproductively active demographic population. In a study of factory workers it was found that most of the people who actively participated in such schemes where such whose desire to have more children had already subsided. Many amongst these already had two sons. In a contrasting study (of East Pakistani refugees in *Hastinapur*), however, it was found that the households in which males had been sterilized (average age being 40) had significantly lower population rates [27]. However such conclusions were rare and overall the population continued to rise unabated.

The issue of Forced Sterilization came about during the period of emergency. People were repulsed at the gross violation of their fundamental right, especially

their right to a dignified life and liberty enshrined in Article 21 of the constitution. Such disgusting measures made people more resistant towards this issue and the population rate continued to soar.

Moreover such repressive and coercive measures made people sceptical, resistive and unsure about adopting family planning policies even in the future. They had become wary of any trickery or skulduggery on the part of the government. Indira Gandhi was subsequently voted out of power.

### **High Percentage of Population in Reproductively Active Age**

This theory represents the vicious cycle of population growth. The **National Population Policy – 2000** considers the high percentage of people in the reproductive age as the prime reason for the persistence of a high population growth rate. It substantiates 58% of the reason towards this aspect of demographic studies. It asserts that 45% of the population increase is caused by the birth of more than two children in the family. Therefore the policy stresses on the importance guiding people towards adopting a “small family norm [12]”.

### **CHINESE AND INDONESIAN FAMILY PLANNING MODELS AND THEIR RELEVANCE IN THE INDIAN CONTEXT**

China in the 1950s, much like India was rather complacent about the importance of population control and its impact on resource management and sustainable development. However, since the 1970s when the urgency of the issue became evident, it enforced the once child policy wherein if a couple conceived more than one child, they would be subject to certain fines and penalties, proportional to the couple's income and would be debarred from availing work bonuses [28].

These measures have helped bring the fertility rate down to around 1.7% and prevented the conception of around 200 million children [29]. However there have been many claims as to the sociological impact of such an aggressive and coercive mechanism to curb the population growth rate [30].

Coercion anyways has never been an effective and feasible methodology in India as evidenced by the forced sterilization episode and therefore such a policy is bound to be unsuccessful in the Indian scenario.

Indonesia on the other hand has focused mainly on clinical methods to deal with its own population crisis [31]. The fertility rate has reduced from mid 5% in the 1970s to about 2.6% today. Though it remains high, the hands-on approach which involves better contraceptive access, education and promotion of overall health, has helped bring it down considerably.

India's family planning strategy is in a way is similar to Indonesia's model. However both policies have reached a plateau [32] and new methods need to be evolved to address the population problem better.

### **SUGGESTIONS**

Since the late 1950s, the government has successively formulated numerous media and awareness strategies. Different campaigns, studies and knowledge dissipating drives have been initiated. Yet, even now, despite widespread understanding of the issue, the birth rate continues to remain high. Here lies the distinction between information, instruction and motivation. For population control plans to actually succeed it is imperative that the people realize that having small families is actually good for them in their own private lives rather than considering it an abstract ideal for the societal future. This was concluded from a Harvard sponsored study called the **Khanna Study** [Footnote 47 of 9] which was conducted in the early 1950s in collaboration with the Government of India. Therefore mere dissipation of information is not enough. This was the view that drove the integration of the issue of family planning with the health, welfare and socio-economic angle and this is the view that needs to be carried forward while designing future policies.

India's population problem is twofold. The first category includes, as mentioned above, understanding the need for family planning while the second includes practical issues like limited knowledge of contraceptive methods especially amongst the most vulnerable age and fertile age group, limited access to contraceptive facilities and therefore effectively limited choices, poor quality of services and limited male involvement in contraception [11]. All these problems are easier for the state to remedy and the many on-paper concurring policies [33] should be implemented immediately. Also, in a society where the balance of power is skewed in favour of men, no contraceptive method can work if there is no active involvement of men and the status of women is not uplifted. This is an issue that needs to be immediately redressed through education, economic and political involvement and empowerment of women.

