CHAPTER 2

REVIEW OF RELATED STUDIES

2.0 INTRODUCTION

The previous chapter made an overview of the two core concepts of the present study, namely, the MDGs and the progress achieved so far by different countries. This chapter presents the review of related studies conducted in the eight MDGs by different researchers in the world. It contains a parsimonious list of empirical researches conducted in this area. This chapter is divided into two sections. Section 1 presents the various studies conducted in the field of MDGs. Studies conducted in the eight MDGs have been reviewed separately under eight sub-headings. Studies on MDGs considered together are also reviewed under a separate sub-heading. Studies are not segregated into “studies conducted in India or abroad”. But they are presented in chronological order under each sub-heading. In section 2, identification of knowledge gap in MDGs literature is presented. This knowledge gap is the rationale of the present study. This is followed by the conclusion of chapter 2.

Each of the individual Millennium Development Goal has been worked out to be a well defined area and is expected to help in the overall development of the countries involved and the world. Additionally the goals are also interrelated to be mutually supportive. Preliminary research reveals that most of the past researches have been carried out on individual goals. However, there are papers published covering all the eight goals taken together too. As mentioned above, this survey has nine sub divisions, first eight for papers dealing with only a single MDG and the last one covering papers dealing with all MDGs taken together.
SECTION 1

Studies on Goal 1 to Goal 8 are given below followed by combined studies taking all eight Goals together. Within each sub-heading, the studies are arranged chronologically from the latest to the earliest.

2.1.1 STUDIES ON GOAL 1

(ERADICATE EXTREME POVERTY AND HUNGER)

Kidambi (2014) said that as Narendra Modi’s government presents its new budget and seeks to restructure Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), it must be remembered that it cannot weaken it in terms of employment, entitlements or monetary allocations. Sri P. Chidambaram used the budget to squeeze the program, so employment figures steadily fell. To continue down this path would be a disaster. The Ministers of Finance and Rural Development must recognize that the changes that millions of beneficiaries of MGNREGA are looking for are real guarantee, effective implementation and better delivery, the author reminds. With a drought situation looming large, India cannot cope without a strong MGNREGA. She also reminds that undermining the program would cause widespread unrest among India’s most vulnerable people.

According to Ambasta (2014), Kalahandi – Bolangir-Koraput (KBK) region of Western Odisha has long been known for all the wrong reasons-starvation deaths, drought, famines, poverty and distress and over the past six years or so, Maoism. With unproductive landholdings and very few means of sustenance, the rural poor are plunged into crisis every year, he believes. Their only option is to migrate to other states in search of work. The most favoured destination for them is the brick kilns, firing the construction boom in cities such as Hyderabad. A well-entrenched chain of labor contractors and middlemen, starting from dons based in Andhra Pradesh go down to touts located in the interior villages of the KBK districts and organize the trafficking of labor from these villages to the cities. Every year, after the 60-day paddy crop is harvested
around the beginning of September, comes the festival of *nuakhai*, meaning “eating new rice,” an old tradition of Western Odisha. Poor families take advance from the labor contractors at this time. Soon after men, women and children start migrating in large numbers to pay off this advance by offering their labor to the contractors. A documentary produced by the National Consortium of Civil Society Organizations on MGNREGA movingly depicts the lives, journeys and choices of these families. They live on brick kiln sites in makeshift shanties, braving the harsh weather with no protection. With no toilets and no sources of drinking water, these sites are hotbeds of misery and diseases. Sexual exploitation of women is rampant. On the journey, travelling with their belongings and children in overcrowded trains, people lose life and limb. Attempts to escape from the work site can meet with instant and ruthless reprisal from the labor contractor. Children are preferred in the brick making industry because they are short, so while filling brick making frames with mud, they need not bend down like adults. Also, when freshly made bricks are piled up, there is no space for an adult to walk and overturn the bricks for drying. Children can walk on top of the bricks and overturn them without causing damage. So, the labor is contracted according to the traditional *pathariya* system, where *pathariya* is a work unit comprising a man, a woman and one or two children. And in the process, every law of the land is violated to keep India shining.

Sukumaran (2014) examined the political scene of India and opines that while other parties are representing sectional interests, the Aam Aadmi Party (AAP) has removed the ‘untouchability’ of the broom. He further observes that broom is becoming an essential tool that India and Indian politics need today. Criminality in politics, gender inequities in Indian society etc., have to be cleansed on priority basis. The policies that serve only the elites have to be redefined in favor of the poor and the needy. Eradication of poverty and hunger (Goal 1) should be given the topmost priority, he asserts.
Azevedo’s observation “India’s food security law may violate its commitments to the World Trade Organization (WTO) should not take New Delhi by surprise”, (Editorial, The Hindu, dated 10th October, 2013, Hyderabad Ed.). It was clear from the start that such a mammoth undertaking would involve purchasing food grain from farmers at high prices and selling them through the public distribution system so as to eradicate poverty and hunger in alignment with the Goal 1.

Not only should the needy be provided access to food but farmers too must be incentivized to produce more grain to reduce reliance on imports. Both actions, it has been argued, constitute a type of price support that the WTO classifies as “amber box measures” – “considered to distort production and trade”. More specifically, India has to comply with its commitments under the “Aggregate Measurement of Support (AMS),” which stipulates a ceiling on domestic subsidies. Azevedo (2011) says that the food security law will breach AMS commitments. For now, the government has sought an “interim” concession from the WTO to ensure that India is not subject to legal action from other members, especially the United States and the European Union.

But this is not a sustainable solution and the future of India’s food security law may well hinge on the outcome of the WTO ministerial meet in Bali in December. The G33 group of developing countries – with India as a prominent member- has proposed exempting price support measures aimed at furthering food security from the purview of their AMS commitments. This argument, however, has cut no ice at the WTO. In fact the West has seized upon the G33’s vulnerability, tying its proposal to the larger, deadlocked discussion on “trade facilitation” under the Doha Development Round. At the Bali Conference, it is likely that the U.S. and EU will push for a grand bargain: lesser import restriction and open markets in developing countries for exemptions on procuring subsidized food grain, Azevedo anticipated. With very little room to negotiate, the then prime Minister, Shri. Manmohan Singh signaled India’s readiness to strike this bargain during his recent visit to
Washington. In an election year, with the Food Security Act touted as a jewel in its crown, the United Progressive Alliance cannot afford to be complacent, he believes. To protect its food security law and the promise of adequate nutrition for the poor it is supposed to deliver, the government must go into a diplomatic overdrive. The aim is to secure exemption from AMS limits without conceding too much ground to the West, which is more interested in penetrating the Indian Market.

Qayum and Samaddar (2013) examined current status of national level programs that address extreme poverty in Bangladesh. Research methods included analysis of nation’s strategies, project evaluations, academic – literature, print media and interview with national stake-holders. The study found that poverty exists among sub groups of the poor. According to the researchers, multiple overlapping programs which often failed to distinguish between short term social protection and long term poverty alleviation is one of the major causes of poverty. The authors recommended increased dialogue between stakeholders, sharing experiences and collaboration on a national strategy which can improve the quality of extreme poverty initiatives in Bangladesh.

Task force on promoting affordable houses appointed by Ministry of Housing, Urban Poverty Alleviation, Government of India (2013) explained that policies framed in the past have failed to deliver. It further said that about 96 % of 18.78 million housing units shortage pertains to lower income groups. New policy framed by the task force suggested that all new housing projects in plots exceeding one hectare should reserve 20 % of developed land for social housing. There is lesson to learn from countries such as England, which insist that even projects as small as 15 housing units must have social housing component.

International Labor Organization (2012) observed that there were 456 million workers in the world living below $ 1.25 a day in 2011 though there was a gradual decline in poverty line since 2007. This global decline in poverty is
heavily influenced by the dramatic reduction in extreme poverty among workers in East Asia. Due to rapid economic growth and poverty reduction especially in China, the number of poor workers fell by 158 million between 2000 and 2011 and by 24 million between 2007 and 2011. Worldwide, the proportion of workers living below $1.25 poverty line declined from 26.4 percent to 14.8 percent between 2000 and 2011. If East Asia is excluded, the decline over the same period is less dramatic from 25 percent in 2000 to 17.4 percent in 2011.

Mussa and Pauw (2011) brought out the fact that despite various strategies of the Government of Malawi which included: the poverty alleviation program (1994); the Malawi poverty reduction strategy (2002-05) and more recently, Malawi Growth and Development Strategy (2006-2011), poverty remains widespread in Malawi. The researchers identified the vulnerabilities and determinants of poverty and brought out the gaps in knowledge namely, poverty and income distribution, regional poverty and migration, chronic and transient poverty and multi dimensional poverty.

National Academy of Science and Technology (NAST) of Philippines (2010) studied the extent to which the country is meeting MDGs, its attendant difficulties through empirical measurements. On February 2, 2010, a round table discussion on MDG 1 (Eradicate extreme poverty and hunger) was held to set objectives: (1) to determine the factors that affect the dynamics of hunger incidence; (2) to determine the relevance of hunger incidence; (3) to come up with recommendations on lowering the prevalence of hunger incidence and (4) to present statistics related to poverty and hunger. Dr. Romulo Virola of National Statistical Coordination Board (NSCB) explained the probability of halving the poverty between 1990 and 2005 was down to 0.5%. There is a time lag of 2 years.

Dr. Ocelyn Juguan of Food and Research Institute (FNRI) presented the statistics that exclusively breastfed children have been decreasing from the 2003 to 2008. She told that only 83 % children met this requirement. Dr.

Food and Agricultural Organization (FAO) of United Nations (2009) explained that extreme poverty remained an alarming problem in the world’s developing regions, despite the advances made in 1990s. Progress in poverty reduction has been concentrated in Asia especially in East Asia. In all other regions, the number of people in extreme poverty has increased. In Sub-Saharan Africa, there are 58 million more people in extreme poverty in 1999 than in 1990.

FAO further argued that existence of 780 million chronically hungry people in the developing world today shows that there is something fundamentally wrong in the distribution of food and resources with which to access it. The paper published by FAO concludes by stating that poverty will remain at unacceptable levels unless purposeful action is taken to give them higher policy priority to mobilize resources towards fighting them directly and also towards agriculture and rural development.

Ijaduola (2008) examined the decline in poverty, unemployment, inequality and found that these aspects have not declined enough although per capita income has doubled in a specified period. So, he argued that based on per capita income progress, it would be strange to call the result as development when other aspects have not improved proportionally. He established how educational improvement can assist in arresting problems capable of jeopardizing achievements of MDGs.

Pogge (2007) observed that the very poor are typically unable to defend their civil rights and other legal rights effectively. According to him, they may be illiterate due to lack of schooling or pre occupied with their family survival or they may be compelled by social dependency to put up with illegal treatment—as is inflicted on many domestic servants who are enduring, far from home, sexual
or other form of severe abuse from their employers. Horrific fates of utter humiliations and despair are suffered by millions of very poor and yet remain completely unfelt by affluent. No Charles Dickens or Thomas Hardy makes this experience vivid to the society.

