ISSN 0974-763X

SOUTH ASIAN JOURNAL OF MANAGEMENT RESEARCH (SAJMR)

Volume 6 Number 2 July 2014

CONTENTS

Chhatrapati Shahu Institute of Business Education and Research (CSIBER)
(An Autonomous Institute)
University Road, Kolhapur- 416 004 Maharashtra State, India.

SOUTH ASIAN JOURNAL OF MANAGEMENT RESEARCH (SAJMR)

ISSN 0974-763X

(An International Peer Reviewed Research Journal)

Published By

Chhatrapati Shahu Institute of Business Education and Research (CSIBER)

University Road, Kolhapur – 416 004, Maharashtra, India

Ph: 91-231-2535706/07 Fax: 91-231-2535708 Website: www.siberindia.co.in

Email: sajmr@siberindia.co.in, sibersajmr@gmail.com

Editorial Note

In India with the change of guard at the centre there is lot of hope and expectations from the new regime. New policies and areas of focus are sending positive signals to the business communities in India and abroad. Discussions are already taking place on various platforms regarding environment protection, improving the business climate, reviving the lagging sectors and others. Accordingly in the present issue we have chosen the research work done on these related themes. The first article takes up the issue of environment. The author summarizes the issues and concerns in this aspect and introduces the reader to the latest terms being introduced world over in this important field. The concept of mergers and acquisitions is examined in the second research study. Based on the primary and secondary level data the authors attempt to throw more light on the trend of mergers and acquisitions taking place in the business world. With the new governments in the different states of India there is unwarranted haste to appease the farmers by way of debt waivers and debt relief. The author in the third article of this issue examines the usefulness of such schemes in the state of Andhra Pradesh. It gives useful insights into the reach and the utility of such schemes. It is concluded that instead of straining the exchequer by floating populist schemes it will be wise to design long-term asset generating schemes for the poor farmers. This will not only reduce the suicide rates being observed in different states but also help the farmer families to rise in their economic status.

In all the present issue covers the latest topics being discussed in the academic and policy making field. The rigor of these research articles and the new observations will definitely benefit the researchers and professionals in these fields.

Dr. T. V. G. Sarma
Editor

Global Climate Change and Need of Green Economic Model

Sanatan Nayak
Associate Professor, Department of Economics, B.B. Ambedkar University (A Central University), Raebareli Road, Vidya Vihar, Lucknow-226025, India. Email: sanatan5@yahoo.com

Abstract : The extremes due to climate change is perceived as one of the most widely and argued issues faced by humankind. In due course of time, there has been huge changes in the dynamics of two important issues. First, the dynamics of complex relationship was changed on scientific understanding on biosphere, politics, policies and economic fundamentals by IPCC on the one hand and the actions of the governments on the other hand. Second, the changing scenario of relationship between environmental and developmental models, which have been adopted by numerous countries. Under the changing scenarios, two outcomes have clearly emerged from the analysis of global climate change. First, the emission of GHGs, which heat up the atmosphere is rising, as a consequence of rising the concentration of CO_2. Therefore, this is aggressively disrupting the nature's cycles. As a result, the earth is hurtling towards endemic, spiraling, unending climate instability with melting ice caps and glaciers, rising sea levels and increasingly frequent erratic weather events. The world has failed to do the minimal necessary to prevent the earth from rapidly heating up even after two decades of first Earth Summit at Rio. Secondly, World's public has very few instruments to influence national climate policies and complex international negotiations since 1992. Therefore, the recently adopted green economic model (GEM) model can address the problem of brown economic model (BEM). The present paper review and explains in detail the conditions in which these models become useful.

Key words: Green Economic model, Brown economic model, Earth Summit

1.0 Introduction

The studies related to climate change at the global level are viewed in two ways, i.e., positive and normative. Positive approach is observational and very important input for the public policy formation (Kolstad, 2011). It assess the impact of climate change on various dimensions, viz., reduction of agricultural production, sea level rise, melting of glaciers and ice caps, change in ocean currents, pattern of precipitations and wind flows. Few studies observed that changing in climatic conditions affects agricultural productivity adversely (Mendelsohn, et al., 1994). The process of trade and industrialization enhances the intensity of air pollution of CO_2, SO_2, black carbon and aerosols, methane, hydroflorocarbons and subsequently helps in increase in water and soil pollutions. Free trade with developed countries has tended to accelerate deforestation in Latin America, and Southeast Asia and intensify the rate of desertification and extinction of some animal and plants species in Africa (Rudel, 1989). Further, contrary to the conventional wisdom, free trade has not been consistent with environmentally sustainable development (Daly, 1993). On the other hand, normative approach provides guidance for several policies to pursue and suggests about the best policy for the society (Kolstad, 2011). Further, it deals with the critical issue of the equity on climate change negotiations, such as future trajectory of green house gas emissions, the distribution of burden between different countries for reducing GHGs, sustainable resource use, production and consumption. Climate Change is really not a 'normal' international environmental problem; however, it threatens huge changes in living conditions and challenges of the existing patterns of energy use and security (Vogler, John, 2011).

Keeping in mind the above issues relating to climate change, this paper highlights the following issues. Firstly, a brief analysis of extremes that have taken place in recent past as a example of negative externalities of Brown Economy Model at the global level. Secondly, the movement of international negotiations vis-à-vis politics and complexities associated at the international level negotiations to curtail down the emissions of Green House Gasses (GHGs). Thirdly, the need of an alternative economic model and it's complications in India.

2.0 Climate Change and the Extremes in Recent Past

External weather related disasters are becoming more common in recent years. Extreme events have more than doubled worldwide since 1980 (Siclair, 2012). There are many extreme examples stands out are as follows. First, record high temperature in Australia in 2009; United States including highest June temperature, i.e., 54.0^{0}C in Earth's recorded history at Death Valley, California. Second, heavy rainfall and catastrophic floods in Northern India in 2013; Jammu & Kashmir in 2014; in the U.S.A, Canada, Central Europe, and Argentina. Third, parts of the Central U.S. also experienced record snowfall as late as in May in 2013 and simultaneously, other parts of the U.S., such as Southern Texas, are in the midst of record of drought. Four, extreme temperature swings are also becoming common. Having endured a "bine-chilling" cold wave in January, heat massive wave was in May in India and the risk of such heat waves is predicted to increase. Further, such swings are not uncommon in the United States of America. According to the National Oceanic and Atmospheric Admission (NOAA) of U.S., the city of Lincoln in the State of Nebraska registered a record low of 0.5^{0}c on May, 2012, rising to a record high of 37.7^{0}C within two days. After all, NOAA reported that the global average temperature in May 2013 tied with 1998 and 2005 as the third warmest May in 134 years. Both extremes are increasing. However, Justin Grieser of the Washington Post reported that in Washington, D.C., "daily heat records have outnumbered cold records..." by a just released report from the World Meteorological Organization titled "The Global Climate 2001-2010: A Decade of Climate Extremes", (WMO, 2013). Further, the average temperature rise, the overall temperature distribution shifts higher. The heat extreme which were very low probability of being observed 30 years ago are observed much more frequently today (James Hansen, 2012). Similarly, ".... Worldwide, the number of local records, i.e., breaking monthly temperature extremes is now on average five times larger than expected in a climate with no long-term warming" (Dim Coumou, 2012). Five, a Global Climate Risk Index indicates that warming is affected most of the Globe, especially in Asian continent. The economic impact of climate change is also significant and growing. Therefore, we must accelerate a shift worldwide from fossil fuels and heavily carbon intensive activities, towards a new economic growth based on renewable energy, energy efficiency, and carbon sequestration. Six, in a recent study conducted at Potsdam Institute for Climate Impact Research lead by Dim Coumou in 2100 that 3 sigma heat waves will cover 85 percent of the global land area and 5 sigma heat waves will cover around 60 percent of global land (Dim Coumou, 2013). 7. In a recent study conducted by Toshihiko Sugiura at National Agriculture and Food Research Organisation in Fujimoto, Japan that the taste and structure of Apple has been changed over the years due to increase in temperature, change in precipitation and solar radiation (Toshihiko Sugiura, 2013).

Global warming responsible for these kinds of extremes in other words, global warming is linked to both extreme heat and cold and further cause a record of droughts and rainfall, snowfall, or floods. Many scientific studies were in the past undertaken and supported that Jennifer Francis and Stephen Vavrus have shown, drastic Arctic summer sea ice melt since the 1980s (equivalent to -40 percent of the contiguous U.S., land area, almost equal to land area of India) and concomitant heat transfer to the Arctic Ocean could cause significant anomalies in atmospheric weather patterns, particularly in the north polar jet stream air current. Thus increased temperature and occurance of extremes are not just chance factor but substantially due to global warming. Further, the IPCC study in 2007 predicted increase in summer dryness and winter wetness in the northern hemisphere. There is growing evidence that global warming is partly due to significant increase in associated record forest fires. At the same time, the vast majority of the warming in the oceans. Greater evaporation of water into a warmer atmosphere made water holding more water vapor, which has led to an increase in atmosphere water content by about 4 percent since the 1970s.

Further it has been observed that rate of global warming has slowed over the last 15 years despite doubling of CO_2 level. The temperature has been reduced for 2^0c to 1.5^0c in 2007, as per the report of IPCC in AR4. Despite sign of an improvement in the reduction of global temperature, there is no room for complacency as numerous externalities are identified during the recent years. There are three theories in recent climate science literature seeking to explain the slowdown. First, Global warming is measured by taking an average of near surface air temperature all over the globe throughout the year. However, this does not account for the heat trapped by GHGs that is transported into the deeper oceans. Warming of ocean waters below 700 meters has been exceptional high in recent years. Depth below 700 meters have become much more strongly involved in the heat uptake after 1998 and subsequently account for 30 percent of the ocean warming precisely the period in which surface warming has slowed down (Michael P. Byrne et al., 2013). Second, prolonged La Nina like cooling effects in the tropical pacific has lessened the impact of GHGs by 0.15^0c in recent years. It is a natural variability and therefore the slowdown shall be temporary (Yu Kosaka, Sanng; et al., 2013). Third, the nearer surface warming is being masked by an increased generation of aerosols, caused by greater manufacturing occurring in China during this period and lesser degree in India. This particulate pollution is harmful to human health but has cooling effect in climate terms (The Hindu, 23rd September, 2013).

Based on similar types of numerous negative externalities in the past, various steps were taken at the international level such as development of creation of norms, capacity building, scientific understanding, governing the commons. A critical outline of various steps at the international level to curtail down the emission of pollution and the reasons for failure are sketched as follows.

3.0 International Response to Global Climate Change

Global problems need global solutions and pose a fundamental requirement for global governance. In addition to this, local or regional action plays important role. Therefore, one of the definite characteristics of environmental politics is 'think globally and act locally'. The purpose of the global environmental governance is conservation of natural resources and controlling the damage caused by pollution. Further, global governance also deals with poverty reduction, economic development, population growth, sustainable development and resource management. The idea of environmental conservation was officially started in 1946 in the form of International Convention for the Regulation of Whale (ICRW) and its International Whaling Commission (IWC) for conservation of Whaling industry and preservation of great Whales. Further, the salient features of environmental issues have grown in 50's and 60's at global and various countries level. The UN Conference on Human Environment (UNCHE) in 1972 at Stockholm created United Nations Environment Programme (UNEP) and established environmental department by various governments. It was established that environmental issues were not separated from the development model at Global level during 70's also (Voglur, John, 2011).

The first treaty on emission of pollution was adopted in 1979 at a meeting conveyed in Geneva by the UN Economic Commission for Europe (ECE). In this treaty, there was little support for the adoption of mandatory reduction of emission of SO_2 and other acid forming pollutants. This convention is otherwise known as Long Range Transboundary Air Pollution (LRTAP). The LRTAP had vague understanding that states would ensures the activities taking place within their boundaries, which do not cause damage to other countries (Soroos. M.S., 2004). A meeting of the parties to the LRTAP in 1985 adopted that states to reduce their emission of SO_2 by 30 percent from 1980 level by 1993. Each country was left to decide on the measures it would adopt to accomplish this reduction. However, several parties, viz. USA, UK, Poland, and Spain refused subsequently to reduce SO_2. Further, parties to the LRTAP concluded to limit emissions of NO_x levels by 1994 (Soroos, 2004). However, it was disappointed that protocol failed to mandate any reductions of NO_x. The protocol of 1991 proceeded for the targeted volatile organic chemicals (VOCs), which was broad category of substances that was responsible for ground level of ozone and photochemical smog, further, it was expected to control by 30 percent up to 1998.

The parties to the LRTAP convention adopted as a revised sulfur protocol in 1994 was based on the critical load. Under this protocol, each country was given its targeted percentage of emission reduction based on absorbing capacity of a geographical region for acidic deposition without significant environmental damage. Initially, it was agreed to reduce by 60 percent by 2000 beyond the critical load in the European regions, whereas many countries were not committed to cut the emission (Soroos, M.S., 2004). Further negotiations were led to the acidification, eutrofication, ground level Ozone layer, at Gothenburg, Sweden in 1999. In this convention, parties to the LRTAP committed to reduce sulfur dioxides (SO_2), nitrogen oxides (NO_x), volatile organic chemicals (VOCs) and NH_3 by 2010 in a phased manner.

The reduction of substances caused for depletion of ozone layer also got similar significance at International level negotiations. Developed nations viz., USA, Sweden, Canada Norway initially promised to reduce CFC, aerosol sprays, whereas many other countries refused it (Soroos, M.S., 2004). The first international convention on ozone layer was held at Vienna in 1985, which decided to control/limit or prevent activities to diminish the ozone layer depletion. Initially this treaty did not set a time limit for mandatory reduction in production and use of substances to ozone depletion (Benedick, 1998). The landmark Montreal Protocol on substances of ozone layer depletion was held in 1987, which decided to reduce the production and use of CFC by 20 percent up to 1993 and 50 percent up to 1998 with 1986 as the base year. As the depletion of ozone layer spreaded to other latitudes higher than Antarctica, the parties to LRTAP in its convention at London in 1990 decided for completion of phasing out of CFC and halons by 2000. Furthermore, carbon tetrachloride and methyl chloroform was banned in 2000 and in 2010 in phase wise. Copenhagen convention of LRTAP in 1992, decided the use of HCFCs as a substitute of CFC. Therefore, the Montreal Protocol of 1987 and the amendments made in 1990, 1992 had drastically reduce the production and use of CFC, halons, carbon tetrachloride and methyl chloroform. However, there had been sufficient doubts on the intensity of recovering of ozone layer due to existence of illicit trade on banned substances of CFC and complete ban of methyl chloroform as it was for agricultural interest (French, 1997).

The emergency of sustainable development was formulated by the Brandtland Commission in 1987 (WCED, 1987), and the environmental issues had been pushed to the periphery of the international agenda out of the global economic downturn in the previous decades (Voglur, John, 2011). The UN Conference of Environment and Development (UNCED) or Earth Summit held at Rio in 1992, which was the largest international conference held so far. It finalized several significant documents and agreements such as Agenda 21 and UN Framework Convention on Climate Change (UNFCCC), Convention on Biological Diversity (UNCBD), and establishment of UN Conference on Sustainable Development (UNCSD). Further, the 10th anniversary of UNCED was held in Johannesburg in 2002 in the name of Earth Summit on Sustainable Development (WSSD). The Johannesburg Summit in 2002 focused on poverty eradication through providing clean water, sanitation, agricultural improvements. In such provisions, the role of public private partnership was played an important role. The change of words showed the change of conceptions and dynamism of Environment and Development since 1972. The important issues emerged from the three great UN Conferences in 1972, 1992 and 2002 was to make connection between the international environment and development agendas.

Many countries joined at UNFCCC, to cooperate one another in 1992 in order to limit the average increase in global temperature. In the Conference of Parties (CoP-1) of UNFCCC at Berlin in 1995 agreed that the original treaty was not achieved much and further commitment was negotiated for binding reductions. They launched negotiations to strengthen the global response to climate change after two years and consequently, the Kyoto Protocol (KP) was adopted at Kyoto Japan, on 11th December, 1997. The Kyoto Protocol legally binds developed countries for emission reduction targets. The Protocol's first commitment period (CP1) started in 2008 and ended in 2012. The second commitment period (CP2) began on 1 January 2013 and will end in 2020 (UNFCCC, 1997). During the first commitment period (CP1), 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of 5.2 percent over 1990 levels. During the second commitment period (CP2), parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020.

Kyoto Protocol to the UNFCCC in 1997 committed for the developed countries to make an average of 5.2 percent cut in their GHGs from the 1990 baseline. Within this, different national targets were negotiated, such as 7 percent for USA, 8 percent for European Union. These were to be achieved by end of the CP1. Many steps were taken to increase the carbon sinks, such as expanding forest cover including developed nations, purchase of emission credit from countries, joint implementation, clean development funds, whose emission were below their KP targets (UNFCCC, 1997). It means that it entailed investing in projects in developing countries that could achieve a net saving in GHGs emissions. Nonetheless, the problems faced by the framers of the KP were numerous and complex. First, instead of controlling a single industrial gases like in the Montreal Protocol in 1987 for which substitutes were available, KP proposed to reduce most of GHGs at a time. As a result such kind of decisions, many countries could not achieve because of their respective political promises and compromise on standard of living (Vogler, John, 2011). Second, despite the international scientific effort for the creation of IPCC, there was no scientific consensus on CFCs reduction. The effect of climate change was fully not understood and there was enough evidence for some nations to calculate that there might be benefit for them from climatic alternations. Third, one of the most important international politics of climate change is the structural division between North and South on the issue of Common But Differentiated Responsibility (CBDR). Nevertheless, later on it was observed that North's commitment to reduce GHGs emission fell short of Kyoto commitment. Instead, many of them meet their targets by buying carbon credits from overseas (Bidwai, 2013). Though, there had been differential CO_2 emission proportionately to their population, developing world's (mostly India and China) emission would overtake the developed OECD nations at a point of time. Four, climate change remains as afflicted by free rider problem. Five, the protocol did not call upon developing countries to restrain their emission of GHGs, which were course to exceed the emission of GHGs of the developed nations.