In 1979, the fertility rates of the state of Kerala in India and of the People's Republic of China were 3% and 2.8% respectively. However by 2007, despite different methodologies adopted in both these areas, the figure for both had come down to 1.7%. Kerala's successful efforts at curbing the high population rate, without resorting to coercive means can be attributed the high percolation of education facilities which consequently translated into a stable employment scenario and equality of the genders [34]. Therefore it is important that these indicators not be ignored and

their lessons incorporated during country-wide planning on the issue.

### CONCLUSION

The situation in India as well as other developing economies is starkly different from what it was in the industrial economies of the West. In the developed nations, a population growth followed industrialization and with further improvement in the health and economic conditions, the population rate declined. In India however, there was a simultaneous attempt at curbing the population rate that went side by side with industrialization. This was with good reason too. This is because India did not have the luxury of utilizing resources from its colonies to feed its growth like the European powers had done in the colonial era. The situation in the 60s could have been tragic had the Green Revolution not happened. However with the economy not progressing as fast as some would have liked, the government tried to treat population control as somewhat like a panacea for all administrative problems and tried to address it as a segregated issue. In a way, contrary to how in the west, economic change and social change had driven population control, the Indian policymakers tried to applying it the other way around. This turned out to be exceedingly counterproductive as evidenced by statistical data.

In the modern times, the **Anti-Malthusians** [35] believe that industrialization and economic development will by itself take care of, and ultimately even out the ratio between birth rate and death rate thereby creating a stable population. This may be true in the long run; however, it may be very fallacious and foolhardy to abandon concerted efforts at population control.

Population control can only find consonance amongst the people if the government manages to transcend the peculiarities concerning the socio-economic factors that are particular to Indian societies. The need of the hour is therefore to maintain the holistic approach towards societal transformation and treat family planning as a vital cog in the machinery that consists of a host of a comprehensive health program while marching towards the ultimate goal of population stability to fuel progress of the nation and its people.

### REFERENCES

- [1] Cgge.aag.org (2013). *Malthusian Theory of Population*. Retrieved from: [http://cgge.aag.org/PopulationandNaturalResources1e/CF\\_PopNatRes\\_Jan10/CF\\_PopNatRes\\_Jan108.html](http://cgge.aag.org/PopulationandNaturalResources1e/CF_PopNatRes_Jan10/CF_PopNatRes_Jan108.html) [Accessed: 16 March 2013].
- [2] S-cool.co.uk (2013). *A-level Geography Population Revision - Population models | S-cool, the revision website*. Retrieved from: <http://www.s-cool.co.uk/a-level/geography/population/revise-it/population-models> [Accessed: 16 March 2013].
- [3] Who.int (2013). *WHO | Family planning*. Retrieved from: [http://www.who.int/topics/family\\_planning/en/](http://www.who.int/topics/family_planning/en/) [Accessed: 16 March 2013].
- [4] United Nations Population Fund (2013). *A Global Need for Family Planning*. Retrieved from: [http://www.unfpa.org/rh/planning/mediakit/docs/new\\_docs/sheet1-english.pdf](http://www.unfpa.org/rh/planning/mediakit/docs/new_docs/sheet1-english.pdf) [Accessed: 16 March 2013].
- [5] Avasarkar, A. (2013). *Essay on the Five-Year Plans of Family Planning to Control the Population of India*. Retrieved from: <http://www.preservearticles.com/2011120718201/essay-on-the-five-year-plans-of-family-planning-to-control-the-population-of-india.html> [Accessed: 16 March 2013].
- [6] National Programme on Technology Enhanced Learning (2010). *Lecture 29: Demographic Transition Theory*. Retrieved from: [http://nptel.iitm.ac.in/courses/109104044/lecture\\_pdf/Lecture%2029.pdf](http://nptel.iitm.ac.in/courses/109104044/lecture_pdf/Lecture%2029.pdf) [Accessed: 16 March 2013].
- [7] Cgge.aag.org (2013). *Explaining the Demographic Transition Model*. Retrieved from: [http://cgge.aag.org/PopulationandNaturalResources1e/CF\\_PopNatRes\\_Jan10/CF\\_PopNatRes\\_Jan106.html](http://cgge.aag.org/PopulationandNaturalResources1e/CF_PopNatRes_Jan10/CF_PopNatRes_Jan106.html) [Accessed: 16 March 2013].
- [8] Thorpe, E. and Thorpe, S. (2011). *Pearson CSAT Manual*. Pearson.
- [9] Ledbetter, R. (1984). Thirty years of family planning in India. *Asian Survey*, 24 (7), pp. 736--758.
- [10] YouTube (2013). *The girl effect: The clock is ticking*. Retrieved from: <https://www.youtube.com/watch?v=1e8xgF0JtVg> [Accessed: 16 March 2013].
- [11] Santhya, K. (2003). *Changing family planning scenario in India: An overview of recent evidence*. No. 17. [report] New Delhi: Population Council.
- [12] *National Population Policy 2000*. Retrieved from: <https://india.unfpa.org/drive/NationalPopulationPolicy2000.pdf> [Accessed: 14 March 2013].
- [13] National Commission on Population (2013). *Incentives and disincentives to promote the Small Family Norm*. Retrieved from: <http://populationcommission.nic.in/incentive.htm> [Accessed: 16 March 2013].
- [14] United Nations Population Fund India. *Country Programme Action Plan 8 signed and sealed!* Retrieved from: [http://india.unfpa.org/2011/10/19/4053/country\\_](http://india.unfpa.org/2011/10/19/4053/country_)