Molyneus (2007) considered some of the changes in Mexico through a focus on the ways in which motherhood is positioned as a key to success of the new anti poverty programs. It examines a flagship cash transfer program known as Progress Opportunities established in Mexico in 1997 and now being widely adopted in various countries by some commentators as quintessentially new liberal program by stating that it represents a novel combination of earlier materialistic social policy associated with recent approaches to social welfare and poverty relief.

Dutta (2005) examined the contribution of energy services towards attainment of MDG-1. He established empirical evidence linking the two. His study also examined the contribution of energy interventions towards achievement of eradication of extreme poverty.

Sohn (2003) throws light on effectiveness of PRSP approach (Poverty Reduction Strategy Paper) adopted by World Bank and International Monetary Fund to guide lending to world’s poor countries. Sohn identified the approach which will address the question whether PRSP process is really helping the poor or not. According to him it is necessary to identify the poor, measure changes in their well being and analyze whether the changes are, in fact, due to changes in policy resulting from PRSP approach.

2.1.2 RESEARCH STUDIES ON GOAL 2 (ACHIEVE UNIVERSAL PRIMARY EDUCATION)

Having reviewed the various studies conducted in the field of Goal-1(Eradicate extreme poverty and hunger), the researcher has made an attempt to review the studies connected with Goal 2.
Prasad (2014) says, “Educate them [girls] and empower them and keep them in school as long as you can and those women are the best agents of change. No question about it”. Despite the pivotal role of education in improving health outcomes in children, delaying marriage and avoiding teenage pregnancy, there are currently about 60 million school-age children out of school across the world.

In India, nearly eight million children have never stepped inside a school and the dropout rate is about 80 million, UNICEF noted.

“When you educate a girl, you educate a nation,” says Joshua (). He further says, “I see education as a prime mover for long-term, home-grown sustainable development. Access to quality education, as well as health, is important for human development.”

Joshua further explained that in elementary education, the priority will be to plug the gaps in ensuring minimal school infrastructure facilities with particular focus on providing toilets and drinking water in all the girls’ schools in the first phase. Teacher training gets a new scheme christened after Pandit Madan Mohan Malviya with an allocation of Rs. 500 crore and school curriculum will have a separate chapter on gender mainstreaming to sensitize people towards the concerns of the girl child and women.

While the ongoing Madrasa Modernisation Programme of the government has got an additional Rs. 100 crore, the BJP’s manifesto promise of augmenting the traditional artisanship of minorities has found its way into the budget through a program for the upgradation of the skills and training in ancestral arts for development of the minorities.

Reddy (2013) threw light on possibility of education policy review after bifurcation of the state of Andhra Pradesh (A.P). He says that with the bifurcation of the state looming large, the A.P. State Council of Higher Education (APSCHE) is seriously considering going in for a redesign of its policy, so that both the regions benefit equally.
In the editorial article (The Hindu, dated October 8, 2013, Hyderabad Ed.), the editor draws attention of all concerned to the issue of preparing all children in India for primary schooling. He explained that the draft national Early Childhood Care and Education (ECCE) policy aims to end the current laissez faire situation that has led to mushrooming of expensive crèches, play schools, nursery schools and so on that adhere to no standard. On the other hand, there are public programs like the Integrated Child Development Program (ICDP) with a national footprint but patchy outcomes. Policies are only as good as institutional arrangements they make and devices they employ to bring about compliance. The ECCE policy talks of covering 157.8 million children in 0 to 6 age group, a category that has traditionally fallen through the cracks, when it comes to resource support. In spite of sustained economic growth, the proportion of undernourished children in 2005 – 2006 measured by the National Family Health Survey-3 was the same as in 1998 – 99, ample proof that the fruits of prosperity are being denied to many. It is crucial, therefore, for a new policy to look at the allocation of funds carefully and prevent profit-seeking actors from skimming off what is meant to create better anganwadi centers, provide standard materials for a play-based curriculum and good nutrition. Reliance on private partners to achieve universal access, equity and inclusion would be misplaced.

Extensive discussion between the Ministry of Women and Child Development and the States on the ECCE policy is essential because the draft envisages a standardized system for public, private and voluntary sectors. It needs a legal framework that will work smoothly. It is evident from the findings of the Comptroller and Auditor General that in 13 states, the performance of the ICDS over a five year period from 2006 in the delivery of supplementary nutrition and pre-school education-two key goals-is depressingly poor. Infrastructure is so weak that 52 percent of the anganwadi centers have no toilets and 32 percent have no drinking water.
Muralidharan (2013) observed that although India has made considerable progress in improving Universal Primary Education (UPE), the policies of Government of India (GOI) have not been framed on empirical research. This paper seeks to bridge the gap between the various researches and make policy recommendations for 12th plan. The main findings reported in this paper is that there is very little evidence to support the notion that improving school inputs in a business as usual manner will improve learning outcomes. On the other hand, innovations in pedagogy and governance have shown large improvements in learning.

United Nations Millennium Development Goals Report (2012) explains that in developing regions, the net enrolment rate for children of primary school age rose from 82 to 90 percent between 1999 and 2010. However a closer look at the data reveals that nearly all of this growth occurred between 1999 and 2004 and progress in reducing the number of out of school children slowed down considerably after 2004.

At the same time many of the countries facing the greater challenges have recorded significant progress towards universal primary education. Enrolment rate of children of primary school age increased markedly in Sub Saharan Africa from 58 to 76 percent between 1999 and 2010. Total enrolment of children of primary school age in the region rose by more than two third with 43 million more enrolled. Not only did countries succeed in reducing their relatively high out of school rates, they also improved their enrolment rates even as the primary school age population was growing more than one quarter between 1999 and 2010(28 percent or 31 million children).

Apart from Sub-Saharan Africa, more than 90 percent of children of primary school age were enrolled either in primary school or in secondary school in 2010. In four developing regions (North Africa, Eastern Asia, Latin America and Caribbean and South Eastern Asia) at least 95 percent of primary school age children were in school.
In 2010, 61 million children of primary school age were out of school. More than half of them (33 million) were in Sub-Saharan Africa and a further one fifth (13 million) were in South Asia. In relative terms, 34 percent of children of primary school age in Sub-Saharan Africa and seven percent in South Asia were not in school.

United Nations Fact Sheet Report (2012) on Millennium Development Goals and beyond 2015 explains that developing regions have made impressive strides in expanding access to primary education. From 2000 to 2011, the enrolment rate grew from year to year. The number of out of school children dropped by almost half from 102 million in 2000 to 57 million in 2011. Achieving gains in education have impact on all MDGs.

Even after four years of primary education in primary school, as many as 250 million of children cannot read and write world-wide. Without these fundamental skills, the basis for all future learning is severely undermined. Going to school is not enough; improving learning is critical. Early school dropouts remain persistent. Among 137 million children who entered first grade in 2011, 34 million are likely to drop out before the last grade of primary school. This translates into dropout rate of 25 percent— the same level as in 2000.

The report further says that literacy rates are rising. The greatest rising in youth literacy rates between 1990 and 2011 were in North Africa (from 68 percent to 89 percent) and Southern Asia (from 60 to 81 percent) where gender gaps narrowed. Poverty, gender and place of residence are key factors keeping children out of school. Children and adolescents from the poorest households are three times more likely to be out of school than children from richest households. Girls are more likely to be out of school than boys. Globally 123 million youth aged 15 to 24, lack basic reading and writing skills. 61 percent among them are women.
Progress in reducing number of out of school children has come to standstill as international aid to basic education in 2011 fell for the first time since 2012. This stalled progress combined with reduction in aid has put the chances of meeting 2015 targets at risk.

Sables et al., (2012) focused on importance of increasing women’s education as a result of Universal Primary Education (UPE) and its further impact on improving children’s education in Tanzania. The study used data from 2007 demographic health survey for empirical analysis. The results showed that future generations would be benefitted due to UPE reform. Once the system could cope with massive increase in participation, trade-off between quality and quantity would be ameliorated.

Wagner and Aiglepierre (2011) assert that UPE is one of the main contributors to development. However, very little empirical evidence of its effectiveness actually exists because the quality of available data was not good enough to obtain robust results regarding relationship between aid to primary education and educational progress till recently. However, results of the recent researches are robust and indicate that aid to primary education has strong effect on primary school enrollment and gender parity. A negative effect of repetition rate is also noted while no effect on pupil teacher ratio can be observed.

Sabur and Ahmad (2010) explained that Bangladesh faces enormous challenges in ensuring completion of primary education even though most children are enrolled in schools and in enabling acceptable learning achievements by those who are in school. There are private schools who have contributed to the goal of achieving universal primary education. The critical question raised by the authors is how multiplicity of school types (Government, Quasi-Government or Private) can contribute to achieving high completion rates and acceptable levels of learning. The main conclusion reached is that regulatory framework for universal primary education has to reconcile to the state’s obligation to guarantee basic education of good quality with a reality of multiple providers who can also serve various disadvantaged populations.
According to global data released by UNESCO (2010) an estimated 61 million children of the primary school age are being denied their right to education. Nigeria alone is home to an estimated 10.5 million out of school children. This figure keeps Nigeria as a country with highest number of out of school children of primary school age.

Elebede (2010) observes that Nigeria’s quest to advance her Socio Economic Status (SES) as well as achieve Universal Primary Education (UPE) goal of MDGs will be a pipe dream unless more willful and viable efforts are invested in education sector, particularly that of primary education.

Rising to this challenge, Child Advocacy on Rights and Education (CARE) trust started three years campaign for ensuring 60% out of school children in Nigeria should have access to basic education by 2015. This NGO is taking on the task of attaining Universal Primary Education (Goal 2 of MDGs) in Nigeria.

Oketch and Somerset (2010) contributed to the understanding of impact of national policies of Kenya of free education on individual primary schools and students transition to secondary schools. The authors studied 17 schools and put up their findings. The impact of rapid and uneven growth on reduced quality is clear, if unintended. The authors further added that transition into secondary school is restricted to a small subset of primary schools. From secondary to university level in national and district schools, the chances were as less as one in one hundred.

The message is clear. The access has improved but the quality has deteriorated. These findings are important reminder to policy framing by the Government to ensure increased access, better quality and higher rate of transition to secondary and university levels.

Nishimura et al., (2009) stated that a Universal Primary Education (UPE) policy in the form of fee abolition has become popular in many countries in sub Saharan Africa since 1990s. However, UPE policies are devoid of analytical
studies on its impact and challenges beyond school enrollment. Through this paper, the authors attempted to make a comparative analysis on UPE in Ghana, Kenya, Malawi and Uganda to identify common and unique themes. The results showed a mutual accountability mechanism between governments and present a key to sustainability of UPE policy.

Bategeka and Okrut (2006) gave evidence of the fact that under Universal Primary Education (UPE) program where the Government of Uganda made primary education free, the gross enrollment in primary school increased from 3.1 million in 1996 to 7.6 million in 2003. This amounts to 145% increase compared to just 39% increases between 1986 and 1996. The total expenditure increased from 2.1% GDP in 1995 to 4.8% of GDP in 2000. The authors concluded by saying that under the country’s education sector investment plan, at least 65% of the education budget must fund primary education, reason being the government’s policy has proved to be a game changer for development of the country.