The original KP left many issues to be worked out in future. Therefore, the CoP-4 in 1998 at Buenos Aires and CoP-5 at Bonn in 1999 achieved little progress on the unfinished agenda of KP. At this conference, the USA pushed developing countries to begin restraining their GHG emissions to improve the prospects for ratification of the protocol (Soroos, 2004). The CoP-6 at The Hague, Netherland in 2000 broke down in disarray as the USA insisted upon receiving at least some credit for its existing carbon sinks. In March 2001, the new Bush administration summarily rejected the KP without participating at the conference and leaving it to other countries to decide to continue on the finalization of KP. A reconvened CoP-6 in 2001 achieved key compromise and finalized protocol was adopted at CoP-7 in Marrakech, Morocco. Many countries have ratified the protocol and begun taking steps to reduce their GHG emissions.

Bali Action Plan (CoP-13) in 2007, launched a new, comprehensive process to enable the full, effective and sustained implementation of the convention through long-term cooperative action, even beyond 2012. The aim at reaching an agreed outcome and adopting a decision at CoP-15 in Copenhagen. All the Governments divided the plan into five main categories, viz., shared vision, mitigation, adaptation, technology and financing. Some other important agreement included a decision on deforestation and forest management, a decision on technology for developing countries, the establishment of the Adaptation Fund Board (AFB), the review of the financial mechanism, going beyond the existing Global Environmental Facility (GEF) initiated the CBOR. It emphasized that North must make the bulk of the emission cuts required and do so first (UNFCCC, 2007).

The Copenhagen Accord (CoP-15 in 2009) contained several key elements on which there was strong convergence of the views of governments. These included the long-term goal of limiting the maximum global average temperature increase to not more than 2^0 Celsius over pre-industrial levels, subject to a review in 2015. However, there was no agreement on how to contain this in practical terms. It also included a reference to consider limiting the temperature increase to below 1.5 degrees, a key demand made by vulnerable developing countries. Some other central elements were as follows. First, developed countries' promised to fund for reducing greenhouse gas emissions and to adapt the inevitable effects of climate change in developing countries. Developed countries promised to provide US$30 billion for the period 2010-2012, and to mobilize long-term finance for a further US$100 billion per year by 2020 from a variety of sources. Second, agreement on measurement, reporting and verification of actions of developing countries, including reference of international consultation and analysis", which had yet to be defined. Third, the establishment of four new bodies, viz., a mechanism on REDD-plus, a High-Level Panel under the CoP to study implementation of financial provisions, the Copenhagen Green Climate Fund, and a Technology Mechanism (UNFCCC, 2009), which are yet to fully operationalised.

The CoP-15 was observed great failures. First, it failed to produce an agreement on overall GHGs emissions. Second, on the obligations of the developed countries to undertake quantitative time bound emissions cuts and financially supports to the South's mitigation and adaptation action. Third, it contains no global or country specific quantitative targets. Four, CoP-15 does not have legal status. Five, the conference was mildly unsuccessful and ended in disarray. Cop-15 has greatly failed to agree on country specific emission reduction targets for 2020, 2030 and 2050. Therefore, North has violated the climate change negotiation and must reduce its emission by 40-45 percent by 2020 and 90 percent by 2050. In the words Praful Bidwai regarding future of the human survival "*the pledges made under the Copenhagen Accord fell about 40 percent short of the emissions cuts necessary to cap atmospheric* CO_2 *concentrations at 450 ppm and limit of global warming to 2°C. Under the pledges reduction,* CO_2 *concentration will rise to 3 to 4°C, even 5°C, above pre-industrial levels by the end of the century, if not earlier. Such high level of warming will produce absolute climate havoc, cause colossal physical and economic damage, threaten millions of livelihoods and displace people on a scale never before witnessed. Some eminent scientists warn that only a small fraction of the world's population will survive at 4°C global warming (Bidwai, P., 2013, p.XIV)*. Further, there is scientific evidence that the planet will soon unable to absorb the waste carbon dioxide (Sanwal, M, 2012).

The CoP-16 at Cancun, Mexico in November-December 2010 was not of great success despite improved atmospheric awareness. Cancun at least produced an agreement although its legal status has been questioned. Cancun summit failed to setting targets for cutting GHGs emissions by dates, placing quantitative, time bound obligations on the North block, mustering technological and financial support to the South block to reduce or avert emissions and enabling technology transfer to facilitate low carbon development without stringent intellectual property conditions. It is also important to mention that USA drove a hard bargain and succeeded to convince the individual members not to follow the CBDR formula. Further, countries retained much of its prominence; despite G-77 got further weakened and dismantled. Most importantly, CoP-16 lessoned that voluntary reductions bear no relationship to their responsibility for causing climate change or their capacity for mitigating it.

The BASIC countries played an important role though there has been lot of divergence on commitment during 28th November to 9th December, 2011 at CoP-17 at Durban in South Africa. Durban was important because it was last year of CP1 and CP2 is about to start. However, umbrella group of countries, viz., USA, Russia, Japan, Canada and Australia, which wants the "*North and South differentiation principles to be abolished altogether in favour of the single agreement all major emitters and imposes emissions reductions targets on all countries, especially emerging economies like BASIC, baring only LDCs, SIDs and AOSIS (Bidwai, 2013, p.XVI).*" Further, Durban, conference included a decision by parties to adopt a Universal legal agreement on climate change as soon as possible and no later than 2015.

The CoP-18 at Doha in Qatar in 2012 has extended the life of Kyoto Protocol from the end of 2012 to 2020 to cut 15 percent CO_2 emission. Second, the conference incorporated for the first time the concept of "loss and damage", an agreement in principle that richer nations could be financially responsible to other nations for their failure to reduce carbon emissions. Third, some important aspects such as adaptation, mitigation and technology are discussed **to a**dapt to Climate Change but not limit to change in agriculture and urban planning. Further, various steps and actions that the countries of the world can take to mitigate the effects of climate change (UNFCCC, 2012). At the end no fixation of country specific and time specific responsibility was fixed to cut CO_2 emission.

Numerous results emerged from the debate on climate change by the heads of the countries, policy makers, scientists and diplomats. First, emissions of green house gases which heat up the atmosphere are rising relentlessly, thus rapidly increasing the atmosphere concentration of CO_2 by 2 ppm a year. Further, two decades of Rio Earth Summit and despite countless publications, policy papers and recommendation of urgent remedial measures, the world failed to do the minimal requirement to prevent the earth from rapid heating up. Their failures are many and persistent. Secondly, world's public has very few instruments to influence national climate policies and extraordinarily complex international negotiations since 1992. Some of the upwind countries, viz, USA, UK and mainland European countries are net exporters of pollutants to the downwind countries of net importers of pollutants. However, upwind countries have little incentives for pollutants reductions. Furthers, some of the centrally located european countries, viz., Germany, Switzerland, and Austria have been willing to join the Scandinavian countries along with Canada in advocating international controls.

4.0 The Novelty of Green Economy Model

The new economic theme was put forward at Rio+20 in 2012 titled "Green Economy Path to Sustainable Development and Poverty Eradication" to find ways for a low Carbon Economic Model of Sustainable Development. All the countries pattern in the globe have experienced brown economic model and fossil fuel based energy consumption pattern in the past decades. However, brown economic model aims at development but not sustainable development, resulting in increasing land, water and atmospheric exploitation and therefore, there is resultant pollution (Kadekodi, 2013). The per capita CO_2 mission (in metric tonne/ per capita) for high income countries is nearly 4 times higher than that middle income countries and nearly 36 times higher than the low income group of countries. Therefore, the established EKC hypothesis (Kuznet, 1955) of inverted U shape was not proved correct for most of the developed countries in the globe (Barbier, 1997; Stern, 2004).

The development model used in past on its impediments and consequences. There are few concerned areas. First, irreversibility characteristic of natural capital, as a result of that increase in fuel price, food and commodity price, and consumer price index have taken place (Kadekodi, 2013). Second, unrecognized values of ecosystem services and non-existence of markers for them, leading to over exploitation of natural resources (Coase, 1960; Hardin, 1968; Friedman, 1971; Olson, 1971; Randall, 1973). Third, the world is running low on drinking water and productive land and hence the threat to food security. Four, due to loss in natural capital, multiple crises such as climate change, energy and food insecurity, financial meltdown, and increase in disasters, and social, political and ethnic conflicts are coming together making and the poor more vulnerable and less resilient. Five, cooperative institutional mechanism is vanishing. Six, more capital is poured into real estate and property, fossil fuels and structural financial assets but relatively little capital was in-vested in renewable energy, energy efficiency, public transportation, sustainable agriculture, ecosystem and biodiversity protection and land and water conservation, may not call it misallocation, but certainly not socially justifiable. Seven, excessive depletion and degradation of natural capital, which includes endowment of mountain natural resources and ecosystems (UNEP, 2011).

The concept of Green Economy model is introduced in the Rio+20 summit of UN Conference on Sustainable Development at Rio in 2012. The Rio+20 have recognized all the above problems in the past or present problem. It declared green economy should contribute to eradicating poverty as well as sustained economic growth, enhance social inclusion, improve human welfare and create opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth's ecosystems (UNO, 2012, p.10, paragraph 56). "The Future We Want" reaffirms all that is to be done in the years to come. The Green Economy model is portrayed as an opportunity to enhance ecosystem services, and enable growth and sustainable livelihood for the poor (Kadekodi, 2013). From the 1972 Earth Summit at Stockholm and the 1992 at Rio summit on Sustainable Development to the June 2012 at Rio+20 Conference, there has been a gradual evolution in global thinking about dealing with human, environmental and ecological problems.

With the history of development at the background, several new "drivers under a Green Economy Model" have to be designed. First, a new strategy on investment may have to be evolved that reduces carbon emissions and pollution, enhances energy and resource efficiency, and prevents the loss of biodiversity and ecosystem services. Second, a new avenue of creating a market for ecosystem services *The Future We Want* has taken some steps to incorporate the green model in some of its preparatory summit. First, reducing or eliminating environmentally harmful or perverse subsidies, creating markets for ecosystem goods and services; providing market based incentives, opportunities and enabling institutions through appropriate regulatory framework. Second, green public procurement and balance between the public and private investments, also sharing social responsibilities on environmental governance and regulations. Third, design of compelling/committing global interest, in investment at least 2 percent of global GDP in greeting the economy.

The challenges that are faced by the developing countries under the green economy model are numerous. First, developing world face large scale challenges for investment in the form of green economic model. Keeping reduction of carbon emission in mind, the potential investors look for investment opportunities in renewable and low-carbon energy in developing countries. This may be possible for the economy, where, (a) country is having high in carbon intensity and suffering from brown economic model, (b) country have all essential infrastructure, such as transport, communication and market to invest, (c) where the returns or turnover is higher. Second, the most challenging areas on establishing a system of payment for ecosystem services (PES) at the global level. This is not only a challenge in economics but also global-political and international relation arena. Third, the demographic dividend is not sure for accepting the green economic models in the developing world.

5.0 Summary and Conclusions

The extremes due to climate change is perceived as one of the most widely and arguably issues faced by humankind. In due course of time, there has been huge changes in the dynamics of two important issues. First, the dynamics of complex relationship was changed on scientific understanding on biosphere, politics, policies and economic fundamentals by IPCC on the one hand and the actions of the governments on the other hand. Second, the changing scenario of relationship between environmental and developmental models, which have been adopted by numerous countries. Under the changing scenarios, two outcomes have clearly emerged from the analysis of global climate change. First, the emission of GHGs, which heat up the atmosphere is rising, as a consequence of rising the concentration of CO_2. Therefore, this is aggressively disrupting the nature's cycles. As a result, the earth is hurtling towards endemic, spiraling, unending climate instability with melting ice caps and glaciers, rising sea levels and increasingly frequent erratic weather events. The world has failed to do the minimal necessary to prevent the earth from rapidly heating up even after two decades of first Earth Summit at Rio. Secondly, World's public has very few instruments to influence national climate policies and complex international negotiations since 1992. Therefore, the recently adopted green economic model (GEM) model can address the problem of brown economic model (BEM) provided the countries could able to (a) reduce or eliminate environmentally harmful or perverse subsidies, creating markets for ecosystem goods and services; providing market based incentives, opportunities and enabling institutions through appropriate regulatory framework, (b) green public procurement and balance between the public and private investments, also sharing social responsibilities on environmental governance and regulations, (c) design of compelling/ committing global interest, in investment at least 2 percent of global GDP in greening the economy.

References

Barbier (1997), "Introduction to EKC: Special Issue, Summaries", Environment and Development Economics, No.2.

Benedick, R.E. (1998), *Ozone Diplomacy: The New Directions in Safeguarding the Planet*, Harvard University Press, Cambridge Mass.

Bidwai, Praful (2012), *The Politics of Climate Change and the Global Crisis: Mortgaging Our Future*, Orient Black Swan, New Delhi.

Coase, R.H. (1960), The Problems of Social Costs, Journal of Law and Economics, Vol.3,
Daly, H.E. (1993), "The Perils of Free Trade", Scientific America, Vol.269.

Dim Coumou and S. Rahmstorf, (2012), "A Decade of Weather Extremes", Journal of *Climate Change,* Vol.2.

Dim Coumou, (2013), "Historic and Future Increase in the Global Land Area affected by Monthly Heat Extremes," *Environment Research Letters*, Vol. 8.

French, (1997), Learning from the Ozone Experience, in Lester Brown (ed.), *State of the World*, Norton, New York.

Friedman, Alan (1971), The Economics of Common Pools Property Rights in Exhaustible Resources, UCLA Law Review, No.18, May, 855-87.

Hardin, Garet (1968), The Tragedy of Commons; Science, Vol.162.

Kadekodi, G., (2013), "Is a Green Economy Possible?", *Economic and Political Weekly,* Vol.48, No.25, June 22.

Kolstad, Charles (2011), *Intermediate Environmental Economics*, Oxford University Press, New York.
Kuznet, S. (1955), "Economics Growth and Income Inequality", American Economics Review, Vol.45.

Mendelsohn, et al., (1994), "The impact of Global Warming on Agriculture: A Ricardian Study", *American Economic Review*, Vol.84. No.4.Michael et all, (2013)

Michael P. B. et al., (2013), "Link between land-ocean warming contrast and surface relative humidity in simulations with coupled climate models", *Geophysical Research Letters*, DOI: 10.1002/grl.50971.

Olson Jr., Mancur (1971), "The logic of Collective Action: Public Goods and the Theory of Groups" Cambridge, M.A., Harvard University press.

Randall, A (1973), Property Rights and Social Micro-economics, Natural resource Journal, No.15

Rudel, T.K., (1989), "Population, Development and Tropical Deforestation", Rural Sociology, Vol.54, No.3.

Sanwal, Mukul, (2012), "Global Sustainable Development Goals: the Un-resolved Questions for Rio+20", *Economic Political **Weekly***, Vol.74, No.7.

Sinclair, P. (2012), "Insurance Giant Study Warns: Extreme Events a Game Changer", *Global Insurance Giant*, October, 25.

Soroos, Marvin S. (2004), "Global Environmental Pollution", in Hussen, Ahmed, M. (ed.), *Principles of Environmental Economics*, Routledge, London.

Stern, David (2004), The Rise and Fall of EKC, World Development, No.32, Vol.8

The Hindu, (2013), "Dangers of Chilling on Climate Change", 23rd September, p.11.

Toshihiko Sugiura, (2013), "Changes in the Taste and Textural Attributes of Apples in response to Climate Change", *Scientific Reports* **3,** No.2418, doi:10.1038/srep02418.

UNEP (2011), Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication", New York. Also see at

http://www.unep.org/greeneconomy/portals/88/documents/ger/GER_synthesis_en.pdf.

United Nations Organization, (1972), "The World Conferences Developing Priorities for the 21st Country", Earth Summit, Stockholm.

United Nations Organization, (1992), "Rio Declaration on Environment and Development", UN Conference of Sustainable Development, Rio, Brazil.

United Nations Organization, (2012), "The Future We Want, UN Conference of Sustainable Development, Rio+20, Rio, Brazil.

Vogler, John (2011), "Environmental Issues" in Buglis, John; Steve Smith; Patricia Owes (eds), The Globalisation of World Politics: An Introduction to International Relations, Oxford University Press, New Delhi.

World Meteorological Organization, (2013), "The Global Climate 2001–2010, A Decade of Climate Extremes Summary Report", WMO No.1119.

*****

Motives for Corporate Mergers in India

J. B. Hullur [1] **and R. L. Hyderabad** [2]
1. Assistant Professor, Department of Studies in Commerce, Government First Grade Degree College, Guledgudda
2. Professor, P G Department of Studies in Commerce, Karnatak University, Dharwad

Abstract : Rising trend in mergers across the globe raises an important question as to why do firms merge. Several explanations and hypotheses are extended in justification for corporate mergers. Mergers and acquisitions (M&As) represent a form external adjustments carried out by the firms to adjust to the evolving environment on account of industrial deregulation and liberalization and bring about rapid changes in the size and structure of companies and the industry they belong. They may be guided by the desire to improve the value of combined entity through the generation of synergies or may be carried out to deploy excess cash flows available to resolve agency problems. Some regard mergers are a manifestation of agency problem. The present study identifies that Indian firms are generally guided by the desire to realise synergistic gains and to strengthen the competitive position of acquiring firms' vis-à-vis the suppliers and customers. Such motives are ubiquitous even among vertical and horizontal mergers. Mergers to mimic the competing firms, to be the first among the competitors and to fall in line with the international merger trends are rated very low by the managers of firms involved in mergers in India.