- programme\_action\_plan\_8\_signed\_and\_sealed/ [Accessed: 16 March 2013].
- [15] Santhya, K. and J Jejeebhoy, S. (2007). *Young people's sexual and reproductive health in India: Policies, programmes and realities*. No. 19. [report] New Delhi: Population Council.
- [16] Population Foundation of India. *Planned Families in India: A national development approach*. [report] Retrieved from: [http://populationfoundation.in/sites/default/files/policy\\_planned\\_families.pdf](http://populationfoundation.in/sites/default/files/policy_planned_families.pdf) [Accessed: 16 March 2013].
- [17] Mahapatra, D. (2008). India misses population control targets for 2010, 2016. *The Times of India*, [online] 11th June. Retrieved from: [http://articles.timesofindia.indiatimes.com/2008-07-11/india/27939157\\_1\\_ngo-azadi-bachao-andolan-national-population-policy-npp-2000](http://articles.timesofindia.indiatimes.com/2008-07-11/india/27939157_1_ngo-azadi-bachao-andolan-national-population-policy-npp-2000) [Accessed: 16 March 2013].
- [18] Irfi.org (2013). *The role and importance of a son in a Hindu family*. [online] Retrieved from: [http://www.irfi.org/articles3/articles\\_4601\\_4700/the%20role%20and%20importance%20of%20a%20son%20in%20a%20hindu%20family.html](http://www.irfi.org/articles3/articles_4601_4700/the%20role%20and%20importance%20of%20a%20son%20in%20a%20hindu%20family.html) [Accessed: 16 March 2013].
- [19] Hinduwebsite.com (2013). *Children in Hinduism*. [online] Retrieved from: [http://www.hinduwebsite.com/hinduism/h\\_children.asp](http://www.hinduwebsite.com/hinduism/h_children.asp) [Accessed: 16 March 2013].
- [20] The Hedaya. (1791). Karachi: p. 25.
- [21] Iyer, S. (2002). Religion and the decision to use contraception in India. *Journal for the scientific study of religion*, 41 (4), pp. 711--722.
- [22] Bbc.co.uk (2013). *BBC - Religions - Islam: Contraception*. [online] Retrieved from: <http://www.bbc.co.uk/religion/religions/islam/islamethics/contraception.shtml> [Accessed: 16 March 2013].
- [23] Pbs.org (2013). *American Experience | The Pill | People & Events*. [online] Retrieved from: [http://www.pbs.org/wgbh/amex/pill/peopleevent/s/e\\_church.html](http://www.pbs.org/wgbh/amex/pill/peopleevent/s/e_church.html) [Accessed: 16 March 2013].
- [24] Das, S. (2013). *The Four Ages of Man - The 4 Stages of Life in Hinduism*. [online] Retrieved from: <http://hinduism.about.com/od/basics/p/fourstages.htm> [Accessed: 16 March 2013].
- [25] Bbc.co.uk (2013). *BBC - GCSE Bitesize - Hinduism: contraception and abortion*. [online] Retrieved from: [http://www.bbc.co.uk/schools/gcsebitesize/rs/sanctity/hiabortionrev\\_print.shtml](http://www.bbc.co.uk/schools/gcsebitesize/rs/sanctity/hiabortionrev_print.shtml) [Accessed: 16 March 2013].