Bruns et al., (2003) highlighted that education, particularly primary education is a goal in and of itself but it is also a powerful driver of progress towards other MDGS. The authors further quoted from the research work of Birdsall and Londone carried out in 2001 where they established a correlation of education with lower poverty and faster economic growth. They also established that greater education for girls has strong positive impact on health of infants and children. They also quoted from a World Bank research paper (2002) that new data from Africa shows that education for girls and boys may be the single most preventive weapon against HIV/AIDS. Also, a threshold of 5 to 6 years schooling will go a long way to achieve removal of poverty and hunger.

Webster (2000) delineated that Universal Primary Education (UPE) is seen as the first step for laying the foundation for future education opportunities and lifelong skills. He argued that education enables people to participate in social, economic and political activities of their communities. It also frees human
beings from state of ignorance and helps to reduce poverty. He further stated that in an increasingly competitive global economy of free markets, a well educated, high quality workforce attracts foreign investments that generate jobs and create wealth. He concluded by proving that good quality primary education is increasingly recognized as an important foundation for economic growth and other development activities.

2.1.3 RESEARCH STUDIES ON GOAL 3  
(PROMOTE GENDER EQUALITY AND EMPOWER WOMEN)

Jaitley (2014), presenting the union budget 2014-15 in the parliament, explained that taking into account the apathy towards the girl child, Government introduced a new scheme called "Beti Bachao, Beti Padhao" and allocated Rs 100 crore for this in the union budget.

Presenting the union budget 2014-15 in the parliament, he said that it is a "shame that while the country has emerged as a major player amongst the emerging market economies, the apathy towards girl child is still quite rampant in many parts of the country".

The scheme, he said, will help in generating awareness and improve the efficiency of delivery of welfare services meant for women. "Government would focus on campaigns to sensitize people of this country towards the concerns of the girl child and women", he said. The process of sensitization must begin early and therefore the school curriculum must have a separate chapter on gender mainstreaming," Jaitley said in his budget speech.

At a time when the country is confronted with women safety issues, government proposed Rs 150 crore to be spent by Ministry of Home Affairs on a scheme to increase the safety of women in large cities. The budget also proposed that the Ministry of Road Transport and Highways will spend Rs 50 crore on pilot testing a scheme for safety of women on Public Road Transport.
According to Subramanyam (2014), “the contemporary discourse credits the modern world exclusively with improving the status of women. But thousands of years ago, Indian women had enjoyed high status. Women like Gargi and Maitreyi of Vedic lore stand for the high status Indian women enjoyed in ancient times”. This was spoken by her after presenting her dance program on “Stree Kavi Ratna”, based on Indian literature, from Gargi to Meera, at the World Spiritual Women’s Conference organized by the United Nations in Geneva in 2002.

Feminist scholars abroad, not Indians, have recently begun studying how traditions have enabled women in India to participate in the public domain, contrary to the traditions in the West. Freedman (2013) hypothesized that the Western political culture drawn from its traditions, which does not offer women any positive model of female power, excluded women from the political field. Taking the hypothesis further, in her essay “The Hindu Goddess and Women’s Political Representation in South Asia: Symbolic Resource or Feminine Mystique?”, Lama (2012) studied the impact of the Hindu Goddess - a uniquely popular, positive figure of feminine power - on the political role of women in India.

Observing that the Indian freedom movement was driven by the symbol of Mother India and devotion to her in the song ‘Vande Mataram’, which singularly inspired the freedom fighters to undertake high sacrifices, she underscored the subterranean influence of feminine power in Indian political life. She connected it to how Indira Gandhi, who became the Prime Minister of India in 1966, was compared to Goddess Durga when she won the 1971 War and how Tamil Nadu Chief Minister Jayalalithaa was portrayed as ‘Mahishasuramardini’ (slayer of the demon Mahisha).

Lama says that in the West, tradition which had classified women as the weaker sex influenced the modern Western politics with their prejudice. But India’s was a contrast. In 1959, the Swiss had denied voting rights to their women in the national referendum. But in 1963, Uttar Pradesh, India’s largest state, which had less than a third of its women literate at the time had no
difficulty in electing Sucheta Kripalani as its Chief Minister. Finally, the Swiss women got voting rights in 1972, after Indira Gandhi had already ruled India for a full six years as its most powerful Prime Minister! American women got franchise rights only in 1924 and the British women two years later, centuries after the exclusively masculine British democracy came into being. Thus, gender conflicts were always present in the Western traditions. But such gender hostility has no philosophic source or traditional roots in India.

In India, from ancient times, Female Divinity has equated women with power. And God as confluence of man and woman (Ardhanareeswara) symbolized gender harmony. The Ultimate Reality [Brahman] which transcended all forms - man, woman and all species - is gender-neutral. But unfortunately, contemporary Indian women intellectualism does not internalize these profound ideas. It tends to copy the Western thoughts that have no philosophic or social comparability or compatibility with the Indian culture and tradition.

Indian traditions have struggled to foster a higher sense of respect for women. Therefore, the grammar of gender relations in India is universal respect for women. This automatically implied unasserted but well-recognized rights. Therefore, despite all the intellectual confusion and conflict, Indian Womanhood practices have preserved the uniqueness of Indian women and respect for them. The paradigm of respect for women in India transcended and avoided the conflict-prone gender rights paradigm. But the Western women, denied respect by tradition, repeatedly rebelled and fought for rights. This has resulted in the modern paradigm of rights without a sense of filial duties in the West and caused social disorientation. Here is its fallout: over 42% of the babies in the United States, 47% in the United Kingdom and almost 60% in Scandinavia are born to unwed mothers; almost half of them teenagers; more than half the marriages end in divorce in 10 years, as two-thirds of the second and three-fourths of the third marriages; most families are run by a single parent.
Paradox of freedom

The ‘rights-sans-traditional-duties’ paradigm is often seen these days scuttling the family system. But the question is, has freeing women from families made women happy? A 2009 study concluded that after three decades of feminism and development, women of Europe and the US are less happy now than before and men incidentally are happier than they were.

In the West, mental illnesses are on the rise among men, women and children. Way back in 1952, when director K. Subrahmanyam was honored by the Hollywood Film Directors Guild in the US, the press asked him: “Why India does not have enough psychiatrists?” Pat came the reply, that the joint family system had kept Indian society sane. The Dharma Sastra or Thirukkural or any other ancient text is unanimous on the householder’s responsibility to elders, the infirm, the unemployed and even unsupported strangers. But in the U.S., with the traditional families collapsing, their whole burden has fallen on the government.

According to economist and columnist S. Gurumurthy, the present social security cost of care of elders, infirm and unemployed is estimated at over six times the GDP of the U.S. - a totally unsustainable situation. He says that this has led to the corporatization of the family kitchen and government takeover of parental obligations as the US National Bureau of Economic Research warned in 1980. India’s cultural and spiritual values stabilize the national economy. The Indian value system, which constitutes the country’s culturally-devised social security system, is the result of the carefully-nurtured continuum of Indian womanhood. This is the biggest Indian intellectual and cultural idea for export to the West. Time has come for India to introspect on what it needs to import from the West and what it need not. Here comes the relevance of Swami Vivekananda, the young Hindu monk, who told the World Parliament of Religions what the world did not know, that there exists in India the spiritual common denominator of mutual respect for all religions.
He therefore asserted that there need be no hostility among religions and appealed for harmony among faiths. In the same vein he appealed equally for gender harmony founded on the Indian idea of respect for women. When the West was learning the basic lessons of equality of humans, including women, Swami Vivekananda proclaimed that “the barometer to the progress of a nation is its treatment of its women”. As the nation gets set to celebrate the 150th anniversary of the monk’s birth and even as India is set to emerge, according to the US National Intelligence Council, as one of the three world powers, it is necessary that Indian women redefine their agenda not only for themselves but also the world at large. An effort has been undertaken under the aegis of the ‘Swami Vivekananda 150 Women’s Initiative’ to hold a women’s convention in Chennai on the occasion on the theme, “Indian Women as the guide for the world at a crossroads”. It is a bold initiative. Hopefully such initiatives will set off the introspection and dialogue which is overdue in India.

According to Khan (2013), “scores of girl students of Class X at Shamshabad in Ranga Reddy district are staring at a bleak future. This is notwithstanding the government’s claim that it is making every effort to promote girls’ education to promote gender equality”.

The sad fact is that there is no intermediate college in the government sector in the locality that offers Urdu or English-medium instruction, though most students complete their schooling through the two mediums. Every year, close to 30 girls pass out of the Zilla Parishad High School, Shamshabad, but most of them do not go for higher studies.

The sorry state of affairs has been in existence for the last several years and it will continue to be so if immediate alternatives are not worked out, says Shahbaz (2013), a social activist.

According to Chidambaram (2013), the “Bhartiya Mahila Bank (BMB) would be a universal bank which would establish branches across India, with some branches abroad and offer all banking products that a regular commercial bank
offers”. BMB would design and offer special products tailor made to the needs of women. It will cater to everybody from self help groups to lower middle class women to high net worth individual. Finance Minister said, “Only 26 percent of women in India have bank accounts and per capita credit for women is currently 80 percent lower than that for men. There is deep seated bias at the institutional and individual levels against women. Since fewer women have bank accounts, fewer women get bank loans. Hence the need for a bank that caters predominantly to women’s needs”. By the end of the financial year, the bank plans to open at least 25 branches, eyeing a presence in every state capital. The bank network would be expanded in subsequent years to reach 770 branches by 2020, covering Tier 2 and Tier3 cities, rural areas and unbanked areas. The bank has drawn up an ambitious business plan to touch Rs. 60,000 crore total businesses (deposits plus advances) by 2020. BMB, headquartered in New Delhi, is headed by Usha Ananthasubramanian, a public sector banker with 31 years of experience. The Finance Minister also announced the eight members - all women - board of directors of the bank. In the budget 2013 -14, the Finance Minister had announced setting up of all women bank with an initial capital of Rs.1000 crore.

Khanna (2013) expressed her concern about the lack of sensitivity among people towards the plight of domestic workers, 90 percent of whom are women, of which about 25 per cent are less than 14 years of age. While a comprehensive legislation is urgently needed, Khanna said that it should also be linked to a national policy for domestic workers for effective implementation. Citing The Domestic Workers Welfare and Social Security Bill 2010, she said that two more drafts are being prepared. “This holds some promise to improve the lot of the marginalized”, she stated. She further asserted, “We simply cannot close our eyes to the fact that these women are what they are because of their weak economic condition and mostly due to an alcoholic, abusive husband or mother. We need to address the problems of these poor girls”. This was spoken at the round table which was an initiative of the National Alliance of Women (NAWO), in association with the Friedrich
Ebert Stiftung (FES), the All India Federation for Domestic Workers (AIFDW) and the National Centre for Labor (NCL).

Millennium Development Goals Report (2012) published by United Nations delineates on importance of achieving parity in education which provides equal opportunity for men and women in social, political and economic domains. Driven by national and international efforts and the MDG campaign, many more of world’s children have enrolled in school at primary level, especially since 2000. Girls have benefited most. This progress is reflected in Gender Parity Index (GPI) showing the ratio between enrolment rate of girls and that of boys. GPI grew from 91 in 1999 to 95 in 2010 for developing regions as which is accepted as measure of parity.