Key Words : Mergers, Acquisitions, Motives, Synergy, Managerialism.

1.0 Introduction:

Mergers and acquisitions (M&As) are one of the forms of corporate restructuring. Though mergers and acquisitions terms are used synonymously, generally merger term is preferred if two or more firms are combined to form another firm while acquisition is preferred if acquiring firm absorbs target without forming a new firm. Despite technical niceties, M&A world has always remained an enigma for researchers. There are years of high merger activity and years of low merger activity, called as merger waves. Further, merger failures are also high. Conservative estimation indicates that nearly 60% mergers end in failure. Risk of failure is more in big mergers than in small mergers. Despite these risks, firms do merge and mergers occur in waves.

The global corporate sector has evidenced six waves of M&As in last 100 years (Gaughan, 2007). Those are early 1897-1904 (horizontal mergers), 1916-1929 (vertical mergers), 1965-1969 (conglomerate mergers), 1984-1989 (strategic alliances), and 1992 - 1997 (mega deals) and 2003-2007 (strategic and cross border deals). Since 2011, the M&As have increased rapidly in terms of number of deals and value of deals indicating the emergence of seventh merger wave.

Firms merge for varied reasons. The academia classifies them into economic or rational motives and dubious motives. Sometimes merger motives could be personal. Several explanations have been extended in support of merger motives. In reality, mergers are justified only if they increase the value of combined firms. The sources of value increases may be due to synergy gains, elimination of competition and consequent wasteful utilization of resources, elimination of duplicating activities, tax savings, improved bargaining power vis-à-vis suppliers and customers, increased power, etc.

Mergers can be justified on all these counts. However, mergers reducing risk through diversification is viewed as dubious in view of the fact that shareholders can also diversify and their diversification is easier and less expensive. There are arguments in support of diversification as a rational motive for mergers. Diversification becomes necessary and value adding in case of owner-managed firms; to retain reputation capital, to carry forward brand and other intangibles developed, for unlisted firms, listed but not regularly traded, etc. Mergers are also justified because they reduce excess funds in the hands of managers and force him to tap capital market sources of funds. A merger or takeover can help in resolving agency problem by removing inefficient or indisciplined managers by the acquiring firm.

A merger may be motivated by personal reasons of managers. The academic puts this in the form 'managerialism' or 'managerial entrenchment' argument. A manager may use merger to grow himself and his coterie. Merger increases manager's power and makes him indispensable. Further, merger increases size and size of the firm in turn increases manager's compensation.

Analysis on the lines of motives would help us to understand the basic reason for which firms merge. Do firms merge for synergy purpose or diversification purpose or for personal reasons? Generally, society gains when merger motives are economic and loses when mergers are driven by personal goals of executives. Mergers which lead to reduction in number of competitors are generally discouraged the world over and there are anti-trust regulations against mergers restricting the competition. Merger gains depend on merger motives. The market performance and financial performance depend on the reason for the merger. A merger with economic motive performs better than others. Similarly, a merger with personal motive fares poorly from shareholders' perspective. There exist a vast extant literature on the analysis of both market and financial performance. Why do Indian firms merge? What explains for merger motives in India? Are they strategic or personal in nature? Do merger motives are uniform across countries? The present study aims to answer some of these questions.

2.0 Review of Literature

Merger and acquisition (M&As) have been extensively researched both in the West and the East. The areas covered so far include wealth effects of mergers for bidders and targets around announcement date (Jensen, 1983), estimation of merger synergies (Mueller et al. 2003), impact of methods of payment (Shleifer and Vishny, 2003), long-term performance (Agrawal and Jaffe, 2001), the managerial hubris (Roll, 1986), merger prescriptions (Trautwein, 1990), industry clustering (Mitchell and Mulherin, 1996) etc. Some others have concentrated on post- merger performance Agrawal and Jaffe (2001), merger waves (Harford, 2005).

In India mergers and acquisitions have gained importance in the recent period, particularly after 1991 (Beena, 2000). Beena (2004) analyses merger waves in India. Agrawal and Bhattacharjea (2004) finds that mergers in India are occurring in response to regulatory shocks; Kumar (2000) analyse the pattern and implications of M&As by MNEs; Guruswamy and Radhakrishnan (2010) analyse the pre and post acquisition performance; Hyderabad (2013) measures long term post merger share price performance of acquiring companies in India and Mantravadi and Reddy

(2009) analyses the impact of type of merger on operating performance.

There are several studies undertaken by the researchers to map the merger motives. Merger motives can be studied by observing market reaction to merger announcement, by computing long-term post-merger performance or by eliciting the opinion of CEOs and/or CFOs involved in the merger process. According to short-term market reaction method, a positive return could be taken to mean as 'merger for synergy' while a negative return could mean as 'managerialism' motive. Similarly, positive and negative long-run returns to the shareholders could be inferred.

Arnold and Parker (2009) employ the market performance approach to identify motives and employ 63 merger cases of UK between 1989 and 2003. A positive gain to merging firms is a 'synergy motive' and a gain to target only is taken to mean 'managerialism motive' as bidder pays a premium to acquire the target. On the other hand, 'hubris motive' is assumed if initial gains to targets are positive but overall gains are zero, due to random nature of the valuation errors being made. The study concludes that synergy and hubris hypotheses dominate as motivations for mergers.

Berkovitch and Narayana (1993) adopt 'market returns' as a method to understand merger motives for 330 tender offers of the period 1963-1988. The study presumes three motives for mergers – synergy, agency and hubris and looks at the correlation between target and total gains. A positive correlation is taken as an indicator of synergy motive, negative motive as agency motive and zero correlation to mean hubris motive. The empirical evidence shows that synergy is the primary motive in takeovers with positive total gains even though the evidence is consistent with the simultaneous existence of hubris. The study also finds that agency is the primary motive in takeovers with negative gains.

Seth et al (2000) employ a method similar to Berkovitch and Narayana (1993) for 100 foreign acquisitions of US firms for 10-year period 1981-1990. The study shows that synergy explanation as the predominant explanation. However, hubris hypothesis co-exists with the synergy hypothesis. The study estimates a total gain of 7.6% of the pre-acquisition value of the combined firm or $249 million positive total gains in 74% of the acquisitions. The targets realize majority of the gains while acquirers realize neither gain nor lose on average. Rhoades (1998) investigate the motives through nine case studies of bank mergers in the US and finds that four out of the nine cases show efficiency gains compared to their peers. The study concludes that cost cutting was the motive behind the bank mergers.

Why do Indian firms merge? Motives cannot vary across the globe. Motives would remain the same, be it Indian mergers or US mergers. Presently mergers are driven by strategic motives. Hence, it can be surmised that Indian mergers too are driven by strategic motives. Using questionnaire method, Rani et al (2012) survey 152 CFOs, Chairmen, Company Secretaries, etc., of firms involved in M&A activities in India during 2003-2008 and identify merger motives for 568 acquirer companies involving 893 target companies. The study finds 'taking advantage of synergies' as a primary motive of merger and 'business consolidation' as a second-most important motive. Restructuring organization, organic growth, acquiring BIFR referred sick company, reduce taxes, diversification, etc., appear to be the other motives for Indian mergers.

Banga and Gupta (2012) survey 65 mutual fund managers in India through a questionnaire to examine the motives behind the mergers and takeovers of mutual fund scheme. The study finds expansion of marketing and management capabilities, expansion of asset size and benefits of diversification as three most important motives behind mergers and takeovers of mutual fund schemes in India after performing factor analysis and multiple regression analysis.

3.0 Need for the study:

Merger motives can vary across period, merger waves, countries, companies, type of merger, characteristics of firms involved in mergers, ownership pattern in the firm, etc. Agarwal and Sensarma (2007) argue that significant differences in motives can exist between the countries, across the industry and over the period also. Motives determine the both market and financial performance. A merger with strategic motive can generate both private and social gains. Such mergers bring about synergy gains and eliminate unnecessary costs. On other hands, managers which involve agency and hubris problems bring gains to managers rather than the shareholders.

Merger failure percentage is high and is increasing. Mergers fail for many reasons and one of the important reasons is lack of economic justification. A failed merger brings destruction to all and is a waste. It could create havoc among corporate sector. Therefore, managers can ensure merger success provided the mergers are done for economic reason.

Do Indian firms merge for economic reasons? Do these mergers are uniform across all firms or vary? Do Indian firms merge for reasons similar to Western firms? The present study aims to analyze on these lines. An analysis on these lines adds to the understanding of merger phenomenon.

4.0 Objectives of the study:

The study aims to achieve the following objectives:

- To identify corporate merger motives in India
- To understand relationship between types of mergers and their motives
- To understand merger motives across industries.
- To understand relationship between method of financing and merger motives.

5.0 Research Methodology

The study covers corporate mergers in India during the period 1996 to2010. The study included M&As of all the industries and uses both the primary data as well as on the secondary data. The primary data is collected from the CEOs and CFOs of the companies involved in mergers through the questionnaire method. The PROWESS database of CMIE, Mumbai is used to prepare the list of the companies involved in mergers. The same database was referred by Beena (2000) and Agrawal and Bhattacharjea (2006). There were in total 1874 mergers announced during the period 1996- 2008. In order to increase the accuracy and reliability, 587 companies listed on the BSE only were included in the sample based on the address book published by the BSE.

The questionnaire was designed after review of literature and holding discussions with many academicians and professionals in the field. In order to ensure quality of the questionnaire it was sent to the experts and their suggestions were incorporated in the revised version.

Table -1 Rate of response

Sl. No.	Questionnaires Sent	No of questionnaires sent	No of responses received
1	Original	587	20
2	First reminder	510	10
3	Second reminder	425	18
	Total		48

Source: Compiled from primary data

Out of 587 questionnaires mailed, only 20 responses were received and the second reminder fetched only 10 responses. The third reminder was sent to increase the response rate and finally18 responses were received. That makes the total sample size of 48. As evidenced by Rani et al. (2012) the survey response rate in the subject of finance is poor and not encouraging.

Table -2 State wise responses

Sl. No.	Domicile State of Acquiring Firm	No of responses	%
1	Maharashtra	16	33.33
2	Karnataka	11	22.92
3	Delhi	2	4.16
4	Gujarat	4	8.33
5	West Bengal	3	6.25
6	Punjab	1	2.08
7	Haryana	1	2.08
8	Tamilnadu	4	8.33
9	Goa	3	6.25
10	Uttar Prad esh	1	2.08
11	Andhra Pradesh	2	4.16
	TOTAL	48	100.00

Source: Compiled from primary data

The study received 48 responses from 11 States of India. The State of Maharashtra, the home state of City of Mumbai, contributed a larger number of respondents followed by the State of Karnataka with 11 responding companies.

For the purpose of analysis, all the respondent companies were broadly classified into manufacturing and service sector. Table-3 shows classification of these responding companies:

Table -3 Sector wise response rate

Sl. No	Sector	No of responses	%
1	Manufacturing	27	56.25
2	Service	21	43 .75
	Total	48	100 .00

Source: Compiled from primary data

Manufacturing sector response rate was 56.25% and the service sector constitutes 43.75%.

Table-4 shows industry wise response rate

Table – 4 Industry-wise Response Rate

Sl. No.	Name of the Industry	No.	%	Sl. No.	Name of the Industry	No.	%
1	IT & Software	12	25 .00	7	Plastic	2	4.16
2	Automobiles	4	8.33	8	Textile	2	4.16
3	Chemicals	3	6.25	9	Construction	2	4.16
4	Pharmaceuticals	3	6.25	10	Financial Services	2	4.16
5	Trading	2	4.16	11	Others	13	29.17
6	Banking	2	4.16		**Total**	**48**	**100.00**

Source: Compiled from primary data

Information technology and software sector account for 25% of the total sample followed by manufacturing sector. The sample includes acquiring firms from chemicals, automobiles, pharmaceuticals, plastic, textile sectors, etc. The other sector includes firms from electric, lubricants, consultancy, mining, transportation, braveries, steel, and electronic industries provided their responses one each.

6.0 Analysis of Data

The following pages present the analysis of data collected through questionnaires circulated among CFOs of acquiring firms. The analysis covers aspects motives for mergers, type of merger and merger motives, diversification motive, relation between merger motives and methods of financing, impact of global mergers on merger motives in India, etc.

6.1 Is merger a strategic motive?

The corporate firms of modern era use many strategies for their survival and growth. Gaughan (2007) opines that growth of a firm is of two types - internal growth and external growth. The internal growth is slow and uncertain but the external growth can be achieved through M&As. Firms involving in mergers use various external growth strategy. Through merger, a firm achieves the competitive advantage or overcomes the various shortcomings or may have a first mover advantage or may try to outwit its competitors. The survey reveals nearly 92% of respondents agreeing that merger is basically a strategic move on the part of acquiring firms. This definitely augurs well for the firm concerned and can be expected to generate wealth. A merger which benefits only the top executives destroys wealth. Lubatkin (1983) showed evidences on three sources of strategic relatedness between the acquiring firms and the target firms. Those are technical economies, pecuniary economies and diversification economies. Brouthers et al (1998) also finds that in his work that mergers are done to accomplish strategic motives.

6.2 Specific Motives for Mergers in India

The study makes a detailed analysis of specific motives guiding merger decisions by executives in firms. Table 5 tabulates specific merger-wise motives in India.

Table 5: Specific Reasons for mergers in India

(Figures in the brackets indicate percentages to the total respondents)

Sl. No	Specific Motive	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)	-- --
1	To acquire competencies not possessed internally	16 (33.33)	25 (52.08)	2 (4.17)	4 (8.34)	1 (2.08)
2	To reduce competitive pressure in the market	12 (25)	18 (37.50)	12 (25)	6 (12.50)	--
3	To use surplus cash available in the firm	6 (12.5)	12 (25)	23 (47.92)	6 (12.5)	1 (2.08)
4.	To take advantage of favourable tax climate	8 (16.67)	15 (31.25)	9 (18.75)	11 (22.92)	5 (10.42)
5	To achieve personal ambition	7 (14.58)	11 (22.92)	5 (10.42)	24 (50.00)	1 (2.08)
6	To improve the growth rate of the firm	20 (41.67)	24 (50.00)	2 (4.17)	2 ((4.17)	--
7	To extend the product line and product mix of the firm	18 (37.5)	26 (54.17)	4 (8.33)	--	--
8	To enhance product capabilities	17 (37.5)	29 (60.42)	2 (4.17)	--	--
9	To obtain synergistic gains involved in mergers	20 (41.67)	28 (58.33)	--	--	--
10	To reduce risk involved in the existing business	17 (37.5)	26 (54.17)	3 (6.25)	2 (4.17)	--
11	To retain talented pool of employees	10 (20.83)	14 (29.17)	9 (18.75)	9 (18.65)	6 (12.5)
12	Be the first among the competitors	2 (4.17)	8 (16.67)	23 (47.92)	11 (22.92)	4 (8.33)
13	Mimic merger decisions of competitive firms	2 (4.17)	6 (12.5)	8 (16.67)	25 (52.08)	7 (14.58)
14	To all in line with international mergers	4 (8.33)	6 (12.5)	14 (29.17)	14 (37.5)	6 (12.5)

Source: Compiled from questionnaires.

The study considers 14 specific motives for mergers in India. Out of which, respondents agree or strongly agree for eight motives as motives for mergers in India and for remaining motives they either disagree or strongly disagree. Obtaining synergistic gains from mergers has been the primary motive for merger with 100% of sample respondents either strongly agree or agree to the motive followed by reducing risk through diversification. The other plausible motives are to acquire competencies not available, improve the growth rate, extending product line and mix, etc.

Mimicking the merger decisions of competitors, merge just to fall in line with international merger trends, etc., have been rejected nearly by 80% of respondents as motives. The other motives not accepted by managers of Indian companies are 'to be the first among the competitors, use surplus cash flows, to take favourable tax advantage and to achieve personal goals.

Studies undertaken in US and other European countries evidence some similar facts. Walter and Barney (1990) argued that there is a relative importance of merger motives across different types of mergers. Bradley et al (1988) find that a successful merger offer increases combined value of the merged entity by 7.4%. Rhoades (1998) argued that in bank mergers efficiency gains occur by cost cutting.

Table-6 shows the respondent's opinion about each statement developed to understand various merger motives. The five point Liker scale is used to measure the opinions of the respondents. The scores assigned were strongly agree- 4, agree-3, disagree-2, strongly disagree-1 and can't say-0. A weighted index score was calculated by multiplying each response with the relevant score and total score is divided by total score (10) to get the weighted score. This helps to identify the prime motives behind the mergers.