- [26] Pew Research Center's Religion & Public Life Project (2011). *The Future of the Global Muslim Population*. [online] Retrieved from: <http://www.pewforum.org/2011/01/27/the-future-of-the-global-muslim-population/> [Accessed: 16 March 2013].
- [27] Carolyn Henning Brown. *The Forced Sterilization Program Under the Indian Emergency: Results in One Settlement*. Retrieved from: [http://freeuniversity-gh.org/wp-content/uploads/2010/09/Forced\\_sterilization1.pdf](http://freeuniversity-gh.org/wp-content/uploads/2010/09/Forced_sterilization1.pdf) [Accessed: 16 March 2013].
- [28] Cowhig, D. (2007). *Sichuan social fostering fee schedule*. [image online] Available at: [http://upload.wikimedia.org/wikipedia/commons/7/7b/Sichuan\\_social\\_fostering\\_fee\\_schedule.jpg](http://upload.wikimedia.org/wikipedia/commons/7/7b/Sichuan_social_fostering_fee_schedule.jpg) [Accessed: 16 March 2013].
- [29] Olesen, A. (2011). *Experts challenge China's 1-child population claim*. [online] Retrieved from: [http://www.boston.com/news/world/asia/articles/2011/10/27/chinas\\_touting\\_of\\_1\\_child\\_rules\\_draws\\_challenges/](http://www.boston.com/news/world/asia/articles/2011/10/27/chinas_touting_of_1_child_rules_draws_challenges/) [Accessed: 16 March 2013].
- [30] Asianews.it (2007). CHINA Consultative Conference: "The government must end the one-child rule" - Asia News. [online] Retrieved from: <http://www.asianews.it/index.php?!=en&art=8757&size=A> [Accessed: 25 Nov 2013].
- [31] Johns Hopkins Bloomberg School of Public Health (2011). *Family Planning in Indonesia*. [report] Advance Family Planning.
- [32] Unknown. (2011). 'Indonesia's family planning campaign is in trouble'. *The Jakarta Post*, [online] December 20. Retrieved from: <http://www.thejakartapost.com/news/2011/12/20/indonesia-s-family-planning-campaign-trouble.html> [Accessed: 25 Nov 2013].
- [33] Ministry of Health and Family Welfare (2013). *Family Planning Program*. Family Planning Division. [report].
- [34] Saxena, S. (2009). How India's family planners lost the plot. *The Times of India*, [online] 19th June. Retrieved from: [http://articles.timesofindia.indiatimes.com/2009-07-19/special-report/28153466\\_1\\_population-policy-fertility-rate-family-planning](http://articles.timesofindia.indiatimes.com/2009-07-19/special-report/28153466_1_population-policy-fertility-rate-family-planning) [Accessed: 25 Nov 2013].
- [35] Sites.google.com (2013). *The Anti-Malthusians - Population/Malthus Theory*. [online] Retrieved from: <https://sites.google.com/site/socialmovementsmalthustheory/the-anti-malthusians> [Accessed: 16 March 2013].