However, most of the developing world had reached a GPI of at least 95 at the primary level by 2010; the index in Western Asia was only 93. In Sub-Saharan Africa, this Index was at 93 level. These two regions, however, have recorded the greatest progress. Between 1999 and 2010, girls’ participation in primary education as measured by gross enrolment ratio, increased from 72 to 96 percent in Sub-Saharan Africa and 87 to 97 percent in Western Asia.

At country level, 71 out of 131 countries in developing regions reporting data by sex had achieved gender parity in primary education by 2010. Boys’ participation rates were higher than those of girls in 53 countries, while the opposite was true in remaining seven countries.

Due to obstacles in employment in formal economy and the need to supplement family income especially during the period of crisis, women more often than men work in informal sector or in the informal employment.

By the end of January 2012, women accounted for 19.7 percent of parliamentarians worldwide. This amounts to nearly 75 percent increase since 1995 when women held 11.3 percent seats worldwide and 44 percent increase over 2000 level. While trends point to an increase in parliamentary
representation, the rate of representation remains low overall and progress is uneven.

Millennium Development Goals Report (2010) by United Nations highlights the progress in gender parity in educational enrolment in primary and secondary schools made by developing regions as a whole. It recounts that in 2008, there were 96 girls for every 100 boys enrolled in primary school and 95 girls for every 100 boys in secondary education. The corresponding ratios in 1999 were 91:100 and 88:100 for the two levels of education. Despite this progress, gender parity in primary and secondary education – a target to be met by 2015 – is still out of reach for many developing countries. For primary education, the steepest challenges were found in Oceania, Sub-Saharan Africa and Western Asia. In secondary education, the gender gap in enrolment is most evident in three regions where overall enrolment is the lowest—Sub-Saharan Africa, Western Asia and Southern Asia. In contrast, more girls than boys have signed up for secondary school in Latin America, the Caribbean and Eastern Asia.

In tertiary education, the ratio between girls and boys in developing regions is close to parity, at 97 girls per 100 boys. This is largely due to the fact that many more girls than boys have enrolled in higher education in the Commonwealth of Independent States (CIS) countries, Latin America and the Caribbean, North Africa and South Eastern Asia. But in most other regions, the number of boys heavily outweighs that of girls in colleges and universities. In Sub-Saharan Africa and South Asia, for example, only 67 and 76 girls are per 100 boys, respectively are enrolled in tertiary levels of education.

The report, further says that globally, the share of women in paid employment outside agriculture sector has continued to increase slowly and reached 41 percent in 2008. But women in some regions are seriously lagging behind. In Southern Asia, Northern Africa and Western Asia, women form only 20 percent in paid employment sector (outside agriculture).
According to this report, global share of women in parliament continues to increase slowly and reached an all time high of 19 percent in 2010. This represents a gain of 67 percent since 1995, when 11 percent parliamentarians worldwide were women. 19 percent (in 2010) is far short of MDG target of gender parity.

United Nation Director General (2010) observed that although not much progress was made up to 2005 for eliminating gender disparity in primary and secondary education, in later years in the area of gender parity in education, considerable success particularly at the primary level has been achieved. In the year 2000, Secretary General Kofi Annan launched the United Nations Girls Education Initiative (UNGEI) as a principal mechanism for addressing girls’ education. UNGEI partnership is formally recognized in a quarter of countries around the world. Elimination of fees, demand side financing mechanism, community and NGO managed schools, more female teachers etc., are some of the features that helped to improve girls’ ratio in the school.

2.1.4 RESEARCH STUDIES ON GOAL 4 (REDUCE CHILD MORTALITY)

The editorial article (The Hindu, dated 10th January 2014, Hyderabad Ed.) on child mortality explained that Goa and Manipur may have knocked Kerala off the pedestal, but at 12 deaths among children less than one year of age per 1,000 live births, Kerala still has an enviably low Infant Mortality Rate (IMR); it is far below India’s average of 42. Yet, for years, this southern state has been unable to reduce the mortality rate further to a single-digit figure to become comparable with the developed countries. Kerala has always been at the forefront in setting the benchmark for almost all health indices. It therefore comes as no surprise that the state has initiated steps to further beat down IMR. A survey done by the National Rural Health Mission (NRHM) and the Indian Academy of Pediatrics (IAP) found that about 75 per cent of infant deaths occurred during the first four weeks of birth (or neonatal deaths). The first
week alone accounted for 59 per cent of the total neonatal deaths. Hence a pilot project is set to begin in 25 hospitals, including five private hospitals, to lower the neonatal mortality rate by 30 per cent in 24 months. It is planning a targeted approach to tackle the four major causal factors—prematurity, congenital anomalies, sepsis and birth asphyxia—for neonatal deaths.

Pre-term births (between 24 and 37 weeks of gestation) combined with low birth weight account for the lion’s share of about 35 per cent of neonatal mortality in Kerala. India has the highest number—3.5 million—of pre-term births in the world. Though the causes for pre-term births cannot be ascertained in vast majority of the cases, it is still possible to identify a certain percentage of mothers who are very likely to deliver such babies using techniques like ultrasound. Aside from improving the nutritional status of pregnant mothers and keeping their blood pressure and diabetes under check, delaying pre-term labor through medical intervention and administration of two doses of steroid before delivery greatly improve neonatal survival. The steroid improves the three major parameters that are essential for survival—lung maturity, preventing hemorrhage of brain blood vessels and avoiding intestinal problems due to immaturity. While sterile hospital conditions can prevent sepsis (9.3 per cent), the importance of the mothers’ genital hygiene is often missed or overlooked. Vaginal and urinary tract infections are quite likely to cause pre-term labor and sepsis. Mortality due to birth asphyxia in Kerala is 8 per cent. Improving the quality of care during the delivery process, including prevention of prolonged labor, can further cut birth asphyxia mortality.

According to a major study into the health of newborns reported in “The Hindu dated 11-01-2014”, children conceived through In-Vitro Fertilization (IVF) treatment have greater risk of complications ranging from preterm birth to neonatal death. Doctors found that IVF babies were nearly twice as likely to be born early, to be stillborn or to die within the first 28 days of delivery compared with those conceived naturally.
But the study, based on more than 300,000 births in South Australia between 1986 and 1992, did not look at whether IVF treatment was to blame and leaves open the possibility that the IVF babies fared worse for other reasons, such as health problems or older age that caused couples to be infertile in the first place. “There is in all likelihood a contribution from both the treatment and patient factors,” said Davies (2013), who led the University of Adelaide study. “We have very unfriendly work practices that mean families defer childbearing until women are relatively old and that is tragic.” The age of the medical records with the most recent being from 2002, means they provide an overview of newborn baby health that is more than a decade old, during which time IVF technology and clinical procedures have advanced.

“What’s hard to understand is how much is due to the treatment itself and how much is due to underlying infertility which the ART (Assisted Reproductive Technology) is overcoming,” says Wells (2012) at the Institute of Reproductive Sciences at Oxford University.

The most striking finding, which needs confirmation, was of a group of women who were diagnosed as infertile but had babies after continuing to try naturally. Babies born to these women appeared to fare much worse than others, with average birth weights 250g lighter than others conceived naturally. The risk of stillbirth was nearly seven times greater. The cause of the problem is unclear and needs confirmation, but may be down to the parents’ health or lifestyles. It is now for Government of India to take advantage of this report and design the further interventions so that those states which are lagging behind can achieve targets of MDG-4.

Alkoma and New (2013) said the progress is measured through certain point estimates by UN Inter Agency Group for child mortality estimation. To facilitate evidence based conclusions about the progress towards the goal, the authors assessed the uncertainty in the estimates arising from sampling errors and biases in data series and the inferior quality of specific data series. Although ARR points estimate for high mortality countries was greater than
zero, for eight of them uncertainty included possibility of no improvement between 1990 and 2011. For 13 countries, it is deemed likely that ARR from 1990 to 2011 exceeded 4.4%.

Jones (2013) published the results of his observational study conducted in a rural hospital of Uganda in the pediatric ward by training the nurses and keeping observation on number of admission, discharges and deaths and morality rates were calculated during six months period. Results showed that morality rate decreased from 6.9% (34 deaths from 496 admissions) to 4% (27 deaths from 706 admissions). These results are statistically significant (p value=0.023). The simple intervention of training the nurses has resulted in significant reduction in child mortality rates in a rural hospital in Uganda.

Demombynes et al., (2012) explained that Kenya’s Infant Mortality Rate (IMR) has fallen by 7.6% per year, the highest rate of decline among 20 countries in the region. Among the causes of decline are the targeted new public health initiatives and improved access to water and sanitation. Demographic and health survey data shows that increased ownership of insecticide treated bed in endemic malaria zones explains 39% decline in post neonatal mortality rate and 58% decline in infant mortality rate. The widespread ownership of insecticide treated bed nets in areas of Kenya where malaria is rare, suggest that better targeting of insecticide treated bed nets provision program could improve the cost effectiveness of such programs.

According to Amouzouge et al., (2012) the 2015 count down profile shows that Niger has achieved for greater reductions in child mortality and gain in coverage for interventions in child survival than neighboring countries in the West Africa. Count down, therefore, invited Niger to do an in depth analysis of their child survival programs between 1998 and 2009. The authors recalculated coverage indicators using 8 nationally representative surveys. They used the life saved tool (list) to estimate the child lives saved in 2009. Thus the mortality rate in U5 declined significantly from 226 deaths per 1000 live births in 1998 to 128 deaths in 2009 an annual rate of decline of 5.1%. It is
through good government policies that Niger could decrease the IMR to meet the target.

Block et al., (2010) used multi-cause proportionate mortality model to estimate deaths in neonatal and children aged 1 to 59 months. Causes of deaths of 193 countries by application of these multi-cause proportionate mortality models in Under 5 Mortality Rate (U5MR) were calculated. Of the estimated 8.795 million deaths in children in U5 category in 2008, infectious diseases caused 68% (5.970 million) 3.575 million deaths occurred in neonatal and single biggest cause was preterm birth complications. Child mortality estimates report of 2012 released by UNICEF in New York stated that in 2011 around 50 percent of global U5 deaths occurred in just 5 countries namely India, Nigeria, Congo, Pakistan and China. It further said that India’s toll is higher than the deaths in Nigeria, Congo and Pakistan put together. According to UN agency, India tops the list of countries with highest number of 15.55 lakhs. India has the highest child mortality in the world.
2.1.5 RESEARCH STUDIES ON GOAL 5

(IMPROVE MATERNAL HEALTH)

According to Cordingley (2014), 3000 Zimbabwean women die annually while giving birth and 1.23 percent of country’s GDP is lost every year because of health complications during childbirth. For women living in rural areas, the impact is particularly dire due to lack of safe and affordable options for obstetric care.

Zimbabwe’s reports a maternal mortality rate of over 960 per 100000 live births, which places it with 40 other nations that seem to have a high mortality rate.

Zimbabwe’s Millennium Goals call for 75 percent decrease in maternal deaths, ministry secretary Gerald Gwinji disclosed on February 4, 2014 that the country could not meet the goal. And bucking global trends, the maternal mortality rate in Zimbabwe is getting higher. The maternal death rate rose by 28 percent from 1990 to 2010.