Table - 6 Weighted Score of Merger Motives

(Weighted score = 4*strongly agreed+3*agreed+2* disagreed +1*strongly disagreed+0 *can't say/10)

Sl. No.	Motives for mergers	Weighted Score	Rank
1	To acquire competencies not possessed internally	14.7	6
2	To reduce competitive pressure in the market	13.2	6
3	To use surplus cash available in the firm	11.2	7
4	To take advantage of favourable tax climate	10.6	9
5	To achieve personal ambition	9.5	10
6	To improve the growth rate of the firm	15.8	3
7	To extend the product line and product mix of the firm	15.8	3
8	To enhance product capabilities	15.9	2
9	To obtain synergistic gains involved in mergers	16.4	1
10	To reduce risk involved in the existing business	15.4	4
11	To retain talented pool of employees	10.9	8
12	Be the among the competitors	7.7	11
13	Mimic merger decisions of competitive firms	6.7	13
14	To fall in line with international mergers	7.0	12
	Mean	12.2	
	Standard Deviation	3.56	
	Variance	12.67	

Table 6 reports the weighted scores and ranking of the respondent's opinions for the purpose of identification of merger motives. The highest score motive is ranked 1 and the least score motive is ranked 14. The analysis reveal that, synergy, enhancement of production capabilities, extension of product line and product mix and to improve the growth rate of the firm are the top three motives for mergers in India. Rani et al (2012) evidence similarly and find that obtaining operating synergy as the prime motive of mergers in India.

6.3 Is Diversification a strong motive for mergers?

The desire to diversify though it is said in merger literature that diversification is dubious motives. Firms diversify to smoothen out fluctuations in the earnings. Two firms with divergent correlation coefficient can reduce the risk factor through diversification. However, individual shareholders can also diversify and such personal diversification is considered to be more economical and faster. Despite this point, conglomerate mergers are encouraged for diverse purposes. Lubatkin (1983) identifies three potential sources of strategic relatedness among acquiring firms and target firms, diversification is one of the strategic relatedness. The third merger wave of period 1960 to 1973 occurred mainly on account of diversification motive (Gaughan, 2007). Many US firms undertook merger during this period for the purpose of diversification.

The present study surveyed the opinions of CEOs and CFOs regarding the diversification motive for Indian mergers. The survey reveals some sort of confusion in the minds of Indian managers. An equal number of executives opine in both the ways, that mergers in India have diversification motive and does not have diversification motive. Some companies diversify their business through mergers to minimize or to avoid the risks in the existing business.

6.4 Types of mergers and merger motives

Mergers are of different types such as vertical, horizontal and conglomerates. Merger motives vary across different mergers. Vertical mergers aim to streamline the operational activities and realise scale economies. Though horizontal mergers, too, aim at scale economies, they could have the objective of limiting the number of competitors or increasing market share. On the other hand, diversification merger, besides risk reduction, may have personal objective of managers or may have an objective of putting the best use of excess cash flow. Baker et al (1988) hold the view that synergy is the one of the motives behind mergers, some mergers are due to financial synergies, some are due to operational synergies and some others are due to managerial synergies.

6.5 Types of mergers and their effects

Motives could vary across different types of mergers. All mergers need not always be guided by the same objective. Though operational efficiency could be the motive for vertical and horizontal mergers but the source of operational efficiency could be different. Vertical mergers help a firm to streamline its downstream and upstream lines of activity by going for backward and forward integration. On other hand, a horizontal merger, though limits competition, enables a firm to enjoy scale economies and market power. The conglomerate mergers may be carried out to deploy surplus cash or to reduce risk or sometimes to meet the personal motives of managers.

Table-7 presents the tabulated data relating to types of mergers & merger motives.

Table: 7: Merger Types and Merger Motives

Sl. No.	Motives	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)	Can't Say (0)
1	Vertical mergers improve overall performance of merged firm	9 (18.75)	33 (68.75)	--	--	6 (12.5)
2	Vertical mergers strengthen a firm's bargaining position vis-à-vis its suppliers and customers	23 (47.92)	23 (47.92)	2 (4.16)	--	--
3	Horizontal mergers limit the competition	26 (54.17)	15 (31.25)	--	--	7 (14.58)
4	Horizontal mergers produce consolidation effect on the industry	10 (20.83)	28 (58.33)	3 (6.25)	--	7 (14.58)
5	Conglomerates are used to diversify risk	10 (20.83)	16 (13.33)	2 (4.16)	2 (4,16)	18 (37.5)
6	Managers are poorer than shareholders	20 (41.67)	3 (6.25)	5 (10.42)	3 (6.25)	17 (35.42)
7	Horizontal and vertical mergers are more successful than conglomerates	10 (20.83)	15 (31.25)	7 (14.58)	--	16 (33.33)
8	A conglomerate works like a miniature capital market, reduces uncertainty and transaction cost	4 (8.32)	16 (33.33)	12 (25)	2 (4.16)	14 (29.17)
9	Conglomerate mergers are motivated by desire to build promotional opportunities for insiders	7 (14.58)	12 (25)	10 (20.83)	3(6.25)	16 (33.33)
10	Conglomerates arise on account of industry clustering	6 (12.50)	22 (45.83)	7 (14.58)	2 (4.16)	11 (22.92)

Source: Compiled from Primary Data

The study considers ten motives for analysis of the linkages between merger types and merger motives. 87.5% and 95.8% of respondents either strongly agree or agree that vertical mergers are accomplished to achieve improvement in overall performance and to strengthen the bargaining position respectively. On the other hand, 85% and 79% respondents either strongly agree or disagree that horizontal mergers are used to limit the competition and to have the consolidation effect respectively. There are more disagreements with regard to the motives or the outcomes of conglomerate mergers. A large majority either strongly disagree or agree that conglomerates diversify risk; they act as internal capital markets and are done to satisfy managerial motives.

In view of greater percent of negative statements relating to conglomerate mergers, it becomes necessary to identify why Indian firms go for conglomerate mergers. There exist a conflict in the results of Tables 5 and 7. According to Table 5, 90% of respondents view reducing the risk of existing business as the primary motive for mergers. Risk is reduced only through diversification which is accomplished by conglomerate mergers. However, only 34% of respondents view, as per Table 7, that conglomerate mergers are used to diversify risk. It can be surmised that even other mergers are done to smoothen earnings volatility.

Table –8 Weighted Score

(Weighted score = 4*strongly agreed+3*agreed+2* disagreed +1*strongly disagreed+0 *can't say/10)

Sl. No.	Merger Motives	Weighted Score	Rank
1	Vertical mergers improve overall performance of merged firm	13.5	3
2	Vertical mergers strengthen a firm's bargaining position vis-à-visits suppliers and customers	16.5	1
3	Horizontal mergers limit the comp etition	14.9	2
4	Horizontal mergers produce consolidation effect on the industry	13.0	4
5	Conglomerates are used to diversify risk	9.4	8
6	Managers are poorer than shareholders	10.2	6
7	Horizontal and vertical mergers are more successful than conglomer ates	9.9	7
8	A conglomerate works like a miniature capital market, reduces uncertainty and transaction cost	9.0	9
9	Conglomerate mergers are motivated by desire to build promotional opportunities for insiders	8.7	10
10	Conglomerates arise on account of industry clustering	10.6	5
	Mean	11.57	
	Standard Deviation	2.71	
	Variance	7.34	

Table 8 presents the weighted scores of the responses given by the respondents towards the various merger motives based on types of mergers. For vertical mergers strengthening of the bargaining position of the acquirer vis-à-vis the suppliers and customers appear to be the strong motive for mergers. On the other hand, limiting competition is the strong motives for horizontal mergers. Providing promotional opportunities for insiders and acting as internal capital market are regarded as the least important motives for conglomerates.

6.6 Relationship between merger motives and method of financing

Mergers may be financed through cash, stock or combination of both. It is necessary to identify when a firm uses cash financing, stock, etc., and to test any sort of evidences on method of financing and merger motives. Factors affecting methods of financing are many and varied. A cash rich firm may use its excess cash to acquire firms while a cash poor firm may use its stock. Similarly, an overvalued firm may want to leverage its valuation and acquires firms using its overvalued stock (Shleifer and Vishny, 2004, Rhodes et al, 2005). Tax motive also influences merger financing. Cash compensation is taxable immediately on capital gains realized while stock financing postpones the tax liability to a future data. A firm signals manager's confidence and merger success through cash compensation while stock financing signals manager's lack of confidence and riskiness of the project. A highly levered firm uses equity stock for financing its mergers in view of lack of debt capital while a low levered firm may issue debt and use the cash compensation for financing firms.

In view of this significance between the merger motives and method of financing, the study enquires the Indian CEOs and CFOs on whether motives of mergers decide the method of financing. 3/4th of responding managers opine that motives and financing policies are interlinked.

6.7 Specific financing motives

The present study considers three specific financing motives, namely to deploy free cash flow, to issue overvalued stock and to signal manager's confidence level. Table 9 tabulates the relationship between these three motives:

Table-9 Merger motives and method of financing

Sl. No.	Merger motives	No of responses	(%)
A	To deploy free cash flow		
B	To issue overvalued shares to the target firm shareholders		
C	To signal manager's confidence level		
I	A only	06	12.50
II	B only	15	31.25
III	C only	--	--
IV	A and B	13	27.08
V	A and C	--	--
VI	B and C	--	--
VII	A, B and C	04	8.33
VIII	No Answer	10	20.83
IX	Total	48	100

Source: Compiled from primary data

Signalling manager's confidence level is not a motive for stock financing on its own in India. Only four sample companies have considered all these three factors in deciding on the method of financing. The large majority, 31%, have used overvalued stock to acquire cheap target while 27% have used the motive of deploying free cash flow and issue overvalued stock in selecting the method of financing.

6.8 Impact of Global Merger trends on Indian firms' merger motives

Changes in the World economy have universal effects irrespective of whether a country is developed or developing. The past experiences provide evidences in this regard. In recent years effects of these kinds of changes are very fast on account of globalization policy adopted by many countries. The economies of countries are more exposed to global economic developments. In view of this linkage, an attempt was made to enquire as to whether merger motives in India are related with the global merger trends. The study reveals that majority of managers of acquiring firms in India (52%) opine that global trends do not influence Indian mergers.

6.9 Role of Hubris Hypothesis in Indian Mergers

Mergers may be guided by managerial hubris, i.e., overconfidence, excessive pride, ego or intuition. Acquiring firms even in the context of non-existence of merger benefits is explained to managerial hubris. Roll (1986) was the first to develop this hypothesis. A manager having this influence of hubris will acquire firms whether there are benefits or not. There is ample empirical support for managerial hubris. Overconfident managers feel that they have superior skills and are more competent than others. These cognitive biases motivate them to bet on their own judgment and engage in complicated tasks such as multiple acquisitions. Managers with overconfidence profiles tend to underestimate (overestimate) the risks (synergy gains) associated with mergers and are therefore less likely to postpone an acquisition decision. Overconfident managers are, in general, optimistic and predisposed to acquire targets quickly and frequently. Thus, overconfident managers are prone to engage in multiple acquisitions because they believe that such serial investment decisions are in the best interest of shareholders than "rational" managers do (Doukas and Petmezas, 2007).

We test the hubris hypothesis for Indian mergers by asking corporate managers whether they are guided by hubris, overconfidence or pride. Table 10 provides the response of the managers to the question.

Table-10 Hubris hypothesis play a major role in merger selection

Sl. No.	Opinion by respondents	No of responses	%
1	Yes	03	6.25
2	No	26	54.17
3	Unanswered	19	39.58
	Total	48	100.00

Source: Compiled from primary data

A perusal of Table shows that 54% managers opine in negative while only 6% opine that they were influenced hubris hypothesis. Nearly 40% of respondents remain unanswered. This can clearly mean Indian corporate mergers are uninfluenced by managerial hubris. There are several implications of these conclusions. It can means that Indian managers always take appropriate or value maximizing mergers, which generate positive short-term announcement returns and positive long-run returns. However, the reality is otherwise. Indian mergers do generate negative short-term returns and there are negative returns even in the long-run.

7.0 Theoretical Justification for Indian Mergers

The study generates several hypotheses based on theoretical foundations of M&As. Weston et al (2006) classifies them into several groups as efficiency theories, agency problem and managerialism theory, free cash flow hypothesis, market power, redistribution, strategic perspectives, signalling hypothesis, etc. The objective is to test the applicability of these hypotheses to Indian context. Does M&A decision in India is taken to improve operational efficiency of combined firm as hypothesized by efficiency theories? Do Indian firms merge to resolve agency conflict or are a manifestation of the existence of agency problem? What is the extent of predictability of Indian mergers as per free cash flow hypothesis?

Table-11 tabulates the data relating to the opinions of respondent managers.

Table – 11: Extent of Applicability for Merger Statements

Sl. No.	Merger Hypotheses	Order of Preferences				
		1	2	3	4	5
1	Mergers are used to signal to the market	18 (38.90)	6 (12.76)	11 (23.4)	1 (2.13)	11 (23.40)
2	Mergers are manifestation of agency problem	12 (25.53)	4 (8.51)	13 (27.6)	1 (4.25)	16 (34.04)
3	Mergers resolve agency problem	15 (31.91)	3 (6.38)	13 (27.6)	3 (6.38)	13 (27.66)
4	Mergers are used to redistribute wealth among stakeholders	22 (46.81)	8 (17.02)	12 (25.5)	3 (6.38)	2 (4.25)
5	Mergers are guided by desire to use free cash flow	21 (44.68)	7 (14.89)	15 (31.9)	4 (8.51)	--
6	Mergers narrow strategic gaps in a firm	20 (42.55)	7 (14.89)	10 (21.2)	5 (10.63)	5 (10.63)
7	Mergers have no ulterior motives	16 (34.04)	5 (10.63)	16 (34.04)	4 (8.51)	6 (12.77)
8	Mergers improve the overall performance of acquiring firms	25 (53.19)	15 (41.91)	2 (4.25)	2 (4.25)	3 (6.38)
9	Mergers are done to circumvent loopholes in regulations	4 (8.51)	5 (10.63)	15 (31.91)	9 (19.14)	14 (29.79)

Source: Compiled from Primary Data

It seems Indian firms merge to improve overall performance as 85% of responding managers agree that mergers improve overall performance of acquiring firms. 59% agree that mergers are done to deploy free cash flows while 54% view that mergers lead to redistribution of wealth across various stakeholders.

There is no acceptance of the fact that mergers in India are a manifestation of agency problem as 66% disagree with the statement. This could be attributed to the fact that large majority o Indian firms are family managed firms. Similarly, 81% do not regard mergers as mechanism to circumvent regulations.

Thus, it can be concluded that Indian mergers are guided by efficiency objective, free cash flow hypothesis, and to fill strategic gaps in the firm.

8.0 Conclusion

Corporate entities can achieve growth either internally or externally. M&As represent a form of external growth which enables firms to gain strategic advantage in a matter of few months. Mergers are considered as strategic decisions which allocate and reallocate resources across several industries and companies within an industry. In view of their strategic importance M&As have become popular among firms and are on the increase. The US has witnessed several mergers waves. Since liberalization, mergers are increasing.

Several explanations are given for the occurrence of M&A phenomenon. Efficiency theories, free cash flow hypothesis, hubris hypothesis, winner's curse hypothesis, redistribution, managerialism, etc., are some of the explanations extended to understand the occurrence of mergers. Present study aims to analyse motivations for Indian mergers of the period 2002-2010. A pre-tested questionnaire was circulated among the CEOs and CFOs for eliciting views relating to motives for corporate mergers. The survey reveals that the mergers are being regarded as strategic decisions by majority of responding managers in India. Obtaining synergistic gains from mergers has been the primary motive for merger with all the respondents agreeing to this motive followed by risk reduction through diversification. Motives such as to achieve personal ambition, to be the first among the competitors, to mimic merger decisions of competitive firms and to fall in line with the international mergers are the least rated motives.

The motives of merger differ across types of mergers and mode of financing and Indian mergers are largely influenced by the desire to improve overall operational performance of the combined entity in both vertical and horizontal mergers. Risk reduction is the motive for conglomerate mergers but Indian firms diversify for reasons other than risk reduction. As far as method of financing is concerned, the Indian firms are primarily guided by the desire to use overvalued stock in acquiring undervalued firms. The deployment of free cash flow does not have takers in India. The study also reveals that Indian mergers are less influenced by the international merger waves.

Motives constitute an important aspect of merger process. Mergers should have an economic motive for them to contribute to the performance of firms. Mergers on grounds other than economic cannot be justified and bring benefits to managers only. By and large Indian mergers are guided by the desire to improve overall performance of combined entities. The reasons are far to seek. The Corporate India is structured around business families for several decades and is closely held. Mergers for non-economic reasons cannot be expected. The questions that remain unanswered are do mergers really improve operational efficiency and are these benefits distributed across all groups of shareholders.

References

Agarwal M and Sensarma R (2007): "Determinants of Merger Activity: Evidence from India", International Journal of Financial Services Management, Vol. 2, No. 4, pp 277-289.

Agrawal A and Jaffe J F (2001). "The Post Merger Performance Puzzle," Advances in Mergers and Acquisitions, Vol. 1, pp. 7-41.

Agrawal M and Bhattacharjea. A. (2006): "Mergers in India; a Response to Regulatory Shocks", Emerging Markets and Financial Trade, Vol. 42, No. 3, pp. 46- 65.

Arnold M and Parker D (2009). "Stock Market Perceptions of the Motives for Mergers in cases reviewed by the UK Competition Authorities: An Empirical Analysis," Managerial and Decision Economics, Vol. 30, No. 4, pp. 211-233.

Banga C and Gupta A (2012). "Motives for Mergers and Takeovers in the Indian Mutual Fun Industry," Vikalpa, Vol. 37, No. 2, pp. 33-42.

Beena P L (2000) "An Analysis of Mergers in the Private Corporate Sector in India," Journal of Scientific and Industrial Research, Vol. 59, No. 8-9, pp. 623-639.

Beena P L (2004) "Towards Understanding Merger Waves in Indian Corporate Sector; A Comparative Perspective," Working Paper 301, Centre for Development Studies, Trivandrum.

Bradley M, Desai A and Kim E H (1983). "The Rationale Behind Inter-Firm Tender Offers: Information or Synergy," Journal of Financial Economics, Vol. 11, No. 1-4, pp.183-206.