The 2013 U.N report ‘Maternal Mortality in Zimbabwe: Evidence, Costs and Implications’ explains that the reasons that Zimbabwe is seemingly unable to reduce its maternal death rate are: worsening social inequalities, AIDS and poor access to emergency obstetric care, especially in rural areas.

About one third of women in Zimbabwe give birth at home. Poorer women also cannot afford healthcare, so more than 50% of new mothers do not go back to hospital for postnatal care.

The Zimbabwean government has enacted a policy that bans government health employees from charging pregnant women for health services. But hospitals will not enact the policy due to lack of subsidy for facility costs such as water and electricity. Due to lack of funding, the government has also frozen roughly 400 doctor’s and nurse’s jobs across the country, leaving a shortage of qualified healthcare workers.
According to Kumar (2014), for every 10 lakh children bore every year in the State, nearly 35,000 die even before completing one year. This compares poorly with Kerala, which has reported 12,000 infant deaths, said Kumar. The officer believes that folk dance and drama are effective means to create awareness on health among the people. He was addressing folk artists from the song and drama division of the Union Ministry of Information and Broadcasting, at the inauguration of an orientation-cum-workshop on the public health awareness campaign. “We are not able to bring down the infant mortality rate and maternal mortality rate as we have failed to change people’s attitude to mother-child healthcare. Folk artists can influence people to a large extent through their campaign better than health workers,” he said.

According to NRHM reports, the IMR for 2011 in the State is 31, which means for every 1,000 live births, 31 babies die before completing one year. The mother mortality rate (MMR) stands at 125 (125 deaths for every one lakh live births). The State NRHM had an IMR target of 25 and an MMR target of 100 by the end of 2012.

Kumar further said that they had been able to achieve only a 43 per cent success in the mass campaign about the importance of breast feeding soon after child birth, despite involving Asha workers. This means 57 per cent of the mothers do not feed their children soon after delivery and most of the MMR cases were expectant mothers with a history of anemia, Kumar continued. The government supplies IFA (Iron Folic Acid) tablets, but there have been cases of anemic mothers refusing to take the tablets, as they have side effects initially. Cultural troupes will perform Dollu Kunitha, Veeragase, Gee Gee pada and other folk art forms to create awareness about healthcare in the days to come.

Sanneving et al., (2013) observed that the progress on maternal and reproductive health has been uneven and inequitable. A review of peer reviewed published literature was conducted by the authors using electronic data bases. A matrix was developed to sort the relevant information. In this way main sources of inequity in maternal and reproductive health in India and
their inter-relationships were determined. Five main determinants that emerged were economic status, gender, education, social status and age. These determinants were found to be inter-related.

Cooke and Tahir (2013) brought out an analysis of the project- Abiye- in Ondo state in South West region of Nigeria. The project provided a model of how data collection, technology and innovation, efficient use of resources and mechanisms of accountability backed by sustained political will can come together in a comprehensive strategy that yielded significant results in improving maternal health over a period of two years.

Ayla (2013) dwells on a program named ‘ensuring mothers do not die when giving life.’ The paper goes further to describe the efforts to reduce maternal and child mortality. It explains the links between violence against women and maternal health and training midwives and maternal health workers to bring long term change.

Spector et al., (2012) conducted a post intervention study in a sub district level in Karnataka between July and December 2010. The study involved observation of 499 births under normal conditions and comparing it with 795 births after introduction of World Health Organization’s (WHO) safe birth check-list program. There was significant reduction of maternal and child mortality after introduction of WHO safe birth check-list program.

Sasse (2011) explained the importance of improved supply of water, sanitation and hygiene in reducing the risks of bacterial and viral infections. For example, it is estimated that diarrhea is reduced up to 48% by washing the hands by soap. This study examined the impact of water, sanitation and hygiene on maternal mortality. The evidence indicated the crucial importance of mothers having access to safe water and sanitation.
Brauw et al., (2011) used regression discontinuity design and a unique implicit threshold to evaluate the impact of El Salvador’s program “comunidades solidarismo rurales” on a range of maternal reproductive health outcomes. Their study proved that conditional cash transfers have improved the outcomes at the time of birth while no impacts were found during post-natal period.

Paruzzolo and Mehra (2010) opined that policy and programs of the Government must address poverty and gender inequality towards inter-related root causes of maternal deaths. Their study examined the ways in which poverty and gender inequality impact maternal mortality by creating barriers to maternal health access and utilization. The study also analyzed strategies designed to identify the best practices in maternal health care.

Zussman (2004) analyzed Malawi’s clinical health system and its underlying reasons for drastic deterioration in maternal health. She found that high maternal mortality rates are the result of poor health care system, health system deficiencies, limited access to care and harmful patient related behavior. Her study made number of recommendations regarding improvement in maternal health, some of which are improving Government infrastructure and making it effective, reduction of poverty, education of women and promotion of gender equality and empowerment of women. 888

2.1.6 RESEARCH STUDIES ON GOAL 6

(COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES)

As per McCormic (2014), Marijuana’s success in shrinking tumors has remained a mystery till now. Researchers have now revealed the existence of previously unknown signaling platforms which are behind the drug’s success in arresting tumor growth. The main psycho-active ingredient in cannabis could reduce tumor. The author says that two cell receptors in particular were responsible for the drug’s anti-tumor effects. In this research, samples of human cancer cells were used to induce tumors in mice. They then targeted the tumors with doses of the cannabis compound THC (Tetra-hydrocannabinol).
“THC, the major active component of marijuana, has anti-cancer properties. This compound is known to act through a specific family of cell receptors called cannabinoid receptors. However, it is unclear which of these receptors were responsible for the anti-tumor effects of THC,” says the author. “We show that these effects are mediated via the joint interaction of CB2 and GPR55 – two members of the cannabinoid receptor family,” author further notes.

The findings help to explain some of the well-known but still poorly understood effects of THC at low and high doses on tumor growth. However, cancer sufferers should not be tempted to self-medicate, the author cautions.

As per Fairless (2014), European Union regulators handed down fines totaling €427.7 million ($582.1 million) to French pharmaceutical company ‘Laboratoires Servier SA’ and five generic drug producers for colluding to delay a cheaper version of a blood-pressure medicine. This decision is the third and by far the largest set of fines imposed by EU antitrust authorities for so-called pay-for-delay deals in the pharmaceutical industry, in which drug makers are accused of paying generic rivals to delay the introduction of cheaper versions of popular drugs.

Antitrust experts said the move was controversial because of the restrictive way in which EU regulators had defined the market and their approach to still-valid patent rights. They said the decision might discourage pharmaceutical companies from settling patent disputes with generic drug companies, thereby increasing legal uncertainty for the industry.

Servier was given a €331 million fine, representing 7.9% of its annual revenue, according to a commission spokesman. The company hit back swiftly at the decision, saying it would launch an appeal at the EU’s top court.

Menon (2014) explained that with the aim of achieving health for all, the government proposes two key initiatives — free drug service and free diagnostic service — to be taken up on priority and universal access to early
quality diagnosis and treatment for TB patients. Two National Institutes of Ageing will be set up at AIIMS, New Delhi and Madras Medical College, Chennai. There is a plan to set up four more AIIMS-like institutions in Andhra Pradesh, West Bengal, Vidarbha in Maharashtra and Poorvanchal in U.P. for which Rs. 500 crore has been allocated.

For the first time, the Central government will provide assistance to strengthen the States Drug Regulatory and Food Regulatory Systems by creating new drug testing laboratories and strengthening the 31 existing State laboratories.

Fifteen model Rural Health Research Centres will be set up in the States, which will take up research on local health issues concerning the rural population. The government proposes a national program in mission mode to tackle malnutrition as the present interventions are not adequate. A comprehensive strategy, including detailed methodology, costing, time lines and monitorable targets will be put in place within six months.

The paper published by Novartis Institute for Tropical Diseases (2014), says that in developing countries where these diseases are endemic, Novartis will make treatments accessible to the communities that need them. NITD was set up as a public-private partnership between Novartis and the Singapore Economic Development Board (EDB) in 2002. Since then, it has grown to more than 100 researchers and supporting staff. As a major center of excellence for drug discovery, NITD will offer exceptional teaching and training opportunities for post-doctoral fellows and graduate students.

According to National AIDS Control Organization of India (2014), the prevalence of AIDS in India in 2013 was 0.27, which is down from 0.41 in 2002. While the National AIDS Control Organization estimated that 2.39 million people live with HIV/AIDS in India in 2008-09, a more recent investigation by the Million Death Study Collaborators in the British Medical Journal (2010) estimates the population to be between 1.4-1.6 million people.
The last decade has seen a 50% decline in the number of new HIV infections. According to more recent National AIDS Control Organization data, India has demonstrated an overall reduction of 57 percent in estimated annual new HIV infections (among adult population) from 0.274 million in 2000 to 0.116 million in 2011 and the estimated number of people living with HIV was 2.08 million in 2011.

Despite being home to the world's third-largest population suffering from HIV/AIDS (with South Africa and Nigeria having more), the AIDS prevalence rate in India is lower than in many other countries. In 2007, India's AIDS prevalence rate stood at the 89th highest in the world. The spread of HIV in India is primarily restricted to southern and north-eastern states. However, India has been praised for its extensive anti AIDS campaign.

The paper published by the College of Physicians of Philadelphia (2014) describes that yellow fever vaccination is typically administered only in areas where the disease is endemic. Vaccination is given to travelling as well as static public. The most recent statistics from WHO show immunization coverage of 51% in 2007 in countries for out breaks. This is a vast improvement from 1988, when 5 million cases were reported and immunization coverage was as low as 5%. WHO warns that coverage for immunization to the extent of 60-80% only will prevent out breaks.

As per Heaton (2013), there is no treatment for yellow fever. However, the symptoms can be treated. This will help the patient to feel comfortable. If one becomes seriously ill, then he/she may need intensive care. One must rest and drink enough fluids. When the patient recovers from yellow fever, he/she will be immune to it for rest of the life.

Shao and Jia (2012) explained that on Dec 1, 2011, Premier Wen Jiabao visited the Chinese Center for Disease Control and Prevention (CDC), marking his ninth consecutive World AIDS Day meeting with patients, doctors and researchers. During his visit, Wen reiterated that the Chinese Government will
provide more funding and strong policy support to guarantee improvements in care for patients and in research into drugs and vaccines, to fight poverty in areas of high HIV prevalence and to provide stronger societal support for AIDS prevention.

In the past 5 years, there have been three major shifts in the route of HIV transmission in China: from parents to children, from high-risk groups to the whole population and from predominantly rural areas to both rural and urban areas. The average annual increases in reported HIV infections and AIDS deaths are 15% and 25% respectively, owing to low coverage of prevention and treatment efforts. The challenges are ever bigger than before, not because of political or financial factors, but technical and infrastructural ones. There are no easy solutions to solve the bottlenecks in the control program - such as how to find the more than 55% of unidentified HIV/AIDS patients among the national estimated total of 780,000; how to control sexual transmission effectively when sex education is still taboo and most men who have sex with men are married as a cover; how to fight discrimination where cultural beliefs and stigma prevent most doctors from operating on AIDS patients; and how to mobilize millions of medical personnel and non-governmental organizations for a comprehensive, unified war against AIDS, rather than just the solitary fight by the CDC system.

According to Ericson (2011), it is estimated that there are 200,000 cases of yellow fever worldwide each year. These cases cause about 30,000 deaths. Forty-five countries in Latin America and Africa are at risk for this disease. WHO recommends that every at-risk country have at least one national laboratory where basic yellow fever blood tests can be performed. If even one person is found positive for this disease, the case should be fully researched to prevent an epidemic. Luckily, there is no concern for outbreaks in this country. However, in past centuries, yellow fever outbreaks have occurred in North America. As late as 1860, there were annual outbreaks of yellow fever in New Orleans.
Schweitzer (2003) informed that the World Bank approved a US$150 million loan to the Russian Federation for Tuberculosis (TB) and AIDS Control Project which will help Russia to protect its population and economy from uncontrolled epidemics of TB, HIV/AIDS and other sexually transmitted infections. It will support the Government’s Federal and Control of Social Diseases, 2002-2006.

This first-ever countrywide TB and HIV/AIDS project in Russia comes at a crucial juncture, since the country is experiencing one of the world’s fastest-growing HIV/AIDS epidemics that threaten the health of its citizens and the economy. In addition, Russia is one of the 22 high-burden countries for TB in the world, according to the World Health Organization (WHO). Cases of drug-resistant tuberculosis are increasing as a result of poorly treated cases of ordinary, drug-sensitive TB. They are difficult and expensive to treat.

2.1.7 Research Studies on Goal 7
(Ensure Environmental Sustainability)

As per Menon (2014), the recent Ganga Manthan event in Delhi attracted more than its fair share of sadhus. There were a few who spoke against dams and said that they were a threat to the river’s existence. But the focus was on keeping the river Ganga “aviral and nirmal” (continuous and unpolluted flow). Activists said that only cleaning up the river will not restore it. Some pointed to the lack of studies of the entire river system and hydrological data which was a secret. Since the Ganga is glacier fed, the climate change impact in the Himalayan ecosystem and on the receding Gangotri and other glaciers are also of paramount importance.

In its report of March 2013, the Inter-Ministerial Group (IMG) on Issues Relating to River Ganga says that the development of new hydro power projects has an impact on the environment, the ecology, the biodiversity, both terrestrial and aquatic and economic and social life. Crucially, it says that in the upper reaches of the river, where the oxygenating abilities of the river are the highest, there are growing signs of contamination. This suggests that even here,
water withdrawal for hydroelectricity is endangering the health of the Ganga. Implementation of the 69 hydro power projects will lead to 81 per cent of the Bhagirathi and 65 per cent of the Alaknanda getting affected. The IMG had considered the need to have portions of the river free of hydro projects and recommended that six rivers should be kept in pristine form.

Local people who have borne the brunt of the devastation due to dams and floods and environmental groups have questioned the feasibility of dams. By all accounts there is cause for concern as reflected in many reports. Even as the Uttarakhand government proposes to approach the Supreme Court in a bid to get a green signal for dam construction, it must remember this. It has to ensure that the quest for hydropower cannot come without a responsibility to preserve a region that is limping back to life after a calamity aggravated by unplanned human interventions neither scientifically assessed nor endorsed by the people of the region.

Das (2014) criticizes that the farmers are increasingly using chemical fertilizers with high nitrate content which in turn is polluting the underground drinking water source. A three year study published by a team of researchers from Osmania University’s geology department, of which Das was the lead author, discovered such an ominous situation in the Mathadi vagu basin in Adilabad district. The author emphasized that the scenario is similar in other districts.

What shocked the researchers was the presence of nitrates in access of World health Organization’s limit of 45mg in 70 % of drinking water samples collected in Adilabad District. When nitrate polluted drinking water in access of permissible limits is consumed by children, it could result in condition called Methaemoglobinemia or “blue baby syndrome”

Jaitley (2014) said that the Modi government is determined to step up growth while simultaneously taking up environmental protection. He proposed to set up a 'National Adaptation Fund' for climate change, with an initial amount of Rs. 100 crore in union budget for 2014-15. The fund will focus on innovative
methods of water conservation, use of hybrid seeds, etc, to help farmers to adapt to climate change. "Climate change is a reality which all of us have to face together," Jaitley said.

The step shows India's seriousness to face the menace of global warming through adaptation exercises. This, along with the proposal to set up ultra-modern solar power projects in many states in the current financial year, reflects the government's commitment to move towards renewable and clean tech-based economic growth.

According to Menon (2014), global warming is expected to impact the availability of basic necessities like freshwater, food and energy.

Quoting the Economic Survey, the author adds that India, like many developing countries, has not even utilized its fair share of the earth’s carbon space, nor has it achieved basic minimum standards of living for its entire population. Per capita energy use in developing countries is only about 25 per cent of that in developed countries on average, the survey says, adding that 400 million Indians still do not have electricity in their homes and about 800 million use some form of biomass as their primary or only energy source for cooking which is worrisome.

The issue of funding and the role of the global community have been stressed as paramount for sustainable development and the Survey warns that while in India, climate change and sustainability are being mainstreamed in the development process, global cooperation and substantial additional funding are required. If resources of this magnitude are not made available, outcomes in terms of growth, sustainability and inclusive development are likely to be sub-optimal.

According to Fridon (2014) there has been a series of alarming incidents in which dangerous biological agents including anthrax, influenza and botulism were mishandled over the past decade.
The latest revelation involved a mistaken contamination of a mild flu strain with a deadly type of H5N1 bird flu, which was then shipped from the Centers for Disease Control and Prevention (CDC) in Georgia to a separate government lab, authorities said. The flu incident came in the same week as the discovery of forgotten smallpox vials at a separate U.S. government lab near the U.S. capital and followed admissions of mishandled anthrax at a CDC lab in Atlanta last month. Though no one was taken ill by the events, they have raised new concerns about the safety of dangerous agents which could be used as bioterror weapons. In addition to the three incidents so far this year, the CDC acknowledged three more in the past decade in which biological materials were shipped without being properly inactivated, including anthrax and Clostridium botulism in 2006 and in 2009 a contagious strain of Brucella, which causes an infectious disease known as brucellosis. The author says that the cross-contamination was unintentional, but the lab that shipped it is closed until better safety measures can be put in place. The incidents will raise further concerns among opponents of studies known as “gain of function,” in which scientists manipulate flu strains to find out how they can more easily spread, as well as how to better vaccinate against them. In 2011 and 2012, worldwide scientists self-imposed a moratorium on such research after concerns were raised about research that made a potent flu strain jump easily between mammals. The full details of those experiments were eventually published in leading scientific journals.

According to Kim (2014) some shark species may be able to cope with the rising temperature and the subsequent decrease of water salinity. The study of sharks that lived in warm Arctic waters millions of years ago suggests that some shark species could handle the falling Arctic salinity that may come with rising temperatures.

No one knows exactly what effect climate change could have on various species. Scientists believe some species will be at risk, though others might
thrive. Past climate change in the Arctic can serve as a proxy to better understand our current climate change and aid future predictions.

Kim and Jaelyn Eberle from the University of Colorado studied shark teeth from a coastal site on Banks Island. This allowed them to better understand the changes in ocean water salinity across a broader geographic area during a time of elevated global temperatures.

Jaitley (2014) explained that he has provided Rs 500 crore for building solar power plants of up to 4,000 mw in Rajasthan, Gujarat, Tamil Nadu and Ladakh in the union budget of 2014-15. Another Rs. 500 crore has been provided for launching a lakh of solar pump sets. He further said that Rs 100 crore would be spent to put up solar panels along embankments for generating up to 1 mw from each project.

Prabhakaran (2014) threw light on the plight of tribal people of Kurumba hamlets in Attapaddy near Palghat in Kerala. Though tribal dance and music welcomed him during his visit to this remote village, nothing could muffle his shock after seeing the ills plaguing the Kurumba hamlets in Attappady.

District Collector K. Ramachandran after visiting the hamlets in the Pudur gram panchayat limits of the tribal belt said, “I was shocked at the plight of these particularly vulnerable tribal people living in the remote forest areas without any infrastructure”.

“We do not have roads, drinking water, electricity, public health centre or school. No officials visit us. We have only one anganwadi started recently after the death of eight Kurumba infants last year. This is functioning on the side of a small house. We live in an isolated world without any amenities, though we have learned that crores of rupees had been spent on our welfare.” Murugan, Ooru Mooppan (tribal chief) told the Collector at the hamlet.
Pazhani, a Kurumba tribal activist, urged the Collector to implement the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act and hand over title deeds for land under possession of the tribal people. The tribal people demanded a ration shop near their hamlets. There was no medical facility; if someone fell ill, they had to be taken through the forests for at least 10 km. The Collector directed the officials to call an “Oorukuttam” of tribal families of Thazhe Bhuthayar and Edavani to understand their requirements and finalize projects. He said that he had held discussions with forest officials on implementing the Forest Rights Act.

Dixit (2014) threw light on nuclear security of India. According to him, “India has dismissed a report by an influential U.S. think tank that placed it 23rd out of 25 countries in terms of securing its nuclear stockpile from non-state actors”.

The report by the Nuclear Threat Initiative (NTI) improves India’s score by a mere one point on the basis of a financial contribution to the International Atomic Energy Agency’s (IAEA) Nuclear Security Fund.

Senior government officials were not left enthused with the report as it equates transparency with nuclear security. “We don’t think it is a great idea to put all information about how India guards its nuclear establishments in the public domain when they are talking about preventing the bad guys from getting in,” explained a senior official while attributing the NTI’s quest for inside information on such sensitive issues to a “fishing expedition for information.”

A democracy like India with a healthy tradition of debate on nuclear issues needs to balance transparency with the need to protect its citizens against terrorism, with which it has to contend with unlike most countries listed by NTI.

Kumar (2014) explained the impact of nuclear power on development. He wrote, “Prime Minister Manmohan Singh stressed the need to increase power supply for economic development and said that the centre planned to build the
capacity to generate more than 27,000 MW of nuclear power over the next decade”. Dr. Singh described nuclear energy as a “reliable and clean source” of power. He said India was among those nations that had developed technology for setting up nuclear power plants and also achieved the capability for producing nuclear fuel. He stressed the need for ensuring that the material used for producing nuclear fuel did not fall into the hands of terrorists and criminals. He added that India had adopted the best methods for the safety and security of nuclear plants and material. He said India had incorporated several new methods of security in the design and management of power plants, following the Fukushima incident in Japan in 2011. He added that Indian safety standards were at par with the best in the world. The then Prime Minister said that the Global Centre for Nuclear Energy Partnership would play an important role in ensuring more safety measures for nuclear power plants. When the centre is fully functional, it will work towards designing a safe and sustainable nuclear system.

Murthy (2014) explained the importance of liquid assets called water. According to him, “Water is the very elixir of life, a precious commodity gifted by nature. It’s worth is known only when it is scarce. Thus, it is essential to conserve water. Keeping in mind the Supreme Court’s ruling that “natural resources meant for public use cannot be converted to private ownership.” A few States including Chhattisgarh and Kerala, which had planned to sell river waters on a commercial basis to industries had to abandon the proposal.