Brouthers K D, Hastenburg P V and Joran V D V (1998): "If Most Mergers Fail Why are they so Popular?" Long Range Planning, Vol. 31, No. 3, pp 347- 353.

Doukas J A and Petmezas D (2007). Acquisitions, Overconfidence Managers and Self-Attribution Bias, European Financial Management, Vol. 13, No. 3, pp. 531-577.

Gaughan P A (2007) Mergers, Acquisitions and Corporate Restructurings, John Willey &Sons, New Delhi

Guruswamy S and Radhakrishnan (2010): "Mergers and Acquisitions- An Empirical Study on Pre and Post Acquisition Performance of Select Indian Corporate Enterprises", Gitam Journal of Management, Vol. 8, No 1, pp. 65-97.

Harford J (2005). "What Drives Merger Waves?" Journal of Financial Economics, Vol. 77, No. 3, pp. 529- 560.

Harshvardhan (2006): "The Out bound M&As from India and China", The Economic Times, Mumbai Edition, Mumbai Edition, December 29.

Hyderabad R L (2013). Long-term Post-Merger Share Price Performance of Acquiring Companies in India, AIMS International Journal of Management, Vol. 7, No. 1, pp. 1-23.

Jensen M.C (1983): "The Market or Corporate Control: The Scientific Evidence", Journal of Financial Economics, 11, No. 1-4, pp 5-50.

Lubatkin (1983): "Mergers and Performance of the Acquiring Firms", Academy of Management Review, Vol. 8, No 2, pp 218 – 225.

Mantravadi P and Reddy. A.V (2009). "Type of Merger and Impact on Operating Performance", Gitam Journal of Management, Vol. 7, No. 1, pp. 88-112.

Marris R (1964). "The Economic Theory of Managerial Capitalism", Vol. 258, Macmillan, London.

Mitchell M L and Mulherin J H (1996). "The Impact of Industry Shocks on Takeover and Restructuring Activity", Journal of Financial Economics, Vol. 41, No. 2, pp 193- 229.

Mueller D C (1969): "A Theory of Conglomerate Mergers", Quarterly Journal of Economics, Vol. 83, No. 4, pp 643-659.

Rani N, Yadav S and Jain P K (2012): "Corporate Merger Practices in India: An Empirical Study", available at http:// ssrn.com/ abstract= 2043698.

Rau P R (2008): Mergers, Acquisitions and Corporate Restructuring. SAGE publication Pvt. Ltd, New Delhi.

Rhoades S.A. (1998): "The Efficiency Effects of Bank Mergers: An Overview of Case Studies of Nine Mergers," Journal of Banking and Finance, Vol. 22, No 3, pp. 273-291.

Rhodes K M, Robinson D T and Vishwnathan S (2005): "Valuation Waves and MergerActivity: The Empirical Evidence", Journal of Financial Economics, Vol. 77, No. 3, pp 561- 603

Roll (1986): "The Hubris hypothesis of Corporate Takeovers". The Journal of Business, Vol. 59, No. 2, pp. 197-216.

Seth A, Song K P and Pettit R (2000). "Synergy, Managerialism or Hubris? An Empirical Examination of Motives for Foreign Acquisition of US Firms," Journal of International Business Studies, Vol. 31, No 3, pp. 387-405.

Shleifer A and Vishny R W (2003): "Stock Market Driven Acquisitions". Vol.70, No. 3, pp. 295-311.

Trautwein F (1990): "Merger Motives and Merger Prescriptions", Strategic Management Journal, Vol. 11, No. 4, pp. 283 -295.

Walter. G. A. and Barney J.B. (1990): "Management Objectives in Mergers and Acquisitions", Strategic Management Journal, Vol. 11, No. 1, pp. 79- 86.

Weston, J F, Chung K S and Hoag S E (2006). Mergers, Restructuring and Corporate Control, Prentice Hall of India, New Delhi.

*****

Agricultural Debt Waiver and Debt Relief Scheme-2008: A Case of Adverse Selection and Moral Hazards in the Agriculture Credit Mechanism of India

Dnyandev C. Talule
Professor, Department of Economics, Shivaji University, Kolhapur (Maharashtra State), 416 004, India

Abstract : This paper attempts to analyze the impacts of the Agricultural Debt Waiver and Debt Relief Scheme of 2008 (ADWDRS-2008) on the beneficiary farm households, banks / financial institutions and the central fiscal position of India. From the farm households' point of view, mainly the paper analyzes the impacts of the debt relief – 2008 on investments, productivity, cropping pattern, access to irrigation, crop insurance, debt performance, credit composition and the immediate pre and post debt waiver demand and supply pattern of farm credit. Apart from the pre and post ADWDRS debt composition of institutional vs non-institutional credit, the history and post debt waiver credit repayment pattern are looked at as a proxy of the impact of debt waiver on the banks. We carry out a survey of 360 debt relief recipient farm households from two districts each of Andhra Pradesh (Anantpur and West Godawari) and Maharashtra (Nanded and Nasik) state. In addition to this 10 farm households per district were interviewed as the control group. This group consisted of farmer households which had obtained bank loan but were not the recipients of the debt relief of 2008. The study of these households being beneficiaries of the largest debt relief scheme of India brings out that there had not been any positive impact on the farm yield levels and the net incomes received from cultivation. Viz-a-viz the debt waivers, apart from immediate farm credit swap could not improve the credit repayment behaviors thereby left banks with moral hazard and adverse selection. Also the debt waiver does not improve investment or productivity of beneficiary households, but leads to a strong and persistent shift of borrowing from all available sources and purposes including non-formal and non-cultivation ones. The investigation further documents strong effect of debt relief on beliefs about the seniority of debt and the reputational consequences of default. The result from the entire exercise resonate with findings on personal bankruptcy and suggests that the arbitrary debt bailout programmes are of limited and immediate short term use in addressing problems of debt overhang, but have significant behavioral implications. Finally we dwell upon the possibility of the 'Nationwide Penetration of Crop Insurance', in the form of policy debate i.e. the "Nationwide Crop insurance can it be the alternative to debt waivers?"

Key words : Debt Waiver, ADWDRS, Repayments, Pendency, Farm Households, Control Group

1.0 Introduction

Most of the Indian farmers belonging to all categories of land-holding need credit both for the farm operations and agricultural investments. Also during the lean seasons and the unforeseen situations like drought they need credit for self consumption and maintaining their livestock. Many a time farmers are found borrowing for the repayment of earlier debts. Therefore an access to formal credit becomes an indispensible matter for the farming community. Limited access to the institutional farm credit and low penetration (about 26 per cent) of agricultural insurance have been underlying causes of the persistent poverty in rural parts of the country (Townsend, 2006).

Acknowledgement : *Author acknowledges the RBI Professor of Finance and the Director of the Gokhale Institute of Politics and Economics, Pune (Deemed to be a University), Prof. Rajas Parchure for providing all infrastructural support for this study. Also the author thanks all four DCCBs, RRBs and the Nationalized Banks from Andhra Pradesh and Maharashtra selected to cover the farm credit delivery points for providing with us the list of beneficiary farm households of the debt relief programme (ADWDRS-2008) and the NABARD for financially supporting this study.*

This is true especially in the case of poor and predominantly agricultural economies like India, where bank credit is expected to serve the dual purpose of enabling productive investment and providing insurance against highly volatile income streams. However, in the Indian case the absence of sophisticated instrument to mitigate income risk, such as the insurance risk and future contracts, even farmers with initial access to institutional credit have found accumulating an extreme levels of debt (accruing to both the institutional and private agencies), factually excluding them from bank credit in future. This has resulted in about half of the (49 per cent) Indian farmers carrying cultivations and their pending debt. In Indian case, generally the pending of farm debt is mainly on account of crop vagaries and low insurance penetration. Credit linked crop insurance launched in the 1970s has remained confined to about 24 per cent where the unit of application is the area and not the individual farmer. Low penetration of agricultural insurance coupled with frequent crop failures on many occasions has led to accumulation of farm credit. This has its political repercussions on one hand. On the other hand low recovery of the farm credit also weakens the credit mechanism leaving the lending institutions with an option of adverse selection. As a result of the farm credit accumulation and the political repercussions of the same, successive governments, in the past resorted to credit waivers.

Potentially far-reaching macro-economic and political implications of extreme farm indebtedness have resulted into a range of large scale debt relief initiatives in the past. In India, during the period between 2000 and 2006, average household debt increased six-fold where as in Mexico, annual increase in the outstanding consumer credit was 35 per cent and the same was more than doubled in Brazil (Fibelman, 2009). The recent farm credit waiver which was announced in the budget of 2008 for about Rs. 71, 000 crores (actual spending incurred Rs. 51340.47 crore) was off-course not the first of its kind. Earlier India enacted a nationwide farm debt relief programme was in 1989 and the same was for US $ 3 bn. This debt relief of 1989 was based on outstanding debt and was not based on the landholding criteria. The question that arises from such fiscal instruments is whether the credit waiver does actually benefit farmers or it is just a temporary relief to them and leaves the banks with adverse selection in future. Therefore the post waiver response of farmers and the assessment of the same on banks need a careful scrutiny. Most often, the farmers regular in repayment are excluded from the debt waiver schemes hence the post waiver trends of repayment and a surge in credit demand may leave banks with adverse selection. With this context the study has focused on the comparison between the pre and post debt waiver pattern of farm credit demand and repayment patterns. And with this approach the impact of credit waiver both on banks and the farming economy benefitted by the waiver programme is assessed. It is widely acclaimed that the benefit of such debt relief programmes are substantial. But their merit as an instrument to promote financial inclusion, investment and boost to agricultural productivity remains highly controversial. But in this context, Mayers (1977) while building on theories of debt overhang and risk shifting has argued that the extreme level of household debt distorts investment and production decisions so that the debt waiver holds the promise of productivity improvements. Whereas; commenting on the Agricultural and Rural Debt Relief Scheme – 1989 (ARDRS) Shailendra and Kartar Singh (1994) observed that the loan waiver schemes are bound to severely hamper the functioning of credit institutions, as they did in Karnataka's co-operatives.

2.0 Data and Methodology

The entire analysis that forms the present study is predominantly based on the primary data obtained from the ADWDRS – 2008 beneficiary farm households from two districts from each of the states of Maharashtra and Andhra Pradesh respectively. These districts were Nashik and Nanded from Maharashtra and West Godawari and Ananthpur from Andhra Pradesh. All these four districts from the two states were selected on the basis of the availability and an extent of irrigation cover.
The primary information(s) were obtained mainly through the household survey of beneficiary farmers' households from the states of Maharashtra and Andhra Pradesh. Andhra Pradesh is a state which happens to be the largest beneficiary state of the ADWDRS-2008 whereas, Maharashtra happens to be the agriculturally unique state in the country and also one of the severely affected states by farmers suicides and most of the suicides have been due to the credit pendency on account of both the institutional and non institutional sources (Parchure & Talule 2012).

Usually the schemes like debt waiver are not expected to bring any direct benefit to the farm households nor does it improve the financial efficiency of the banking sector in the long term. On the contrary as the debt waiver usually includes only the defaulting farmers and excludes the regularly repaying ones, the schemes like debt waiver leaves the entire banking sector with a mandatory option of an adverse selection. Therefore it is necessary to work out the feasibility of public investment in the agricultural and allied sectors and find out whether an efficient subsidy mechanism can be a substitute or can it replace the requirement of frequent farm debt waivers which usually do not bring any long term transformation in the country's agricultural sector.

2.1 Sample Plan

For the purpose of the collection of the primary data two districts each from the state of Maharashtra and Andhra Pradesh were selected and while selecting the districts form both the states the basis was the availability and the extent of irrigation cover. 90 farmer households from each of the districts have been covered for the purpose and thus in total the sample covered 180 farm households from each of the state. Hence the total number of the sample of the beneficiary households belonging to the four districts from two states is 360. In order to cover the farm credit delivery points one District Central Cooperative Bank (DCCB), one Nationalized Commercial Bank (NCB) and one Regional Rural Bank were identified from the selected districts of both the states of Maharashtra and Andhra Pradesh. For this purpose the basis was the amount of debt waived under the ADWDRS – 2008 as well as the banks suggested by lead bank managers from the respective states or the NABARD officials. Further three (03) branches of each of these banks were selected on the basis of the higher benefits received under the ADWDRS – 2008 or as suggested by the concerned bank higher authority. Hence the selection of the concerned bank branches was based upon combination of two factors viz. the amount of the money received under the ADWDRS – 2008 as well as, the suggestions of bank officials. Therefore the selection of the bank branches had a strong and mutual base between the implementing banks and the study team which happened to be helpful in bringing a higher degree of accuracy in the collection of the data.

The list of beneficiaries of the ADWDRS - 2008 available at the selected financial institutions was used as a source list to draw a sample of 30 farm households from each of the selected financial institution. This way in all 90 farm households were surveyed from every selected district and the total of 180 farmers from each of the state.

In addition to this, 10 farm households per district were interviewed as the control group. This group consisted of the farmers' households which had obtained bank loans but were not the recipients of the ADWDRS – 2008 (may be the regularly repaying households of loans, hence didn't get the ADWDRS benefits). Also the officials from the financial institutes from the respective state were contacted in person. They were the branch managers, lead bank managers, chief officers of selected banks. The attempt was also made to contact and interview the Insurance officials to strengthen the understanding about different aspects of the problem related to farm credit and insurance.

3.0 Results and Discussion

As the ADWDRS-2008 policy document itself has stated, all pending loans of Small, Medium and the Marginal farmers stand waived under the scheme inclusive of principal plus interest amount. Therefore the lending institution wise waiver – principal ratios for most of these institutions happened to be more than 100 per cent. Therefore the amounts waived shown in row 03 of table 2.4 is inclusive of interest and pending principal. Since sanctioned loans are of long standing duration, the accumulated interest amount has become high and hence the amount waived in every case exceeds the principal lending. The state and credit institution wise ratios for the state of Andhra Pradesh are observed as; 140 per cent for the Co-operatives, 105 per cent for the Nationalized Banks, 123 per cent for the rural banks. The overall state waiver-principal ratio for Andhra Pradesh is 124.81 per cent. The data about the sample ADWDRS farmers from the state of Maharashtra shows the credit institution wise debt waiver that was received as; 120.57 per cent for Co-operatives, 53.71 per cent for the Nationalized Banks, 91,24 per cent for the Rural Banks and the overall state specific ratio as 77.07 per cent. The combined institution wise ratios and the debt waiver received under the ADWDRS-2008 for both the states of Andhra Pradesh and Maharashtra are; 132.30 per cent for the co-operatives, 62.19 per cent for the Nationalized Banks and 117.21 per

3.1 Details of Credit Waiver and the Use of Waiver Amounts by Beneficiary Farmers

Table.1. Details of the Credit Waiver Received under the ADFWDRS-2008 by the Sample ADWDRS beneficiaries from Andhra Pradesh and Maharashtra

Loan Details	Andhra Pradesh				Maharashtra				Andhra Pradesh & Maharashtra Aggregate			
	Cooperatives	Nationalized	RRBs	Total	Nationalized	RRBs	Cooperatives	Total	RRBs	Cooperatives	Nationalized	Total
Loan Amount	1889802	1355530	1595707	4841039	1254701	6851947	385800	8492448	3144503	8207477	1981507	13333487
Amount Repaid	236972	98000	67669	402641	33880	2225321	70900	1957101	270852	2323321	138569	1729742
As % of (1)	12.54	7.23	4.24	8.32	2.70	32.48	18.38	23.05	8.61	28.31	6.99	12.97
Amount Waived	2647375	1423975	1970510	6041860	1512758	3680048	352000	6544806	4160133	5104023	2322510	12586666
As % of (1)	140.09	105.05	123.49	124.81	120.57	53.71	91.24	77.07	132.30	62.19	117.21	94.40

cent for the Rural Banks whereas, the combined average for both the states and for all three categories of the lending institutions emerges as 94.40 per cent. The conclusion that can be inferred from the analysis is that because of the multiple borrowing and inability of farmers to repay the loans in time, the accumulated amounts shot up high and therefore the waiver – principal ratios also shot up very high.

Table. 2. Utilization of the Money the Beneficiary Farmers Received / Saved due to the Receipt of the ADWDRS-2008

Use of ADWDRS Money	Study HHs		Total
	Andhra Pradesh	Maharashtra	
Bank Deposit	1	17	18
per cent	0.54	9.44	4.92
Business	1	1	2
per cent	0.54	0.56	0.55
Family	1	39	40
per cent	0.54	21.67	10.93
Farm related work	20	74	94
per cent	10.75	41.11	25.68
Not Utilized	148	2	150
per cent	79.57	1.11	40.98
Others	4	1	5
per cent	2.15	0.56	1.37
Purchase of livestock		2	2
per cent	0.00	1.11	0.55
NR	11	44	55
per cent	5.91	24.44	15.03
Grand Total	186	180	366
per cent	100.00	100.00	100.00

In fact no beneficiary farmer of the ADWDRS-2008 was to get any direct benefit in the form of money. Their credit accounts were to be cleared and the banks' NPAs were to be made nil. So that the clearance of both; the NPAs of the banks and the farmers' credit accounts were supposed to restore the credit ability of the loanee and the credit paying capacity (monetization) of the banks. Another aspect about the farm credit use is that mostly the farmers use their credit money either for unproductive or for ceremonial purposes. But both i.e. our earlier study *(Parchure & Talule 2012, Agricultural Distress and Farmers Suicides in Yavatmal District, NABARD Study)* and the present study show that such type of opinion is negative and biased. In the case of the present study no sample ADWDRS farmer from any of the two states is observed to have used the ADWDRS money for unproductive purposes. When their debt accounts were cleared through the ADWDRS and the money they were supposed to pay to the banks were saved in such cases some of them have purchased livestock such as the milching cows, a pair of bullocks or small animals like sheep and goats. But the proportion of such farmers is almost negligible and that it is 1.1 per cent in Maharashtra. Many of them have used the saved installment money for agricultural cultivation and their proportion is 10 75 per cent in Andhra Pradesh and 41.11 per cent in the state of Maharashtra. A few farmers from Maharashtra also used this money in the form of the bank deposits. The overall conclusion that emerges from this information also coincides with our earlier study proving that the farmers have no tendency of using their credit money for the unproductive purposes. On the contrary this i.e. the farming segment of the rural society has a higher degree of common sense sometimes even more than the urban middle class which has developed the habit of borrowed consumption that means using the bank borrowings for consumptions such as the buying of consumable durables and going at vocational destinations with the bank loans.