A city like Singapore, which imports water, recycles water and encourages individuals and industry to use such water for non-potable purposes. In the foreseeable future, such recycled water could be used even for drinking when people’s mindset changes.

Some cities have laid down mandatory rules to harvest groundwater. However, it is no longer ‘free’. A permit is required to drill a bore-well. Moreover, what is needed is to levy a charge for extracting groundwater, which is the community property. Rainwater harvesting is catching on and is mandatory in
cities and towns. Urban water supply is plagued by leaks and contamination. Maintaining pipes and taps properly could go a long way in conserving water.

Venkatraman (2014) explained that The Zoological Survey of India has discovered 248 new animal species in different parts of the country in 2013. Of them, 162 are insects, 19 are arachnids, 36 are fish, five are amphibians and two are reptiles.

“These rarest-of-rare species are found in small habitats and most of them are endangered,” Emphasizing that such discovery depends on both chance and expertise, Mr. Venkataraman said the Western Ghats and Eastern Himalaya continued to be “hot-spots for these discoveries.”

He pointed out that finding new vertebrate species -from fishes to those higher up in the animal order- was very difficult and such species were very interesting to study. Of the 1.4 million animal species that had been found across the world till December 2013, India, with over 96,000 finds was home to 7 per cent, Mr. Venkataraman said.

“Invertebrates are very difficult to study and they are in plenty. Of the 96,000 which we have reported, 65,000 are insects,” he said, adding that insects rule the world in terms of numbers. Similarly, molluscs rule the marine world.

Subramanyan (2013) explained the subject of water conservation in the following manner: “Water is the universal fuel with no viable or foreseeable alternative. Walking miles for water, incredible stories in search of water, drinking poor quality water and falling prey to illness are far more real than we think they are! It is not uncommon to see lives changed and generations altered in this quest for a basic necessity”.

Although water covers 75 per cent of the world’s surface, 97.5 per cent of the earth’s water is salty; of the remaining 2.5 per cent, much of it is locked away as groundwater or in glaciers. Water is a finite resource: there is some 1,400 million cubic kilometers of it on earth and circulating through the hydrological
cycle. Only one-hundredth of one per cent of the world’s water is readily available for human use.

Therefore supply is simply not enough to meet the needs of over seven billion thirsty people. Projections of population increase by another 27% to 8.9 billion by 2050, increased prosperity, large-scale urbanization and environmental stress with climate variability in the forefront all make the case compelling and alarming. At the current rate, there will certainly not be enough water for the entire world to consume.

2013 is the United Nation’s International Year of Water Cooperation, with the premise of advertising, promoting and endorsing the value of water cooperation. As water is an all-encompassing resource, cooperation between parties is imperative, as a delicate balance must be found between supply for various groups in an equitable and naturally beneficial manner.

Srivathsan (2013) explained the woes of the 96 families living in the unauthorized apartments in the Campa Cola housing complex in Mumbai. He wrote, “With no regularization or correction in sight to the illegal construction, demolition appears imminent. The Supreme Court order has directed the families to vacate the building by May 31”. This tragedy is not entirely about the depressing regularity with which such unauthorized construction occurs. The lurking truth behind the inability to prevent them is that urban governance is collapsing. Non-compliance, pathetic enforcement and unfair and exploitative building practices exist not only in Mumbai but in all Indian cities which has lot of implications on environmental sustainability.

The key to prevent such tragedies is to stop unauthorized construction in the initial stages. When the local body issues ‘stop-work’ notice, it should be ensured that construction does not proceed. If need be, it should amend the Acts to support this. A zero-tolerance policy, committed enforcement and effective deterrents are equally important. What is at stake is not only
individual property, but also planned development of city, environmental sustainability and well-being of the residents.

Eccles et al., (2012) analyzed the incentive structure of climate change management for a sample of large multinational organizations. The authors assessed the effectiveness of different types of incentive schemes that corporation have introduced for the employees to reduce carbon emission. Results suggested, contrary to wide spread belief, in the effectiveness of monetary incentives. In fact, adoption of monetary incentives resulted in higher carbon emissions.

Jones and Bouamane (2012) provided a business history of solar energy between nineteenth century and the present day. It covers early attempts to develop solar energy before World War II, subsequent growth of modern Photovoltaic (PV) industry and alternative non-PV technologies such as parabolic collectors. Authors argue that building viable business models proved crucially because of two factors; prices of alternative conventional fuels and public policy.

Jones and Bouamane (2011) analyzed developments in Wind Turbine Business (WTB) over more than a century and argued that public policy has been a key variable in spread of wind energy since 1980s but not in the earlier history. Both in US and Denmark, the existence of rural areas not connected to electricity provided the initial stimulus to entrepreneurs and innovators. Building firm level capabilities has been essential in an industry which is technically difficult and vulnerable to policy shifts.

Jira and Toeffel (2011) examined proprietary data from carbon disclosure projects of supply chains asking their key suppliers to share information about their Green House Gas (GHG) emissions. The authors found evidence that a supplier is more likely to share when its buyers appear committed to use this information in common interest.
Schendler and Toffel (2011) argued that environmental rating neglect companies action that seek to influence environmental policy which can have much broader impact than on their internal actions. As a result, sustainability ratings risk seriously misleading consumers and investors by green washing their operations. Authors further say that environmental ratings should also factor in political contributions and engagement with non-governmental organizations.

Singh et al., (2010) dealt with economic disposal of biomass residues of Palm Oil Industry. For paper industry substituting Lignocellulosic biomass material can reduce the burden on forests and natural biodiversity. The authors reviewed the possibility of using palm oil biomass as a raw material for pulp.

Epule et al., (2009) sought to verify the correlation between food supply and four variables viz., fertilizers, machinery, permanent crop land and permanent pasture land in Africa and Asia. Data was obtained from World Resources Institute (WRI). Data was analyzed using PPSS version 19. Pearson’s correction tool and multiple linear regression methods were then used. The results showed that levels of fertilizer application and machinery used are more significant for food production in Asia than in Africa. In Africa, permanent cropland was more significant.

Sudarmai et al., (1998) in their quantitative study to investigate differences in perception, knowledge, awareness and attitude with regard to environmental problems between educated and community groups to indentify human factors for environmental conservation. The results showed that perception of educated people with reference to environmental problems were much better.

Goodland (1995) reviewed the current status of debate about the Concept of Environmental Sustainability (CES) and discussed related aspects of growth and sustainability. While paths leading to environmental sustainability in each country differ, goals remain the same. Ensuring within less than two human
generations that as many as 10 billion people are decently fed and housed without damaging environment on which mankind depend represents a monumental challenge.

2.1.8 RESEARCH STUDIES ON GOAL 8

(DEVELOP GLOBAL PARTNERSHIP FOR DEVELOPMENT)

Malik (2014) opines that each time Narendra Modi’s world view is discussed, Japan finds prominent mention. This year’s (2014) railway budget mentioned ‘bullet’ trains; Modi is expected to announce an agreement for upgrade of India’s railway network and building of high-speed or ‘bullet’ train lines with Japanese technology and capital.

Meeting a Japanese parliamentary delegation recently, the Indian prime minister spoke of the two countries sharing a “fundamental identity of values, interests and priorities”. In the president’s address to Parliament in June, there was reference to Japan helping India in “building modern infrastructure”.

The author adds that over the decades, Japan has been among the biggest providers of assistance to India without asking for a political or strategic price. It has been, to use the words of an astute analyst, India’s “all-weather friend”.

Rivalry with China has acquired a hard, civilizational edge that is difficult for most outsiders to fathom. This is not about two Asian countries quarrelling over some remote islands or even about Japan gradually turning its back on a strictly pacifist constitution. It is about a process of social engineering that aims at revitalizing an aging society and a sluggish economy.

Abe is pushing for less protectionism, fewer subsidies for farmer cooperatives, greater participation of women in the workforce, even more openness to immigrants. One by one, he is taking on every entrenched lobby in a deeply conservative society.
Shom (2014) says that it is instructive to study the origins of the Group of Twenty (G20). It will give us an idea of its innate strength and ability (or lack of it) to reach globally binding agreements. It was formed in December 1999 during the years of Asian financial crisis. The intention was to assuage the developing countries and form a group which would take care of the interests of both the advanced and the developing countries. Ritualistic meetings of the G20 were held alongside the Annual Fund/Bank jamborees. The G20 was expected to rubber-stamp and legitimize the decisions already taken by the G7. No wonder, the G20 went into limbo in the coming years.

The early years of this century witnessed the extraordinary growth of China, India, Brazil etc. BRIC became the cynosure of western investors and was specially promoted by investment banks like Goldman Sachs which coined the term ‘BRIC’ in the first instance as a marketing ploy. (Since last year, the soothsayers have declared its demise!) Globalization, both in manufacturing and financial sectors, tilted the balance towards the South. Cross-border flows of capital fattened the profits and bonuses of western banks and to a large extent promoted the growth of emerging economies. To cut the long story short, excessive financialization, liberalization, deregulation and financial innovations, etc. resulted in the Great Financial Recession (GFR) in 2008.

The attempt of advanced economies is to use the G20 as a shield to protect the western banking system and also put pressure on emerging economies to adopt the same codes, norms, etc. The work in the Financial Stability Board (FSB) is elaborate and more suited to ensure the safety of globally operating banks than those in developing countries.

The Editor Times of India (2014) says that with the BRICS summit at Fortaleza and Brasilia in Brazil, Prime Minister Narendra Modi has a packed foreign policy schedule over the next two months. His meetings will encompass leaders from US, China, Russia and Japan, among others. Foreign policy is usually marked by significant continuity despite changes in
government. Yet, Modi’s forthcoming meetings will be closely watched to get a sense of his government’s priorities in bilateral relationships.

Some western countries’ diplomatic boycott of Modi when he was Gujarat chief minister, as well as his interest in East Asia has triggered speculation on whether India’s foreign policy will tilt in that direction. The most sensible course would be to maintain a balance between East and West. India’s interests are too heterogeneous to be tied to rigid positions. Even in a limited area of engagement such as trade, friction between partners is not uncommon. Economic diplomacy is central to the BRICS meetings, but it does not prevent Brazil from challenging Indian government’s subsidy to local sugar industry at the WTO. Even as Brazil and India discuss ways of challenging the established order among multilateral institutions, they are at odds elsewhere.

Modi (2014) says that U.N. Security Council and the IMF are in need of “urgent reform”. With his remarks, Mr. Modi set the course for a strong political statement at the summit where he addressed Brazilian President Dilma Rousseff, Russian President Vladimir Putin, Chinese President Xi Jinping and South African President Jacob Zuma in his first multilateral engagement. Calling on the Security Council and the IMF to recognize and represent “ground realities”, Mr. Modi said, “Corrective action must begin with the reform of institutions of global governance. This has been on the BRICS agenda since its inception”.