3.2 Impacts of Debt Waiver on Farmer Beneficiaries from Andhra Pradesh and Maharashtra

a) Pattern of Holding

The comparative analysis for the sample ADWDRS-2008 beneficiary farmers for Andhra Pradesh and Maharashtra presented in the table 05 points out that as the size of holding for these farmers increases, their proportion for both the states initially increases and again it declines when the size of holding reaches beyond the medium size of the land (i.e. between 05 and 10 Ha.). For both the states the proportion of beneficiaries of the sample ADWDRS farmers and the size of holding bare positive relation at the initial stage and then becomes negative when the land holding enters the phase of medium size of the land. This is indicative that most of the farmers from the marginal and the small group of holders are more dependent on the debt borrowings for their agricultural operations and also for investments. Therefore any eventuality in cultivation can push them into an adverse economic condition. Therefore this is the category of farmers that needs to be protected from adverse cultivation conditions. These protections may be in the form of crop, life, cattle and general insurance and the rural and agricultural investments by the government. Therefore such farmers need protection either through the compulsory, crop specific or through the part sponsorship of insurance premium payments by the government. The proportion of the sample beneficiaries from Andhra Pradesh shows that it is; 25.81- for the holding up to 01 Ha. and 48.92 per cent – for the holding up to 02 Ha. and then it goes on declining and becomes 16.67 per cent for the category of holding up to 05 Ha. (12.50 acres). As the holding pattern crosses the limit of 10 Ha. (25 acres), the proportion of the ADWDRS beneficiaries strikingly declines to 00.54 per cent. The case of the state of Maharashtra is similar to that of Andhra Pradesh. The proportion of the sample AWDRS beneficiaries from both the states is 30.11 per cent for the size group of holding of up to 01 Ha. (05 acre) and as the size of holding increases to 02 and 05 hectares the proportion of the sample ADWDRS beneficiaries become 21.67 per cent for Maharashtra and 48.92 per cent for Andhra Pradesh. Then it starts to decline for the greater size of holding i.e. from the size of up to 10 Ha. onwards. But for Andhra Pradesh the proportion of the sample ADWDRS beneficiaries starts declining from the size of holding from 05 Ha. onwards. Similar is the proportion for the correlation between the ADWDRS beneficiaries and the size of holding. First it increases from 25.81 per cent for the holding size of up to 01 Ha. (2.5 acres) to 48.92 per cent for the holding up to 02 Ha. (05 acres) then it declines to 16.67 per cent for the holding size up to 05 Ha. (12.5 acres). Thereafter it shows a declining trend of 06.45 per cent (05 to 10 Ha.) to become 00.54 per cent for the size of holding larger than 10 Ha. (25 acres).

For the control group, evidently it emerges from the information about the pattern of holding and the proportion of the sample ADWDRS beneficiaries that relatively the size of holding of the farmers from Maharashtra is greater than their counterparts from Andhra Pradesh. For this category when the proportion of the farmers from Andhra Pradesh is 44.44 per cent for the holding size up to 01 Ha. For the same category in the state of Maharashtra it is 11.76 per cent ; it strikingly touches 00 per cent for the holding size of up to 02 Ha. and again increases to 29.41 per cent for the higher size of holding of up to 05 Ha.. Subsequently it increases to 41 per cent for the higher size of holding of up to 10 Ha. and becomes 17.65 per cent for the size exceeding 10 (25 acres) hectares.

The overall holding and cultivation pattern of the sample ADWDRS-2008 beneficiary farmers from both the states is almost similar. The patterns are representative of the average Indian farmers. But the interstate comparison of these two states is indicative of Maharashtra having an edge over Andhra Pradesh. The Average size of holding of the ADWDRS farmers of Andhra Pradesh is 2 Ha. while the same for Maharashtra it is 3.32 Ha. As regards the average size of the land that is brought under cultivation for Andhra Pradesh it is 1.95 Ha. and for Maharashtra the same is 2.82 Ha.. This shows the overall soil quality and intensity and thereby the higher cultivability of the land in Maharashtra than in Andhra Pradesh. Also in the case of irrigation the average for Maharashtra being 00.55 Ha. is greater than Andhra Pradesh where it is 00.02 Ha.. But for the control group the scenario for Maharashtra is substantially different from its counterpart i.e. the Andhra Pradesh. From the averages of land held by the farmers' families, land cultivated, irrigated and the cultivable waste it could be seen that just apart from cultivable waste (0.05 Ha.) and waste land (0.07 Ha.) the sample ADWDRS farmers from Maharashtra having average of 4.45, 4.44 and 3.50 Ha. of average land holding, average land under cultivation and the average irrigated land respectively are ahead of Andhra Pradesh.

b) Irrigation : Access, Sources and Problems of Irrigation

Table.3. Access to Irrigation to the Study and Control Farmers from Andhra Pradesh and Maharashtra

Study Group Access to Irrigation									
	Andhra Pradesh				Maharashtra				
Row Labels	Co-Op	National	RRBs	Total	Co-Op	National	RRBs	Total	Total
Yes	59	60	63	182	37	79	11	127	309
%	95.16	98.36	100.00	97.85	60.66	88.76	36.67	70.56	84.43
No	3	1		4	24	10	19	53	57
%	4.84	1.64	0.00	2.15	39.34	11.24	63.33	29.44	15.57
Total	62	61	63	186	61	89	30	180	366
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Control Group Access to Irrigation									
	Andhra Pradesh				Maharashtra				Total
Yes	7	6	5	18	9	7	00	16	34
%	100	100.00	100.00	100.00	100.00	87.50	00	94.12	97.14
No						1	00	1	1
%						12.5	00	5.88	2.86
Total	7	6	5	18	9	8	00	17	35
%	100	100	100	100	100	100	00	100	100

The proportion of farmers having irrigation cover is more than dry land farmers. But sources revealed by farmers to us show that for Maharashtra the irrigation cover available is not perennial being dependent more on Wells and Tube wells. The comparatively greater irrigation cover of AP than MH is indicative of the interstate irrigation disparities which need to be addressed.

The data on irrigation status provided in the earlier tables on the sample ADWDRS farmers from both the states of Andhra Pradesh and Maharashtra reveal that the penetration of irrigation is at the lower side and also below the national average. The data in the present table (3.13) reveals that the farmers face various difficulties in maintaining and managing their irrigation infrastructure. Difficulties in managing irrigation infrastructure push them to the low yield conditions and thereby accumulation of debt. It is clear that the sample ADWDRS farmers of Andhra Pradesh do not have any source of canal irrigation but the farmers who have canal irrigation also have to face the problems like untimely canal rotations. Those who want to create their own source of irrigation have to face problem of capital investment and the proportion of such farmers from Andhra Pradesh is 13.76 per cent. As noted in the foregoing analysis; even though the irrigation infrastructure is ready; the power cut off (load shedding) is a major problem during the peak agricultural season. In such cases, irrigation infrastructure such as the wells, pump sets and pipelines is available, there is water in the wells but the farmers cannot operate this infrastructure because there is no power. This is reported by the sample ADWDRS farmers from both the states and the proportion is 40.37 per cent for Andhra Pradesh and 52.63 per cent for the Maharashtra. Not even a single sample ADWDRS farmer from Andhra Pradesh has reported that there is no problem in the irrigation whereas, the same is true for Maharashtra also, where the proportion of farmers, who feel that there is no problem in irrigation is 00.75 per cent, which is negligible . As stated in the foregoing analysis (based on irrigation); the electric pump sets equipped with pipelines driven irrigation network in Maharashtra is dominant for 64 per cent of the irrigated areas. The surveyed ADWDRS farmers from the state of this category do have the problems related to the pipeline network. For 33.88 per cent of the sample ADWDRS farmers the source of irrigation available is very weak and the same cannot be helpful in augmenting the crop yields and ensure the timely debt repayment.

The irrigation problems faced by the control group farmers from both the states have the same grievances like their ADWDRS counterparts. The average proportion that emerges for two states for control group farmers who have these problems is as follows: capital (03.85per cent), load shedding (50.00per cent) and the weak source of irrigation (38.46per cent) respectively. State specific disaggregated proportion for the control group regarding the irrigation problems show that there happen to be 11.11, 77.78 and 66.67 per cent of the farmers from Andhra Pradesh who have the problems of capital, load shedding and the weak source of irrigation respectively, whereas, for Maharashtra 35.29 per cent of the ADWDRS farmers face the problem of load shedding and another set of 23.53 per cent have to face the problem of the weak source of irrigation.

Disaggregated information on the pattern of the holding according to the irrigation cover, land leased in and leased out by the farmers from the two states of Andhra Pradesh and Maharashtra as per the lending institutions shows that of the total sample ADWDRS farmers from Andhra Pradesh 109 have irrigation cover available for 187.13 hectares of the land with proportion of 58.60 per cent whereas, 11 farmers have been cultivating on leased in land and the hectarage of the same is 12.4. 03 farmers have leased out their land of 06 Ha. and the average of the sample is of 02 Ha. per farmer. The information for Maharashtra is that 133 sample ADWDRS farmers have the irrigation cover available for their 347.35 Ha. of land whereas, 03 of them have leased out 04 Ha. of the land and 06 Ha. is leased in by 04 sample ADWDRS farmers from the two districts of the state. For the control group there happened to be 09 farmers having irrigation cover for their 27.03 Ha. of the land, 03 have leased in 15.4 Ha. and 0.8 Ha. is leased out by one farmer from the state of Andhra Pradesh. Information for Maharashtra is slightly different than the counterpart state of Andhra Pradesh. 17 control group farmers Have irrigation cover for their 95.55 Ha. of the land whereas, there is no leasing in or leasing out done by this group of farmers.

c) About the Impact on Productivity and Net Income Received from Cultivation

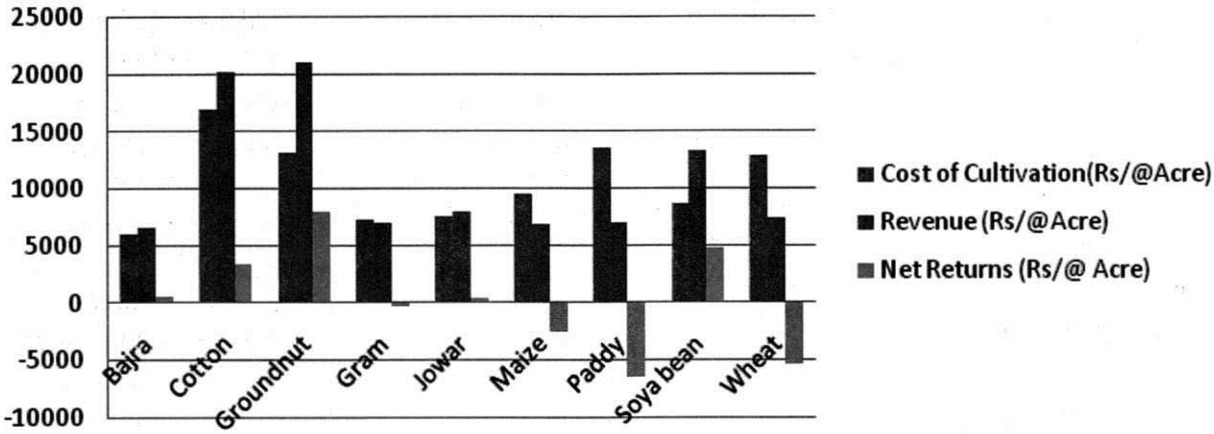
The basic purpose of the debt waiver being the clearance of unpaid bank debt and restoring back both the farmers and bankers to the credit and financing ability, The focus was not on any other areas like productivity. It is true that the farmers from both the states have brought in some amount of change in their cropping pattern, but during the group discussions when querried specifically to respond about the productivity improvements, the blanket response was negative. It is because there was no in-built mechanism in the debt waiver scheme which could have brought the productivity improvements. The striking fact is that the debt waiver scheme has not resulted in any agricultural infrastructural development. As mentioned in the foregoing analysis it was not the objective of the scheme. As such, on the productive front the debt waiver proves to be non-impacting one.

Table.4. Major Crops Cultivated, Yield Levels and Net Income from Cultivation Received by the ADWDRS Farmers from Andhra Pradesh and Maharashtra

Crop	Yield @ Ha (Qntl)	Yield @ Acre (Qntl)	MSP/Rs. (@ Qntl. /2013-14)	Cost of Cultivation (@ Acre/Rs.)	Revenue @ Acre/Rs. (Cl. 2*Cl. 3)	Net Income (@ Acre/Rs.) (Cl. 5-Cl.4)
	(1)	(2)	(3)	(4)	(5)	(6)
Bajra	13.08	5.23	1250	6019.40	6537.50	518.09
Cotton	13.08	3.23	3850	16857.34	12435.50	-4411.84
Groundnut	13.08	3.34	4000	13064.56	13360	295.44
Gram	13.08	2.23	3100	7258.4	6913	-345.40
Jowar	13.08	5.23	1510	7520.17	7897.30	377.12
Maize	13.08	5.23	1310	9442.64	6851.30	-2591.34
Onions	13.08	5.23	MSP Not Applicable			
Paddy	13.08	5.23	1327.50	13478.78	6942.82	-6535.95
Soya bean	13.08	5.23	2530	8592.21	13231.90	4639.68
Wheat	13.08	5.23	1400	12755.60	7322	-5433.60

Note:
1. Per Ha @ Per Acre Yield calculations are based on field data while the MSP and Cost of Cultivation are based on CACP-2013-14.
2. Cost of Cultivation is Cost 'C2' which is exclusive of Marketing, Transportation Costs and the Insurance Charges

Per Acre Cost of Cultivation, Revenue and Net Income Received by the ADWDRS Farmers from the Cultivation of Major Crops (At MSP & Cost 'C2' of CACP-2013-14)



Apart from a small amount of per acre profit for cultivating the crops like Bajra, Groundnut, Jowar and Rs. 4639 for Soya beans, all other crops are cultivated at net negative income. When crop-wise per acre revenue as per the MSPs of 2013-14 are compared to the CACP's corresponding 'C2' (cost of cultivation) the crop-wise net negative returns received by the ADWDRS farmers for cultivation were as; Cotton Rs. - 4411.84, Gram Rs. -345.40, Maize Rs. – 2591.34, Paddy Rs. – 6535.95 and for Wheat Rs. – 5433.60 respectively. Since the ADWDRS didn't bring any improvement in crop/land productivity it was also not possible for the scheme to bring any significant changes in the levels of revenue and net farm incomes.

Table.5. Post ADWDRS Change in Cropping Pattern Introduced by the Beneficiary Farmers from Andhra Pradesh and Maharashtra

Response	Andhra Pradesh				Maharashtra				Andhra Pradesh & Maharashtra Aggregate			
	Cooperatives	Nationalized	RRBs	Total	Cooperatives	Nation al	Rural	Total	Cooperatives	Naticmalized	RRBs	Total
YES	23	6	31	60	31	54	9	85	54	60	40	154
per cent	37.10	9.84	49.21	32.26	50.82	60.67	30.00	47.22	43.90	40.00	43.01	42.08
No	39	55	32	126	30	31	20	90	69	86	52	207
per cent	62.90	90.16	50.79	67.74	49.18	34.83	66.67	50.00	56.10	57.33	55.91	56.56
NR						4	1	5	0	4	1	5
per cent	0.00	0.00	0.00	0.00	0.00	4.49	3.33	2.78	0.00	2.67	1.08	1.37
Grand Total	62	61	63	186	61	89	30	180	123	150	93	366

d) Change in Cropping Pattern

Aggregate average for the change in cropping pattern after the ADWDRS-2008 that is reported by the sample beneficiaries for Andhra Pradesh is 32.26 percent and the same for Maharashtra it is 47.22 per cent. This means that the proportion of the ADWDRS beneficiary farmers from both the states is confined to less than a half of them. The state specific proportion of the sample ADWDRS beneficiary farmers who have not introduced any change in the cropping pattern after they received the ADWDRS benefits is 67.74 per cent in Andhra Pradesh and 50 per cent in the state of Maharashtra respectively. The state specific credit institution wise disaggregated proportion about the change in cropping pattern shows that it was 37.10, 49.21 and 9.98 per cent for the Cooperatives, Rural Banks and the Nationalized Banks from Andhra Pradesh and the same for Maharashtra it was 50.82, 30 and 60.67 per cent respectively.

When a specific question pertaining to the post ADWDRS-2008 change in cropping pattern was posed to the beneficiary farmers (Qu. No. 10) in a manner enquiring the addition of new crops in the list of earlier cropping pattern practiced by them, we could obtain a positive information from about two-third respondents from Andhra Pradesh and about half of them from Maharashtra.

Table. 6. The Crop Specific Disaggregation of Post ADWDRS Change in Cropping Pattern Introduced by the Beneficiary Farmers from Andhra Pradesh and Maharashtra

Crops	Andhra Pradesh				Maharashtra				Andhra Pradesh & Maharashtra Aggregate			
	Cooperatives	Nationalized	RRBs	Total	Cooperatives	Nationalized	RRBs	Total	Cooperatives	Nationalized	RRBsl	Total
Cotton	1	1		2		2		2	1	3	0	4
per cent	4.35	16.67	0.00	3.33	0.00	3.70	0.00	2.13	1.85	5.00	0.00	2.60
Horticulture				0	5	15		20	5	15	0	20
per cent	0.00	0.00	0.00	0.00	16.13	27.78	0.00	21.28	9.26	25.00	0.00	12.99
Maize	7			7				0	7	0	0	7
per cent	3043	0.00	0.00	11.67	0.00	0.00	0.00	0.00	12.96	0.00	0.00	4.55
Paddy	7		17	24				0	7	0	17	24
per cent	30.43	0.00	54.84	40.00	0.00	0.00	0.00	0.00	12.96	0.00	42.50	15.58
Semi cash crop oilseed	5	5	7	17	8	6		14	13	11	7	31
per cent	21.74	83.33	22.58	28.33	2581	11.11	0.00	14.89	24.07	18.33	17.50	20.13
Semi cash crop Ha.lad				0	2			2	2	0	0	2
per cent	0.00	0.00	0.00	0.00	6.45	0.00	0.00	2.13	3.70	0.00	0.00	1.30
Sugarcane			5	5	1	3		4	1	3	5	9
per cent	0.00	0.00	16.13	8.33	3.23	5.56	0.00	4.26	1.85	5.00	12.50	5.84
Tobbacco	2			2				0	2	0	0	2
per cent	8.70	0.00	0.00	3.33	0.00	0.00	0.00	0.00	3.70	0.00	0.00	1.30
Vegetables				0	1	1		2	1	1	0	2
per cent	0.00	0.00	0.00	0.00	3.23	1.85	0.00	2.13	1.85	1.67	0.00	1.30
Wheat				0	1			1	1	0	0	1
per cent	0.00	0.00	0.00	0.00	3.23	0.00	0.00	1.06	1.85	0.00	0.00	0.65
NR	1		2	3	13	27	9	49	14	27	11	52
per cent	4.35	0.00	6.45	5.00	41.94	50.00	100.00	52.13	25.93	45.00	27.50	33.77
Total	23	6	31	60	31	54	9	94	54	60	40	154

Data given in the above Table No. 6 brings out the post ADWDRS crop specific and disaggregated direction of the change in cropping pattern introduced by the sample ADWDRS farmers from the state of Andhra Pradesh and Maharashtra. This is the proportion of the farmers from both the states who have gone in for the change in cropping pattern after they received the ADWDRS benefits. The proportion is presented in the credit institution wise disaggregated and the overall state wise aggregate manner for both the states. The other angle that emerges from the data is that the proportion of these ADWDRS farmers also brings out the lending institution wise crop specific change in the cropping pattern. Looking at the change in the cropping pattern of these farmers it shows that the farmers are not enterprising by nature. Rather, being enterprising in cultivation is almost beyond their affordability. Just 0.25 per cent of the farmers have started to cultivate a cash crop like Chilly whereas; the proportion of the farmers who have resorted to cultivation of Cotton from both the states is confined to 02.60 per cent. The combined proportion for both the states of the sample ADWDRS beneficiary farmers who have started developing the horticultural orchids is 12.99 per cent. All these farmers who have started to develop the orchids belong to the state of Maharashtra and not even a single farmer from Andhra Pradesh has taken up this specific change in the cropping pattern. Same is the information about the development of Grape orchids by these farmers from both the states. The proportion of this category of farmers is very small which is just 0.75 per cent and all them are from Maharashtra. As regards cultivation of Ground nuts by ADWDRS beneficiary farmers who happened to be the respondents of this study it infers that only the respondents from Andhra Pradesh have started cultivating the Ground nuts, whereas no sample ADWDRS farmer from the state of Maharashtra has shown any interest in this crop to be cultivated newly. In the case of proportion of these ADWDRS farmers resorting to some other crops like Turmeric, Gram, Wheat, Sugarcane, Maize, Oilseeds, Onions, Paddy, Soya beans, Tobacco, etc. the proportion is almost insignificant. The state specific proportion of such farmers shows that in both the states this change is almost negligible. The proportion of the sample ADWDRS farmers from both the states of surveyed districts who have not undertaken any change in their post ADWDRS cropping pattern is 32.26 per cent for Andhra Pradesh and 47022 per cent for Maharashtra. The state specific crop wise change in cropping pattern for Andhra Pradesh is; (Sugarcane) 08.33 per cent, (Maize) 30.43 per cent, (Paddy) 30.43 per cent and (Tobacco) 08.70 per cent and for the Maharashtra only 04.26 per cent of the farmers have changed their cropping pattern in favor of sugarcane.

Table.7. Status of the Crop Insurance Subscription by the Sample ADWDRS-2008 Beneficiary Farmers from Andhra Pradesh and Maharashtra

	Andhra Pradesh				Maharashtra				Andhra Pradesh & Maharashtra Aggregate			
Insurance	Cooperatives	Nationalized	RRBs	Total	Cooperatives	Nationalized	RRBs	Total	Cooperatives	Nationalized	RRBs	Total
Yes	38	16	12	66	6	12	11	29	44	28	23	95
per cent	61.29	26.23	19.05	35.48	9.84	13.48	36.67	16.11	35.77	18.67	24.73	25.96
No	24	45	51	120	55	77	19	151	79	122	70	262
per cent	38.71	73.77	80.95	64.52	90.16	86.52	63.33	83.89	64.23	81.33	75.27	71.58
Grand Total	62	61	63	186	61	89	30	180	123	150	93	366
percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.54

e) Crop Insurance

Indicator of the development of agricultural insurance in a country is its penetration. The crop insurance in India has achieved a penetration of about 25 per cent. Approximately it covers 22.5 million Indian farmers. This figure is impressive considering that the NAIS having been launched in 1983 is just to complete three decades of its existence. Of the 22.5 million crop insured farmers, about five million of them are loanees and of these about 2.5 million are insured. The remaining farmers can easily be covered provided the funds that are periodically spent on agricultural debt waiver are routed through India's crop insurance mechanism. By doing this not only the debt waiver funds will be uniformly spent among all farmers but such disbursement will enhance creditworthiness of farmers and will also help to enhance the flow of organized credit to agriculture (Parchure, 2013). Looking at the combined proportion of both the states of Andhra Pradesh and Maharashtra related to the penetration of agricultural insurance among the sample AWDRS farmers, it shows that the same is closer to the National average (25.69 per cent). But looking at the state wise average of the same; for Andhra Pradesh 34.31 per cent is ahead if the National average and for Maharashtra 16.75 per cent is lower than the national average. Disaggregated lending institution wise proportion for the subscription of crop insurance for these states is 33.09, 23.47 and 20.73 per cent respectively for the AWDRS farmers borrowing from the Cooperatives, Rural Banks and the Nationalized Banks. But at the same time a glance at the state and lending institution wise proportion of the ADWDRS farmers show that for Andhra Pradesh it is 47.97, 17.65 and 26.87 per cent for the Cooperatives, Rural Banks and the Nationalized Banks whereas, the same for Maharashtra is 8.57, 36.67 and 16.49 per cent respectively. The overall proportion of the sample the ADWDRS farmers having crops insured is; 34.31 per cent for Andhra Pradesh and 16.75 per cent for Maharashtra. This is indicative that in Maharashtra the spread of crop insurance needs to be taken on war footing

Table.8. Details of the Crop Insurance Subscription by the Sample ADWDRS-2008 Beneficiary Farmers from Andhra Pradesh and Maharashtra

	Andhra Pradesh				Maharashtra				AP & MH			
Yes/No	Co-Op	National	Rural	Total	Co-Op	National	Rural	Total	Co-Op	National	Rural	Grand Total
Yes	38	16	12	66	6	12	11	29	44	28	23	95
%	61.29	26.23	19.05	35.48	9.84	13.48	36.67	16.11	35.77	18.67	24.73	25.96
No	24	45	51	120	55	77	19	151	79	122	70	262
%	38.71	73.77	80.95	64.52	90.16	86.52	63.33	83.89	64.23	81.33	75.27	71.58
Grand Total	62	61	63	186	61	89	30	180	123	150	93	366
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.54

	Andhra Pradesh	Maharashtra	Grand Total
Yes	4	4	8
%	22.22	23.53	22.86
No	14	13	27
%	77.78	76.47	77.14
Total	18	17	35
%	100.00	100.00	100.00

Penetration of crop insurance is one of the crucial challenges faced by Indian agricultural sector. As it is confined to about 24 per cent at the national level, it could not make any impressive dent in the states under present study also. Overall proportion of non subscription for the crop insurance by the ADWDRS farmers of these two states is more than two third (71.58 per cent) and the non-penetration of the same among Control farmers is 77.14 per cent which is indicative of the similar picture.

Table.9. Reasons for Non-subscription of the Crop Insurance by the Sample ADWDRS Farmers from Andhra Pradesh and Maharashtra

	Andhra Pradesh				Maharashtra				Andhra Pradesh & Maharashtra Aggregate			
Reasons Cited	Cooperatives	Nationalized	RRBs	Total	Cooperatives	Nationalized	RRBs	Total	Cooperatives	Nationalized	RRBs	Total
Financial Problem	4	36	18	58	1			1	5	36	18	59
per cent	6.45	59.02	28.57	31.18	1.64	0.00	0.00	0.56	4.07	24.00	19.35	16.12
No timely repayment					14	4		18	14	4	0	18
per cent	0.00	0.00	0.00	0.00	22.95	4.49	0.00	10.00	11.38	2.67	0.00	4.92
Not applicable					3	8		11	3	8	0	11
per cent	0.00	0.00	0.00	0.00	4.92	8.99	0.00	6.11	2.44	5.33	0.00	3.01
Not Aware/ Interested	21	1	34	56	36	65		101	57	66	34	157
per cent	33.87	1.64	53.97	30.11	59.02	73.03	0.00	56.11	46.34	44.00	36.56	42.90
NR	37	24	11	72	7	12	30	49	44	36	41	121
per cent	59.68	39.34	17.46	38.71	11.48	13.48	100.00	27.22	35.77	24.00	44.09	33.06
Grand Total	62	61	63	186	61	89	30	180	123	150	93	366
per cent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Awareness and affordability are the two predominant determinants of the penetration of Crop Insurance in a country like India. Therefore these two are the important reasons for the limited penetration of (about 21 per cent) the crop insurance and the lowest premium GDP ratio (about 01 per cent) in India. About two third (31.18 per cent) of the sample ADWDRS farmers do not have the capacity of payment of the premium for the crop insurance, whereas at the same time 30.11 per cent of them are not aware of the existence of any crop insurance scheme. But it is surprising to note that despite the financial (0.56 per cent being in financial crunch) ability for crop insurance subscription, 56.11 per cent of the sample ADWDRS farmers from Maharashtra are not aware of the crop insurance. In the case of the control group farmers, same two reasons i.e. 1) the financial crunch and 2) unawareness are predominant in non-subscription of the crop insurance in both the states. 55.56 per cent from Andhra Pradesh and 52.94 per cent of the farmers from Maharashtra are not aware about crop insurance whereas, 22.22 per cent of them from Andhra Pradesh have the financial problems in subscribing to the crop insurance. Therefore looking at the information emerging from both the groups of farmers i.e. the sample ADWDRS and the control group farmers it is necessary that either the state should finance the crop insurance premium or otherwise make it compulsory at least for some crops coupled with insurance education in the rural areas.

3.3 Pre and Post Debt Waivers Comparative Performance of Borrowing and Repayments: A Proxy to Estimating the Impacts on Banks

Table.10. Pre and Post ADWDRS Reason wise Details of Borrowing and Repayments by the Sample ADWDRS beneficiaries from Andhra Pradesh and Maharashtra

Purpose of Borrowing	Loan Amount	Repayment	Repayment (%)	Overdue	Overdue (%)
Pre ADWDRS					
Agriculture	2211000	641400	29.01	1195000	54.05
Irrigation	86000	2081000	2419.77	1108000	1288.37
Education	900000	594000	66.66	400000	44.44
Consumption/Health	150000	00	0.00	150000	100.00
Housing	590000	800000	135.59	1250000	211.86
NR	40000	30900	77.25	20000	50.00
Total	3977000	3553300	89.35	4123000	103.67
Post ADWDRS					
Agriculture	9191000	2355013	25.62	17156820	186.67
Irrigation	550000	1219000	221.64	1935000	351.82
Education	3035000	147200	4.85	2652700	87.40
Consumption/Health	2764000	487000	17.62	4152800	150.25
Housing	6580000	688000	10.46	6371000	96.82
NR	105000	111500	106.19	75000	71.43
Total	22225000	5007713	22.53	32343320	145.53

The inferences based on primary data in the above table (10), clearly reveals the case of moral hazard / adverse selection for the banks / lending institutions. Comparing the total amount of pre ADWDRS loans borrowed and repaid with the corresponding proportions of the same during post ADWDRS period it is seen that the proportion of repayment of agricultural loans has declined from 29.01 per cent (which already was unsatisfactory) to 22.53 per cent, whereas the proportion of overdue has shot up from the earlier 54.05 per cent to 186.67 per cent. The overall (all purpose credit) credit performance between pre and post ADWDRS shows that the overdues have increased from 103.67 to 145.53 per cent. As the overdues have been pending for over a long period the 'overdue-principle' ratio becomes greater than 100 per cent. It is mainly because of the accumulation of long pending interest amounts.

Table.11. Source-wise Pre and post ADWDRS Comparison of Loan Account Performance of the Sample ADWDRS Beneficiaries from Andhra Pradesh and Maharashtra

Source of Borrowing	Loan Amount	Repayment	Repayment (%)	Overdue	Overdue (%)
Pre ADWDRS					
Gramin Bank	472300	739700	156.62	935300	198.03
Nationalized Bank	642000	3012000	469.16	2115000	329.44
Pvt. Persons	2120000	95000	4.48	840000	39.62
Total	3234300	3846700	118.93	3890300	120.28
Post ADWDRS					
Gramin Bank	1270000	840123	66.15	3827000	301.34
Nationalized Bank	3160000	3402430	107.67	14059000	444.91
Pvt. Persons	14023000	1469200	10.48	13177300	93.97
SHG	470000	10000	2.13	480000	102.13
Total	18923000	5721753	30.24	31543300	166.69

The striking character of the comparison of pre and post ADWDRS source wise credit, its repayment and its overdue emerges as a significant indicator of moral hazard / adverse selection for the banks and lending institutions. The overall performance of repayment appears declined by almost four times, whereas; the proportion of overdue shows an exponential rise of more that 40 per cent. The available primary data for both the institutional and non-institutional sources indicate that no lending institution has an exception of better recovery performance during both the periods of pre and post ADWDRS. But the post ADWDRS picture indicates a worsened situation. This means that the debt waiver could not bring any better recovery performance for the lending institution. During the post ADWDRS period the SHGs have added to the earlier sources of lending but the recovery rates remains confined at the drastic lower rate of 2.13 per cent and the overdues exceed 100 per cent.

Table.11 (A) Pre and Post ADWDRS Comparative Picture of Credit Access

Loan Particulars	Pre ADWDRS	Post ADWDRS	Proportion of change (%)
No. of Loan Accounts/Cases	133	613	460.90
Total amount of Loan (Rs.)	3234300	18923000	585.07
Average Amount of Loan per Account (Rs.)	24318	30869	126.94

Attempt based on primary data of assessing the comparative change between the pre and post ADWDRS in credit access for farmers through change in number of loan accounts, total amounts of loans borrowed and the average amount of loans per account borrowed indicated that post ADWDRS period has emerged as the greater access of credit for farmers. The number of loan accounts of the same farm households of two states has increased by more than four times and the total borrowings by about six times (585.07 per cent). The average amount of loan per account indicates an increase of about 126 per cent

4.0 Conclusion

Farmers from Maharashtra are not observed as the staunch expectants of the debt waiver to be continued in future but having the past experience of such benefits the farmers from Andhra Pradesh do have the expectation of the re-occurrence of the debt waiver in future too. Many of the ADWDRS farmers despite being beneficiaries of the ADWDRS-2008 were not insistent on the continuation of the programme; instead they expected the policies helping their self reliance. In such a context the policies like the compulsory or state sponsored insurance or the capital formation and investment policies strengthening the agricultural economy will be more useful and strength building in nature.

The development of crop insurance in India has achieved a penetration of about 25 per cent. Approximately it covers 22.5 million Indian farmers. This figure is impressive considering that the NAIS having been launched in 1983 is just to complete three decades of its existence. Of the 22.5 million crop insured farmers, about five million of them are loanee and of these about 2.5 million are insured. The remaining 10 million can easily be covered provided the funds that are periodically spent on agricultural debt waiver are routed through the India's crop insurance mechanism. By doing this not only the debt waiver funds will be uniformly spent among all farmers but will enhance the creditworthiness and help to increase the flow of organized credit to agriculture. The information that has emerged from the field level data advocates for that the National insurance policy that needs to take into account the faster penetration of life, crop and general insurance for the farmers across all states of the country. It also should have a greater focus on covering the rural areas in general and the farming community in particular. Both at the National and at the state specific level of Andhra Pradesh and Maharashtra, the penetration of the Life and Crop Insurance is confined to unsatisfactory penetration. The subscription of General Insurance among the sample ADWDRS and Control group farmers in Andhra Pradesh is nil whereas, for Maharashtra it is 23.89 and 23.53 per cent respectively.