Mr. Modi spoke even as the leaders of BRICS countries ironed out their differences over the announcement of the BRICS bank and the contingent reserve fund. The two economic initiatives are the major announcements of the Fortaleza declaration. Shanghai won out as the location for the headquarters for the BRICS bank, but Indian officials claimed victory over the key issues of equal shareholding for all BRICS members. India would assume the first presidency of the bank, which would be named, as per the Indian suggestion, the “New Development Bank”.

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Mr. Modi also pitched for a common outlook on global crises such as the conflict in Israel, Syria and Iraq, and called for BRICS countries to help “Afghanistan fight the forces of terrorism.”

In his speech at the BRICS summit, he said that cyber security was a priority for BRICS countries and called for a united stand on “zero terrorism”. We must also put collective pressure on states to deny sanctuaries and support to terrorists,” Mr. Modi said.

Mr. Modi invoked his oft-repeated mantra of “Vasudaiv kutumbakam” (the global family), and called for more “people to people” ties within the BRICS countries, including a BRICS university, more travel, scientific exchanges and sharing of healthcare facilities.

Modi (2014) has laid down a lighted path, if not a specific and complete roadmap for taking India into the digital 21st Century.

The biggest of the allotments, a decent Rs 7,060 crore, goes towards smart cities; an idea that while popular has not been enthusiastically taken up by India’s poorly managed cities. Indeed, some of the biggest problems that technology companies are facing are the hesitancy of local municipal corporations in forking over or even finding funds for initial pilot projects.

A firm mandate from the Centre may nudge some of the more entrepreneurial cities and real estate developers to jump into action while convincing the late adopters of the worth of a smart city.

The biggest winner, however, is the fledgling start-up ecosystem. While the merits of having the government invest directly in start-ups are still being hotly debated amongst the community, as opposed to the Kerala start-up village model, the allocation of Rs.10, 000 crore fund to provide risk capital for start-ups will finally give this debate some teeth.

Besides this, there are provisions for rural start-up programs, a nationwide incubation network and a special focus on ramping up software product start-
ups, all with the backing of Rs. 100-500 crore allotments. The diamond amongst the rough, however, is that an “entrepreneur-friendly legal bankruptcy framework will be developed for SMEs to enable easy exit”. In a country where capital can dry up at moment’s notice and where our biggest Internet companies are Western clones, laws must be framed in a way that allows entrepreneurs to fail without being harshly penalized.

Calliari (2013) takes a deeper look into the human rights implications of MDG8 to be more specific: He wrote, “How much did MDG8 respond to human rights imperatives and how far did its implementation go in promoting human rights? What historical legal trends were the backdrop to MDG8 and what hope can we bear for the future as the international community evaluates a potentially new generation of development goals?” He concludes: “Many of the problems with the current sorry state of implementation of Goal 8 could be addressed if its successor is in close alignment with international human rights framework”.

According to Sobhan (2012), Bangladesh has long been a byword for calamity in the rest of the world, a punch line, a metonymy for doom and disaster. It is only when something catastrophic occurs that the world pays attention to our small delta nation on the Bay of Bengal. A quick search for “Bangladesh” on the New York Times or another publication's website uncovers a litany of chaos and misery: labor unrest, murder, pitched street battles between police and political protesters, flash floods, landslides, death and destruction. Tragedy in Bangladesh, which is the story everyone gets.

It is in this context that the tragic fire at Tazreen Fashions, a garment factory just outside the capital Dhaka should be seen. At last count, over 120 people perished. They died in the some of the most gruesome ways imaginable, either asphyxiated by smoke, being burned alive or leaping to their deaths in a vain attempt to save themselves. Of the dead, 53 were charred beyond recognition.
But why do these things happen in Bangladesh? Is this just another story illustrating the sufficiency of misery in that benighted country, or is there more to the story that we are missing?

There is more. And it is a familiar narrative of "progress" and globalization. Today Bangladesh is the second-largest garment manufacturer in the world, lagging behind only China, with garment exports of over $18 billion annually. And it is this dehumanizing, soul-destroying, exploitative trade that has provided employment to over three million impoverished Bangladeshis, the vast majority of them women and utterly transformed the economic and social landscape of the country. In the 40 years since independence, the poverty rate has plummeted from 80 percent down to less than 30 percent today, GDP growth has averaged around 5-6 percent for over 20 years and the garment industry has had a lot to do with it. Capitalizing on wages that were and remain among the lowest in the world, globalization brought the garment trade to Bangladesh in the 1980s, kicking off decades of growth.

The garment trade is at the forefront of the kind of industrial revolution that we are experiencing in Bangladesh today, which is why, if from the outside, we look like some Dickensian hell-hole of sweatshops and smokestacks, the image is not altogether inapposite. If the Tazreen Fashions story reminds of the Triangle Shirtwaist factory fire that killed over 140 garment workers some 100 years ago in New York, it is because we are just now going through the ugly industrialization that we hope will turn us into a middle-income country within a few decades.

The Clarke Committee in its report (2009), titled “Liberty and Security in a Changing World” observes that advances in Information and Communication Technology (ICT) continue along with increased globalization of trade, investment and information flows, as also the national security threats. Information collection by intelligence cannot distinguish between ‘domestic’ and ‘foreign’, leading to violation of the privacy of American citizens and foreigners. Even strategic relationships with allies get into difficulties because
of pursuing “multiple and competing goals at home and abroad”. These goals include: protecting the nation against threats to national security, foreign policy interests, the right to privacy, democracy, civil liberties and the rule of law promoting prosperity, security and openness in a networked world.

Metova and Olga (2009) explain that Russia as a G8 member and member of Security Council is contributing to play a major role in world for peace keeping operation and to combat terrorism. The authors further say that economically Russia is also an emerging donor, both in the fields of aid and technical assistance. Russia therefore, is well on its track to achieve global partnership for development.

Massa and Velde (2008) examined whether Ghana, Kenya, Mali, Mozambique, Rwanda, Senegal, Tanzania and Uganda which represent recent successful countries are at risk of back sliding on their successes. They did this by first painting the picture on how Africa might be affected and then discussing each country in detail. It predicted that some countries are seriously at risk as compared to the other countries.

Setboonsarng (2008) reviewed the pros and cons of contract farming from the point of view of different stakeholders e.g. firms, farmers, governments and donors. The work examines contract farming in Cambodia in organic crops as a promising option for poor farmers as practice in consistence with traditional practices associated with lower risk for health and environment.

According to Balkrishanan (2004), globalization is the new buzzword that has come to dominate the world since the nineties of the last century. This happened after the end of cold war and break-up of the former Soviet Union. Most of the developing countries have increased their faith on market economy and private capital.

Globalization has brought new opportunities to developing countries. Greater access to developed countries’ markets and technology transfer hold out promise of improved productivity and higher living standard. But globalization
has also thrown up new challenges like growing inequality across and within nations, volatility in financial markets and environmental deteriorations.

India opened up its economy in the early nineties following a major crisis that resulted to foreign exchange crunch which dragged the economy close to defaulting on loans. The new policy regime radically pushed forward in favor of more open and market oriented economy.

Over the years there has been a steady liberalization of the current account transactions. More and more sectors were opened up for foreign direct investments and portfolio investments, facilitating entry of foreign investors in telecom, roads, ports, insurance and other major sectors.

2.1.9 RESEARCH STUDIES ON MDGS CONSIDERED TOGETHER

In ‘Thematic evaluation study on ADB’s support for achieving Development Goals’ (2013), there is an assessment of the alignment of ADB’s corporate strategies to the MDGS. The study considers where setting global targets made a difference to development results in the developing countries. The study looks at emerging issues for the development agenda post-2015 to give a feedback to ADB. It covers ADB’s portfolio from 2002 to 2011 when more than 37% of the financing was for direct MDG support (Source: Asian Development Bank Annual Report, 2013).

Denney (2012) examined the arguments and proposal for including a security related target in post MDG framework. The paper further examined how security and development are correlated. While there appears to be a growing community of support for inclusion of security as part of the new development framework, the manner in which this should be done remains varied and inconsistent across this community. As a result, it is yet unclear whether security is a credible potential goal for inclusion in the new framework.

Peters (2010) examined the progress of achievement of MDGs and explained that respective governments are not in driver’s seat and themselves are driven
by a host of partners whose identity remains nebulous. Experts are appointed by UN secretariat Statisticians, the Bilateral Agencies and Pressure Groups. The West exports its crisis to global governance. As a consequence, global governance processes such as MDGs tend to be opaque, a situation which facilitates power grab by special interest groups.

Easterly (2007) made a strong viewpoint that while world as a whole will meet most of the MDGs, Sub-Saharan Africa will miss them badly. The author further says that Sub-Saharan Africa has been in a downward spiral of AIDS, resurgent Malaria, falling food output per person, deteriorating shelter conditions and environmental degradation. Most countries in the region are on a trajectory to miss most of the Millennium Development Goals. The author has recommended to the international community to take note of this situation and design interventions to improve the situation.
SECTION – 2

2.1.10. IDENTIFICATION OF GAPS IN RELATED RESEARCH LITERATURE AND FINALISATION OF RESEARCH TOPIC

Various studies conducted by different researchers in the field of Millennium Development Goals were examined in the forgoing analysis. The review of related literature clearly shows that although achievement of various goals are interdependent but there is no study conducted by any researcher so far establishing the extent of correlation among various Millennium Development Goals.

The review strongly suggests that Goal 2 namely, ‘Achieve Universal Primary Education’ and Goal 3 namely, ‘Promote Gender Equality and Empower Women’ are the Key to achieve success in all the rest six Millennium Development Goals. Keeping in view the above findings, it is decided by the researcher in consultation with his guide to carry out research in order to establish the extent of correlation between rate of progress of Universal Primary Education as an independent variable and rate of progress of each of the other dependent goals as dependent variables. Similarly research was carried out to establish the extent of correlation between rate of progress of ‘Gender Equality and Women Empowerment’ as an independent variable and rate of progress of rest of the goals as dependent variables. Once the significant correlation is established between:

(1) Rate of growth of Primary Education (Independent variable) and rest of dependent Goals as dependent variables.

(2) Rate of growth of Gender equality and Women Empowerment (Independent variable) and rest of dependent Goals as dependent variables, then the significant correlation between rate of growth of two independent variables (Growth of Primary Education and Gender Equality and Women Empowerment) and rate of growth of dependent Goals is automatically proved. The Regression Equation for estimating progress rate for each of the dependent
goal because of progress of combined effect of two independent goals is also worked out.

This link of research will be most fulfilling to the research already carried out so far in the field of Millennium Development Goals. The topic selected by the researcher and approved by his guide is as follows:

Combined Impact of Growth of Universal Primary Education and Women Empowerment on Performance of Rest of the Millennium Development Goals – Implications for India”

2.1.11 CONCLUSION

As narrated above, an extensive literature review in the field of Millennium Developmental Goals has been done. The gaps in the existing research work have been identified and appropriate topic for research has been selected.

The review of various studies presented in this chapter has thrown open certain research questions. This further led him to frame certain hypotheses connecting the two independent goals (Growth of Universal Primary Education and Women Empowerment) and the dependent goals (Performance of the Rest of the Millennium Development Goals). These are incorporated in the research methodology which is given the next chapter, that is, Chapter 3.