The farmers from both the states are multi time borrowers and from all available sources but have not been observed serious in repayments. Relatively the productive borrowing was of greater order. The reasons for their borrowing were; Agricultural operations, Setting a business, Consumption and the Medical loans, Education, Irrigation infrastructure, Livestock and for Buying the vehicles and Tractors. Most of the proportion of these loans of the ADWDRS beneficiaries from both the states is unpaid. Post ADWDRS proportion of overdue of loans is at the higher side. Purpose wise borrowing and the proportion of the pendency of loans by the ADWDRS farmers from Andhra Pradesh is as; Agriculture (60.05 per cent), Business (86.67 per cent, Consumption (88.29 per cent), Education (73.79 per cent), Irrigation (40 per cent), Livestock (42.86 per cent), non specified other loans (100 per cent), Vehicle loans (89.52 per cent) and the overall average of all these for the state ADWDRS farmers is 74.01 per cent. The proportions of pendency of the loans that were borrowed for the same purposes by the ADWDRS farmers from Maharashtra were; 84.55, 93.65, 70.23, 100, 68.50, 76.52, 78.22, 43.18, 87.20, 40.88 per cent and the overall state level pendency is 76.25 per cent respectively. This leads to the conclusion that most of the farmers had borrowed for all the purposes irrespective of agricultural or non-agricultural and were unable to repay the same during the specified time frame and hence both the borrowers and the lending institutions have no substitute but to face the problems of credit inability and the adverse selection. The comparison of pre and post ADWDRS situation about the purpose and source-wise borrowing and the proportion of repayment and overdue indicates post ADWDRS decline in the proportion of repayment and increase in overdue clearly indicates the case of moral hazard / adverse selection. But when looked at the change in credit access to farmers through the pre and post ADWDRS comparison of the number of credit accounts, total amount of credit and the average amount of credit per account the primary data elucidates that there has been a substantial growth in all these indicators which clearly shows that the post ADWDRS access of credit to farmers has grown. The proportion of the pendency exceeds the proportion of repayment and thereby the pendency – principal ratio becomes greater than the repayment – principal ratio for both the states' ADWDRS farmers. The lending institution wise proportions of pendency for Andhra Pradesh was of the order of; Bank (99.18 per cent), Friends (75.55 per cent), Gold Bank (96 per cent), Nationalized Banks (100 per cent), Other sources (non- specified) (42.86 per cent), Private Organizations (63.35 per cent), Rural Bank (100 per cent), SHGs (97.87 per cent) and the overall state pendency was 74.01 per cent. The same for the control group for Andhra Pradesh it was; 95.63, 689.62, 88.89, 100 and 100 per cent for the Bank, Friends, Gold Bank, Nationalized Bank and Private Organizations and the state average was 94.49 per cent. The source wise pendency scenario of the ADWDRS farmers from Maharashtra was; DCCBs (84.53), Friends (102 per cent), Money lenders (90.94 per cent), Nationalized banks (74.76 per cent), Rural banks (100 per cent) SHGs (97.87 per cent) and the overall state proportion for the same was 74.01 per cent. The control group farmers also have borrowed from many available sources and could not repay the same within the time frame.

The purpose of the ADWDRS was to clear the NPAs of the banks and restore the farmers' credit accounts with the future credit ability and the credit paying capacity (monetization) of the banks. When the farm debt accounts were cleared and the money they were supposed to pay to the banks was saved, in such cases the farmers have used the saved amount of money in purchasing of livestock such as the milching cows, a pair of bullocks or the small animals like sheep and goats. The proportion of such farmers from Maharashtra is almost negligible (1.1 per cent) but the proportion of such farmers from AP is observed to be higher. The programmes like the ADWDRS-2008 or the ARDWS-1989 exclude by default the regular debt repaying farmers and leave credit institutions with the option of adverse selection. This is bound to demoralize both the lenders and the borrowers. The (demoralized) regular repaying farmers cannot be in favor of introducing such programmes like the ADWDRS. Even some beneficiary farmers are not in favor of such debt waivers. There are farmers who feel demoralized and do not want to continue such schemes in future. Instead they expect agricultural development policies. In conclusion this means that the government, instead of spending money in popular programmes like the ARDWS-1989 or ADWDRS-2008 can use the same money either for capital formation in agriculture, agricultural investments or for part or full payments of crop insurance.

The main conclusion is that the programmes like debt waiver being completely an arbitrary gift of money to loanee farmers create conditions for moral hazards in the utilization of scares government resources, it undermines at stroke all the hard work done both by the lending and insurance agencies in disbursing and recovering the loans. There is a relative merit in the credit linked Crop Insurance system such as the one operating in India over the policy of debt waiver. In fact the debt waivers are costlier not only than indemnities paid out through Crop Insurance, but the indemnities and subsidies together stand less than the debt waivers such as the ADWDRS-2008.

References

Feibelman, A. (2009), Consumer Bankruptcy as Development Policy, Seton Hall Law Review, Forthcoming.

Martin Kanz (2011), What does Debt Relief do for Development (Evidence from a Large Scale Policy Experiment), The World Bank, Oct. 22. 2011.

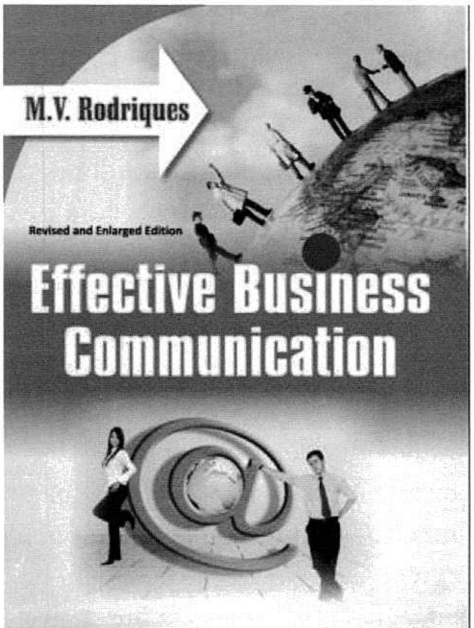
Mayers, S.C. (1977), Determinants of Corporate Borrowing, Journal of Financial Economics, 5, 147-175.

Parchure Rajas (2013), Strategies for Increasing Agricultural Insurance Penetration in India, Working Paper, Gokhale Institute of Politics and Economics, Pune.

Parchure, Rajas and Talule Dnyandev (2012), Agricultural Distress and Farmers Suicides in Yavatmal District, A NABARD Study, Gokhale Institute of Politics and Economics, Pune, March.

Townsend, R. (2006), Credit Intermediation and Poverty Reduction, in Abhijit Banerjee, Roland Benabou and Dilip Mukharjee (eds) Understanding Poverty, Oxford University Press.

BOOK REVIEW



EFFECTIVE BUSINESS COMMUNIATION'
(Revised and Enlarged Edition)

Dr. Maryan V. Rodriques
Year of Publication : 2013
ISBN : 9788180699290
Binding : Hard Bound
No of Pages : XX, 404
Concept Publishing Company Pvt. Ltd.
New Delhi-110 059

Communication is a two-way process of giving and receiving information through any number of channels. It plays a significant role in human interactions. It is a key to success in the world of present–day business: in relationships, in the workplace, as a citizen of a country, and across our lifetime. Our ability to communicate comes from our human interactions and experience, and experience can be an effective teacher. Organizations of all kinds look for dynamic personnel with strong communication, to man their key positions. Possession of effective communication skills is rightly perceived as an important asset to a professional. With the integration of Indian economy with the world economy, liberalization and our professionals becoming more cosmopolitan in their approach, the importance of communication is bound to grow further. Today, effective business communication in this corporate world of cut-throat competition is a much sought after subject among the students and other persons, beginning their professional career.

The Revised and Enlarged Edition of the book entitled **'Effective Business Communication'** by Dr. **Maryan Rodriques,** is a natural corollary of the other book in the series: **'Perspective of Communication and Communicative Competence'**. This book has attempted to cover as many aspects of communication as possible. It covers the major aspects of verbal and non-verbal communication as they dominate the human interactions in all the business situations. Even though, a number of books have been published on business communication by various authors, hardly few have gone beyond the theoretical. It is this gap in the literature that this book intends to fill satisfactorily.

The said book has in all three sections, comprising thirty chapters organized in a coherent, manner. The Section I, which has thirteen chapters, contains a description of basic concepts of communication: 'Meaning and Process of Communication', Objectives of Communication', 'The Channels of Communication', 'Media of Communication', 'Barriers to Communication', 'Essentials of Effective Communication', 'Sharpening the Tools of Business-Communication', 'Group Communication', 'Listening', 'Reading', 'Public Speech', 'Interviews', and 'Interpersonal Communication Dynamics'.

While the section II consists of eleven chapters that incorporate 'Business Letters', 'Report Writing', and 'Minutes Writing'- Nine chapters deal with Business Correspondence: 'Nature and Structure of Business Correspondence', 'Enquiries and Replies', 'Orders and Their Execution', 'Credit and Status Enquiries', 'Agency Letters', and 'Sales Letters'. Two separate Chapters deal in depth with 'Reports and Other written Communication' and 'Minutes Writing'.

The section III of the book deals with different dimensions of managerial communication and consists of six chapters: 'Communication in Advertising', 'Leadership Communication', 'Communication in Labour Relations', 'Communication in Conflict Management', 'Communication in Performance Management', and 'Communication in Performance Appraisal'.

The first part of this book deals with the fundamentals of communication, like the Process of Communication, the Channels, the Media Verbal and Non-Verbal, the Obstructions in Communication and the Essentials of Effective Communication. The Second part deals with the various aspects of communicative competence required in the professional areas and throws light upon the Linguistic, Psycho Linguistics, Socio Culture, Psychological, Socio Linguistic, Socio Philosophical and Socio Semantic aspects of communicative competence. The last part of the book shows how to practically evaluate the communicative competence of the professionals with special reference to the MBA, MSW, Journalism, students and professionals.

As I understand, this book seems to have been designed to meet the requirements of students pursuing professional and management courses in Indian institutes. It covers all the important topics exhaustively in simple, direct, concise and lucid language. A good number of examples and exercises have been provided for practice too. Each of the book's 30 chapters begins with a list of objectives; and chapter ends with a list of questions which would assist them to recapitulate the subject matter and enhance their critical thinking ability to adopt continuously to the new situations and innovative ideas. Each chapter is self-contained, allowing for mix-and-match flexibility and custom or course-specific design. Each chapter focuses on clear aims and goals and skill demonstrations that can be easily linked to ones syllabus and course requirements. Similarly, each chapter features time-saving and learning-enhancement support for instructors and students.

In fact, there are many books in the market, on the topic of 'Business Communication' but this one is different, (An attempt has been made to make this book different by exposing the subject in the way that I would like to learn If I had a fresh opportunity to do so in life) as it offers the readers the standards of evaluating effectiveness of interactive communication that takes place through different channels and media, used to serve a variety of communicative purposes in business situations. As the author himself states that the aim of this book is to discuss the principles and practice of business communication and to impart to the readers knowledge and skills of putting these principles into use creatively, functionally and effectively in the direction of problem solving and decision making, this book is immensely useful for the students and teachers alike in their subjects and would prove helpful both as a text book for classes and a manual for managerial communication.

Hence, I feel, this is a comprehensive book that deals with all the major aspects of written and oral business communication; and at the same time fulfils the needs of the students, professionals and businessmen alike, as a well-integrated book on the subject. The practical and concise text provides the right quantum of material on a broadening base of communication topics. It captures the dynamics of effective business communication among the professionals from all walks of life. It presents the subject in a fascinating way, powerfully stimulating and motivating readers; this book gives the foundation for excellent, effective, and practical business communication.

This is a really an excellent book for anyone interested in improving their business communication skills. It is filled with a lot of useful examples and scenarios from everyday business to the not so every day. Therefore, the content of this book initiate the readers to their first step in acquiring business communication, and then takes them step by step through the process, practice and means of improving one's effective business communication skills. I truly enjoyed reading it.

Dr. Marku Monis
Asst. Professor, English
Tatysaheb Kore Institute of Engg. &
Tech., Warananagar, Kolhapur.

*****

South Asian Journal of Management Research (SAJMR)

(Published in January and July Every year)

Membership Form

(Pl. take a Photo Copy)

Yearly Subscription :	Individual	₹ 400
	Institutional	₹ 500 (India)
		US $ 25 (Outside India)

Please start my subscription to South Asian Journal of Management Research (SAJMR)

Name: ____

Address: ____

____

City: ______________________________ PIN Code: ______________

State: ____

Country: ____

Contact No: ____

E-mail: ____

Send your payments by demand draft in favour of

Editor, South Asian Journal of Management Research (SAJMR) payable at Kolhapur, India.

The Editor,

South Asian Journal of Management Research (SAJMR)

Chhatrapati Shahu Institute of Business Education and Research,

University Road, Kolhapur 416004, Maharashtra State, INDIA

Email: sajmr@siberindia.co.in, sibersajmr@gmail.com

Instructions to Authors

South Asian Journal of Management Research (SAJMR) is planned to be an archival journal of research pertaining to managerial aspects in various areas of human activities. This journal is a publication of Chhatrapathi Shahu Institute of Business Education and Research (CSIBER) Kolhapur, India. CSIBER is a unique institute of its kind in the entire Indian subcontinent imparting postgraduate professional education in the fields of business management, social work administration, environmental studies and computer applications. Management thoughts and managerial research are the common factors that link these otherwise diverse fields. Having completed three decades, the institute now desires to cater to the international community by creating a platform for sharing the outputs of managerial research in these as well as other areas of human activities. We believe that the socio-economic and political environments in South Asian countries are more or less similar that we will be able to share the same media for this purpose. SAJMR is the realization of this vision.

Scope of the Journal

The Journal publishes original research papers pertaining to the managerial aspects of (but not limited to) Business, Industry, Information Technology, Environmental Studies, Public Administration and Social Work Administration. The journal will also consider publishing full-fledged review papers in some of these areas.

Content blend

The journal prefers to publish rigorous papers with sound methodology leading to advanced body of knowledge. Conceptual and empirical research papers, review papers, theoretical studies, case studies, simulation studies and model building will be considered for publication.

Frequency

Biannual (January and July)

Editorial Policy

SAJMR is a refereed research journal. Only original articles will be accepted for publication. The nature of the article should confine to the specification given in content blend. The manuscript submitted for publication would be screened by theeditorial board for its relevance. Appropriate manuscripts would be put through blindfold reviews by two experts. On the basis of reviewers reports the editor will take a decision. Published manuscripts will be the exclusive copyright of SAJMR.The copyright includes electronic distribution as well. Accepted or otherwise the review-reports-will be made available to the authors of all reviewed articles.

Instructions to Authors

1. We expect the papers to have word length between 3000 and 7000.
2. First page of the manuscript should contain only the title of the paper, name(s) of author(s), name(s) and full address(es) of organization(s) (along with phone, fax and e-mail) where the work has been carried out. The corresponding author should be marked with an asterisk (*).
3. An abstract of 150 words should be included at the beginning of the paper.
4. Abstract should be followed by relevant key words.
5. The paper must be typed on MS Word with limes New Roman font, 1.5-line spacing, A4 size paper, 1.5" margin on left side and 1" margin on all other sides. The main heading should be of 16-font size and it should appear in bold characters. The rest of the paper including the sub headings and sub-sub headings should be of 12-font size.
6. Tables, Sketches and graphs can be included.
7. Section headings should be numbered serially as 1, 2, . . and it should be in bold characters. Sub sections headings should be numbered as 1.1,1.2,.. & it should appear in italics. If sub-sub sections are there they should be numbered as 1.1.1,1.1.2, ...and it should appear in italics.
8. All headings should appear in title cases.
9. A short biography (one paragraph per author) of the author(s) should appear at the end of the paper.
10. References must be written in the following model.

Journal reference

Starbuck, W.H. & Mezias, J.M. (1996) Opening Pandora's box: Studying the accuracy of managers' perceptions. Journal of Organisational Behaviour, 17:99-117.

Book reference

Cummins, Thomas G. & Huse, Edger E. (1998) Organisational Development and Change. West Publishing Company, St. Paul, New York.

Submission of Papers

1. The manuscript should be submitted through email as an attachment ?le in MS Word to the Editor Dr. T.V.G. Sarma (E-mail: sajmr@siberindia.co.in, sibersajmr@gmail.com).
2. The author(s) of the research paper should give an undertaking while submitting the paper that the manuscript submitted to the journal has not been published or submitted simultaneously elsewhere and the manuscript is their original work. The duly signed undertaking should be sent to the editor by post.
3. If asked to revise. the authors have to resubmit the articles within a period of 30 days.
4. Each author will get a soft copy of the paper and a free journal copy in which their paper is published.

SOUTH ASIAN JOURNAL OF MANAGEMENT RESEARCH (SAJMR)

(An International Peer Reviewed Research Journal) ISSN 0974-763X

List of Research Papers Published in the year 2013-14

Contents of Vol. 5 No. 2 July 2013

Contents of Vol. 6 No. 1 January 2014

The Editor

South Asian Journal of Management Research (SAJMR)

Chhatrapati Shahu Institute of Business Education and Research (CSIBER)

University Road, Kolhapur- 416 004 Maharashtra State, India.

Phone : 0231 - 2535706, 2535707. Fax : 0231- 2535708

Website : www.siberindia.co.in Email : sajmr@siberindia.co.in, sibersajmr@gmail.com